



M E M O R A N D U M

**City of Austin
Financial Services Department
Purchasing Office**

DATE: February 7, 2020
TO: Memo to File
FROM: Bartley Tyler, Procurement Specialist II
RE: MA 6000 NA160000056

The expiration date on this contract was changed from 5/28/2020 to 11/28/2020 as additional time is needed to complete the project. The time was added based on language in Paragraph 1.3 of the contract that states the contract "shall remain in effect for six months or until the City has deemed the project as complete."

The additional 6 months will allow the extra time needed to complete the project and ease the administrative burden of repetitive file Memorandums every 6 months. Project completion was delayed due to the hiring process for a Civil Engineer and the AULCC (Austin Utility Location Coordination Committee) process which is required to complete the work under this contract.



Amendment No. 3
to
Contract No. NA160000056
for
DOWNTOWN SIGNAGE PROJECT
between
Q-FREE TCS, INC.
and the
City of Austin, Texas

- 1.0 The City hereby amends the above referenced contract to increase available funding administratively in an amount not to exceed \$13,025.00 effective 01/30/2018.
- 2.0 The total Contract amount is increased by \$13,025.00. The total Contract authorization is recapped below:

Term	Contract Amount for the Item	Total Contract Amount
Initial Term: 11/22/2013-11/21/2015	\$598,331.00	\$598,331.00
Amendment No. 1: Name change from TCS International Alias Q-Free TCS to Q-Free TCS, Inc.	\$0.00	\$598,331.00
Amendment No. 2: Administrative Increase 07/25/2017	\$1,698.00	\$600,029.00
Amendment No. 3: Administrative Increase 01/30/2018	\$13,025.00	\$613,054.00

- 3.0 MBE/WBE goals were not established for this contract.
- 4.0 By signing this Amendment the Contractor certifies that the Contractor and its principals are not currently suspended or debarred from doing business with the Federal Government, as indicated by the General Services Administration (GSA) List of Parties Excluded from Federal Procurement and Non-Procurement Programs, the State of Texas, or the City of Austin.
- 5.0 ALL OTHER TERMS AND CONDITIONS REMAIN THE SAME.

BY THE SIGNATURE(S) affixed below, this Amendment is hereby incorporated and made a part of the above-referenced contract.

Signature & Date:



Printed Name: DAVE RUFFORD, CEO
Authorized Representative

Q-FREE TCS, INC.
55 UNION AVE
SUDBURY, MA 01776-2245

Signature & Date:

 2/1/18

Liz Lock, Procurement Specialist II
City of Austin Purchasing Office

Signature & Date:

 2-1-18

Matthew Duree, Procurement Supervisor
City of Austin Purchasing Office



M E M O R A N D U M

**City of Austin
Financial Services Department
Purchasing Office**

DATE: October 19, 2018
TO: Memo to File
FROM: Michelle Pearson, Procurement Specialist II
RE: MA 6000 NA160000056

The expiration date on this contract was changed from 5/28/2018 to 5/27/2020 as additional time is needed to complete the project. The time was added based on language in Paragraph 1.3 of the contract that states the contract "shall remain in effect for six months or until the City has deemed the project as complete."

The additional 24 months will allow the extra time needed to complete the project and ease the administrative burden of repetitive file Memorandums every 6 months. Project completion was delayed due to the hiring process for a Civil Engineer and the AULCC (Austin Utility Location Coordination Committee) process which is required to complete the work under this contract.



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Amendment No. 2: Administrative Increase 07/25/2017	\$1,698.00	\$600,029.00
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- 4.0 By signing this Amendment the Contractor certifies that the Contractor and its principals are not currently suspended or debarred from doing business with the Federal Government, as indicated by the General Services Administration (GSA) List of Parties Excluded from Federal Procurement and Non-Procurement Programs, the State of Texas, or the City of Austin.
- 5.0 ALL OTHER TERMS AND CONDITIONS REMAIN THE SAME.

BY THE SIGNATURE(S) affixed below, this Amendment is hereby incorporated and made a part of the above-referenced contract.


Signature & Date:



Printed Name: DAVE RAINFORD, CEO
Authorized Representative

Q-FREE TCS, INC.
55 UNION AVE
SUDBURY, MA 01776-2245

Signature & Date:

 2/1/18

Liz Lock, Procurement Specialist II
City of Austin Purchasing Office

Signature & Date:

 2-1-18

Matthew Duree, Procurement Supervisor
City of Austin Purchasing Office



M E M O R A N D U M

**City of Austin
Financial Services Department
Purchasing Office**

DATE: September 19, 2017

TO: Memo to File

FROM: Jonathan Dalchau, Procurement Specialist IV

RE: MA 6000 NA160000056

The expiration date on this contract was changed from 8/31/2017 to 2/28/2018 as the project completion date has been pushed. The time was added based on language in Paragraph 1.3 of the contract that says the contract "shall remain in effect for six months or until the City has deemed the project as complete."



Amendment No. 2
to
Contract No. NA160000056
for
DOWNTOWN SIGNAGE PROJECT
between
Q-FREE TCS, INC.
and the
City of Austin, Texas


- 1.0 The City hereby amends the above referenced contract to increase available funding administratively in an amount not to exceed \$1,698.00 effective 07/25/2017.
- 2.0 The total Contract amount is increased by \$1,698.00. The total Contract authorization is recapped below:

Term	Contract Amount for the Item	Total Contract Amount
Initial Term: 11/22/2013-11/21/2015	\$598,331.00	\$598,331.00
Amendment No. 1: Name change from TCS International Alias Q-Free TCS to Q-Free TCS, Inc.	\$0.00	\$598,331.00
Amendment No. 2: Administrative Increase 07/25/2017	\$1,698.00	\$600,029.00

- 3.0 MBE/WBE goals were not established for this contract.
- 4.0 By signing this Amendment the Contractor certifies that the Contractor and its principals are not currently suspended or debarred from doing business with the Federal Government, as indicated by the General Services Administration (GSA) List of Parties Excluded from Federal Procurement and Non-Procurement Programs, the State of Texas, or the City of Austin.
- 5.0 ALL OTHER TERMS AND CONDITIONS REMAIN THE SAME.

BY THE SIGNATURE(S) affixed below, this Amendment is hereby incorporated and made a part of the above-referenced contract.

Signature & Date:


Printed Name: DAVE RANSFORD
Authorized Representative

Q-FREE TCS, INC.
55 UNION AVE
SUDBURY, MA 01776-2245

Signature & Date:

 7/25/17
Erika Larsen, Procurement Specialist II
City of Austin
Purchasing Office



Amendment No. 1
to
Contract No. NA160000056
for
DOWNTOWN SIGNAGE PROJECT
Between
TCS INTERNATIONAL ALIAS Q-FREE TCS
and the
City of Austin

1.0 The Contract is hereby amended as follows: Change the vendor information as requested and documented by the vendor.

	From	To
Vendor Name	TCS INTERNATIONAL ALIAS Q-FREE TCS	Q-FREE TCS, INC
Vendor Code	TCS8310445	TCS8310445
FEIN	[REDACTED]	[REDACTED]

2.0 All other terms and conditions of the Contract remain unchanged and in full force and effect.

BY THE SIGNATURE affixed below, this Amendment No. 1 is hereby incorporated into and made a part of the Contract.

Handwritten signature of Linell Goodin-Brown.

Linell Goodin-Brown
Contract Management Supervisor II
City of Austin, Purchasing Office

7-19-17
Date



M E M O R A N D U M

**City of Austin
Financial Services Department
Purchasing Office**

DATE: April 12, 2017
TO: Memo to File
FROM: Jonathan Dalchau, Procurement Specialist IV
RE: MA 6000 NA160000056

The expiration date on this contract was changed from 12/6/2016 to 8/31/2017 as the project completion date has been pushed. The time was added based on language in Paragraph 1.3 of the contract that says the contract "shall remain in effect for six months or until the City has deemed the project as complete."



City of Austin

Purchasing Office, Financial Services Department

P.O. Box 1088, Austin, TX 78767

June 7, 2016

Dave Radford
Q-Free TCS
55 Union Avenue
Sudbury, MA 01776
Dave.Radford@q-free.com

Dear Mr. Radford:

The Austin City Council approved the execution of a contract with your company for Dynamic Parking System Equipment, Installation, and Integration Services in accordance with the referenced solicitation.

Responsible Department:	Public Works
Department Contact Person:	Burton Jones
Department Contact Email Address:	Burton.Jones@austintexas.gov
Department Contact Telephone:	(512) 974-7278
Project Name:	Dynamic Parking System Equipment, Installation, and Integration Services
Contractor Name:	Q-Free TCS
Contract Number:	MA 6000 NA160000056
Contract Period:	06/07/2016 – 12/06/2016
Dollar Amount	\$598,331.00
Extension Options:	N/A
Requisition Number:	RQM 6000 15093000537
Solicitation Type & Number:	N/A
Agenda Item Number:	42
Council Approval Date:	01/28/2016

Thank you for your interest in doing business with the City of Austin. If you have any questions regarding this contract, please contact the person referenced under Department Contact Person.

Sincerely,

Sandy Brandt
Senior Buyer Specialist
City of Austin
Purchasing Office

cc: Burton Jones, Public Works
Steve Grassfield, Transportation Department

**CONTRACT BETWEEN THE CITY OF AUSTIN ("City")
and
Q-Free TCS ("Contractor")
for
Dynamic Parking System Equipment, Installation, and Integration Services
MA 6000 NA160000056**

This Contract is made by and between the City of Austin ("City"), a home-rule municipality incorporated by the State of Texas, and Q-Free TCS ("Contractor"), having offices at 55 Union Avenue, Sudbury, Massachusetts 01776.

On January 28, 2016, Austin City Council authorized negotiation and execution of a contract for the installation of sensors and signage for the implementation of a dynamic parking system for the Transportation Department.

1.1 This Contract is composed of the following documents:

- 1.1.1 This document
- 1.1.2 Exhibit A, the City's terms and conditions
- 1.1.3 Exhibit B, Dynamic Parking System Requirements and Preliminary Plans
- 1.1.4 Exhibit C, Roles and Responsibilities
- 1.1.5 Exhibit D, Preliminary Timeline
- 1.1.6 Exhibit E, Non Discrimination Certification
- 1.1.7 Exhibit F, Prevailing Wage Rates
- 1.1.8 Attachment 1, Contractor's Offer dated January 5, 2016

1.2 Order of Precedence. Any Inconsistency or conflict in the Contract documents shall be resolved by giving precedence in the following order:

- 1.2.1 This document and Exhibits as referenced in Sections 1.1.1 through 1.1.7; and
- 1.2.2 The Contractor's Offer as referenced in Section 1.1.8.

1.3 Term of Contract. The Contract will be in effect on the date executed by the City ("Effective Date") and shall remain in effect for six months or until the City has deemed the project as complete or the City terminates the Contract.

1.4 Compensation. The Contractor shall be paid a total not-to-exceed amount of \$598,331 for the project.

1.5 Invoices. The Contractor shall invoice the City in the amounts below upon completion of the tasks identified in the table.

Milestone	% of Contract Amount	Invoice Amount
Installation of equipment at City Hall Garage	20%	\$119,666.20
Installation of equipment at Seaholm Garage	20%	\$119,666.20
Installation of equipment at Library Garage	20%	\$119,666.20
Installation of roadway signs	20%	\$119,666.20
Training of City staff; demonstrated functionality of dynamic parking system; City's final written acceptance of project	20%	\$119,666.20
TOTAL		\$598,331.00

1.6 Designation of Key Personnel. The Contractor's Contract Manager for this engagement shall be Dave Radford, Phone: (978) 443-2527, extension 36, Email Address: Dave.Radford@q-free.com. The Contractor's Project Manager for this engagement shall be Rusty Rose, Phone: (978) 443-2527, extension 32, Email Address: Rusty.Rose@austintexas.gov. The City's Contract Manager for the engagement shall be Burton Jones, Phone:

(512) 974-7278, Email Address: Burton.Jones@austintexas.gov. Owner's Representative designated by the City shall be Encotech Engineering Consultants. The City and the Contractor resolve to keep the same key personnel assigned to this engagement throughout its term. In the event that it becomes necessary for the Contractor to replace any key personnel, the replacement will be an individual having equivalent experience and competence in executing projects such as the one described herein. Additionally, the Contractor will promptly notify the City Contract Manager and obtain approval for the replacement. Such approval shall not be unreasonably withheld.

- 1.7 **Contractor's Obligations.** The Contractor shall fully and timely perform tasks and provide all deliverables according to the Dynamic System Requirements and Preliminary Plans (Exhibit B), Roles and Responsibilities (Exhibit C), and Preliminary Timeline (Exhibit D) and Contractor's Offer (Attachment 1) in strict accordance with the terms, covenants, and conditions of the Contract and all applicable Federal, State, and local laws, rules, and regulations. In addition to the requirements set forth in this Contract, the Contractor shall:

- 1.7.1 Provide the City with proof of Installation Insurance according to Paragraph 5.3.1.5 of Exhibit A Supplemental General Conditions/00810 prior to performance of any and all installation on City property.
- 1.7.2 Obtain all permits required for this project.
- 1.7.3 Pay for all permits required for this project, with the exception of the permits stated in Section 1.8.2.
- 1.7.4 Submit to the City a written traffic control plan for right-of-way for each roadway sign location.
- 1.7.5 Perform all work in accordance with Austin Energy standards.

1.8 **City's Obligations.**

- 1.8.1 The City will provide timely review and response of all submittals.
- 1.8.2 The City will pay for the following permits, licenses, and/or fees:
 - 1.8.2.1 Site Development Permit;
 - 1.8.2.2 Building Permit(s). City's responsibility for paying for the Building Permit(s) shall be limited to the following where applicable: the required Electrical Service (Aid of Construction) Fee, Water and Wastewater Tap Fees, Water and Wastewater Capital Recovery Fees, and Septic Permit Fee. The City's responsibility for paying for the Building Permit(s) excludes securing Electrical Permit, Mechanical Permit, Plumbing Permit, Water Engineering Inspection Fee, Temporary Use of Right-of-Way Permit, the gas company's Gas Yard Line Contribution Fee, and any other permits/fees not listed above;
 - 1.8.2.3 Texas Department of Transportation permit for Work in State rights-of-way; and
 - 1.8.2.4 Railroad Utility License Agreement.

1.9 **Equal Opportunity.**

- 1.9.1 **Equal Employment Opportunity.** No Contractor or Contractor's agent shall engage in any discriminatory employment practice as defined in Chapter 5-4 of the City Code. No Bid submitted to the City shall be considered, nor any Purchase Order issued, or any Contract awarded by the City unless the Contractor has executed and filed with the City Purchasing Office a current Non-Discrimination Certification. The Contractor shall sign and return the Non-Discrimination Certification attached hereto as Exhibit E. Non-compliance with Chapter 5-4 of the City Code may result in sanctions, including termination of the contract and the Contractor's suspension or debarment from participation on future City contracts until deemed compliant with Chapter 5-4.
- 1.9.2 **Americans With Disabilities Act (ADA) Compliance.** No Contractor, or Contractor's agent shall engage in any discriminatory employment practice against individuals with disabilities as defined in the ADA.

- 1.10 **Interested Parties Disclosure.** As a condition to entering the Contract, the Business Entity constituting the Offeror must provide the following disclosure of Interested Parties to the City prior to the award of a contract with the City on Form 1295 "Certificate of Interested Parties" as prescribed by the Texas Ethics Commission for any contract award requiring council authorization. The Certificate of Interested Parties Form must be completed on the Texas Ethics Commission website, printed, and signed by the authorized agent of the Business Entity with acknowledgment that disclosure is made under oath and under penalty of perjury. The City will submit the "Certificate of Interested Parties" to the Texas Ethics Commission within 30 days of receipt from the Offeror. Link to Texas Ethics Commission Form 1295 process and procedures below:
https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm

- 1.11 **Prevailing Wage.** Contractor shall comply with the requirements of Section 0830 Prevailing Wage Rates and Payroll Reporting including the wage rates listed in Section 00830BC Wage Rates for Building Construction or Section 00830HH Wage Rates for Heavy and Highway Construction per Exhibit F.

1.12 **Holidays.** The following holidays are observed by the City:

<u>Holiday</u>	<u>Date Observed</u>
New Year's Day	January 1
Martin Luther King, Jr.'s Birthday	Third Monday in January
President's Day	Third Monday in February
Memorial Day	Last Monday in May
Independence Day	July 4
Labor Day	First Monday in September
Veteran's Day	November 11
Thanksgiving Day	Fourth Thursday in November
Friday after Thanksgiving	Friday after Thanksgiving
Christmas Eve	December 24
Christmas Day	December 25

If a Legal Holiday falls on Saturday, it will be observed on the preceding Friday. If a Legal Holiday falls on Sunday, it will be observed on the following Monday.

1.13 **Non-Suspension or Debarment Certification.** The City of Austin is prohibited from contracting with or making prime or sub-awards to parties that are suspended or debarred or whose principals are suspended or debarred from Federal, State, or City of Austin Contracts. By accepting a Contract with the City, the Vendor certifies that its firm and its principals are not currently suspended or debarred from doing business with the Federal Government, as indicated by the General Services Administration List of Parties Excluded from Federal Procurement and Non-Procurement Programs, the State of Texas, or the City of Austin.

1.14 **Incorporation of Documents.** Section 0100, **Standard Purchase Definitions**, is hereby incorporated into this Contract by reference, with the same force and effect as if they were incorporated in full text. The full text versions of this Section are available, on the Internet at the following online address:
https://assets.austintexas.gov/purchase/downloads/standard_purchase_definitions.pdf

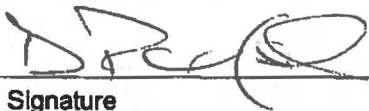
This Contract (including any Exhibits and Attachments) constitutes the entire agreement of the parties regarding the subject matter of this Contract and supersedes all prior and contemporaneous agreements and understandings, whether written or oral, relating to such subject matter. This Contract may be altered, amended, or modified only by a written instrument signed by the duly authorized representatives of both parties.

In witness whereof, the parties have caused a duly authorized representative to execute this Contract on the date set forth below.

Q-FREE TCS

DAVE RANDFORD

Printed Name of Authorized Person



Signature

CEO

Title:

5-31-16

Date:

CITY OF AUSTIN

Stephen T. Aden

Printed Name of Authorized Person



Signature

Corporate Purchasing Manager

Title:

6/7/16

Date:

Bidding Requirements, Contract Forms and Conditions of the Contract
GENERAL CONDITIONS OF THE CONTRACT
Section 00700

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ARTICLE 1 – DEFINITIONS

Whenever used in these General Conditions or in the other Contract Documents the following terms have the meanings indicated which are applicable to both the singular and plural thereof:

- 1.1 Addendum** - Written instruments issued by the Contract Awarding Authority which clarify, correct or change the bidding requirements or the Contract Documents prior to the Due Date. "Addenda" is the plural form of Addendum.
- 1.2 Agreement** - Prescribed form, Section 00500.
- 1.3 Alternative Dispute Resolution** - The process by which a disputed Claim may be settled if the OWNER and the CONTRACTOR cannot reach an agreement between themselves, as an alternative to litigation.
- 1.4 Bid** - A complete, properly signed response to an Invitation for Bid that, if accepted, would bind the Bidder to perform the resultant Contract.
- 1.5 Bidder** - A person, firm, or entity that submits a Bid in response to a Solicitation. Any Bidder may be represented by an agent after submitting evidence demonstrating the agent's authority. The agent cannot certify as to his own agency status.
- 1.6 Bid Documents** - The advertisement or Invitation for Bids, instructions to Bidders, the Bid form, the Contract Documents and Addenda.
- 1.7 Calendar Day** - Any day of the week; no days being excepted. Work on Saturdays, Sundays, and/or Legal Holidays shall be coordinated with OWNER.
- 1.8 Change Directive** - A written directive to CONTRACTOR, signed by OWNER, ordering a change in the Work and stating a proposed basis for adjustment, if any, in the Contract Amount or Contract Time, or both. A Change Directive may be used in the absence of total agreement on the terms of a Change Order. A Change Directive does not change the Contract Amount or Contract Time, but is evidence that the parties expect that the change directed or documented by a Change Directive will be incorporated in a subsequently issued Change Order.
- 1.9 Change Orders** - Written agreements entered into between CONTRACTOR and OWNER authorizing an addition, deletion, or revision to the Contract, issued on or after the Execution Date of the Agreement.
- 1.10 Claim** - A written demand seeking, as a matter of right, adjustment or interpretation of Contract terms, payment of money, extension of time or other relief with respect to the terms of the Contract.
- 1.11 Contract** - The binding legal agreement between the OWNER and the CONTRACTOR. The Contract represents the entire and integrated agreement between OWNER and CONTRACTOR for performance of the Work, as evidenced by the Contract Documents.
- 1.12 Contract Amount** - The moneys payable by OWNER to CONTRACTOR for completion of the Work in accordance with the Contract Documents.
- 1.13 Contract Awarding Authority** - A City department authorized to enter into Contracts on behalf of the City.
- 1.14 Contract Documents** - Project Manual, Drawings, Addenda and Change Orders.
- 1.15 Contract Time** - The number of days allowed for completion of the Work as defined by the Contract. When any period is referred to in days, it will be computed to exclude the first and include the last day of such period. A day of twenty-four hours measured from midnight to the next midnight will constitute a day.
- 1.16 CONTRACTOR** - The individual, firm, corporation, or other business entity with whom OWNER has entered into the Contract for performance of the Work.

- 1.17 Critical Path** - The longest series of tasks that runs consecutively from the beginning to the end of the project, as determined by duration and workflow sequence. This longest path sets the managerial standard for how quickly a project can be completed, given appropriate resources.
- 1.18 Drawings** - Those portions of the Contract Documents which are graphic representations of the scope, extent and character of the Work to be furnished and performed by CONTRACTOR and which have been approved by OWNER. Drawings may include plans, elevations, sections, details, schedules and diagrams. Shop Drawings are not Drawings as so defined.
- 1.19 Due Date** - The date and time specified for receipt of Bids.
- 1.20 Engineer/Architect (E/A)** - The OWNER's design professional identified as such in the Contract. The titles of "Architect/Engineer," "Architect" and "Engineer" used in the Contract Documents shall read the same as Engineer/Architect (E/A). Nothing contained in the Contract Documents shall create any contractual or agency relationship between E/A and CONTRACTOR.
- 1.21 Equal** - The terms "equal" or "approved equal" shall have the same meaning.
- 1.22 Execution Date** - Date of last signature of the parties to the Agreement.
- 1.23 Field Order** - A written order issued by Owner's Representative which orders minor changes in the Work and which does not involve a change in the Contract Amount or the Contract Time.
- 1.24 Final Completion** - The point in time when OWNER determines that all Work has been completed and final payment to CONTRACTOR will be made in accordance with the Contract Documents.
- 1.25 Force Account** - a basis of payment for the direct performance of Work with payment based on the actual cost of the labor, equipment and materials furnished and consideration for overhead and profit as set forth in Section 11.5.
- 1.26 Inspector** - The authorized representative of any regulatory agency that has jurisdiction over any portion of the Work.
- 1.27 Invitation for Bid (IFB)** - a Solicitation requesting pricing for a specified Good or Service which has been advertised for Bid in a newspaper and/or the Internet.
- 1.28 Legal Holidays**
- 1.28.1** The following are recognized by the OWNER:
- | <u>Holiday</u> | <u>Date Observed</u> |
|------------------------------------|-----------------------------|
| New Year's Day | January 1 |
| Martin Luther King, Jr.'s Birthday | Third Monday in January |
| President's Day | Third Monday in February |
| Memorial Day | Last Monday in May |
| Independence Day | July 4 |
| Labor Day | First Monday in September |
| Veteran's Day | November 11 |
| Thanksgiving Day | Fourth Thursday in November |
| Friday after Thanksgiving | Friday after Thanksgiving |
| Christmas Eve | December 24 |
| Christmas Day | December 25 |
- 1.28.2** If a Legal Holiday falls on Saturday, it will be observed on the preceding Friday.
If a Legal Holiday falls on Sunday, it will be observed on the following Monday.

- 1.28.3** Christmas Eve is observed only if it falls on a Monday through Thursday. If Christmas Eve falls on a Friday, that day is observed as the Christmas Day holiday.
- 1.29 Milestones** - A significant event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Work.
- 1.30 Notice to Proceed** - A Written Notice given by OWNER to CONTRACTOR fixing the date on which the Contract Times will commence to run and on which CONTRACTOR shall start to perform CONTRACTOR's obligations under the Contract Documents.
- 1.31 OWNER** - City of Austin, Texas, a municipal corporation, home rule city and political subdivision organized and existing under the laws of the State of Texas, acting through the City Manager or his/her designee, officers, agents or employees to administer design and construction of the Project.
- 1.32 Owner's Representative** - The designated representative of the OWNER. The Owner's Representative will be identified at the pre-construction conference.
- 1.33 Partial Occupancy or Use** - Use by OWNER of a substantially completed part of the Work for the purpose for which it is intended (or a related purpose) prior to Substantial Completion of all the Work, provided OWNER and CONTRACTOR have accepted in writing the responsibilities assigned to each of them for payments, retainage if any, security, maintenance, utilities, corrective work, insurance and warranties.
- 1.34 Project** - The subject of the Work and its intended result.
- 1.35 Project Manual** - That portion of the Contract Documents which may include the following: introductory information; bidding requirements, Contract forms and General and Supplemental General Conditions; General Requirements; Specifications; Drawings; MBE/WBE or DBE Procurement Program Package; Project Safety Manual; and Addenda.
- 1.36 Resident Project Representative** - The authorized representative of E/A who may be assigned to the site or any part thereof.
- 1.37 Shop Drawings** - All drawings, diagrams, illustrations, schedules and other data or information which are specifically prepared or assembled by or for CONTRACTOR and submitted by CONTRACTOR as required by the Contract Documents.
- 1.38 Specifications** - Those portions of the Contract Documents consisting of written technical descriptions as applied to the Work, which set forth to CONTRACTOR, in detail, the requirements which must be met by all materials, equipment, construction systems, standards, workmanship, equipment and services in order to render a completed and useful project.
- 1.39 Solicitation** - Solicitation means, as applicable, an Invitation for Bid or a Request for Proposal.
- 1.40 Substantial Completion** - The stage in the progress of the Work when the Work, or designated portion thereof, is sufficiently complete in accordance with the Contract Documents so OWNER can occupy or utilize the Work for its intended use, as evidenced by a Certificate of Substantial Completion approved by OWNER.
- 1.41 Subcontractor** - An individual, firm, corporation, or other business entity having a direct contract with CONTRACTOR for the performance of a portion of the Work under the Contract.
- 1.42 Sub-Subcontractor** - A person or entity who has a direct or indirect contract with a Subcontractor to perform a portion of the work.

- 1.43 Superintendent** - The representative of CONTRACTOR authorized in writing to receive and fulfill instructions from the Owner's Representative, and who shall supervise and direct construction of the Work.
- 1.44 Supplemental General Conditions** - The part of the Contract Documents which amends or supplements the General Conditions. All General Conditions which are not so amended or supplemented remain in full force and effect.
- 1.45 Supplier** - An individual or entity having a direct contract with CONTRACTOR or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by CONTRACTOR or any Subcontractor.
- 1.46 Time Extension Request** - An approved request for time extension on a form acceptable to OWNER.
- 1.47 Work** - The entire completed construction, or the various separately identifiable parts thereof, required to be furnished under the Contract Documents.
- 1.48 Working Day** - Any day of the week, not including Saturdays, Sundays, or Legal Holidays in which conditions under the CONTRACTOR's control will permit work for a continuous period of not less than seven (7) hours between 7:00 a.m. and 6:00 p.m. Upon agreement with Owner's Representative, work on Saturdays, Sundays and/or Legal Holidays may be allowed and will be considered a Working Day.
- 1.49 Working Hours**
- 1.49.1 Working Day Contract:** All Work shall be done between 7:00 a.m. and 6:00 p.m. unless authorized by Owner's Representative. However, emergency work may be done without prior permission as indicated in paragraph 6.11.5. If night Work is authorized and conditions under CONTRACTOR's control will permit Work for a continuous period of not less than seven (7) hours between 12:00 a.m. and 11:59 p.m. it will be considered a Working Day. Night Work may be revoked at any time by OWNER if CONTRACTOR fails to maintain adequate equipment and supervision for the prosecution and control of the night Work.
- 1.49.2 Calendar Day Contract:** All Work shall be done between 7:00 a.m. and 6:00 p.m. unless authorized by Owner's Representative. However, emergency work may be done without prior permission as indicated in paragraph 6.11.5. Night Work may be revoked at any time by OWNER if CONTRACTOR fails to maintain adequate equipment and supervision for the prosecution and control of the night Work.
- 1.50 Written Notice** - Written communication between OWNER and CONTRACTOR. Written Notice shall be deemed to have been duly served if delivered in person to Owner's Representative or CONTRACTOR's duly authorized representative, or if delivered at or sent by registered or certified mail to the attention of Owner's Representative or CONTRACTOR's duly authorized representative at the last business address known to the party giving notice.

ARTICLE 2 - PRELIMINARY MATTERS

- 2.1 Delivery of Agreement, Bonds, Insurance, etc.:** Within five (5) Working Days after written notification of award of Contract, CONTRACTOR shall deliver to OWNER signed Agreement, Bond(s), Insurance Certificate(s) and other documentation required for execution of Contract.
- 2.2 Copies of Documents:** OWNER shall furnish to CONTRACTOR one (1) Project Manual with original signatures, one (1) copy of the executed Project Manual, one (1) set of Drawings

and one (1) copy of the Contract Documents in .pdf format. Additional copies will be furnished, upon request, at the cost specified in the Supplemental General Conditions."

2.3 Commencement of Contract Times; Notice to Proceed: The Contract Time(s) will begin to run on the day indicated in the Notice to Proceed. Notice to Proceed will be given at any time within sixty (60) calendar days after the Execution Date of the Agreement, unless extended by written agreement of the parties.

2.4 Before Starting Construction:

2.4.1 No Work shall be done at the site prior to the preconstruction conference without OWNER's approval. Before undertaking each part of the Work, CONTRACTOR shall carefully study the Contract Documents to check and verify pertinent figures shown thereon compare accurately to all applicable field measurements. CONTRACTOR shall promptly report in writing to Owner's Representative any conflict, error, ambiguity or discrepancy which CONTRACTOR may discover and shall obtain a written interpretation or clarification from Owner's Representative before proceeding with any Work affected thereby. CONTRACTOR shall be liable to OWNER for failure to report any conflict, error, ambiguity or discrepancy in the Contract Documents of which CONTRACTOR knew or reasonably should have known.

2.4.2 It is mutually agreed between CONTRACTOR and OWNER that successful completion of the Work within the Contract completion date is of primary importance. Therefore, the CONTRACTOR hereby agrees to submit to the Owner's Representative for review and approval, or acceptance, as appropriate, all information requested within this section, including a Baseline Schedule, no later than five working days prior to the preconstruction conference. The Owner's Representative will schedule the preconstruction conference upon the timely submittal of the required documents, unless time is extended by written mutual agreement. CONTRACTOR will submit the following:

- .1** A proposed Baseline Schedule developed using Microsoft Project software, unless otherwise approved by Owner's Representative ("Baseline Schedule") to confirm that all Work will be completed within the Contract time. The Baseline Schedule must (i) indicate the times (number of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract Documents, (ii) identify the Critical Path for completing the Work, (iii) identify when all Subcontractors will be utilized, and (iv) take into consideration any limitations on Working Hours, including baseline Rain Days on Calendar Day Contracts, and (v) be prepared accordance with Section 01310, Schedules and Reports, if applicable; otherwise in accordance with Section 01300, Submittals. This Baseline Schedule, a copy of which shall be made available at the job site(s), must contain sufficient detail to indicate that the CONTRACTOR has properly identified required Work elements and tasks, has provided for a sufficient and proper workforce and integration of Subcontractors, has provided sufficient resources and has considered the proper sequencing of the Work required to result in a successful Project that can be completed within the Contract time;
- .2** An organizational chart showing the principals and management personnel who will be involved with the Work, including each one's responsibilities for the Work;
- .3** To the extent not set forth in the Section 00400 Statement of Contractor's Experience, a complete listing of the CONTRACTOR's employees proposed for the Work. List each one by name and job title, and show length of employment with CONTRACTOR;

- .4 To the extent not set forth in the Section 00410 Statement of Bidder's Safety Experience, a discussion and confirmation of the CONTRACTOR's commitment to safety by providing a copy of its employee's safety handbook and the safety records for the past three years of CONTRACTOR's proposed project manager and Superintendent;
 - .5 A preliminary schedule of Shop Drawing and sample submittals;
 - .6 A preliminary schedule of values for all of the Work, subdivided into component parts in sufficient detail to serve as the basis for progress payments during construction. Such prices will be deemed to include an appropriate amount of overhead and profit applicable to each item of Work;
 - .7 To the extent not set forth in the Section 00400 Statement of Contractor's Experience, a letter designating CONTRACTOR's Superintendent and project manager, and a confirmation of past project experience for the CONTRACTOR's Superintendent and project manager specifically intended for the Work;
 - .8 A letter from CONTRACTOR and Subcontractor(s) listing salaried specialists. A salaried specialist is anyone except an hourly worker whose wage rate is governed by Section 00830 of this agreement;
 - .9 A letter designating the "Competent Person(s)" on general safety and excavation safety measures along with certifications or other documentation of the safety representative's qualifications;
 - .10 If applicable, an excavation safety system plan;
 - .11 If applicable, a plan illustrating proposed locations of temporary facilities;
 - .12 A completed Non-Use of Asbestos Affidavit (Prior to Construction);
 - .13 A letter designating the Texas Registered Professional Land Surveyor for layout of the Work, if the Work requires the services of a surveyor; and
 - .14 Appropriate safety training certificates for workers that will initially be on site;
 - .15 A certificate of worker's compensation insurance coverage for all persons providing services on the Project (refer to 5.2.1.3 in Section 00700 for definition of persons providing services on the Project);
 - .16 A Construction Equipment Emissions Reduction Plan.
- 2.4.3** Neither the acceptance nor the approval of any of the submittals required in paragraph 2.4.2, above, will constitute the adoption, affirmation, or direction of the CONTRACTOR'S means and methods.
- 2.5 Preconstruction Conference:** Prior to commencement of Work at the site, CONTRACTOR must attend a preconstruction conference with Owner's Representative and others, as set forth in Division 1. Additionally, prior to commencement of work, the CONTRACTOR shall host a preconstruction conference for the Subcontractors identified on the originally approved compliance plan, Owner's Representative and others, as set forth in Division 1. The CONTRACTOR shall notify all Subcontractors five (5) working days prior to the preconstruction conference. If the CONTRACTOR has included Subcontractors in the initial preconstruction conference, the additional Subcontractor preconstruction conference will not be required.
- 2.6 Initially Acceptable Schedules:** Unless otherwise provided in the Contract Documents, CONTRACTOR shall obtain approval of Owner's Representative on the Baseline Schedule submitted in accordance with paragraph 2.4.2.1 and Division 1 before the first progress payment will be made to CONTRACTOR. The Baseline Schedule must provide for an orderly

progression of the designated portion of the Work to completion within any specified Milestones and Contract Times. Acceptance of the schedule by Owner's Representative will neither impose on Owner's Representative responsibility or liability for the sequencing, scheduling or progress of the Work nor interfere with or relieve CONTRACTOR from CONTRACTOR's full responsibility for such Work. CONTRACTOR's schedule of Shop Drawings and sample submissions must provide an acceptable basis for reviewing and processing the required submittals. CONTRACTOR's schedule of values must conform to the requirements set forth in Division 1.

ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.1 Intent:

3.1.1 The intent of the Contract Documents is to include all information necessary for the proper execution and timely completion of the Work by CONTRACTOR. The CONTRACTOR will execute the Work described in and reasonably inferable from the Contract Documents as necessary to produce the results indicated by the Contract Documents. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all. In cases of disagreement, the following order of precedence shall generally govern (top item receiving priority of interpretation):

- Signed Agreement
- Addendum to the Contract Documents, including approved changes
- Supplemental General Conditions
- General Conditions
- Other Bidding Requirements and Contract Forms
- Special Provisions to the Standard Technical Specifications
- Special Specifications
- Standard Technical Specifications
- Drawings (figured dimensions shall govern over scaled dimensions)
- Project Safety Manual (if applicable),

with the understanding that a common sense approach will be utilized as necessary so that the Contract Documents produce the intended response.

3.1.2 Unless otherwise stated in the Contract Documents, words that have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

3.2 Reporting and Resolving Discrepancies: If, during the performance of the Work, CONTRACTOR discovers any conflict, error, ambiguity or discrepancy within the Contract Documents or between the Contract Documents and any provisions of any such law or regulation applicable to the performance of the Work or of any such standard, specification, manual or code or instructions of any Supplier, CONTRACTOR shall report it to Owner's Representative in writing at once, and CONTRACTOR shall not proceed with the Work affected thereby until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in paragraph 3.3.1 or 3.3.2. CONTRACTOR shall be liable to OWNER for failure to report any such conflict, error, ambiguity or discrepancy of which CONTRACTOR knew or reasonably should have known.

3.3 Amending and Supplementing Contract Documents:

3.3.1 The Contract Documents may be amended to provide for additions, deletions and revisions in the Work or to modify the terms and conditions thereof in one or more of the following ways:

- .1 Change Order.
 - .2 Change Directive.
 - .3 Time Extension Request.
- 3.3.2** In addition, the requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, in one or more of the following ways:
- .1 Field Order.
 - .2 Review of a Shop Drawing or sample.
 - .3 Written interpretation or clarification.
- 3.4** Reuse of Documents Prohibited: CONTRACTOR and any Subcontractor or Supplier or other person or organization performing or furnishing any of the Work under a direct or indirect contract with OWNER: (i) shall not have or acquire any title to or ownership rights in any of the Drawings, Specifications or other documents (or copies of any thereof) prepared by or bearing the seal of E/A or E/A's consultant, and (ii) shall not reuse any of such Drawings, Specifications, other documents or copies on extensions of the Project or any other project without written consent of OWNER and E/A.
- 3.5** In the event of the breach by the OWNER or CONTRACTOR of any of its obligations under the Contract, so as to support a claim by the other party, the provisions of this Contract will be equitably construed to allow the resolution of such a claim and all of the other provisions of this Contract shall continue in full force and effect as to the rights, responsibilities, and remedies of the OWNER and CONTRACTOR.

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

- 4.1 Availability of Lands:** The OWNER will provide access to all land and interests in land required for the Work and will notify CONTRACTOR of any restrictions in such access. CONTRACTOR may make a claim if OWNER fails to provide timely access to the Work. CONTRACTOR must obtain any additional temporary construction facilities, stockpiling or storage sites not otherwise provided.
- 4.2 Subsurface and Physical Conditions:**
- 4.2.1** CONTRACTOR specifically represents that it has carefully examined the plans, the geotechnical report, if any, and the site of the proposed Work and is thoroughly familiar with all of the conditions surrounding construction of the Project, having had the opportunity to conduct any and all additional inquiry, tests and investigation that he/she deems necessary and proper. CONTRACTOR acknowledges the receipt of the geotechnical report, if any, and agrees that the report, while it is an accurate record of the geotechnical conditions at the boring locations, is not a guarantee of specific site conditions which may vary between boring locations.
 - 4.2.2** CONTRACTOR must notify OWNER in writing as soon as reasonably possible, but no later than three (3) calendar days, if unforeseen conditions are encountered at the site which are (i) subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Contract Documents or (ii) unknown physical conditions of an unusual nature, that differ materially from those normally encountered in the type of work being performed under this Contract. CONTRACTOR may not disturb the conditions until OWNER conducts an investigation. Owner's Representative and E/A will promptly investigate such

conditions with E/A. If it is determined that such conditions differ materially and cause an increase or decrease in the CONTRACTOR's cost of or time required for performance of any part of the Work, Owner's Representative will recommend an equitable adjustment in the Contract Amount or Contract Time, or both. If it is determined that such conditions are not materially different from those indicated in the Contract Documents, Owner's Representative will notify CONTRACTOR in writing of such findings and the Contract will not be adjusted. CONTRACTOR may dispute such a determination in accordance with Article 16.

4.2.3 Notwithstanding any other provision of this Contract, CONTRACTOR is solely responsible for the location and protection of any and all public utility lines and utility customer service lines in the Work area. "Public utility lines" means the utility distribution and supply system, and "utility customer service lines" means the utility lines connecting customers to the utility distribution and collection system. Generally, existing utility customer service line connections are not shown on the Drawings. CONTRACTOR shall notify "One Call" and exercise due care to locate, mark, uncover and otherwise protect all such lines in the construction zone and any of CONTRACTOR's work or storage areas. CONTRACTOR's responsibility for the location and protection of utilities is primary and nondelegable. CONTRACTOR shall indemnify or reimburse such expenses or costs (including fines that may be levied against OWNER) that may result from unauthorized or accidental damage to all public lines and utility customer service lines in the work area. OWNER reserves the right to repair any damage CONTRACTOR causes to such utilities at CONTRACTOR's expense. If a public line and/or customer service line is damaged by CONTRACTOR, CONTRACTOR shall give verbal notice within one (1) hour and written notice within twenty-four (24) hours to the Owner's Representative.

4.2.4 CONTRACTOR shall take reasonable precaution to avoid disturbing primitive records and antiquities of archaeological, paleontological or historical significance. No objects of this nature shall be disturbed without written permission of OWNER and Texas Historical Commission. When such objects are uncovered unexpectedly, CONTRACTOR shall stop all Work in close proximity and notify Owner's Representative and Texas Historical Commission of their presence and shall not disturb them until written permission and permit to do so is granted. All primitive rights and antiquities uncovered on OWNER's property shall remain property of State of Texas, Texas Historical Commission conforming to Texas Natural Resources Code. If it is determined by OWNER, in consultation with Texas Historical Commission, that exploration or excavation of primitive records or antiquities on Project site is necessary to avoid loss, CONTRACTOR shall cooperate in salvage work attendant to preservation. If the Work stoppage or salvage work causes an increase in CONTRACTOR's cost of, or time required for, performance of the Work, the Contract Amount and/or Contract Time will be equitably adjusted.

4.3 Reference Points: Unless otherwise specified, all control lines and bench marks suitable for use in layout will be furnished by OWNER. Lay out of the Work shall be performed in accordance with Division 1. Controls, bench marks and property boundary markers shall be carefully preserved by CONTRACTOR by use of flags, staffs or other visible devices and in case of destruction or removal by CONTRACTOR or its employees, such controls and bench marks shall be replaced by a Registered Professional Land Surveyor at CONTRACTOR's expense. City of Austin survey monuments damaged by CONTRACTOR will be reestablished by OWNER at CONTRACTOR's expense.

4.4 Hazardous Materials:

4.4.1 To the extent provided by applicable law, OWNER shall be responsible for any hazardous material uncovered or revealed at the site which was not shown,

indicated or identified in the Contract Documents to be within the scope of the Work and which may present a substantial danger to persons or property exposed thereto in connection with the Work at the site. CONTRACTOR shall immediately notify Owner's Representative of any suspected hazardous materials encountered before or during performance of the Work and shall take all necessary precautions to avoid further disturbance of the materials.

- 4.4.2** CONTRACTOR shall be responsible for any hazardous materials brought to the site by CONTRACTOR, Subcontractor, Suppliers or anyone else for whom CONTRACTOR is responsible.
- 4.4.3** No asbestos-containing materials shall be incorporated into the Work or brought on Project site without prior approval of OWNER. The CONTRACTOR shall not knowingly use, specify, request or approve for use any asbestos containing materials or lead-based paint without the OWNER'S written approval. When a specific product is specified, the CONTRACTOR shall endeavor to verify that the product does not include asbestos containing material.
- 4.4.4** Refer to Division 1 for hazardous material definitions and procedures.
 - .1** Unless otherwise expressly provided in the Contract Documents to be part of the Work, CONTRACTOR is not responsible for any unexpected Hazardous Materials encountered at the site. Upon encountering any Hazardous Conditions, CONTRACTOR must stop Work immediately in the affected area and duly notify OWNER and, if required by applicable law or regulations, all government or quasi-government entities with jurisdiction over the Project or site.
 - .2** Upon receiving notice of the presence of suspected Hazardous Materials, OWNER shall take the necessary measures required to ensure that the Hazardous Materials are remediated or rendered harmless. Such necessary measures shall include OWNER retaining qualified independent experts to (i) ascertain whether Hazardous Materials have actually been encountered, and, if they have been encountered, (ii) prescribe the remedial measures that OWNER must take either to remove the Hazardous Materials or render the Hazardous Materials harmless.
 - .3** CONTRACTOR shall be obligated to resume Work at the affected area of the Project only after OWNER's Representative provides written certification that (i) the Hazardous Materials have been removed or rendered harmless and (ii) all necessary approvals have been obtained from all government and quasi-government entities having jurisdiction over the Project or site. The CONTRACTOR shall be responsible for continuing the Work in the unaffected portion of the Project and site.
 - .4** CONTRACTOR will be entitled, in accordance with these General Conditions, to an adjustment in its Contract Amount and/or Contract Time(s) to the extent CONTRACTOR's cost and/or time of performance have been adversely impacted by the presence of Hazardous Materials.
 - .5** Notwithstanding the preceding provisions of this Section 4.1, OWNER is not responsible for Hazardous Materials introduced to the Site by CONTRACTOR, Subcontractors or anyone for whose acts they may be liable. CONTRACTOR shall indemnify, defend and hold harmless OWNER and OWNER's officers, directors, employees and agents from and against all claims, losses, damages, liabilities and expenses, including attorneys' fees and expenses, arising out of or resulting from those hazardous materials introduced to the site by CONTRACTOR, Subcontractors or anyone for whose acts they may be liable.

- 4.4.5** CONTRACTOR shall be responsible for use, storage and remediation of any hazardous materials brought to the Site by CONTRACTOR, Subcontractors, Suppliers or anyone else for whom CONTRACTOR is responsible.

ARTICLE 5 - BONDS AND INSURANCE

5.1 Surety and Insurance Companies: All bonds and insurance required by the Contract Documents shall be obtained from solvent surety or insurance companies that are duly licensed by the State of Texas and authorized to issue bonds or insurance policies for the limits and coverages required by the Contract Documents. The bonds shall be in a form acceptable to OWNER and shall be issued by a surety which complies with the requirements of Texas Insurance Code, Title 12, Chapter 3503. The surety must obtain reinsurance for any portion of the risk that exceeds 10% of the surety's capital and surplus. For bonds exceeding \$100,000, the surety must also hold a certificate of authority from the U.S. Secretary of the Treasury or have obtained reinsurance for any liability in excess of \$1,000,000 from a reinsurer that is authorized as a reinsurer in Texas or holds a certificate of authority from the U.S. Secretary of the Treasury. In the event that the proposed surety for a contract award in excess of \$100,000 does not hold a certificate of authority from the U.S. Secretary of the Treasury and/or its proposed reinsurer does not hold a certificate of authority from the U.S. Secretary of the Treasury, the OWNER may require additional financial solvency information from the Bidder/Contractor and the proposed surety company and/or reinsurer as part of the 00400 Statement of Bidders Experience and determination of bidder responsibility in the award of the Contract.

5.2 Workers' Compensation Insurance Coverage:

5.2.1 Definitions:

- .1** Certificate of coverage ("certificate") - A copy of a certificate of insurance, a certificate of authority to self-insure issued by the commission, or a coverage agreement (DWC-81, DCW-82, DCW-83, or DCW84), showing statutory workers' compensation insurance coverage for the person's or entity's employees providing services on the Project, for the duration of the Project.
- .2** Duration of the Project - includes the time from the beginning of the Work on the Project until the CONTRACTOR's/ person's Work on the Project has been completed and accepted by OWNER.
- .3** Persons providing services on the Project ("subcontractor" in Texas Labor Code, Section 406.096) - includes all persons or entities performing all or part of the services the CONTRACTOR has undertaken to perform on the Project, regardless of whether that person contracted directly with the CONTRACTOR and regardless of whether that person has employees. This includes, without limitation, independent contractors, Subcontractors, leasing companies, motor carriers, owner-operators, employees of any such entity, or employees of any entity which furnishes persons to provide services on the Project. "Services" include, without limitation, providing, hauling, or delivering equipment or materials, or providing labor, transportation, or other service related to a project. "Services" does not include activities unrelated to the Project, such as food/beverage vendors, office supply deliveries, and delivery of portable toilets.

5.2.2 CONTRACTOR shall provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Code, Section 401.011(44) for all

employees of the CONTRACTOR providing services on the Project, for the duration of the Project.

- 5.2.3** CONTRACTOR must provide a certificate of coverage to OWNER prior to being awarded the Contract.
- 5.2.4** If the coverage period shown on the CONTRACTOR's current certificate of coverage ends during the duration of the Project, the CONTRACTOR must, prior to the end of the coverage period, file a new certificate of coverage with OWNER showing that coverage has been extended.
- 5.2.5** CONTRACTOR shall obtain from each person providing services on the Project, and provide to OWNER:
 - .1** A certificate of coverage, prior to that person beginning Work on the Project, so OWNER will have on file certificates of coverage showing coverage for all persons providing services on the Project; and
 - .2** No later than seven (7) days after receipt by CONTRACTOR, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the Project.
- 5.2.6** CONTRACTOR shall retain all required certificates of coverage for the duration of the Project and for one (1) year thereafter.
- 5.2.7** CONTRACTOR shall notify OWNER in writing by certified mail or personal delivery, within ten (10) days after CONTRACTOR knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the Project.
- 5.2.8** CONTRACTOR shall post on each Project site a notice, in the text, form and manner prescribed by the Texas Workers' Compensation Commission, informing all persons providing services on the Project that they are required to be covered, and stating how a person may verify coverage and report lack of coverage.
- 5.2.9** CONTRACTOR shall contractually require each person with whom it contracts to provide services on a Project, to:
 - .1** Provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Code, Section 401.011(44) for all of its employees providing services on the Project, for the duration of the Project;
 - .2** Provide to CONTRACTOR, prior to that person beginning Work on the Project, a certificate of coverage showing that coverage is being provided for all employees of the person providing services on the Project, for the duration of the Project;
 - .3** Provide CONTRACTOR, prior to the end of the coverage period, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the Project;
 - .4** Obtain from each other person with whom it contracts, and provide to CONTRACTOR: a) a certificate of coverage, prior to the other person beginning Work on the Project; and b) a new certificate of coverage showing extension of coverage, prior to the end of the coverage period, if the coverage period shown on the current certificate of coverage ends during the duration of the Project;
 - .5** Retain all required certificates of coverage on file for the duration of the Project and for one (1) year thereafter;

- .6 Notify OWNER in writing by certified mail or personal delivery, within ten (10) days after the person knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the Project; and
- .7 Contractually require each person with whom it contracts, to perform as required by paragraphs 5.2.9.1 - 5.2.9.7, with the certificates of coverage to be provided to the person for whom they are providing services.

5.2.10 By signing this Contract or providing or causing to be provided a certificate of coverage, CONTRACTOR is representing to OWNER that all employees of the CONTRACTOR who will provide services on the Project will be covered by workers' compensation coverage for the duration of the Project, that the coverage will be based on proper reporting of classification codes and payroll amounts, and that all coverage agreements will be filed with the appropriate insurance carrier or, in the case of a self-insured, with the Texas Worker's Compensation Commission's Division of Self- Insurance Regulation. Providing false or misleading information may subject CONTRACTOR to administrative penalties, criminal penalties, civil penalties, or other civil actions.

5.2.11 CONTRACTOR's failure to comply with any of these provisions is a breach of Contract by CONTRACTOR which entitles OWNER to declare the Contract void if CONTRACTOR does not remedy the breach within ten (10) days after receipt of notice of breach from OWNER.

5.3 Other Bond and Insurance Requirements: For additional insurance requirements, refer to the Supplemental General Conditions.

5.4 Bonds:

5.4.1 General.

- .1 Bonds, when required, shall be executed on forms furnished by or acceptable to OWNER. All bonds signed by an agent must be accompanied by a certified copy of such agent's authority to act.
- .2 If the surety on any bond furnished by CONTRACTOR is declared bankrupt or becomes insolvent or its right to do business is terminated in the State of Texas or it ceases to meet the requirements of the preceding paragraph, CONTRACTOR shall within ten (10) days thereafter substitute another bond and surety, both of which must be acceptable to OWNER.
- .3 When Performance Bonds and/or Payment Bonds are required, each shall be issued in an amount of one hundred percent (100%) of the Contract Amount as security for the faithful performance and/or payment of all CONTRACTOR's obligations under the Contract Documents. Performance Bonds and Payment Bonds shall be issued by a solvent surety company authorized to do business in the State of Texas, and shall meet any other requirements established by law or by OWNER pursuant to applicable law. Any surety duly authorized to do business in Texas may write Performance and Payment Bonds on a project without reinsurance to the limit of ten percent (10%) of its capital and surplus. Such a surety must reinsure any obligations over ten percent (10%).

5.4.2 Performance Bond.

- .1 If the Contract Amount exceeds \$100,000, CONTRACTOR shall furnish OWNER with a Performance Bond in the form set out in Section 00610.
- .2 If the Contract Amount exceeds \$25,000 but is less than or equal to \$100,000, CONTRACTOR shall furnish OWNER with a Performance Bond in the form set out in Section 00610, unless the original Contract Time is 60 Calendar

Days/40 Working Days or less, in which case CONTRACTOR can agree to the following terms and conditions for payment in lieu of providing a Performance Bond: no moneys will be paid to CONTRACTOR until completion and acceptance of the Work by OWNER; CONTRACTOR shall be entitled to receive 95% of the Contract Amount following Final Completion, and the remaining 5% of the Contract Amount following the one (1) year warranty period.

- .3 If the Contract Amount is less than or equal to \$25,000, CONTRACTOR will not be required to furnish a Performance Bond; provided that no moneys will be paid to CONTRACTOR until completion and acceptance of the Work by OWNER under the following terms and conditions: CONTRACTOR shall be entitled to receive 95% of the Contract Amount following Final Completion, and the remaining 5% of the Contract Amount following the one (1) year warranty period.
- .4 If a Performance Bond is required to be furnished, it shall extend for the one (1) year warranty period.

5.4.3 Payment Bond.

- .1 If the Contract Amount exceeds \$50,000, CONTRACTOR shall furnish OWNER with a Payment Bond in the form set out in Section 00620.
- .2 If the Contract Amount is less than or equal to \$50,000, CONTRACTOR will not be required to furnish a Payment Bond; provided that no moneys will be paid to CONTRACTOR until completion and acceptance of the Work by OWNER under the terms and conditions specified in paragraph 5.4.2.3.

5.4.4 Maintenance Bond: If the Contract Documents contemplate a period of maintenance beyond the one (1) year contractual warranty period, OWNER agrees that any bond to be required for such maintenance work will be in the amount of the maintenance work during any extended maintenance period.

ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES

6.1 Supervision and Superintendence:

- 6.1.1** CONTRACTOR shall supervise, inspect and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. CONTRACTOR shall be solely responsible for the means, methods, techniques, sequences and procedures of construction. CONTRACTOR shall be responsible to see that the completed Work complies accurately with the Contract Documents.
- 6.1.2** CONTRACTOR shall have an English-speaking, competent Superintendent on the Work at all times that work is in progress. The Superintendent will be CONTRACTOR's representative on the Work and shall have the authority to act on the behalf of CONTRACTOR. All communications given to the Superintendent shall be as binding as if given to CONTRACTOR. Either CONTRACTOR or the Superintendent shall provide a cellular telephone number and an emergency and home telephone number at which one or the other may be reached if necessary when work is not in progress. The Superintendent must be an employee of the CONTRACTOR, unless such requirement is waived in writing by the Owner's Representative. If the CONTRACTOR proposes a management structure with a Project Manager supervising, directing, and managing construction of the work in addition to or in substitution of a Superintendent, the requirements of these Construction Documents with respect to the Superintendent shall likewise apply to any such Project Manager.

- .1 CONTRACTOR shall present the resume of the proposed Superintendent to the Owner's Representative showing evidence of experience and successful superintendence and direction of work of a similar scale and complexity. If, in the opinion of the Owner's Representative, the proposed Superintendent does not indicate sufficient experience in line with the Work, he/she will not be allowed to be the designated Superintendent for the Work.
- .2 The Superintendent shall not be replaced without Written Notice to Owner's Representative. If CONTRACTOR deems it necessary to replace the Superintendent, CONTRACTOR shall provide the necessary information for approval, as stated above, on the proposed new Superintendent.
- .3 A qualified substitute Superintendent may be designated in the event that the designated Superintendent is temporarily away from the Work, but not to exceed a time limit acceptable to the Owner's Representative. CONTRACTOR shall replace the Superintendent upon OWNER's request in the event the Superintendent is unable to perform to OWNER's satisfaction.

6.2 Labor, Materials and Equipment:

- 6.2.1 CONTRACTOR shall maintain a work force adequate to accomplish the Work within the Contract Time. CONTRACTOR agrees to employ only orderly and competent workers, skillful in performance of the type of Work required under this Contract. CONTRACTOR, Subcontractors, Sub-subcontractors, and their employees may not use or possess any alcoholic or other intoxicating beverages, illegal drugs or controlled substances while on the job or on OWNER's property, nor may such workers be intoxicated, or under the influence of alcohol or drugs, on the job. Subject to the applicable provisions of Texas law, CONTRACTOR, Subcontractors, Sub-subcontractors, and their employees may not use or possess any firearms or other weapons while on the job or on OWNER'S property. If OWNER or Owner's Representative notifies CONTRACTOR that any worker or representative of Contractor is incompetent, disorderly, abusive, or disobedient, has knowingly or repeatedly violated safety regulations, has possessed any firearms in contravention of the applicable provisions of Texas law, or has possessed or was under the influence of alcohol or drugs on the job, CONTRACTOR shall immediately remove such worker or representative, including an officer or owner of CONTRACTOR, from performing Contract Work, and may not employ such worker or representative again on Contract Work without OWNER's prior written consent. CONTRACTOR shall at all times maintain good discipline and order on or off the site in all matters pertaining to the Project. CONTRACTOR shall pay workers no less than the wage rates established in Section 00830, and maintain weekly payroll reports as evidence thereof, in accordance with the requirements of Chapter 2258 of the Texas Government Code.
- 6.2.2 Unless otherwise specified in Division 1, CONTRACTOR shall provide and pay for all materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities and all other facilities and incidentals necessary for the furnishing, performance, testing, start-up and completion of the Work.
- 6.2.3 All materials and equipment shall be of good quality and new (including new products made of recycled materials, pursuant to Section 361.426 of the Texas Health & Safety Code), except as otherwise provided in the Contract Documents. If required by Owner's Representative, CONTRACTOR shall furnish satisfactory evidence (reports of required tests, manufacturer's certificates of compliance with material requirements, mill reports, etc.) as to the kind and quality of materials and equipment. All materials and equipment shall be applied, installed, connected,

erected, used, cleaned and conditioned in accordance with instructions of the applicable Supplier, except as otherwise provided in the Contract Documents.

6.2.4 Substitutes and "Approved Equal" Items:

- .1** Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function and quality required. Unless the specification or description contains words reading that no like, equivalent or "approved equal" item or no substitution is permitted, other items of material or equipment of other Suppliers may be submitted by CONTRACTOR, at CONTRACTOR'S sole risk, including disruptions to the Critical Path of the Progress Schedule, to E/A through Owner's Representative under the following circumstances:

 - .1.1 "Approved Equal":** If in E/A's sole discretion an item of material or equipment proposed by CONTRACTOR is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by E/A as an "approved equal" item, in which case review of the proposed item may, in E/A's sole discretion, be accomplished without compliance with some or all of the requirements for evaluation of proposed substitute items. CONTRACTOR shall provide E/A with the documentation required for E/A to make its determination.
 - .1.2 Substitute Items:** If in E/A's sole discretion an item of material or equipment proposed by CONTRACTOR does not qualify as an "approved equal" item under subparagraph 6.2.4.1.1, it will be considered a proposed substitute item. CONTRACTOR shall submit sufficient information as provided in Division 1 to allow E/A to determine that the item of material or equipment proposed is essentially equivalent to that named and a substitute therefor.
- .2 Substitute Construction Methods and Procedures:** If a specific means, method, technique, sequence or procedure of construction is shown or indicated in and expressly required by the Contract Documents, CONTRACTOR may, at CONTRACTOR'S sole risk, including disruptions to the Critical Path of the Progress Schedule, with prior approval of E/A furnish or utilize a substitute means, method, technique, sequence, or procedure of construction. CONTRACTOR shall submit sufficient information to Owner's Representative to allow E/A, in E/A's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. The procedure for review by E/A will be same as that provided for substitute items in Division 1.
- .3 E/A's Evaluation:** E/A will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to subparagraphs 6.2.4.1.1 and 6.2.4.1.2. E/A will be the sole judge of acceptability. No "approved equal" or substitute shall be ordered, installed, or utilized until E/A's review is complete, which will be evidenced by either a Change Order or completion of the Shop Drawing review procedure. OWNER may require CONTRACTOR to furnish at CONTRACTOR's expense a special performance guarantee or other surety bond with respect to any "approved equal" or substitute or for any other delay or disruption to the Critical Path of the Project Schedule attributable to any such substitution. OWNER shall not be responsible for any delay due to review time for any "approved equal" or substitute.

- .4 CONTRACTOR's Expense: All data and documentation to be provided by CONTRACTOR in support of any proposed "approved equal" or substitute item will be at CONTRACTOR's expense.
- .5 The approval of the E/A will not relieve the CONTRACTOR from primary responsibility and liability for the suitability and performance of any proposed substitute item, method or procedure and will not relieve CONTRACTOR from its primary responsibility and liability for curing defective Work and performing warranty work, which the CONTRACTOR shall cure and perform, regardless of any claim the CONTRACTOR may choose to advance against the E/A or manufacturer.

6.2.5 CONTRACTOR agrees to assign to OWNER any rights it may have to bring antitrust suits against its Suppliers for overcharges on materials incorporated in the Project growing out of illegal price fixing agreements. CONTRACTOR further agrees to cooperate with OWNER should OWNER wish to prosecute suits against Suppliers for illegal price fixing.

6.3 Progress Schedule: Unless otherwise provided in Division 1, CONTRACTOR shall adhere to the Baseline Schedule established in accordance with paragraph 2.6 as it may be adjusted from time to time as provided below:

6.3.1 CONTRACTOR shall submit to Owner's Representative for review and approval any proposed adjustments in the Progress Schedule that will not change the Contract Times or Milestones on a monthly basis. Any such proposed adjustments must be substantiated with documentation of any changes to the underlying logic of the Progress Schedule. CONTRACTOR's Progress Schedule must show how the CONTRACTOR will consistently advance the progress of the Work in accordance with the Critical Path of the Work and the Contract Time or Milestones. Such adjustments will conform generally to the Progress Schedule then in effect and additionally will comply with any provisions of Division 1 applicable thereto.

6.3.2 Proposed adjustments in the Progress Schedule that will change the Contract Times or Milestones shall be submitted in accordance with the requirements of Article 12. Any such proposed adjustments must be substantiated with documentation of any changes to the underlying logic of the Progress Schedule. Such adjustments may only be made by a Change Order or Time Extension Request in accordance with Article 12.

6.4 Concerning Subcontractors, Suppliers and Others:

6.4.1 Assignment: CONTRACTOR agrees to retain direct control of and give direct attention to the fulfillment of this Contract. CONTRACTOR agrees not to, by Power of Attorney, or otherwise, assign said Contract without the prior written consent of OWNER. In addition, without OWNER'S written consent, the CONTRACTOR will not subcontract the performance of the entire Work or the supervision and direction of the Work.

6.4.2 Award of Subcontracts for Portions of the Work: CONTRACTOR shall not employ any Subcontractor, Supplier or other person or organization, whether initially or as a substitute, against whom OWNER may have reasonable objection. OWNER will communicate such objections by Written Notice. If OWNER requires a change without good cause of any Subcontractor, person or organization previously accepted by OWNER, the Contract Amount shall be increased or decreased by the difference in the cost occasioned by any such change, and appropriate Change Order shall be issued. CONTRACTOR shall not substitute any Subcontractor, person or organization that has been accepted by OWNER, unless the substitute has been accepted in writing by OWNER. No acceptance by OWNER of any Subcontractor,

Supplier or other person or organization shall constitute a waiver of any right of OWNER to reject defective Work.

- 6.4.3** CONTRACTOR shall enter into written agreements with all Subcontractors and Suppliers which specifically binds the Subcontractors or Suppliers to the applicable terms and conditions of the Contract Documents for the benefit of OWNER and E/A. The OWNER reserves the right to specify that certain requirements shall be adhered to by all Subcontractors and Sub-subcontractors as indicated in other portions of the Contract Documents and these requirements shall be made a part of the agreement between CONTRACTOR and Subcontractor or Supplier. Subject to and in accordance with the above requirements, the CONTRACTOR must provide and will be deemed for all purposes to have provided in its contracts with major Subcontractors or Suppliers on the Project (those contracts of more than \$10,000) the following specific provision: alternative dispute resolution (paragraphs 16.2 and 16.3), which shall be mandatory in the event of a subcontractor or supplier claim and a prerequisite for the submission of any derivative claim. The CONTRACTOR's standard subcontract form is subject to the OWNER's review and approval. The OWNER may request and the CONTRACTOR will provide within five (5) working days a copy of any subcontract requested by the OWNER.
- 6.4.4** CONTRACTOR shall be fully responsible to OWNER for all acts and omissions of the Subcontractors, Suppliers and other persons and organizations performing or furnishing any of the Work under a direct or indirect contract with CONTRACTOR just as CONTRACTOR is responsible for CONTRACTOR's own acts and omissions. Nothing in the Contract Documents shall create for the benefit of any such Subcontractor, Supplier or other person or organization any contractual relationship between OWNER and any such Subcontractor, Supplier or other person or organization, nor shall it create any obligation on the part of OWNER or E/A to pay or to see to the payment of any moneys due any such Subcontractor, Supplier or other person or organization except as may otherwise be required by laws and regulations.
- 6.4.5** CONTRACTOR shall be solely responsible for efficiently scheduling and 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 in order to avoid any delays or inefficiencies in the prosecution of the Work. CONTRACTOR shall require all Subcontractors, Suppliers and such other persons and organizations performing or furnishing any of the Work to communicate with Owner's Representative through CONTRACTOR.
- 6.4.6** The divisions and sections of the Specifications and the identifications of any Drawings shall not control CONTRACTOR in dividing or delineating the Work to be performed by any specific trade.
- 6.4.7** CONTRACTOR shall pay each Subcontractor and Supplier their appropriate share of payments made to CONTRACTOR not later than ten (10) Calendar Days of CONTRACTOR's receipt of payment from OWNER. Upon request from Owner, the CONTRACTOR has two (2) Working Days to provide documentation verifying Payment to Subcontractor(s). The CONTRACTOR is required to notify the Subcontractor(s) in writing of rejection of Application for Payment within two (2) Working Days following notification by Owner. Failure of CONTRACTOR to make payments to Subcontractors or for labor, materials or equipment in accordance to this contract, may be cause to reject future Bids by the CONTRACTOR in accordance with Section 00100 9.B.4 and may be cause to reject payment in accordance with 00700 14.4.1.3.
- 6.4.8** To the extent allowed by Texas law, the OWNER shall be deemed to be a third party beneficiary to each subcontract and may, if OWNER elects, following a termination of the CONTRACTOR, require that the Subcontractor(s) perform all or a portion of

unperformed duties and obligations under its subcontract(s) for the benefit of the OWNER, rather than the CONTRACTOR; however, if the OWNER requires any such performance by a Subcontractor for the OWNER's direct benefit, then the OWNER shall be bound and obligated to pay such Subcontractor the reasonable value for all Work performed by such Subcontractor to the date of the termination of the CONTRACTOR, less previous payments, and for all Work performed thereafter. In the event that the OWNER elects to invoke its right under this section, OWNER will provide notice of such election to the CONTRACTOR and the affected Subcontractor(s).

6.5 Patent Fees and Royalties:

- 6.5.1** CONTRACTOR shall be responsible at all times for compliance with applicable patents or copyrights encompassing, in whole or in part, any design, device, material, or process utilized, directly or indirectly, in the performance of the Work or the formulation or presentation of its Bid.
- 6.5.2** CONTRACTOR shall pay all royalties and license fees and shall provide, prior to commencement of Work hereunder and at all times during the performance of same, for lawful use of any design, device, material or process covered by letters, patent or copyright by suitable legal agreement with the patentee, copyright holder, or their duly authorized representative whether or not a particular design, device, material, or process is specified by OWNER.
- 6.5.3** CONTRACTOR shall defend all suits or claims for infringement of any patent or copyright and shall save OWNER harmless from any loss or liability, direct or indirect, arising with respect to CONTRACTOR's process in the formulation of its Bid or the performance of the Work or otherwise arising in connection therewith. OWNER reserves the right to provide its own defense to any suit or claim of infringement of any patent or copyright in which event CONTRACTOR shall indemnify and save harmless OWNER from all costs and expenses of such defense as well as satisfaction of all judgments entered against OWNER.
- 6.5.4** OWNER shall have the right to stop the Work and/or terminate this Agreement at any time in the event CONTRACTOR fails to disclose to OWNER that CONTRACTOR's work methodology includes the use of any infringing design, device, material or process.

6.6 Permits, Fees: Unless otherwise provided in the Supplemental General Conditions, CONTRACTOR shall obtain and pay for all construction permits, licenses and fees required for prosecution of the Work.

6.7 Laws and Regulations:

- 6.7.1** CONTRACTOR shall give all notices and comply with all laws and regulations applicable to furnishing and performing the Work, including arranging for and obtaining any required inspections, tests, approvals or certifications from any public body having jurisdiction over the Work or any part thereof. Except where otherwise expressly required by applicable laws and regulations, neither OWNER nor E/A shall be responsible for monitoring CONTRACTOR's compliance with any laws and regulations.
- 6.7.2** Maintaining clean water, air and earth or improving thereon shall be regarded as of prime importance. CONTRACTOR shall plan and execute its operations in compliance with all applicable Federal, State and local laws and regulations concerning control and abatement of water pollution and prevention and control of air pollution.
- 6.7.3** If CONTRACTOR performs any Work knowing or having reason to know that it is contrary to laws or regulations, CONTRACTOR shall bear all claims, costs, losses and damages arising therefrom; however, it shall not be CONTRACTOR's primary

responsibility to make certain that the Specifications and Drawings are in accordance with laws and regulations, but this does not relieve CONTRACTOR of CONTRACTOR's obligations under Article 3.

6.8 Taxes:

- 6.8.1** CONTRACTOR shall pay only those sales, consumer, use and other similar taxes required to be paid by CONTRACTOR in accordance with the laws and regulations of the State of Texas in the performance of this public works contract.
- 6.8.2** OWNER is an exempt organization as defined by Chapter 11 of the Property Tax Code of Texas and is thereby exempt from payment of Sales Tax under Chapter 151, Limited Use Sales, Excise and Use Tax, Texas Tax Code, and Article 1066 (C), Local Sales and Use Tax Act, Revised Civil Statutes of Texas.

6.9 Use of Premises:

- 6.9.1** CONTRACTOR shall confine construction equipment, the storage of materials and equipment and the operations of workers to the site and land and areas identified in and permitted by the Contract Documents and other land and areas permitted by laws and regulations, right-of-way, permits and easements, and shall not unreasonably encumber the premises with construction equipment or other materials or equipment. CONTRACTOR shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof or of any adjacent land or areas, resulting from the performance of the Work. Should any claim be made by any such owner or occupant because of or in connection with the performance of the Work, CONTRACTOR shall promptly settle with such other party by negotiation or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law. CONTRACTOR shall indemnify, defend and hold harmless OWNER, E/A, E/A'S Consultants and anyone directly or indirectly employed by any of them from and against all claims, costs, losses and damages (including court costs and reasonable attorney's fees) arising out of or resulting from any claim or action, legal or equitable, brought by any such owner or occupant against OWNER, E/A or any other party indemnified hereunder to the extent caused by or based upon performance of the work or failure to perform the Work.
 - 6.9.2** During the progress of the Work and on a daily basis, CONTRACTOR shall keep the premises free from accumulations of waste materials, rubbish and other debris resulting from the Work. At the completion of the Work, CONTRACTOR shall remove all waste materials, rubbish and debris from and about the premises as well as all tools, appliances, construction equipment and machinery and surplus materials. CONTRACTOR shall leave the site clean and ready for occupancy by OWNER at Substantial Completion of the Work. CONTRACTOR shall, at a minimum, restore to original condition all property not designated for alteration by the Contract Documents. If the CONTRACTOR fails to clean up at the completion of the Work, OWNER may do so and the cost thereof will be charged against the CONTRACTOR.
 - 6.9.3** CONTRACTOR shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall CONTRACTOR subject any part of the Work or adjacent property to stresses or pressures that will endanger it.
- 6.10 Record Documents:** CONTRACTOR shall maintain in a safe place at the site, or other location acceptable to OWNER, one (1) record copy of all Drawings, Specifications, Addenda, Change Orders, Change Directives, Field Orders and written interpretations and clarifications (issued pursuant to paragraph 9.5) in good order and annotated to show all changes made during construction. These record documents together with all final samples and all final Shop Drawings will be available to OWNER and E/A for reference during performance of the Work. Upon Substantial Completion of the Work, these record documents, samples and Shop Drawings shall be promptly delivered to Owner's Representative.

6.11 Safety and Protection:

6.11.1 CONTRACTOR shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. Upon request, and prior to installation of measures, CONTRACTOR shall submit a site security plan for approval by OWNER. By reviewing the plan or making recommendations or comments, OWNER will not assume liability nor will CONTRACTOR be relieved of liability for damage, injury or loss. CONTRACTOR shall take all necessary precautions for the safety of and shall provide the necessary protection to prevent damage, injury or loss to:

- .1 all persons on the Work site or who may be affected by the Work;
- .2 all the Work and materials and equipment to be incorporated therein, whether in storage on or off the site; and
- .3 other property at the site or adjacent thereto, including, but not limited to, trees, shrubs, lawns, walks, pavements, roadways, structures, utilities and underground facilities not designated for removal, relocation or replacement in the course of construction.

6.11.2 CONTRACTOR shall comply with all applicable laws and regulations of any public body having jurisdiction for safety of persons or property or to protect them from damage, injury or loss; and shall erect and maintain all necessary safeguards for such safety and protection. CONTRACTOR shall notify owners of adjacent property and of underground facilities, and utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation and replacement of their property. All damage, injury or loss to any property referred to in paragraph 6.11.1.2 and 6.11.1.3 caused, directly or indirectly, in whole or in part, by CONTRACTOR, Subcontractor, Supplier or any person or organization directly or indirectly employed by any of them to perform or furnish any of the Work or anyone for whose acts any of them may be liable, shall be remedied by CONTRACTOR (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of OWNER, or E/A, or E/A's consultant or anyone employed by any of them or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the faults or negligence of CONTRACTOR or any Subcontractor, Supplier or other person or organization directly or indirectly employed by any of them). CONTRACTOR's duties and responsibilities for safety and protection of the Work shall continue until such time as all the Work is completed and Owner's Representative has issued a notice to OWNER and CONTRACTOR in accordance with Article 14 that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion). Without limitation, CONTRACTOR shall comply with the following specific provisions:

It shall be the duty and responsibility of CONTRACTOR and all of its subcontractors to be familiar with and comply with 29 USC Section 651, et seq., the Occupational Safety and Health Act of 1970, as amended ("OSHA") and to enforce and comply with all provisions of this Act.

The CONTRACTOR and all of its subcontractors shall comply with all applicable requirements of Subpart P of Part 1926 of 29 C.F.R, OSHA Safety and Health Standards, Texas Health and Safety Code Section 756.023, as amended, and shall submit a unit price for the particular excavation safety systems to be utilized by the Contractor for all excavations which exceed a depth of five feet (5').

Before commencing any excavation which will exceed a depth of five feet (5'), the CONTRACTOR shall provide the Owner with detailed plans and specifications regarding the safety systems to be utilized. Said plans and specifications shall

include a certification from a Texas licensed professional engineer indicating full compliance with the OSHA provisions cited above.

6.11.3 Safety Representative: CONTRACTOR shall designate in writing a qualified and experienced safety representative (the "Safety Representative") at the site whose duties and responsibilities shall include safety training; identifying and mitigating hazardous conditions and unsafe work practices; and developing, maintaining and supervising the implementation of safe work practices and safety programs as deemed necessary and appropriate for the Project. The term "Safety Representative" includes any designated Safety Supervisor, Superintendent or Safety Manager. The Safety Representative shall exercise due diligence in the execution of all Project related safety duties. The Safety Representative shall report directly to a company executive, not an on site project manager. Upon request of OWNER, CONTRACTOR shall provide certifications or other acceptable documentation of the Safety Representative's qualifications. The following requirements will be effective as of September 1, 2010:

- .1 The Safety Representative shall present certification of completion of the OSHA 30-hour Construction Industry Training Outreach Program described at: http://www.osha.gov/dte/outreach/construction_generalindustry/construction.html
- .2 The Safety Representative shall verify that all construction workers (defined as persons covered by a prevailing wage determination) on the job site, whether employed by the CONTRACTOR or subcontractors, have completed the OSHA 10-hour Construction Industry Training Outreach Program described at: http://www.osha.gov/dte/outreach/construction_generalindustry/construction.html. The Safety Representative must receive a certificate of training completion before allowing a worker on site and shall have all such certificates available for inspection by the OWNER.
- .3 The Safety Representative shall ensure that workers, including designated competent persons, have completed all applicable OSHA specific or other training needed to perform their job assignments. Training topics applicable to the scope of the current Project may include, but are not limited to, scaffolds, fall protection, cranes, excavations, electrical safety, tools, concrete and masonry construction, steel erection, operation of motor vehicles and mechanized equipment.
- .4 The Safety Representative shall post notice on the site of the Work stating that all workers shall have completed OSHA Construction Industry Training. The Owner may require, and the Safety Representative should consider providing a means of readily identifying workers who have completed the required training to monitor compliance with these requirements.
- .5 The Safety Representative shall ensure that all required OSHA and Workers Compensation notices to workers are posted in English and Spanish at one or more conspicuous locations on the work site.

6.11.4 Hazard Communication Programs: CONTRACTOR shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the site in accordance with laws and regulations.

6.11.5 Emergencies:

- .1 In emergencies affecting the safety or protection of persons or the Work at the site or adjacent thereto, CONTRACTOR, without special instruction or authorization from OWNER or E/A, is obligated to act reasonably to prevent threatened damage, injury or loss and to mitigate damage or loss to the Work.

CONTRACTOR shall give Owner's Representative telephone notification as soon as reasonably practical and a prompt written notice if CONTRACTOR believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby. If Owner's Representative determines that a change in the Contract Documents is required because of the action taken by CONTRACTOR in response to such an emergency, a Change Directive or Change Order will be issued to document the consequences of such action; otherwise OWNER will not be responsible for CONTRACTOR's emergency action.

- .2 Authorized agents of CONTRACTOR shall respond immediately to call-out at any time of any day or night when circumstances warrant the presence on Project site of CONTRACTOR or his agent to protect the Work or adjacent property from damage, restriction or limitation or to take such action or measures pertaining to the Work as may be necessary to provide for the safety of the public. Should CONTRACTOR and/or their agent fail to respond and take action to alleviate such an emergency situation, OWNER may direct other forces to take action as necessary to remedy the emergency condition, and OWNER will deduct any cost of such remedial action from the funds due CONTRACTOR under this Contract.
- .3 In the event there is an accident involving injury to any individual or damage to any property on or near the Work, CONTRACTOR shall provide to Owner's Representative verbal notification within one (1) hour and written notification within twenty-four (24) hours of the event and shall be responsible for recording the location of the event and the circumstances surrounding the event through photographs, interviewing witnesses, obtaining medical reports, police accident reports and other documentation that describes the event. Copies of such documentation shall be provided to Owner's Representative, for OWNER's and E/A's records, within forty-eight (48) hours of the event. Contractor shall cooperate with OWNER on any OWNER investigation of any such incident.

6.11.6 Rest Breaks:

- .1 Except as provided in subsection 6.11.6.2 below, an employee performing construction activity at a construction site is entitled to a rest break of not less than ten (10) minutes for every four (4) hours worked. No employee may be required to work more than 3.5 hours without a rest break. A rest break means a break from work within working hours, excluding meal breaks, during which an employee may not work. A rest break shall be scheduled as near as possible to the midpoint of the work period.
- .2 An employee is not entitled to a rest break under subsection 6.11.6.1 on any day the employee works less than 3.5 hours or spends more than half of his or her work time engaged in non-strenuous labor in a climate controlled environment.
- .3 A sign describing the requirements of this Section 6.11.6 in English and Spanish shall be posted by the employer in each establishment subject to the requirement of a rest break in a conspicuous place or places where notices to employees are customarily posted, in accordance with the OWNER's then current rules for size, content, and location of such signage.
- .4 The violation of Ordinance No. 20100729-047, enacted July 29, 2010, which establishes the rest break requirements set forth above, may be enforced with criminal penalties and civil remedies, as set forth in the Ordinance.

6.11.7 If the Contractor fails to carry out the Work in accordance with the Contract Documents so that a safety violation has occurred, the Owner may order the Contractor to stop the Work or any portion thereof, until the cause for such order has been eliminated. However, the right of the Owner to stop the Work under this paragraph shall not give rise to a duty on the part of the Owner to supervise the Contractor's Work or to control the Contractor's means and methods or to exercise this right for the benefit of the Contractor or any other person or entity. All time lost due to Project shut down will be the Contractor's sole responsibility, will be charged against the Contract Time, and the Contractor will be responsible for any and all expenses incurred. This provision is in addition to and supplemental to the applicable provisions of the Project's ROCIP Safety Manual.

6.11.8 Confined Space Program

- .1 Contractor acknowledges and agrees that the Owner is temporarily transferring management and control of the site of the Work to the Contractor for the purpose of constructing the Project. The Contractor's responsibilities to manage the Work includes the responsibility to manage the property for purposes of compliance with 29 CFR 1926 subpart AA. To the best of Owner's knowledge and belief, Owner has provided the following information in the plans and specifications and other Contract Documents: (i) the location of each known permit space, (ii) the hazards or potential hazards in each space or the reason it is a permit space; and (iii) any precautions that the Owner or any previous contractor has implemented for the protection of employees in the permit space. This transfer will result in the Contractor being both the host employer and the controlling contractor for this portion of the Work.

6.12 Continuing the Work: CONTRACTOR shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with OWNER. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as OWNER and CONTRACTOR may otherwise agree in writing.

6.13 CONTRACTOR's General Warranty and Guarantee:

6.13.1 CONTRACTOR warrants and guarantees to OWNER that all Work will conform to the plans and specifications, be performed in a good and workmanlike manner in accordance with the Contract Documents and will not be defective. This warranty will survive the termination or expiration of the Contract. CONTRACTOR's warranty and guarantee hereunder excludes defects or damage caused by:

- .1 abuse, modification or improper maintenance or operation by persons other than CONTRACTOR, Subcontractors or Suppliers; or
- .2 normal wear and tear under normal usage.

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

- .1 observations by Owner's Representative and/or E/A;
- .2 recommendation of any progress or final payment by Owner's Representative;
- .3 the issuance of a certificate of Substantial Completion or any payment by OWNER to CONTRACTOR under the Contract Documents;
- .4 use or occupancy of the Work or any part thereof by OWNER;

- .5 any acceptance by OWNER or any failure to do so;
- .6 any review of a Shop Drawing or sample submittal;
- .7 any inspection, test or approval by others; or
- .8 any correction of defective Work by OWNER.

6.14 INDEMNIFICATION:

6.14.1 CONTRACTOR shall defend, indemnify and hold harmless OWNER, E/A, E/A'S Consultants and Sub consultants and their respective officers, directors, partners, employees, agents and other Consultants and any of them (the "INDEMNIFIED PARTIES") from and against all claims, costs, losses and damages (including but not limited to all fees and charges of engineers, architects, attorneys and other professionals and all court or arbitration or other dispute resolution costs) arising out of or resulting from the performance of the Work, provided that any such claim, cost, loss or damage:

- .1 Is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the work itself), including the loss of use resulting therefrom, and
- .2 Is caused in whole or in part by any negligent act or omission of CONTRACTOR, any Subcontractor, any Supplier, any person or organization directly or indirectly employed by any of them to perform or furnish any of the work or anyone for whose acts any of them may be liable, regardless of whether or not caused in part by any negligence or omission of the INDEMNIFIED PARTIES hereunder or whether liability is imposed upon such INDEMNIFIED PARTY by laws and regulations regardless of the negligence of any such person or entity.

In the event that indemnification of the INDEMNIFIED PARTIES is prohibited by law, CONTRACTOR shall nonetheless be solely responsible for any liability arising out of or resulting from the performance of the Work, subject to the limitations set forth above, and shall indemnify and hold harmless the remaining INDEMNIFIED PARTIES, who may be legally indemnified, from such liability of the CONTRACTOR and the associated costs described above.

6.14.2 The indemnification obligation under paragraph 6.14.1 shall not be limited in any way by any limitation on the amount or type of damages, or compensation or benefits payable by or for CONTRACTOR or any such Subcontractor, Supplier or other person or organization under workers' compensation acts, disability benefit acts or other employee benefit acts.

6.14.3 The obligations of CONTRACTOR under paragraph 6.14.1 shall not extend to the liability of OWNER, E/A, E/A's consultants, and their officers, directors, partners, employees or agents caused primarily by negligent preparation of maps, drawings, surveys, designs or specifications upon which is placed the applicable state-authorized design professional seal of OWNER's, E/A's or E/A's consultant's officers, directors, partners, employees or agents.

6.14.4 In the event CONTRACTOR fails to follow OWNER's directives concerning use of the site, scheduling or course of construction, or engages in other conduct which proximately causes damage to property based on inverse condemnation or otherwise, then and in that event, CONTRACTOR shall indemnify OWNER against all costs resulting from such claims.

6.14.5 In the event CONTRACTOR unreasonably delays progress of the work being done by others on the site so as to cause loss for

which OWNER becomes liable, then CONTRACTOR shall indemnify OWNER from and reimburse OWNER for such loss.

- 6.15 Survival of Obligations:** All representations, indemnifications, warranties and guarantees made in, required by or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion and acceptance of the Work and termination or completion of the Agreement.
- 6.16 Losses from Natural Causes:** Unless otherwise specified, all loss or damage to CONTRACTOR arising out of the nature of the Work to be done or from action of the elements, floods or from unforeseeable circumstances in prosecution of the Work or from unusual obstructions or difficulties which may be encountered in prosecution of the Work, shall be sustained and borne by CONTRACTOR at its own cost and expense.
- 6.17 Notice of Claim:** Should CONTRACTOR suffer injury or damage to person or property because of any error, omission or act of OWNER or of any of OWNER's employees or agents or others for whose acts OWNER is liable, a Claim must be made to the other party within thirty (30) calendar days of the event giving rise to such injury or damage. The provisions of this paragraph 6.17 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitations or statute of repose.
- 6.18 Liquidated Damages:** CONTRACTOR or its Surety shall be liable for liquidated damages for the failure of the CONTRACTOR to timely complete the Work or any portion thereof within the Contract Time.

ARTICLE 7 - OTHER WORK

- 7.1** OWNER may perform other work related to the Project at the site by OWNER's own forces, or let other contracts therefor, or have other work performed by utility owners. CONTRACTOR and OWNER agree to and shall use best efforts to cooperate and coordinate the Work with others performing work and other work related to the Project in order to avoid conflicts and delays in the Work. If CONTRACTOR believes that delay or additional cost is involved because of such action by OWNER, CONTRACTOR may make a Claim as provided in Article 11 or 12.
- 7.2** CONTRACTOR shall afford other contractors who are in a contract with OWNER and each utility owner (and OWNER, if OWNER is performing the additional work with OWNER's employees) proper and safe access to the site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work and shall properly connect and coordinate the Work with theirs. Unless otherwise provided in the Contract Documents, CONTRACTOR shall do all cutting, fitting and patching of the Work that may be required to make its several parts come together properly and integrate with such other work. CONTRACTOR shall not endanger any work of others by cutting, excavating or otherwise altering their work and will only cut or alter their work with the written consent of Owner's Representative and the other contractors whose work will be affected. CONTRACTOR shall promptly remedy damage wrongfully caused by CONTRACTOR to completed or partially completed construction or to property of the OWNER or separate contractors.
- 7.3** If the proper execution or results of any part of CONTRACTOR's Work depends upon work performed by others under this Article 7, CONTRACTOR shall inspect such other work and promptly report to Owner's Representative in writing any delays, defects or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of CONTRACTOR's Work. CONTRACTOR's failure to report will constitute an acceptance of such other work as fit and proper for integration with CONTRACTOR's Work except for latent or non-apparent defects and deficiencies in such other work.

- 7.4** OWNER shall provide for coordination of the activities of the OWNER's own forces and of each separate contractor with the Work of CONTRACTOR, who shall cooperate with them. CONTRACTOR shall participate with other separate contractors and Owner's Representative in reviewing their construction Progress Schedules when directed to do so. On the basis of such review, CONTRACTOR shall make any revisions to the construction Progress Schedule deemed necessary after a joint review and mutual agreement. The agreed upon construction Progress Schedules shall then constitute the Progress Schedules to be used by CONTRACTOR, separate contractors and OWNER until subsequently revised.
- 7.5** Costs caused by delays or by improperly timed activities or defective construction shall be borne by the party responsible therefor.

ARTICLE 8 - OWNER'S RESPONSIBILITIES

- 8.1** Prior to the start of construction, OWNER will designate in writing a person or entity to act as Owner's Representative during construction. Except as otherwise provided in these General Conditions, OWNER shall issue all communications to CONTRACTOR through Owner's Representative.
- 8.2** OWNER will not supervise, direct, control or have authority over or be responsible for CONTRACTOR's means, methods, techniques, sequences or procedures of construction or the safety precautions and programs incident thereto. OWNER is not responsible for any failure of CONTRACTOR to comply with laws and regulations applicable to furnishing or performing the Work. OWNER is not responsible for CONTRACTOR's failure to perform or furnish the Work in accordance with the Contract Documents. Failure or omission of OWNER to discover, or object to or condemn any defective Work or material shall not release CONTRACTOR from the obligation to properly and fully perform the Contract.
- 8.3** OWNER is not responsible for the acts or omissions of CONTRACTOR, or of any Subcontractor, any Supplier, or of any other person or organization performing or furnishing any of the Work. CONTRACTOR acknowledges and agrees that OWNER'S direction to perform Work in accordance with the approved Progress Schedule is not a demand for acceleration or a dictation of CONTRACTOR'S means or methods.
- 8.4** Information or services under the OWNER's control shall be furnished by the OWNER with reasonable promptness to avoid delay in orderly progress of the Work. The OWNER shall have a reasonable amount of time to investigate site conditions, review submittals, analyze requests for changes, and to make other decisions in the orderly administration of the Contract. CONTRACTOR must notify the OWNER in writing, if the time for the investigation, review, analysis of any submittals, required for changes or otherwise required for OWNER'S decision, impacts in any way the Critical Path of the approved Progress Schedule.
- 8.5** The foregoing are in addition to other duties and responsibilities of the OWNER enumerated herein and especially those in respect to Article 4 (Availability of Lands; Subsurface and Physical Conditions; Reference Points), Article 7 (Other Work) and Article 14 (Payments to CONTRACTOR and Completion).
- 8.6** **Notice of Claim:** Should OWNER suffer injury or damage to person or property because of any error, omission or act of CONTRACTOR or of any of CONTRACTOR's employees or agents or others for whose acts CONTRACTOR is liable, a Claim will be made to the other party within thirty (30) calendar days of receipt of actual or constructive notice of the event giving rise to such injury or damage. The provisions of this paragraph 8.6 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitations or statute of repose.

ARTICLE 9 - ENGINEER/ARCHITECT'S STATUS DURING CONSTRUCTION

9.1 E/A's Authority and Responsibilities:

- 9.1.1** The duties and responsibilities and the limitations of authority of E/A during construction, as set forth in the Contract Documents, may be assigned or assumed by the OWNER, but shall not be extended without written consent of OWNER and/or E/A. The assignment of any authority, duties or responsibilities to E/A under the Contract Documents, or under any agreement between OWNER and E/A, or any undertaking, exercise or performance thereof by E/A, is intended to be for the sole and exclusive benefit of OWNER and not for the benefit of CONTRACTOR, Subcontractor, Supplier, or any other person or organization, or for any surety or employee or agent of any of them.
- 9.1.2** E/A will not supervise, direct, control or have authority over or be responsible for CONTRACTOR's means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto. E/A is not responsible for any failure of CONTRACTOR to comply with laws and regulations applicable to the furnishing or performing the Work. E/A is not responsible for CONTRACTOR's failure to perform or furnish the Work in accordance with the Contract Documents. Failure or omission of E/A to discover, or object to or condemn any defective Work or material shall not release CONTRACTOR from the obligation to properly and fully perform the Contract.
- 9.1.3** E/A is not responsible for the acts or omissions of CONTRACTOR, or of any Subcontractor, any Supplier, or of any other person or organization performing or furnishing any of the Work.
- 9.1.4** If OWNER and E/A agree, E/A will review the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds and certificates of inspection, tests and approvals and other documentation required to be delivered by Article 14, but only to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests and approvals that the results certified indicate compliance with, the Contract Documents.
- 9.1.5** The limitations upon authority and responsibility set forth in this paragraph 9.1 shall also apply to E/A's Consultants, Resident Project Representative and assistants.

9.2 E/A as Owner's Representative: E/A may be designated as the Owner's Representative under paragraph 8.1.

9.3 Visits to Site: If OWNER and E/A agree, E/A will make visits to the site at intervals appropriate to the various stages of construction as E/A deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of CONTRACTOR's executed Work. Based on information obtained during such visits and observations, E/A will endeavor for the benefit of OWNER to determine, in general, if the Work is proceeding in accordance with the Contract Documents. E/A will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. E/A's efforts will be directed toward providing for OWNER a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and on-site observations, E/A will keep OWNER informed of the progress of the Work and will endeavor to guard OWNER against defective Work. E/A's visits and on-site observations are subject to all the limitations on E/A's authority and responsibility set forth in paragraph 9.1.

- 9.4 Resident Project Representative:** If OWNER and E/A agree, E/A will furnish a Resident Project Representative to assist E/A in providing more continuous observation of the Work. The responsibilities and authority and limitations of any such Resident Project Representative and assistants will be as provided in paragraph 9.1 and in the Supplemental General Conditions. OWNER may designate another representative or agent to represent OWNER at the site who is not E/A, E/A's consultant, agent or employee.
- 9.5 Clarifications and Interpretations:** E/A may determine that written clarifications or interpretations of the requirements of the Contract Documents (in the form of drawings or otherwise) are necessary. Such written clarifications or interpretations will be consistent with the intent of and reasonably inferable from the Contract Documents, will be issued with reasonable promptness by Owner's Representative and will be binding on OWNER and CONTRACTOR. If OWNER or CONTRACTOR believes that a written clarification or interpretation justifies an adjustment in the Contract Amount or the Contract Times, OWNER or CONTRACTOR may make a Claim therefor as provided in Article 11 or 12.
- 9.6 Rejecting Defective Work:** E/A will recommend that OWNER disapprove or reject Work which E/A believes to be defective, or believes will not produce a completed Project that conforms to the Contract Documents or will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
- 9.7 Shop Drawings:** Refer to Division 1 for E/A's authority concerning Shop Drawings.

ARTICLE 10 - CHANGES IN THE WORK

10.1 Changes:

- 10.1.1** Without invalidating the Contract and without notice to any surety, OWNER may, at any time or from time to time, order additions, deletions or revisions in the Work. Such changes in the Work will be authorized by Change Order, Change Directive or Field Order. In the event that the OWNER and the CONTRACTOR are unable to negotiate the terms of a Change Order for the performance of additional Work, the OWNER may, at its election, perform such additional Work with its own forces or with another contractor and such work will be considered "Other Work" in accordance with Article 7.
- 10.1.2** Changes in the Work shall be performed under applicable provisions of the Contract Documents, and CONTRACTOR shall proceed promptly, unless otherwise provided in the Change Order, Change Directive or Field Order. CONTRACTOR's proposals for changes in the Contract Amount and/or Contract Time shall be submitted within ten (10) Calendar Days of request by Owner's Representative, including impacts to the approved Progress Schedule, unless Owner's Representative grants an extension. OWNER will review each proposal and respond to CONTRACTOR within ten (10) Calendar Days. After review by OWNER, CONTRACTOR shall provide any supporting data requested by Owner's Representative within seven (7) Calendar Days, unless Owner's Representative grants an extension. OWNER will determine within seven (7) Calendar Days whether to pursue the change in Work.
- 10.1.3** CONTRACTOR shall not be entitled to an increase in the Contract Amount or an extension of the Contract Times with respect to any Work performed that is not required by the Contract Documents as amended, modified and supplemented as provided in paragraphs 3.3.1 and 3.3.2, except in the case of an emergency as provided in paragraph 6.11.5 or in the case of uncovering Work as provided in paragraph 13.4.

- 10.1.4** Except in the case of an emergency as provided in paragraph 6.11.5, a Change Order or Change Directive is required before CONTRACTOR commences any activities associated with a change in the Work which, in CONTRACTOR 's opinion, will result in a change in the Contract Amount and/or Contract Times.
- 10.1.5** If notice of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Amount or Contract Times) is required by the provisions of any Bond to be given to a surety, the giving of any such notice will be CONTRACTOR's responsibility, and the amount of each applicable Bond will be adjusted accordingly.

10.2 Change Orders:

- 10.2.1** OWNER and CONTRACTOR shall execute appropriate written Change Orders covering:
 - .1 a change in the Work;
 - .2 the amount of the adjustment in the Contract Amount, if any; and
 - .3 the extent of the adjustment in the Contract Time, if any.
- 10.2.2** An executed Change Order shall represent the complete, equitable, and final amount of adjustment in the Contract Amount and/or Contract Time owed to CONTRACTOR or OWNER as a result of the occurrence or event causing the change in the Work encompassed by the Change Order.

10.3 Change Directives:

- 10.3.1** Without invalidating the Contract, OWNER may, by written Change Directive, using the Force Account method, order changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions, the Contract Amount and Contract Time being adjusted as necessary. "Force Account" means a basis of payment for the direct performance of Work with payment based on the actual cost of the labor, equipment and materials furnished and consideration for overhead and profit as set forth in Section 11.5, below. A Change Directive shall be used in the absence of complete and prompt agreement on the terms of a Change Order. Where practicable, any items of Work that may be agreed upon, prior to the performance of Work under this Section, will be included in a separate Change Order. For example, the cost of the installation of additional asphalt may be agreed upon based on the unit prices in the Bid.
- 10.3.2** If the Change Directive provides for an adjustment to the Contract Amount, the adjustment shall be based on the method provided in paragraph 11.5.
- 10.3.3** A Change Directive shall be effective immediately and shall be recorded later by preparation and execution of an appropriate Change Order.
- 10.3.4** Upon receipt of a Change Directive, CONTRACTOR shall promptly proceed with the change in the Work involved, provided, prior to the commencement of any Work under this section, the CONTRACTOR must submit its proposed Work plan, anticipated schedule, and a list of its work force and equipment proposed to be used in the Work for OWNER'S approval. Upon such approval, CONTRACTOR must promptly commence and make continuous progress in the Work. The OWNER reserves the right to withhold payment for low production or lack of progress.

10.4 Field Order:

- 10.4.1** Owner's Representative may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Amount or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the

Contract Documents. These shall be accomplished by written Field Order and shall be binding on OWNER and on CONTRACTOR who shall perform the Work involved promptly.

- 10.4.2** If CONTRACTOR believes that a Field Order would require an adjustment in the Contract Amount and/or Contract Times, CONTRACTOR shall make a prompt written request to Owner's Representative for a Change Order. Any request by CONTRACTOR for an adjustment in Contract Amount and/or Contract Times must be made in writing prior to beginning the work covered by the Field Order.

10.5 No Damages for Delay: CONTRACTOR shall receive no compensation for delays or hindrances to the Work, except when direct and unavoidable extra cost to CONTRACTOR is caused by failure of OWNER to provide information or material, if any, which is to be furnished by OWNER or access to the Work and only to the extent that such acts continue after the CONTRACTOR furnishes OWNER with written notice of such failure. When such extra compensation is claimed a written statement thereof shall be presented by CONTRACTOR to OWNER and if by OWNER found correct shall be approved. If delay is caused by specific orders given by OWNER to stop work or by performance of extra Work or by failure of OWNER to provide material or necessary instructions for carrying on the Work, then such delay will entitle CONTRACTOR to an equivalent extension of time, CONTRACTOR's application for which shall, however, be subject to approval of OWNER. No such extension of time shall release CONTRACTOR or surety on its performance bond from all CONTRACTOR's obligations hereunder which shall remain in full force until discharge of the Contract. In no event shall the CONTRACTOR be entitled to any compensation or recovery of any special damages in connection with any delays, including without limitation: consequential damages, lost opportunity costs, impact damages, or other similar damages. The OWNER'S exercise of any of its rights or remedies under the Contract Documents (including without limitation ordering changes in the Work, or directing suspension, rescheduling, or correction of the Work), regardless of the extent or frequency of the OWNER'S exercise of such rights or remedies, shall not be construed as active interference in the CONTRACTOR'S performance of the Work. Except as otherwise provided herein, an extension of Contract Time, to the extent permitted under Article 12, shall be the sole remedy of the CONTRACTOR for any acknowledged delays.

ARTICLE 11 - CHANGE OF CONTRACT AMOUNT

- 11.1** The Contract Amount is stated in the Agreement and, including authorized adjustments, is the total amount payable by OWNER to CONTRACTOR for performance of the Work under the Contract Documents.
- 11.2** The original Contract Amount may not be increased by more than twenty-five percent (25%) and it may not be decreased more than twenty-five percent (25%) without the consent of the CONTRACTOR to such decrease, except in the event of a termination for convenience under paragraph 15.2 or the failure of the City Council to appropriate sufficient funding for the Project, in which events it is agreed that the consent of the CONTRACTOR will not be required.
- 11.3** The Contract Amount shall only be changed by a Change Order. Any claim for an adjustment in the Contract Amount shall be made by Written Notice delivered by the party making the Claim to the other party promptly (but in no event later than thirty (30) calendar days) after the start of the occurrence or event giving rise to the Claim and stating the general nature of the Claim. Notice of the amount of the Claim with supporting data shall be delivered within thirty (30) calendar days after Written Notice of Claim is delivered by claimant, and shall represent that the adjustment claimed covers all known amounts to which claimant is entitled as a result of said occurrence or event. If OWNER and

CONTRACTOR cannot otherwise agree, all Claims for adjustment in the Contract Amount shall be determined as set out in Article 16.

11.4 Determination of Value of Work:

11.4.1 The value of any Work covered by a Change Order for an adjustment in the Contract Amount will be determined by one or more of the following methods:

- .1 by application of unit prices contained in the Contract Documents to the quantities of the items involved.
- .2 by a mutually agreed lump sum properly itemized and supported by sufficient substantiating data, including documentation by subcontractors performing the work, to permit evaluation.
- .3 by cost of Work plus CONTRACTOR's fee for all overhead costs and profit (determined as provided in paragraph 11.5).
- .4 No cost will be included in the change order for time spent preparing the change order, nor will costs be included for an estimate of time to negotiate the change order costs for machinery, tools, or equipment as described in subparagraph 11.5.3

11.4.2 Before using the method described in paragraph 11.4.1.3, OWNER and CONTRACTOR agree to negotiate a Change Order using the methods identified in paragraphs 11.4.1.1 and 11.4.1.2, as appropriate, to determine the adjustment in the Contract Amount.

11.5 Cost of Work: If neither of the methods defined in paragraphs 11.4.1.1 nor 11.4.1.2 can be agreed upon before a change in the Work is commenced which will result in an adjustment in the Contract Amount, then the change in the Work will be performed by Change Directive, using the Force Account method, and payment will be made as follows:

11.5.1 For all personnel, CONTRACTOR will receive actual field cost wage rates for each hour that said personnel are actually engaged in such Work, as substantiated by its certified payroll, to which will be added an amount equal to twenty-five percent (25%) of the sum thereof as compensation for CONTRACTOR's and any effected Subcontractor's total overhead and profit. No separate charge will be made by CONTRACTOR or its Subcontractor(s) for organization or overhead expenses. In no case will the rate of wage be less than the minimum shown in the Contract for a particular category. CONTRACTOR will also receive an amount equal to 55% of the wages paid personnel, excluding the 25% compensation provided above, for CONTRACTOR's and any effected Subcontractor's cost of premiums on public liability insurance, workers' compensation insurance, social security and unemployment insurance. The actual cost of CONTRACTOR's bond(s) on the extra Work will be paid based on invoices from surety. No charge for superintendence will be made unless considered necessary and ordered by OWNER.

11.5.2 CONTRACTOR will receive the actual cost, including freight charges, of the materials used and installed on such Work, to which costs will be added a sum equal to twenty-five percent (25%) thereof as compensation for CONTRACTOR's and any effected Subcontractor's total overhead and profit. In case material invoices indicate a discount may be taken, the actual cost will be the invoice price minus the discount.

11.5.3 For machinery, trucks, power tools, or other similar equipment (the "equipment") agreed to be necessary by OWNER and CONTRACTOR, OWNER will allow CONTRACTOR the Regional and Model Year adjusted Monthly Ownership Cost divided by 176 plus the Hourly Estimated Operating Costs as given in the latest edition of the "Rental Rate Blue Book" as published by EquipmentWatch (1-800-

669-3282) for each hour that said equipment is in use on such work. The established equipment rates will be paid for each hour that the equipment is utilized in the Work. In the event that the equipment is used intermittently during the Work, full payment for an eight-hour day will be made if the equipment is not idle more than four (4) hours of the day. If the equipment is idle more than four (4) hours in a day, then payment will be made only for the actual hours worked. No additional compensation will be allowed on the equipment for CONTRACTOR's or any affected Subcontractor's overhead and profit. OWNER may accept an actual rental invoice in lieu of the method of calculation set forth in paragraph 11.5.3 for equipment rented exclusively for Force Account Work or for equipment not included in the Rental Rate Blue Book.

- 11.5.4** The compensation, as herein provided for, shall be received by CONTRACTOR and any affected Subcontractor as payment in full for work done by Change Directive and will include use of small tools, and total overhead expense and profit. CONTRACTOR and Owner's Representative shall compare records of work done by Change Directive at the end of each day. Copies of these records will be made upon forms provided for this purpose by OWNER and signed by both Owner's Representative and CONTRACTOR, with one copy being retained by OWNER and one by CONTRACTOR. Refusal by CONTRACTOR to sign these records within two (2) working days of presentation does not invalidate the accuracy of the record.

11.6 Unit Price Work:

- 11.6.1** Where the Contract Documents provide that all or part of the Work is to be unit price Work, initially the Contract Amount will be deemed to include for all unit price work an amount equal to the sum of the established unit price for each separately identified item of unit price work times the estimated quantity of each item as indicated in the Bid. The estimated quantities of items of unit price work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Amount. Determinations of the actual quantities and classifications of unit price work performed by CONTRACTOR will be made by Owner's Representative. Owner's Representative will review with CONTRACTOR the preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise).
- 11.6.2** When "plan quantity" is indicated for a Bid item, CONTRACTOR shall be paid amount specified in the Contract Documents without any measurements.
- 11.6.3** Each unit price will be deemed to include an amount considered by CONTRACTOR to be adequate to cover CONTRACTOR's overhead and profit for each separately identified item.
- 11.6.4** A Major Item is any individual Bid item in the Bid that has a total cost equal to or greater than five percent (5%) of the original Contract Amount or \$50,000, whichever is greater, computed on the basis of Bid quantities and Contract unit prices.
- 11.6.5** OWNER or CONTRACTOR may make a Claim for an adjustment in the Contract Amount in accordance with Article 11 if:
- .1** the actual quantity of any Major Item should become as much as twenty percent (20%) more than or twenty percent (20%) less than that in the Bid; or
 - .2** CONTRACTOR presents documentation contesting accuracy of "plan quantity" and Owner's Representative verifies quantity and determines original value is in error by five percent (5%) or more;

Provided, however, in the event a Major Item is reduced by twenty percent (20%) or more of the amount in the Bid, no additional Article 11 profit or overhead will be added, if, due to other additions in the Work, the net value of the Contract Amount is not reduced.

ARTICLE 12 - CHANGE OF CONTRACT TIMES

12.1 Working Day and Calendar Day Contracts:

- 12.1.1** The Contract Times (or Milestones) may only be changed by Change Order or Time Extension Request duly executed by both CONTRACTOR and Owner's Representative. Any claim for an adjustment of the Contract Times (or Milestones) shall be made by Written Notice delivered by the party making the Claim to the other party promptly (but in no event later than thirty (30) calendar days after the start of the occurrence or event giving rise to the delay) and stating the general nature of the delay. Notice of the extent of the delay with supporting data shall be delivered within thirty (30) calendar days after Written Notice of Claim is delivered by claimant, and shall represent that the adjustment claimed is the entire adjustment to which claimant is entitled as a result of said occurrence or event. If OWNER and CONTRACTOR cannot otherwise agree, all Claims for adjustment in the Contract Times (or Milestones) shall be determined as set out in Article 16. No Claim for an adjustment in the Contract Times (or Milestones) will be valid if not submitted in accordance with the requirements of this paragraph.
- 12.1.2** When CONTRACTOR is at fault and OWNER stops the Work, so that corrections in the Work can be made by CONTRACTOR, no extension in time will be allowed.
- 12.1.3** When CONTRACTOR is prevented from completing any part of the Work within the Contract Times (or Milestones) due to delay beyond the control of both OWNER and CONTRACTOR, an extension of the Contract Times (or Milestones) in an amount equal to the time lost due to such delay shall be CONTRACTOR's sole and exclusive remedy for such delay. If performance by the CONTRACTOR or OWNER is interrupted by any occurrence not occasioned by its own conduct, whether such occurrence be an act of god or the result of war, riot, civil commotion, sovereign conduct, or the conduct of a third party, then such performance will be excused for a period of time necessary to remedy its effects, provided, however, in such an event, a conference will be held within three (3) business days to establish a proposed new Progress Schedule for the Project.
- 12.1.4** OWNER will consider time extension requests and may grant CONTRACTOR an extension of time because of:
 - .1** Changes ordered in the work which justify additional time.
 - .2** Failure of materials or products being at the Project site due to delays in transportation or failures of Suppliers, which are not the result of CONTRACTOR's, Subcontractor's or Supplier's negligence. The request for an extension of time shall be supported by a citation of acts demonstrating that the delays are beyond CONTRACTOR's control, including, but not limited to, CONTRACTOR's efforts to overcome such delays documented as follows:
 - a)** Copy of purchase order for delayed item(s) indicating date ordered by CONTRACTOR/ Subcontractor and date purchase order received by Supplier.
 - b)** If item(s) require Shop Drawings or other submittal information in accordance with the Contract Documents, provide record of date

submittal(s) forwarded to Owner's Representative, date submittal(s) returned to CONTRACTOR, and date submittal(s) forwarded to Supplier.

- c) Copy of document(s) from Supplier, on Supplier's letterhead, indicating date(s) item(s) would be ready for shipment and/or actual shipment date(s).
 - d) Copies of all correspondence between CONTRACTOR / Subcontractor and Supplier indicating CONTRACTOR / Subcontractor's efforts to expedite item(s).
 - e) If item(s) are being purchased by a Subcontractor, provide correspondence, meeting notes, etc., that reflect CONTRACTOR's efforts with the Subcontractor to expedite delivery of the item(s).
- .3 When acts of OWNER, E/A, utility owners or other contractors employed by OWNER delay progress of work through no fault of CONTRACTOR. The CONTRACTOR will only be entitled to an extension of time for delays that affect the Critical Path of the Work and that are not caused by the CONTRACTOR.
- .4 When CONTRACTOR is delayed by strikes, lockouts, fires, losses from natural causes, or other unavoidable cause or causes beyond CONTRACTOR's control.

12.2 Calendar Day Contracts:

- 12.2.1** Under a Calendar Day Contract, CONTRACTOR may be granted an extension of time because of unusual inclement weather, including but not limited to unusual rainfall events, which are beyond the normal rainfall recorded and expected for Austin, Texas. However, the CONTRACTOR will not be granted an extension of time for "normal rainfall", as described below.
- 12.2.2** "Unusual Inclement Weather" is defined as a rain event or other weather related event which occurs at the site and is of sufficient magnitude to prevent CONTRACTOR from performing units of Work critical to maintaining the Progress Schedule.
- 12.2.3** Baseline Rain Day Determination. "Normal rainfall" compiled by the State climatologist, based on U.S. Weather Bureau Records for Austin, Texas, is considered a part of the Calendar Day Contract, and is not a justification for an extension of time. Listed below are the number of days in each month for which no compensatory days for rainfall events ("Rain Days") in such months may be claimed:

January..... 8 days
 February..... 8 days
 March..... 7 days
 April..... 7 days
 May..... 9 days
 June..... 6 days
 July..... 5 days
 August..... 5 days
 September..... 7 days
 October..... 7 days

November..... 7 days

December..... 7 days

Rain Days in addition to the baseline Rain Day determination described above will be measured with the Owner's Representative's approval at the nearest operational public weather data collection facility to the site, including but not limited to the OWNER's early warning flood gauge system.

- 12.2.4** CONTRACTOR may receive credit in any month for Unusual Inclement Weather, and specifically for any Rain Days in that month which exceed the number of Rain Days allocated to that month, if a Claim is made in accordance with paragraph 12.1.1 and the weather event meets the definition for "Unusual Inclement Weather", and as applicable, "Rain Day" and such claimed day is a day on which Work critical to maintaining the Progress Schedule is scheduled to be performed and is otherwise capable of being performed.

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

- 13.1 Notice of Defects:** Prompt notice of all defective Work of which OWNER or E/A has actual knowledge will be given to CONTRACTOR. All defective Work may be rejected, corrected or accepted as provided in Article 13. CONTRACTOR must give OWNER and E/A prompt notice of any defective Work of which CONTRACTOR has actual knowledge.
- 13.2 Access to Work:** OWNER, E/A, E/A's Consultants, other representatives and personnel of OWNER, independent testing laboratories and governmental agencies having jurisdiction will have access to the Work at reasonable times for observing, inspecting and testing. CONTRACTOR shall provide them proper and safe conditions for such access, and advise them of CONTRACTOR's site safety procedures and programs so that they may comply therewith as applicable.
- 13.3 Tests and Inspections:**
- 13.3.1** CONTRACTOR shall give timely notice of readiness of the Work for all required inspections, tests or approvals, and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.
- 13.3.2** OWNER shall employ and pay for services of an independent testing laboratory to perform all inspections, tests or approvals required by the Contract Documents except:
- .1 for inspections, tests or approvals covered by paragraphs 13.3.3 and 13.3.4 below;
 - .2 that costs incurred for tests or inspections conducted pursuant to paragraph 13.4.3 shall be paid as provided in paragraph 13.4.3;
 - .3 for reinspecting or retesting defective Work, including any associated costs incurred by the testing laboratory for cancelled tests or standby time; and
 - .4 as otherwise specifically provided in the Contract Documents.
- 13.3.3** If laws or regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested or approved by an employee or other representative of such public body, CONTRACTOR shall assume full responsibility for arranging and obtaining such inspections, tests or approvals, pay

all costs in connection therewith and furnish Owner's Representative the required certificates of inspection or approval.

13.3.4 CONTRACTOR shall also be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests or approvals required for OWNER's and E/A's review of submittals covering materials, equipment, and mix designs to be incorporated in the Work.

13.3.5 All testing laboratories shall meet the requirements of ASTM E-329.

13.4 Uncovering Work:

13.4.1 If any Work (or the work of others) that is to be inspected, tested or approved is covered by CONTRACTOR without written concurrence of Owner's Representative, or if any Work is covered contrary to the written request of Owner's Representative, it must, if requested by Owner's Representative, be uncovered and recovered at CONTRACTOR's expense.

13.4.2 Uncovering Work as provided in paragraph 13.4.1 shall be at CONTRACTOR's expense unless CONTRACTOR has given Owner's Representative timely notice of CONTRACTOR's intention to cover the same and Owner's Representative has not acted within five (5) working days to such notice.

13.4.3 If Owner's Representative considers it necessary or advisable that covered Work be observed, inspected or tested, CONTRACTOR shall uncover, expose or otherwise make available for observation, inspection or testing that portion of the Work in question, furnishing all necessary labor, material and equipment. If it is found that such Work is defective, CONTRACTOR shall pay all claims, costs, losses and damages caused by, arising out of or resulting from such uncovering, exposure, observation, inspection and testing and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and OWNER shall be entitled to an appropriate decrease in the Contract Amount, and may make a Claim therefor as provided in Article 11. If, however, such Work is not found to be defective, CONTRACTOR shall be allowed an increase in the Contract Amount or an extension of the Contract Times (or Milestones), or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement and reconstruction; and CONTRACTOR may make a Claim therefor as provided in Articles 11 and 12.

13.5 OWNER May Stop the Work:

13.5.1 If the Work is defective, or CONTRACTOR fails to supply sufficient skilled workers, suitable materials, and/or equipment; or fails to furnish or perform the Work in such a way that the Work in progress or the completed Work will conform to the Contract Documents, OWNER may order CONTRACTOR to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of OWNER to stop the Work shall not give rise to any duty on the part of OWNER to exercise this right for the benefit of CONTRACTOR or any surety or other party.

13.5.2 If CONTRACTOR fails to correct defective Work or submit a satisfactory plan to take corrective action, with procedure and time schedule, OWNER may order CONTRACTOR to stop the Work, or any portion thereof, until cause for such order has been eliminated, or take any other action permitted by this Contract. A notice to stop the Work, based on defects, shall not stop calendar or working days charged to the Project.

13.6 Correction or Removal of Defective Work: If required by OWNER, CONTRACTOR shall promptly, as directed, either correct all defective Work, whether or not fabricated, installed or completed, or, if the Work has been rejected by Owner's Representative, remove it from the site and replace it with Work that is not defective. CONTRACTOR shall correct or remove and replace defective Work, or submit a plan of action detailing how the deficiency will be corrected, within the time frame identified in the notice of defective Work. CONTRACTOR shall pay all claims, costs, losses and damages caused by or resulting from such correction or removal (including but not limited to all costs of repair or replacement of work of others).

13.7 Warranty period:

13.7.1 If within one year after the date of Substantial Completion or such longer period of time as may be prescribed by laws or regulations or by the terms of any applicable special guarantee required by the Contract Documents or by any specific provision of the Contract Documents (e.g. paragraph 14.11.2), any Work, including work performed after the Substantial Completion date, is found to be defective, CONTRACTOR shall promptly, without cost to OWNER and in accordance with OWNER's written instructions:

- (i) correct such defective Work, or, if it has been rejected by OWNER, remove it from the site and replace it with Work that is not defective, and
- (ii) satisfactorily correct or remove and replace any damage to other Work or the work of others resulting therefrom.

If CONTRACTOR does not promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, OWNER may have the defective Work corrected or the rejected Work removed and replaced, and all claims, costs, losses and damages caused by or resulting from such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by CONTRACTOR. The warranty period will be deemed to be renewed and recommenced in connection with the completed items of Work requiring correction.

13.7.2 In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the warranty period for that item may start to run from an earlier date if so provided in the Contract Documents.

13.7.3 If correction of defective Work will affect the function or use of the facility CONTRACTOR shall not proceed with correction of defective Work without prior coordination and approval of OWNER.

13.7.4 The obligations of the CONTRACTOR to perform warranty work will survive the acceptance of the Work and any termination of the Contract.

13.8 Acceptance of Defective Work: If, instead of requiring correction or removal and replacement of defective Work, OWNER decides to accept it, OWNER may do so. CONTRACTOR shall pay all claims, costs, losses and damages attributable to OWNER's evaluation of and determination to accept such defective Work. If any such acceptance occurs prior to recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents and compensating OWNER for the diminished value of the defective Work. If the acceptance occurs after such recommendation, an appropriate amount will be paid by CONTRACTOR to OWNER after a calculation by OWNER of the diminution in value of the defective Work.

13.9 OWNER May Correct Defective Work: If CONTRACTOR fails within a reasonable time after Written Notice of OWNER to correct defective Work, or to remove and replace rejected Work, or if CONTRACTOR fails to perform the Work in accordance with the Contract Documents, or if CONTRACTOR fails to comply with any other provision of the Contract

Documents, OWNER may, after seven (7) calendar days' Written Notice to CONTRACTOR, correct and remedy any such deficiency. If, in the opinion of the Owner's Representative, significant progress has not been made during this seven (7) calendar day period to correct the deficiency, the OWNER may exercise any actions necessary to remedy the deficiency. In exercising the rights and remedies under this paragraph, OWNER shall proceed expeditiously. In connection with such corrective and remedial action, OWNER may exclude CONTRACTOR from all or part of the site, take possession of all or part of the Work, and suspend CONTRACTOR's services related thereto, and incorporate in the Work all materials and equipment stored at the site or for which OWNER has paid CONTRACTOR but which are stored elsewhere. CONTRACTOR shall allow OWNER, its agents and employees, OWNER's other contractors, E/A and E/A's consultants access to the site to enable OWNER to exercise the rights and remedies under this paragraph. All claims, costs, losses and damages incurred or sustained by OWNER in exercising such rights and remedies will be charged against CONTRACTOR and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work. Such claims, costs, losses and damages will include but not be limited to all costs of repair or replacement of work of others destroyed or damaged by correction, removal or replacement of CONTRACTOR's defective Work. CONTRACTOR shall not be allowed an extension of the Contract Times (or Milestones), or claims of damage because of any delay in the performance of the Work attributable to the exercise by OWNER of OWNER's rights and remedies hereunder.

ARTICLE 14 - PAYMENTS TO CONTRACTOR AND COMPLETION

14.1 Application for Progress Payment:

- 14.1.1** No more often than once a month, CONTRACTOR shall submit to Owner's Representative for review an Application for Payment, in a form acceptable to OWNER, filled out and signed by CONTRACTOR covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents.
- 14.1.2** Such applications shall not include requests for payment on account of changes in the Work which have been properly authorized by Change Directives but not yet included in Change Orders.
- 14.1.3** Such applications shall not include requests for payment of amounts the CONTRACTOR does not intend to pay to a Subcontractor or Supplier because of a dispute or other reason.
- 14.1.4** If payment is requested on the basis of materials or equipment not incorporated in the Work but delivered and suitably stored at the site or at another location agreed to in writing, the Application for Payment shall be accompanied by such bills of sale, data and other procedures satisfactory to OWNER substantiating OWNER's title to such materials or equipment or otherwise protecting OWNER's interest. Payment on account of such materials or equipment will not include any amount for CONTRACTOR's overhead or profit or relieve CONTRACTOR of its obligation to protect and install such materials or equipment in accordance with the requirements of the Contract and to restore damaged or defective Work. If materials or equipment are stored at another location, at the direction of the OWNER they shall be stored in a bonded and insured facility, accessible to E/A and OWNER, and shall be clearly marked as property of OWNER. Title to materials delivered to the site of the Work or a staging area will pass to OWNER upon payment by OWNER without the necessity for further documentation. Risk of loss will not pass to OWNER until acceptance.

- 14.1.5** Where the original Contract Amount is less than \$400,000, OWNER will pay CONTRACTOR total amount of approved Application for Payment, less ten percent (10%) of amount thereof, which ten percent (10%) will be retained until final payment, less all previous payments and less all other sums that may be retained by OWNER under the terms of this Agreement. Where the original Contract Amount is \$400,000 or more, OWNER will pay CONTRACTOR total amount of approved Application for Payment, less five percent (5%) of amount thereof, which five percent (5%) will be retained until final payment, less all previous payments and less all other sums that may be retained by OWNER under the terms of this Agreement. In either case, if the Work is near completion and delay occurs due to no fault or neglect of CONTRACTOR, OWNER may pay a portion of the retained amount to CONTRACTOR. CONTRACTOR, at OWNER's option, may be relieved of the obligation to complete the Work and, thereupon, CONTRACTOR shall receive payment of the balance due under the Contract subject to the conditions stated under paragraph 15.2. A Subcontractor may submit a written request to the CONTRACTOR and Project Manager requesting release of retainage for work by the Subcontractor that has been completed and approved. The Project Manager will evaluate the request and if it is approved, the Project Manager will request the CONTRACTOR to include the request for release of an appropriate amount of retainage in the next Pay Application.
- 14.1.6** Applications for Payment shall include the following documentation:
- .1 updated Progress Schedule;
 - .2 monthly subcontractor report;
 - .3 any other documentation required under the Supplemental General Conditions.
- 14.2 CONTRACTOR's Warranty of Title:** CONTRACTOR warrants and guarantees that title to all Work, materials and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to OWNER free and clear of all Liens no later than the time of payment to CONTRACTOR.
- 14.3 Review of Applications for Progress Payment:**
- 14.3.1** Owner's Representative will, within seven (7) calendar days after receipt of each Application for Payment, either indicate a recommendation for payment and forward the Application for processing by OWNER, or return the Application to CONTRACTOR indicating Owner's Representative's reasons for refusing to recommend payment. In the latter case, CONTRACTOR shall make the necessary corrections and resubmit the Application.
- 14.3.2** Owner's Representative's recommendation of any payment requested in an Application for Payment will constitute a representation by Owner's Representative, based upon Owner's Representative's on-site observations of the executed Work and on Owner's Representative's review of the Application for Payment and the accompanying data and schedules, that to the best of Owner's Representative's knowledge, information and belief:
- .1 the Work has progressed to the point indicated; and
 - .2 the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents, to a final determination of quantities and classifications for unit price Work, and to any other qualifications stated in the recommendation).

14.3.3 By recommending any such payment, Owner's Representative will not thereby be deemed to have represented that:

- .1 exhaustive or continuous on-site inspections have been made to check the quality or the quantity of the Work;
- .2 examination has been made to ascertain how or for what purpose CONTRACTOR has used money previously paid on account of the Contract Amount;
- .3 CONTRACTOR's construction means, methods, techniques, sequences or procedures have been reviewed; or
- .4 that there may not be other matters or issues between the parties that might entitle CONTRACTOR to be paid additionally by OWNER or entitle OWNER to withhold payment to CONTRACTOR.

14.4 Decisions to Withhold Payment:

14.4.1 OWNER may withhold or nullify the whole or part of any payment to such extent as may be necessary on account of:

- .1 defective Work not remedied;
- .2 third party Claims filed or reasonable evidence indicating probable filing of such Claims;
- .3 failure of CONTRACTOR to make payments properly to Subcontractors for labor, materials or equipment;
- .4 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Amount;
- .5 damage to OWNER or another contractor;
- .6 reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay;
- .7 failure of CONTRACTOR to submit a schedule of values in accordance with the Contract Documents;
- .8 failure of CONTRACTOR to submit a submittal schedule in accordance with the Contract Documents;
- .9 failure of CONTRACTOR to submit and update a construction Progress Schedule in accordance with the Contract Documents;
- .10 failure of CONTRACTOR to maintain a record of changes on drawings and documents;
- .11 failure of CONTRACTOR to maintain weekly payroll reports and, as applicable, provide copies of reports in a timely manner upon request of OWNER;
- .12 failure of CONTRACTOR to submit monthly subcontractor reports;
- .13 CONTRACTOR's neglect or unsatisfactory prosecution of the Work, including failure to clean up;
- .14 failure of CONTRACTOR to comply with the Austin City Code, Chapter 2-9-A, as amended, "Minority-Owned and Women-Owned Business Enterprise Procurement Program;" or
- .15 failure of CONTRACTOR to comply with any provision of the Contract Documents.

- 14.4.2** When the above reasons for withholding payment are removed, CONTRACTOR shall resubmit a statement for the value of Work performed. Payment will be made within thirty (30) calendar days of receipt of approved Application for Payment.
- 14.4.3** Subcontractors may request Partial Payment when the OWNER withholds payment of an invoice to the CONTRACTOR for any reason listed in Section 14.4.1. If payment is withheld by the OWNER, the CONTRACTOR shall notify all affected Subcontractors within two (2) working days of notice that payment is being withheld. Upon notification, Subcontractors may submit a formal written request for Partial Payment to the CONTRACTOR and OWNER. If directed by the OWNER, the CONTRACTOR shall within three (3) working days resubmit to the OWNER an invoice for the same period that includes only the work performed by the requesting Subcontractors during this period. The OWNER will review this resubmitted invoice in accordance with Section 14.3.1. Upon receipt of payment for the resubmitted invoice, CONTRACTOR shall pay the subcontractor within ten (10) Calendar Days in accordance with Section 6.4.7.
- 14.5 Delayed Payments:** Should OWNER fail to make payment to CONTRACTOR of sum named in any Application for Payment within thirty (30) calendar days after the day on which OWNER received the mutually acceptable Application for Payment, then OWNER will pay to CONTRACTOR, in addition to sum shown as due by such Application for Payment, interest thereon at the rate specified in Government Code, Section 2251.025(b) from date due until fully paid, which shall fully liquidate any injury to CONTRACTOR growing out of such delay in payment.
- 14.6 Arrears:** No money shall be paid by OWNER upon any claim, debt, demand or account whatsoever, to any person, firm or corporation who is in arrears to City for taxes; and City shall be entitled to counterclaim and automatically offset against any such debt, claim, demand or account in the amount of taxes so in arrears and no assignment or transfer of such debt, claim, demand or account after said taxes are due, shall affect the right of OWNER to so offset said taxes, and associated penalties and interest if applicable, against the same.
- 14.7 Substantial Completion:**
- 14.7.1** When the CONTRACTOR considers that the Work, or a portion thereof which the OWNER agrees to accept separately, is substantially complete, the CONTRACTOR shall notify Owner's Representative and request a determination as to whether the Work or designated portion thereof is substantially complete. If Owner's Representative does not consider the Work substantially complete, Owner's Representative will notify CONTRACTOR giving reasons therefor. After performing any required Work, CONTRACTOR shall then submit another request for Owner's Representative to determine Substantial Completion. If Owner's Representative considers the Work substantially complete, Owner's Representative will prepare and deliver a certificate of Substantial Completion which shall establish the date of Substantial Completion, shall include a punch list of items to be completed or corrected before final payment, shall establish the time within which CONTRACTOR shall finish the punch list, and shall establish responsibilities of the OWNER and CONTRACTOR for security, maintenance, heat, utilities, damage to the Work, warranty and insurance. Failure to include an item on the punch list does not alter the responsibility of CONTRACTOR to complete all Work in accordance with the Contract Documents. If a Certificate of Occupancy is required by public authorities having jurisdiction over the Work, said certificate shall be issued before the Work or any portion thereof is considered substantially complete. The certificate of Substantial Completion shall be signed by OWNER and CONTRACTOR to evidence acceptance of the responsibilities assigned to them in such certificate.

14.7.2 OWNER shall have the right to exclude CONTRACTOR from the Work after the date of Substantial Completion, but OWNER will allow CONTRACTOR reasonable access to complete or correct items on the punch list and complete warranty work.

14.8 Partial Utilization: Use by OWNER, at OWNER's option, of any substantially completed part of the Work which: (i) has specifically been identified in the Contract Documents, or (ii) OWNER and CONTRACTOR agree constitutes a separately functioning and usable part of the Work that can be used by OWNER for its intended purpose without significant interference with CONTRACTOR's performance of the remainder of the Work, may be accomplished prior to Substantial Completion of all the Work in accordance with the following:

14.8.1 OWNER at any time may request CONTRACTOR to permit OWNER to use any such part of the Work which OWNER believes to be ready for its intended use and substantially complete. If CONTRACTOR agrees that such part of the Work is substantially complete, CONTRACTOR shall certify to Owner's Representative that such part of the Work is substantially complete and request Owner's Representative to issue a certificate of substantial Completion for that part of the Work. CONTRACTOR at any time may notify Owner's Representative that CONTRACTOR considers any such part of the Work ready for its intended use and substantially complete and request Owner's Representative to issue a certificate of Substantial Completion for that part of the Work. The provisions of paragraphs 14.7.1 and 14.7.2 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

14.8.2 Such partial utilization is authorized by public authorities having jurisdiction over the Work.

14.9 Final Inspection: Upon Written Notice from CONTRACTOR that the entire Work or an agreed portion thereof is complete, Owner's Representative will make a final inspection with CONTRACTOR and provide Written Notice of all particulars in which this inspection reveals that the Work is incomplete or defective. CONTRACTOR shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

14.10 Final Application for Payment: CONTRACTOR may make application for final payment following the procedure for progress payments after CONTRACTOR has completed all such corrections to the satisfaction of Owner's Representative and delivered the following documents:

14.10.1 Affidavit by CONTRACTOR certifying the payment of all debts and claims;

14.10.2 Three (3) complete operating and maintenance manuals, each containing maintenance and operating instructions, schedules, guarantees, and other documentation required by the Contract Documents;

14.10.3 Record documents (as provided in paragraph 6.10);

14.10.4 Consent of surety, if any, to final payment. If surety is not provided, complete and legally effective releases or waivers (satisfactory to OWNER) of all claims arising out of or filed in connection with the Work;

14.10.5 Certificate evidencing that insurance required by the Supplemental General Conditions will remain in force after final payment and through the warranty period;

14.10.6 Non-Use of Asbestos Affidavit (After Construction);

14.10.7 Subcontractor report and all other documentation necessary for evaluation of CONTRACTOR's fulfillment of the Contract MBE/WBE or DBE goals;

14.10.8 Documentation of notice to claimants, to the extent applicable and subject to subparagraph 14.11.4; and

14.10.9 Any other documentation called for in the Contract Documents.

14.11 Final Payment and Acceptance:

14.11.1 If, on the basis of observation of the Work during construction, final inspection, and review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Owner's Representative is satisfied that the Work has been completed and CONTRACTOR's other obligations under the Contract Documents have been fulfilled and there are no outstanding claims, Owner's Representative will recommend the final Application for Payment and thereby notify the OWNER, who will pay to CONTRACTOR the balance due CONTRACTOR under the terms of the Contract. If the sole remaining unfinished item to complete the Work is the reestablishment of vegetation, CONTRACTOR may execute a revegetation letter with fiscal posted (letter of credit) to ensure completion of this item. This Work must be accomplished within one hundred twenty (120) Calendar Days of the date of Final Completion of the Work. When the permanent erosion control has been established, OWNER will initiate an inspection for final acceptance of the erosion controls. If the revegetation is not completed within the one hundred twenty (120) Calendar Days, OWNER, at its option, may complete the Work using the posted fiscal.

14.11.2 If the Contract measures Contract Time to Final Completion, rather than Substantial Completion, Owner's Representative will issue a letter of final acceptance to CONTRACTOR which establishes the Final Completion date and initiates the one-year warranty period. If the sole remaining unfinished item to complete the Work is the reestablishment of vegetation and CONTRACTOR has executed a revegetation letter with fiscal posted (letter of credit) to ensure completion of this item, the Owner's Representative will issue a letter of conditional acceptance to CONTRACTOR which established the Final Completion date and initiates the one-year warranty period.

14.11.3 Final payment is considered to have taken place when CONTRACTOR or any of its representatives negotiates OWNER's final payment check, whether labeled final or not, for cash or deposits check in any financial institution for its monetary return.

14.11.4 The OWNER will withhold funds sufficient to cover the amount of any unresolved contract claims from final payment for six months under the following limited conditions:

- .1** CONTRACTOR must provide written notice to the claimant (via certified mail or hand delivery) that (i) OWNER will hold funds in the amount of the disputed claim for six (6) months from the date of the receipt of the notice and (ii) CONTRACTOR and the claimant have certain alternative dispute resolution rights; and
- .2** CONTRACTOR must provide OWNER with a copy of the receipted notice.

Provided the claimant has received notice under this section, OWNER will release the withheld funds, if the CONTRACTOR provides a bond in substantial compliance with the provisions of Section 52.231 of the Texas Property Code; when the OWNER receives a settlement or release of the claim with accompanying instructions regarding payment; upon resolution of the claim in litigation, if suit is filed within such six (6) month period and the OWNER receives written notice of such filing; or when such six (6) month period has passed, if no such bond, settlement, release, or notice of filing of suit have been received. The above provisions notwithstanding, if efforts to timely resolve a disputed claim are not

being made to OWNER'S reasonable satisfaction, OWNER may, in its complete discretion, file an interpleader action and deposit the withheld funds in the registry of a court of competent jurisdiction. In addition, CONTRACTOR must include a provision in each of its subcontracts that the prevailing party in any litigation arising thereunder will be entitled to recover its costs of court and reasonable attorney's fees.

14.12 Waiver of Claims: The making and acceptance of final payment will constitute:

14.12.1 a waiver of claims by OWNER against CONTRACTOR, except claims arising from unsettled claims, from defective Work appearing after final inspection, from failure to comply with the Contract Documents or the terms of any warranty specified therein, or from CONTRACTOR's continuing obligations under the Contract Documents; and

14.12.2 a waiver of all claims by CONTRACTOR against OWNER other than those previously made in writing and still unsettled.

ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION

15.1 OWNER May Suspend Work Without Cause: At any time and without cause, OWNER may suspend the Work or any portion thereof for a period of not more than ninety (90) calendar days by Written Notice to CONTRACTOR which will fix the date on which the Work will be resumed. CONTRACTOR shall resume the Work on the date so fixed. CONTRACTOR shall be allowed an adjustment in the Contract Amount or an extension of the Contract Times, or both, directly attributable to any such suspension if CONTRACTOR makes an approved Claim therefor as provided in Articles 11 and 12.

15.2 OWNER May Terminate Without Cause: Upon seven (7) calendar days' Written Notice to CONTRACTOR, OWNER may, without cause and without prejudice to any right or remedy of OWNER, elect to terminate the Agreement. In such case, CONTRACTOR shall be paid (without duplication of any items):

15.2.1 for completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination;

15.2.2 for reasonable demobilization costs;

15.2.3 for anticipated profits on completed and accepted Work not previously paid and not included in separate pay items calculated to date of termination but not for anticipated profit on the entire Contract not previously paid, unabsorbed overhead, or lost opportunity; and

15.2.4 for all claims incurred in settlement of terminated contracts with Subcontractors, Suppliers and others, including for anticipated profits on completed and accepted Work not previously paid and not included in separate pay items calculated to date of termination but not for anticipated profit on the entire Contract not previously paid, unabsorbed overhead, or lost opportunity. CONTRACTOR agrees to negotiate in good faith with Subcontractors, Suppliers and others to mitigate OWNER's cost.

15.3 OWNER May Terminate With Cause:

15.3.1 Upon the occurrence of any one or more of the following events:

.1 if CONTRACTOR persistently fails to perform the Work in accordance with the Contract Documents;

- .2 if CONTRACTOR disregards laws or regulations of any public body having jurisdiction;
- .3 if CONTRACTOR disregards the authority of Owner's Representative;
- .4 if CONTRACTOR makes fraudulent statements;
- .5 if CONTRACTOR fails to maintain a work force adequate to accomplish the Work within the Contract Time;
- .6 if CONTRACTOR fails to make adequate progress and endangers successful completion of the Contract; or
- .7 if CONTRACTOR otherwise violates in any substantial way any provisions of the Contract Documents;

OWNER may, after giving CONTRACTOR (and the surety, if any) seven (7) calendar days Written Notice terminate the services of CONTRACTOR. OWNER, at its option, may proceed with negotiation with surety for completion of the Work. Alternatively, OWNER may under these circumstances exclude CONTRACTOR from the site and take possession of the Work (without liability to CONTRACTOR for trespass or conversion), incorporate in the Work all materials and equipment stored at the site or for which OWNER has paid CONTRACTOR but which are stored elsewhere, and finish the Work as OWNER may deem expedient. In such case CONTRACTOR shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Amount exceeds all claims, costs, losses and damages sustained by OWNER arising out of or resulting from completing the Work, such excess will be paid to CONTRACTOR. If such claims, costs, losses and damage exceed such unpaid balance, CONTRACTOR or surety shall pay the difference to OWNER. In the event that a termination for cause is found to be wrongful, the termination shall be converted to a termination without cause as set forth in Section 15.2 and CONTRACTOR'S remedy for wrongful termination is limited to the recovery of the payments permitted for termination without cause as set forth in Section 15.2.

- 15.3.2** Where CONTRACTOR's services have been so terminated by OWNER, the termination will not affect any rights or remedies of OWNER against CONTRACTOR and surety then existing or which may thereafter accrue. Any retention or payment of moneys due CONTRACTOR by OWNER will not release CONTRACTOR from liability. In the event OWNER terminates Contract with cause, OWNER may reject any and all Bids submitted by CONTRACTOR for up to three (3) years after the date of such termination. These Progressive Sanctions will be administered in accordance with the City of Austin Purchasing Office Probation, Suspension, and Debarment Procedures for Vendors, which include notice and an opportunity for a hearing.

- 15.4 CONTRACTOR May Stop Work or Terminate:** If through no act or fault of CONTRACTOR, the Work is suspended for a period of more than ninety (90) calendar days by OWNER or under an order of court or other public authority, or (except during disputes) Owner's Representative fails to forward for processing any mutually acceptable Application for Payment within thirty (30) calendar days after it is submitted, or (except during disputes) OWNER fails for sixty (60) calendar days after it is submitted to pay CONTRACTOR any sum finally determined by OWNER to be due, then CONTRACTOR may, upon seven (7) calendar days' Written Notice to OWNER, and provided OWNER does not remedy such suspension or failure within that time, terminate the Agreement and recover from OWNER payment on the same terms as provided in paragraph 15.2. In lieu of terminating the Agreement and without prejudice to any other right or remedy, if (except during disputes) Owner's Representative has failed to forward for processing any mutually acceptable Application for Payment within thirty (30) calendar days after it is submitted, or (except during disputes)

OWNER has failed for sixty (60) calendar days after it is submitted to pay CONTRACTOR any sum finally determined by OWNER to be due, CONTRACTOR may upon seven (7) calendar days' Written Notice to OWNER stop the Work until payment of all such amounts due CONTRACTOR, including interest thereon. The provisions of this paragraph 15.4 are not intended to preclude CONTRACTOR from making a Claim under Articles 11 and 12 for an increase in Contract Amount or Contract Times or otherwise for expenses or damage directly attributable to CONTRACTOR's stopping Work as permitted by this paragraph.

- 15.5 Discretionary Notice to Cure:** In its complete discretion, OWNER may, but is not required to, provide a Notice to Cure to CONTRACTOR and its surety to cure an event of default described above and/or an anticipatory breach of contract and, if required by OWNER, to attend a meeting with OWNER, regarding the Notice to Cure, the event of default, and/or the anticipatory breach of contract. The Notice to Cure will set forth the time limit in which the cure is to be completed or commenced and diligently prosecuted. Upon receipt of any Notice to Cure, CONTRACTOR shall prepare a report describing its program and measures to affect the cure of the event of default and/or anticipatory breach of contract within the time required by the Notice to Cure. The CONTRACTOR'S report must be delivered to OWNER at least three (3) days prior to any requested meeting with the OWNER and surety.
- 15.6 Bankruptcy:** If CONTRACTOR declares bankruptcy or is adjudged bankrupt or makes an assignment for the benefit of creditors or if a receiver is appointed for the benefit of creditors or if a receiver is appointed by reason of CONTRACTOR'S insolvency, CONTRACTOR may be unable to perform this Contract in accordance with the Contract requirements. In such an event, OWNER may demand CONTRACTOR or its successor in interest provide OWNER with adequate assurance of CONTRACTOR'S future performance in accordance with the terms and conditions of the Contract. If CONTRACTOR fails to provide adequate assurance of future performance to OWNER'S reasonable satisfaction within ten (10) days of such a request, OWNER may terminate the CONTRACTOR'S services for cause or without cause, as set forth above. If CONTRACTOR fails to provide timely adequate assurance of its performance and actual performance, OWNER may prosecute the Work with its own forces or with other contractors on a time and material or other appropriate basis and the cost of which will be charged against the Contract balance.
- 15.7 Duty to Mitigate:** In the event of any termination or suspension under this Contract, the CONTRACTOR agrees to and shall take all reasonable actions to mitigate its damages and any and all claims which may be asserted against the OWNER.
- 15.8 Responsibility during Demobilization:** While demobilizing, the CONTRACTOR will take all necessary and reasonable actions to preserve and protect the Work, the site and other property of the OWNER or others at the site.

ARTICLE 16 - DISPUTE RESOLUTION

16.1 Filing of Claims:

- 16.1.1** Claims arising from the circumstances identified in paragraphs 3.2, 4.1, 4.2.2, 4.2.4, 6.4.2, 6.11.5.2, 6.17, 7.5, 8.6, 9.5, 10.4.2, 13.4.3, 13.8, 13.9, 15.1, 15.2, 15.3, or 15.4, or other occurrences or events, shall be made by Written Notice delivered by the party making the Claim to the other party within thirty (30) calendar days after the start of the occurrence or event giving rise to the Claim and stating the general nature of the Claim. Notice of the amount of the Claim with supporting data shall be delivered in writing within thirty (30) calendar days after Written Notice of Claim is delivered by claimant and shall represent that the adjustment claimed covers all known amounts and/or extensions of time to which claimant is entitled.

- 16.1.2** Within thirty (30) calendar days of receipt of notice of the amount of the Claim with supporting data, Owner's Representative and CONTRACTOR shall meet to discuss the Claim, after which an offer of settlement or notification of no settlement offer will be made to claimant. If claimant is not satisfied with the proposal presented, claimant shall have thirty (30) calendar days in which to: (i) submit additional supporting data requested by the other party; (ii) modify the initial Claim; or (iii) request Alternative Dispute Resolution.

16.2 Alternative Dispute Resolution:

- 16.2.1** If a dispute exists concerning a Claim, the parties agree to use the following procedure prior to pursuing any other available remedies. OWNER reserves the right to include the E/A as a party.

- 16.2.2** Negotiating with Previously Uninvolved Personnel: Either party may make a written request for a meeting to be held between representatives of each party within fourteen (14) Calendar Days of the request or such later period that the parties may agree to. Each party shall endeavor to include, at a minimum, one (1) previously uninvolved senior level decision maker (an owner, officer, or employee of each organization) empowered to negotiate on behalf of their organization. If a previously uninvolved senior level decision maker is unavailable due to the size of the CONTRACTOR'S organization or any other reason, the CONTRACTOR shall nonetheless provide an appropriate senior level decision maker for the meeting. The purpose of this and any subsequent meetings will be good faith negotiations of the matters constituting the dispute. Negotiations shall be concluded within thirty (30) Calendar Days of the first meeting, unless mutually agreed otherwise. This step may be waived by a written agreement signed by both parties, in which event the parties may proceed directly to mediation as described below.

16.2.3 Mediation:

- .1** If the procedure described in 16.2.2 proves unsuccessful or is waived pursuant to its terms, the parties shall initiate the mediation process. OWNER and CONTRACTOR agree to select within thirty (30) calendar days a mediator trained in mediation skills, to assist with resolution of the dispute. OWNER and CONTRACTOR agree to act in good faith in the selection of the mediator and to give consideration to qualified individuals nominated to act as mediator. Nothing in this agreement prevents the parties from relying on the skills of a person who also is trained in the subject matter of the dispute and/or a contract interpretation expert. Should the parties fail to agree on a mediator within thirty (30) calendar days of initiation of the mediation process, the parties agree to ask the Travis County Dispute Resolution Center to select a qualified individual, which selection shall be binding on the parties.
- .2** Mediation is a forum in which an impartial person, the mediator, facilitates communication between parties to promote reconciliation, settlement, or understanding among them. The parties hereby agree that mediation, at a minimum, shall provide for (i) conducting an on-site investigation, if appropriate, by the mediator for fact gathering purposes, (ii) a meeting of all parties for the exchange of points of view and (iii) separate meetings between the mediator and each party to the dispute for the formulation of resolution alternatives. The parties agree to participate in mediation in good faith for up to thirty (30) calendar days from the date of the first mediation session, unless mutually agreed otherwise. Should the parties fail to reach a resolution of the dispute through mediation, then each party is released to pursue other remedies available to them.

16.3 Resolution of Disputes between Contractor and Subcontractor or Supplier: If a dispute exists concerning a claim between a CONTRACTOR and a Subcontractor or Supplier, the CONTRACTOR agrees to participate with such Subcontractor and/or Supplier in a process substantially paralleling the steps set out in paragraphs 16.1 and 16.2 above, including the delivery of written notices, submission of supporting data, negotiation with previously uninvolved personnel, and, if such alternative dispute resolution process is unsuccessful, mediation between the parties to the claim. If the CONTRACTOR and Subcontractor or Supplier agreement provides an alternative dispute resolution process, which provides substantially equivalent rights to those set forth herein, it may be followed, unless the CONTRACTOR and affected Subcontractor or Supplier agree to follow the process outlined above. The OWNER is not a party to the alternative dispute resolution process between the CONTRACTOR and Subcontractor or Supplier and will not pay any costs incurred in the process. Each party will be responsible for its own expenses incurred in the process, which will include an equal share of the mediation expenses, unless otherwise determined by the mediator. NOTICE: THE PROCESS SET FORTH HEREIN IS NOT A SUBSTITUTE FOR THE STATUTORY PAYMENT BOND CLAIM PROCESS.

16.4 Claim Calculation:

16.4.1 Delay Claims: The intent of paying for delay damages is to reimburse the CONTRACTOR for actual expense arising out of a compensable delay. No profit or force account markups, other than labor burden, will be allowed for delay claims by the CONTRACTOR seeking reimbursement for expenses arising out of an alleged event of delay. No consequential damages will be allowed to the CONTRACTOR in connection with any claimed delays. If the CONTRACTOR requests compensation for delay damages and the delay is determined to be compensable, then standby equipment costs and project overhead compensation will be based on the duration of the compensable delay and the following:

- .1 Standby equipment costs will not be allowed during periods when the equipment would have otherwise been idle. Standby equipment time will not exceed more than eight (8) hours per twenty-four (24) hour day, forty (40) hours per week, and one hundred seventy-six (176) hours per month. Standby equipment costs will be paid at 50 percent (50%) of the applicable Rental Rate Blue Book rates and calculated by dividing the monthly rate by one hundred seventy-six (176), multiplying the result by the number of standby hours and multiplying that number by the regional adjustment factor and the rate adjustment factor contained in the Blue Book. Operating costs will not be allowed.
- .2 Project overhead will be determined from actual costs that the CONTRACTOR will be required to document. Project overhead is defined as the administrative and supervisory expenses incurred at the work site and will not include home office overhead.

16.4.2 General: Except as limited with respect to delay claims, as set forth above, the criteria set forth in Section 11.4.1 may be used as a basis to calculate an adjustment in the Contract Amount in the resolution of a claim, provided that there will be no compensation for home office overhead.

16.5 MBE/WBE Program Progressive Sanctions: CONTRACTOR is subject to progressive sanctions for failure of CONTRACTOR to comply with Austin City Code, Chapter 2-9A, as amended: "Minority-owned and Women-owned Business Enterprise Procurement Program." Available sanctions for Program violations are set forth in Program rules adopted by the Small and Minority Business Resources Department (SMBR), as amended, and may include the following progressive sanctions for Program violations within a rolling 24-month period: (i) a period of probation for up to six (6) months for the first violation (ii) a period of suspension from bidding for up to 24 months for the second violation, and (iii) a period of

debarment for up to five (5) years for the third violation. If the CONTRACTOR engages in more than one of the violations listed below at any given time, OWNER has the discretion to determine whether such actions should be counted as multiple violations of the MBE/WBE Ordinance. Program violations include:

- .1 providing false or misleading information to the OWNER in connection with the submission of a Bid, responses to request for qualifications or Proposals, Good Faith Efforts documentation, post award compliance or other Program operations;
- .2 substituting M/WBE Subcontractors without first receiving approval for such substitutions;
- .3 failure to comply with the approved Compliance Plan without an approved request for a change, an approved Change Order or other approved change to the Contract;
- .4 violation of any other provision of the "Minority-owned and Women-owned Business Enterprise Procurement Program";
- .5 providing false or misleading information to the OWNER in connection with an application for or challenge to certification, recertification or decertification as a MBE/WBE; and
- .6 bid shopping.

The Progressive Sanctions will be administered in accordance with the City of Austin Purchasing Office Probation, Suspension, and Debarment Procedures for Vendors, which includes notice and an opportunity for a hearing.

ARTICLE 17 – MISCELLANEOUS

- 17.1 Venue:** In the event of any suit at law or in equity involving the Contract, venue shall be exclusively in Travis County, Texas and the laws of the State of Texas shall apply to the interpretation and enforcement of the Contract.
- 17.2 Extent of Agreement:** This Contract represents the entire and integrated agreement between the OWNER and CONTRACTOR with respect to the subject matter hereof and supersedes all prior negotiations, representations or agreements, either written or oral.
- 17.3 Cumulative Remedies:** The rights and remedies available to the parties are not to be construed in any way as a limitation of any rights and remedies available to any or all of them which are otherwise imposed or available by laws or regulations, by special warranty or guarantees or by other provisions of the Contract Documents, and the provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right and remedy to which they apply. Specifically, the OWNER is not required to only assess liquidated damages, and OWNER may elect to pursue its actual damages resulting from the failure of the CONTRACTOR to complete the Work in accordance with the requirements of the Contract Documents.
- 17.4 Severability:** If any word, phrase, clause, sentence or provision of the Contract, or the application of same to any person or set of circumstances is for any reason held to be unconstitutional, invalid or unenforceable, that finding shall only effect such word, phrase, clause, sentence or provision, and such finding shall not affect the remaining portions of this Contract; this being the intent of the parties in entering into the Contract; and all provisions of the Contract are declared to be severable for this purpose.

- 17.5 Independent Contractor:** The Contract shall not be construed as creating an employer/employee relationship, a partnership, or a joint venture. CONTRACTOR is an independent contractor and CONTRACTOR's services shall be those of an independent contractor. CONTRACTOR agrees and understands that the Contract does not grant any rights or privileges established for employees of OWNER.
- 17.6 Prohibition of Gratuities:** OWNER may, by Written Notice to CONTRACTOR, terminate the Contract without liability if it is determined by OWNER that gratuities were offered or given by CONTRACTOR or any agent or representative of CONTRACTOR to any officer or employee of OWNER with a view toward securing the Contract or securing favorable treatment with respect to the awarding or amending or the making of any determinations with respect to the performing of such Contract. In the event the Contract is terminated by OWNER pursuant to this provision, OWNER shall be entitled, in addition to any other rights and remedies, to recover or withhold the amount of the cost incurred by CONTRACTOR in providing such gratuities.
- 17.7 Prohibition Against Personal Interest in Contracts:** No officer, employee, independent consultant, or elected official of OWNER who is involved in the development, evaluation, or decision-making process of the performance of any solicitation shall have a financial interest, direct or indirect, in the Contract resulting from that solicitation. Any violation of this provision, with the knowledge, expressed or implied, of CONTRACTOR shall render the Contract voidable by OWNER.
- 17.8 OWNER'S Right to Audit:**
- 17.8.1** Records means all records generated by or on behalf of CONTRACTOR and each Subcontractor and Supplier of CONTRACTOR, whether paper, electronic, or other media, which are in any way related to performance of or compliance with this Contract, including, without limitation:
- .1 accounting records;
 - .2 written policies and procedures;
 - .3 subcontract files (including proposals of successful and unsuccessful Bidders, Bid recaps, etc.);
 - .4 original estimates and estimating work sheets;
 - .5 correspondence;
 - .6 Change Order files (including documentation covering negotiated settlements);
 - .7 back charge logs and supporting documentation;
 - .8 general ledger entries detailing cash and trade discounts earned, insurance rebates and dividends;
 - .9 lump sum agreements between CONTRACTOR and any Subcontractor or Supplier;
 - .10 records necessary to evaluate: Contract compliance, Change Order pricing, and any Claim submitted by CONTRACTOR or any of its payees; and
 - .11 any other CONTRACTOR record that may substantiate any charge related to this Contract.
- 17.8.2** CONTRACTOR shall allow OWNER'S agent or its authorized representative to inspect, audit, and/or reproduce, or all three, all Records generated by or on behalf of CONTRACTOR and each Subcontractor and Supplier, upon OWNER'S written request. Further, CONTRACTOR shall allow OWNER'S agent or authorized

representative to interview any of CONTRACTOR'S employees, all Subcontractors and all Suppliers, and all their respective employees.

- 17.8.3** CONTRACTOR shall retain all its Records, and require all its Subcontractors and Suppliers to retain their respective Records, during this Contract and for three (3) years after final payment, until all audit and litigation matters that OWNER has brought to the attention of CONTRACTOR are resolved, or as otherwise required by law, whichever is longer. OWNER'S right to inspect, audit, or reproduce Records, or interview employees of CONTRACTOR or its respective Subcontractors or Suppliers exists during this Contract, and for three (3) years after final payment, until all audit and litigation matters that OWNER has brought to CONTRACTOR'S attention are resolved, or as otherwise required by law, whichever is longer, and at no cost to OWNER, either from CONTRACTOR or any of its Subcontractors or Suppliers that may furnish Records or make employees available for interviewing.
- 17.8.4** CONTRACTOR must provide sufficient and accessible facilities during its normal business hours for OWNER to inspect, audit, or reproduce Records, or all three, and to interview any person about the Records.
- 17.8.5** CONTRACTOR shall insert these requirements in each written contract between CONTRACTOR and any Subcontractor or Supplier and require each Subcontractor and Supplier to comply with these provisions.
- 17.9 Survival:** The terms and conditions of this Contract, which contemplate a period of time beyond completion or termination will survive such completion or termination and not be merged therein or otherwise terminated.
- 17.10 No Waiver:** The waiver of any provision of this Contract will not be deemed to be a waiver of any other provision of this Contract. No waiver of any provision of this Contract will be deemed to constitute a continuing waiver unless expressly provided in writing, nor will a waiver of any default be deemed a waiver of any subsequent defaults of the same type. The failure at any time to enforce this Contract, whether the default is known or not, shall not constitute a waiver or estoppel of the right to do so.
- 17.11 Conditions Precedent to Right to Sue:** Notwithstanding anything herein to the contrary, the CONTRACTOR will have at least 90 days to give notice of a claim for damages as a condition precedent to the right to sue on the Contract, subject to the contractual claim and alternative dispute resolution processes set forth herein.
- 17.12 Waiver of Trial by Jury:** OWNER and CONTRACTOR agree that they have knowingly waived the right to trial by jury and have instead agreed that, in the event of any litigation arising out of or connected to this Contract, to proceed with a trial before the court, unless both parties subsequently agree otherwise in writing.
- 17.13 Contractor Evaluation:** The Owner will review and evaluate the Contractor's Work and performance on the Project and provide the Contractor with a written Contractor Evaluation Report in accordance with City of Austin Administrative Rule R161-13.37. Rule R161-13.37 provides an appeal process.

<http://www.austintexas.gov/department/contract-management>

End

Bidding Requirements, Contract Forms and Conditions of the Contract
SUPPLEMENTAL GENERAL CONDITIONS
Section 00810

The Supplemental General Conditions contained herein amend or supplement the General Conditions, Section 00700.

ARTICLE 2 - PRELIMINARY MATTERS

2.4 Before Starting Construction:

Delete 2.4.2.6 and replace with the following (changes to the original text are identified by underlining):

- “.6 a preliminary schedule of values for all of the Work, subdivided into component parts in sufficient detail to serve as the basis for progress payments during construction. At a minimum, the schedule of values shall be broken out by trade and split between materials and labor. Prices will include an appropriate amount of overhead and profit applicable to each item of Work;”

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

4.1 Availability of Lands: Add the following:

“CONTRACTOR shall contact OWNER’s Transportation Department to obtain a Temporary Use of Right-of-Way Permit prior to beginning construction on any sidewalk/driveway or occupying any parking area/meters within the public right-of-ways.”

ARTICLE 5 - BONDS AND INSURANCE

"5.3 Insurance:

5.3.1 CONTRACTOR Provided Insurance

.3.1.1 General Requirements.

- .1 CONTRACTOR shall carry insurance in the types and amounts indicated below for the duration of the Contract, which shall include items owned by OWNER in the care, custody and control of CONTRACTOR prior to and during construction and warranty period.
- .2 CONTRACTOR must complete and forward the Certificate of Insurance, Section 00650, to OWNER before the Contract is executed as verification of coverage required below. CONTRACTOR shall not commence Work until the required insurance is obtained and until such insurance has been reviewed by OWNER. Approval of insurance by OWNER shall not relieve or decrease the liability of CONTRACTOR hereunder and shall not be construed to be a limitation of liability on the part of CONTRACTOR. CONTRACTOR must also complete and forward the Certificate of Insurance, Section 00650, to OWNER whenever a previously identified policy period has expired as verification of continuing coverage.
- .3 CONTRACTOR’s insurance coverage is to be written by companies licensed to do business in the State of Texas at the time the policies are issued and shall be written by companies with A.M. Best ratings of B+VII or better, except for hazardous

material insurance which shall be written by companies with A.M. Best ratings of A- or better.

- .4 All endorsements naming the OWNER as additional insured, waivers, and notices of cancellation endorsements as well as the Certificate of Insurance shall indicate: City of Austin, Contract Management Department, P.O. Box 1088, Austin, Texas 78767.
- .5 The "other" insurance clause shall not apply to the OWNER where the OWNER is an additional insured shown on any policy. It is intended that policies required in the Contract, covering both OWNER and CONTRACTOR, shall be considered primary coverage as applicable.
- .6 If insurance policies are not written for amounts specified below, CONTRACTOR shall carry Umbrella or Excess Liability Insurance for any differences in amounts specified. If Excess Liability Insurance is provided, it shall follow the form of the primary coverage.
- .7 OWNER shall be entitled, upon request and without expense, to receive certified copies of policies and endorsements thereto and may make any reasonable requests for deletion or revision or modification of particular policy terms, conditions, limitations, or exclusions except where policy provisions are established by law or regulations binding upon either of the parties hereto or the underwriter on any such policies.
- .8 OWNER reserves the right to review the insurance requirements set forth during the effective period of this Contract and to make reasonable adjustments to insurance coverage, limits, and exclusions when deemed necessary and prudent by OWNER based upon changes in statutory law, court decisions, the claims history of the industry or financial condition of the insurance company as well as CONTRACTOR.
- .9 CONTRACTOR shall not cause any insurance to be canceled nor permit any insurance to lapse during the term of the Contract or as required in the Contract.
- .10 CONTRACTOR shall be responsible for premiums, deductibles and self-insured retentions, if any, stated in policies. All deductibles or self-insured retentions shall be disclosed on the Certificate of Insurance.
- .11 CONTRACTOR shall provide OWNER thirty (30) days written notice of erosion of the aggregate limits below occurrence limits for all applicable coverages indicated within the Contract.
- .12 If OWNER owned property is being transported or stored off-site by CONTRACTOR, then the appropriate property policy will be endorsed for transit and storage in an amount sufficient to protect OWNER's property.
- .13 The insurance coverages required under this contract are required minimums and are not intended to limit the responsibility or liability of CONTRACTOR.

5.3.1.2 Business Automobile Liability Insurance. Provide coverage for all owned, non-owned and hired vehicles. The policy shall contain the following endorsements in favor of OWNER:

- a) Waiver of Subrogation endorsement CA 0444;
- b) 30 day Notice of Cancellation endorsement CA 0244; and
- c) Additional Insured endorsement CA 2048.

Provide coverage in the following types and amounts:

- .1 A minimum combined single limit of \$500,000 per occurrence for bodily injury and property damage. Alternate acceptable limits are \$250,000 bodily injury per person, \$500,000 bodily injury per occurrence and at least \$100,000 property damage liability each accident.

5.3.1.3 Workers' Compensation And Employers' Liability Insurance. Coverage shall be consistent with statutory benefits outlined in the Texas Workers' Compensation Act (Section 401). CONTRACTOR shall assure compliance with this Statute by submitting two (2) copies of a standard certificate of coverage (e.g. ACCORD form) to Owner's Representative for every person providing services on the Project as acceptable proof of coverage. The Certificate of Insurance, Section 00650, must be presented as evidence of coverage for CONTRACTOR. CONTRACTOR's policy shall apply to the State of Texas and include these endorsements in favor of OWNER:

- a) Waiver of Subrogation, form WC 420304; and
- b) 30 day Notice of Cancellation, form WC 420601. The minimum policy limits for Employers' Liability Insurance coverage shall be as follows: .1 \$100,000 bodily injury per accident, \$500,000 bodily injury by disease policy limit and \$100,000 bodily injury by disease each employee.

5.3.1.4 Commercial General Liability Insurance. The Policy shall contain the following provisions:

- a) Contractual liability coverage for liability assumed under the Contract and all contracts relative to this Project.
- b) Completed Operations/Products Liability for the duration of the warranty period.
- c) Explosion, Collapse and Underground (X, C & U) coverage.
- d) Independent Contractors coverage (Contractors/ Subcontractors work).
- e) Aggregate limits of insurance per project, endorsement CG 2503.
- f) OWNER listed as an additional insured, endorsement CG 2010 and CG 2037 or equivalent.
- g) 30 day notice of cancellation in favor of OWNER, endorsement CG 0205.
- h) Waiver of Transfer of Recovery Against Others in favor of OWNER, endorsement CG 2404. Provide coverages A&B with minimum limits as follows:

- .1 A combined bodily injury and property damage limit of \$500,000 per occurrence.

5.3.1.5 ~~Builders' Risk Insurance.~~ CONTRACTOR shall maintain ~~Builders' Risk Insurance~~ or Installation Insurance on an all risk physical loss form in the Contract Amount. Coverage shall continue until the Work is accepted by OWNER. OWNER shall be a loss payee on the policy. If off-site storage is permitted, coverage shall include transit and storage in an amount sufficient to protect property being transported or stored.

~~5.3.1.7 Professional Liability Insurance. For Work which requires professional engineering or professional survey services to meet the requirements of the Contract, including but not limited to excavation safety systems, traffic control plans, and construction surveying, the CONTRACTOR or Subcontractors, responsible for performing the professional services shall provide Professional Liability Insurance with a minimum limit of \$500,000 per claim and in the aggregate to pay on behalf of the assured all sums which the assured shall become legally obligated to pay as damages by reason of any negligent act, error, or omission committed with respect to all professional services provided in due course of the Work of this Contract.~~

ARTICLE 11 - CHANGE OF CONTRACT AMOUNT

11.4 Determination of Value of Work: Add the following to paragraph 11.4.1.2:

"11.4.1.2 In the case of a Change Order determined by a mutually agreed lump sum or unit price properly itemized and supported by sufficient substantiating data, including documentation by subcontractors performing the work, to permit evaluation, the following method may be used:

COMPONENT ONE - The R.S. Means Co., Inc. 'Building Construction Cost Data' - latest edition - will be used as a basis for evaluating:

1a - the cost of labor (base rate, including fringe benefits),

1b - the cost of material and equipment to be incorporated in the Work, and

1c - the cost of tools, equipment and facilities necessary to accomplish the Work described in the change.

COMPONENT TWO - The costs of payroll taxes and insurance, Liability and Builder's Risk Insurance, shall be calculated as follows:

2a - Payroll taxes and Workers' Compensation Insurance <25% of payroll (Item 1a) (14.65% of 1a for ROCIP Projects)>

2b - Liability and Builder's Risk Insurance <2% of "total costs" (Items 1a, 1b, 1c, and 2a) (.034% of "total costs" for ROCIP Projects)>

COMPONENT THREE - Overhead and profit shall be calculated as follows:

3a - For Subcontractors and for those portions of the Work performed by CONTRACTOR'S own forces: 15% of the first \$10,000.00 of costs and 10% of the balance over \$10,000.00. ("costs" = Items 1a, 1b, and 1c, above, broken down into Contractor and Subcontractor costs).

3b - For the CONTRACTOR for that portion of the Work performed by Subcontractors: 10% of the first \$10,000.00 of the Subcontractor costs and 7.5% of the balance over \$10,000.00. ("costs" = Items 1a, 1b, and 1c, above, broken down into Subcontractor costs)

COMPONENT FOUR - Bonds Performance and Payment Bond according to the following table ("TOTAL COST" = Items 1a, 1b, 1c, 2a, 2b, 3a and 3b,):

DOLLAR VALUE OF CONTRACT	% OF TOTAL COST OF CHANGE ORDER FOR BOND EXPENSE
\$100,000 or less	2.5
\$100,000 thru \$500,000	1.5
\$500,001 thru \$2,500,000	1.0
\$2,500,001 thru \$5,000,000	0.75
\$5,000,001 thru \$7,500,000	0.70
OVER \$7,500,000	0.65

The total costs for the change, whether additive or deductive, shall be the sum total of COMPONENTS ONE - FOUR.

ARTICLE 14 - PAYMENTS TO CONTRACTOR AND COMPLETION

14.7 Substantial Completion: Reference 14.7.1, and add the following two provisions:

- "14.7.1.1 For water and wastewater lines construction, Substantial Completion means that the Work, including all testing and disinfection, has been completed and accepted and the line(s) placed into service. A certificate of Substantial Completion will not be issued. Work that remains after Substantial Completion could include the final pavement of roadways, adjustment of structures to final grade and revegetation. Owner's Representative will issue a notice specifying what portion of the Work is partially completed for the purpose of payment and what Work remains to be done on the portion being accepted as Substantially Complete. This subsection 14.7.1.1 changes the 00700 General Conditions definition of Substantial Completion."
- "14.7.1.2 For roadway construction and/or reconstruction, Substantial Completion means that the Work, including the final surface course, all permanent traffic control devices (pavement markings, signs, etc.), substantial clean-up, and punchlist items have been completed, accepted, and placed into service, and, any traffic signal or street lighting conduit that has been installed, lowered or relocated must be inspected for usability by, and must have received written approval from, the City's traffic signal section and/or street lighting section, as well as having been completed, accepted, and placed into service. A certificate of Substantial Completion will not be issued. Work that remains after Substantial Completion could include final clean up. Owner's Representative will issue a notice specifying what portion of the Work is partially completed for the purpose of payment and what Work remains to be done on the portion being accepted as Substantially Complete. This subsection 14.7.1.2 changes the 00700 General Conditions definition of Substantial Completion."

DEFINITIONS

General: Basic Contract definitions are included in the General Conditions, Section 00700 included herein.

Approved: The term approved, when used in conjunction with the Owner's Representative's action on the CONTRACTOR'S submittals, applications, and requests, is limited to the Owner's Representative's duties and responsibilities as stated in the Conditions of the Contract. A stamp reading "No Exceptions Taken" shall have the same intent as "Approved".

Furnish: The term furnish means supply and deliver to the Project site, ready for unloading, unpacking, assembly, installation, and similar operations.

Indicated: The term indicated refers to graphic representations, notes, or schedules on the Drawings, or other paragraphs or schedules in the Specifications, and similar requirements in the Contract Documents. Terms such as shown, noted, scheduled, and specified are used to help the reader locate the reference. There is no limitation on location.

Install: The term install describes operations at the Project site including the actual unloading, unpacking, assembly, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.

Installer: An Installer is the CONTRACTOR or another entity engaged by the CONTRACTOR, either as an employee, subcontractor, or contractor of lower tier, to perform a particular construction activity, including installation, erection, application, and similar operations. Installers are required to be experienced in operations they are engaged to perform.

Project Site: The space available to the CONTRACTOR for performing construction activities either exclusively or in conjunction with others performing other work as part of the Project. The extent of the Project site is shown on the Drawings and may or may not be identical with the description of the land on which the Project is to be built.

Provide: The term provide means to furnish and install, complete and ready for the intended use.

Regulations: The term regulations includes laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, as well as rules, conventions, and agreements within the construction industry that control performance of the Work.

Trades: Using terms such as carpentry is not intended to imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as carpenter. It also does not imply that requirements specified apply exclusively to trades persons of the corresponding generic name.

INDUSTRY STANDARDS

Applicability of Standards: Except where the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.

Publication Dates: Comply with the standards in effect as of the date of the Contract Documents.

Conflicting Requirements: Where compliance with two or more standards is specified and where the standards may establish different or conflicting requirements for minimum quantities or quality levels, refer to the Owner's Representative for a decision before proceeding.

Copies of Standards: Each entity engaged in construction on the Project is required to be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.

Abbreviations and Names: Trade association names, titles of general standards, and names and titles of government agencies are frequently abbreviated. Where such acronyms or abbreviations are used in the

Specifications or other Contract Documents, they mean the recognized name of the trade association, standards-generating organization, authority having jurisdiction, or other entity applicable to the context of the text provision. Refer to the "Encyclopedia of Associations," published by Gale Research Co., available in most libraries.

AA	Aluminum Association
AABC	Associated Air Balance Council
AAMA	American Architectural Manufacturer's Association
AAN	American Association of Nurserymen.
AASHTO	American Association of State Highway and Transportation Officials.
AATCC	American Association of Textile Chemists and Colorists
ACI	American Concrete Institute
ACIL	American Council of Independent Laboratories
ACPA	American Concrete Pipe Association
ADC	Air Diffusion Council
AFBMA	Anti-Friction Bearing Manufacturers Association
AGA	American Gas Association
AGC	Associated General Contractors of America
AGMA	American Gear Manufacturers Association
AHA	American Hardboard Association
AHAM	Association of Home Appliance Manufacturers
AI	Asphalt Institute
AIA	American Institute of Architects
AIHA	American Industrial Hygiene Association
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
AITC	American Institute of Timber Construction.
ALCA	Associated Landscape Contractors of America
ALI	Associated Laboratories, Inc.
ALSC	American Lumber Standards Committee
AMCA	Air Movement and Control Association
ANSI	American National Standards Institute.
AOAC	Association of Official Analytical Chemists

AOSA	Association of Official Seed Analysts
APA	American Plywood Association
API	American Petroleum Institute.
AREA	American Railroad Engineers Association
ARI	Air Conditioning and Refrigeration Institute
ARMA	Asphalt Roofing Manufacturers Association
ASA	Acoustical Society of America
ASA	American Standards Association.
ASC	Adhesive and Sealant Council
ASCE	American Society of Civil Engineers
ASHRAE	American Society of Heating, Refrigerating & Air Conditioning Engineers
ASME	American Society of Mechanical Engineers
ASPE	American Society of Plumbing Engineers
ASSE	American Society of Sanitary Engineering
ASTM	American Society for Testing and Materials.
AWCMA	American Window Covering Manufacturers Association
AWG	American Wire Gage
AWI	Architectural Woodwork Institute
AWPA	American Wood Preservers Association
AWPB	American Wood Preservers Bureau
AWPI	American Wood Preservers Institute
AWS	American Welding Society
AWWA	American Water Works Association
BHMA	Builders Hardware Manufacturers Association
BIA	Brick Institute of America
BIFMA	Business and Institutional Furniture Manufacturers Association
CAGI	Compressed Air and Gas Institute
CAUS	Color Association of the United States
CBM	Certified Ballast Manufacturers
CCC	Carpet Cushion Council

CDA	Copper Development Association
CE	Corps of Engineers
CFR	Code of Federal Regulations
CGA	Compressed Gas Association
CISCA	Ceiling and Interior Systems Construction Association
CISPI	Cast Iron Soil Pipe Institute
CPSC	Consumer Product Safety Commission
CRI	Carpet and Rug Institute
CRSI	Concrete Reinforcing Steel Institute
CS	Commercial Standard of NBS (U.S. Dept. of Commerce)
CTI	Ceramic Tile Institute
DFPA	Douglas Fir Plywood Association
DHI	Door and Hardware Institute
DLPA	Decorative Laminate Products Association
DOC	U.S. Department of Commerce
DOT	Department of Transportation
ECSA	Exchange Carriers Standards Association
EIA	Electronic Industries Association
EIMA	Exterior Insulation Manufacturers Association
EJMA	Expansion Joint Manufacturers Association
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FCC	Federal Communications Commission
FGMA	Flat Glass Marketing Association
FHA	Federal Housing Administration
FM	Factory Mutual Research Organization
FS	Federal Specifications
FSC	Forest Stewardship Council
FTI	Facing Tile Institute
GA	Gypsum Association
GSA	General Services Administration

HEI	Heat Exchange Institute
HI	Hydronics Institute
H.I.	Hydraulic Institute
HMA	Hardwood Manufacturers Association
HPMA	Hardwood Plywood Manufacturers Association
IBD	Institute of Business Designers
ICEA	Insulated Cable Engineers Association, Inc.
IEEE	Institute of Electrical and Electronic Engineers, Inc.
IESNA	Illuminating Engineering Society of North American
IGCC	Insulating Glass Certification Council
ILI	Indiana Limestone Institute of America
IMSA	International Municipal Signal Association
IRI	Industrial Risk Insurers
ISA	Instrument Society of America
ITE	Institute of Transportation Engineers
LEED™	Leadership in Energy and Environmental Design
LIA	Lead Industries Association, Inc.
LPI	Lightning Protection Institute
MBMA	Metal Building Manufacturer's Association
MCAA	Mechanical Contractors Association of America
MFMA	Maple Flooring Manufacturers' Association
MIA	Marble Institute of America
ML/SFA	Metal Lath/Steel Framing Association
MSS	Manufacturers Standardization Society of the Valve and Fittings Industry
MUTCD	Texas Department of Transportation Manual on Uniform Traffic Control Devices
NAAMM	National Association of Architectural Metal Manufacturers
NAIMA	North American Insulation Manufacturers Association
NAPA	National Asphalt Pavement Association
NBFU	National Board of Fire Underwriters

NBGQA	National Building Granite Quarries Association
NBS	National Bureau of Standards (U.S. Dept. of Commerce)
NCMA	National Concrete Masonry Association
NCRPM	National Council on Radiation Protection and Measurements
NCSPA	National Corrugated Steel Pipe Association
NEC	National Electrical Code (Published by NFPA)
NECA	National Electrical Contractors Association
NEII	National Elevator Industry, Inc.
NEMA	National Electrical Manufacturers Association
NETA	International Electrical Testing Association
N.F.P.A.	National Forest Products Association
NFPA	National Fire Protection Association
NHLA	National Hardwood Lumber Association
NIST	National Institute of Standards and Technology
NLGA	National Lumber Grades Authority
NOFMA	National Oak Flooring Manufacturers Association
NPA	National Particleboard Association
NPCA	National Paint and Coatings Association
NRCA	National Roofing Contractors Association
NWMA	National Woodwork Manufacturers Association
OSHA	Occupational Safety and Health Administration
PCA	Portland Cement Association
PCI	Precast/Prestressed Concrete Institute
PDI	Plumbing and Drainage Institute
PE	Professional Engineer
REA	Rural Electrification Administration
RFCI	Resilient Floor Covering Institute
RMA	Rubber Manufacturing Association
RPLS	Registered Professional Land Surveyor
SDI	Steel Deck Institute
S.D.I.	Steel Door Institute

SFPA	Southern Forest Products Association
SGCC	Safety Glazing Certification Council
SIGMA	Sealed Insulating Glass Manufacturers Association
SJI	Steel Joist Institute
SMACNA	Sheet Metal and Air Conditioning Contractors National Association
SPIB	Southern Pine Inspection Bureau
SPRI	Single Ply Roofing Institute
SSPC	Steel Structures Painting Council
SSPMA	Sump and Sewage Pump Manufacturers Association
SWI	Steel Window Institute
SWPA	Submersible Wastewater Pump Association
TCA	Tile Council of America
TEX TEST	TxDOT Laboratory Test
TIMA	Thermal Insulation Manufacturers Association
TPI	Truss Plate Institute
TxDOT	Texas Department of Transportation
UL	Underwriters Laboratory, Inc.
USDA	U. S. Department of Agriculture
USGBC	U. S. Green Building Council
USPS	U. S. Postal Service
WCLIB	West Coast Lumber Inspection Bureau
WCMA	Wallcovering Manufacturers Association
WIC	Woodwork Institute of California
WLPDIA	Western Lath, Plaster, Drywall Industries Association
WRI	Wire Reinforcement Institute
WSC	Water Systems Council
WSFI	Wood and Synthetic Flooring Institute
WWPA	Western Wood Products Association
W.W.P.A.	Woven Wire Products Association

END

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Documents related to this section will include the construction drawings and general provisions of the Contract, including the General Conditions of the Contract, Section 00700, Supplemental General Conditions, Section 00810, and other Division 1 requirements.

1.2 SUMMARY

- A. This section describes the preconstruction conference and other Project related meetings which may be held on a routine schedule throughout the duration of the Project.
- B. The CONTRACTOR, or his authorized representative(s), shall attend all Project related meetings as indicated herein. The CONTRACTOR's representatives, as a minimum, shall include his Project Manager and/or Superintendent. Other CONTRACTOR's representatives may attend Project related meetings; however, there shall be a maximum of two (2) CONTRACTOR's representatives at any one meeting unless the ENGINEER approves a larger number.
- C. The CONTRACTOR shall provide all pertinent reports, copies of reports, etc., for each meeting as may be required by this or other sections of the Contract.

1.3 PRECONSTRUCTION CONFERENCE

A. Attendees

A preconstruction conference shall be held as soon after the award and execution of the Contract as possible and before any Work at the site is started. The conference will be held at a location selected by the Owner's Project Manager. The Owner's Project Manager shall prepare and distribute the meeting agenda, preside over the conference, and may distribute meeting minutes. The conference shall be attended by:

- 1. CONTRACTOR's Project Manager.
- 2. CONTRACTOR's Superintendent.
- 3. Any Subcontractors' and/or Suppliers' representatives whom the CONTRACTOR may desire to invite or whom the ENGINEER or OWNER may request to attend.
- 4. ENGINEER's representative.
- 5. OWNER's Project Manager.
- 6. OWNER's REPRESENTATIVE

B. Meeting topics

The topics to be discussed may include, but will not be limited to, the following items:

- 1. Introduction of persons attending the meeting.
- 2. General project description, including length of contract and liquidated damages.
- 3. Key personnel associated with the construction.
- 4. Lines of communication and chains of command.
- 4. Wage and personnel records and reporting requirements.
- 5. Subcontractors and suppliers.

6. Submittal review and approval procedure. Submittals may include, but are not limited to the following:
 - Schedule of Values
 - Schedule for submittals
 - Shop drawings
 - Construction schedule (The schedule shall indicate the phases of work in which subcontractors will be participating. Subcontractors shall be indicated by name.)
 - Payroll reports
 - Substitution of subcontractors
 - Non-use of asbestos materials affidavit
8. Job safety.
9. Permits.
10. Utility coordination report.
11. Notification of property owners and other affected by the project
12. Job meetings.
13. Use of the site for construction, storage, staging, etc., and interrelationship with other contracts.
14. Equal opportunity requirements.
15. Inventory of materials stored on site provisions.
16. Progress estimate and payment procedure.
17. Posting of signs.
18. Prompt payment procedure.
19. Review of contract - addenda, supplementary general conditions, special provisions, special specifications, and other unique project items.
20. Other

1.4 JOB MEETINGS

A. General

Job meetings shall be held as deemed necessary by the ENGINEER or OWNER or as requested by the CONTRACTOR throughout the duration of the Project. The meetings shall be held at a location selected by or approved by the Owner's Representative. The OWNER's REPRESENTATIVE or CONTRACTOR, as agreed to, shall preside over the meeting and issue meeting minutes.

B. Attendees

Job meetings will be attended by the following:

1. CONTRACTOR's Project Manager, when requested to attend.
2. CONTRACTOR's Construction Superintendent.
3. Any subcontractors' and/or suppliers' representatives whom the CONTRACTOR may desire to invite or whom the ENGINEER or OWNER request to attend.
4. OWNER's REPRESENTATIVE
5. ENGINEER's representative(s), if needed or required.
6. OWNER's PROJECT MANAGER, if needed or required
7. OWNER's Sponsor Department representative(s), if needed or required.

C. Meeting topics

The topics will include, but not necessarily be limited to, the following subjects:

1. Review of previous meetings' notes and update of pertinent information and Project status.
2. Identification and discussion of new job related construction problems. Such discussion will be toward resolving identified problems.
3. Review work accomplished to date and establish proposed construction activities for the upcoming week(s).
4. Discuss the status of or need for change orders.
5. Check of required bonds and insurance certificates (including Workers' Compensation Insurance verification for CONTRACTOR's, Subcontractor's, and Sub-Subcontractor's employees as stated in Section 00700, General Conditions, 5.2 Workers' Compensation).
6. Status of pay requests.
7. Work in progress.
8. Review and update construction schedule.
9. Review of submittals schedule and status of submittals.
10. Other.

END

PART 1 - GENERAL**1.1 RELATED DOCUMENTS:**

The Contractor prepares submittals. Drawings and general provisions of Contract, including Section 00700, "General Conditions of the Contract"; Section 00810, and "Supplemental General Conditions"; Division 1 requirements, should be used as the related documents for this requirement.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for submittals required for performance of the Work, including the following:
 - 1. Contractor's construction schedule.
 - 2. Submittal schedule.
 - 3. Shop drawings.
 - 4. Product data.
- B. Administrative Submittals: Refer to other Division 1 Sections and other Contract Documents for requirements for administrative submittals. Such submittals include, but are not limited to, the following:
 - 1. Permits.
 - 2. Applications for Payment.
 - 3. Performance and Payment bonds.
 - 4. Insurance certificates.
 - 5. Monthly Subcontractors expense report.
 - 6. Non-use of asbestos affidavits

PART 2 - PRODUCTS - not used**PART 3 - EXECUTION****3.1 SUBMITTAL PROCEDURES**

Contractor shall be responsible for the following:

- A. Coordination: Coordinate preparation and processing of submittals with performance of construction activities. Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delay.
 - 1. Coordinate each submittal with delivery, other submittals, and related activities that require sequential activity.
 - 2. Coordinate transmittal of different types of submittals for related elements of the Work so processing will not be delayed by the need to review submittals or resubmittals concurrently.
 - 3. Processing: To avoid the need to delay installation as a result of the time required to process submittals, allow sufficient time for submittal review, including time for resubmittals.
- B. Submittal Preparation: Provide identification for each submittal. Indicate the name of the entity that prepared each submittal.

C. Number of Copies:

1. Two (2) copies of the proposed Construction schedule and subsequent revision are required.
2. Two (2) copies of the proposed Submittal schedule and subsequent revision are required.
3. Five (5) copies of Shop Drawings, and Product submittals are required.

D. Submittal Transmittal: Package each submittal appropriately for transmittal and handling. Transmit each submittal from the Contractor to the ENGINEER through the Owner's Representative using a transmittal form (An example Transmittal Form is provided at the end of this section). The ENGINEER will not accept submittals received from sources other than the Contractor.

1. On the transmittal, record relevant information and requests for data. On the form, or separate sheet, record deviations from Contract Document requirements, including variations and limitations. Include Contractor's certification that information complies with Contract Document requirements.
2. Number transmittals in sequence for each Series of the Specifications thus: x-xxx. The number after the dash indicates the Section of the Specifications, and the number before the dash is the sequence number of the transmittal. For example, the first item submitted related to Specification Item No. 506, "Manholes" would be labeled **1-506**, the second item submitted would be labeled **2-506**, etc. Identify resubmittals with a letter of the alphabet following the original sequence number, using "A" for the first resubmittal, "B" for the second resubmittal, etc. For example, the first resubmittal of the second item submitted for Specification 506 would be labeled **2A-506**.

3.2 CONTRACTOR'S CONSTRUCTION SCHEDULE

A. Construction Schedule: As described in Section 2.4.2 of Section 00700 "General Conditions", prepare a fully developed Contractor's construction schedule ("Baseline Schedule") using Microsoft Project[®] software unless otherwise approved by Owner's Representative. Submit Baseline Schedule prior to or at the preconstruction conference, and submit updated schedules as specified by the ENGINEER, usually at each regularly scheduled Project Meeting and with each pay application.

1. Detail each significant construction activity and use a weekly timeframe for the schedule. Use the same breakdown of units of the Work as indicated in the "Schedule of Values."
2. With each update, revise task completion percentage and mark completed tasks.
3. Prepare the schedule on a sheet, or series of sheets, of stable transparency, or other reproducible media, of sufficient width to show data for the entire construction period.
4. Secure time commitments for performing critical elements of the Work from parties involved. Coordinate each element on the schedule with other construction activities; include minor elements involved in the sequence of the Work. Show each activity in proper sequence. Indicate graphically the critical path items and the sequences necessary for completion of related portions of the Work.
5. Indicate the phases of work in which subcontractors will be participating. Subcontractors shall be indicated by name.
6. Coordinate the Contractor's Construction Schedule with the Schedule of Values, list of subcontracts, Submittal Schedule, progress reports, payment requests, and other schedules.

7. Indicate substantial completion in advance of the date established for Final Completion to allow time for the ENGINEER's procedures necessary for certification of Substantial and Final Completion.
- B. Work Stages: Indicate important stages of construction for each major portion of the Work, including submittal review, testing, and installation.
- C. Cost Correlation: Within the Baseline Schedule, provide cost information indicating planned and actual costs. On the appropriate task line(s), show dollar volume of Work performed as of the dates used for preparation of applications for payment. Refer to Section 00700, "General Conditions", Article 14 Payment to Contractor and Completion for cost reporting and payment procedures.
- D. Distribution: Following response to the Baseline Schedule submittal, distribute electronic copies to the ENGINEER, subcontractors, suppliers, and other parties required to comply with scheduled dates. Keep a copy at the Project Site at all times.
 1. When revisions are made, distribute to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in construction activities.
- E. Schedule Updating: Revise the schedule after each meeting, event, or activity where revisions have been recognized or made and as requested by the ENGINEER. Issue the updated schedule concurrently with the report of each meeting, or as requested by the ENGINEER.

3.3 SUBMITTAL SCHEDULE

- A. Concurrently with the development of the Contractor's Construction Schedule, prepare a complete schedule of submittals. Submit the initial Submittal Schedule along with the Construction Schedule, at, or prior to, the Pre-construction Conference.
 1. Coordinate Submittal Schedule with the list of subcontractors, Schedule of Values, and the list of products as well as the Contractor's Construction Schedule.
 2. Prepare the schedule in chronological order. Provide the following information:
 - a. Scheduled date for the first submittal.
 - b. Related Section number or Specification number.
 - c. Submittal category (Shop Drawings, Product Data, Calculations, Test Results, or Samples).
 - d. Name of the subcontractor.
 - e. Description of the part of the Work covered.
 - f. Scheduled date for resubmittal.
 - g. Scheduled date for completion of the ENGINEER's review.
- B. Distribution: Following Owner's response to the initial submittal, print and distribute copies to the Owner's Representative, ENGINEER, Owner, subcontractors, suppliers, and other parties required to comply with submittal dates indicated. Keep copies at the Project Site at all times.
 1. When revisions are made, distribute to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in construction activities.
- C. Schedule Updating: Revise the schedule after each meeting or activity where revisions have been recognized or made. Issue the updated schedule concurrently with the report of each meeting, or as requested by the ENGINEER.

3.4 CONSTRUCTION SEQUENCE PLANS

The Contractor is required to submit construction sequence plans to the City at, or prior to, the pre-construction conference for approval. The Project shall be divided into phases

according to the sequence of construction given in the Drawings and traffic control plans. The Contractor shall arrange his/her work schedule to complete all Work on each phase, including patching of concrete, before moving on to the next work area.

3.5 PRODUCT DATA

- A. Collect Product Data into a single submittal for each element of construction or system. Product Data includes printed information, such as manufacturer's installation instructions, catalog cuts, standard color charts, roughing-in diagrams and templates, standard wiring diagrams, applicable certifications and performance curves.
 - 1. Mark each copy to show applicable choices and options. Where printed Product Data includes information on several products that are not required, mark copies to indicate the applicable information. Include the following information:
 - a. Manufacturer's printed recommendations;
 - b. Compliance with trade association standards;
 - c. Compliance with recognized testing agency standards;
 - d. Application of testing agency labels and seals;
 - e. Notation of dimensions verified by field measurement; and
 - f. Notation of coordination requirements.
 - 2. Do not submit Product Data until compliance with requirements of the Contract Documents has been confirmed.
 - 3. Distribution: Furnish copies of final submittal to installers, subcontractors, suppliers, manufacturers, fabricators, and others required for performance of construction activities. Show distribution on transmittal forms.
 - a. Do not proceed with installation until a copy of the final submission of Product Data is in the Installer's possession.
 - b. Do not permit use of unmarked copies of Product Data in connection with construction.

3.6 ENGINEER/ARCHITECT'S ACTION

- A. Except for submittals, for the record, or for information where action and return is not required, the ENGINEER will review each submittal, mark to indicate action taken, and return within the time frame specified in Paragraph 3.1.A.3.
 - 1. Compliance with specified characteristics is the Contractor's responsibility.
- B. Action Stamp: The ENGINEER will stamp each submittal with a uniform, action stamp. The ENGINEER will mark the stamp appropriately to indicate the action taken, as follows:
 - 1. "Reviewed": the Work covered by the submittal may proceed provided it complies with requirements of the Contract Documents. Final payment depends on that compliance.
 - 2. "Reviewed with Comments": the Work covered by the submittal may proceed provided it complies with notations or corrections on the submittal and requirements of the Contract Documents. Final payment depends on that compliance.
 - 3. "Revise and Resubmit" or "Rejected": do not proceed with Work covered by the submittal, including purchasing, fabrication, delivery, or other activity. Revise or prepare a new submittal according to the notations and resubmit without delay. Repeat if necessary to obtain different action mark.
 - a. Do not use, or allow others to use, submittals marked "Revise and Resubmit" or "Rejected" at the Project Site or elsewhere where Work is in progress.

4. Other Action: Where a submittal is for information, or for record purposes, or for special processing, or for other activity, the ENGINEER will return the submittal marked "Record Copy", "Action Not Required" or "No Action Taken."
- C. Unsolicited Submittals: The ENGINEER will return unsolicited submittals to the sender without action.

3.7 PREPARATION AND SUBMITTAL OF CONSTRUCTION RECORD DRAWINGS

The Owner's Representative and the Contractor's Superintendent will each maintain a set of bluelines noting any changes in ink during construction of the Project. The Owner's Representative and the Contractor's Superintendent will compare bluelines at least weekly (at a time mutually acceptable to both) to exchange information and compare notes to ensure all items installed and changes are documented. The following is a recommended minimum of items to be noted:

GENERAL

1. Notes should be sufficiently clear to allow a draftsman to easily make the necessary changes without the need for field checks and interpretation.
2. One complete set of Construction Record bluelines will be submitted prior to the final pay request and forwarded to the Owner.

Any information noted which could be used for future maintenance, location and construction projects is encouraged to be noted on the bluelines.

3.8 CONSTRUCTION DIARIES

The Contractor shall prepare a daily construction diary recording as a minimum the following information concerning events at the site and submit duplicate copies to the Owner's Representative at weekly intervals. The copies are to be signed by the project Superintendent as defined in Section 00700, Article 6.1.2.

1. Work performed;
2. Approximate count of Contractor's personnel, by classification, on the site;
3. List by classification, of all Subcontractors, personnel and any professionals on the site that day;
4. List of all equipment on the site by make and model;
5. High and low temperatures together with general weather conditions;
6. Start time and finish time of day's work;
7. Accidents and / or unusual events;
8. Meetings and significant decisions made;
9. Stoppages, delays, shortages and / or losses;
10. Meter readings and / or similar recordings;
11. Emergencies procedures that may have been needed;
12. Orders and requests of governing authorities;
13. Change Orders received and implemented;
14. Services connected and / or disconnected;
15. Installed equipment and / or system tests and / or startups and results;
16. Partial completions and / or occupancies; and
17. Date of substantial completion certified.

Shop Drawing Transmittal

Month XX, 2008

Transmittal No. _____
Previous Transmittal No. _____
Previous Submittal Date _____

City of Austin
Construction Inspection Division
Public Works Department
P.O. Box 1088
Austin, Texas 78767

Project Name: Austin Lakeside Drive

Attention: Owner's Representative

Enclosed are nine (9) copies of the following items for your review:

<u>Item No.</u>	<u>Description</u>	<u>Submittal Type</u>	<u>Specification Section</u>	<u>Subcontractor/Supplier</u>
1.	6" DI Pipe	Produce Data	510	ABC Company
2.	8" Resilient Seat Gate Valve	Product Data	511	DEF Company

NOTE: Item 1 above contains a deviation from the Specifications as indicated on the item

Submitted by: _____
XYZ Company
101 Ranch Road 2974
Austin, Texas 78759

END

Division 1 General Requirements
SUSTAINABLE CONSTRUCTION REQUIREMENTS
Section 01352

Non-Building Project – Watershed, Sitework, Landscape

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A.** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section. The requirements may or may not include reference to sustainability.

Related Sections include the following Division 1 Sections:

- 1.** The contents of this Section are related to all Sections of these Specifications.
- 2.** Section 01300 Submittals.
- 3.** Section 01505 Construction and Demolition Waste Management and Disposal.

1.2 SUMMARY

- A.** This Section includes requirements and procedures for compliance with certain Sustainable Construction requirements.
- 1.** Some Sustainability requirements are dependent on material selections and may not be specifically identified as sustainability requirements. Compliance with requirements may be used as one criterion to evaluate substitution requests.
 - 2.** Additional Sustainability Construction requirements are dependent on design and other aspects of the Project that are not part of the Work of the Contract.

1.3 DEFINITIONS

- A. Regionally Manufactured Materials:** Materials that are manufactured within a radius of 500 miles (800 km) from the Project location. Manufacturing refers to the final assembly of components into the product that is installed at the Project site.
- B. Regionally Extracted, Harvested, or Recovered Materials:** Materials that are extracted, harvested or recovered and manufactured within a radius of 500 miles (800 km) from the Project site.
- C. Recycled Content:** The percentage by weight of constituents that have been recovered or otherwise diverted from the solid waste stream, either during the manufacturing process (pre-consumer), or after consumer use (post-consumer).
- D. Post-consumer recycled content:** The percentage (by weight) of a reclaimed waste material contained in a product. A reclaimed waste material (e.g., newspaper, magazines, beverage containers, etc.) has already served a purpose to a consumer and has been diverted or separated from waste stream for recycling.
- E. Pre-Consumer Recycled Content:** (or Post-industrial recycled content). The percentage (by weight) of a waste material obtained from industrial processes that are contained in a product. Discarded materials from one manufacturing process that are used in another manufacturing process are pre-consumer recycled materials. Wastes from the original manufacturing process used in the same product after minimal reprocessing are not recycled material.

- F. Recycled material:** A material that would otherwise be destined for landfill disposal but is diverted or separated from the waste stream, reintroduced as material feedstock, and processed into marketed end products.
- G. Reused Material:** Any item that is salvaged or reused without significant reprocessing as in a recycling process.
- H. Source reduction:** Minimization of waste at the start of a process or activity so that there is a reduced amount of waste to recycle or dispose. Also called precycling.
- I. Xeriscape:** Quality landscaping that conserves water and protects the environment through its employment of seven principles: planning and design; soil analysis; appropriate plant selection; practical turf areas; efficient irrigation; use of mulches; and appropriate maintenance.

1.4 SUSTAINABILITY OBJECTIVES/GOALS

The City of Austin is committed to sustainability and expects the Project to reflect this commitment. The specific Sustainable (Design & Construction) goals for this project include:

1. Protection of the environment.
2. Limiting construction site area and disturbance of natural habitat and protection of trees and vegetation.
3. Reduction of waste created by construction activity through Source Reduction.
4. Increasing the use of materials and products with recycled content.
5. Chemically safe construction materials and pest management.
6. Construction materials that use less energy and create less pollution in manufacture, delivery, installation, renovation, and demolition.

1.5 SUBMITTALS

- A. Sustainability submittals** If required submitted item is identical to that submitted for another requirement, submit duplicate copies for each separate submittal.
- B. Sustainable Construction Action Plans:** Provide preliminary submittals within 14 calendar days of date established for the Notice to Proceed indicating how the following requirements will be met.
 1. Construction & Demolition Waste Management Plan complying with Division 1 Section 01505 "Construction Waste Management."
 2. List of proposed materials with recycled content, indicating cost, post consumer recycled content, and pre-consumer recycled content for each product having recycled content.
 3. List of proposed regionally manufactured materials and regionally extracted, harvested, or recovered materials, identifying each regionally manufactured material and its source.
- C. Sustainability Contract Closeout Documentation:**
 1. Comply with Division 1 Section 01505 "Construction Waste Management."
 2. Provide manufacturer's product Data indicating percentages by weight of post-consumer and pre-consumer recycled content for products having recycled content. Include statement indicating costs for each product having recycled content.
 3. Provide manufacturer's and or supplier's product Data indicating location of material manufacturer for regionally manufactured, harvested, recovered and extracted materials.

1.6 QUALITY ASSURANCE

- A. Sustainability Coordinator:** Engage a responsible person on the construction team who is familiar with Sustainable practices and procedures. The Coordinator may also serve as the Waste Management coordinator.

PART 2 – PRODUCTS

Provide and maximize to the greatest extent economically feasible, a combination of salvaged, refurbished, recycled, regional materials within the scope of the project.

PART 3 – EXECUTION

A. SITE DISTURBANCE - Special Site Practices:

- 1.** Construction Activity Pollution Prevention: Comply with City of Austin standard requirements.
- 2.** Protect and restore natural vegetation per division 1 Sections and plans.
- 3.** Replace any removed or destroyed vegetation with equivalent species that are within City guidelines for native and adaptive plants.
- 4.** Restrict construction activity only to defined site limits per plans and avoid activity and practices that would adversely affect environment, property, soils, vegetation and water courses.

END

Division 1 General Requirements
CONSTRUCTION EQUIPMENT EMISSIONS REDUCTION PLAN
Section 01353

1. GENERAL

1.1. RELATED DOCUMENTS

- A.** This Section applies to Drawings and all provisions of Contract.

1.2. SUMMARY – CONSTRUCTION EQUIPMENT EMISSIONS PLAN

- A.** The OWNER, as part of the Council Resolution No. 20100211-019, has decided to take steps to reduce emissions associated with construction process including Nitrogen Oxides (NO_x), particulate matter and greenhouse gas. Construction activity is a source of large quantities of particulate matter and ozone forming Nitrogen Oxides that adversely affect the health of our community and the natural environment.
- B.** The CONTRACTOR shall employ practices and take actions that reduce emissions from NO_x, particulate matter (black soot) and greenhouse gases resulting from activities associated with new construction and demolition Projects.
- C.** The CONTRACTOR shall maximize the use of equipment and vehicles with advanced emission controls in support of the City's goals, utilizing equipment that meets defined EPA emissions standards.

1.3. DEFINITIONS

- A.** "Construction Equipment" means equipment powered by an internal combustion engine and used for performing or otherwise advancing the Work on the Project, other than motor vehicles intended for use on public highways and registered pursuant to Section 502.002 of the Texas Transportation Code.
- B.** The list of applicable Construction Equipment includes, but is not limited to excavators, backhoes, loaders, bulldozers, graders, rock saws, generators, and other similar equipment.
- C.** "EPA" means the United States Environmental Protection Agency.
- D.** "Low-Use Equipment" means any piece of construction equipment which is used for less than ten (10) hours per week on site for a single construction contract.
- E.** "Greenhouse Gases" are emissions that absorb and emit radiation within the atmosphere. Greenhouse Gases can be one or a combination of, these gases: carbon dioxide, methane, nitrous oxide and three groups of fluorinated gases (sulfur hexafluoride, hydro fluorocarbons, and perfluorocarbons)

1.4. REQUIREMENTS – Not Used

1.5. SUBMITTALS

A. CONSTRUCTION EQUIPMENT EMISSIONS REDUCTION PLAN:

- 1.** The CONTRACTOR agrees to prepare a draft Emissions Reduction Plan (referred to as PLAN) prior to start of construction. This PLAN shall include an inventory report

containing identifying data for each piece of equipment to be used on the worksite and shall include the following:

- Vehicle/Equipment: Make & Model Year
 - Vehicle/Equipment: Engine Make & Model Year
 - Vehicle/Equipment: Fuel Type
 - Vehicle/Equipment: Expected gallons or hours used for project duration
- a) The OWNER will provide Emissions Reduction Toolkit to help the CONTRACTOR in preparation of the PLAN and inventory.
- 2.** The CONTRACTOR shall develop a list of strategies to be used in this Project in order to reduce emissions from NOx, particulate matter and greenhouse gas (CO₂ equivalent). Once prepared, the agreed upon strategies shall be incorporated into the PLAN. The PLAN will then be signed by the CONTRACTOR and made ready for implementation. Implementation progress will be reviewed once a month in regularly scheduled project progress meetings. The PLAN may be modified during construction if changes are made to the Project, but adjustments shall be approved by the OWNER prior to implementation.
- 3.** This PLAN may be used by the Owner's Representative or Inspector to conduct site inspections and/or verify compliance with specification elements.
- 4.** If additional equipment is brought on-site after construction begins, the Contractor shall provide this same inventory information to the Owner's Representative for the new equipment on or before the day it begins work on-site. All additional equipment shall conform to the PLAN.
- 5.** Reports shall be provided for all equipment used on-site.

B. EQUIPMENT EMISSIONS CLOSEOUT DOCUMENTATION:

- 1.** Submit the following prior to final payment:
- a) Record of changes made to the original PLAN and reasons.
 - b) Provide a summary and documentation of strategies used and estimated reductions in fuel & emissions.
 - c) Provide documentation of amount and % of alternative fuel used.

2. PRODUCTS

Not used

3. EXECUTION

3.1. GENERAL

- A.** Implement the submitted PLAN. Provide personnel, documentation, equipment, signage, transportation, and other items as required to implement the PLAN during the entire duration of the Contract.

3.2. EQUIPMENT EMISSIONS PLAN IMPLEMENTATION

- A.** Plan Coordinator (Could be same as superintendent): Designate an on-site person responsible for instructing workers on the Owner's intent to reduce emissions, overseeing implementation and documenting results of the PLAN for the Project.

- B.** Plan Review: Review the PLAN in monthly progress meeting and include comments in the meeting notes.
- C.** Instruction: Provide on-site instructions to all subcontractors of emissions reduction methods to be used by all parties for the appropriate activities of the Project.
- D.** Discuss Owner's goals and requirements at the following meetings:
 - 1.** Pre-bid conference.
 - 2.** Pre-construction conference.
 - 3.** Progress meetings (monthly).

3.3 EQUIPMENT EMISSIONS REDUCTION TOOLKIT

- A.** Equipment Emissions Reduction Toolkit available at:
 - 1.** Website: (<http://austintexas.gov/departments/capital-improvement-program>)
 - 2.** City of Austin Public Works Department, Project Management Division, One Texas Center, Suite 900
 - 3.** Construction Job Site Office (after contract award)
- B.** Equipment Emissions Reduction Toolkit consists of:
 - 1.** A list of Construction Equipment Emissions Reduction Strategies
 - 2.** EPA fuel savings calculator by idling reductions
 - 3.** Posting of Anti-idling signs
 - 4.** Memorandum of Agreement by Local Area Governments
 - 5.** Equipment Inventory Form

3.4 A LIST OF EQUIPMENT EMISSIONS REDUCTION STRATEGIES

The following are suggested emissions reduction strategies and references. As per the specification section 01353, 1.5 Submittals, the CONTRACTOR shall develop a list of strategies to be used in this Project at the start of construction.

C-1 Anti-Idling Strategies:

- 1.** Implement and enforce anti-idling practices for all equipment and vehicles on and adjacent to the site and associated with the project. City will provide a construction site sign and stickers for vehicles and equipment. (<http://www.engineoff.org/>)
- 2.** Limit all idling of project associated vehicles and equipment operations to five (5) minutes unless the idling is applicable to one or more of the following exceptions:
 - a) Idling is being used for emergency response purposes;
 - b) Idling is necessary for component of mechanical operation, maintenance, or diagnostic purposes; or
 - c) Idling is for the health or safety of the equipment operator.
- 3.** Provide education to all staff, vendors and subcontractors about emissions hazards and anti-idling practices and encourage use of EPA calculator for fuel savings.

4. To the extent possible, do not stop or idle haulage trucks directly under tree limbs and foliage overhanging the street along the haul route. Further avoid such damage from truck exhaust by means of exhaust diversion devices to redirect or diffuse exhaust from being directed in a concentrated manner to tree limbs and foliage.
5. Avoid vehicle loitering or queuing outside or inside the gates of the work area to minimize degradation of localized air quality.

([http://data.capcog.org/air-quality/engineoff/AntiIdlingBrochure\(2\).pdf](http://data.capcog.org/air-quality/engineoff/AntiIdlingBrochure(2).pdf))

(<http://data.capcog.org/air-quality/engineoff/template-1/HowtoOrderSign.html>)

(<http://data.capcog.org/air-quality/engineoff/smartwaycalculator.xls>)

(<http://austintexas.gov/airquality/>)

C-2 Alternative Fuels:

6. Utilize **alternative fuels** including, Texas LED Compliant B20 (or higher) biodiesel, Compressed Natural Gas (CNG), propane and electric. (Refer to EPA Energy Policy Act for full list).
7. Avoid unnecessary fuel use by providing on-site fuelling for alternate fuels.

(<http://www.tceq.texas.gov/airquality/mobilesource/txled/cleandiesel.html>)

(<http://www.eere.energy.gov/cleancities>)

(<http://lonestarcfa.org>)

C-3 Vehicle/Equipment Improvements:

8. Eliminate use of vehicles in tier 0 and 1 categories per EPA and rent or purchase tier 2 and 3 or (4) compliant vehicles.
9. It is recommended that CONTRACTOR takes advantage of the **Texas Emission Reduction Plan (TERP)** grant incentives to upgrade (replace or repower) vehicles with retrofitted emission reduction technologies.
(<http://www.tceq.texas.gov/airquality/terp/index.html>) or (www.terpgrants.com)
10. Utilize **battery powered and/or solar powered equipment** where available. This strategy can be combined with anti-idling strategies by using this technology for sign boards. (evtransportal.org/dieselengineidlerreduction.pdf)

C-4 Maintenance Program:

11. Establish a preventative **maintenance program** addressing issues including but not limited to, fuel use, air emissions, tire pressure, smoke from exhaust and noise.
12. Make all efforts to **prevent oil/fuel spillage** on to site surfaces.

C-5 Resource Management:

13. Utilize equipment companies that are located closest to the construction site.
14. Store equipment on site during construction use or arrange for closest overnight storage including **temporary use of the Right of Way** if possible.

15. To the extent possible, CONTRACTOR shall maximize use of **local and regional materials** to reduce transportation emissions.
16. CONTRACTOR shall maximize **salvage and reuse** of appropriate on-site materials. (<http://www.usgbc.org/ShowFile.aspx?DocumentID=1095>)
17. To the greatest extent possible, stage equipment and vehicles away from, and minimize operation near, sensitive receptors including, but not limited to, operable windows, fresh air intakes, hospitals, schools, licensed day care facilities, residences and areas where people congregate.

END

Division 1 General Requirements
CONSTRUCTION AND DEMOLITION WASTE
MANAGEMENT
Section 01505

Non-Building Projects using Non-Building Baseline Sustainability Criteria (Minimal Waste)

PART 1 – GENERAL

1.1 Related Documents

1. Division 01 Section 01200 "Project Meetings"
2. Division 01 Section 01500 "Temporary Facilities"
3. Division 00 Section "Hazardous Waste Management"
4. Division 01 Section 01700 "Contract Closeout"
5. Division 02 Section "Demolition" & "Clearing and Grubbing".
6. Division 01 Section 01352 "Sustainable Construction Requirements".

1.2 SUMMARY

- A.** The Owner has established that the Project shall minimize the creation of construction and demolition waste on the Project site and shall recycle and/or salvage non-hazardous construction, demolition, and land clearing debris to divert waste from Landfills.
1. Contractor shall minimize factors that contribute to waste such as over packaging, improper storage, ordering error, poor planning, breakage, mishandling, and contamination.
 2. Contractor shall reuse, salvage, or recycle as many of the non-hazardous waste materials as economically feasible.
 3. All profits resulting from salvaging and recycling shall go to the Contractor.
 4. Where there is little to no cost difference between recycling/salvaging and land-filling of items, the Contractor is directed to recycle/salvage.
- B.** Hazardous materials are an exception to this Section. Comply with applicable requirements of Local, State and Federal regulations.
- C.** This Section includes administrative and procedural requirements for recycling, salvaging and disposing of non-hazardous demolition and construction waste

1.3 REFERENCES

- A.** The standards listed below form a part of this Section to extent referenced. Standards are referred to in the text by basic reference only.
1. Sustainable Building Sourcebook – Austin Energy Green Building: www.austenergy.com/Energy%20Efficiency/Programs/Green%20Building/Sourcebook/constructionWasteManagement.htm
 2. Resource Exchange Network for Eliminating Waste (RENEW), TCEQ (MC-112), Biannual catalog lists materials available and wanted; serves Texas and surrounding states; lists are posted on the Internet: <http://www.tceq.state.tx.us/assistance/P2Recycle/renew/renew.html>

3. Recycle Texas Online, A service of the Texas Commission on Environmental Quality. Contains information on about 1000 businesses and local governments handling materials from Texas. Organizations' information is self-reported and listings are free of charge. www.tceq.state.tx.us/assistance/P2Recycle/rtol/rtol.html
4. "WasteSpec", Triangle J Council of Governments, Research Triangle Park, NC 27709, (919) 549-9390.

1.4 DEFINITIONS

- A. Chemical Waste: Includes petroleum products, bituminous materials, salts, acids, alkalis, herbicides, pesticides, organic chemicals, and inorganic wastes.
- B. Clean: Untreated, unpainted, not contaminated with oils, solvents, caulk, or other materials.
- C. Disposal: Acceptance of solid wastes at legally permitted and operating facility for the purposes of land-filling.
- D. Diversion: Avoidance of demolition and construction waste sent for disposal to landfill or incineration. Diversion does not include using materials for landfill, alternate daily cover on landfills, or materials used as fuel in waste-to-energy processes.
- E. Hazardous Waste: Byproducts of society that can pose a substantial or potential hazard to human health or the environment when improperly managed, and possessing at least 1 of 4 of the following characteristics, or appearing on a special Environmental Protection Agency (EPA) list.
 1. Ignitability.
 2. Corrosivity.
 3. Reactivity.
 4. Toxicity.
- F. Landfill: Authorized land waste disposal site that is located to minimize waste pollution from runoff and leaching.
- G. Recycling: The process of sorting, cleansing, treating, and reconstituting solid waste and other discarded materials for the purpose of using the altered form. Recycling does not include burning, incinerating, or thermally destroying waste.
- H. Return: To give back reusable items or unused products to vendors for credit.
- I. Reuse: A strategy to return materials to active use in the same or a related capacity.
- J. Salvage: To remove a waste material from the Project site to another site for resale or reuse by others.
- K. Source Separation: The act of keeping different types of waste materials separate beginning from the first time they become a waste.
- L. Toxic: Poisonous to living beings either immediately or after a long period of exposure.
- M. Trash: Any product or material unable to be reused, returned, recycled, or salvaged.
- N. Waste: Extra material or material that has reached the end of its useful life in its intended use. Waste includes all materials removed from the Project site to be land-filled, recycled, or salvaged for reuse. Pallets, containers, packaging and packing materials in which construction products are delivered to the Project site are considered waste materials.

1.5 WASTE MANAGEMENT GOALS

- A. The Owner has established that at least 50% of the “waste” materials produced as a result of the Work, shall be employed, salvaged, reused, or recycled in order to minimize the impact of construction and demolition waste on landfills and reducing disposal costs.
- B. Contractor shall employ and encourage practices that ensure the generation of as little waste as possible due to error, poor planning, breakage, mishandling, contamination, or other factors.
- C. Contractor is responsible for knowing and complying with regulatory requirements, including but not limited to Federal, State and local laws and regulations, pertaining to legal disposal of all construction waste materials.
- D. Contractor shall recycle and divert materials for secondary uses whenever economically feasible.
- E. Acceptable methods of diversion include:
 - Recycling, reuse and salvage
 - Donation to nonprofit organizations
 - Removal from jobsite by staff or subcontractors for use (not disposal)
 - Return to supplier
 - Sale to organizations or individuals
- F. The Contractor shall develop a Construction and Demolition Waste Management Plan that results in end-of-Project rates for recycle and/or salvage of at least 50% of non-hazardous construction and demolition waste. The plan shall identify the materials to be diverted from disposal and define the materials to be separated on-site or off-site. Calculations can be done by weight or volume, but must be consistent throughout.

1.6 SUBMITTALS

- A. **Waste Management Plan:** A Project-specific plan for the collection, transportation, and disposal of the waste generated at the construction site, shall be submitted for approval within 14 calendar days after date of the Notice to Proceed, or prior to any waste removal, whichever occurs first. The approved Plan shall be distributed to all subcontractors and the owner and will not relieve the Contractor’s responsibility for compliance with applicable environmental regulations.

An example template is included as “Appendix A” to this section.

- 1. The Waste Management Plan shall include the following:
 - a. Identify each type of waste material produced as a result of the Work on the Project Site.
 - b. Identify each type and quantity of demolished and waste material intended to be recycled, salvaged or reused.
 - c. Identify material separation requirements.
 - e. Identify location of temporary on-Site storage for recycled and reused materials.
 - f. Identify final destination means of transportation for each recycled and reused material.
 - h. Identify the name/phone number of the Contractor’s on-site coordinator of the Waste Management Plan.

- i. Indicate permit or license and the location of the municipal solid waste landfills and other disposal area(s) to be used.
 - j. List of materials that cannot be recycled or reused.
- B. CWM Closeout Documentation:** Submit the following upon the completion of The Work and prior to final payment:
- a. A Summary of Solid Waste Disposal and Diversion (refer example template "Appendix B") prepared and maintained through Project duration, demonstrating that 100% of all non-hazardous construction wastes were recycled, salvaged or disposed of properly and includes as a minimum the following information:
 - 1. Dates
 - 2. Materials Description
 - 3. Materials Quantity
 - 4. Indicate whether recycled, salvaged, reused or sent to landfill for disposal.
 - 5. Name and location of accepting facility.
 - 6. Destination
 - b. Copies of all receipts, manifests, weight tickets, and other documentation that identify all materials recycled, salvaged, land-filled or incinerated.

PART 2 - PRODUCTS

Not used

PART 3 – EXECUTION

3.1 GENERAL

- A.** Implement the Waste Management Plan as approved by the City of Austin Project Manager. Provide handling, containers, storage, signage, transportation, and other items as required to implement Waste Management Plan during the entire duration of the Contract.
- B.** Satisfy the requirements outlined in Subsection 1.5, Waste Management Goals.

3.2 WASTE MANAGEMENT PLAN IMPLEMENTATION

- A.** Plan Coordinator: Designate an on-site party (or parties) responsible for instructing workers, overseeing implementation and documenting results of the Waste Management Plan for the Project.
- B.** Plan Distribution: Provide copies of the Waste Management Plan to the Contractor's superintendent, each Subcontractor, the Owner, and the Engineer.
- C.** Meetings: Include Construction Waste Management in progress meetings to maintain the Plan for achieving the owners waste management goals:
- D.** Carefully order materials to avoid over supply.
- E.** Protect materials from contamination during handling, storage and transport to meet the requirements of the accepting facilities.
- F.** The Contractor shall assign and label a specific area to facilitate separation of materials for potential recycling, salvage, reuse, return and disposal. This area shall be kept neat and clean and clearly marked in order to avoid contamination of materials.

3.3 RECYCLING REQUIREMENTS

A. Materials: In general, the following types of construction waste materials generated during the course of this project that are not salvaged shall be recycled:

- a. Asphalt concrete pavement.
- b. Concrete materials.
- c. Metals, including the following.
 - i. Banding straps.
 - ii. Reinforcing steel.
 - iii. Iron.
 - iv. Brass and bronze.
 - v. Lead.
 - vi. Extruded aluminum.
 - vii. Aluminum sheet.
 - viii. Stainless steel sheet.
 - ix. Steel studs.
 - x. Copper pipe.
 - xi. Steel pipe.
 - xii. Galvanized steel pipe.
- d. Clean dimensional lumber.
- e. Wood crates and pallets.
- f. Glass and glass containers.
- g. Plastics.
- h. Plumbing fixtures.
- i. Electrical conduit.
- j. Electrical wiring.
- k. Cardboard, paper, and packaging.
- l. Beverage containers.

B. Methods: The following recycling methods, or a combination of, may be used.

1. On-site separation: Each material to be recycled shall be separated at the Project site and delivered to the recycling markets or directly from the Project site.
 - a. If on-site separation method is used, designate a specific area or areas to facilitate separation of materials for potential reuse, salvage, recycling, and return.
 - b. Maintain recycling and waste bin areas neat and clean and clearly marked, both in Spanish and in English, in order to avoid co-mingling of materials.
 - c. Protect materials from contamination.
2. Off-site separation: Materials to be recycled are delivered unsorted from the Project site to a materials recovery facility or transfer station where recyclable materials are separated from other waste.
 - a. Contractor shall verify that the entity responsible for the off-site separation has a market for all materials required to be recycled from the Project site.
 - b. The same Submittals procedures shall apply.

- c. Protect materials from contamination.

3.4 REUSE

- A.** Contractor is encouraged to reuse as many demolished and waste materials as possible.
- B.** Reuse of waste materials includes the following:
 - a. Salvaging materials scheduled for disposal.
 - b. Off-Site storage of waste materials for future reuse by Contractor on other projects.
 - c. Returning unused and reusable materials, packaging and pallets, to vendor.
 - e. Assemble designated reuse items in a single location safe from damage, for review and approval by the owner's representative.

3.5 SALVAGE

- A.** Salvage materials as identified on the Engineering Plans.
- B.** Salvage Guidelines:
 - 1. The contractor shall salvage as many items as deemed economically possible, considering reduction of land filling fees and possible use by others.
 - 2. Assemble potentially salvageable items in one area and donate or sell to the public after review by the City of Austin Project Manager.
 - 3. All proceeds from the sale of salvaged items shall go to the contractor.

Appendix A. Sample Construction Waste Management Plan

Construction Waste Management Plan

Project:
Contractor:
Date:
Contact:
Phone:
Prepared by:

Diversion Goal: Recycle, reuse and/or salvage at least 50% (by weight or volume) of land-clearing and construction waste

I. Coordination and Training

- a. Name of Contractor's representative responsible for CWM implementation & coordination.
- b. Describe method(s) of waste recycling management – on-site and/or off-site.
- c. Describe how Contractor's staff and subcontractors will be informed regarding proper recycling and separation procedures
- d. Describe and/or show on an attached site map where the temporary waste material storage area(s) will be located, and how will contamination of separated waste materials will be prevented?

II. Waste Minimization

- a. What waste minimization techniques will be employed during the construction phase?

- b. Which employees and / or subcontractors will be involved with each technique?

III. Construction Waste Analysis (including site / land-clearing materials, as applicable)

- a. **Diverted Materials:** For each material anticipated to be reused or recycled (diverted from the landfill) to meet the minimum 50% diversion goal, provide information to complete the table below. (Note: Whenever possible, attempt to use or donate construction waste materials rather than recycling.)

Material or Item	Storage Method (roll-off, bin, area, on pallet, etc.)	Quantity estimate (no., linear ft., square ft., etc.)	Proposed Recipient

Add rows (or paper pages) as required

- b. **Landfill:** For construction phase trash and materials / items that will not be diverted, complete the following table:

Quantity estimate (weight or volume)	Number and size of roll offs anticipated	Proposed landfill site

Appendix B. Summary of Solid Waste Disposal and Diversion

Project name _____

Project Number _____

Contractor Name _____

License Number _____

Contractor Address _____

Solid Waste Material	Recycled, Reused, salvaged or disposed	Date Material Disposed or diverted	Amount Disposed/ Diverted (Ton or cubic yd.)	Municipal Solid Waste Facility (Name, address, Phone)	Recycling/Reuse Facility Name Address Phone	Comment (If disposed state why not diverted)
Vegetation						
Soil						
Trench spoils						
Rock						
Asphalt						
Concrete						
Metal						
Wood						
Debris						
Glass						
Trash						
Other						

Signature _____

Date _____



Page / of / total pages

END

SECTION 01700

CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
 - 1. Substantial Completion procedures.
 - 2. Final completion procedures.
 - 3. Warranties.
 - 4. Final cleaning.
- B. Related Sections:
 - 1. Divisions 10 and 26 Sections for specific closeout and special cleaning requirements for the Work in those Sections.

1.2 SUBSTANTIAL COMPLETION

- A. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete with request.
 - 1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
 - 2. Advise Owner of pending insurance changeover requirements.
 - 3. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
 - 4. Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 - 5. Prepare and submit Project Record Documents, operation and maintenance manuals, and similar final record information.
 - 6. Deliver tools, spare parts, extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.
 - 7. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
 - 8. Complete startup testing of systems.
 - 9. Submit test/adjust/balance records.
 - 10. Terminate and remove temporary facilities from Project site, along with construction tools, and similar elements.
 - 11. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
 - 12. Complete final cleaning requirements, including touchup painting.
 - 13. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

- B. Inspection: Submit a written request for inspection for Substantial Completion. On receipt of request, Engineer and Construction Manager will either proceed with inspection or notify Contractor of unfulfilled requirements. Engineer will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Engineer, that must be completed or corrected before certificate will be issued.
 - 1. Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.
 - 2. Results of completed inspection will form the basis of requirements for final completion.

1.3 FINAL COMPLETION

- A. Preliminary Procedures: Before requesting final inspection for determining final completion, complete the following:
 - 1. Submit a final Application for Payment according to Division 01 Section "Payment Procedures."
 - 2. Submit certified copy of Engineer's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Engineer. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
 - 3. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
 - 4. Submit pest-control final inspection report and warranty.
 - 5. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems.
- B. Inspection: Submit a written request for final inspection for acceptance. On receipt of request, Engineer and Construction Manager will either proceed with inspection or notify Contractor of unfulfilled requirements. Engineer will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.
 - 1. Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.

1.4 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Organization of List: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction
 - 1. Organize list of locations in order indicated in Drawings.
 - 2. Submit list of incomplete items in the following format: PDF electronic file.

1.5 WARRANTIES

- A. Submittal Time: Submit written warranties on request of Engineer for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated.
- B. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual.
 - 1. Bind warranties and bonds in heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch paper.
 - 2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.
 - 3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.
 - 4. Scan warranties and bonds and assemble complete warranty and bond submittal package into a single indexed electronic PDF file with links enabling navigation to each item. Provide table of contents at beginning of document.
- C. Provide additional copies of each warranty to include in operation and maintenance manuals.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.
 - 1. Use cleaning products that meet Green Seal GS-37, or if GS-37 is not applicable, use products that comply with the California Code of Regulations maximum allowable VOC levels.

PART 3 - EXECUTION

3.1 FINAL CLEANING

- A. General: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.

1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a portion of Project:
 - a. Clean Project sites in areas disturbed by construction activities, including grassy areas, of rubbish, waste material, litter, and other foreign substances.
 - b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
 - c. Remove tools, construction equipment, machinery, and surplus material from Project sites.
 - d. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
 - e. Remove labels that are not permanent.
 - f. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
 - 1) Do not paint over "UL" and other required labels and identification, including mechanical and electrical nameplates.
 - g. Wipe surfaces of electrical equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
 - h. Replace parts subject to operating conditions during construction that may impede operation or reduce longevity.
 - i. Leave Project clean and ready for operation.

END OF SECTION 017700

ARTICLE 1 - GENERAL**1.1 RELATED DOCUMENTS**

The following documents are a part of this section:

All documents in Bidding Requirements, Contract Forms and Conditions of the Contract.

Other sections of Division 1 - General Requirements apply to this section.

1.2 DESCRIPTION AND INTENT OF THE WORK

No asbestos containing material (ACM) shall be brought onto the Project site, and/or incorporated into the Project construction without the written consent of the OWNER. Any asbestos containing material found at any time including after contract completion, to have been brought onto the site or incorporated into the Project construction by the CONTRACTOR, or any Subcontractors, Sub-Subcontractors or Suppliers, shall be removed and disposed of in accordance with the then current governmental regulatory standards.

All costs associated with the inspection, sampling, testing, removal and disposal of ACM as described above shall be paid by the CONTRACTOR.

1.3 DEFINITIONS

ASBESTOS: The asbestiform varieties of serpentine (chrysotile), riebeckite (crocidolite) cummingtonite-grunerite (amosite), anthophyllite, actinolite and tremolite.

ASBESTOS CONTAINING MATERIAL (ACM): Any material containing more than one percent (1%) by weight of asbestos of any type or mixture of types.

ASBESTOS CONTAINING BUILDING MATERIAL (ACBM): Any material used in the construction of, or incorporated into the construction of, any building that contains more than one percent (1%) by weight of asbestos of any type or mixture of types.

MSDS: A material safety data sheet (MSDS) is a form containing data regarding the properties of component substances that comprise a manufactured product. They are a basic hazard communication tool that gives details on chemical and physical dangers, safety procedures, and emergency responses for chemicals.

1.4 QUALITY ASSURANCE**PROHIBITION OF ASBESTOS CONTAINING MATERIALS**

The E/A has been instructed to not permit any asbestos containing materials to be specified, requested or approved for use in conjunction with this Project.

The E/A has signed the following:

- A. 01900A Statement of Non-Inclusion of Asbestos Containing Material (E/A, Prior to Design): stating that the Engineer/Architect shall not specify, request or approve any ACM in this Project without prior written approval of OWNER.
- B. 01900B Statement of Non-Inclusion of Asbestos Containing Material (E/A, After Design): stating that the Engineer/Architect has not specified, requested or approved any ACM in this Project

without the prior written approval of the OWNER, and that any ACM allowed in this Project is identified in the Statements.

These Statements are included in the Construction Documents.

ASBESTOS CONTAINING MATERIALS PROHIBITED FROM SITE

No asbestos containing materials will be permitted as part of the Project construction. The following list is intended to be used as a general guide to show which types of materials are suspected to contain asbestos:

- Cement Pipes
- Cement Wallboard
- Cement Siding
- Asphalt Floor Tile
- Vinyl Floor Tile
- Vinyl Sheet Flooring/vinyl wall coverings
- Flooring Backing
- Construction Mastics (floor tile, carpet, ceiling tile, etc.)
- Acoustical Plaster
- Decorative Plaster / stucco
- Textured Paintings/Coatings
- Ceiling Tiles and Lay-in Panels
- Spray-Applied Insulation
- Blown-in Insulation
- Fireproofing Materials
- Taping Compounds (thermal)
- Packing Materials (for wall/floor penetrations)
- High Temperature Gaskets
- Laboratory Gloves
- Fire Blankets
- Fire Curtains
- Elevator Equipment Panels
- Elevator Brake Shoes
- HVAC Duct Insulation
- Boiler Insulation
- Breeching Insulation
- Ductwork Flexible Fabric Connections
- Cooling Towers
- Pipe Insulation (corrugated air-cell, block, etc.)
- Heating and Electrical Ducts
- Electrical Panel Partitions
- Electric Cloth
- Electric Wiring Insulation
- Chalkboards
- Roofing Shingles / tiles / membranes
- Roofing Felt
- Roof Coatings
- Base Flashing
- Thermal Paper Products
- Fire Doors
- Caulking/Putties
- Adhesives / mastics
- Wallboard
- Joint Compounds
- Spackling Compounds
- Laboratory hoods/tabletops
- CMU block fill materials

If any of these suspect materials are specified for use on the Project, and if they do not have specific labelling identifying them as asbestos free, then the CONTRACTOR shall notify the OWNER immediately. Laboratory analysis of the material by an OWNER-approved laboratory shall be performed at CONTRACTOR's expense in order to warrant that the material does not contain asbestos. A copy of the package labelling or results of laboratory testing must be provided to the OWNER prior to inclusion of the specified material during construction. Contractor's construction submittals must include MSDSs for all new materials used in construction of buildings, facilities and infrastructure.

1.5 SUBMITTALS

NON-USE OF ASBESTOS AFFIDAVITS

At the time that the CONTRACTOR signs the Agreement, they shall sign a Non-Use of Asbestos Affidavit (Contractor Prior to Construction), Contract Document 00680. This Affidavit certifies that the CONTRACTOR agrees that they will not allow any asbestos containing materials to be incorporated into the construction of the Project or allow any asbestos containing building materials on the site for which the OWNER has not given prior written approval.

Prior to final payment, the CONTRACTOR will provide to the OWNER a Non-Use of Asbestos Affidavit (Contractor After Construction), Contract Document 00681. This Affidavit certifies that the CONTRACTOR did not allow asbestos containing materials to be incorporated into the construction or allowed any

asbestos containing building materials on the site for which the OWNER of the Project did not give prior written approval.

ASBESTOS CONTAINING MATERIALS: When any asbestos containing materials are used on the Project, provide the following information:

A detailed description of the material containing the asbestos.

The type and percent of asbestos contained in the material.

The quantity of the materials used, including the square footage, or in the case of pipe insulation, the size and linear footage.

A drawing showing the exact location of any asbestos containing materials.

Final payment shall be withheld until the above described Affidavits, submittals and/or information are received and approved.

END

STATEMENT OF NON-INCLUSION OF ASBESTOS CONTAINING MATERIALSTATE OF TEXAS
COUNTY OF TRAVIS**ENGINEER/ARCHITECT
PRIOR TO DESIGN**

"My name is _____, hereinafter known as Authorized Representative.

"I am over the age of 18 years and I have never been convicted of a crime. I am the _____ of _____ hereinafter known as ENGINEER/ARCHITECT.

"I am fully competent to make this statement. I have personal knowledge of the facts set forth below and they are all true and correct.

"WHEREAS ENGINEER/ARCHITECT has been selected to provide designs, to prepare the bid and construction documents, and to assist

the City of Austin, Texas, hereinafter known as OWNER, during the construction of _____

_____, located at _____

_____, Austin, Texas, hereinafter known as Project, and

"WHEREAS asbestos in a dust form is a recognized health hazard, and

"WHEREAS the OWNER desires not to have any asbestos containing materials used or incorporated into the construction of the Project;

"THEREFORE the ENGINEER/ARCHITECT affirms that to the best of its knowledge and belief:

1. The ENGINEER/ARCHITECT, any person, firm or organization representing or represented by the ENGINEER/ARCHITECT, shall not knowingly specify, request, or approve for use in conjunction with the Project, any asbestos containing materials or any other materials defined as containing asbestos by any laws, rules or regulations promulgated by the United States Government, the State of Texas or any governmental organization or agency operating under the authority of either of those entities.
2. Realizing that there might be materials required in which a satisfactory non-asbestos containing material cannot be obtained, the ENGINEER/ARCHITECT will do the following before specifying any asbestos containing material:
 - A. Inform the OWNER's Project Manager for this Project, in writing, of any intent to specify asbestos containing materials.
 - B. Receive written approval from the City of Austin Project Manager for the specifying of any asbestos containing materials.
 - C. At the completion of the design phase, and before the OWNER receives any bids for this Project, provide to the Project Manager, in writing, the proposed location of any asbestos containing materials, the type of asbestos they contain, and the percent of asbestos by types.
3. The ENGINEER/ARCHITECT states its understanding that if any asbestos containing materials not approved by the OWNER for inclusion into the Project, are determined, as a result of any inspection and sample analysis performed by an individual(s) and/or firm(s) certified and/or licensed to perform such inspection by the United States Government and/or the State of Texas, to have been knowingly specified, requested and/or approved by the ENGINEER/ARCHITECT for inclusion in the Project, the OWNER shall look to the ENGINEER/ARCHITECT for reimbursement of any and all costs incurred in the removal and/or other abatement of said asbestos containing materials.
4. ENGINEER/ARCHITECT further understands that OWNER shall also look to the ENGINEER/ARCHITECT for any and all damages to OWNER which result from the inability of the OWNER to use any portion or all of the Project due to the incorporation of asbestos containing materials that have been knowingly specified, requested and/or approved by the ENGINEER/ARCHITECT.
5. ENGINEER/ARCHITECT further understands that OWNER will pursue reimbursement of any said cost and compensation for any said damages from the ENGINEER/ARCHITECT by any and every means within OWNER's right and power.

Signature of Authorized Representative: _____

STATE OF TEXAS
COUNTY OF TRAVIS

ON _____, 20____, personally appeared _____

_____ and been duly sworn by me, subscribed to the foregoing statement and has stated that the facts stated therein are true and correct.

Notary Public, State of Texas _____

Printed Name of Notary _____

My Commission Expires: _____

STATEMENT OF NON-INCLUSION OF ASBESTOS CONTAINING MATERIALSTATE OF TEXAS
COUNTY OF TRAVIS**ENGINEER/ARCHITECT
AFTER DESIGN**

"My name is _____, hereinafter known as Authorized Representative.

"I am over the age of 18 years and I have never been convicted of a crime. I am the _____ of _____ hereinafter known as ENGINEER/ARCHITECT.

"I am fully competent to make this statement. I have personal knowledge of the facts set forth below and they are all true and correct.

"WHEREAS ENGINEER/ARCHITECT has been selected to provide designs, to prepare the bid and construction documents, and to assist the City of Austin, Texas, hereinafter known as OWNER, during the construction of _____

_____, located at _____ Austin, Texas, hereinafter known as Project, and

"WHEREAS asbestos in a dust form is a recognized health hazard, and

"WHEREAS the OWNER desires not to have any asbestos containing materials used or incorporated into the construction of the Project;

"THEREFORE the ENGINEER/ARCHITECT affirms that to the best of its knowledge and belief:

1. The ENGINEER/ARCHITECT, any person, firm or organization representing or represented by the ENGINEER/ARCHITECT, shall not knowingly specify, request, or approve for use in conjunction with the Project, any asbestos containing materials or any other materials defined as containing asbestos by any laws, rules or regulations promulgated by the United States Government, the State of Texas or any governmental organization or agency operating under the authority of either of those entities.
2. The only exceptions to the above statement are the following materials that are required because a satisfactory non-asbestos containing material cannot be obtained. The inclusion of these materials has been approved by the OWNER's Project Manager for this Project.

3. The ENGINEER/ARCHITECT states its understanding that if any asbestos containing materials not approved by the OWNER for inclusion into the Project, are determined, as a result of any inspection and sample analysis performed by an individual(s) and/or firm(s) certified and/or licensed to perform such inspection by the United States Government and/or the State of Texas, to have been knowingly specified, requested and/or approved by the ENGINEER/ARCHITECT for inclusion in the Project, the OWNER shall look to the ENGINEER/ARCHITECT for reimbursement of any and all costs incurred in the removal and/or other abatement of said asbestos containing materials.
4. ENGINEER/ARCHITECT further understands that OWNER shall also look to the ENGINEER/ARCHITECT for any and all damages to OWNER which result from the inability of the OWNER to use any portion or all of the Project due to the incorporation of asbestos containing materials that have been knowingly specified, requested and/or approved by the ENGINEER/ARCHITECT.
5. ENGINEER/ARCHITECT further understands that OWNER will pursue reimbursement of any said cost and compensation for any said damages from the ENGINEER/ARCHITECT by any and every means within OWNER's right and power.

Signature of Authorized Representative: _____

STATE OF TEXAS
COUNTY OF TRAVIS

ON _____, 20____, personally appeared _____

_____ and been duly sworn by me, subscribed to the foregoing statement and has stated that the facts stated therein are true and correct.

Notary Public, State of Texas _____

Printed Name of Notary _____

My Commission Expires: _____

TRAFFIC SIGNAL POLES

839S.1 - Description

This item shall govern furnishing and installation of traffic signal poles in accordance with the specifications contained herein, the Drawings, Standard Detail No. 839S-4, "Traffic Signal Structures Mast Arm Details," the manufacturer's recommendations and/or written instructions from the Engineer or designated representative.

Traffic signal poles shall be of the size and type shown on the project drawings and referenced details.

This specification is applicable for projects or work involving either inch-pound or SI units. Within the text and accompanying tables, the inch-pound units are given preference followed by SI units shown within parentheses.

839S.2 - Design Requirements

All design drawings and calculations for traffic signal poles shall be signed, dated and sealed by a Licensed Professional Engineer registered in the State of Texas, who shall be wholly responsible for the design of all poles, arms and davit extensions. Acceptance of traffic signal pole designs by the City of Austin shall not relieve the designer of this responsibility.

839S.3 - Submittals

The Contractor shall submit to the City of Austin, with the submittal data, the design drawings showing design details and copies of the design strength and deflection calculations for each completed pole/arm/davit extension structure for review and acceptance prior to fabrication. The ASTM specifications numbers for the materials to be used shall be included as part of the design strength calculations.

839S.4 - Materials

A. General Requirements

This section of the Specifications describes steel poles, mast arms and davit extensions for traffic signal and street light support. The Specifications cover monotube steel strain and mast arm poles, monotube steel cantilevered mast arms and davit type steel luminaire poles and extensions for steel strain and mast arm poles. The general design of the poles, arms and extensions shall conform to the requirements of the plans and the typical drawings with no guys, struts, rods, stay braces, or clamps of U-bolts, except where noted otherwise.

B. AASHTO Specifications

The design of the completed assembly of poles, davit extensions, mast arms and hardware shall equal or exceed the most current version of AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals, and addenda thereto, assuming ice and 80 mph. (128 kmph) winds with 104 mph (167kmph) gusts when loaded in accordance with the typical drawings and these Specifications.

C. Dimension Limits

Each complete pole/arm/extension assembly shall be within the dimension limits shown on the drawings.



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 City of Austin
 Parking Guidance System
 Work Plan
 March 21, 2016

Project Roles and Responsibilities

The following table defines resource requirements and tasks for Q-Free TCS and the City:

Table 1 - Project Roles & Responsibilities

Role	Objectives	Responsibilities	Timeline
CEO	<p>The CEO is responsible for pre-award coordination.</p> <p>Typical activities include</p> <ul style="list-style-type: none"> - attend final oral interviews - present best and final offer <p>Acts as point of contact between the City before NTP of project.</p>	<ul style="list-style-type: none"> • Attend final meetings. • Hand over project to project manager. • Provide sign off for extended warranty purchase if selected 	<ul style="list-style-type: none"> • Involvement required during initiation of project and at extended warranty purchase occurrence



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Role	Objectives	Responsibilities	Timeline
Project Manager	<p>The Project Manager shall ensure that the project is managed through adequate and efficient means and ensure that planning and measures are taken in a proactive way.</p> <p>Typical activities include:</p> <ul style="list-style-type: none"> - creating project schedules and plans, - coordinating activities between Engineering, Installation & Service Support, and Logistics, - handling budget, payments and invoices, - compile and communicate progress reports and forecasts to internal (project team) and external (City) stakeholders. - serving as the point of contact for after sales service support - coordinating activities between after sales service coordinator & service support <p>The PM acts as point of contact between the Project and the Project Support Office.</p>	<ul style="list-style-type: none"> • The project manager shall manage and plan the project according to requirements and time schedule, including test and handover activities. • Ensure that the project objectives are met within time and quality constraints and maintain a close co-operation with the Client. • Submit project- and progress reports (planning including baseline planning, achievements, etc.) according to agreed schedules. • Participate in project- and progress meetings (remote & on-site if needed). 	<ul style="list-style-type: none"> • Involvement required during duration of project and warranty period • If City elects to purchase additional warranty periods, involvement will be extended



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Role	Objectives	Responsibilities	Timeline
Logistics & Service Coordinator	<p>The Logistics & Service Coordinator will ensure availability and proper handling of equipment and follow up procurement, including logistics and warehouse activities.</p> <p>In addition, after sales service efforts will also be coordinated.</p> <p>Typical activities include</p> <ul style="list-style-type: none"> - Procure equipment and services - Update project manager on delivery schedule - Schedule deliveries - Coordinate after-sales service support efforts with service support <p>Acts as point of contact between the service support and project manager during after sales warranty period.</p>	<ul style="list-style-type: none"> • Provide procurement and delivery schedule • Coordinate after sales support. 	<ul style="list-style-type: none"> • Involvement required during hardware assembly phase (i.e. purchasing of any peripherals not already in stock) • Involvement required during warranty period • If City elects to purchase additional warranty periods, involvement will be extended



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Role	Objectives	Responsibilities	Timeline
Senior Design Engineer	<p>The Senior Design Engineer is responsible for system design and layout:</p> <p>Typical activities include</p> <ul style="list-style-type: none"> - Design functioning system layout according to client's specification - Design final layout drawings prior to installation - Provide expert advice and support during installation - Install and configure all necessary software in Gateways and Central PGS server - Verify proper operations of the system - Provide remote after sales service support in coordination with on-site service support <p>Acts as point of contact between the Project Manager and Service/Installation Support Manager.</p>	<ul style="list-style-type: none"> • Ensure system solution is designed in accordance to customer's system requirements specification. • Provide input to test and acceptance activities. • Provide remote after sales service support 	<ul style="list-style-type: none"> • Involvement required during duration of project and warranty period • If City elects to purchase additional warranty periods, involvement will be extended



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Role	Objectives	Responsibilities	Timeline
Field Technician/s	<p>The Field Technician/s is/are responsible for the initial project site walk and final system commissioning.</p> <p>Typical activities include</p> <ul style="list-style-type: none"> - Coordinate with senior design engineer on site visit findings - Provide final system commissioning support - Training and final handover to Client - On-site after sales service efforts that cannot be resolved by local service support manager. <p>Acts as point of contact between the senior design engineer and Installation & Service Support Manager.</p>	<ul style="list-style-type: none"> • Ensure final system solution meets site requirements. • Provide input to test and acceptance activities. • Provide final system commissioning efforts • Provide on-site after sales service support if needed 	<ul style="list-style-type: none"> • Involvement required during final meeting with the City, and final system commissioning and warranty period phase • If City elects to purchase additional warranty periods, involvement will be extended



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Role	Objectives	Responsibilities	Timeline
Project Support Office (PSO)	<p>Typical activities include</p> <ul style="list-style-type: none"> - Provision of expertise and support to the Project Manager. <p>Acts in cooperation with the Project Manager.</p>	<ul style="list-style-type: none"> • Logistics - support logistics & service coordinator with procurement, logistics and shipping. • Quality and risk management - controlling that all activities are performed in accordance to the quality management plan, risk management plan, internal quality routines and procedures • Document Management – document handling and archiving. • Controller – finance and accounting. • Legal advisor – provide assistance on legislation and contractual issues as necessary. • Project management assistance and “best practice” guidance. 	<ul style="list-style-type: none"> • Involvement required during duration of project and warranty period • If City elects to purchase additional warranty periods, involvement will be extended



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Role	Objectives	Responsibilities	Timeline
Installation & Service Support Manager/Team	<p>The Installation & Service Support Manager shall ensure that the project is installed and serviced according to customer requirements.</p> <p>Typical activities include</p> <ul style="list-style-type: none"> - attend final site walk with field technician - provide and install conduit & cabling according to customer requirements - install counting equipment according to Q-Free TCS specifications and customer requirements - serve as the point of contact for City appointed electrical contractor and project manager - perform after sales service support <p>Acts as the on-site point of contact between the Q-Free TCS Project Manager and the City appointed electrical contractor/project manager</p>	<ul style="list-style-type: none"> • The installation and service support manager shall manage all coordination between the project manager and his service and installation support team. • Ensure that the project objectives are met within time and quality constraints and maintain a close co-operation with the Client. • Provide installation and service support • Participate in on-site project- and progress meetings. 	<ul style="list-style-type: none"> • Involvement required during duration of project and warranty period • If City elects to purchase additional warranty periods, involvement will be extended



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Role	Objectives	Responsibilities	Timeline
City appointed Project Manager	<p>The City Appointed Project Manager shall ensure that the Q-Free TCS project manager is aware of all City requirements with regards to timelines, access and customer requirements</p> <p>Typical activities include</p> <ul style="list-style-type: none"> - attend final site walk with Q-Free TCS and service & installation support team - coordinate with City appointed electrical contractor for the power and conduit requirements connecting the power conductors from the J-box to the electrical rooms - make Q-Free TCS team aware of any restrictions in access to the garage - serve as the point of contact for City appointed electrical contractor and project manager - initiate after sales service support <p>Acts as the point of contact to the Q-Free TCS Project Manager.</p>	<ul style="list-style-type: none"> • The City appointed Project Manager shall manage all coordination between the Q-Free TCS project manager and the city appointed electrical contractor • Provide coordination with City IT management for PGS server network connection 	<ul style="list-style-type: none"> • Involvement required during duration of project and warranty period • If City elects to purchase additional warranty periods, involvement will be extended

TASK #	TASK DESCRIPTION	MONTH 1	MONTH 2	MONTH 3	MONTH 4
1	City determines which permits are required and furnishes this information to the Contractor.				
2	Contractor obtains required permits.				
3	City approves plans and issues Notice to Proceed.				
4	Contractor orders equipment.				
5	Contractor assembles equipment.				
6	Equipment is delivered to City.				
7	Contractor installs equipment at City Hall Garage.				
8	Contractor installs equipment at Seaholm Garage.				
9	Contractor installs equipment at Library Garage.				
10	Contractor installs Roadway Signs.				
11	Contractor provides City with on-site training on use of system.				
12	City provides final acceptance of project.				

EXHIBIT E
City of Austin, Texas
EQUAL EMPLOYMENT/FAIR HOUSING OFFICE
NON-DISCRIMINATION CERTIFICATION

City of Austin, Texas
Human Rights Commission

To: City of Austin, Texas, ("OWNER")

I hereby certify that our firm conforms to the Code of the City of Austin, Section 5-4-2 as reiterated below:

Chapter 5-4. Discrimination in Employment by City Contractors.

Sec. 4-2 Discriminatory Employment Practices Prohibited. As an Equal Employment Opportunity (EEO) employer, the Contractor will conduct its personnel activities in accordance with established federal, state and local EEO laws and regulations and agrees:

- (B) (1) Not to engage in any discriminatory employment practice defined in this chapter.
- (2) To take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without discrimination being practiced against them as defined in this chapter. Such affirmative action shall include, but not be limited to: all aspects of employment, including hiring, placement, upgrading, transfer, demotion, recruitment, recruitment advertising; selection for training and apprenticeship, rates of pay or other form of compensation, and layoff or termination.
- (3) To post in conspicuous places, available to employees and applicants for employment, notices to be provided by OWNER setting forth the provisions of this chapter.
- (4) To state in all solicitations or advertisements for employees placed by or on behalf of the Contractor, that all qualified applicants will receive consideration for employment without regard to race, creed, color, religion, national origin, sexual orientation, gender identity, disability, veteran status, sex or age.
- (5) To obtain a written statement from any labor union or labor organization furnishing labor or service to Contractors in which said union or organization has agreed not to engage in any discriminatory employment practices as defined in this chapter and to take affirmative action to implement policies and provisions of this chapter.
- (6) To cooperate fully with OWNER's Human Rights Commission in connection with any investigation or conciliation effort of said Human Rights Commission to ensure that the purpose of the provisions against discriminatory employment practices are being carried out.
- (7) To require compliance with provisions of this chapter by all subcontractors having fifteen or more employees who hold any subcontract providing for the expenditure of \$2,000 or more in connection with any contract with OWNER subject to the terms of this chapter.

For the purposes of this Offer and any resulting Contract, Contractor adopts the provisions of the City's Minimum Standard Nondiscrimination Policy set forth below.

City of Austin
Minimum Standard Non-Discrimination in Employment Policy:

As an Equal Employment Opportunity (EEO) employer, the Contractor will conduct its personnel activities in accordance with established federal, state and local EEO laws and regulations.

The Contractor will not discriminate against any applicant or employee based on race, creed, color, national origin, sex, age, religion, veteran status, gender identity, disability, or sexual orientation. This policy covers all aspects of employment, including hiring, placement, upgrading, transfer, demotion, recruitment, recruitment advertising, selection for training and apprenticeship, rates of pay or other forms of compensation, and layoff or termination.

Further, employees who experience discrimination, sexual harassment, or another form of harassment should immediately report it to their supervisor. If this is not a suitable avenue for addressing their complaint, employees are advised to contact another member of management or their human resources representative. No employee shall be discriminated against, harassed, intimidated, nor suffer any reprisal as a result of reporting a violation of this policy. Furthermore, any employee, supervisor, or manager who becomes aware of any such discrimination or harassment should immediately report it to executive management or the human resources office to ensure that such conduct does not continue.

Contractor agrees that to the extent of any inconsistency, omission, or conflict with its current non-discrimination employment policy, the Contractor has expressly adopted the provisions of the City's Minimum Non-Discrimination Policy contained in Section 5-4-2 of the City Code and set forth above, as the Contractor's Non-Discrimination Policy or as an amendment to such Policy and such provisions are intended to not only supplement the Contractor's policy, but will also supersede the Contractor's policy to the extent of any conflict.

UPON CONTRACT AWARD, THE CONTRACTOR SHALL PROVIDE A COPY TO THE CITY OF THE CONTRACTOR'S NON-DISCRIMINATION POLICY ON COMPANY LETTERHEAD, WHICH CONFORMS IN FORM, SCOPE, AND CONTENT TO THE CITY'S MINIMUM NON-DISCRIMINATION POLICY, AS SET FORTH HEREIN, OR THIS NON-DISCRIMINATION POLICY, WHICH HAS BEEN ADOPTED BY THE CONTRACTOR FOR ALL PURPOSES (THE FORM OF WHICH HAS BEEN APPROVED BY THE CITY'S EQUAL EMPLOYMENT/FAIR HOUSING OFFICE), WILL BE CONSIDERED THE CONTRACTOR'S NON-DISCRIMINATION POLICY WITHOUT THE REQUIREMENT OF A SEPARATE SUBMITTAL.

Sanctions:

Our firm understands that non-compliance with Chapter 5-4 may result in sanctions, including termination of the contract and suspension or debarment from participation in future City contracts until deemed compliant with the requirements of Chapter 5-4.

Term:

The Contractor agrees that this Section 0800 Non-Discrimination Certificate or the Contractor's separate conforming policy, which the Contractor has executed and filed with the Owner, will remain in force and effect for one year from the date of filing. The Contractor further agrees that, in consideration of the receipt of continued Contract payments, the Contractor's Non-Discrimination Policy will automatically renew from year-to-year for the term of the underlying Contract.

Dated this 30th day of APRIL, 2016

CONTRACTOR

Authorized
Signature

Title

Q FREE TCS

[Signature]

PRESIDENT & CEO

**CITY OF AUSTIN
PURCHASING OFFICE
PREVAILING WAGE RATES AND PAYROLL REPORTING**

1. PAYMENT

A. Classification Definitions, Building and Heavy and Highway

Definitions for Building Construction and Heavy and Highway classifications shall conform to the current "Dictionary of Occupational Titles" as published by the U.S. Department of Labor.

B. Minimum Wages

Workers assigned to perform work under a City Contract that contains the Prevailing Wage provision shall be paid not less than wage rates, including fringe benefits, as published by the Department of Labor (DOL) for Building Construction and Heavy and Highway Trades. Such wage rates shall be used throughout the Contract. If a classification is to be used, which is not listed in the attached wage rates, Contractor shall submit to the City rates and classification proposed for use, for approval, **prior** to performance of the work.

NOTE: The terms journeyman and apprentice apply to both union and independent workers, and are not intended to imply that these positions are union workers only.

All laborers and mechanics performing work for this Contract shall be paid unconditionally and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by Secretary of Labor under the Copeland Act, Title 29 CFR, Part 3) full wages accrued and when due, computed at rates not less than wage rates bound herein pertaining to type of work being performed. When work is of such a nature that both Building and Heavy and Highway wage scales are incorporated into contract, Contractor shall pay wage rates to mechanics or laborers performing work in more than one classification at the rate indicated for each classification for time actually worked as determined by area practice applicable to type (Site Construction Crafts or Building Construction Crafts) of work being performed without regards to skill. Salaried specialists (contract superintendent and administrative personnel only) in the permanent employment of Contractor do not fall under any Wage Classification. Wage rates shall be posted by Contractor in easily accessible and conspicuous places, where it can be seen by all workers. The following shall also be posted by the Contractor alongside prevailing wage rates: City of Austin wage contact posters (English and Spanish), City of Austin Equal Employment Opportunity posters (English and Spanish) Link to posters below:

https://assets.austintexas.gov/purchase/prevailing_wage_posters.pdf

C. Overtime Requirements

No Contractor, Subcontractor, or Sub-subcontractor contracting for any part of contract work which may require or involve the employment of laborers or mechanics shall require or permit any laborer or mechanic in any workweek in which he is employed on such work, to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times his basic rate of pay for all hours in excess of forty hours in such workweek.

2. APPRENTICES

Locally & Federally Funded Contracts

Apprentices and Trainees will be permitted to work as such only when they are registered, individually, under a bonafide Apprenticeship or Trainee program registered with the Bureau of Apprenticeship and Training, United States Department of Labor. The allowable ratio of Apprentices or Trainees to journeymen in any craft classification shall not be greater than the ratio permitted to Contractor as stated in the registered Apprenticeship program standards. Any employee listed on a payroll at an Apprentice or Trainee wage rate, who is not registered as above, shall be paid the wage rate provided in Contract for work employee actually performed. Contractor, Subcontractor, or Sub-subcontractor shall furnish to the City written evidence of registration of his program for Apprentices and Trainees as well as of the appropriate ratios and wage rates, for the area of construction **prior** to using any Apprentices or Trainees on this Contract.

**CITY OF AUSTIN
PURCHASING OFFICE
PREVAILING WAGE RATES AND PAYROLL REPORTING**

3. WITHHOLDING OF PAYMENTS

The City may withhold or cause to be withheld from Contractor as much of the accrued payments as necessary to pay laborers and mechanics employed by Contractor, Subcontractors, or Sub-subcontractors the amount of wages required to comply with the Contract. In the event of nonpayment of wages to laborers or mechanics working on the site of the work of this Contract, the City may, after written notice to Contractor, take such action as may be necessary to cause suspension of any further payments or advance of funds to Contractor until such violations have ceased and until restitution has been made. Payments may also be withheld if Contractor fails to maintain weekly payroll reports or fails to provide copies in a timely manner upon request of the City.

4. PAYROLLS

A. Contractor shall keep records showing:

1. Name, address and occupation of each worker employed by the Contractor or Subcontractor(s) in the construction of the public work.
2. Actual per diem wages paid to each worker.
3. Employee Certification. Contractor and all levels of Subcontractors, shall identify in writing, the classification agreed to by all laborers and mechanics employed by them in the execution of the Contract, and pay not less than rates specified in the attached Building Construction and Heavy and Highway Wage Rate Schedule(s). Contractor shall prepare a completed form for the signature of Employee and a witness shall sign the form in the presence of Employee. If work performed by worker is different than the trade classification agreed upon, the worker shall be paid for that work no less than the minimum prevailing wage for that specified trade.
4. Payroll Deduction Authorization Form. Contractor, Subcontractor, and Sub-subcontractor shall prepare for employee signature a payroll deduction authorization form to identify all payroll deductions excluding those required by statute, such as federal income taxes, Medicare and social security.

- B.** The record shall be open at all reasonable hours to inspection by the officers and agents of the City as requested. Contractor will be responsible to provide copies of records as requested by the City within two (2) working days. Payrolls relating to this work shall be maintained during term of Contract and preserved for a period of three (3) years thereafter by Contractor for all laborers and mechanics working on the work.

C. Statement of Compliance

A Statement of Compliance, a letter signed and dated by party responsible for supervising the payment of persons employed by Contractor or subcontractor shall accompany payrolls required by the City. The Statement of Compliance letter shall identify but is not limited to:

1. Name of signatory party and title.
2. Name of Contract, payroll period.
3. Name of Contractor or Subcontractor.

The signed letter attests that the payroll complies with 29CFR issued by the Secretary of Labor.

D. Federal Funding

In the event that federal funding is used:

1. Contractor and all levels of Subcontractors shall submit weekly certified payroll reports and signed wage compliance statements to the City's designated office no later than seven (7) calendar days after the scheduled

Bidding Requirements, Contract Forms Conditions of the Contract
WAGE RATES AND PAYROLL REPORTING
Section 00830BC

PREVAILING WAGE RATE DETERMINATION

BUILDING CONSTRUCTION TYPE

COUNTY NAME : TRAVIS

Wages based on DOL General Decision: TX160323 3/18/2016 TX323

CLASSIFICATION	RATE	FRINGES	TOTAL WAGE
Asbestos Worker/Heat & Frost Insulator (Duct, Pipe, and Mechanical System Insulation)	\$ 21.17	\$ 8.77	\$ 29.94
Boilermaker	\$ 23.14	\$ 21.55	\$ 44.69
Bricklayer	\$ 20.07	\$ -	\$ 20.07
Carpenter	\$ 20.75	\$ 7.30	\$ 28.05
Carpenter (Acoustical Ceiling Installation only)	\$ 14.00	\$ -	\$ 14.00
Carpenter (Form Work Only)	\$ 15.62	\$ 0.05	\$ 15.67
Cement Mason/Concrete Finisher	\$ 15.71	\$ -	\$ 15.71
Drywall Finisher/Taper	\$ 17.06	\$ 4.43	\$ 21.49
Drywall Hanger and Metal Stud Installer	\$ 17.47	\$ 3.45	\$ 20.92
Electrical Installer (Sound and Communication Systems, Excluding Wiring)	\$ 18.00	\$ 2.30	\$ 20.30
Electrician (Excludes Installation of Sound and Communication Systems)	\$ 27.15	\$ 7.88	\$ 35.03
Elevator Mechanic <5 years experience	\$ 37.76	\$ 32.25	\$ 70.01
Elevator Mechanic >5 years experience	\$ 37.76	\$ 33.01	\$ 70.77
Floor Layer (Carpet)	\$ 21.88	\$ -	\$ 21.88
Glazier	\$ 12.83	\$ -	\$ 12.83
HVAC Mechanic (HVAC Unit Installation Only)	\$ 23.78	\$ 6.89	\$ 30.67
Ironworker, Ornamental	\$ 23.02	\$ 6.35	\$ 29.37
Ironworker, Reinforcing	\$ 12.27	\$ -	\$ 12.27
Ironworker, Structural	\$ 20.73	\$ 5.24	\$ 25.97
*Lead Paint or Asbestos Abatement Worker	\$ 12.27	\$ -	\$ 12.27
Laborer, Common or General	\$ 11.44	\$ -	\$ 11.44
Laborer, Mason Tender - Brick	\$ 12.22	\$ -	\$ 12.22
Laborer, Mason Tender - Cement/Concrete	\$ 11.85	\$ -	\$ 11.85
Laborer, Pipelayer	\$ 12.45	\$ -	\$ 12.45
Laborer, Roof Tearoff	\$ 11.28	\$ -	\$ 11.28
Operator, Backhoe/Excavator/Trackhoe	\$ 19.43	\$ 3.49	\$ 22.92
Operator, Bobcat/Skid Steer/Skid Loader	\$ 13.00	\$ -	\$ 13.00
Operator, Bulldozer	\$ 14.00	\$ -	\$ 14.00
Operator, Crane	\$ 34.85	\$ 9.85	\$ 44.70
Operator, Drill	\$ 14.50	\$ -	\$ 14.50
Operator, Forklift	\$ 16.64	\$ 6.26	\$ 22.90
Operator, Grader/Blade	\$ 19.30	\$ -	\$ 19.30
Operator, Loader	\$ 14.00	\$ -	\$ 14.00

Operator, Mechanic	\$ 18.75	\$ 5.12	\$ 23.87
Operator, Paver (Asphalt, Aggregate, and Concrete)	\$ 16.03	\$ -	\$ 16.03
Operator, Roller	\$ 11.25	\$ -	\$ 11.25
Painter (Brush, Roller, and Spray, Excludes Drywall Finishing/Taping)	\$ 18.76	\$ 6.35	\$ 25.11
Pipefitter (Including HVAC Pipe Installation)	\$ 28.00	\$ 11.41	\$ 39.41
Plumber, Excludes HVAC Pipe Installation	\$ 23.57	\$ 6.37	\$ 29.94
Roofer	\$ 12.00	\$ -	\$ 12.00
*Roofer, Metal	\$ 14.05	\$ -	\$ 14.05
Sheet Metal Worker (Including HVAC Duct Installation)	\$ 24.38	\$ 13.74	\$ 38.12
Sprinkler Fitter (Fire Sprinklers)	\$ 27.43	\$ 22.52	\$ 49.95
Tile Finisher	\$ 11.32	\$ -	\$ 11.32
Tile Setter	\$ 16.35	\$ -	\$ 16.35
Truck Driver, Dump Truck	\$ 12.39	\$ 1.18	\$ 13.57
Truck Driver, Flatbed Truck	\$ 19.65	\$ 8.57	\$ 28.22
Truck Driver, Semi-Trailer Truck	\$ 12.50	\$ -	\$ 12.50
Truck Driver, Water Truck	\$ 12.00	\$ 4.11	\$ 16.11
Waterproofers	\$ 16.30	\$ 0.06	\$ 16.36

<http://www.wdol.gov/wdol/scafiles/davisbacon/tx.html>

* See Page 2 for Additional Wage Information

Note: *Lead Paint & Asbestos Abatement and Roofer, Metal Classifications have been added to this Prevailing Wage Rate Determination pursuant to a City of Austin Prevailing Wage Survey (trades absent from DOL).

The Wage Compliance information detailed below was excerpted from General Decision TX070018 or other DOL sources.

1. Additional Trade information:

Electricians** - Including low voltage wiring for computers, fire/smoke alarms.

Elevator Mechanics*** - also must be paid for 7 holidays - New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and Veterans Day.

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

Unlisted classifications needed for work not included within the scope of the classifications listed may be added upon the advance approval of City of Austin Contract Administration. CONTRACTOR shall submit to City of Austin Contract Administration for review the classification, a bona fide definition of work to be performed and a proposed wage with sample payrolls conforming to area practice prior to the start of the job for that type of work.

2. Wages

The Total Wage may be met by any combination of cash wages and credible "bona fide" fringe benefits by the employer. For overtime, the basic hourly rate listed in the contract wage determination must be used in computing pay obligations.

3. Crediting fringe benefit contributions to meet DBA/DBRA and City of Austin requirements:

The Davis-Bacon Act (and 29 CFR 5.23), list fringe benefits to be considered. Examples are:

- > Life Insurance
- > Health Insurance
- > Pension
- > Vacation
- > Holidays
- > Sick Leave

Note: The use of a truck is not a fringe benefit; a Thanksgiving turkey or Christmas bonus is not a fringe benefit. No credit may be taken for any benefit required by federal, state, or local law such as: workers compensation, unemployment compensation; or social security contributions.

Contributions to fringe benefit plans must be made regularly, e.g. daily, weekly, etc. They must be more frequent than quarterly. (see 29 CFR 5.5 (a)(1)(I)) A periodic bonus may not be counted as a fringe benefit.

4. Annualization of Benefit Costs

If a firm provides an electrician with \$200 per month medical insurance, to calculate allowable fringe benefit credit contributions per hour, the formula ([\$200 x 12 months] divided by 2080 hours = \$1.15 per hour) should be used.

5. Proper Designation of Trade

A work classification on the wage decision for each worker must be made based on the actual type of work he/she performed and each worker must be paid no less than the wage rate on the wage decision for that classification **regardless** of his or her level of skill.

6. Split Classification

If a firm has employees that perform work in more than one classification, it can pay the wage rates specified for each classification ONLY if it maintains accurate time records showing the amount of time spent in each classification. If accurate time records are not maintained, these employees must be paid the highest wage rate of all the classifications of work performed by each worker. Accurate time records tracking how many hours a worker performed the work of one trade and then switched to another trade must be accounted for on a daily basis and reflected on Employer Certified Payroll accordingly.

WELDERS - Receive rate prescribed for craft performing
operation to which welding is incidental.
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Unlisted classifications needed for work not included within
the scope of the classifications listed may be added after
award only as provided in the labor standards contract clauses
(29CFR 5.5 (a) (1) (ii)).

In the listing above, the "SU" designation means that rates
listed under the identifier do not reflect collectively
bargained wage and fringe benefit rates. Other designations
indicate unions whose rates have been determined to be
prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can
be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on
a wage determination matter
- * a conformance (additional classification and rate) ruling

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

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

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

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

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

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

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

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

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

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Bidding Requirements, Contract Forms Conditions of the Contract
WAGE RATES AND PAYROLL REPORTING
Section 00830HH

PREVAILING WAGE RATE DETERMINATION

HEAVY AND HIGHWAY CONSTRUCTION

COUNTY NAME: TRAVIS

Wages based on DOL General Decision:TX160016 1/8/2016 TX16

Classification	Wage Rate	Classification	Wage Rate
Agricultural Tractor Operator	\$ 12.69	Laborer, Utility	\$ 12.27
Asphalt Distributor Operator	\$ 15.55	Loader/Backhoe Operator	\$ 14.12
Asphalt Paving Machine Operator	\$ 14.36	Mechanic	\$ 17.10
Asphalt Raker	\$ 12.12	Milling Machine	\$ 14.18
Boom Truck Operator	\$ 18.36	Motor Grader Operator - Fine Grade	\$ 18.51
Broom or Sweeper Operator	\$ 11.04	Motor Grader Operator - Rough	\$ 14.63
Cement Mason/Concrete Finisher	\$ 12.56	Painter - Structures	\$ 18.34
Concrete Pavement Finishing Machine Operator	\$ 15.48	Pavement Marking Machine Operator	\$ 19.17
Crane, Hydraulic 80 tons or less	\$ 18.36	Pipelayer	\$ 12.79
Crane, Lattice Boom, 80 tons or less	\$ 15.87	Reclaimer/Pulverizer	\$ 12.88
Crane, Lattice Boom, over 80 tons	\$ 19.38	Reinforcing Steel Setter	\$ 14.00
Crawler Tractor	\$ 15.67	Roller Operator, Asphalt	\$ 12.78
Directional Drilling Locator	\$ 11.67	Roller Operator, Other	\$ 10.50
Directional Drilling Operator	\$ 17.24	Scraper Operator	\$ 12.27
Electrician	\$ 26.35	Servicer	\$ 14.51
Excavator, 50,000 lbs. or less	\$ 12.88	Spreader Box Operator	\$ 14.04
Excavator, over 50,000 lbs.	\$ 17.71	Structural Steel Worker	\$ 19.29
Flagger	\$ 10.15	Traffic Signal Installer/Light Pole Worker	\$ 16.00
Form Builder/Form Setter - Paving & Curb	\$ 12.94	Trenching Machine Operator, Heavy	\$ 18.48
Form Builder/Form Setter - Structures	\$ 12.87	Truck Driver Tandem Axle Semi-Trailer	\$ 12.81
Foundation Drill Operator, Truck Mounted	\$ 16.93	Truck Driver, Lowboy-Float	\$ 15.66
Front End Loader Operator, 3CY or less	\$ 13.04	Truck Driver, Single Axle	\$ 11.79
Front End Loader Operator, over 3 CY	\$ 13.21	Truck Driver, Off Road Hauler	\$ 11.88
Laborer, Common	\$ 10.50	Truck Driver, Single or Tandem Axle Dump Truck	\$ 11.68
		Welder	\$ 15.97
		Work Zone Barricade Servicer	\$ 11.85

<http://www.wdol.gov/wdol/scafiles/davisbacon/tx.html>

The Wage Compliance information detailed below was excerpted from General Decision TX20070043 or other DOL sources.

1. Additional Trade information:

Unlisted classifications needed for work not listed within the scope of the classifications listed may be added upon the advance approval of Contract Procurement. CONTRACTOR shall submit to City of Austin Contract Procurement the following: classification, a bona fide definition of work to be performed and a proposed wage with sample payrolls conforming to area practice **prior** to the start of the job for that type of work. Proposed trade may not be performed by any trade already listed.

2. Wages

For overtime, the basic hourly rate listed in the contract wage determination must be used in computing pay obligations.

3. Proper Designation of Trade

A work classification from the Prevailing Wage Poster for each worker must be made based on the actual type of work he/she performed on the job. In summary the work performed, not the "title" determines the correct worker classification and wage. Each worker must be paid no less than the wage rate on the wage decision for that classification **regardless** of his/her level of skill (exclusive of a bona fide apprentice currently registered in a DOL approved apprentice program - proof of individual registration must be supplied in advance to the City of Austin).

4. Split Classification

If a firm has employees that perform work in more than one classification, it can pay the wage rates specified for each classification ONLY if it maintains accurate time records showing the amount of time spent in each classification. If accurate time records are not maintained, these employees must be paid the highest wage rate of all the classifications of work performed by each worker. Accurate time records tracking how many hours a worker performed the work of one trade and then switched to another trade must be accounted for on a daily basis and reflected on Employer Certified Payroll accordingly.

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

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

In the listing above, the "SU" designation means that rates listed under the identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

----- WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

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

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

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

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

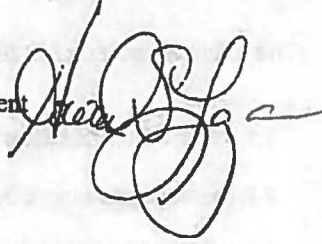
4.) All decisions by the Administrative Review Board are final.

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MEMORANDUM

TO: Robert D. Goode, Assistant City Manager

FROM: Howard S. Lazarus, P.E., PWLF, Director, Public Works Department 

DATE: January 11, 2016

SUBJECT: Request for Certificate of Exemption – Sole Source Procurement
Installation of Dynamic Signs for Parking System in Downtown Austin

Purpose:

The purpose of this memorandum is to request approval of a Certificate of Exemption to allow the City to sole source installation services to TCS International for dynamic signs in the downtown area. The Austin Transportation Department would like to provide information to the public, and direct them to parking spaces available in participating parking garages downtown. This memorandum supersedes the memorandum submitted on October 29, 2015 with additional information to support this request.

Background:

This scope of work for which a sole source exemption is requested is part of a larger project in which the City hired MERJE through a Request for Proposals selection process to create a masterplan for wayfinding downtown. As part of their professional services to us, MERJE brought forward TCS to the City as a leading firm capable of providing expertise for both design services and installation of dynamic signage systems. The City has been working with TCS for four years to integrate the software design and data transmission of the dynamic parking system with the City's existing data storage and communication systems. We have relied on information from TCS concerning equipment component sizes, power requirements, data transmission capabilities, cost, etc. Our current design is based upon this information.

Justification:

Retaining TCS to provide installation services for the dynamic parking system signage provides significant benefits to the City. If the City were required to prepare a separate bid package, it would experience significant additional costs and schedule impacts. The complex communications operation would also be more difficult to integrate, potentially causing system inoperability.

Approved: 

Robert D. Goode, Assistant City Manager

Directions for Completing

FSD Purchasing Office Certification of Exemption Form

(The following steps must be completed prior to forwarding form to Purchasing)

1. Enter date of request in MM/DD/YYYY format
2. Enter Purchasing Buyers name
3. Enter Department requesting exemption
4. Enter Originator of certification
5. Enter phone number of Originator
6. Select one of the exemptions that that apply to this procurement
7. Complete the Exemption Form providing any additional information required for the chosen exemption
8. Enter Vendor's Company Name
9. Enter Total Aggregate Amount
10. Obtain signature of:
 - Person requesting exemption (Originator)
 - Department Director or designee
 - AE General Manager (for Critical Business Needs)
 - Assistant City Manager, AE General Manager or designee (for all other exemptions where the purchase > \$50,000)
11. Forward completed form to Purchasing:
 - Buyer reviews and signs document
 - Purchasing Officer or designee (only required if purchase > \$50,000)



City of Austin FSD Purchasing Office

Certificate of Exemption

DATE: 07/09/2015

DEPT: Public Works

TO: Purchasing Officer or Designee

FROM: Burton Jones

BUYER: Terry Nicholson

PHONE: 974-7278

Chapter 252 of the Local Government Code requires that municipalities comply with the procedures established for competitive sealed bids or proposals before entering into a contract requiring an expenditure of \$50,000 or more, unless the expenditure falls within an exemption listed in Section 252.022.

Senate Bill 7 amended Chapter 252 of the Local Government Code to exempt from the requirements of such Chapter expenditures made by a municipally owned electric utility for any purchases made by the municipally owned electric utility in accordance with procurement procedures adopted by a resolution of its governing body that sets out the public purpose to be achieved by those procedures. The Austin City Council has adopted Resolution No. 040610-02 to establish circumstances which could give rise to a finding of critical business need for Austin Energy.

This Certification of Exemption is executed and filed with the Purchasing Office as follows:

1. The undersigned is authorized to submit this certification.
2. The undersigned certifies that the following exemption is applicable to this purchase. (Please check which exemption you are certifying)
 - ☐ a procurement made because of a public calamity that requires the immediate appropriation of money to relieve the necessity of the municipality's residents or to preserve the property of the municipality
 - ☐ a procurement necessary to preserve or protect the public health or safety of municipality's residents
 - ☐ a procurement necessary because of unforeseen damage to public machinery, equipment, or other property
 - ☐ a procurement for personal, professional, or planning services
 - ☐ a procurement for work that is performed and paid for by the day as the work progresses
 - ☐ a purchase of land or right-of-way
 - ☒ a procurement of items available from only one source, including: items that are available from only one source because of patents, copyrights, secret processes, or natural monopolies; films, manuscripts, or books; gas, water, and other utility services; captive replacement parts or components for equipment; books, papers, and other library materials for a public library that are available only from the persons holding exclusive distribution rights to the materials; and management services provided by a nonprofit organization to a municipal museum, park, zoo, or other facility to which the organization has provided significant financial or other benefits
 - ☐ a purchase of rare books, papers, and other library materials for a public library
 - ☐ paving, drainage, street widening and other public improvements, or related matters, if at least one-third of the cost is to be paid by or through special assessments levied on property that will benefit from the improvements
 - ☐ a public improvement project, already in progress, authorized by voters of the municipality, for which there is a deficiency of funds for completing the project in accordance with the plans and purposes as authorized by the voters

- ☐ a payment under a contract by which a developer participates in the construction of a public improvement as provided by Subchapter C, Chapter 212
- ☐ personal property sold: at an auction by a state licensed auctioneer; at a going out of business sale held in compliance with Subchapter F, Chapter 17, Business & Commerce Code; by a political subdivision of this state, a state agency of this state, or an entity of the federal government; or under an interlocal contract for cooperative purchasing administered by a regional planning commission established under Chapter 391
- ☐ services performed by blind or severely disabled persons
- ☐ goods purchased by a municipality for subsequent retail sale by the municipality
- ☐ electricity
- ☐ advertising, other than legal notices
- ☐ Critical Business Need (Austin Energy Only)

3. The following facts as detailed below support an exemption according to Section 252.022 of the Local Government Code for this purchase. Please verify the steps taken to confirm these facts. If you are citing the following exemptions, please provide the additional information requested below. A more detailed explanation of these exemptions is attached.

- **Preserve and Protect the Public Health and Safety** – Describe how this purchase will preserve and protect the public safety of residents.
- **Sole Source** – Describe what patents, copyrights, secret processes, or natural monopolies exist. Attach a letter from vendor supporting the sole source. The letter must be on company letterhead and be signed by an authorized person in company management.
- **Personal Services** – Describe those services to be performed personally by the individual contracted to perform them.
- **Professional Services** – Describe what mainly mental or intellectual rather than physical or manual and/or disciplines requiring special knowledge or attainment and a high order of learning, skill, and intelligence are required to perform this service.
- **Planning Services** – Describe the services primarily intended to guide governmental policy to ensure the orderly and coordinated development of the state or of municipal, county, metropolitan, or regional land areas.
- **Critical Business Need** – Describe the procurement necessary to protect the competitive interests or position of Austin Energy.

Professional Services - TCS is a company that has provided support and technical expertise and knowledge to the City of Austin for the past 4 years as we have conceptualized and then designed a digital dynamic sign system to inform the public as to locations and numbers of public parking spaces available in downtown Austin. This system must be integrated with the existing traffic control system in the City of Austin. TCS has also worked intimately with several departments in the City of Austin to coordinate hardware and software control of the signage system. To accept a different manufactured system would require the time and effort to redesign and ensure conformance to existing systems within the City.

4. Please attach any documentation that supports this exemption.
5. Please provide any evaluation conducted to support the recommendation. Include the efforts taken to ensure the selected vendor is responsible and will provide the best value to the City (Ex: evaluation of other firms, knowledge of market, etc).

MERJE was selected by the City of Austin in an open RFP to provide design services to develop a wayfinding masterplan for downtown Austin. MERJE has worked closely with TCS to develop the concepts and working details of this plan (please see attached letter). Part of the reason the City opted to work with MERJE was their connections to expertise in the wayfinding community, such as TCS, that could support and help with MERJE's efforts.

6. Because the above facts and documentation support the requested exemption, the City of Austin intends to contract with TCS which will cost approximately \$ 550,000.00 (Provide estimate and/or breakdown of cost).

Recommended
Certification

Originator

Date

Approved
Certification

Department Director or Designee

Date

Assistant City Manager / General Manager
or designee (if applicable)

Date

Purchasing Review
(if applicable)

Buyer

Date

Manager Initials

Exemption Authorized
(if applicable)

Purchasing Officer or designee

Date

02/26/2013

July 10, 2015

Mr. Burton Jones
Architect / Project Management
City of Austin, Public Works Department
505 Barton Springs Rd.
Austin, TX 78704

RE: DOWNTOWN AUSTIN WAYFINDING / TCS INT'L DYNAMIC PARKING SIGNAGE

Dear Burton,

Thank you for contacting me regarding the Downtown Austin Wayfinding Program. As requested below is a summary of our coordination with TCS Int'l during the development of the project. Just a note: TCS Int'l was not a paid consultant during this process; they acted primarily as a resource of information that helped to inform our efforts and recommendations as we developed the Master Plan and associated design.

In 2011, MERJE was hired by the City of Austin to develop a Downtown Wayfinding Master Plan. We worked with a variety of COA departments, including Planning and Transportation/Parking, as well as local stakeholders to develop this plan, which is currently being prepared for bid.

Phase 1 of our effort was an overall Wayfinding Analysis for Downtown Austin; this included an investigation into parking related issues and strategies. We worked closely with COA Transportation/Parking Department on this aspect of the plan. As part of this task, we contacted TCS Int'l to provide us with information in regards to how we may include dynamic parking signage into the overall wayfinding philosophy and approach. TCS Int'l acted as our primary source of information in regards to understanding the ROI benefits of digital signs, the technology framework and equipment required, as well as the associated cost of these components. This information was also used to identify preliminary budgets for the overall wayfinding project, which included dynamic parking signage as a key element.

Phase 2 of our project included the design and documentation of the proposed wayfinding and signage system. During this period we again coordinated with TCS Int'l to specify the appropriate digital signage components, as well as the technical specifications.

I hope you find this information helpful. If you have any questions please do not hesitate to contact me directly.

Sincerely,



John F. Boslo
Principal
MERJE

Cc: Tonya Swartzendruber



MEMORANDUM

TO: Robert D. Goode, Assistant City Manager

FROM: Howard S. Lazarus, P.E., PWLF, Director, Public Works Department

DATE: January 11, 2016

SUBJECT: Request for Certificate of Exemption – Sole Source Procurement
Installation of Dynamic Signs for Parking System in Downtown Austin

Purpose:

The purpose of this memorandum is to request approval of a Certificate of Exemption to allow the City to sole source installation services to TCS International for dynamic signs in the downtown area. The Austin Transportation Department would like to provide information to the public, and direct them to parking spaces available in participating parking garages downtown. This memorandum supersedes the memorandum submitted on October 29, 2015 with additional information to support this request.

Background:

This scope of work for which a sole source exemption is requested is part of a larger project in which the City hired MERJE through a Request for Proposals selection process to create a masterplan for wayfinding downtown. As part of their professional services to us, MERJE brought forward TCS to the City as a leading firm capable of providing expertise for both design services and installation of dynamic signage systems. The City has been working with TCS for four years to integrate the software design and data transmission of the dynamic parking system with the City's existing data storage and communication systems. We have relied on information from TCS concerning equipment component sizes, power requirements, data transmission capabilities, cost, etc. Our current design is based upon this information.

Justification:

Retaining TCS to provide installation services for the dynamic parking system signage provides significant benefits to the City. If the City were required to prepare a separate bid package, it would experience significant additional costs and schedule impacts. The complex communications operation would also be more difficult to integrate, potentially causing system inoperability.

Approved: 
Robert D. Goode, Assistant City Manager

Directions for Completing

FSD Purchasing Office Certification of Exemption Form

(The following steps must be completed prior to forwarding form to Purchasing)

1. Enter date of request in MM/DD/YYYY format
2. Enter Purchasing Buyers name
3. Enter Department requesting exemption
4. Enter Originator of certification
5. Enter phone number of Originator
6. Select one of the exemptions that that apply to this procurement
7. Complete the Exemption Form providing any additional information required for the chosen exemption
8. Enter Vendor's Company Name
9. Enter Total Aggregate Amount
10. Obtain signature of:
 - Person requesting exemption (Originator)
 - Department Director or designee
 - AE General Manager (for Critical Business Needs)
 - Assistant City Manager, AE General Manager or designee (for all other exemptions where the purchase > \$50,000)
11. Forward completed form to Purchasing:
 - Buyer reviews and signs document
 - Purchasing Officer or designee (only required if purchase > \$50,000)



City of Austin FSD Purchasing Office

Certificate of Exemption

DATE: 07/09/2015

DEPT: Public Works

TO: Purchasing Officer or Designee

FROM: Burton Jones

BUYER: Terry Nicholson

PHONE: 974-7278

Chapter 252 of the Local Government Code requires that municipalities comply with the procedures established for competitive sealed bids or proposals before entering into a contract requiring an expenditure of \$50,000 or more, unless the expenditure falls within an exemption listed in Section 252.022.

Senate Bill 7 amended Chapter 252 of the Local Government Code to exempt from the requirements of such Chapter expenditures made by a municipally owned electric utility for any purchases made by the municipally owned electric utility in accordance with procurement procedures adopted by a resolution of its governing body that sets out the public purpose to be achieved by those procedures. The Austin City Council has adopted Resolution No. 040610-02 to establish circumstances which could give rise to a finding of critical business need for Austin Energy.

This Certification of Exemption is executed and filed with the Purchasing Office as follows:

1. The undersigned is authorized to submit this certification.
2. The undersigned certifies that the following exemption is applicable to this purchase. (Please check which exemption you are certifying)
 - ☐ a procurement made because of a public calamity that requires the immediate appropriation of money to relieve the necessity of the municipality's residents or to preserve the property of the municipality
 - ☐ a procurement necessary to preserve or protect the public health or safety of municipality's residents
 - ☐ a procurement necessary because of unforeseen damage to public machinery, equipment, or other property
 - ☒ a procurement for personal, professional, or planning services
 - ☐ a procurement for work that is performed and paid for by the day as the work progresses
 - ☐ a purchase of land or right-of-way
 - ☐ a procurement of items available from only one source, including: items that are available from only one source because of patents, copyrights, secret processes, or natural monopolies; films, manuscripts, or books; gas, water, and other utility services; captive replacement parts or components for equipment; books, papers, and other library materials for a public library that are available only from the persons holding exclusive distribution rights to the materials; and management services provided by a nonprofit organization to a municipal museum, park, zoo, or other facility to which the organization has provided significant financial or other benefits
 - ☐ a purchase of rare books, papers, and other library materials for a public library
 - ☐ paving, drainage, street widening and other public improvements, or related matters, if at least one-third of the cost is to be paid by or through special assessments levied on property that will benefit from the improvements
 - ☐ a public improvement project, already in progress, authorized by voters of the municipality, for which there is a deficiency of funds for completing the project in accordance with the plans and purposes as authorized by the voters

- ☐ a payment under a contract by which a developer participates in the construction of a public improvement as provided by Subchapter C, Chapter 212
- ☐ personal property sold: at an auction by a state licensed auctioneer; at a going out of business sale held in compliance with Subchapter F, Chapter 17, Business & Commerce Code; by a political subdivision of this state, a state agency of this state, or an entity of the federal government; or under an interlocal contract for cooperative purchasing administered by a regional planning commission established under Chapter 391
- ☐ services performed by blind or severely disabled persons
- ☐ goods purchased by a municipality for subsequent retail sale by the municipality
- ☐ electricity
- ☐ advertising, other than legal notices
- ☐ Critical Business Need (Austin Energy Only)

3. The following facts as detailed below support an exemption according to Section 252.022 of the Local Government Code for this purchase. Please verify the steps taken to confirm these facts. If you are citing the following exemptions, please provide the additional information requested below. A more detailed explanation of these exemptions is attached.

- **Preserve and Protect the Public Health and Safety** – Describe how this purchase will preserve and protect the public safety of residents.
- **Sole Source** – Describe what patents, copyrights, secret processes, or natural monopolies exist. Attach a letter from vendor supporting the sole source. The letter must be on company letterhead and be signed by an authorized person in company management.
- **Personal Services** – Describe those services to be performed personally by the individual contracted to perform them.
- **Professional Services** – Describe what mainly mental or intellectual rather than physical or manual and/or disciplines requiring special knowledge or attainment and a high order of learning, skill, and intelligence are required to perform this service.
- **Planning Services** – Describe the services primarily intended to guide governmental policy to ensure the orderly and coordinated development of the state or of municipal, county, metropolitan, or regional land areas.
- **Critical Business Need** – Describe the procurement necessary to protect the competitive interests or position of Austin Energy.

Professional Services - TCS is a company that has provided support and technical expertise and knowledge to the City of Austin for the past 4 years as we have conceptualized and then designed a digital dynamic sign system to inform the public as to locations and numbers of public parking spaces available in downtown Austin. This system must be integrated with the existing traffic control system in the City of Austin. TCS has also worked intimately with several departments in the City of Austin to coordinate hardware and software control of the signage system. To accept a different manufactured system would require the time and effort to redesign and ensure conformance to existing systems within the City.

4. Please attach any documentation that supports this exemption.
5. Please provide any evaluation conducted to support the recommendation. Include the efforts taken to ensure the selected vendor is responsible and will provide the best value to the City (Ex: evaluation of other firms, knowledge of market, etc).

MERJE was selected by the City of Austin in an open RFP to provide design services to develop a wayfinding masterplan for downtown Austin. MERJE has worked closely with TCS to develop the concepts and working details of this plan (please see attached letter). Part of the reason the City opted to work with MERJE was their connections to expertise in the wayfinding community, such as TCS, that could support and help with MERJE's efforts.

6. Because the above facts and documentation support the requested exemption, the City of Austin intends to contract with TCS
which will cost approximately \$ 550,000.00 (Provide estimate and/or breakdown of cost).

Recommended
Certification

Originator

Date

Approved
Certification

Department Director or designee

Date

Assistant City Manager / General Manager Date
or designee (if applicable)

Purchasing Review
(if applicable)

Buyer

Date

Manager Initials

Exemption Authorized
(if applicable)

Purchasing Officer or designee

Date

02/26/2013

July 10, 2015

Mr. Burton Jones
Architect / Project Management
City of Austin, Public Works Department
505 Barton Springs Rd.
Austin, TX 78704

RE: DOWNTOWN AUSTIN WAYFINDING / TCS INT'L DYNAMIC PARKING SIGNAGE

Dear Burton,

Thank you for contacting me regarding the Downtown Austin Wayfinding Program. As requested below is a summary of our coordination with TCS Int'l during the development of the project. Just a note: TCS Int'l was not a paid consultant during this process; they acted primarily as a resource of information that helped to inform our efforts and recommendations as we developed the Master Plan and associated design.

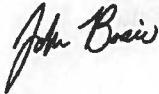
In 2011, MERJE was hired by the City of Austin to develop a Downtown Wayfinding Master Plan. We worked with a variety of COA departments, including Planning and Transportation/Parking, as well as local stakeholders to develop this plan, which is currently being prepared for bid.

Phase 1 of our effort was an overall Wayfinding Analysis for Downtown Austin; this included an investigation into parking related issues and strategies. We worked closely with COA Transportation/Parking Department on this aspect of the plan. As part of this task, we contacted TCS Int'l to provide us with information in regards to how we may include dynamic parking signage into the overall wayfinding philosophy and approach. TCS Int'l acted as our primary source of information in regards to understanding the ROI benefits of digital signs, the technology framework and equipment required, as well as the associated cost of these components. This information was also used to identify preliminary budgets for the overall wayfinding project, which included dynamic parking signage as a key element.

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I hope you find this information helpful, if you have any questions please do not hesitate to contact me directly.

Sincerely,



John F. Boslo
Principal
MERJE

Cc: Tonya Swartzendruber

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

1 of 1

Complete Nos. 1 - 4 and 6 if there are interested parties.
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY CERTIFICATION OF FILING

Certificate Number:
2016-30193

Date Filed:
03/23/2016

Date Acknowledged:

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.

Q-Free TCS, Inc.
Sudbury, MA United States

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.

City of Austin Purchasing

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the goods or services to be provided under the contract.

MA 6000 NA160000056
Provision of Dynamic Parking System

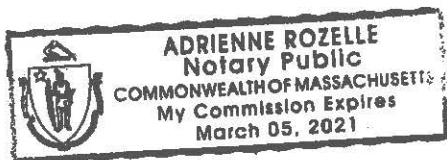
4	Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
			Controlling	Intermediary

5 Check only if there is NO Interested Party.



6 AFFIDAVIT

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.



David Radford

Signature of authorized agent of contracting business entity

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said David Radford this the 28th day of April, 2016, to certify which, witness my hand and seal of office.

Adrienne Rozelle

Signature of officer administering oath

Adrienne Rozelle

Printed name of officer administering oath

Officer Mgr

Title of officer administering oath



**CITY OF AUSTIN
PUBLIC WORKS DEPARTMENT**

**PROJECT MANUAL
Contract Documents and Technical
Specifications**

**VOLUME 1 of 1
Dynamic Parking System**

C.I.P. PROJECT NUMBER: 6735.043

**CITY OF AUSTIN
Public Works Department
PO Box 1088
Austin, TX 78767**

October 23, 2015

**Document
Number**

Title

VOLUME 1

INTRODUCTORY INFORMATION

10/23/15	Title Page
10/23/15	Table of Contents

BIDDING REQUIREMENTS, CONTRACT FORMS, & CONDITIONS OF THE CONTRACT

Bid Forms

00300L	10/19/15	Bid Form (Lump Sum)
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Supplements to Bid Forms

00410	05/06/11	Statement of Bidder's Safety Experience
00440	10/19/15	Affidavit - Prohibited Activities

Agreement Form

00500	10/18/15	Agreement
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Bonds and Certificates

00610	02/23/10	Performance Bond
00620	02/23/10	Payment Bond
00650	07/30/12	Certificate of Insurance
00670	03/20/14	Sales Tax Exemption Certificate
00680	06/05/06	Non-Use of Asbestos Affidavit (Prior to Construction)
00681	06/05/06	Non-Use of Asbestos Affidavit (After Construction)

General Conditions

00700	10/19/15	General Conditions
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Supplementary Conditions

00810	10/19/15	Supplemental General Conditions
00820	10/19/15	Modifications to Bidding Requirements and Contract Forms
00830	02/04/15	Wage Rates and Payroll Reporting
00830HH	01/05/15	Wage Rates Highway Heavy

Addenda

If any addendum is issued, it will be bound in the front of Contract sets following contract execution.

SPECIFICATIONS

Division 1 - General Requirements

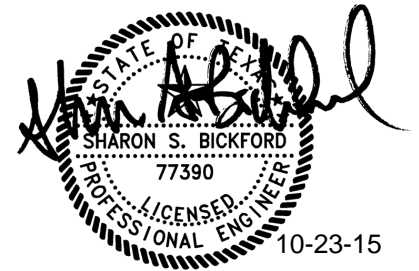
01010	04/22/13	Summary of Work
01050	10/19/15	Grades Lines & Levels
01095	07/21/03	Reference Standards and Definitions
01200	08/09/12	Project Meetings
01300	04/22/13	Submittals
01352	04/22/13	Sustainable Construction Requirements
01353	08/09/12	Construction Equipment Emissions Reduction Plan
01505	04/22/13	Construction and Demolition Waste Management
01700	10/23/15	Closeout Procedures
01900	03/12/12	Prohibition of Asbestos Containing Materials

**Document
Number****Title**

01900a	06/05/06	Statement of Non-Inclusion of Asbestos Containing Material (E/A Prior to Design)
01900b	06/05/06	Statement of Non-Inclusion of Asbestos Containing Material (E/A After Design)

Special Specifications

839S	10/23/15	Traffic Signal Poles
101400	10/23/15	Exterior Signage
260500	10/23/15	Electrical General Provisions
260513	10/23/15	600 Volt Insulated Conductors
260526	10/23/15	Grounding and Bonding for Electrical Systems
260533	10/23/15	Raceways
260553	10/23/15	Electrical Identification
262716	10/23/15	Electrical Boxes

**END**

LUMP SUM BID FORM

Section 00300L

City Manager
Austin, Texas

The undersigned, in compliance with the Invitation for Bids for construction of the following Project: Dynamic Parking System

(CIP ID# 6735.043) for the City of Austin, Texas, having examined the Project Manual, Drawings and Addenda, the site of the proposed Work and being familiar with all of the conditions surrounding construction of the proposed Project, having conducted all inquiries, tests and investigations deemed necessary and proper; hereby proposes to furnish all labor, permits, material, machinery, tools, supplies and equipment, and incidentals, and to perform all Work required for construction of the Project in accordance with the Project Manual, Drawings and Addenda within the time indicated for the lump sum price of:

BASE BID..... = \$ _____
(Base Bid includes Allowances and Excavation Safety Systems Unit Prices, if applicable.)

TOTAL BID (Base Bid Plus Alternate)..... = \$ _____
 Figures

Notes:

1. For a more detailed explanation of Bid allowances, see Section 1020.

UNIT PRICES: The undersigned Bidder agrees that, in case of an authorized adjustment to the scope of Work shown, the following unit price(s) will be used in adjusting the Contract Amount:

<u>Item Description</u>	<u>Unit Price</u>
Tall pole with sign cantilevered over traffic lane	\$ _____ per pole
Shorter vertical pole with sign mounted outside curb	\$ _____ per pole

BID GUARANTY: A Bid guaranty must be enclosed with this Bid, in the amount of not less than five percent (5%) of the total Bid. Following the Bid opening, submitted Bids may not be withdrawn for a period of 60 Calendar Days. Award of Contract will occur within this period, unless mutually agreed between the parties. The Bid guaranty may become the property of the OWNER, or the OWNER may pursue any other action allowed by law, if:

- Bidder withdraws a submitted Bid within the period stated above;
- Bidder fails to execute the Contract and furnish the prescribed documentation (bonds, insurance, etc.) needed to complete execution of the Contract within five (5) Working Days after notice of award, or any mutually agreed extension of that period.

TIME OF COMPLETION: The undersigned Bidder agrees to commence work on the date specified in the written "Notice to Proceed" to be issued by the OWNER and to **substantially** complete construction of the improvements, as required by the Project Manual, Drawings and Addenda for the Work within sixty (60) **Calendar** Days. **If a Substantial Completion date has been specified, the Bidder further agrees to reach Final Completion within thirty (30) Calendar Days after Substantial Completion as required by the Project Manual, Drawings and Addenda for the work.** The Bidder further agrees that should the Bidder fail to **substantially complete the Work or to finally** complete the Work within the number of days indicated in the Bid or as subsequently adjusted, Bidder shall pay the liquidated damages for each consecutive day thereafter as provided below; unless the OWNER elects to pursue any other action allowed by law.

WAIVER OF ATTORNEY FEES: In submitting its bid, in consideration for the waiver of its right to attorney's fees by the OWNER, the Bidder knowingly and intentionally agrees to and shall waive the right to attorney's fees under Section 271.153 of the Texas Local Government Code in any administrative proceeding, alternative dispute resolution proceeding, or litigation arising out of or connected to any Contract awarded pursuant to this solicitation process.

LIQUIDATED DAMAGES: The Bidder understands and agrees that the timely completion of the described Work is of the essence. The Bidder and OWNER further agree that the OWNER's actual damages for delay caused by failure to timely complete the Project are difficult, if not impossible to measure. However, with respect to the additional administrative and consultant costs to be incurred by OWNER, the reasonable estimate of such damages has been calculated and agreed to by OWNER and Bidder. Therefore, the Bidder and the OWNER agree that for each and every **Calendar** Day the Work or any portion thereof, remains incomplete after the **Substantial** Completion date as established by the above paragraph, "Time of Completion", payment will be due to the Owner in the amount of two hundred dollars (\$200) per **Calendar** Day as liquidated damages, not as a penalty, but for delay damages to the OWNER. **If both Substantial and Final Completion dates have been specified, the Bidder and the OWNER further agree that for each and every Calendar Day the Work or any portion thereof, remains incomplete after the Final Completion date as established by the above paragraph, "Time of Completion", payment will be due to the OWNER in the amount of two hundred dollars (\$200) per Calendar Day as liquidated damages, not as a penalty, but for delay damages to the OWNER.** Such amount shall be deducted by the OWNER from any Contract payment due. In the event of a default or breach by the CONTRACTOR and demand is made upon the surety to complete the project, in accordance with the Contract Documents, the surety shall be liable for liquidated damages pursuant to the Contract Documents in the same manner as the CONTRACTOR would have been.

OWNER reserves the right to reject any or all Bids and to waive any minor informality in any Bid or solicitation procedure (a minor informality is one that does not affect the competitiveness of the Bidders).

The undersigned acknowledges receipt of the following addenda:

Addendum No. 1 dated _____	Received _____
Addendum No. 2 dated _____	Received _____
Addendum No. 3 dated _____	Received _____
Addendum No. 4 dated _____	Received _____
Addendum No. 5 dated _____	Received _____

Secretary, *if Bidder is a Corporation

Bidder

(Seal)

Authorized Signature

Title

Date

Address

Telephone Number / FAX Number

Email Address for Person Signing Bid

Email Address for Bidder's Primary Contact Person

* Copy of Corporate Resolution and minutes with certificate of officer of Bidder as to authority of signatory to bind Bidder is to be signed and dated no earlier than one week before Bid date, and attached to this document.

End

**SAFETY RECORD QUESTIONNAIRE
& STATEMENT OF BIDDER'S SAFETY EXPERIENCE
(To Be Submitted Post-Bid)**

Project: Dynamic Parking System

CIP ID Number: 6735.043

Pursuant to Section 252.0435 of the Local Government Code, the Austin City Council will consider the safety records of potential contractors prior to awarding bids on City contracts. The City of Austin has adopted the following written definitions and criteria for accurately determining the safety record of a Bidder prior to awarding bids on City contracts. The term "Bidder" includes the firm, corporation, partnership, or other legal entity represented by the Bidder or anyone acting for such firm, corporation, partnership or other entity submitting the bid. The definitions and criteria for determining the safety record of a Bidder are:

"Citations" include notices of violation, notices of enforcement, suspension/revocations of state or federal licenses or registrations, fines assessed pending criminal complaints, indictments, or convictions, administrative orders, draft orders, final orders, and judicial final judgments. Notice of Violations and Notice of Enforcement received from the TCEQ shall include those classified as major violations and moderate violations under the TCEQ'S regulations for documentation of Compliance History, 30 Texas Administrative Code, Chapter 60.2 (c) (1) and (2).

"Environmental Protection Agency" includes, but is not limited to the Texas Commission on Environmental Quality (TCEQ), the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, the Texas Department of Health, the Texas Parks and Wildlife Department, the Structural Pest Control Service, agencies of local governments responsible for enforcing environmental protection laws or regulations, and similar regulatory agencies of other states of the United States.

1. If the Bidder's response to the following questions reveals more than two (2) cases in which final orders have been entered by the Occupational Safety and Health Review Commission (OSHRC) against the Bidder for serious violations of Occupational Safety & Health Administration (OSHA) regulations within the past five (5) years, the City will, at its discretion, determine whether to disqualify the Bidder.
2. If the Bidder's response to the following questions reveals more than one (1) case in which Bidder has received a citation or for which final orders have been entered from an environmental protection agency for violations within the past five (5) years, the City will, at its discretion, determine whether to disqualify the Bidder.
3. If the Bidder's response to the following questions reveals that the Bidder has been convicted of a criminal offense within the past ten (10) years or has been subject to a judgment for a negligent act or omission, which resulted in serious bodily harm or death, at its discretion, the City will determine whether to disqualify the Bidder.
4. The City may consider the responses to each question listed below separately when making a discretionary determination of whether to disqualify a Bidder and it may consider the cumulative impact of the information generated by the Bidder's responses in making the determination.

5. The Bidder acknowledges the requirements for Safety Training (listed in Section 00700) must be met before any work commences on the project.
6. In order to consider the safety records of potential contractors prior to awarding bids on City contracts, the City requires that Bidders answer the following questions and submit them upon request:

QUESTION ONE

Has the Bidder received any Citations for violations of OSHA within the past five (5) years?

☐ Yes ☐ No

QUESTION TWO

Has the Bidder received any Citations for violations of environmental protection laws or regulations within the past five (5) years?

☐ Yes ☐ No

QUESTION THREE

Has the Bidder ever been convicted, within the past ten (10) years, of a criminal offense or has been subject to a judgment for a negligent act or omission, which resulted in serious bodily injury or death?

☐ Yes ☐ No

If the Bidder has indicated "Yes" to any question above, the Bidder must provide to the City, with its bid submission, the following information:

Date of Citation or offense and location where violation or offense occurred, type of violation or offense, final disposition of violation or offense, if any, and penalty assessed.

In addition, the City will utilize the following information and in its discretion, as additional support to make any discretionary determination of whether to disqualify a Bidder. Accordingly, Bidder must answer the following questions and provide evidence that it meets minimum OSHA construction safety standards and has a lost time injury rate that does not exceed the limits established below:

1. Does the Bidder have a written construction safety program? ☐ Yes ☐ No
2. Does the Bidder conduct regular construction site safety inspections? ☐ Yes ☐ No
3. Does the Bidder have an active construction safety training program? ☐ Yes ☐ No
4. Does the Bidder or affected subcontractors have competent persons in the following areas (as applicable to the scope of the current Project):
 - A. Scaffolding ☐ Yes ☐ No ☐ N/A
 - B. Excavation ☐ Yes ☐ No ☐ N/A
 - C. Cranes & Hoists ☐ Yes ☐ No ☐ N/A
 - D. Electrical ☐ Yes ☐ No ☐ N/A
 - E. Fall Protection ☐ Yes ☐ No ☐ N/A
 - F. Confined Spaces ☐ Yes ☐ No ☐ N/A
 - G. Material Handling ☐ Yes ☐ No ☐ N/A
 - H. Demolition ☐ Yes ☐ No ☐ N/A

- I. Steel Erection ☐ Yes ☐ No ☐ N/A
J. Underground Construction ☐ Yes ☐ No ☐ N/A

5. Does the company have a lost time injury rate and a total recordable injury rate of less than or equal to the national average for North American Industrial Classification System (NAICS) Category 23 for each of the past five (5) years? (Attach the Bidder's OSHA 300 and 300A logs for the past five (5) years) ☐ Yes ☐ No
6. Does the Bidder have an experience modifier rate of 1.0 or less? (Attach the Bidder's NCCI workers compensation experience rating sheets for the past five (5) years) ☐ Yes ☐ No
7. Has the Bidder had any OSHA inspections within the past six (6) months? ☐ Yes ☐ No
(If "YES", provide sufficient documentation to indicate the nature of the inspection, the findings, and magnitude of the issues.)

ACKNOWLEDGEMENT

THE STATE OF TEXAS
COUNTY OF TRAVIS

I certify that my responses and the information provided are true and correct to the best of my personal knowledge and belief and that I have made no willful misrepresentations in this Questionnaire, nor have I withheld any relevant information in my statements and answers to questions. I am aware that any information given by me in this questionnaire may be investigated and I hereby give my full permission for any such investigation and I fully acknowledge that any misrepresentations or omissions in my responses and information may cause my bid to be rejected.

Bidder's full name and entity status:

Signature, Authorized Representative of Bidder

Title

Date

END

Bidding Requirements, Contract Forms and Conditions of the Contract
AFFIDAVIT - PROHIBITED ACTIVITIES
Section 00440

CITY OF AUSTIN
BIDDER'S AFFIDAVIT OF NON-COLLUSION,
NON-CONFLICT OF INTEREST, AND ANTI-LOBBYING FOR
Dynamic Parking System

CIP ID Number: 6735.043

State of Texas

County of Travis

The undersigned "Affiant" is a duly authorized representative of the bidder for the purpose of making this Affidavit, and, after being first duly sworn, has deposed and stated and hereby deposes and states, to the best of his or her personal knowledge and belief as follows:

The term "**Bidder**", as used herein, includes the individual or business entity submitting the bid and for the purpose of this Affidavit includes the directors, officers, partners, managers, members, principals, owners, agents, representatives, employees, other parties in interest of the Bidder, and anyone or any entity acting for or on behalf of the Bidder, including a subcontractor in connection with this bid.

The terms "**City**" and "**Owner**" are synonymous.

1. **Anti-Collusion Statement.** The Bidder has not and will not in any way directly or indirectly:
 - a. colluded, conspired, or agreed with any other person, firm, corporation, bidder or potential bidder to the amount of this bid or the terms or conditions of this bid.
 - b. paid or agreed to pay any other person, firm, corporation bidder or potential bidder any money or anything of value in return for assistance in procuring or attempting to procure a contract or in return for establishing the prices in the attached bid or the bid of any other bidder.
2. **Preparation of Invitation for Bid and Contract Documents.** The Bidder has not received any compensation or a promise of compensation for participating in the preparation or development of the underlying bid or contract documents., In addition, the Bidder has not otherwise participated in the preparation or development of the underlying bid or contract documents, except to the extent of any comments or questions and responses in the bidding process, which are available to all bidders, so as to have an unfair advantage over other bidders, provided that the Bidder may have provided relevant product or process information to a consultant in the normal course of its business.
3. **Participation in Decision Making Process.** The Bidder has not participated in the evaluation of bids or proposals or other decision making process for this solicitation, and, if Bidder is awarded a contract hereunder, no individual, agent, representative, consultant or sub contractor or consultant associated with Bidder, who may have been involved in the evaluation or other decision making process for this solicitation, will have any direct or indirect financial interest in the Contract, provided that the Bidder may have provided relevant product or process information to a consultant in the normal course of its business.
4. **Present Knowledge.** Bidder is not presently aware of any potential or actual conflicts of interest regarding this solicitation, which either enabled Bidder to obtain an advantage over other bidders or would prevent Bidder from advancing the best interests of OWNER in the course of the performance of the Contract.
5. **City Code.** As provided in Sections 2-7-61 through 2-7-65 of the City Code, no individual with a substantial interest in Bidder is a City official or employee or is related to any City official or employee within the first or second degree of consanguinity or affinity.

6. Chapter 176 Conflict of Interest Disclosure. In accordance with Chapter 176 of the Texas Local Government Code, the Bidder:

- a. does not have an employment or other business relationship with any local government officer of OWNER or a family member of that officer that results in the officer of family member receiving taxable income;
- b. has not given a local government officer of OWNER one or more gifts, other than gifts of food lodging transportation or entertainment accepted as a guest, that have an aggregate value of more than \$100 in the twelve month period preceding the date the officer becomes aware of the execution of the Contract or that OWNER is considering doing business with the Bidder; and
- c. does not have a family relationship with a local government officer of OWNER in the third degree of consanguinity or the second degree of affinity.

As required by Chapter 176, Bidder must file the Conflicts of Interest Questionnaire with the Purchasing Department no later than the seventh business day after the commencement of contract discussions or negotiations with the City or the submission of a Bid, response to a request for proposals, or other writing related to a potential contract with OWNER. The questionnaire must be updated not later than the seventh day after the date of an event that would make a statement in the questionnaire inaccurate or incomplete. There are statutory penalties for failure to comply with Chapter 176.

7. Anti-Lobbying Ordinance. As set forth in paragraph 1.i. of the Instructions to Bidders Section 00100, between the date that the Invitation for Bid was issued and the date of full execution of the Contract, Bidder has not made and will not make a representation to a member of the City Council, a member of a City Board, or any other official, employee or agent of the City, other than the authorized contact person for the solicitation, except as permitted by the Ordinance.

If the Bidder cannot affirmatively swear and subscribe to the forgoing statements, the Bidder shall provide a detailed written explanation in the space provided below or, as necessary, on separate pages to be annexed hereto.

Signature: _____ Date: _____

Printed Name: _____

Title: _____

Firm/Entity: _____

Subscribed and sworn to before me this ____ day of _____, 20__.

Notary Public

My Commission Expires _____

BIDDER'S EXPLANATION:

END

Bidding Requirements, Contract Forms and Conditions of the Contract
AGREEMENT SECTION
Section 00500

STATE OF TEXAS
COUNTY OF TRAVIS

THIS AGREEMENT is made and entered into this _____ day of _____, 20____, by and between the City of Austin, Texas, a municipal corporation, organized and existing under laws of State of Texas, acting through its City Manager or other duly authorized designee, hereinafter referred to as the "OWNER," and _____, of the City of _____, County of _____, and State of _____, hereinafter referred to as the "CONTRACTOR."

In consideration of the promises, performances, payments and agreements set forth herein CONTRACTOR hereby agrees to commence and complete the following Project:

and all Work in accordance with the Project Manual, Drawings and Addenda, which are incorporated herein by reference and made a part hereof and which have been prepared by _____ and approved by OWNER, and OWNER agrees to pay the CONTRACTOR the total amount of:

\$ _____
(Figures) (Words)

The CONTRACTOR hereby agrees to commence work on the date specified in the written "Notice to Proceed" to be issued by the OWNER and to **substantially** complete construction of the improvements, as required by the Project Manual, Drawings and Addenda for the Work within sixty (60) **Calendar** Days. **If a Substantial Completion date has been specified, the CONTRACTOR further agrees to reach Final Completion within thirty (30) Calendar Days after Substantial Completion as required by the Project Manual, Drawings and Addenda for the work.** Waiver of any breach of this Contract shall not constitute waiver of any subsequent breach.

In consideration of the award and execution of this Contract, and in consideration of the waiver of its right to attorney's fees by the OWNER, the CONTRACTOR knowingly and intentionally waives its right to attorney's fees under Section 271.153 of the Texas Local Government Code in any administrative proceeding, alternative dispute resolution proceeding, or litigation arising out of or connected to this Contract.

OWNER agrees to pay CONTRACTOR from available funds for performance of the Contract in accordance with the Bid and the provisions of the Contract Documents, subject to additions and deductions, as provided therein.

The OWNER's payment obligations are payable only and solely from funds available for the purposes of this Agreement.

Although drafted by OWNER, this Agreement, in event of any disputes over its meaning or application, shall be interpreted fairly and reasonably, and neither more strongly for nor against either party.

OWNER

By: _____
City of Austin (Signature)

Date

Title of Signatory

APPROVED AS TO FORM:

By: _____
Law Department

Date

§ CONTRACTOR

§
§ By: _____
§ (Signature)
§
§ _____
§ Date

§ _____
§ Printed Name of Signatory

§ _____
§ Title of Signatory, Authorized Representative

§ ATTEST (as applicable)

§ _____
§ **Secretary of Corporate Bidder or**
§ **Corporate General Partner ***

*Copy of Corporate Resolution and minutes with certificate of officer of CONTRACTOR as to authority of signatory to bind CONTRACTOR is to be signed, dated no earlier than one week before the date of award of Contract, and attached to this document.

END

Bidding Requirements, Contract Forms and Conditions of the Contract
PERFORMANCE BOND
Section 00610

STATE OF TEXAS
COUNTY OF TRAVIS

Bond No. _____
C.I.P. ID No. 6735.043

Project Name Dynamic Parking System

Know All Men By These Presents: That _____
of the City of _____, County of _____, and
State of _____, as Principal, and _____, a
solvent company authorized under laws of the State of Texas to act as surety on bonds for
principals, are held and firmly bound unto _____
(OWNER), in the penal sum of _____

_____ U.S. Dollars (\$ _____ U.S.) for
payment whereof, well and truly to be made, said Principal and Surety bind themselves and their
heirs, administrators, executors, successors and assigns, jointly and severally, by these presents:

Conditions of this Bond are such that, whereas, Principal has entered into a certain written contract
with OWNER, dated the _____ day of _____, _____, which
Agreement is hereby referred to and made a part hereof as fully and to the same extent as if
copied at length herein.

Now, therefore, the condition of this obligation is such, that if said Principal shall faithfully perform
said Agreement and shall in all respects duly and faithfully observe and perform all and singular
covenants, conditions and agreements in and by said contract agreed and covenanted by Principal
to be observed and performed, and according to true intent and meaning of said Agreement hereto
annexed, then this obligation shall be void; otherwise to remain in full force and effect. If OWNER
notifies Principal and Surety the OWNER is considering declaring Principal in default, Surety agrees
to meet with OWNER and Principal no later than fifteen days after receipt of such notice to discuss
methods of performing the Work of the Contract.

Provided, however, that this bond is executed pursuant to provisions of Chapter 2253, Texas
Government Code as amended and all liabilities on this bond shall be determined in accordance
with provisions of said Article to same extent as if it were copied at length herein.

Surety, for value received, stipulates and agrees that no change in Contract Time or Contract
Amount shall in anywise affect its obligation on this bond, and it does hereby waive notice of any
such change in Contract Time or Contract Amount.

In witness whereof, said Principal and Surety have signed and sealed this instrument this
_____ day of _____, _____.

Principal
By _____
(Signature)
Title _____
Address _____

Surety
By _____
(Signature)
Title _____
Address _____

Telephone_____Fax_____

E-Mail Address _____

Name and address of Resident Agent of Surety:

Note: Bond shall be issued by a solvent Surety company authorized to do business in Texas, and shall meet any other requirements established by law or by OWNER pursuant to applicable law. A copy of surety agent's "Power of Attorney" must be attached hereto.

END

Bidding Requirements, Contract Forms and Conditions of the Contract
PAYMENT BOND
Section 00620

STATE OF TEXAS
COUNTY OF TRAVIS

Bond No. _____
C.I.P. ID No. 6735.043

Project Name Dynamic Parking System

Know All Men By These Presents: That _____
of the City of _____, County of _____, and
State of _____, as Principal, and _____, a
solvent company authorized under laws of the State of Texas to act as surety on bonds for
principals, are held and firmly bound unto _____
(OWNER), and all Subcontractors, workers, laborers, mechanics and suppliers as their interests
may appear, all of whom shall have right to sue upon this bond in the penal sum of _____ U.S.
Dollars (\$ _____ U.S.) for payment whereof, well and truly to be made, said
Principal and Surety bind themselves and their heirs, administrators, executors, successors and
assigns, jointly and severally, by these presents:

Conditions of this Bond are such that, whereas, Principal has entered into a certain written contract
with OWNER, dated the _____ day of _____, _____, which
Agreement is hereby referred to and made a part hereof as fully and to the same extent as if
copied at length herein.

Now, therefore, condition of this obligation is such, that if the said Principal shall well and truly pay
all Subcontractors, workers, laborers, mechanics, and suppliers, all monies to them owing by said
Principals for subcontracts, work, labor, equipment, supplies and materials done and furnished for
the construction of improvement of said Agreement, then this obligation shall be and become null
and void; otherwise to remain in full force and effect.

Provided, however, that this bond is executed pursuant to provisions of Chapter 2253, Texas
Government Code as amended and all liabilities on this bond shall be determined in accordance
with provisions of said Article to same extent as if it were copied at length herein.

Surety, for value received, stipulates and agrees that no change in Contract Time or Contract
Amount shall in anywise affect its obligation on this bond, and it does hereby waive notice of any
such change in Contract Time or Contract Amount.

In witness whereof, said Principal and Surety have signed and sealed this instrument this
_____ day of _____, _____.

Principal
By _____
(Signature)
Title _____
Address _____

Surety
By _____
(Signature)
Title _____
Address _____

Telephone_____Fax_____

E-Mail Address _____

Name and address of Resident Agent of Surety:

Note: Bond shall be issued by a solvent Surety company authorized to do business in Texas, and shall meet any other requirements established by law or by OWNER pursuant to applicable law. A copy of surety agent's "Power of Attorney" must be attached hereto.

END

Bidding Requirements, Contract Forms and Conditions of the Contract
CERTIFICATE OF INSURANCE
Section 00650

This Certificate shall be completed by a licensed insurance agent:

Name and Address of Agency:

Phone: _____ / _____

Name and Address of Insured:

Phone: _____ / _____

Prime or Sub-Contractor?: _____

Name of Prime Contractor, if different from Insured: _____

City of Austin Reference:

Project Name: Dynamic Parking System

C.I.P. No.: 6735.043

Project Location: Downtown Austin

Managing Dept.: Public Works

Contract No.: _____

Project Mgr.: Burton Jones

Insurers Affording Coverages:

Insurer A:

Insurer B:

Insurer C:

Insurer D:

INSR LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YYYY)	POLICY EXPIRATION DATE (MM/DD/YYYY)	LIMITS OF LIABILITY	
	Commercial General Liability Policy As defined in the Policy, does the Policy provide:				Each Occurrence	\$
					General Aggregate	\$
	<input type="checkbox"/> Yes <input type="checkbox"/> No -- Completed Operations/Products				Completed Operations /Products Aggregate	\$
	<input type="checkbox"/> Yes <input type="checkbox"/> No -- Contractual Liability				Personal & Advertising Injury	\$
	<input type="checkbox"/> Yes <input type="checkbox"/> No -- Explosion				Deductible or Self Insured Retention	\$
	<input type="checkbox"/> Yes <input type="checkbox"/> No -- Collapse					
	<input type="checkbox"/> Yes <input type="checkbox"/> No -- Underground					
	<input type="checkbox"/> Yes <input type="checkbox"/> No -- Contractors/ Subcontractors Work					
	<input type="checkbox"/> Yes <input type="checkbox"/> No -- Aggregate Limits per Project Form CG 2503					
	<input type="checkbox"/> Yes <input type="checkbox"/> No -- Additional Insured Form – CG 2010					
	<input type="checkbox"/> Yes <input type="checkbox"/> No -- 30 Day Notice of Cancellation Form – CG 0205					
	<input type="checkbox"/> Yes <input type="checkbox"/> No -- Waiver of Subrogation Form – CG 2404					
	Pollution/ Environmental Impairment Policy				Occurrence	\$
					Aggregate	\$

INSR LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YYYY)	POLICY EXPIRATION DATE (MM/DD/YYYY)	LIMITS OF LIABILITY	
	Auto Liability Policy As defined in the Policy, does the Policy provide:				CSL	\$
	<input type="checkbox"/> Yes <input type="checkbox"/> No -- Any Auto				Bodily Injury (Per Accident)	\$
	<input type="checkbox"/> Yes <input type="checkbox"/> No -- All Owned Autos				Bodily Injury (Per Person)	\$
	<input type="checkbox"/> Yes <input type="checkbox"/> No -- Non-Owned Autos				Property Damage (Per Accident)	\$
	<input type="checkbox"/> Yes <input type="checkbox"/> No -- Hired Autos					
	<input type="checkbox"/> Yes <input type="checkbox"/> No -- Waiver of Subrogation – CA0444					
	<input type="checkbox"/> Yes <input type="checkbox"/> No -- 30 Day Notice of Cancellation – CA0244					
	<input type="checkbox"/> Yes <input type="checkbox"/> No -- Additional Insured – CA2048					
	<input type="checkbox"/> Yes <input type="checkbox"/> No -- MCS 90					
	Excess Liability <input type="checkbox"/> Umbrella Form				Occurrence	\$
	<input type="checkbox"/> Excess Liability Follow Form				Aggregate	\$
	Workers Compensation and Employers Liability As defined in the Policy, does the Policy provide:				<input type="checkbox"/> Statutory	
	<input type="checkbox"/> Yes <input type="checkbox"/> No -- Waiver of Subrogation – WC420304				Each Accident	\$
	<input type="checkbox"/> Yes <input type="checkbox"/> No -- 30 Day Notice of Cancellation – WC420601				Disease – Policy Limit	\$
					Disease – Each Employee	\$
	Is a Builders Risk or Installation Insurance Policy provided? <input type="checkbox"/> Yes <input type="checkbox"/> No					\$
	<input type="checkbox"/> Yes <input type="checkbox"/> No -- Is the City shown as loss payee/mortgagee?					
	Professional Liability As defined in the Policy, does the Policy provide:				Each Claim	\$
	<input type="checkbox"/> Yes <input type="checkbox"/> No -- 30 Day Notice of Cancellation				Deductible or Self Insured Retention	\$
	Retroactive Date: _____					

This form is for informational purposes only and certifies that policies of insurance listed above have been issued to insured named above and are in force at this time. Notwithstanding any requirements, term or condition of any contract or other document with respect to which this certificate may be issued or may pertain, insurance afforded by policies described herein is subject to all terms, exclusions and conditions of such policies.

CERTIFICATE HOLDER:

DATE ISSUED: _____

City of Austin
Contract Management Department
P.O. Box 1088
Austin, Texas 78767

AUTHORIZED REPRESENTATIVE SIGNATURE
Licensed Insurance Agent

END

Bidding Requirements, Contract Forms and Conditions of the Contract
TEXAS SALES AND USE TAX EXEMPTION CERTIFICATE
Section 00670

City of Austin, Texas
P.O. Box 1088
Austin, Texas 78767

CONTRACTOR/PURCHASER: _____

Street Address: _____

City, State, ZIP Code: _____

PROJECT: Dynamic Parking System

Project Manager: Burton Jones

FDU No.: 8400 2507 9027

CIP ID No. 6735.043

Description of items to be purchased or as described on the attached order or invoice:

The Contractor may purchase all labor, materials, supplies, and equipment to be incorporated in the City of Austin realty, including easements, or completely consumed at the Project jobsite and services required by or integral to the performance of the contract for the Project without paying sales or use tax in accordance with State Comptroller Rule 3.291.

Contractor/Purchaser claims this exemption for the following reason: This contract is to be performed for the City of Austin, a tax exempt entity under the Texas Tax Code.

I understand that I will be liable for payment of sales and use taxes which may become due for failure to comply with the provisions of the Tax Code. I also understand that it is a criminal offense to give an exemption certificate to the contractor for taxable items that I know, at the time of purchase, will be used in a manner other than that expressed in this certificate and depending on the amount of tax evaded, the offense may range from a Class B misdemeanor to a felony of the second degree.

City of Austin, Texas	Title	Date
 ELAINE HART	CHIEF FINANCIAL OFFICER	March 20, 2014

CONTRACTOR/PURCHASER: _____

By: _____

Title: _____

Date: _____

NOTE: This certificate cannot be issued for the purchase, lease, or rental of a motor vehicle. THIS CERTIFICATE DOES NOT REQUIRE A NUMBER TO BE VALID. Sales and Use Tax "Exemption Numbers" or "Tax Exempt" Numbers do not exist. This certificate should be furnished to the supplier. Do not send the completed certificate to the Comptroller of Public Accounts.

End

Bidding Requirements, Contract Forms and Conditions of the Contract
NON-USE OF ASBESTOS AFFIDAVIT (CONTRACTOR PRIOR TO
CONSTRUCTION)
Section 00680

STATE OF TEXAS
COUNTY OF TRAVIS

BEFORE ME, the undersigned authority, personally appeared the Affiant who, being by me first duly sworn, upon oath deposed and stated:

"My name is _____, hereinafter known as Affiant.

"I am over the age of 18 years and I have never been convicted of a crime. I am the _____ of _____ hereinafter known as CONTRACTOR.

"I am fully competent to make this affidavit. I have personal knowledge of the facts set forth below and they are all true and correct.

"WHEREAS CONTRACTOR has submitted a bid to the City of Austin as the Prime CONTRACTOR and anticipates being awarded a contract for the construction of _____, located at _____, Austin, Texas, hereinafter known as Project, for the City of Austin, Texas, hereinafter known as OWNER, and

"WHEREAS asbestos in a dust form is a recognized health hazard, and

"WHEREAS the OWNER desires not to have any asbestos containing materials used or incorporated into the construction of the Project;

"THEREFORE the CONTRACTOR affirms and understands the following:

1. The CONTRACTOR, any person, firm or organization representing or represented by the CONTRACTOR, or employed by the CONTRACTOR shall not cause or allow any material to be incorporated into the construction of the project, or allow any building material on the project site that is an asbestos containing material or any other material defined as containing asbestos by any laws, rules or regulations promulgated by the United States Government, the State of Texas or any governmental organization or agency operating under the authority of either of those entities.
2. Realizing that there might be some materials in which a satisfactory non-asbestos containing material could not be obtained, the Consultant has received prior approval from the OWNER before specifying any such asbestos containing material. Those approved materials are the only asbestos containing materials that are exempt from the above prohibition.
3. The CONTRACTOR certifies and affirms their understanding that if any asbestos containing materials not approved by the City of Austin for inclusion into the Project, are determined, as a result of any inspection and sample analysis performed by an individual(s) and/or firm(s) certified and/or licensed to perform such inspection by the United States Government and/or the State of Texas, to have been incorporated into the construction of the Project, or brought onto the site of the Project, the OWNER shall look to the CONTRACTOR for reimbursement of any and all costs incurred in the removal and/or other abatement of said asbestos containing materials.

Non-Use of Asbestos Affidavit (Contractor Prior to Construction) / 00680

4. CONTRACTOR further understands that OWNER shall also look to the CONTRACTOR for any and all damages to OWNER which result from the inability of the OWNER to use any portion or all of the Project due to the incorporation of asbestos containing materials that have not been approved by OWNER.
5. CONTRACTOR further understands that OWNER will pursue reimbursement of any said cost and compensation for any said damages from the CONTRACTOR by any and every means within OWNER's right and power.

Signature of Affiant: _____

**STATE OF TEXAS
COUNTY OF TRAVIS**

ON _____, 20____, personally appeared _____
_____ and been duly sworn by me, subscribed to the
foregoing affidavit and has stated that the facts stated therein are true and correct.

Notary Public, State of Texas

Printed Name of Notary

My Commission Expires: _____

End

Bidding Requirements, Contract Forms and Conditions of the Contract
NON-USE OF ASBESTOS AFFIDAVIT (CONTRACTOR AFTER
CONSTRUCTION)
Section 00681

STATE OF TEXAS
COUNTY OF TRAVIS

BEFORE ME, the undersigned authority, personally appeared the Affiant who, being by me first duly sworn, upon oath deposed and stated:

"My name is _____, hereinafter known as Affiant.

"I am over the age of 18 years and I have never been convicted of a crime. I am the _____ of _____ hereinafter known as CONTRACTOR.

"I am fully competent to make this affidavit. I have personal knowledge of the facts set forth below and they are all true and correct.

"WHEREAS CONTRACTOR was awarded a Contract for, and was the Prime CONTRACTOR for the construction of _____, located at _____, Austin, Texas, hereinafter known as Project, for the City of Austin, Texas, hereinafter known as OWNER, and

"WHEREAS asbestos in a dust form is a recognized health hazard, and

"WHEREAS the OWNER desires not to have any asbestos containing materials used or incorporated into the construction of the Project;

"THEREFORE the CONTRACTOR affirms and understands the following:

1. The CONTRACTOR, any person, firm or organization representing or represented by the CONTRACTOR, or employed by the CONTRACTOR has not caused or allowed any material to be incorporated into the construction of the project, or allowed any building material on the project site that is an asbestos containing material or any other material defined as containing asbestos by any laws, rules or regulation promulgated by the United States Government, the State of Texas or any governmental organization or agency operating under the authority of either of those entities.
2. Realizing that there were some materials in which a satisfactory non-asbestos containing material could not be obtained, the Consultant received prior approval from the OWNER before specifying any such asbestos containing material. Those approved materials were the only asbestos containing materials incorporated into the construction of the Project and are listed below, with their locations:

3. The CONTRACTOR certifies and affirms their understanding that if any asbestos containing materials not approved by the City of Austin for inclusion into the Project, are determined, as a result of any inspection and sample analysis performed by an individual(s) and/or firm(s) certified and/or licensed to perform such inspection by the United States Government and/or the State of Texas, to have been incorporated into the

Non-Use of Asbestos Affidavit (Contractor After Construction) / 00681

construction of the Project, or brought onto the site of the Project, the OWNER shall look to the CONTRACTOR for reimbursement of any and all costs incurred in the removal and/or other abatement of said asbestos containing materials.

4. CONTRACTOR further understands that OWNER shall also look to the CONTRACTOR for any and all damages to OWNER which result from the inability of the OWNER to use any portion or all of the Project due to the incorporation of asbestos containing materials that have not been approved by OWNER.
5. CONTRACTOR further understands that OWNER will pursue reimbursement of any said cost and compensation for any said damages from the CONTRACTOR by any and every means within OWNER's right and power.

Signature of Affiant: _____

**STATE OF TEXAS
COUNTY OF TRAVIS**

ON _____, 20____, personally appeared _____
_____ and been duly sworn by me, subscribed to the
foregoing affidavit and has stated that the facts stated therein are true and correct.

Notary Public, State of Texas

Printed Name of Notary

My Commission Expires: _____

End

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ARTICLE 1 – DEFINITIONS

Whenever used in these General Conditions or in the other Contract Documents the following terms have the meanings indicated which are applicable to both the singular and plural thereof:

- 1.1 Addendum** - Written instruments issued by the Contract Awarding Authority which clarify, correct or change the bidding requirements or the Contract Documents prior to the Due Date. "Addenda" is the plural form of Addendum.
- 1.2 Agreement** - Prescribed form, Section 00500.
- 1.3 Alternative Dispute Resolution** - The process by which a disputed Claim may be settled if the OWNER and the CONTRACTOR cannot reach an agreement between themselves, as an alternative to litigation.
- 1.4 Bid** - A complete, properly signed response to an Invitation for Bid that, if accepted, would bind the Bidder to perform the resultant Contract.
- 1.5 Bidder** - A person, firm, or entity that submits a Bid in response to a Solicitation. Any Bidder may be represented by an agent after submitting evidence demonstrating the agent's authority. The agent cannot certify as to his own agency status.
- 1.6 Bid Documents** - The advertisement or Invitation for Bids, instructions to Bidders, the Bid form, the Contract Documents and Addenda.
- 1.7 Calendar Day** - Any day of the week; no days being excepted. Work on Saturdays, Sundays, and/or Legal Holidays shall be coordinated with OWNER.
- 1.8 Change Directive** - A written directive to CONTRACTOR, signed by OWNER, ordering a change in the Work and stating a proposed basis for adjustment, if any, in the Contract Amount or Contract Time, or both. A Change Directive may be used in the absence of total agreement on the terms of a Change Order. A Change Directive does not change the Contract Amount or Contract Time, but is evidence that the parties expect that the change directed or documented by a Change Directive will be incorporated in a subsequently issued Change Order.
- 1.9 Change Orders** - Written agreements entered into between CONTRACTOR and OWNER authorizing an addition, deletion, or revision to the Contract, issued on or after the Execution Date of the Agreement.
- 1.10 Claim** - A written demand seeking, as a matter of right, adjustment or interpretation of Contract terms, payment of money, extension of time or other relief with respect to the terms of the Contract.
- 1.11 Contract** - The binding legal agreement between the OWNER and the CONTRACTOR. The Contract represents the entire and integrated agreement between OWNER and CONTRACTOR for performance of the Work, as evidenced by the Contract Documents.
- 1.12 Contract Amount** - The moneys payable by OWNER to CONTRACTOR for completion of the Work in accordance with the Contract Documents.
- 1.13 Contract Awarding Authority** - A City department authorized to enter into Contracts on behalf of the City.
- 1.14 Contract Documents** - Project Manual, Drawings, Addenda and Change Orders.
- 1.15 Contract Time** - The number of days allowed for completion of the Work as defined by the Contract. When any period is referred to in days, it will be computed to exclude the first and include the last day of such period. A day of twenty-four hours measured from midnight to the next midnight will constitute a day.
- 1.16 CONTRACTOR** - The individual, firm, corporation, or other business entity with whom OWNER has entered into the Contract for performance of the Work.

- 1.17 Critical Path** - The longest series of tasks that runs consecutively from the beginning to the end of the project, as determined by duration and workflow sequence. This longest path sets the managerial standard for how quickly a project can be completed, given appropriate resources.
- 1.18 Drawings** - Those portions of the Contract Documents which are graphic representations of the scope, extent and character of the Work to be furnished and performed by CONTRACTOR and which have been approved by OWNER. Drawings may include plans, elevations, sections, details, schedules and diagrams. Shop Drawings are not Drawings as so defined.
- 1.19 Due Date** - The date and time specified for receipt of Bids.
- 1.20 Engineer/Architect (E/A)** - The OWNER's design professional identified as such in the Contract. The titles of "Architect/Engineer," "Architect" and "Engineer" used in the Contract Documents shall read the same as Engineer/Architect (E/A). Nothing contained in the Contract Documents shall create any contractual or agency relationship between E/A and CONTRACTOR.
- 1.21 Equal** - The terms "equal" or "approved equal" shall have the same meaning.
- 1.22 Execution Date** - Date of last signature of the parties to the Agreement.
- 1.23 Field Order** - A written order issued by Owner's Representative which orders minor changes in the Work and which does not involve a change in the Contract Amount or the Contract Time.
- 1.24 Final Completion** - The point in time when OWNER determines that all Work has been completed and final payment to CONTRACTOR will be made in accordance with the Contract Documents.
- 1.25 Force Account** - a basis of payment for the direct performance of Work with payment based on the actual cost of the labor, equipment and materials furnished and consideration for overhead and profit as set forth in Section 11.5.
- 1.26 Inspector** - The authorized representative of any regulatory agency that has jurisdiction over any portion of the Work.
- 1.27 Invitation for Bid (IFB)** - a Solicitation requesting pricing for a specified Good or Service which has been advertised for Bid in a newspaper and/or the Internet.
- 1.28 Legal Holidays**
- 1.28.1** The following are recognized by the OWNER:
- | <u>Holiday</u> | <u>Date Observed</u> |
|------------------------------------|-----------------------------|
| New Year's Day | January 1 |
| Martin Luther King, Jr.'s Birthday | Third Monday in January |
| President's Day | Third Monday in February |
| Memorial Day | Last Monday in May |
| Independence Day | July 4 |
| Labor Day | First Monday in September |
| Veteran's Day | November 11 |
| Thanksgiving Day | Fourth Thursday in November |
| Friday after Thanksgiving | Friday after Thanksgiving |
| Christmas Eve | December 24 |
| Christmas Day | December 25 |
- 1.28.2** If a Legal Holiday falls on Saturday, it will be observed on the preceding Friday.
If a Legal Holiday falls on Sunday, it will be observed on the following Monday.

- 1.28.3** Christmas Eve is observed only if it falls on a Monday through Thursday. If Christmas Eve falls on a Friday, that day is observed as the Christmas Day holiday.
- 1.29 Milestones** - A significant event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Work.
- 1.30 Notice to Proceed** - A Written Notice given by OWNER to CONTRACTOR fixing the date on which the Contract Times will commence to run and on which CONTRACTOR shall start to perform CONTRACTOR's obligations under the Contract Documents.
- 1.31 OWNER** - City of Austin, Texas, a municipal corporation, home rule city and political subdivision organized and existing under the laws of the State of Texas, acting through the City Manager or his/her designee, officers, agents or employees to administer design and construction of the Project.
- 1.32 Owner's Representative** - The designated representative of the OWNER. The Owner's Representative will be identified at the pre-construction conference.
- 1.33 Partial Occupancy or Use** - Use by OWNER of a substantially completed part of the Work for the purpose for which it is intended (or a related purpose) prior to Substantial Completion of all the Work, provided OWNER and CONTRACTOR have accepted in writing the responsibilities assigned to each of them for payments, retainage if any, security, maintenance, utilities, corrective work, insurance and warranties.
- 1.34 Project** - The subject of the Work and its intended result.
- 1.35 Project Manual** - That portion of the Contract Documents which may include the following: introductory information; bidding requirements, Contract forms and General and Supplemental General Conditions; General Requirements; Specifications; Drawings; MBE/WBE or DBE Procurement Program Package; Project Safety Manual; and Addenda.
- 1.36 Resident Project Representative** - The authorized representative of E/A who may be assigned to the site or any part thereof.
- 1.37 Shop Drawings** - All drawings, diagrams, illustrations, schedules and other data or information which are specifically prepared or assembled by or for CONTRACTOR and submitted by CONTRACTOR as required by the Contract Documents.
- 1.38 Specifications** - Those portions of the Contract Documents consisting of written technical descriptions as applied to the Work, which set forth to CONTRACTOR, in detail, the requirements which must be met by all materials, equipment, construction systems, standards, workmanship, equipment and services in order to render a completed and useful project.
- 1.39 Solicitation** - Solicitation means, as applicable, an Invitation for Bid or a Request for Proposal.
- 1.40 Substantial Completion** - The stage in the progress of the Work when the Work, or designated portion thereof, is sufficiently complete in accordance with the Contract Documents so OWNER can occupy or utilize the Work for its intended use, as evidenced by a Certificate of Substantial Completion approved by OWNER.
- 1.41 Subcontractor** - An individual, firm, corporation, or other business entity having a direct contract with CONTRACTOR for the performance of a portion of the Work under the Contract.
- 1.42 Sub-Subcontractor** - A person or entity who has a direct or indirect contract with a Subcontractor to perform a portion of the work.

- 1.43 Superintendent** - The representative of CONTRACTOR authorized in writing to receive and fulfill instructions from the Owner's Representative, and who shall supervise and direct construction of the Work.
- 1.44 Supplemental General Conditions** - The part of the Contract Documents which amends or supplements the General Conditions. All General Conditions which are not so amended or supplemented remain in full force and effect.
- 1.45 Supplier** - An individual or entity having a direct contract with CONTRACTOR or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by CONTRACTOR or any Subcontractor.
- 1.46 Time Extension Request** - An approved request for time extension on a form acceptable to OWNER.
- 1.47 Work** - The entire completed construction, or the various separately identifiable parts thereof, required to be furnished under the Contract Documents.
- 1.48 Working Day** - Any day of the week, not including Saturdays, Sundays, or Legal Holidays in which conditions under the CONTRACTOR's control will permit work for a continuous period of not less than seven (7) hours between 7:00 a.m. and 6:00 p.m. Upon agreement with Owner's Representative, work on Saturdays, Sundays and/or Legal Holidays may be allowed and will be considered a Working Day.
- 1.49 Working Hours**
 - 1.49.1 Working Day Contract:** All Work shall be done between 7:00 a.m. and 6:00 p.m. unless authorized by Owner's Representative. However, emergency work may be done without prior permission as indicated in paragraph 6.11.5. If night Work is authorized and conditions under CONTRACTOR's control will permit Work for a continuous period of not less than seven (7) hours between 12:00 a.m. and 11:59 p.m. it will be considered a Working Day. Night Work may be revoked at any time by OWNER if CONTRACTOR fails to maintain adequate equipment and supervision for the prosecution and control of the night Work.
 - 1.49.2 Calendar Day Contract:** All Work shall be done between 7:00 a.m. and 6:00 p.m. unless authorized by Owner's Representative. However, emergency work may be done without prior permission as indicated in paragraph 6.11.5. Night Work may be revoked at any time by OWNER if CONTRACTOR fails to maintain adequate equipment and supervision for the prosecution and control of the night Work.
- 1.50 Written Notice** - Written communication between OWNER and CONTRACTOR. Written Notice shall be deemed to have been duly served if delivered in person to Owner's Representative or CONTRACTOR's duly authorized representative, or if delivered at or sent by registered or certified mail to the attention of Owner's Representative or CONTRACTOR's duly authorized representative at the last business address known to the party giving notice.

ARTICLE 2 - PRELIMINARY MATTERS

- 2.1 Delivery of Agreement, Bonds, Insurance, etc.:** Within five (5) Working Days after written notification of award of Contract, CONTRACTOR shall deliver to OWNER signed Agreement, Bond(s), Insurance Certificate(s) and other documentation required for execution of Contract.
- 2.2 Copies of Documents:** OWNER shall furnish to CONTRACTOR one (1) Project Manual with original signatures, one (1) copy of the executed Project Manual, one (1) set of Drawings

and one (1) copy of the Contract Documents in .pdf format. Additional copies will be furnished, upon request, at the cost specified in the Supplemental General Conditions."

2.3 Commencement of Contract Times; Notice to Proceed: The Contract Time(s) will begin to run on the day indicated in the Notice to Proceed. Notice to Proceed will be given at any time within sixty (60) calendar days after the Execution Date of the Agreement, unless extended by written agreement of the parties.

2.4 Before Starting Construction:

2.4.1 No Work shall be done at the site prior to the preconstruction conference without OWNER's approval. Before undertaking each part of the Work, CONTRACTOR shall carefully study the Contract Documents to check and verify pertinent figures shown thereon compare accurately to all applicable field measurements. CONTRACTOR shall promptly report in writing to Owner's Representative any conflict, error, ambiguity or discrepancy which CONTRACTOR may discover and shall obtain a written interpretation or clarification from Owner's Representative before proceeding with any Work affected thereby. CONTRACTOR shall be liable to OWNER for failure to report any conflict, error, ambiguity or discrepancy in the Contract Documents of which CONTRACTOR knew or reasonably should have known.

2.4.2 It is mutually agreed between CONTRACTOR and OWNER that successful completion of the Work within the Contract completion date is of primary importance. Therefore, the CONTRACTOR hereby agrees to submit to the Owner's Representative for review and approval, or acceptance, as appropriate, all information requested within this section, including a Baseline Schedule, no later than five working days prior to the preconstruction conference. The Owner's Representative will schedule the preconstruction conference upon the timely submittal of the required documents, unless time is extended by written mutual agreement. CONTRACTOR will submit the following:

- .1** A proposed Baseline Schedule developed using Microsoft Project software, unless otherwise approved by Owner's Representative ("Baseline Schedule") to confirm that all Work will be completed within the Contract time. The Baseline Schedule must (i) indicate the times (number of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract Documents, (ii) identify the Critical Path for completing the Work, (iii) identify when all Subcontractors will be utilized, and (iv) take into consideration any limitations on Working Hours, including baseline Rain Days on Calendar Day Contracts, and (v) be prepared accordance with Section 01310, Schedules and Reports, if applicable; otherwise in accordance with Section 01300, Submittals. This Baseline Schedule, a copy of which shall be made available at the job site(s), must contain sufficient detail to indicate that the CONTRACTOR has properly identified required Work elements and tasks, has provided for a sufficient and proper workforce and integration of Subcontractors, has provided sufficient resources and has considered the proper sequencing of the Work required to result in a successful Project that can be completed within the Contract time;
- .2** An organizational chart showing the principals and management personnel who will be involved with the Work, including each one's responsibilities for the Work;
- .3** To the extent not set forth in the Section 00400 Statement of Contractor's Experience, a complete listing of the CONTRACTOR's employees proposed for the Work. List each one by name and job title, and show length of employment with CONTRACTOR;

- .4 To the extent not set forth in the Section 00410 Statement of Bidder's Safety Experience, a discussion and confirmation of the CONTRACTOR's commitment to safety by providing a copy of its employee's safety handbook and the safety records for the past three years of CONTRACTOR's proposed project manager and Superintendent;
- .5 A preliminary schedule of Shop Drawing and sample submittals;
- .6 A preliminary schedule of values for all of the Work, subdivided into component parts in sufficient detail to serve as the basis for progress payments during construction. Such prices will be deemed to include an appropriate amount of overhead and profit applicable to each item of Work;
- .7 To the extent not set forth in the Section 00400 Statement of Contractor's Experience, a letter designating CONTRACTOR's Superintendent and project manager, and a confirmation of past project experience for the CONTRACTOR's Superintendent and project manager specifically intended for the Work;
- .8 A letter from CONTRACTOR and Subcontractor(s) listing salaried specialists. A salaried specialist is anyone except an hourly worker whose wage rate is governed by Section 00830 of this agreement;
- .9 A letter designating the "Competent Person(s)" on general safety and excavation safety measures along with certifications or other documentation of the safety representative's qualifications;
- .10 If applicable, an excavation safety system plan;
- .11 If applicable, a plan illustrating proposed locations of temporary facilities;
- .12 A completed Non-Use of Asbestos Affidavit (Prior to Construction);
- .13 A letter designating the Texas Registered Professional Land Surveyor for layout of the Work, if the Work requires the services of a surveyor; and
- .14 Appropriate safety training certificates for workers that will initially be on site;
- .15 A certificate of worker's compensation insurance coverage for all persons providing services on the Project (refer to 5.2.1.3 in Section 00700 for definition of persons providing services on the Project);
- .16 A Construction Equipment Emissions Reduction Plan.

2.4.3 Neither the acceptance nor the approval of any of the submittals required in paragraph 2.4.2, above, will constitute the adoption, affirmation, or direction of the CONTRACTOR'S means and methods.

2.5 Preconstruction Conference: Prior to commencement of Work at the site, CONTRACTOR must attend a preconstruction conference with Owner's Representative and others, as set forth in Division 1. Additionally, prior to commencement of work, the CONTRACTOR shall host a preconstruction conference for the Subcontractors identified on the originally approved compliance plan, Owner's Representative and others, as set forth in Division 1. The CONTRACTOR shall notify all Subcontractors five (5) working days prior to the preconstruction conference. If the CONTRACTOR has included Subcontractors in the initial preconstruction conference, the additional Subcontractor preconstruction conference will not be required.

2.6 Initially Acceptable Schedules: Unless otherwise provided in the Contract Documents, CONTRACTOR shall obtain approval of Owner's Representative on the Baseline Schedule submitted in accordance with paragraph 2.4.2.1 and Division 1 before the first progress payment will be made to CONTRACTOR. The Baseline Schedule must provide for an orderly

progression of the designated portion of the Work to completion within any specified Milestones and Contract Times. Acceptance of the schedule by Owner's Representative will neither impose on Owner's Representative responsibility or liability for the sequencing, scheduling or progress of the Work nor interfere with or relieve CONTRACTOR from CONTRACTOR's full responsibility for such Work. CONTRACTOR's schedule of Shop Drawings and sample submissions must provide an acceptable basis for reviewing and processing the required submittals. CONTRACTOR's schedule of values must conform to the requirements set forth in Division 1.

ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.1 Intent:

3.1.1 The intent of the Contract Documents is to include all information necessary for the proper execution and timely completion of the Work by CONTRACTOR. The CONTRACTOR will execute the Work described in and reasonably inferable from the Contract Documents as necessary to produce the results indicated by the Contract Documents. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all. In cases of disagreement, the following order of precedence shall generally govern (top item receiving priority of interpretation):

- Signed Agreement
- Addendum to the Contract Documents, including approved changes
- Supplemental General Conditions
- General Conditions
- Other Bidding Requirements and Contract Forms
- Special Provisions to the Standard Technical Specifications
- Special Specifications
- Standard Technical Specifications
- Drawings (figured dimensions shall govern over scaled dimensions)
- Project Safety Manual (if applicable),

with the understanding that a common sense approach will be utilized as necessary so that the Contract Documents produce the intended response.

3.1.2 Unless otherwise stated in the Contract Documents, words that have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

3.2 Reporting and Resolving Discrepancies: If, during the performance of the Work, CONTRACTOR discovers any conflict, error, ambiguity or discrepancy within the Contract Documents or between the Contract Documents and any provisions of any such law or regulation applicable to the performance of the Work or of any such standard, specification, manual or code or instructions of any Supplier, CONTRACTOR shall report it to Owner's Representative in writing at once, and CONTRACTOR shall not proceed with the Work affected thereby until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in paragraph 3.3.1 or 3.3.2. CONTRACTOR shall be liable to OWNER for failure to report any such conflict, error, ambiguity or discrepancy of which CONTRACTOR knew or reasonably should have known.

3.3 Amending and Supplementing Contract Documents:

3.3.1 The Contract Documents may be amended to provide for additions, deletions and revisions in the Work or to modify the terms and conditions thereof in one or more of the following ways:

- .1 Change Order.
 - .2 Change Directive.
 - .3 Time Extension Request.
- 3.3.2** In addition, the requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, in one or more of the following ways:
- .1 Field Order.
 - .2 Review of a Shop Drawing or sample.
 - .3 Written interpretation or clarification.
- 3.4** Reuse of Documents Prohibited: CONTRACTOR and any Subcontractor or Supplier or other person or organization performing or furnishing any of the Work under a direct or indirect contract with OWNER: (i) shall not have or acquire any title to or ownership rights in any of the Drawings, Specifications or other documents (or copies of any thereof) prepared by or bearing the seal of E/A or E/A's consultant, and (ii) shall not reuse any of such Drawings, Specifications, other documents or copies on extensions of the Project or any other project without written consent of OWNER and E/A.
- 3.5** In the event of the breach by the OWNER or CONTRACTOR of any of its obligations under the Contract, so as to support a claim by the other party, the provisions of this Contract will be equitably construed to allow the resolution of such a claim and all of the other provisions of this Contract shall continue in full force and effect as to the rights, responsibilities, and remedies of the OWNER and CONTRACTOR.

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

- 4.1 Availability of Lands:** The OWNER will provide access to all land and interests in land required for the Work and will notify CONTRACTOR of any restrictions in such access. CONTRACTOR may make a claim if OWNER fails to provide timely access to the Work. CONTRACTOR must obtain any additional temporary construction facilities, stockpiling or storage sites not otherwise provided.
- 4.2 Subsurface and Physical Conditions:**
- 4.2.1** CONTRACTOR specifically represents that it has carefully examined the plans, the geotechnical report, if any, and the site of the proposed Work and is thoroughly familiar with all of the conditions surrounding construction of the Project, having had the opportunity to conduct any and all additional inquiry, tests and investigation that he/she deems necessary and proper. CONTRACTOR acknowledges the receipt of the geotechnical report, if any, and agrees that the report, while it is an accurate record of the geotechnical conditions at the boring locations, is not a guarantee of specific site conditions which may vary between boring locations.
 - 4.2.2** CONTRACTOR must notify OWNER in writing as soon as reasonably possible, but no later than three (3) calendar days, if unforeseen conditions are encountered at the site which are (i) subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Contract Documents or (ii) unknown physical conditions of an unusual nature, that differ materially from those normally encountered in the type of work being performed under this Contract. CONTRACTOR may not disturb the conditions until OWNER conducts an investigation. Owner's Representative and E/A will promptly investigate such

conditions with E/A. If it is determined that such conditions differ materially and cause an increase or decrease in the CONTRACTOR's cost of or time required for performance of any part of the Work, Owner's Representative will recommend an equitable adjustment in the Contract Amount or Contract Time, or both. If it is determined that such conditions are not materially different from those indicated in the Contract Documents, Owner's Representative will notify CONTRACTOR in writing of such findings and the Contract will not be adjusted. CONTRACTOR may dispute such a determination in accordance with Article 16.

4.2.3 Notwithstanding any other provision of this Contract, CONTRACTOR is solely responsible for the location and protection of any and all public utility lines and utility customer service lines in the Work area. "Public utility lines" means the utility distribution and supply system, and "utility customer service lines" means the utility lines connecting customers to the utility distribution and collection system. Generally, existing utility customer service line connections are not shown on the Drawings. CONTRACTOR shall notify "One Call" and exercise due care to locate, mark, uncover and otherwise protect all such lines in the construction zone and any of CONTRACTOR's work or storage areas. CONTRACTOR's responsibility for the location and protection of utilities is primary and nondelegable. CONTRACTOR shall indemnify or reimburse such expenses or costs (including fines that may be levied against OWNER) that may result from unauthorized or accidental damage to all public lines and utility customer service lines in the work area. OWNER reserves the right to repair any damage CONTRACTOR causes to such utilities at CONTRACTOR's expense. If a public line and/or customer service line is damaged by CONTRACTOR, CONTRACTOR shall give verbal notice within one (1) hour and written notice within twenty-four (24) hours to the Owner's Representative.

4.2.4 CONTRACTOR shall take reasonable precaution to avoid disturbing primitive records and antiquities of archaeological, paleontological or historical significance. No objects of this nature shall be disturbed without written permission of OWNER and Texas Historical Commission. When such objects are uncovered unexpectedly, CONTRACTOR shall stop all Work in close proximity and notify Owner's Representative and Texas Historical Commission of their presence and shall not disturb them until written permission and permit to do so is granted. All primitive rights and antiquities uncovered on OWNER's property shall remain property of State of Texas, Texas Historical Commission conforming to Texas Natural Resources Code. If it is determined by OWNER, in consultation with Texas Historical Commission, that exploration or excavation of primitive records or antiquities on Project site is necessary to avoid loss, CONTRACTOR shall cooperate in salvage work attendant to preservation. If the Work stoppage or salvage work causes an increase in CONTRACTOR's cost of, or time required for, performance of the Work, the Contract Amount and/or Contract Time will be equitably adjusted.

4.3 Reference Points: Unless otherwise specified, all control lines and bench marks suitable for use in layout will be furnished by OWNER. Lay out of the Work shall be performed in accordance with Division 1. Controls, bench marks and property boundary markers shall be carefully preserved by CONTRACTOR by use of flags, staffs or other visible devices and in case of destruction or removal by CONTRACTOR or its employees, such controls and bench marks shall be replaced by a Registered Professional Land Surveyor at CONTRACTOR's expense. City of Austin survey monuments damaged by CONTRACTOR will be reestablished by OWNER at CONTRACTOR's expense.

4.4 Hazardous Materials:

4.4.1 To the extent provided by applicable law, OWNER shall be responsible for any hazardous material uncovered or revealed at the site which was not shown,

indicated or identified in the Contract Documents to be within the scope of the Work and which may present a substantial danger to persons or property exposed thereto in connection with the Work at the site. CONTRACTOR shall immediately notify Owner's Representative of any suspected hazardous materials encountered before or during performance of the Work and shall take all necessary precautions to avoid further disturbance of the materials.

- 4.4.2** CONTRACTOR shall be responsible for any hazardous materials brought to the site by CONTRACTOR, Subcontractor, Suppliers or anyone else for whom CONTRACTOR is responsible.
- 4.4.3** No asbestos-containing materials shall be incorporated into the Work or brought on Project site without prior approval of OWNER. The CONTRACTOR shall not knowingly use, specify, request or approve for use any asbestos containing materials or lead-based paint without the OWNER'S written approval. When a specific product is specified, the CONTRACTOR shall endeavor to verify that the product does not include asbestos containing material.
- 4.4.4** Refer to Division 1 for hazardous material definitions and procedures.
 - .1** Unless otherwise expressly provided in the Contract Documents to be part of the Work, CONTRACTOR is not responsible for any unexpected Hazardous Materials encountered at the site. Upon encountering any Hazardous Conditions, CONTRACTOR must stop Work immediately in the affected area and duly notify OWNER and, if required by applicable law or regulations, all government or quasi-government entities with jurisdiction over the Project or site.
 - .2** Upon receiving notice of the presence of suspected Hazardous Materials, OWNER shall take the necessary measures required to ensure that the Hazardous Materials are remediated or rendered harmless. Such necessary measures shall include OWNER retaining qualified independent experts to (i) ascertain whether Hazardous Materials have actually been encountered, and, if they have been encountered, (ii) prescribe the remedial measures that OWNER must take either to remove the Hazardous Materials or render the Hazardous Materials harmless.
 - .3** CONTRACTOR shall be obligated to resume Work at the affected area of the Project only after OWNER's Representative provides written certification that (i) the Hazardous Materials have been removed or rendered harmless and (ii) all necessary approvals have been obtained from all government and quasi-government entities having jurisdiction over the Project or site. The CONTRACTOR shall be responsible for continuing the Work in the unaffected portion of the Project and site.
 - .4** CONTRACTOR will be entitled, in accordance with these General Conditions, to an adjustment in its Contract Amount and/or Contract Time(s) to the extent CONTRACTOR's cost and/or time of performance have been adversely impacted by the presence of Hazardous Materials.
 - .5** Notwithstanding the preceding provisions of this Section 4.1, OWNER is not responsible for Hazardous Materials introduced to the Site by CONTRACTOR, Subcontractors or anyone for whose acts they may be liable. CONTRACTOR shall indemnify, defend and hold harmless OWNER and OWNER's officers, directors, employees and agents from and against all claims, losses, damages, liabilities and expenses, including attorneys' fees and expenses, arising out of or resulting from those hazardous materials introduced to the site by CONTRACTOR, Subcontractors or anyone for whose acts they may be liable.

- 4.4.5** CONTRACTOR shall be responsible for use, storage and remediation of any hazardous materials brought to the Site by CONTRACTOR, Subcontractors, Suppliers or anyone else for whom CONTRACTOR is responsible.

ARTICLE 5 - BONDS AND INSURANCE

5.1 Surety and Insurance Companies: All bonds and insurance required by the Contract Documents shall be obtained from solvent surety or insurance companies that are duly licensed by the State of Texas and authorized to issue bonds or insurance policies for the limits and coverages required by the Contract Documents. The bonds shall be in a form acceptable to OWNER and shall be issued by a surety which complies with the requirements of Texas Insurance Code, Title 12, Chapter 3503. The surety must obtain reinsurance for any portion of the risk that exceeds 10% of the surety's capital and surplus. For bonds exceeding \$100,000, the surety must also hold a certificate of authority from the U.S. Secretary of the Treasury or have obtained reinsurance for any liability in excess of \$1,000,000 from a reinsurer that is authorized as a reinsurer in Texas or holds a certificate of authority from the U.S. Secretary of the Treasury. In the event that the proposed surety for a contract award in excess of \$100,000 does not hold a certificate of authority from the U.S. Secretary of the Treasury and/or its proposed reinsurer does not hold a certificate of authority from the U.S. Secretary of the Treasury, the OWNER may require additional financial solvency information from the Bidder/Contractor and the proposed surety company and/or reinsurer as part of the 00400 Statement of Bidders Experience and determination of bidder responsibility in the award of the Contract.

5.2 Workers' Compensation Insurance Coverage:

5.2.1 Definitions:

- .1** Certificate of coverage ("certificate") - A copy of a certificate of insurance, a certificate of authority to self-insure issued by the commission, or a coverage agreement (DWC-81, DCW-82, DCW-83, or DCW84), showing statutory workers' compensation insurance coverage for the person's or entity's employees providing services on the Project, for the duration of the Project.
- .2** Duration of the Project - includes the time from the beginning of the Work on the Project until the CONTRACTOR's/ person's Work on the Project has been completed and accepted by OWNER.
- .3** Persons providing services on the Project ("subcontractor" in Texas Labor Code, Section 406.096) - includes all persons or entities performing all or part of the services the CONTRACTOR has undertaken to perform on the Project, regardless of whether that person contracted directly with the CONTRACTOR and regardless of whether that person has employees. This includes, without limitation, independent contractors, Subcontractors, leasing companies, motor carriers, owner-operators, employees of any such entity, or employees of any entity which furnishes persons to provide services on the Project. "Services" include, without limitation, providing, hauling, or delivering equipment or materials, or providing labor, transportation, or other service related to a project. "Services" does not include activities unrelated to the Project, such as food/beverage vendors, office supply deliveries, and delivery of portable toilets.

5.2.2 CONTRACTOR shall provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Code, Section 401.011(44) for all

employees of the CONTRACTOR providing services on the Project, for the duration of the Project.

- 5.2.3** CONTRACTOR must provide a certificate of coverage to OWNER prior to being awarded the Contract.
- 5.2.4** If the coverage period shown on the CONTRACTOR's current certificate of coverage ends during the duration of the Project, the CONTRACTOR must, prior to the end of the coverage period, file a new certificate of coverage with OWNER showing that coverage has been extended.
- 5.2.5** CONTRACTOR shall obtain from each person providing services on the Project, and provide to OWNER:
 - .1** A certificate of coverage, prior to that person beginning Work on the Project, so OWNER will have on file certificates of coverage showing coverage for all persons providing services on the Project; and
 - .2** No later than seven (7) days after receipt by CONTRACTOR, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the Project.
- 5.2.6** CONTRACTOR shall retain all required certificates of coverage for the duration of the Project and for one (1) year thereafter.
- 5.2.7** CONTRACTOR shall notify OWNER in writing by certified mail or personal delivery, within ten (10) days after CONTRACTOR knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the Project.
- 5.2.8** CONTRACTOR shall post on each Project site a notice, in the text, form and manner prescribed by the Texas Workers' Compensation Commission, informing all persons providing services on the Project that they are required to be covered, and stating how a person may verify coverage and report lack of coverage.
- 5.2.9** CONTRACTOR shall contractually require each person with whom it contracts to provide services on a Project, to:
 - .1** Provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Code, Section 401.011(44) for all of its employees providing services on the Project, for the duration of the Project;
 - .2** Provide to CONTRACTOR, prior to that person beginning Work on the Project, a certificate of coverage showing that coverage is being provided for all employees of the person providing services on the Project, for the duration of the Project;
 - .3** Provide CONTRACTOR, prior to the end of the coverage period, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the Project;
 - .4** Obtain from each other person with whom it contracts, and provide to CONTRACTOR: a) a certificate of coverage, prior to the other person beginning Work on the Project; and b) a new certificate of coverage showing extension of coverage, prior to the end of the coverage period, if the coverage period shown on the current certificate of coverage ends during the duration of the Project;
 - .5** Retain all required certificates of coverage on file for the duration of the Project and for one (1) year thereafter;

- .6 Notify OWNER in writing by certified mail or personal delivery, within ten (10) days after the person knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the Project; and
- .7 Contractually require each person with whom it contracts, to perform as required by paragraphs 5.2.9.1 - 5.2.9.7, with the certificates of coverage to be provided to the person for whom they are providing services.

5.2.10 By signing this Contract or providing or causing to be provided a certificate of coverage, CONTRACTOR is representing to OWNER that all employees of the CONTRACTOR who will provide services on the Project will be covered by workers' compensation coverage for the duration of the Project, that the coverage will be based on proper reporting of classification codes and payroll amounts, and that all coverage agreements will be filed with the appropriate insurance carrier or, in the case of a self-insured, with the Texas Worker's Compensation Commission's Division of Self- Insurance Regulation. Providing false or misleading information may subject CONTRACTOR to administrative penalties, criminal penalties, civil penalties, or other civil actions.

5.2.11 CONTRACTOR's failure to comply with any of these provisions is a breach of Contract by CONTRACTOR which entitles OWNER to declare the Contract void if CONTRACTOR does not remedy the breach within ten (10) days after receipt of notice of breach from OWNER.

5.3 Other Bond and Insurance Requirements: For additional insurance requirements, refer to the Supplemental General Conditions.

5.4 Bonds:

5.4.1 General.

- .1 Bonds, when required, shall be executed on forms furnished by or acceptable to OWNER. All bonds signed by an agent must be accompanied by a certified copy of such agent's authority to act.
- .2 If the surety on any bond furnished by CONTRACTOR is declared bankrupt or becomes insolvent or its right to do business is terminated in the State of Texas or it ceases to meet the requirements of the preceding paragraph, CONTRACTOR shall within ten (10) days thereafter substitute another bond and surety, both of which must be acceptable to OWNER.
- .3 When Performance Bonds and/or Payment Bonds are required, each shall be issued in an amount of one hundred percent (100%) of the Contract Amount as security for the faithful performance and/or payment of all CONTRACTOR's obligations under the Contract Documents. Performance Bonds and Payment Bonds shall be issued by a solvent surety company authorized to do business in the State of Texas, and shall meet any other requirements established by law or by OWNER pursuant to applicable law. Any surety duly authorized to do business in Texas may write Performance and Payment Bonds on a project without reinsurance to the limit of ten percent (10%) of its capital and surplus. Such a surety must reinsure any obligations over ten percent (10%).

5.4.2 Performance Bond.

- .1 If the Contract Amount exceeds \$100,000, CONTRACTOR shall furnish OWNER with a Performance Bond in the form set out in Section 00610.
- .2 If the Contract Amount exceeds \$25,000 but is less than or equal to \$100,000, CONTRACTOR shall furnish OWNER with a Performance Bond in the form set out in Section 00610, unless the original Contract Time is 60 Calendar

Days/40 Working Days or less, in which case CONTRACTOR can agree to the following terms and conditions for payment in lieu of providing a Performance Bond: no moneys will be paid to CONTRACTOR until completion and acceptance of the Work by OWNER; CONTRACTOR shall be entitled to receive 95% of the Contract Amount following Final Completion, and the remaining 5% of the Contract Amount following the one (1) year warranty period.

- .3 If the Contract Amount is less than or equal to \$25,000, CONTRACTOR will not be required to furnish a Performance Bond; provided that no moneys will be paid to CONTRACTOR until completion and acceptance of the Work by OWNER under the following terms and conditions: CONTRACTOR shall be entitled to receive 95% of the Contract Amount following Final Completion, and the remaining 5% of the Contract Amount following the one (1) year warranty period.
- .4 If a Performance Bond is required to be furnished, it shall extend for the one (1) year warranty period.

5.4.3 Payment Bond.

- .1 If the Contract Amount exceeds \$50,000, CONTRACTOR shall furnish OWNER with a Payment Bond in the form set out in Section 00620.
- .2 If the Contract Amount is less than or equal to \$50,000, CONTRACTOR will not be required to furnish a Payment Bond; provided that no moneys will be paid to CONTRACTOR until completion and acceptance of the Work by OWNER under the terms and conditions specified in paragraph 5.4.2.3.

5.4.4 Maintenance Bond: If the Contract Documents contemplate a period of maintenance beyond the one (1) year contractual warranty period, OWNER agrees that any bond to be required for such maintenance work will be in the amount of the maintenance work during any extended maintenance period.

ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES

6.1 Supervision and Superintendence:

- 6.1.1** CONTRACTOR shall supervise, inspect and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. CONTRACTOR shall be solely responsible for the means, methods, techniques, sequences and procedures of construction. CONTRACTOR shall be responsible to see that the completed Work complies accurately with the Contract Documents.
- 6.1.2** CONTRACTOR shall have an English-speaking, competent Superintendent on the Work at all times that work is in progress. The Superintendent will be CONTRACTOR's representative on the Work and shall have the authority to act on the behalf of CONTRACTOR. All communications given to the Superintendent shall be as binding as if given to CONTRACTOR. Either CONTRACTOR or the Superintendent shall provide a cellular telephone number and an emergency and home telephone number at which one or the other may be reached if necessary when work is not in progress. The Superintendent must be an employee of the CONTRACTOR, unless such requirement is waived in writing by the Owner's Representative. If the CONTRACTOR proposes a management structure with a Project Manager supervising, directing, and managing construction of the work in addition to or in substitution of a Superintendent, the requirements of these Construction Documents with respect to the Superintendent shall likewise apply to any such Project Manager.

- .1 CONTRACTOR shall present the resume of the proposed Superintendent to the Owner's Representative showing evidence of experience and successful superintendence and direction of work of a similar scale and complexity. If, in the opinion of the Owner's Representative, the proposed Superintendent does not indicate sufficient experience in line with the Work, he/she will not be allowed to be the designated Superintendent for the Work.
- .2 The Superintendent shall not be replaced without Written Notice to Owner's Representative. If CONTRACTOR deems it necessary to replace the Superintendent, CONTRACTOR shall provide the necessary information for approval, as stated above, on the proposed new Superintendent.
- .3 A qualified substitute Superintendent may be designated in the event that the designated Superintendent is temporarily away from the Work, but not to exceed a time limit acceptable to the Owner's Representative. CONTRACTOR shall replace the Superintendent upon OWNER's request in the event the Superintendent is unable to perform to OWNER's satisfaction.

6.2 Labor, Materials and Equipment:

- 6.2.1 CONTRACTOR shall maintain a work force adequate to accomplish the Work within the Contract Time. CONTRACTOR agrees to employ only orderly and competent workers, skillful in performance of the type of Work required under this Contract. CONTRACTOR, Subcontractors, Sub-subcontractors, and their employees may not use or possess any alcoholic or other intoxicating beverages, illegal drugs or controlled substances while on the job or on OWNER's property, nor may such workers be intoxicated, or under the influence of alcohol or drugs, on the job. Subject to the applicable provisions of Texas law, CONTRACTOR, Subcontractors, Sub-subcontractors, and their employees may not use or possess any firearms or other weapons while on the job or on OWNER'S property. If OWNER or Owner's Representative notifies CONTRACTOR that any worker or representative of Contractor is incompetent, disorderly, abusive, or disobedient, has knowingly or repeatedly violated safety regulations, has possessed any firearms in contravention of the applicable provisions of Texas law, or has possessed or was under the influence of alcohol or drugs on the job, CONTRACTOR shall immediately remove such worker or representative, including an officer or owner of CONTRACTOR, from performing Contract Work, and may not employ such worker or representative again on Contract Work without OWNER's prior written consent. CONTRACTOR shall at all times maintain good discipline and order on or off the site in all matters pertaining to the Project. CONTRACTOR shall pay workers no less than the wage rates established in Section 00830, and maintain weekly payroll reports as evidence thereof, in accordance with the requirements of Chapter 2258 of the Texas Government Code.
- 6.2.2 Unless otherwise specified in Division 1, CONTRACTOR shall provide and pay for all materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities and all other facilities and incidentals necessary for the furnishing, performance, testing, start-up and completion of the Work.
- 6.2.3 All materials and equipment shall be of good quality and new (including new products made of recycled materials, pursuant to Section 361.426 of the Texas Health & Safety Code), except as otherwise provided in the Contract Documents. If required by Owner's Representative, CONTRACTOR shall furnish satisfactory evidence (reports of required tests, manufacturer's certificates of compliance with material requirements, mill reports, etc.) as to the kind and quality of materials and equipment. All materials and equipment shall be applied, installed, connected,

erected, used, cleaned and conditioned in accordance with instructions of the applicable Supplier, except as otherwise provided in the Contract Documents.

6.2.4 Substitutes and "Approved Equal" Items:

- .1** Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function and quality required. Unless the specification or description contains words reading that no like, equivalent or "approved equal" item or no substitution is permitted, other items of material or equipment of other Suppliers may be submitted by CONTRACTOR, at CONTRACTOR'S sole risk, including disruptions to the Critical Path of the Progress Schedule, to E/A through Owner's Representative under the following circumstances:
 - .1.1 "Approved Equal":** If in E/A's sole discretion an item of material or equipment proposed by CONTRACTOR is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by E/A as an "approved equal" item, in which case review of the proposed item may, in E/A's sole discretion, be accomplished without compliance with some or all of the requirements for evaluation of proposed substitute items. CONTRACTOR shall provide E/A with the documentation required for E/A to make its determination.
 - .1.2 Substitute Items:** If in E/A's sole discretion an item of material or equipment proposed by CONTRACTOR does not qualify as an "approved equal" item under subparagraph 6.2.4.1.1, it will be considered a proposed substitute item. CONTRACTOR shall submit sufficient information as provided in Division 1 to allow E/A to determine that the item of material or equipment proposed is essentially equivalent to that named and a substitute therefor.
- .2 Substitute Construction Methods and Procedures:** If a specific means, method, technique, sequence or procedure of construction is shown or indicated in and expressly required by the Contract Documents, CONTRACTOR may, at CONTRACTOR'S sole risk, including disruptions to the Critical Path of the Progress Schedule, with prior approval of E/A furnish or utilize a substitute means, method, technique, sequence, or procedure of construction. CONTRACTOR shall submit sufficient information to Owner's Representative to allow E/A, in E/A's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. The procedure for review by E/A will be same as that provided for substitute items in Division 1.
- .3 E/A's Evaluation:** E/A will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to subparagraphs 6.2.4.1.1 and 6.2.4.1.2. E/A will be the sole judge of acceptability. No "approved equal" or substitute shall be ordered, installed, or utilized until E/A's review is complete, which will be evidenced by either a Change Order or completion of the Shop Drawing review procedure. OWNER may require CONTRACTOR to furnish at CONTRACTOR's expense a special performance guarantee or other surety bond with respect to any "approved equal" or substitute or for any other delay or disruption to the Critical Path of the Project Schedule attributable to any such substitution. OWNER shall not be responsible for any delay due to review time for any "approved equal" or substitute.

- .4 CONTRACTOR's Expense: All data and documentation to be provided by CONTRACTOR in support of any proposed "approved equal" or substitute item will be at CONTRACTOR's expense.
- .5 The approval of the E/A will not relieve the CONTRACTOR from primary responsibility and liability for the suitability and performance of any proposed substitute item, method or procedure and will not relieve CONTRACTOR from its primary responsibility and liability for curing defective Work and performing warranty work, which the CONTRACTOR shall cure and perform, regardless of any claim the CONTRACTOR may choose to advance against the E/A or manufacturer.

6.2.5 CONTRACTOR agrees to assign to OWNER any rights it may have to bring antitrust suits against its Suppliers for overcharges on materials incorporated in the Project growing out of illegal price fixing agreements. CONTRACTOR further agrees to cooperate with OWNER should OWNER wish to prosecute suits against Suppliers for illegal price fixing.

6.3 Progress Schedule: Unless otherwise provided in Division 1, CONTRACTOR shall adhere to the Baseline Schedule established in accordance with paragraph 2.6 as it may be adjusted from time to time as provided below:

6.3.1 CONTRACTOR shall submit to Owner's Representative for review and approval any proposed adjustments in the Progress Schedule that will not change the Contract Times or Milestones on a monthly basis. Any such proposed adjustments must be substantiated with documentation of any changes to the underlying logic of the Progress Schedule. CONTRACTOR's Progress Schedule must show how the CONTRACTOR will consistently advance the progress of the Work in accordance with the Critical Path of the Work and the Contract Time or Milestones. Such adjustments will conform generally to the Progress Schedule then in effect and additionally will comply with any provisions of Division 1 applicable thereto.

6.3.2 Proposed adjustments in the Progress Schedule that will change the Contract Times or Milestones shall be submitted in accordance with the requirements of Article 12. Any such proposed adjustments must be substantiated with documentation of any changes to the underlying logic of the Progress Schedule. Such adjustments may only be made by a Change Order or Time Extension Request in accordance with Article 12.

6.4 Concerning Subcontractors, Suppliers and Others:

6.4.1 Assignment: CONTRACTOR agrees to retain direct control of and give direct attention to the fulfillment of this Contract. CONTRACTOR agrees not to, by Power of Attorney, or otherwise, assign said Contract without the prior written consent of OWNER. In addition, without OWNER'S written consent, the CONTRACTOR will not subcontract the performance of the entire Work or the supervision and direction of the Work.

6.4.2 Award of Subcontracts for Portions of the Work: CONTRACTOR shall not employ any Subcontractor, Supplier or other person or organization, whether initially or as a substitute, against whom OWNER may have reasonable objection. OWNER will communicate such objections by Written Notice. If OWNER requires a change without good cause of any Subcontractor, person or organization previously accepted by OWNER, the Contract Amount shall be increased or decreased by the difference in the cost occasioned by any such change, and appropriate Change Order shall be issued. CONTRACTOR shall not substitute any Subcontractor, person or organization that has been accepted by OWNER, unless the substitute has been accepted in writing by OWNER. No acceptance by OWNER of any Subcontractor,

Supplier or other person or organization shall constitute a waiver of any right of OWNER to reject defective Work.

- 6.4.3** CONTRACTOR shall enter into written agreements with all Subcontractors and Suppliers which specifically binds the Subcontractors or Suppliers to the applicable terms and conditions of the Contract Documents for the benefit of OWNER and E/A. The OWNER reserves the right to specify that certain requirements shall be adhered to by all Subcontractors and Sub-subcontractors as indicated in other portions of the Contract Documents and these requirements shall be made a part of the agreement between CONTRACTOR and Subcontractor or Supplier. Subject to and in accordance with the above requirements, the CONTRACTOR must provide and will be deemed for all purposes to have provided in its contracts with major Subcontractors or Suppliers on the Project (those contracts of more than \$10,000) the following specific provision: alternative dispute resolution (paragraphs 16.2 and 16.3), which shall be mandatory in the event of a subcontractor or supplier claim and a prerequisite for the submission of any derivative claim. The CONTRACTOR's standard subcontract form is subject to the OWNER's review and approval. The OWNER may request and the CONTRACTOR will provide within five (5) working days a copy of any subcontract requested by the OWNER.
- 6.4.4** CONTRACTOR shall be fully responsible to OWNER for all acts and omissions of the Subcontractors, Suppliers and other persons and organizations performing or furnishing any of the Work under a direct or indirect contract with CONTRACTOR just as CONTRACTOR is responsible for CONTRACTOR's own acts and omissions. Nothing in the Contract Documents shall create for the benefit of any such Subcontractor, Supplier or other person or organization any contractual relationship between OWNER and any such Subcontractor, Supplier or other person or organization, nor shall it create any obligation on the part of OWNER or E/A to pay or to see to the payment of any moneys due any such Subcontractor, Supplier or other person or organization except as may otherwise be required by laws and regulations.
- 6.4.5** CONTRACTOR shall be solely responsible for efficiently scheduling and 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 in order to avoid any delays or inefficiencies in the prosecution of the Work. CONTRACTOR shall require all Subcontractors, Suppliers and such other persons and organizations performing or furnishing any of the Work to communicate with Owner's Representative through CONTRACTOR.
- 6.4.6** The divisions and sections of the Specifications and the identifications of any Drawings shall not control CONTRACTOR in dividing or delineating the Work to be performed by any specific trade.
- 6.4.7** CONTRACTOR shall pay each Subcontractor and Supplier their appropriate share of payments made to CONTRACTOR not later than ten (10) Calendar Days of CONTRACTOR's receipt of payment from OWNER. Upon request from Owner, the CONTRACTOR has two (2) Working Days to provide documentation verifying Payment to Subcontractor(s). The CONTRACTOR is required to notify the Subcontractor(s) in writing of rejection of Application for Payment within two (2) Working Days following notification by Owner. Failure of CONTRACTOR to make payments to Subcontractors or for labor, materials or equipment in accordance to this contract, may be cause to reject future Bids by the CONTRACTOR in accordance with Section 00100 9.B.4 and may be cause to reject payment in accordance with 00700 14.4.1.3.
- 6.4.8** To the extent allowed by Texas law, the OWNER shall be deemed to be a third party beneficiary to each subcontract and may, if OWNER elects, following a termination of the CONTRACTOR, require that the Subcontractor(s) perform all or a portion of

unperformed duties and obligations under its subcontract(s) for the benefit of the OWNER, rather than the CONTRACTOR; however, if the OWNER requires any such performance by a Subcontractor for the OWNER's direct benefit, then the OWNER shall be bound and obligated to pay such Subcontractor the reasonable value for all Work performed by such Subcontractor to the date of the termination of the CONTRACTOR, less previous payments, and for all Work performed thereafter. In the event that the OWNER elects to invoke its right under this section, OWNER will provide notice of such election to the CONTRACTOR and the affected Subcontractor(s).

6.5 Patent Fees and Royalties:

- 6.5.1** CONTRACTOR shall be responsible at all times for compliance with applicable patents or copyrights encompassing, in whole or in part, any design, device, material, or process utilized, directly or indirectly, in the performance of the Work or the formulation or presentation of its Bid.
- 6.5.2** CONTRACTOR shall pay all royalties and license fees and shall provide, prior to commencement of Work hereunder and at all times during the performance of same, for lawful use of any design, device, material or process covered by letters, patent or copyright by suitable legal agreement with the patentee, copyright holder, or their duly authorized representative whether or not a particular design, device, material, or process is specified by OWNER.
- 6.5.3** CONTRACTOR shall defend all suits or claims for infringement of any patent or copyright and shall save OWNER harmless from any loss or liability, direct or indirect, arising with respect to CONTRACTOR's process in the formulation of its Bid or the performance of the Work or otherwise arising in connection therewith. OWNER reserves the right to provide its own defense to any suit or claim of infringement of any patent or copyright in which event CONTRACTOR shall indemnify and save harmless OWNER from all costs and expenses of such defense as well as satisfaction of all judgments entered against OWNER.
- 6.5.4** OWNER shall have the right to stop the Work and/or terminate this Agreement at any time in the event CONTRACTOR fails to disclose to OWNER that CONTRACTOR's work methodology includes the use of any infringing design, device, material or process.

6.6 Permits, Fees: Unless otherwise provided in the Supplemental General Conditions, CONTRACTOR shall obtain and pay for all construction permits, licenses and fees required for prosecution of the Work.

6.7 Laws and Regulations:

- 6.7.1** CONTRACTOR shall give all notices and comply with all laws and regulations applicable to furnishing and performing the Work, including arranging for and obtaining any required inspections, tests, approvals or certifications from any public body having jurisdiction over the Work or any part thereof. Except where otherwise expressly required by applicable laws and regulations, neither OWNER nor E/A shall be responsible for monitoring CONTRACTOR's compliance with any laws and regulations.
- 6.7.2** Maintaining clean water, air and earth or improving thereon shall be regarded as of prime importance. CONTRACTOR shall plan and execute its operations in compliance with all applicable Federal, State and local laws and regulations concerning control and abatement of water pollution and prevention and control of air pollution.
- 6.7.3** If CONTRACTOR performs any Work knowing or having reason to know that it is contrary to laws or regulations, CONTRACTOR shall bear all claims, costs, losses and damages arising therefrom; however, it shall not be CONTRACTOR's primary

responsibility to make certain that the Specifications and Drawings are in accordance with laws and regulations, but this does not relieve CONTRACTOR of CONTRACTOR's obligations under Article 3.

6.8 Taxes:

- 6.8.1** CONTRACTOR shall pay only those sales, consumer, use and other similar taxes required to be paid by CONTRACTOR in accordance with the laws and regulations of the State of Texas in the performance of this public works contract.
- 6.8.2** OWNER is an exempt organization as defined by Chapter 11 of the Property Tax Code of Texas and is thereby exempt from payment of Sales Tax under Chapter 151, Limited Use Sales, Excise and Use Tax, Texas Tax Code, and Article 1066 (C), Local Sales and Use Tax Act, Revised Civil Statutes of Texas.

6.9 Use of Premises:

- 6.9.1** CONTRACTOR shall confine construction equipment, the storage of materials and equipment and the operations of workers to the site and land and areas identified in and permitted by the Contract Documents and other land and areas permitted by laws and regulations, right-of-way, permits and easements, and shall not unreasonably encumber the premises with construction equipment or other materials or equipment. CONTRACTOR shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof or of any adjacent land or areas, resulting from the performance of the Work. Should any claim be made by any such owner or occupant because of or in connection with the performance of the Work, CONTRACTOR shall promptly settle with such other party by negotiation or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law. CONTRACTOR shall indemnify, defend and hold harmless OWNER, E/A, E/A'S Consultants and anyone directly or indirectly employed by any of them from and against all claims, costs, losses and damages (including court costs and reasonable attorney's fees) arising out of or resulting from any claim or action, legal or equitable, brought by any such owner or occupant against OWNER, E/A or any other party indemnified hereunder to the extent caused by or based upon performance of the work or failure to perform the Work.
 - 6.9.2** During the progress of the Work and on a daily basis, CONTRACTOR shall keep the premises free from accumulations of waste materials, rubbish and other debris resulting from the Work. At the completion of the Work, CONTRACTOR shall remove all waste materials, rubbish and debris from and about the premises as well as all tools, appliances, construction equipment and machinery and surplus materials. CONTRACTOR shall leave the site clean and ready for occupancy by OWNER at Substantial Completion of the Work. CONTRACTOR shall, at a minimum, restore to original condition all property not designated for alteration by the Contract Documents. If the CONTRACTOR fails to clean up at the completion of the Work, OWNER may do so and the cost thereof will be charged against the CONTRACTOR.
 - 6.9.3** CONTRACTOR shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall CONTRACTOR subject any part of the Work or adjacent property to stresses or pressures that will endanger it.
- 6.10 Record Documents:** CONTRACTOR shall maintain in a safe place at the site, or other location acceptable to OWNER, one (1) record copy of all Drawings, Specifications, Addenda, Change Orders, Change Directives, Field Orders and written interpretations and clarifications (issued pursuant to paragraph 9.5) in good order and annotated to show all changes made during construction. These record documents together with all final samples and all final Shop Drawings will be available to OWNER and E/A for reference during performance of the Work. Upon Substantial Completion of the Work, these record documents, samples and Shop Drawings shall be promptly delivered to Owner's Representative.

6.11 Safety and Protection:

6.11.1 CONTRACTOR shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. Upon request, and prior to installation of measures, CONTRACTOR shall submit a site security plan for approval by OWNER. By reviewing the plan or making recommendations or comments, OWNER will not assume liability nor will CONTRACTOR be relieved of liability for damage, injury or loss. CONTRACTOR shall take all necessary precautions for the safety of and shall provide the necessary protection to prevent damage, injury or loss to:

- .1 all persons on the Work site or who may be affected by the Work;
- .2 all the Work and materials and equipment to be incorporated therein, whether in storage on or off the site; and
- .3 other property at the site or adjacent thereto, including, but not limited to, trees, shrubs, lawns, walks, pavements, roadways, structures, utilities and underground facilities not designated for removal, relocation or replacement in the course of construction.

6.11.2 CONTRACTOR shall comply with all applicable laws and regulations of any public body having jurisdiction for safety of persons or property or to protect them from damage, injury or loss; and shall erect and maintain all necessary safeguards for such safety and protection. CONTRACTOR shall notify owners of adjacent property and of underground facilities, and utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation and replacement of their property. All damage, injury or loss to any property referred to in paragraph 6.11.1.2 and 6.11.1.3 caused, directly or indirectly, in whole or in part, by CONTRACTOR, Subcontractor, Supplier or any person or organization directly or indirectly employed by any of them to perform or furnish any of the Work or anyone for whose acts any of them may be liable, shall be remedied by CONTRACTOR (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of OWNER, or E/A, or E/A's consultant or anyone employed by any of them or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the faults or negligence of CONTRACTOR or any Subcontractor, Supplier or other person or organization directly or indirectly employed by any of them). CONTRACTOR's duties and responsibilities for safety and protection of the Work shall continue until such time as all the Work is completed and Owner's Representative has issued a notice to OWNER and CONTRACTOR in accordance with Article 14 that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion). Without limitation, CONTRACTOR shall comply with the following specific provisions:

It shall be the duty and responsibility of CONTRACTOR and all of its subcontractors to be familiar with and comply with 29 USC Section 651, et seq., the Occupational Safety and Health Act of 1970, as amended ("OSHA") and to enforce and comply with all provisions of this Act.

The CONTRACTOR and all of its subcontractors shall comply with all applicable requirements of Subpart P of Part 1926 of 29 C.F.R, OSHA Safety and Health Standards, Texas Health and Safety Code Section 756.023, as amended, and shall submit a unit price for the particular excavation safety systems to be utilized by the Contractor for all excavations which exceed a depth of five feet (5').

Before commencing any excavation which will exceed a depth of five feet (5'), the CONTRACTOR shall provide the Owner with detailed plans and specifications regarding the safety systems to be utilized. Said plans and specifications shall

include a certification from a Texas licensed professional engineer indicating full compliance with the OSHA provisions cited above.

6.11.3 Safety Representative: CONTRACTOR shall designate in writing a qualified and experienced safety representative (the "Safety Representative") at the site whose duties and responsibilities shall include safety training; identifying and mitigating hazardous conditions and unsafe work practices; and developing, maintaining and supervising the implementation of safe work practices and safety programs as deemed necessary and appropriate for the Project. The term "Safety Representative" includes any designated Safety Supervisor, Superintendent or Safety Manager. The Safety Representative shall exercise due diligence in the execution of all Project related safety duties. The Safety Representative shall report directly to a company executive, not an on site project manager. Upon request of OWNER, CONTRACTOR shall provide certifications or other acceptable documentation of the Safety Representative's qualifications. The following requirements will be effective as of September 1, 2010:

- .1 The Safety Representative shall present certification of completion of the OSHA 30-hour Construction Industry Training Outreach Program described at: http://www.osha.gov/dte/outreach/construction_generalindustry/construction.html
- .2 The Safety Representative shall verify that all construction workers (defined as persons covered by a prevailing wage determination) on the job site, whether employed by the CONTRACTOR or subcontractors, have completed the OSHA 10-hour Construction Industry Training Outreach Program described at: http://www.osha.gov/dte/outreach/construction_generalindustry/construction.html. The Safety Representative must receive a certificate of training completion before allowing a worker on site and shall have all such certificates available for inspection by the OWNER.
- .3 The Safety Representative shall ensure that workers, including designated competent persons, have completed all applicable OSHA specific or other training needed to perform their job assignments. Training topics applicable to the scope of the current Project may include, but are not limited to, scaffolds, fall protection, cranes, excavations, electrical safety, tools, concrete and masonry construction, steel erection, operation of motor vehicles and mechanized equipment.
- .4 The Safety Representative shall post notice on the site of the Work stating that all workers shall have completed OSHA Construction Industry Training. The Owner may require, and the Safety Representative should consider providing a means of readily identifying workers who have completed the required training to monitor compliance with these requirements.
- .5 The Safety Representative shall ensure that all required OSHA and Workers Compensation notices to workers are posted in English and Spanish at one or more conspicuous locations on the work site.

6.11.4 Hazard Communication Programs: CONTRACTOR shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the site in accordance with laws and regulations.

6.11.5 Emergencies:

- .1 In emergencies affecting the safety or protection of persons or the Work at the site or adjacent thereto, CONTRACTOR, without special instruction or authorization from OWNER or E/A, is obligated to act reasonably to prevent threatened damage, injury or loss and to mitigate damage or loss to the Work.

CONTRACTOR shall give Owner's Representative telephone notification as soon as reasonably practical and a prompt written notice if CONTRACTOR believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby. If Owner's Representative determines that a change in the Contract Documents is required because of the action taken by CONTRACTOR in response to such an emergency, a Change Directive or Change Order will be issued to document the consequences of such action; otherwise OWNER will not be responsible for CONTRACTOR's emergency action.

- .2 Authorized agents of CONTRACTOR shall respond immediately to call-out at any time of any day or night when circumstances warrant the presence on Project site of CONTRACTOR or his agent to protect the Work or adjacent property from damage, restriction or limitation or to take such action or measures pertaining to the Work as may be necessary to provide for the safety of the public. Should CONTRACTOR and/or their agent fail to respond and take action to alleviate such an emergency situation, OWNER may direct other forces to take action as necessary to remedy the emergency condition, and OWNER will deduct any cost of such remedial action from the funds due CONTRACTOR under this Contract.
- .3 In the event there is an accident involving injury to any individual or damage to any property on or near the Work, CONTRACTOR shall provide to Owner's Representative verbal notification within one (1) hour and written notification within twenty-four (24) hours of the event and shall be responsible for recording the location of the event and the circumstances surrounding the event through photographs, interviewing witnesses, obtaining medical reports, police accident reports and other documentation that describes the event. Copies of such documentation shall be provided to Owner's Representative, for OWNER's and E/A's records, within forty-eight (48) hours of the event. Contractor shall cooperate with OWNER on any OWNER investigation of any such incident.

6.11.6 Rest Breaks:

- .1 Except as provided in subsection 6.11.6.2 below, an employee performing construction activity at a construction site is entitled to a rest break of not less than ten (10) minutes for every four (4) hours worked. No employee may be required to work more than 3.5 hours without a rest break. A rest break means a break from work within working hours, excluding meal breaks, during which an employee may not work. A rest break shall be scheduled as near as possible to the midpoint of the work period.
- .2 An employee is not entitled to a rest break under subsection 6.11.6.1 on any day the employee works less than 3.5 hours or spends more than half of his or her work time engaged in non-strenuous labor in a climate controlled environment.
- .3 A sign describing the requirements of this Section 6.11.6 in English and Spanish shall be posted by the employer in each establishment subject to the requirement of a rest break in a conspicuous place or places where notices to employees are customarily posted, in accordance with the OWNER's then current rules for size, content, and location of such signage.
- .4 The violation of Ordinance No. 20100729-047, enacted July 29, 2010, which establishes the rest break requirements set forth above, may be enforced with criminal penalties and civil remedies, as set forth in the Ordinance.

6.11.7 If the Contractor fails to carry out the Work in accordance with the Contract Documents so that a safety violation has occurred, the Owner may order the Contractor to stop the Work or any portion thereof, until the cause for such order has been eliminated. However, the right of the Owner to stop the Work under this paragraph shall not give rise to a duty on the part of the Owner to supervise the Contractor's Work or to control the Contractor's means and methods or to exercise this right for the benefit of the Contractor or any other person or entity. All time lost due to Project shut down will be the Contractor's sole responsibility, will be charged against the Contract Time, and the Contractor will be responsible for any and all expenses incurred. This provision is in addition to and supplemental to the applicable provisions of the Project's ROCIP Safety Manual.

6.11.8 Confined Space Program

- .1 Contractor acknowledges and agrees that the Owner is temporarily transferring management and control of the site of the Work to the Contractor for the purpose of constructing the Project. The Contractor's responsibilities to manage the Work includes the responsibility to manage the property for purposes of compliance with 29 CFR 1926 subpart AA. To the best of Owner's knowledge and belief, Owner has provided the following information in the plans and specifications and other Contract Documents: (i) the location of each known permit space, (ii) the hazards or potential hazards in each space or the reason it is a permit space; and (iii) any precautions that the Owner or any previous contractor has implemented for the protection of employees in the permit space. This transfer will result in the Contractor being both the host employer and the controlling contractor for this portion of the Work.

6.12 Continuing the Work: CONTRACTOR shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with OWNER. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as OWNER and CONTRACTOR may otherwise agree in writing.

6.13 CONTRACTOR's General Warranty and Guarantee:

6.13.1 CONTRACTOR warrants and guarantees to OWNER that all Work will conform to the plans and specifications, be performed in a good and workmanlike manner in accordance with the Contract Documents and will not be defective. This warranty will survive the termination or expiration of the Contract. CONTRACTOR's warranty and guarantee hereunder excludes defects or damage caused by:

- .1 abuse, modification or improper maintenance or operation by persons other than CONTRACTOR, Subcontractors or Suppliers; or
- .2 normal wear and tear under normal usage.

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

- .1 observations by Owner's Representative and/or E/A;
- .2 recommendation of any progress or final payment by Owner's Representative;
- .3 the issuance of a certificate of Substantial Completion or any payment by OWNER to CONTRACTOR under the Contract Documents;
- .4 use or occupancy of the Work or any part thereof by OWNER;

- .5 any acceptance by OWNER or any failure to do so;
- .6 any review of a Shop Drawing or sample submittal;
- .7 any inspection, test or approval by others; or
- .8 any correction of defective Work by OWNER.

6.14 INDEMNIFICATION:

6.14.1 CONTRACTOR shall defend, indemnify and hold harmless OWNER, E/A, E/A'S Consultants and Sub consultants and their respective officers, directors, partners, employees, agents and other Consultants and any of them (the "INDEMNIFIED PARTIES") from and against all claims, costs, losses and damages (including but not limited to all fees and charges of engineers, architects, attorneys and other professionals and all court or arbitration or other dispute resolution costs) arising out of or resulting from the performance of the Work, provided that any such claim, cost, loss or damage:

- .1 Is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the work itself), including the loss of use resulting therefrom, and
- .2 Is caused in whole or in part by any negligent act or omission of CONTRACTOR, any Subcontractor, any Supplier, any person or organization directly or indirectly employed by any of them to perform or furnish any of the work or anyone for whose acts any of them may be liable, regardless of whether or not caused in part by any negligence or omission of the INDEMNIFIED PARTIES hereunder or whether liability is imposed upon such INDEMNIFIED PARTY by laws and regulations regardless of the negligence of any such person or entity.

In the event that indemnification of the INDEMNIFIED PARTIES is prohibited by law, CONTRACTOR shall nonetheless be solely responsible for any liability arising out of or resulting from the performance of the Work, subject to the limitations set forth above, and shall indemnify and hold harmless the remaining INDEMNIFIED PARTIES, who may be legally indemnified, from such liability of the CONTRACTOR and the associated costs described above.

6.14.2 The indemnification obligation under paragraph 6.14.1 shall not be limited in any way by any limitation on the amount or type of damages, or compensation or benefits payable by or for CONTRACTOR or any such Subcontractor, Supplier or other person or organization under workers' compensation acts, disability benefit acts or other employee benefit acts.

6.14.3 The obligations of CONTRACTOR under paragraph 6.14.1 shall not extend to the liability of OWNER, E/A, E/A's consultants, and their officers, directors, partners, employees or agents caused primarily by negligent preparation of maps, drawings, surveys, designs or specifications upon which is placed the applicable state-authorized design professional seal of OWNER's, E/A's or E/A's consultant's officers, directors, partners, employees or agents.

6.14.4 In the event CONTRACTOR fails to follow OWNER's directives concerning use of the site, scheduling or course of construction, or engages in other conduct which proximately causes damage to property based on inverse condemnation or otherwise, then and in that event, CONTRACTOR shall indemnify OWNER against all costs resulting from such claims.

6.14.5 **In the event CONTRACTOR unreasonably delays progress of the work being done by others on the site so as to cause loss for**

which OWNER becomes liable, then CONTRACTOR shall indemnify OWNER from and reimburse OWNER for such loss.

- 6.15 Survival of Obligations:** All representations, indemnifications, warranties and guarantees made in, required by or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion and acceptance of the Work and termination or completion of the Agreement.
- 6.16 Losses from Natural Causes:** Unless otherwise specified, all loss or damage to CONTRACTOR arising out of the nature of the Work to be done or from action of the elements, floods or from unforeseeable circumstances in prosecution of the Work or from unusual obstructions or difficulties which may be encountered in prosecution of the Work, shall be sustained and borne by CONTRACTOR at its own cost and expense.
- 6.17 Notice of Claim:** Should CONTRACTOR suffer injury or damage to person or property because of any error, omission or act of OWNER or of any of OWNER's employees or agents or others for whose acts OWNER is liable, a Claim must be made to the other party within thirty (30) calendar days of the event giving rise to such injury or damage. The provisions of this paragraph 6.17 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitations or statute of repose.
- 6.18 Liquidated Damages:** CONTRACTOR or its Surety shall be liable for liquidated damages for the failure of the CONTRACTOR to timely complete the Work or any portion thereof within the Contract Time.

ARTICLE 7 - OTHER WORK

- 7.1** OWNER may perform other work related to the Project at the site by OWNER's own forces, or let other contracts therefor, or have other work performed by utility owners. CONTRACTOR and OWNER agree to and shall use best efforts to cooperate and coordinate the Work with others performing work and other work related to the Project in order to avoid conflicts and delays in the Work. If CONTRACTOR believes that delay or additional cost is involved because of such action by OWNER, CONTRACTOR may make a Claim as provided in Article 11 or 12.
- 7.2** CONTRACTOR shall afford other contractors who are in a contract with OWNER and each utility owner (and OWNER, if OWNER is performing the additional work with OWNER's employees) proper and safe access to the site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work and shall properly connect and coordinate the Work with theirs. Unless otherwise provided in the Contract Documents, CONTRACTOR shall do all cutting, fitting and patching of the Work that may be required to make its several parts come together properly and integrate with such other work. CONTRACTOR shall not endanger any work of others by cutting, excavating or otherwise altering their work and will only cut or alter their work with the written consent of Owner's Representative and the other contractors whose work will be affected. CONTRACTOR shall promptly remedy damage wrongfully caused by CONTRACTOR to completed or partially completed construction or to property of the OWNER or separate contractors.
- 7.3** If the proper execution or results of any part of CONTRACTOR's Work depends upon work performed by others under this Article 7, CONTRACTOR shall inspect such other work and promptly report to Owner's Representative in writing any delays, defects or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of CONTRACTOR's Work. CONTRACTOR's failure to report will constitute an acceptance of such other work as fit and proper for integration with CONTRACTOR's Work except for latent or non-apparent defects and deficiencies in such other work.

- 7.4** OWNER shall provide for coordination of the activities of the OWNER's own forces and of each separate contractor with the Work of CONTRACTOR, who shall cooperate with them. CONTRACTOR shall participate with other separate contractors and Owner's Representative in reviewing their construction Progress Schedules when directed to do so. On the basis of such review, CONTRACTOR shall make any revisions to the construction Progress Schedule deemed necessary after a joint review and mutual agreement. The agreed upon construction Progress Schedules shall then constitute the Progress Schedules to be used by CONTRACTOR, separate contractors and OWNER until subsequently revised.
- 7.5** Costs caused by delays or by improperly timed activities or defective construction shall be borne by the party responsible therefor.

ARTICLE 8 - OWNER'S RESPONSIBILITIES

- 8.1** Prior to the start of construction, OWNER will designate in writing a person or entity to act as Owner's Representative during construction. Except as otherwise provided in these General Conditions, OWNER shall issue all communications to CONTRACTOR through Owner's Representative.
- 8.2** OWNER will not supervise, direct, control or have authority over or be responsible for CONTRACTOR's means, methods, techniques, sequences or procedures of construction or the safety precautions and programs incident thereto. OWNER is not responsible for any failure of CONTRACTOR to comply with laws and regulations applicable to furnishing or performing the Work. OWNER is not responsible for CONTRACTOR's failure to perform or furnish the Work in accordance with the Contract Documents. Failure or omission of OWNER to discover, or object to or condemn any defective Work or material shall not release CONTRACTOR from the obligation to properly and fully perform the Contract.
- 8.3** OWNER is not responsible for the acts or omissions of CONTRACTOR, or of any Subcontractor, any Supplier, or of any other person or organization performing or furnishing any of the Work. CONTRACTOR acknowledges and agrees that OWNER'S direction to perform Work in accordance with the approved Progress Schedule is not a demand for acceleration or a dictation of CONTRACTOR'S means or methods.
- 8.4** Information or services under the OWNER's control shall be furnished by the OWNER with reasonable promptness to avoid delay in orderly progress of the Work. The OWNER shall have a reasonable amount of time to investigate site conditions, review submittals, analyze requests for changes, and to make other decisions in the orderly administration of the Contract. CONTRACTOR must notify the OWNER in writing, if the time for the investigation, review, analysis of any submittals, required for changes or otherwise required for OWNER'S decision, impacts in any way the Critical Path of the approved Progress Schedule.
- 8.5** The foregoing are in addition to other duties and responsibilities of the OWNER enumerated herein and especially those in respect to Article 4 (Availability of Lands; Subsurface and Physical Conditions; Reference Points), Article 7 (Other Work) and Article 14 (Payments to CONTRACTOR and Completion).
- 8.6** **Notice of Claim:** Should OWNER suffer injury or damage to person or property because of any error, omission or act of CONTRACTOR or of any of CONTRACTOR's employees or agents or others for whose acts CONTRACTOR is liable, a Claim will be made to the other party within thirty (30) calendar days of receipt of actual or constructive notice of the event giving rise to such injury or damage. The provisions of this paragraph 8.6 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitations or statute of repose.

ARTICLE 9 - ENGINEER/ARCHITECT'S STATUS DURING CONSTRUCTION

9.1 E/A's Authority and Responsibilities:

- 9.1.1** The duties and responsibilities and the limitations of authority of E/A during construction, as set forth in the Contract Documents, may be assigned or assumed by the OWNER, but shall not be extended without written consent of OWNER and/or E/A. The assignment of any authority, duties or responsibilities to E/A under the Contract Documents, or under any agreement between OWNER and E/A, or any undertaking, exercise or performance thereof by E/A, is intended to be for the sole and exclusive benefit of OWNER and not for the benefit of CONTRACTOR, Subcontractor, Supplier, or any other person or organization, or for any surety or employee or agent of any of them.
- 9.1.2** E/A will not supervise, direct, control or have authority over or be responsible for CONTRACTOR's means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto. E/A is not responsible for any failure of CONTRACTOR to comply with laws and regulations applicable to the furnishing or performing the Work. E/A is not responsible for CONTRACTOR's failure to perform or furnish the Work in accordance with the Contract Documents. Failure or omission of E/A to discover, or object to or condemn any defective Work or material shall not release CONTRACTOR from the obligation to properly and fully perform the Contract.
- 9.1.3** E/A is not responsible for the acts or omissions of CONTRACTOR, or of any Subcontractor, any Supplier, or of any other person or organization performing or furnishing any of the Work.
- 9.1.4** If OWNER and E/A agree, E/A will review the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds and certificates of inspection, tests and approvals and other documentation required to be delivered by Article 14, but only to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests and approvals that the results certified indicate compliance with, the Contract Documents.
- 9.1.5** The limitations upon authority and responsibility set forth in this paragraph 9.1 shall also apply to E/A's Consultants, Resident Project Representative and assistants.

9.2 E/A as Owner's Representative: E/A may be designated as the Owner's Representative under paragraph 8.1.

9.3 Visits to Site: If OWNER and E/A agree, E/A will make visits to the site at intervals appropriate to the various stages of construction as E/A deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of CONTRACTOR's executed Work. Based on information obtained during such visits and observations, E/A will endeavor for the benefit of OWNER to determine, in general, if the Work is proceeding in accordance with the Contract Documents. E/A will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. E/A's efforts will be directed toward providing for OWNER a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and on-site observations, E/A will keep OWNER informed of the progress of the Work and will endeavor to guard OWNER against defective Work. E/A's visits and on-site observations are subject to all the limitations on E/A's authority and responsibility set forth in paragraph 9.1.

- 9.4 Resident Project Representative:** If OWNER and E/A agree, E/A will furnish a Resident Project Representative to assist E/A in providing more continuous observation of the Work. The responsibilities and authority and limitations of any such Resident Project Representative and assistants will be as provided in paragraph 9.1 and in the Supplemental General Conditions. OWNER may designate another representative or agent to represent OWNER at the site who is not E/A, E/A's consultant, agent or employee.
- 9.5 Clarifications and Interpretations:** E/A may determine that written clarifications or interpretations of the requirements of the Contract Documents (in the form of drawings or otherwise) are necessary. Such written clarifications or interpretations will be consistent with the intent of and reasonably inferable from the Contract Documents, will be issued with reasonable promptness by Owner's Representative and will be binding on OWNER and CONTRACTOR. If OWNER or CONTRACTOR believes that a written clarification or interpretation justifies an adjustment in the Contract Amount or the Contract Times, OWNER or CONTRACTOR may make a Claim therefor as provided in Article 11 or 12.
- 9.6 Rejecting Defective Work:** E/A will recommend that OWNER disapprove or reject Work which E/A believes to be defective, or believes will not produce a completed Project that conforms to the Contract Documents or will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
- 9.7 Shop Drawings:** Refer to Division 1 for E/A's authority concerning Shop Drawings.

ARTICLE 10 - CHANGES IN THE WORK

10.1 Changes:

- 10.1.1** Without invalidating the Contract and without notice to any surety, OWNER may, at any time or from time to time, order additions, deletions or revisions in the Work. Such changes in the Work will be authorized by Change Order, Change Directive or Field Order. In the event that the OWNER and the CONTRACTOR are unable to negotiate the terms of a Change Order for the performance of additional Work, the OWNER may, at its election, perform such additional Work with its own forces or with another contractor and such work will be considered "Other Work" in accordance with Article 7.
- 10.1.2** Changes in the Work shall be performed under applicable provisions of the Contract Documents, and CONTRACTOR shall proceed promptly, unless otherwise provided in the Change Order, Change Directive or Field Order. CONTRACTOR's proposals for changes in the Contract Amount and/or Contract Time shall be submitted within ten (10) Calendar Days of request by Owner's Representative, including impacts to the approved Progress Schedule, unless Owner's Representative grants an extension. OWNER will review each proposal and respond to CONTRACTOR within ten (10) Calendar Days. After review by OWNER, CONTRACTOR shall provide any supporting data requested by Owner's Representative within seven (7) Calendar Days, unless Owner's Representative grants an extension. OWNER will determine within seven (7) Calendar Days whether to pursue the change in Work.
- 10.1.3** CONTRACTOR shall not be entitled to an increase in the Contract Amount or an extension of the Contract Times with respect to any Work performed that is not required by the Contract Documents as amended, modified and supplemented as provided in paragraphs 3.3.1 and 3.3.2, except in the case of an emergency as provided in paragraph 6.11.5 or in the case of uncovering Work as provided in paragraph 13.4.

- 10.1.4** Except in the case of an emergency as provided in paragraph 6.11.5, a Change Order or Change Directive is required before CONTRACTOR commences any activities associated with a change in the Work which, in CONTRACTOR 's opinion, will result in a change in the Contract Amount and/or Contract Times.
- 10.1.5** If notice of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Amount or Contract Times) is required by the provisions of any Bond to be given to a surety, the giving of any such notice will be CONTRACTOR's responsibility, and the amount of each applicable Bond will be adjusted accordingly.

10.2 Change Orders:

- 10.2.1** OWNER and CONTRACTOR shall execute appropriate written Change Orders covering:
 - .1 a change in the Work;
 - .2 the amount of the adjustment in the Contract Amount, if any; and
 - .3 the extent of the adjustment in the Contract Time, if any.
- 10.2.2** An executed Change Order shall represent the complete, equitable, and final amount of adjustment in the Contract Amount and/or Contract Time owed to CONTRACTOR or OWNER as a result of the occurrence or event causing the change in the Work encompassed by the Change Order.

10.3 Change Directives:

- 10.3.1** Without invalidating the Contract, OWNER may, by written Change Directive, using the Force Account method, order changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions, the Contract Amount and Contract Time being adjusted as necessary. "Force Account" means a basis of payment for the direct performance of Work with payment based on the actual cost of the labor, equipment and materials furnished and consideration for overhead and profit as set forth in Section 11.5, below. A Change Directive shall be used in the absence of complete and prompt agreement on the terms of a Change Order. Where practicable, any items of Work that may be agreed upon, prior to the performance of Work under this Section, will be included in a separate Change Order. For example, the cost of the installation of additional asphalt may be agreed upon based on the unit prices in the Bid.
- 10.3.2** If the Change Directive provides for an adjustment to the Contract Amount, the adjustment shall be based on the method provided in paragraph 11.5.
- 10.3.3** A Change Directive shall be effective immediately and shall be recorded later by preparation and execution of an appropriate Change Order.
- 10.3.4** Upon receipt of a Change Directive, CONTRACTOR shall promptly proceed with the change in the Work involved, provided, prior to the commencement of any Work under this section, the CONTRACTOR must submit its proposed Work plan, anticipated schedule, and a list of its work force and equipment proposed to be used in the Work for OWNER'S approval. Upon such approval, CONTRACTOR must promptly commence and make continuous progress in the Work. The OWNER reserves the right to withhold payment for low production or lack of progress.

10.4 Field Order:

- 10.4.1** Owner's Representative may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Amount or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the

Contract Documents. These shall be accomplished by written Field Order and shall be binding on OWNER and on CONTRACTOR who shall perform the Work involved promptly.

- 10.4.2** If CONTRACTOR believes that a Field Order would require an adjustment in the Contract Amount and/or Contract Times, CONTRACTOR shall make a prompt written request to Owner's Representative for a Change Order. Any request by CONTRACTOR for an adjustment in Contract Amount and/or Contract Times must be made in writing prior to beginning the work covered by the Field Order.

10.5 No Damages for Delay: CONTRACTOR shall receive no compensation for delays or hindrances to the Work, except when direct and unavoidable extra cost to CONTRACTOR is caused by failure of OWNER to provide information or material, if any, which is to be furnished by OWNER or access to the Work and only to the extent that such acts continue after the CONTRACTOR furnishes OWNER with written notice of such failure. When such extra compensation is claimed a written statement thereof shall be presented by CONTRACTOR to OWNER and if by OWNER found correct shall be approved. If delay is caused by specific orders given by OWNER to stop work or by performance of extra Work or by failure of OWNER to provide material or necessary instructions for carrying on the Work, then such delay will entitle CONTRACTOR to an equivalent extension of time, CONTRACTOR's application for which shall, however, be subject to approval of OWNER. No such extension of time shall release CONTRACTOR or surety on its performance bond from all CONTRACTOR's obligations hereunder which shall remain in full force until discharge of the Contract. In no event shall the CONTRACTOR be entitled to any compensation or recovery of any special damages in connection with any delays, including without limitation: consequential damages, lost opportunity costs, impact damages, or other similar damages. The OWNER'S exercise of any of its rights or remedies under the Contract Documents (including without limitation ordering changes in the Work, or directing suspension, rescheduling, or correction of the Work), regardless of the extent or frequency of the OWNER'S exercise of such rights or remedies, shall not be construed as active interference in the CONTRACTOR'S performance of the Work. Except as otherwise provided herein, an extension of Contract Time, to the extent permitted under Article 12, shall be the sole remedy of the CONTRACTOR for any acknowledged delays.

ARTICLE 11 - CHANGE OF CONTRACT AMOUNT

- 11.1** The Contract Amount is stated in the Agreement and, including authorized adjustments, is the total amount payable by OWNER to CONTRACTOR for performance of the Work under the Contract Documents.
- 11.2** The original Contract Amount may not be increased by more than twenty-five percent (25%) and it may not be decreased more than twenty-five percent (25%) without the consent of the CONTRACTOR to such decrease, except in the event of a termination for convenience under paragraph 15.2 or the failure of the City Council to appropriate sufficient funding for the Project, in which events it is agreed that the consent of the CONTRACTOR will not be required.
- 11.3** The Contract Amount shall only be changed by a Change Order. Any claim for an adjustment in the Contract Amount shall be made by Written Notice delivered by the party making the Claim to the other party promptly (but in no event later than thirty (30) calendar days) after the start of the occurrence or event giving rise to the Claim and stating the general nature of the Claim. Notice of the amount of the Claim with supporting data shall be delivered within thirty (30) calendar days after Written Notice of Claim is delivered by claimant, and shall represent that the adjustment claimed covers all known amounts to which claimant is entitled as a result of said occurrence or event. If OWNER and

CONTRACTOR cannot otherwise agree, all Claims for adjustment in the Contract Amount shall be determined as set out in Article 16.

11.4 Determination of Value of Work:

11.4.1 The value of any Work covered by a Change Order for an adjustment in the Contract Amount will be determined by one or more of the following methods:

- .1 by application of unit prices contained in the Contract Documents to the quantities of the items involved.
- .2 by a mutually agreed lump sum properly itemized and supported by sufficient substantiating data, including documentation by subcontractors performing the work, to permit evaluation.
- .3 by cost of Work plus CONTRACTOR's fee for all overhead costs and profit (determined as provided in paragraph 11.5).
- .4 No cost will be included in the change order for time spent preparing the change order, nor will costs be included for an estimate of time to negotiate the change order costs for machinery, tools, or equipment as described in subparagraph 11.5.3

11.4.2 Before using the method described in paragraph 11.4.1.3, OWNER and CONTRACTOR agree to negotiate a Change Order using the methods identified in paragraphs 11.4.1.1 and 11.4.1.2, as appropriate, to determine the adjustment in the Contract Amount.

11.5 Cost of Work: If neither of the methods defined in paragraphs 11.4.1.1 nor 11.4.1.2 can be agreed upon before a change in the Work is commenced which will result in an adjustment in the Contract Amount, then the change in the Work will be performed by Change Directive, using the Force Account method, and payment will be made as follows:

11.5.1 For all personnel, CONTRACTOR will receive actual field cost wage rates for each hour that said personnel are actually engaged in such Work, as substantiated by its certified payroll, to which will be added an amount equal to twenty-five percent (25%) of the sum thereof as compensation for CONTRACTOR's and any effected Subcontractor's total overhead and profit. No separate charge will be made by CONTRACTOR or its Subcontractor(s) for organization or overhead expenses. In no case will the rate of wage be less than the minimum shown in the Contract for a particular category. CONTRACTOR will also receive an amount equal to 55% of the wages paid personnel, excluding the 25% compensation provided above, for CONTRACTOR's and any effected Subcontractor's cost of premiums on public liability insurance, workers' compensation insurance, social security and unemployment insurance. The actual cost of CONTRACTOR's bond(s) on the extra Work will be paid based on invoices from surety. No charge for superintendence will be made unless considered necessary and ordered by OWNER.

11.5.2 CONTRACTOR will receive the actual cost, including freight charges, of the materials used and installed on such Work, to which costs will be added a sum equal to twenty-five percent (25%) thereof as compensation for CONTRACTOR's and any effected Subcontractor's total overhead and profit. In case material invoices indicate a discount may be taken, the actual cost will be the invoice price minus the discount.

11.5.3 For machinery, trucks, power tools, or other similar equipment (the "equipment") agreed to be necessary by OWNER and CONTRACTOR, OWNER will allow CONTRACTOR the Regional and Model Year adjusted Monthly Ownership Cost divided by 176 plus the Hourly Estimated Operating Costs as given in the latest edition of the "Rental Rate Blue Book" as published by EquipmentWatch (1-800-

669-3282) for each hour that said equipment is in use on such work. The established equipment rates will be paid for each hour that the equipment is utilized in the Work. In the event that the equipment is used intermittently during the Work, full payment for an eight-hour day will be made if the equipment is not idle more than four (4) hours of the day. If the equipment is idle more than four (4) hours in a day, then payment will be made only for the actual hours worked. No additional compensation will be allowed on the equipment for CONTRACTOR's or any affected Subcontractor's overhead and profit. OWNER may accept an actual rental invoice in lieu of the method of calculation set forth in paragraph 11.5.3 for equipment rented exclusively for Force Account Work or for equipment not included in the Rental Rate Blue Book.

- 11.5.4** The compensation, as herein provided for, shall be received by CONTRACTOR and any affected Subcontractor as payment in full for work done by Change Directive and will include use of small tools, and total overhead expense and profit. CONTRACTOR and Owner's Representative shall compare records of work done by Change Directive at the end of each day. Copies of these records will be made upon forms provided for this purpose by OWNER and signed by both Owner's Representative and CONTRACTOR, with one copy being retained by OWNER and one by CONTRACTOR. Refusal by CONTRACTOR to sign these records within two (2) working days of presentation does not invalidate the accuracy of the record.

11.6 Unit Price Work:

- 11.6.1** Where the Contract Documents provide that all or part of the Work is to be unit price Work, initially the Contract Amount will be deemed to include for all unit price work an amount equal to the sum of the established unit price for each separately identified item of unit price work times the estimated quantity of each item as indicated in the Bid. The estimated quantities of items of unit price work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Amount. Determinations of the actual quantities and classifications of unit price work performed by CONTRACTOR will be made by Owner's Representative. Owner's Representative will review with CONTRACTOR the preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise).
- 11.6.2** When "plan quantity" is indicated for a Bid item, CONTRACTOR shall be paid amount specified in the Contract Documents without any measurements.
- 11.6.3** Each unit price will be deemed to include an amount considered by CONTRACTOR to be adequate to cover CONTRACTOR's overhead and profit for each separately identified item.
- 11.6.4** A Major Item is any individual Bid item in the Bid that has a total cost equal to or greater than five percent (5%) of the original Contract Amount or \$50,000, whichever is greater, computed on the basis of Bid quantities and Contract unit prices.
- 11.6.5** OWNER or CONTRACTOR may make a Claim for an adjustment in the Contract Amount in accordance with Article 11 if:
- .1 the actual quantity of any Major Item should become as much as twenty percent (20%) more than or twenty percent (20%) less than that in the Bid; or
 - .2 CONTRACTOR presents documentation contesting accuracy of "plan quantity" and Owner's Representative verifies quantity and determines original value is in error by five percent (5%) or more;

Provided, however, in the event a Major Item is reduced by twenty percent (20%) or more of the amount in the Bid, no additional Article 11 profit or overhead will be added, if, due to other additions in the Work, the net value of the Contract Amount is not reduced.

ARTICLE 12 - CHANGE OF CONTRACT TIMES

12.1 Working Day and Calendar Day Contracts:

- 12.1.1** The Contract Times (or Milestones) may only be changed by Change Order or Time Extension Request duly executed by both CONTRACTOR and Owner's Representative. Any claim for an adjustment of the Contract Times (or Milestones) shall be made by Written Notice delivered by the party making the Claim to the other party promptly (but in no event later than thirty (30) calendar days after the start of the occurrence or event giving rise to the delay) and stating the general nature of the delay. Notice of the extent of the delay with supporting data shall be delivered within thirty (30) calendar days after Written Notice of Claim is delivered by claimant, and shall represent that the adjustment claimed is the entire adjustment to which claimant is entitled as a result of said occurrence or event. If OWNER and CONTRACTOR cannot otherwise agree, all Claims for adjustment in the Contract Times (or Milestones) shall be determined as set out in Article 16. No Claim for an adjustment in the Contract Times (or Milestones) will be valid if not submitted in accordance with the requirements of this paragraph.
- 12.1.2** When CONTRACTOR is at fault and OWNER stops the Work, so that corrections in the Work can be made by CONTRACTOR, no extension in time will be allowed.
- 12.1.3** When CONTRACTOR is prevented from completing any part of the Work within the Contract Times (or Milestones) due to delay beyond the control of both OWNER and CONTRACTOR, an extension of the Contract Times (or Milestones) in an amount equal to the time lost due to such delay shall be CONTRACTOR's sole and exclusive remedy for such delay. If performance by the CONTRACTOR or OWNER is interrupted by any occurrence not occasioned by its own conduct, whether such occurrence be an act of god or the result of war, riot, civil commotion, sovereign conduct, or the conduct of a third party, then such performance will be excused for a period of time necessary to remedy its effects, provided, however, in such an event, a conference will be held within three (3) business days to establish a proposed new Progress Schedule for the Project.
- 12.1.4** OWNER will consider time extension requests and may grant CONTRACTOR an extension of time because of:
 - .1** Changes ordered in the work which justify additional time.
 - .2** Failure of materials or products being at the Project site due to delays in transportation or failures of Suppliers, which are not the result of CONTRACTOR's, Subcontractor's or Supplier's negligence. The request for an extension of time shall be supported by a citation of acts demonstrating that the delays are beyond CONTRACTOR's control, including, but not limited to, CONTRACTOR's efforts to overcome such delays documented as follows:
 - a)** Copy of purchase order for delayed item(s) indicating date ordered by CONTRACTOR/ Subcontractor and date purchase order received by Supplier.
 - b)** If item(s) require Shop Drawings or other submittal information in accordance with the Contract Documents, provide record of date

submittal(s) forwarded to Owner's Representative, date submittal(s) returned to CONTRACTOR, and date submittal(s) forwarded to Supplier.

- c) Copy of document(s) from Supplier, on Supplier's letterhead, indicating date(s) item(s) would be ready for shipment and/or actual shipment date(s).
 - d) Copies of all correspondence between CONTRACTOR / Subcontractor and Supplier indicating CONTRACTOR / Subcontractor's efforts to expedite item(s).
 - e) If item(s) are being purchased by a Subcontractor, provide correspondence, meeting notes, etc., that reflect CONTRACTOR's efforts with the Subcontractor to expedite delivery of the item(s).
- .3 When acts of OWNER, E/A, utility owners or other contractors employed by OWNER delay progress of work through no fault of CONTRACTOR. The CONTRACTOR will only be entitled to an extension of time for delays that affect the Critical Path of the Work and that are not caused by the CONTRACTOR.
- .4 When CONTRACTOR is delayed by strikes, lockouts, fires, losses from natural causes, or other unavoidable cause or causes beyond CONTRACTOR's control.

12.2 Calendar Day Contracts:

- 12.2.1** Under a Calendar Day Contract, CONTRACTOR may be granted an extension of time because of unusual inclement weather, including but not limited to unusual rainfall events, which are beyond the normal rainfall recorded and expected for Austin, Texas. However, the CONTRACTOR will not be granted an extension of time for "normal rainfall", as described below.
- 12.2.2** "Unusual Inclement Weather" is defined as a rain event or other weather related event which occurs at the site and is of sufficient magnitude to prevent CONTRACTOR from performing units of Work critical to maintaining the Progress Schedule.
- 12.2.3** Baseline Rain Day Determination. "Normal rainfall" compiled by the State climatologist, based on U.S. Weather Bureau Records for Austin, Texas, is considered a part of the Calendar Day Contract, and is not a justification for an extension of time. Listed below are the number of days in each month for which no compensatory days for rainfall events ("Rain Days") in such months may be claimed:

January..... 8 days
 February..... 8 days
 March..... 7 days
 April..... 7 days
 May..... 9 days
 June..... 6 days
 July..... 5 days
 August..... 5 days
 September..... 7 days
 October..... 7 days

November..... 7 days

December..... 7 days

Rain Days in addition to the baseline Rain Day determination described above will be measured with the Owner's Representative's approval at the nearest operational public weather data collection facility to the site, including but not limited to the OWNER's early warning flood gauge system.

- 12.2.4** CONTRACTOR may receive credit in any month for Unusual Inclement Weather, and specifically for any Rain Days in that month which exceed the number of Rain Days allocated to that month, if a Claim is made in accordance with paragraph 12.1.1 and the weather event meets the definition for "Unusual Inclement Weather", and as applicable, "Rain Day" and such claimed day is a day on which Work critical to maintaining the Progress Schedule is scheduled to be performed and is otherwise capable of being performed.

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

- 13.1 Notice of Defects:** Prompt notice of all defective Work of which OWNER or E/A has actual knowledge will be given to CONTRACTOR. All defective Work may be rejected, corrected or accepted as provided in Article 13. CONTRACTOR must give OWNER and E/A prompt notice of any defective Work of which CONTRACTOR has actual knowledge.
- 13.2 Access to Work:** OWNER, E/A, E/A's Consultants, other representatives and personnel of OWNER, independent testing laboratories and governmental agencies having jurisdiction will have access to the Work at reasonable times for observing, inspecting and testing. CONTRACTOR shall provide them proper and safe conditions for such access, and advise them of CONTRACTOR's site safety procedures and programs so that they may comply therewith as applicable.
- 13.3 Tests and Inspections:**
- 13.3.1** CONTRACTOR shall give timely notice of readiness of the Work for all required inspections, tests or approvals, and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.
- 13.3.2** OWNER shall employ and pay for services of an independent testing laboratory to perform all inspections, tests or approvals required by the Contract Documents except:
- .1 for inspections, tests or approvals covered by paragraphs 13.3.3 and 13.3.4 below;
 - .2 that costs incurred for tests or inspections conducted pursuant to paragraph 13.4.3 shall be paid as provided in paragraph 13.4.3;
 - .3 for reinspecting or retesting defective Work, including any associated costs incurred by the testing laboratory for cancelled tests or standby time; and
 - .4 as otherwise specifically provided in the Contract Documents.
- 13.3.3** If laws or regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested or approved by an employee or other representative of such public body, CONTRACTOR shall assume full responsibility for arranging and obtaining such inspections, tests or approvals, pay

all costs in connection therewith and furnish Owner's Representative the required certificates of inspection or approval.

13.3.4 CONTRACTOR shall also be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests or approvals required for OWNER's and E/A's review of submittals covering materials, equipment, and mix designs to be incorporated in the Work.

13.3.5 All testing laboratories shall meet the requirements of ASTM E-329.

13.4 Uncovering Work:

13.4.1 If any Work (or the work of others) that is to be inspected, tested or approved is covered by CONTRACTOR without written concurrence of Owner's Representative, or if any Work is covered contrary to the written request of Owner's Representative, it must, if requested by Owner's Representative, be uncovered and recovered at CONTRACTOR's expense.

13.4.2 Uncovering Work as provided in paragraph 13.4.1 shall be at CONTRACTOR's expense unless CONTRACTOR has given Owner's Representative timely notice of CONTRACTOR's intention to cover the same and Owner's Representative has not acted within five (5) working days to such notice.

13.4.3 If Owner's Representative considers it necessary or advisable that covered Work be observed, inspected or tested, CONTRACTOR shall uncover, expose or otherwise make available for observation, inspection or testing that portion of the Work in question, furnishing all necessary labor, material and equipment. If it is found that such Work is defective, CONTRACTOR shall pay all claims, costs, losses and damages caused by, arising out of or resulting from such uncovering, exposure, observation, inspection and testing and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and OWNER shall be entitled to an appropriate decrease in the Contract Amount, and may make a Claim therefor as provided in Article 11. If, however, such Work is not found to be defective, CONTRACTOR shall be allowed an increase in the Contract Amount or an extension of the Contract Times (or Milestones), or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement and reconstruction; and CONTRACTOR may make a Claim therefor as provided in Articles 11 and 12.

13.5 OWNER May Stop the Work:

13.5.1 If the Work is defective, or CONTRACTOR fails to supply sufficient skilled workers, suitable materials, and/or equipment; or fails to furnish or perform the Work in such a way that the Work in progress or the completed Work will conform to the Contract Documents, OWNER may order CONTRACTOR to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of OWNER to stop the Work shall not give rise to any duty on the part of OWNER to exercise this right for the benefit of CONTRACTOR or any surety or other party.

13.5.2 If CONTRACTOR fails to correct defective Work or submit a satisfactory plan to take corrective action, with procedure and time schedule, OWNER may order CONTRACTOR to stop the Work, or any portion thereof, until cause for such order has been eliminated, or take any other action permitted by this Contract. A notice to stop the Work, based on defects, shall not stop calendar or working days charged to the Project.

13.6 Correction or Removal of Defective Work: If required by OWNER, CONTRACTOR shall promptly, as directed, either correct all defective Work, whether or not fabricated, installed or completed, or, if the Work has been rejected by Owner's Representative, remove it from the site and replace it with Work that is not defective. CONTRACTOR shall correct or remove and replace defective Work, or submit a plan of action detailing how the deficiency will be corrected, within the time frame identified in the notice of defective Work. CONTRACTOR shall pay all claims, costs, losses and damages caused by or resulting from such correction or removal (including but not limited to all costs of repair or replacement of work of others).

13.7 Warranty period:

13.7.1 If within one year after the date of Substantial Completion or such longer period of time as may be prescribed by laws or regulations or by the terms of any applicable special guarantee required by the Contract Documents or by any specific provision of the Contract Documents (e.g. paragraph 14.11.2), any Work, including work performed after the Substantial Completion date, is found to be defective, CONTRACTOR shall promptly, without cost to OWNER and in accordance with OWNER's written instructions:

- (i) correct such defective Work, or, if it has been rejected by OWNER, remove it from the site and replace it with Work that is not defective, and
- (ii) satisfactorily correct or remove and replace any damage to other Work or the work of others resulting therefrom.

If CONTRACTOR does not promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, OWNER may have the defective Work corrected or the rejected Work removed and replaced, and all claims, costs, losses and damages caused by or resulting from such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by CONTRACTOR. The warranty period will be deemed to be renewed and recommenced in connection with the completed items of Work requiring correction.

13.7.2 In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the warranty period for that item may start to run from an earlier date if so provided in the Contract Documents.

13.7.3 If correction of defective Work will affect the function or use of the facility CONTRACTOR shall not proceed with correction of defective Work without prior coordination and approval of OWNER.

13.7.4 The obligations of the CONTRACTOR to perform warranty work will survive the acceptance of the Work and any termination of the Contract.

13.8 Acceptance of Defective Work: If, instead of requiring correction or removal and replacement of defective Work, OWNER decides to accept it, OWNER may do so. CONTRACTOR shall pay all claims, costs, losses and damages attributable to OWNER's evaluation of and determination to accept such defective Work. If any such acceptance occurs prior to recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents and compensating OWNER for the diminished value of the defective Work. If the acceptance occurs after such recommendation, an appropriate amount will be paid by CONTRACTOR to OWNER after a calculation by OWNER of the diminution in value of the defective Work.

13.9 OWNER May Correct Defective Work: If CONTRACTOR fails within a reasonable time after Written Notice of OWNER to correct defective Work, or to remove and replace rejected Work, or if CONTRACTOR fails to perform the Work in accordance with the Contract Documents, or if CONTRACTOR fails to comply with any other provision of the Contract

Documents, OWNER may, after seven (7) calendar days' Written Notice to CONTRACTOR, correct and remedy any such deficiency. If, in the opinion of the Owner's Representative, significant progress has not been made during this seven (7) calendar day period to correct the deficiency, the OWNER may exercise any actions necessary to remedy the deficiency. In exercising the rights and remedies under this paragraph, OWNER shall proceed expeditiously. In connection with such corrective and remedial action, OWNER may exclude CONTRACTOR from all or part of the site, take possession of all or part of the Work, and suspend CONTRACTOR's services related thereto, and incorporate in the Work all materials and equipment stored at the site or for which OWNER has paid CONTRACTOR but which are stored elsewhere. CONTRACTOR shall allow OWNER, its agents and employees, OWNER's other contractors, E/A and E/A's consultants access to the site to enable OWNER to exercise the rights and remedies under this paragraph. All claims, costs, losses and damages incurred or sustained by OWNER in exercising such rights and remedies will be charged against CONTRACTOR and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work. Such claims, costs, losses and damages will include but not be limited to all costs of repair or replacement of work of others destroyed or damaged by correction, removal or replacement of CONTRACTOR's defective Work. CONTRACTOR shall not be allowed an extension of the Contract Times (or Milestones), or claims of damage because of any delay in the performance of the Work attributable to the exercise by OWNER of OWNER's rights and remedies hereunder.

ARTICLE 14 - PAYMENTS TO CONTRACTOR AND COMPLETION

14.1 Application for Progress Payment:

- 14.1.1** No more often than once a month, CONTRACTOR shall submit to Owner's Representative for review an Application for Payment, in a form acceptable to OWNER, filled out and signed by CONTRACTOR covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents.
- 14.1.2** Such applications shall not include requests for payment on account of changes in the Work which have been properly authorized by Change Directives but not yet included in Change Orders.
- 14.1.3** Such applications shall not include requests for payment of amounts the CONTRACTOR does not intend to pay to a Subcontractor or Supplier because of a dispute or other reason.
- 14.1.4** If payment is requested on the basis of materials or equipment not incorporated in the Work but delivered and suitably stored at the site or at another location agreed to in writing, the Application for Payment shall be accompanied by such bills of sale, data and other procedures satisfactory to OWNER substantiating OWNER's title to such materials or equipment or otherwise protecting OWNER's interest. Payment on account of such materials or equipment will not include any amount for CONTRACTOR's overhead or profit or relieve CONTRACTOR of its obligation to protect and install such materials or equipment in accordance with the requirements of the Contract and to restore damaged or defective Work. If materials or equipment are stored at another location, at the direction of the OWNER they shall be stored in a bonded and insured facility, accessible to E/A and OWNER, and shall be clearly marked as property of OWNER. Title to materials delivered to the site of the Work or a staging area will pass to OWNER upon payment by OWNER without the necessity for further documentation. Risk of loss will not pass to OWNER until acceptance.

- 14.1.5** Where the original Contract Amount is less than \$400,000, OWNER will pay CONTRACTOR total amount of approved Application for Payment, less ten percent (10%) of amount thereof, which ten percent (10%) will be retained until final payment, less all previous payments and less all other sums that may be retained by OWNER under the terms of this Agreement. Where the original Contract Amount is \$400,000 or more, OWNER will pay CONTRACTOR total amount of approved Application for Payment, less five percent (5%) of amount thereof, which five percent (5%) will be retained until final payment, less all previous payments and less all other sums that may be retained by OWNER under the terms of this Agreement. In either case, if the Work is near completion and delay occurs due to no fault or neglect of CONTRACTOR, OWNER may pay a portion of the retained amount to CONTRACTOR. CONTRACTOR, at OWNER's option, may be relieved of the obligation to complete the Work and, thereupon, CONTRACTOR shall receive payment of the balance due under the Contract subject to the conditions stated under paragraph 15.2. A Subcontractor may submit a written request to the CONTRACTOR and Project Manager requesting release of retainage for work by the Subcontractor that has been completed and approved. The Project Manager will evaluate the request and if it is approved, the Project Manager will request the CONTRACTOR to include the request for release of an appropriate amount of retainage in the next Pay Application.
- 14.1.6** Applications for Payment shall include the following documentation:
- .1 updated Progress Schedule;
 - .2 monthly subcontractor report;
 - .3 any other documentation required under the Supplemental General Conditions.
- 14.2 CONTRACTOR's Warranty of Title:** CONTRACTOR warrants and guarantees that title to all Work, materials and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to OWNER free and clear of all Liens no later than the time of payment to CONTRACTOR.
- 14.3 Review of Applications for Progress Payment:**
- 14.3.1** Owner's Representative will, within seven (7) calendar days after receipt of each Application for Payment, either indicate a recommendation for payment and forward the Application for processing by OWNER, or return the Application to CONTRACTOR indicating Owner's Representative's reasons for refusing to recommend payment. In the latter case, CONTRACTOR shall make the necessary corrections and resubmit the Application.
- 14.3.2** Owner's Representative's recommendation of any payment requested in an Application for Payment will constitute a representation by Owner's Representative, based upon Owner's Representative's on-site observations of the executed Work and on Owner's Representative's review of the Application for Payment and the accompanying data and schedules, that to the best of Owner's Representative's knowledge, information and belief:
- .1 the Work has progressed to the point indicated; and
 - .2 the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents, to a final determination of quantities and classifications for unit price Work, and to any other qualifications stated in the recommendation).

- 14.3.3** By recommending any such payment, Owner's Representative will not thereby be deemed to have represented that:
- .1 exhaustive or continuous on-site inspections have been made to check the quality or the quantity of the Work;
 - .2 examination has been made to ascertain how or for what purpose CONTRACTOR has used money previously paid on account of the Contract Amount;
 - .3 CONTRACTOR's construction means, methods, techniques, sequences or procedures have been reviewed; or
 - .4 that there may not be other matters or issues between the parties that might entitle CONTRACTOR to be paid additionally by OWNER or entitle OWNER to withhold payment to CONTRACTOR.

14.4 Decisions to Withhold Payment:

- 14.4.1** OWNER may withhold or nullify the whole or part of any payment to such extent as may be necessary on account of:
- .1 defective Work not remedied;
 - .2 third party Claims filed or reasonable evidence indicating probable filing of such Claims;
 - .3 failure of CONTRACTOR to make payments properly to Subcontractors for labor, materials or equipment;
 - .4 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Amount;
 - .5 damage to OWNER or another contractor;
 - .6 reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay;
 - .7 failure of CONTRACTOR to submit a schedule of values in accordance with the Contract Documents;
 - .8 failure of CONTRACTOR to submit a submittal schedule in accordance with the Contract Documents;
 - .9 failure of CONTRACTOR to submit and update a construction Progress Schedule in accordance with the Contract Documents;
 - .10 failure of CONTRACTOR to maintain a record of changes on drawings and documents;
 - .11 failure of CONTRACTOR to maintain weekly payroll reports and, as applicable, provide copies of reports in a timely manner upon request of OWNER;
 - .12 failure of CONTRACTOR to submit monthly subcontractor reports;
 - .13 CONTRACTOR's neglect or unsatisfactory prosecution of the Work, including failure to clean up;
 - .14 failure of CONTRACTOR to comply with the Austin City Code, Chapter 2-9-A, as amended, "Minority-Owned and Women-Owned Business Enterprise Procurement Program;" or
 - .15 failure of CONTRACTOR to comply with any provision of the Contract Documents.

- 14.4.2** When the above reasons for withholding payment are removed, CONTRACTOR shall resubmit a statement for the value of Work performed. Payment will be made within thirty (30) calendar days of receipt of approved Application for Payment.
- 14.4.3** Subcontractors may request Partial Payment when the OWNER withholds payment of an invoice to the CONTRACTOR for any reason listed in Section 14.4.1. If payment is withheld by the OWNER, the CONTRACTOR shall notify all affected Subcontractors within two (2) working days of notice that payment is being withheld. Upon notification, Subcontractors may submit a formal written request for Partial Payment to the CONTRACTOR and OWNER. If directed by the OWNER, the CONTRACTOR shall within three (3) working days resubmit to the OWNER an invoice for the same period that includes only the work performed by the requesting Subcontractors during this period. The OWNER will review this resubmitted invoice in accordance with Section 14.3.1. Upon receipt of payment for the resubmitted invoice, CONTRACTOR shall pay the subcontractor within ten (10) Calendar Days in accordance with Section 6.4.7.
- 14.5 Delayed Payments:** Should OWNER fail to make payment to CONTRACTOR of sum named in any Application for Payment within thirty (30) calendar days after the day on which OWNER received the mutually acceptable Application for Payment, then OWNER will pay to CONTRACTOR, in addition to sum shown as due by such Application for Payment, interest thereon at the rate specified in Government Code, Section 2251.025(b) from date due until fully paid, which shall fully liquidate any injury to CONTRACTOR growing out of such delay in payment.
- 14.6 Arrears:** No money shall be paid by OWNER upon any claim, debt, demand or account whatsoever, to any person, firm or corporation who is in arrears to City for taxes; and City shall be entitled to counterclaim and automatically offset against any such debt, claim, demand or account in the amount of taxes so in arrears and no assignment or transfer of such debt, claim, demand or account after said taxes are due, shall affect the right of OWNER to so offset said taxes, and associated penalties and interest if applicable, against the same.
- 14.7 Substantial Completion:**
- 14.7.1** When the CONTRACTOR considers that the Work, or a portion thereof which the OWNER agrees to accept separately, is substantially complete, the CONTRACTOR shall notify Owner's Representative and request a determination as to whether the Work or designated portion thereof is substantially complete. If Owner's Representative does not consider the Work substantially complete, Owner's Representative will notify CONTRACTOR giving reasons therefor. After performing any required Work, CONTRACTOR shall then submit another request for Owner's Representative to determine Substantial Completion. If Owner's Representative considers the Work substantially complete, Owner's Representative will prepare and deliver a certificate of Substantial Completion which shall establish the date of Substantial Completion, shall include a punch list of items to be completed or corrected before final payment, shall establish the time within which CONTRACTOR shall finish the punch list, and shall establish responsibilities of the OWNER and CONTRACTOR for security, maintenance, heat, utilities, damage to the Work, warranty and insurance. Failure to include an item on the punch list does not alter the responsibility of CONTRACTOR to complete all Work in accordance with the Contract Documents. If a Certificate of Occupancy is required by public authorities having jurisdiction over the Work, said certificate shall be issued before the Work or any portion thereof is considered substantially complete. The certificate of Substantial Completion shall be signed by OWNER and CONTRACTOR to evidence acceptance of the responsibilities assigned to them in such certificate.

14.7.2 OWNER shall have the right to exclude CONTRACTOR from the Work after the date of Substantial Completion, but OWNER will allow CONTRACTOR reasonable access to complete or correct items on the punch list and complete warranty work.

14.8 Partial Utilization: Use by OWNER, at OWNER's option, of any substantially completed part of the Work which: (i) has specifically been identified in the Contract Documents, or (ii) OWNER and CONTRACTOR agree constitutes a separately functioning and usable part of the Work that can be used by OWNER for its intended purpose without significant interference with CONTRACTOR's performance of the remainder of the Work, may be accomplished prior to Substantial Completion of all the Work in accordance with the following:

14.8.1 OWNER at any time may request CONTRACTOR to permit OWNER to use any such part of the Work which OWNER believes to be ready for its intended use and substantially complete. If CONTRACTOR agrees that such part of the Work is substantially complete, CONTRACTOR shall certify to Owner's Representative that such part of the Work is substantially complete and request Owner's Representative to issue a certificate of substantial Completion for that part of the Work. CONTRACTOR at any time may notify Owner's Representative that CONTRACTOR considers any such part of the Work ready for its intended use and substantially complete and request Owner's Representative to issue a certificate of Substantial Completion for that part of the Work. The provisions of paragraphs 14.7.1 and 14.7.2 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

14.8.2 Such partial utilization is authorized by public authorities having jurisdiction over the Work.

14.9 Final Inspection: Upon Written Notice from CONTRACTOR that the entire Work or an agreed portion thereof is complete, Owner's Representative will make a final inspection with CONTRACTOR and provide Written Notice of all particulars in which this inspection reveals that the Work is incomplete or defective. CONTRACTOR shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

14.10 Final Application for Payment: CONTRACTOR may make application for final payment following the procedure for progress payments after CONTRACTOR has completed all such corrections to the satisfaction of Owner's Representative and delivered the following documents:

14.10.1 Affidavit by CONTRACTOR certifying the payment of all debts and claims;

14.10.2 Three (3) complete operating and maintenance manuals, each containing maintenance and operating instructions, schedules, guarantees, and other documentation required by the Contract Documents;

14.10.3 Record documents (as provided in paragraph 6.10);

14.10.4 Consent of surety, if any, to final payment. If surety is not provided, complete and legally effective releases or waivers (satisfactory to OWNER) of all claims arising out of or filed in connection with the Work;

14.10.5 Certificate evidencing that insurance required by the Supplemental General Conditions will remain in force after final payment and through the warranty period;

14.10.6 Non-Use of Asbestos Affidavit (After Construction);

14.10.7 Subcontractor report and all other documentation necessary for evaluation of CONTRACTOR's fulfillment of the Contract MBE/WBE or DBE goals;

14.10.8 Documentation of notice to claimants, to the extent applicable and subject to subparagraph 14.11.4; and

14.10.9 Any other documentation called for in the Contract Documents.

14.11 Final Payment and Acceptance:

14.11.1 If, on the basis of observation of the Work during construction, final inspection, and review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Owner's Representative is satisfied that the Work has been completed and CONTRACTOR's other obligations under the Contract Documents have been fulfilled and there are no outstanding claims, Owner's Representative will recommend the final Application for Payment and thereby notify the OWNER, who will pay to CONTRACTOR the balance due CONTRACTOR under the terms of the Contract. If the sole remaining unfinished item to complete the Work is the reestablishment of vegetation, CONTRACTOR may execute a revegetation letter with fiscal posted (letter of credit) to ensure completion of this item. This Work must be accomplished within one hundred twenty (120) Calendar Days of the date of Final Completion of the Work. When the permanent erosion control has been established, OWNER will initiate an inspection for final acceptance of the erosion controls. If the revegetation is not completed within the one hundred twenty (120) Calendar Days, OWNER, at its option, may complete the Work using the posted fiscal.

14.11.2 If the Contract measures Contract Time to Final Completion, rather than Substantial Completion, Owner's Representative will issue a letter of final acceptance to CONTRACTOR which establishes the Final Completion date and initiates the one-year warranty period. If the sole remaining unfinished item to complete the Work is the reestablishment of vegetation and CONTRACTOR has executed a revegetation letter with fiscal posted (letter of credit) to ensure completion of this item, the Owner's Representative will issue a letter of conditional acceptance to CONTRACTOR which established the Final Completion date and initiates the one-year warranty period.

14.11.3 Final payment is considered to have taken place when CONTRACTOR or any of its representatives negotiates OWNER's final payment check, whether labeled final or not, for cash or deposits check in any financial institution for its monetary return.

14.11.4 The OWNER will withhold funds sufficient to cover the amount of any unresolved contract claims from final payment for six months under the following limited conditions:

- .1** CONTRACTOR must provide written notice to the claimant (via certified mail or hand delivery) that (i) OWNER will hold funds in the amount of the disputed claim for six (6) months from the date of the receipt of the notice and (ii) CONTRACTOR and the claimant have certain alternative dispute resolution rights; and
- .2** CONTRACTOR must provide OWNER with a copy of the receipted notice.

Provided the claimant has received notice under this section, OWNER will release the withheld funds, if the CONTRACTOR provides a bond in substantial compliance with the provisions of Section 52.231 of the Texas Property Code; when the OWNER receives a settlement or release of the claim with accompanying instructions regarding payment; upon resolution of the claim in litigation, if suit is filed within such six (6) month period and the OWNER receives written notice of such filing; or when such six (6) month period has passed, if no such bond, settlement, release, or notice of filing of suit have been received. The above provisions notwithstanding, if efforts to timely resolve a disputed claim are not

being made to OWNER'S reasonable satisfaction, OWNER may, in its complete discretion, file an interpleader action and deposit the withheld funds in the registry of a court of competent jurisdiction. In addition, CONTRACTOR must include a provision in each of its subcontracts that the prevailing party in any litigation arising thereunder will be entitled to recover its costs of court and reasonable attorney's fees.

14.12 Waiver of Claims: The making and acceptance of final payment will constitute:

14.12.1 a waiver of claims by OWNER against CONTRACTOR, except claims arising from unsettled claims, from defective Work appearing after final inspection, from failure to comply with the Contract Documents or the terms of any warranty specified therein, or from CONTRACTOR's continuing obligations under the Contract Documents; and

14.12.2 a waiver of all claims by CONTRACTOR against OWNER other than those previously made in writing and still unsettled.

ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION

15.1 OWNER May Suspend Work Without Cause: At any time and without cause, OWNER may suspend the Work or any portion thereof for a period of not more than ninety (90) calendar days by Written Notice to CONTRACTOR which will fix the date on which the Work will be resumed. CONTRACTOR shall resume the Work on the date so fixed. CONTRACTOR shall be allowed an adjustment in the Contract Amount or an extension of the Contract Times, or both, directly attributable to any such suspension if CONTRACTOR makes an approved Claim therefor as provided in Articles 11 and 12.

15.2 OWNER May Terminate Without Cause: Upon seven (7) calendar days' Written Notice to CONTRACTOR, OWNER may, without cause and without prejudice to any right or remedy of OWNER, elect to terminate the Agreement. In such case, CONTRACTOR shall be paid (without duplication of any items):

15.2.1 for completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination;

15.2.2 for reasonable demobilization costs;

15.2.3 for anticipated profits on completed and accepted Work not previously paid and not included in separate pay items calculated to date of termination but not for anticipated profit on the entire Contract not previously paid, unabsorbed overhead, or lost opportunity; and

15.2.4 for all claims incurred in settlement of terminated contracts with Subcontractors, Suppliers and others, including for anticipated profits on completed and accepted Work not previously paid and not included in separate pay items calculated to date of termination but not for anticipated profit on the entire Contract not previously paid, unabsorbed overhead, or lost opportunity. CONTRACTOR agrees to negotiate in good faith with Subcontractors, Suppliers and others to mitigate OWNER's cost.

15.3 OWNER May Terminate With Cause:

15.3.1 Upon the occurrence of any one or more of the following events:

.1 if CONTRACTOR persistently fails to perform the Work in accordance with the Contract Documents;

- .2 if CONTRACTOR disregards laws or regulations of any public body having jurisdiction;
- .3 if CONTRACTOR disregards the authority of Owner's Representative;
- .4 if CONTRACTOR makes fraudulent statements;
- .5 if CONTRACTOR fails to maintain a work force adequate to accomplish the Work within the Contract Time;
- .6 if CONTRACTOR fails to make adequate progress and endangers successful completion of the Contract; or
- .7 if CONTRACTOR otherwise violates in any substantial way any provisions of the Contract Documents;

OWNER may, after giving CONTRACTOR (and the surety, if any) seven (7) calendar days Written Notice terminate the services of CONTRACTOR. OWNER, at its option, may proceed with negotiation with surety for completion of the Work. Alternatively, OWNER may under these circumstances exclude CONTRACTOR from the site and take possession of the Work (without liability to CONTRACTOR for trespass or conversion), incorporate in the Work all materials and equipment stored at the site or for which OWNER has paid CONTRACTOR but which are stored elsewhere, and finish the Work as OWNER may deem expedient. In such case CONTRACTOR shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Amount exceeds all claims, costs, losses and damages sustained by OWNER arising out of or resulting from completing the Work, such excess will be paid to CONTRACTOR. If such claims, costs, losses and damage exceed such unpaid balance, CONTRACTOR or surety shall pay the difference to OWNER. In the event that a termination for cause is found to be wrongful, the termination shall be converted to a termination without cause as set forth in Section 15.2 and CONTRACTOR'S remedy for wrongful termination is limited to the recovery of the payments permitted for termination without cause as set forth in Section 15.2.

- 15.3.2** Where CONTRACTOR's services have been so terminated by OWNER, the termination will not affect any rights or remedies of OWNER against CONTRACTOR and surety then existing or which may thereafter accrue. Any retention or payment of moneys due CONTRACTOR by OWNER will not release CONTRACTOR from liability. In the event OWNER terminates Contract with cause, OWNER may reject any and all Bids submitted by CONTRACTOR for up to three (3) years after the date of such termination. These Progressive Sanctions will be administered in accordance with the City of Austin Purchasing Office Probation, Suspension, and Debarment Procedures for Vendors, which include notice and an opportunity for a hearing.

- 15.4 CONTRACTOR May Stop Work or Terminate:** If through no act or fault of CONTRACTOR, the Work is suspended for a period of more than ninety (90) calendar days by OWNER or under an order of court or other public authority, or (except during disputes) Owner's Representative fails to forward for processing any mutually acceptable Application for Payment within thirty (30) calendar days after it is submitted, or (except during disputes) OWNER fails for sixty (60) calendar days after it is submitted to pay CONTRACTOR any sum finally determined by OWNER to be due, then CONTRACTOR may, upon seven (7) calendar days' Written Notice to OWNER, and provided OWNER does not remedy such suspension or failure within that time, terminate the Agreement and recover from OWNER payment on the same terms as provided in paragraph 15.2. In lieu of terminating the Agreement and without prejudice to any other right or remedy, if (except during disputes) Owner's Representative has failed to forward for processing any mutually acceptable Application for Payment within thirty (30) calendar days after it is submitted, or (except during disputes)

OWNER has failed for sixty (60) calendar days after it is submitted to pay CONTRACTOR any sum finally determined by OWNER to be due, CONTRACTOR may upon seven (7) calendar days' Written Notice to OWNER stop the Work until payment of all such amounts due CONTRACTOR, including interest thereon. The provisions of this paragraph 15.4 are not intended to preclude CONTRACTOR from making a Claim under Articles 11 and 12 for an increase in Contract Amount or Contract Times or otherwise for expenses or damage directly attributable to CONTRACTOR's stopping Work as permitted by this paragraph.

- 15.5 Discretionary Notice to Cure:** In its complete discretion, OWNER may, but is not required to, provide a Notice to Cure to CONTRACTOR and its surety to cure an event of default described above and/or an anticipatory breach of contract and, if required by OWNER, to attend a meeting with OWNER, regarding the Notice to Cure, the event of default, and/or the anticipatory breach of contract. The Notice to Cure will set forth the time limit in which the cure is to be completed or commenced and diligently prosecuted. Upon receipt of any Notice to Cure, CONTRACTOR shall prepare a report describing its program and measures to affect the cure of the event of default and/or anticipatory breach of contract within the time required by the Notice to Cure. The CONTRACTOR'S report must be delivered to OWNER at least three (3) days prior to any requested meeting with the OWNER and surety.
- 15.6 Bankruptcy:** If CONTRACTOR declares bankruptcy or is adjudged bankrupt or makes an assignment for the benefit of creditors or if a receiver is appointed for the benefit of creditors or if a receiver is appointed by reason of CONTRACTOR'S insolvency, CONTRACTOR may be unable to perform this Contract in accordance with the Contract requirements. In such an event, OWNER may demand CONTRACTOR or its successor in interest provide OWNER with adequate assurance of CONTRACTOR'S future performance in accordance with the terms and conditions of the Contract. If CONTRACTOR fails to provide adequate assurance of future performance to OWNER'S reasonable satisfaction within ten (10) days of such a request, OWNER may terminate the CONTRACTOR'S services for cause or without cause, as set forth above. If CONTRACTOR fails to provide timely adequate assurance of its performance and actual performance, OWNER may prosecute the Work with its own forces or with other contractors on a time and material or other appropriate basis and the cost of which will be charged against the Contract balance.
- 15.7 Duty to Mitigate:** In the event of any termination or suspension under this Contract, the CONTRACTOR agrees to and shall take all reasonable actions to mitigate its damages and any and all claims which may be asserted against the OWNER.
- 15.8 Responsibility during Demobilization:** While demobilizing, the CONTRACTOR will take all necessary and reasonable actions to preserve and protect the Work, the site and other property of the OWNER or others at the site.

ARTICLE 16 - DISPUTE RESOLUTION

16.1 Filing of Claims:

- 16.1.1** Claims arising from the circumstances identified in paragraphs 3.2, 4.1, 4.2.2, 4.2.4, 6.4.2, 6.11.5.2, 6.17, 7.5, 8.6, 9.5, 10.4.2, 13.4.3, 13.8, 13.9, 15.1, 15.2, 15.3, or 15.4, or other occurrences or events, shall be made by Written Notice delivered by the party making the Claim to the other party within thirty (30) calendar days after the start of the occurrence or event giving rise to the Claim and stating the general nature of the Claim. Notice of the amount of the Claim with supporting data shall be delivered in writing within thirty (30) calendar days after Written Notice of Claim is delivered by claimant and shall represent that the adjustment claimed covers all known amounts and/or extensions of time to which claimant is entitled.

- 16.1.2** Within thirty (30) calendar days of receipt of notice of the amount of the Claim with supporting data, Owner's Representative and CONTRACTOR shall meet to discuss the Claim, after which an offer of settlement or notification of no settlement offer will be made to claimant. If claimant is not satisfied with the proposal presented, claimant shall have thirty (30) calendar days in which to: (i) submit additional supporting data requested by the other party; (ii) modify the initial Claim; or (iii) request Alternative Dispute Resolution.

16.2 Alternative Dispute Resolution:

- 16.2.1** If a dispute exists concerning a Claim, the parties agree to use the following procedure prior to pursuing any other available remedies. OWNER reserves the right to include the E/A as a party.

- 16.2.2** Negotiating with Previously Uninvolved Personnel: Either party may make a written request for a meeting to be held between representatives of each party within fourteen (14) Calendar Days of the request or such later period that the parties may agree to. Each party shall endeavor to include, at a minimum, one (1) previously uninvolved senior level decision maker (an owner, officer, or employee of each organization) empowered to negotiate on behalf of their organization. If a previously uninvolved senior level decision maker is unavailable due to the size of the CONTRACTOR'S organization or any other reason, the CONTRACTOR shall nonetheless provide an appropriate senior level decision maker for the meeting. The purpose of this and any subsequent meetings will be good faith negotiations of the matters constituting the dispute. Negotiations shall be concluded within thirty (30) Calendar Days of the first meeting, unless mutually agreed otherwise. This step may be waived by a written agreement signed by both parties, in which event the parties may proceed directly to mediation as described below.

16.2.3 Mediation:

- .1** If the procedure described in 16.2.2 proves unsuccessful or is waived pursuant to its terms, the parties shall initiate the mediation process. OWNER and CONTRACTOR agree to select within thirty (30) calendar days a mediator trained in mediation skills, to assist with resolution of the dispute. OWNER and CONTRACTOR agree to act in good faith in the selection of the mediator and to give consideration to qualified individuals nominated to act as mediator. Nothing in this agreement prevents the parties from relying on the skills of a person who also is trained in the subject matter of the dispute and/or a contract interpretation expert. Should the parties fail to agree on a mediator within thirty (30) calendar days of initiation of the mediation process, the parties agree to ask the Travis County Dispute Resolution Center to select a qualified individual, which selection shall be binding on the parties.
- .2** Mediation is a forum in which an impartial person, the mediator, facilitates communication between parties to promote reconciliation, settlement, or understanding among them. The parties hereby agree that mediation, at a minimum, shall provide for (i) conducting an on-site investigation, if appropriate, by the mediator for fact gathering purposes, (ii) a meeting of all parties for the exchange of points of view and (iii) separate meetings between the mediator and each party to the dispute for the formulation of resolution alternatives. The parties agree to participate in mediation in good faith for up to thirty (30) calendar days from the date of the first mediation session, unless mutually agreed otherwise. Should the parties fail to reach a resolution of the dispute through mediation, then each party is released to pursue other remedies available to them.

16.3 Resolution of Disputes between Contractor and Subcontractor or Supplier: If a dispute exists concerning a claim between a CONTRACTOR and a Subcontractor or Supplier, the CONTRACTOR agrees to participate with such Subcontractor and/or Supplier in a process substantially paralleling the steps set out in paragraphs 16.1 and 16.2 above, including the delivery of written notices, submission of supporting data, negotiation with previously uninvolved personnel, and, if such alternative dispute resolution process is unsuccessful, mediation between the parties to the claim. If the CONTRACTOR and Subcontractor or Supplier agreement provides an alternative dispute resolution process, which provides substantially equivalent rights to those set forth herein, it may be followed, unless the CONTRACTOR and affected Subcontractor or Supplier agree to follow the process outlined above. The OWNER is not a party to the alternative dispute resolution process between the CONTRACTOR and Subcontractor or Supplier and will not pay any costs incurred in the process. Each party will be responsible for its own expenses incurred in the process, which will include an equal share of the mediation expenses, unless otherwise determined by the mediator. NOTICE: THE PROCESS SET FORTH HEREIN IS NOT A SUBSTITUTE FOR THE STATUTORY PAYMENT BOND CLAIM PROCESS.

16.4 Claim Calculation:

16.4.1 Delay Claims: The intent of paying for delay damages is to reimburse the CONTRACTOR for actual expense arising out of a compensable delay. No profit or force account markups, other than labor burden, will be allowed for delay claims by the CONTRACTOR seeking reimbursement for expenses arising out of an alleged event of delay. No consequential damages will be allowed to the CONTRACTOR in connection with any claimed delays. If the CONTRACTOR requests compensation for delay damages and the delay is determined to be compensable, then standby equipment costs and project overhead compensation will be based on the duration of the compensable delay and the following:

- .1 Standby equipment costs will not be allowed during periods when the equipment would have otherwise been idle. Standby equipment time will not exceed more than eight (8) hours per twenty-four (24) hour day, forty (40) hours per week, and one hundred seventy-six (176) hours per month. Standby equipment costs will be paid at 50 percent (50%) of the applicable Rental Rate Blue Book rates and calculated by dividing the monthly rate by one hundred seventy-six (176), multiplying the result by the number of standby hours and multiplying that number by the regional adjustment factor and the rate adjustment factor contained in the Blue Book. Operating costs will not be allowed.
- .2 Project overhead will be determined from actual costs that the CONTRACTOR will be required to document. Project overhead is defined as the administrative and supervisory expenses incurred at the work site and will not include home office overhead.

16.4.2 General: Except as limited with respect to delay claims, as set forth above, the criteria set forth in Section 11.4.1 may be used as a basis to calculate an adjustment in the Contract Amount in the resolution of a claim, provided that there will be no compensation for home office overhead.

16.5 MBE/WBE Program Progressive Sanctions: CONTRACTOR is subject to progressive sanctions for failure of CONTRACTOR to comply with Austin City Code, Chapter 2-9A, as amended: "Minority-owned and Women-owned Business Enterprise Procurement Program." Available sanctions for Program violations are set forth in Program rules adopted by the Small and Minority Business Resources Department (SMBR), as amended, and may include the following progressive sanctions for Program violations within a rolling 24-month period: (i) a period of probation for up to six (6) months for the first violation (ii) a period of suspension from bidding for up to 24 months for the second violation, and (iii) a period of

debarment for up to five (5) years for the third violation. If the CONTRACTOR engages in more than one of the violations listed below at any given time, OWNER has the discretion to determine whether such actions should be counted as multiple violations of the MBE/WBE Ordinance. Program violations include:

- .1 providing false or misleading information to the OWNER in connection with the submission of a Bid, responses to request for qualifications or Proposals, Good Faith Efforts documentation, post award compliance or other Program operations;
- .2 substituting M/WBE Subcontractors without first receiving approval for such substitutions;
- .3 failure to comply with the approved Compliance Plan without an approved request for a change, an approved Change Order or other approved change to the Contract;
- .4 violation of any other provision of the "Minority-owned and Women-owned Business Enterprise Procurement Program";
- .5 providing false or misleading information to the OWNER in connection with an application for or challenge to certification, recertification or decertification as a MBE/WBE; and
- .6 bid shopping.

The Progressive Sanctions will be administered in accordance with the City of Austin Purchasing Office Probation, Suspension, and Debarment Procedures for Vendors, which includes notice and an opportunity for a hearing.

ARTICLE 17 – MISCELLANEOUS

- 17.1 Venue:** In the event of any suit at law or in equity involving the Contract, venue shall be exclusively in Travis County, Texas and the laws of the State of Texas shall apply to the interpretation and enforcement of the Contract.
- 17.2 Extent of Agreement:** This Contract represents the entire and integrated agreement between the OWNER and CONTRACTOR with respect to the subject matter hereof and supersedes all prior negotiations, representations or agreements, either written or oral.
- 17.3 Cumulative Remedies:** The rights and remedies available to the parties are not to be construed in any way as a limitation of any rights and remedies available to any or all of them which are otherwise imposed or available by laws or regulations, by special warranty or guarantees or by other provisions of the Contract Documents, and the provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right and remedy to which they apply. Specifically, the OWNER is not required to only assess liquidated damages, and OWNER may elect to pursue its actual damages resulting from the failure of the CONTRACTOR to complete the Work in accordance with the requirements of the Contract Documents.
- 17.4 Severability:** If any word, phrase, clause, sentence or provision of the Contract, or the application of same to any person or set of circumstances is for any reason held to be unconstitutional, invalid or unenforceable, that finding shall only effect such word, phrase, clause, sentence or provision, and such finding shall not affect the remaining portions of this Contract; this being the intent of the parties in entering into the Contract; and all provisions of the Contract are declared to be severable for this purpose.

- 17.5 Independent Contractor:** The Contract shall not be construed as creating an employer/employee relationship, a partnership, or a joint venture. CONTRACTOR is an independent contractor and CONTRACTOR's services shall be those of an independent contractor. CONTRACTOR agrees and understands that the Contract does not grant any rights or privileges established for employees of OWNER.
- 17.6 Prohibition of Gratuities:** OWNER may, by Written Notice to CONTRACTOR, terminate the Contract without liability if it is determined by OWNER that gratuities were offered or given by CONTRACTOR or any agent or representative of CONTRACTOR to any officer or employee of OWNER with a view toward securing the Contract or securing favorable treatment with respect to the awarding or amending or the making of any determinations with respect to the performing of such Contract. In the event the Contract is terminated by OWNER pursuant to this provision, OWNER shall be entitled, in addition to any other rights and remedies, to recover or withhold the amount of the cost incurred by CONTRACTOR in providing such gratuities.
- 17.7 Prohibition Against Personal Interest in Contracts:** No officer, employee, independent consultant, or elected official of OWNER who is involved in the development, evaluation, or decision-making process of the performance of any solicitation shall have a financial interest, direct or indirect, in the Contract resulting from that solicitation. Any violation of this provision, with the knowledge, expressed or implied, of CONTRACTOR shall render the Contract voidable by OWNER.
- 17.8 OWNER'S Right to Audit:**
- 17.8.1** Records means all records generated by or on behalf of CONTRACTOR and each Subcontractor and Supplier of CONTRACTOR, whether paper, electronic, or other media, which are in any way related to performance of or compliance with this Contract, including, without limitation:
- .1 accounting records;
 - .2 written policies and procedures;
 - .3 subcontract files (including proposals of successful and unsuccessful Bidders, Bid recaps, etc.);
 - .4 original estimates and estimating work sheets;
 - .5 correspondence;
 - .6 Change Order files (including documentation covering negotiated settlements);
 - .7 back charge logs and supporting documentation;
 - .8 general ledger entries detailing cash and trade discounts earned, insurance rebates and dividends;
 - .9 lump sum agreements between CONTRACTOR and any Subcontractor or Supplier;
 - .10 records necessary to evaluate: Contract compliance, Change Order pricing, and any Claim submitted by CONTRACTOR or any of its payees; and
 - .11 any other CONTRACTOR record that may substantiate any charge related to this Contract.
- 17.8.2** CONTRACTOR shall allow OWNER'S agent or its authorized representative to inspect, audit, and/or reproduce, or all three, all Records generated by or on behalf of CONTRACTOR and each Subcontractor and Supplier, upon OWNER'S written request. Further, CONTRACTOR shall allow OWNER'S agent or authorized

representative to interview any of CONTRACTOR'S employees, all Subcontractors and all Suppliers, and all their respective employees.

- 17.8.3** CONTRACTOR shall retain all its Records, and require all its Subcontractors and Suppliers to retain their respective Records, during this Contract and for three (3) years after final payment, until all audit and litigation matters that OWNER has brought to the attention of CONTRACTOR are resolved, or as otherwise required by law, whichever is longer. OWNER'S right to inspect, audit, or reproduce Records, or interview employees of CONTRACTOR or its respective Subcontractors or Suppliers exists during this Contract, and for three (3) years after final payment, until all audit and litigation matters that OWNER has brought to CONTRACTOR'S attention are resolved, or as otherwise required by law, whichever is longer, and at no cost to OWNER, either from CONTRACTOR or any of its Subcontractors or Suppliers that may furnish Records or make employees available for interviewing.
- 17.8.4** CONTRACTOR must provide sufficient and accessible facilities during its normal business hours for OWNER to inspect, audit, or reproduce Records, or all three, and to interview any person about the Records.
- 17.8.5** CONTRACTOR shall insert these requirements in each written contract between CONTRACTOR and any Subcontractor or Supplier and require each Subcontractor and Supplier to comply with these provisions.
- 17.9 Survival:** The terms and conditions of this Contract, which contemplate a period of time beyond completion or termination will survive such completion or termination and not be merged therein or otherwise terminated.
- 17.10 No Waiver:** The waiver of any provision of this Contract will not be deemed to be a waiver of any other provision of this Contract. No waiver of any provision of this Contract will be deemed to constitute a continuing waiver unless expressly provided in writing, nor will a waiver of any default be deemed a waiver of any subsequent defaults of the same type. The failure at any time to enforce this Contract, whether the default is known or not, shall not constitute a waiver or estoppel of the right to do so.
- 17.11 Conditions Precedent to Right to Sue:** Notwithstanding anything herein to the contrary, the CONTRACTOR will have at least 90 days to give notice of a claim for damages as a condition precedent to the right to sue on the Contract, subject to the contractual claim and alternative dispute resolution processes set forth herein.
- 17.12 Waiver of Trial by Jury:** OWNER and CONTRACTOR agree that they have knowingly waived the right to trial by jury and have instead agreed that, in the event of any litigation arising out of or connected to this Contract, to proceed with a trial before the court, unless both parties subsequently agree otherwise in writing.
- 17.13 Contractor Evaluation:** The Owner will review and evaluate the Contractor's Work and performance on the Project and provide the Contractor with a written Contractor Evaluation Report in accordance with City of Austin Administrative Rule R161-13.37. Rule R161-13.37 provides an appeal process.

<http://www.austintexas.gov/departments/contract-management>

End

Bidding Requirements, Contract Forms and Conditions of the Contract
SUPPLEMENTAL GENERAL CONDITIONS
Section 00810

The Supplemental General Conditions contained herein amend or supplement the General Conditions, Section 00700.

ARTICLE 1 - DEFINITIONS

Add the following definition:

"1.20 Engineer/Architect (E/A): Add the following:

Name: Encotech Engineering Consultants

ARTICLE 2 - PRELIMINARY MATTERS

2.4 Before Starting Construction:

Delete 2.4.2.6 and replace with the following (changes to the original text are identified by underlining):

- "**.6** a preliminary schedule of values for all of the Work, subdivided into component parts in sufficient detail to serve as the basis for progress payments during construction. At a minimum, the schedule of values shall be broken out by trade and split between materials and labor. Prices will include an appropriate amount of overhead and profit applicable to each item of Work;"

ARTICLE 3 – CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

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

4.1 Availability of Lands: Add the following:

"CONTRACTOR shall contact OWNER's Transportation Department to obtain a Temporary Use of Right-of-Way Permit prior to beginning construction on any sidewalk/driveway or occupying any parking area/meters within the public right-of-ways."

ARTICLE 5 - BONDS AND INSURANCE

"5.3 Insurance:

5.3.1 CONTRACTOR Provided Insurance

5.3.1.1 General Requirements.

- .1** CONTRACTOR shall carry insurance in the types and amounts indicated below for the duration of the Contract, which shall include items owned by OWNER in the care, custody and control of CONTRACTOR prior to and during construction and warranty period.

- .2** CONTRACTOR must complete and forward the Certificate of Insurance, Section 00650, to OWNER before the Contract is executed as verification of coverage required below. CONTRACTOR shall not commence Work until the required insurance is obtained and until such insurance has been reviewed by OWNER. Approval of insurance by OWNER shall not relieve or decrease the liability of CONTRACTOR hereunder and shall not be construed to be a limitation of liability on the part of CONTRACTOR. CONTRACTOR must also complete and forward the Certificate of Insurance, Section 00650, to OWNER whenever a previously identified policy period has expired as verification of continuing coverage.
- .3** CONTRACTOR's insurance coverage is to be written by companies licensed to do business in the State of Texas at the time the policies are issued and shall be written by companies with A.M. Best ratings of B+VII or better, except for hazardous material insurance which shall be written by companies with A.M. Best ratings of A- or better.
- .4** All endorsements naming the OWNER as additional insured, waivers, and notices of cancellation endorsements as well as the Certificate of Insurance shall indicate: City of Austin, Contract Management Department, P.O. Box 1088, Austin, Texas 78767.
- .5** The "other" insurance clause shall not apply to the OWNER where the OWNER is an additional insured shown on any policy. It is intended that policies required in the Contract, covering both OWNER and CONTRACTOR, shall be considered primary coverage as applicable.
- .6** If insurance policies are not written for amounts specified below, CONTRACTOR shall carry Umbrella or Excess Liability Insurance for any differences in amounts specified. If Excess Liability Insurance is provided, it shall follow the form of the primary coverage.
- .7** OWNER shall be entitled, upon request and without expense, to receive certified copies of policies and endorsements thereto and may make any reasonable requests for deletion or revision or modification of particular policy terms, conditions, limitations, or exclusions except where policy provisions are established by law or regulations binding upon either of the parties hereto or the underwriter on any such policies.
- .8** OWNER reserves the right to review the insurance requirements set forth during the effective period of this Contract and to make reasonable adjustments to insurance coverage, limits, and exclusions when deemed necessary and prudent by OWNER based upon changes in statutory law, court decisions, the claims history of the industry or financial condition of the insurance company as well as CONTRACTOR.
- .9** CONTRACTOR shall not cause any insurance to be canceled nor permit any insurance to lapse during the term of the Contract or as required in the Contract.
- .10** CONTRACTOR shall be responsible for premiums, deductibles and self-insured retentions, if any, stated in policies. All deductibles or self-insured retentions shall be disclosed on the Certificate of Insurance.
- .11** CONTRACTOR shall provide OWNER thirty (30) days written notice of erosion of the aggregate limits below occurrence limits for all applicable coverages indicated within the Contract.

- .12** If OWNER owned property is being transported or stored off-site by CONTRACTOR, then the appropriate property policy will be endorsed for transit and storage in an amount sufficient to protect OWNER's property.
- .13** The insurance coverages required under this contract are required minimums and are not intended to limit the responsibility or liability of CONTRACTOR.

5.3.1.2

Business Automobile Liability Insurance. Provide coverage for all owned, non-owned and hired vehicles. The policy shall contain the following endorsements in favor of OWNER:

- a) Waiver of Subrogation endorsement CA 0444;
- b) 30 day Notice of Cancellation endorsement CA 0244; and
- c) Additional Insured endorsement CA 2048.

Provide coverage in the following types and amounts:

- .1** A minimum combined single limit of \$500,000 per occurrence for bodily injury and property damage. Alternate acceptable limits are \$250,000 bodily injury per person, \$500,000 bodily injury per occurrence and at least \$100,000 property damage liability each accident.

5.3.1.3

Workers' Compensation And Employers' Liability Insurance. Coverage shall be consistent with statutory benefits outlined in the Texas Workers' Compensation Act (Section 401). CONTRACTOR shall assure compliance with this Statute by submitting two (2) copies of a standard certificate of coverage (e.g. ACCORD form) to Owner's Representative for every person providing services on the Project as acceptable proof of coverage. The Certificate of Insurance, Section 00650, must be presented as evidence of coverage for CONTRACTOR. CONTRACTOR's policy shall apply to the State of Texas and include these endorsements in favor of OWNER:

- a) Waiver of Subrogation, form WC 420304; and
- b) 30 day Notice of Cancellation, form WC 420601.

The minimum policy limits for Employers' Liability Insurance coverage shall be as follows:

- .1** \$100,000 bodily injury per accident, \$500,000 bodily injury by disease policy limit and \$100,000 bodily injury by disease each employee.

5.3.1.4

Commercial General Liability Insurance. The Policy shall contain the following provisions:

- a) Contractual liability coverage for liability assumed under the Contract and all contracts relative to this Project.
- b) Completed Operations/Products Liability for the duration of the warranty period.
- c) Explosion, Collapse and Underground (X, C & U) coverage.
- d) Independent Contractors coverage (Contractors/ Subcontractors work).
- e) Aggregate limits of insurance per project, endorsement CG 2503.
- f) OWNER listed as an additional insured, endorsement CG 2010 and CG 2037 or equivalent.
- g) 30 day notice of cancellation in favor of OWNER, endorsement CG 0205.

- h) Waiver of Transfer of Recovery Against Others in favor of OWNER, endorsement CG 2404.

Provide coverages A&B with minimum limits as follows:

- .1 A combined bodily injury and property damage limit of \$500,000 per occurrence.

5.3.1.5 Builders' Risk Insurance. CONTRACTOR shall maintain Builders' Risk Insurance or Installation Insurance on an all risk physical loss form in the Contract Amount. Coverage shall continue until the Work is accepted by OWNER. OWNER shall be a loss payee on the policy. If off-site storage is permitted, coverage shall include transit and storage in an amount sufficient to protect property being transported or stored.

5.3.1.7 Professional Liability Insurance. For Work which requires professional engineering or professional survey services to meet the requirements of the Contract, including but not limited to excavation safety systems, traffic control plans, and construction surveying, the CONTRACTOR or Subcontractors, responsible for performing the professional services shall provide Professional Liability Insurance with a minimum limit of \$500,000 per claim and in the aggregate to pay on behalf of the assured all sums which the assured shall become legally obligated to pay as damages by reason of any negligent act, error, or omission committed with respect to all professional services provided in due course of the Work of this Contract.

ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES

6.6 Permits, Fees: Add the following:

"OWNER will obtain and pay for the following permits, licenses and/or fees:

- .1 Site Development Permit.
- .2 Building Permit(s). OWNER's responsibility for obtaining and paying for the Building Permit(s) shall be limited to the following where applicable: the required Electrical Service (Aid of Construction) Fee, Water and Wastewater Tap Fees, Water and Wastewater Capital Recovery Fees, and Septic Permit Fee. The OWNER's responsibility for obtaining and paying for the Building Permit(s) excludes securing and paying for the following where applicable: Driveway Permit (Concrete) Fee, Electrical Permit, Mechanical Permit, Plumbing Permit, Water Engineering Inspection Fee, Temporary Use of Right-of Way Permit, the gas company's Gas Yard Line Contribution Fee, and any other permits/fees not listed above.
- .3 Texas Department of Transportation permit for Work in State rights-of-way.
- .4 Railroad Utility License Agreement."

ARTICLE 11 - CHANGE OF CONTRACT AMOUNT

11.4 Determination of Value of Work: Add the following to paragraph 11.4.1.2:

- "11.4.1.2 In the case of a Change Order determined by a mutually agreed lump sum or unit price properly itemized and supported by sufficient substantiating data, including documentation by subcontractors performing the work, to permit evaluation, the following method may be used:

COMPONENT ONE - The R.S. Means Co., Inc. 'Building Construction Cost Data' - latest edition - will be used as a basis for evaluating:

- 1a - the cost of labor (base rate, including fringe benefits),
- 1b - the cost of material and equipment to be incorporated in the Work, and
- 1c - the cost of tools, equipment and facilities necessary to accomplish the Work described in the change.

COMPONENT TWO - The costs of payroll taxes and insurance, Liability and Builder's Risk Insurance, shall be calculated as follows:

2a - Payroll taxes and Workers' Compensation Insurance <25% of payroll (Item 1a) (14.65% of 1a for ROCIP Projects)>

2b - Liability and Builder's Risk Insurance <2% of "total costs" (Items 1a, 1b, 1c, and 2a) (.034% of "total costs" for ROCIP Projects)>

COMPONENT THREE - Overhead and profit shall be calculated as follows:

3a - For Subcontractors and for those portions of the Work performed by CONTRACTOR'S own forces:

15% of the first \$10,000.00 of costs and 10% of the balance over \$10,000.00.

("costs" = Items 1a, 1b, and 1c, above, broken down into Contractor and Subcontractor costs).

3b - For the CONTRACTOR for that portion of the Work performed by Subcontractors:

10% of the first \$10,000.00 of the Subcontractor costs and 7.5% of the balance over \$10,000.00.

("costs" = Items 1a, 1b, and 1c, above, broken down into Subcontractor costs)

COMPONENT FOUR - Bonds

Performance and Payment Bond according to the following table ("TOTAL COST" = Items 1a, 1b, 1c, 2a, 2b, 3a and 3b,):

DOLLAR VALUE OF CONTRACT			% OF TOTAL COST OF CHANGE ORDER ADDED FOR BOND EXPENSE
100,000	or	less	2.5
100,001	thru	500,000	1.5
500,001	thru	2,500,000	1.0
2,500,001	thru	5,000,000	0.75
5,000,001	thru	7,500,000	0.70
OVER 7,500,000			0.65

- The total costs for the change, whether additive or deductive, shall be the sum total of COMPONENTS ONE - FOUR.

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

13.7 Warranty Period: Add the following:

"13.7.5 OWNER will utilize a "Warranty Item Form" (attached at the end of this Section) for the purpose of providing Written Notice of warranty defects to CONTRACTOR. CONTRACTOR shall date, sign, complete and return the form to OWNER when the defect is corrected, including such information on or attached to the form to describe the nature of the repairs or corrections that were made. If the defect cannot be corrected in seven (7) Calendar Days, CONTRACTOR shall provide a written explanation to the Owner's Representative describing the repairs needed and the time required to complete the repairs."

ARTICLE 14 - PAYMENTS TO CONTRACTOR AND COMPLETION

14.7 Substantial Completion:

Reference 14.7.1, and add the following two provisions:

"14.7.1.1 For water and wastewater lines construction, Substantial Completion means that the Work, including all testing and disinfection, has been completed and accepted and the line(s) placed into service. A certificate of Substantial Completion will not be issued. Work that remains after Substantial Completion could include the final pavement of roadways, adjustment of structures to final grade and revegetation. Owner's Representative will issue a notice specifying what portion of the Work is partially completed for the purpose of payment and what Work remains to be done on the portion being accepted as Substantially Complete. This subsection 14.7.1.1 changes the 00700 General Conditions definition of Substantial Completion."

"14.7.1.2 For roadway construction and/or reconstruction, Substantial Completion means that the Work, including the final surface course, all permanent traffic control devices (pavement markings, signs, etc.), substantial clean-up, and punchlist items have been completed, accepted, and placed into service, and, any traffic signal or street lighting conduit that has been installed, lowered or relocated must be inspected for usability by, and must have received written approval from, the City's traffic signal section and/or street lighting section, as well as having been completed, accepted, and placed into service. A certificate of Substantial Completion will not be issued. Work that remains after Substantial Completion could include final clean up. Owner's Representative will issue a notice specifying what portion of the Work is partially completed for the purpose of payment and what Work remains to be done on the portion being accepted as Substantially Complete. This subsection 14.7.1.2 changes the 00700 General Conditions definition of Substantial Completion."

WARRANTY ITEM NO. _____ (PROJECT NAME)

The General Conditions of the Contract require that Warranty Defects be corrected within 7 days after written notice is received.

TO: _____
contractor name address / telephone / fax / email

ATTENTION OF: _____

FROM: _____
project manager name / address / telephone / fax / email

PROJECT: _____
name / location / CIP ID number

END OF ONE YEAR WARRANTY: _____

SUBJECT: _____

☐ If checked, the damage requires immediate attention. The Contractor has been called.

☐ If checked, the Consultant has been asked to consult with the Contractor on the problem.

PLEASE CORRECT OR REPAIR THE FOLLOWING ITEM(S):

DATE OF REQUEST _____

SIGNATURE _____
 Project Manager

XC:

☐ _____ Phone No. _____

☐ _____ Phone No. _____

☐ _____ Phone No. _____

☐ _____ Phone No. _____

RESPONSE FROM CONTRACTOR: DATE CORRECTION WAS MADE: _____

The Contractor must endeavor to correct the defect within 7 calendar days after written notice is given. If the defect cannot be corrected in that time, Contractor shall provide a written explanation to the Owner's Representative describing the repairs needed and the time required to complete the repairs.

Description of corrections made:

DATE OF REPLY _____ **SIGNATURE** _____

When the repair is complete, the contractor should return a copy to each of the following:

☐ _____ Phone No. _____

☐ _____ Phone No. _____

☐ _____ Phone No. _____

☐ _____ Phone No. _____

END

1. Payment

A. Classification Definitions, Building and Heavy and Highway

Definitions for Building Construction and Heavy and Highway classifications shall conform to the current "Dictionary of Occupational Titles" as published by the U.S. Department of Labor.

B. Minimum Wages

Workers on Project shall be paid not less than wage rates, including fringe benefits, as published by the Department of Labor (DOL) for Building Construction and Heavy and Highway Trades. Such wage rates shall be used throughout the Contract. If a classification is to be used, which is not listed in the attached wage rates, CONTRACTOR shall submit to OWNER rates and classification proposed for use, for approval, **prior** to performance of the Work.

NOTE: The terms journeyman and apprentice apply to both union and independent workers, and are not intended to imply that these positions are union workers only.

All laborers and mechanics working upon the Work for this Project shall be paid unconditionally and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by Secretary of Labor under the Copeland Act, Title 29 CFR, Part 3) full wages accrued and when due, computed at rates not less than wage rates bound herein pertaining to type of Work being performed. When Work is of such a nature that both Building and Heavy and Highway wage scales are incorporated into contract, CONTRACTOR shall pay wage rates to mechanics or laborers performing Work in more than one classification at the rate indicated for each classification for time actually worked as determined by area practice applicable to type (Site Construction Crafts or Building Construction Crafts) of Work being performed without regards to skill. Salaried specialists (project superintendent and administrative personnel only) in the permanent employment of CONTRACTOR do not fall under any Wage Classification. Wage rates shall be posted by CONTRACTOR at site(s) of Work in prominent, easily accessible places where they can be seen by all workers. The following shall also be posted by the CONTRACTOR alongside prevailing wage rates: City of Austin wage contact posters (English and Spanish), City of Austin Equal Employment Opportunity posters (English and Spanish).

C. Overtime Requirements

No CONTRACTOR, Subcontractor, or Sub-subcontractor contracting for any part of contract Work which may require or involve the employment of laborers or mechanics shall require or permit any laborer or mechanic in any workweek in which he is employed on such Work, to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times his basic rate of pay for all hours in excess of forty hours in such workweek.

2. Apprentices

Locally & Federally Funded Projects

Apprentices and Trainees will be permitted to work as such only when they are registered, individually, under a bonafide Apprenticeship or Trainee program registered with the Bureau

of Apprenticeship and Training, United States Department of Labor. The allowable ratio of Apprentices or Trainees to journeymen in any craft classification shall not be greater than the ratio permitted to CONTRACTOR as stated in the registered apprenticeship program standards. Any employee listed on a payroll at an Apprentice or Trainee wage rate, who is not registered as above, shall be paid the wage rate provided in Contract for Work employee actually performed. CONTRACTOR, Subcontractor, or Sub-subcontractor shall furnish to OWNER written evidence of registration of his program for Apprentices and Trainees as well as of the appropriate ratios and wage rates, for the area of construction **prior** to using any Apprentices or Trainees on this Contract.

3. Withholding of Payments

OWNER may withhold or cause to be withheld from CONTRACTOR as much of the accrued payments as necessary to pay laborers and mechanics employed by CONTRACTOR, Subcontractors, or Sub-subcontractors the amount of wages required to comply with the Contract. In the event of nonpayment of wages to laborers or mechanics working on the site of the Work of this Contract, OWNER may, after Written Notice to CONTRACTOR, take such action as may be necessary to cause suspension of any further payments or advance of funds to CONTRACTOR until such violations have ceased and until restitution has been made. Payments may also be withheld if CONTRACTOR fails to maintain weekly payroll reports or fails to provide copies in a timely manner upon request of Owner.

4. Payrolls

A. CONTRACTOR shall keep records showing:

1. the name, address and occupation of each worker employed by the CONTRACTOR or subcontractor(s) in the construction of the public work.
2. the actual per diem wages paid to each worker.
3. Employee Certification. CONTRACTOR, all levels of Subcontractors shall identify in writing, the classification agreed to by all laborers and mechanics employed by them in the execution of the Contract, and pay not less than rates specified in the attached Building Construction and Heavy and Highway Wage Rate Schedule(s). Contractor shall prepare a completed form for the signature of Employee and a witness shall sign the form in the presence of Employee. If work performed by worker is different than the trade classification agreed upon, the worker shall be paid for that work no less than the minimum prevailing wage for that specified trade.
4. Payroll Deduction Authorization Form. CONTRACTOR, Subcontractor, and Subsubcontractor shall prepare for employee signature a payroll deduction authorization form to identify all payroll deductions excluding those required by statute, such as federal income taxes, medicare and social security.

B. The record shall be open at all reasonable hours to inspection by the officers and agents of the Owner as requested. CONTRACTOR will be responsible to provide copies of records as requested by the Owner within two (2) working days. Payrolls relating to this Work shall be maintained during term of Contract and preserved for a period of three (3) years thereafter by CONTRACTOR for all laborers and mechanics working on the Work.

C. A Statement of Compliance, a letter signed and dated by party responsible for supervising the payment of persons employed by CONTRACTOR or subcontractor

shall accompany payrolls required by Owner. The Statement of Compliance letter shall identify but is not limited to:

1. name of signatory party and title,
2. name of project, payroll period and
3. name of CONTRACTOR or Subcontractor.

The signed letter attests that the payroll complies with 29CFR issued by the Secretary of Labor.

D. Federal Funding

In the event that federal funding is used:

1. Contractor and all levels of Subcontractors shall submit weekly certified payroll reports and signed wage compliance statements to the Owner's designated office no later than seven (7) calendar days after the scheduled payday.
2. Contractors and all levels of Subcontractors shall pay all "mechanics and laborers" not less often than once per week, for work performed the previous week.
3. Submit to the Owner's designated office Standard Form 1413, Statement and Acknowledgement, from each subcontractor prior to the subcontractor performing work on the project.

5. Complaints and Penalties

A public body awarding a contract, and an agent or officer of the public body, shall, take cognizance of complaints of all violations of Chapter 2258 Texas Government Code Title 10 or applicable Federal Statutes committed in the execution of the contract; and withhold money forfeited or required to be withheld under this chapter from the payments to the CONTRACTOR under the contract. A CONTRACTOR or subcontractor(s) who violates this section shall pay to the political subdivision on whose behalf the contract is made, \$60 for each worker employed for each calendar day or part of the day that the worker is paid less than the wage rates stipulated in the contract. A public body shall use any money collected under this section to offset the costs incurred in the administration of this chapter. Confirmed Disciplinary action taken by CONTRACTOR against employees who provide information during an interview or investigation by the Owner on wages received, may result in suspension or debarment from consideration of award of City contracts.

6. Area Practice

- A. Heavy and Highway Construction Rates shall be used on this Project, unless the Project consists primarily of Building Construction and Building Construction Rates are to be used.
 1. Building Construction consists generally of all aspects of construction of buildings, which are sheltered enclosures with walk-in access for the purpose of housing persons, machinery, equipment or supplies, including without limitation the installation of utilities and equipment, both above and below grade level, as well as incidental demolition, grading, utilities, paving and other site work. Buildings need not be "habitable" to be classified as Building Construction and the installation of heavy machinery and/or equipment will not generally change a Building Construction project's classification.
 2. The determination of Building Construction Wage Rates includes all construction trades and work necessary to complete a building, regardless of the number of

contracts involved, so long as all such contracts are closely related in purpose, time and place.

- B. For projects that involve both Building Construction and Heavy and Highway trades, the following classifications shall be used:
 - 1. A multiple classification shall be used if Building Construction items are more than 20% of the Heavy and Highway project cost.
 - 2. A multiple classification shall be used if Heavy and Highway Construction items are more than 20% of the Building Construction Project cost.
- C. Split classifications/multiple wage rate schedules: When construction work requires that an employee perform work under multiple classifications or multiple wage scales, the employer must pay that worker (at least) the highest prevailing wage or the employer payroll records must accurately set forth the times spent performing the work of each classification and under each scale. For those projects that involve both Building Construction and Heavy and Highway trades, the Heavy and Highway wage rates may only be applied to workers when engaged in site work at least five (5) feet beyond the building.

7. Texas Open Records Act

Unless covered by an exception to mandatory disclosure under the Texas Public Information Act, Chapter 552, Texas Government Code, any and all documents submitted to the City of Austin become Public Records and are, therefore, subject to public disclosure.

Wage Rates For This Project Are Attached

End

Bidding Requirements, Contract Forms Conditions of the Contract
WAGE RATES AND PAYROLL REPORTING
Section 00830HH

PREVAILING WAGE RATE DETERMINATION

HEAVY AND HIGHWAY CONSTRUCTION

COUNTY NAME: TRAVIS

Wages based on DOL General Decision:TX150016 01/02/2015 TX16

Classification	Wage Rate	Classification	Wage Rate
Agricultural Tractor Operator	\$ 12.69	Laborer, Utility	\$ 12.27
Asphalt Distributor Operator	\$ 15.55	Loader/Backhoe Operator	\$ 14.12
Asphalt Paving Machine Operator	\$ 14.36	Mechanic	\$ 17.10
Asphalt Raker	\$ 12.12	Milling Machine	\$ 14.18
Boom Truck Operator	\$ 18.36	Motor Grader Operator - Fine Grade	\$ 18.51
Broom or Sweeper Operator	\$ 11.04	Motor Grader Operator - Rough	\$ 14.63
Cement Mason/Concrete Finisher	\$ 12.56	Painter - Structures	\$ 18.34
Concrete Pavement Finishing Machine Operator	\$ 15.48	Pavement Marking Machine Operator	\$ 19.17
Crane, Hydraulic 80 tons or less	\$ 18.36	Pipelayer	\$ 12.79
Crane, Lattice Boom, 80 tons or less	\$ 15.87	Reclaimer/Pulverizer	\$ 12.88
Crane, Lattice Boom, over 80 tons	\$ 19.38	Reinforcing Steel Setter	\$ 14.00
Crawler Tractor	\$ 15.67	Roller Operator, Asphalt	\$ 12.78
Directional Drilling Locator	\$ 11.67	Roller Operator, Other	\$ 10.50
Directional Drilling Operator	\$ 17.24	Scraper Operator	\$ 12.27
Electrician	\$ 26.35	Servicer	\$ 14.51
Excavator, 50,000 lbs. or less	\$ 12.88	Spreader Box Operator	\$ 14.04
Excavator, over 50,000 lbs.	\$ 17.71	Structural Steel Worker	\$ 19.29
Flagger	\$ 10.10	Traffic Signal Installer/Light Pole Worker	\$ 16.00
Form Builder/ Setter, Structures	\$ 12.87	Trenching Machine Operator, Heavy	\$ 18.48
Form Setter - Paving & Curb	\$ 12.94	Truck Driver Tandem Axle Semi-Trailer	\$ 12.81
Foundation Drill Operator, Truck Mounted	\$ 16.93	Truck Driver, Lowboy-Float	\$ 15.66
Front End Loader Operator, 3CY or less	\$ 13.04	Truck Driver, Single Axle	\$ 11.79
Front End Loader Operator, over 3 CY	\$ 13.21	Truck Driver, Off Road Hauler	\$ 11.88
Laborer, Common	\$ 10.50	Truck Driver, Single or Tandem Axle Dump Truck	\$ 11.68
		Welder	\$ 15.97
		Work Zone Barricade Servicer	\$ 11.85

<http://www.wdol.gov/wdol/scafiles/davisbacon/tx.html>

The Wage Compliance information detailed below was excerpted from General Decision TX20070043 or other DOL sources.

1. Additional Trade information:

Unlisted classifications needed for work not listed within the scope of the classifications listed may be added upon the advance approval of Contract Procurement. CONTRACTOR shall submit to City of Austin Contract Procurement the following: classification, a bona fide definition of work to be performed and a proposed wage with sample payrolls conforming to area practice **prior** to the start of the job for that type of work. Proposed trade may not be performed by any trade already listed.

2. Wages

For overtime, the basic hourly rate listed in the contract wage determination must be used in computing pay obligations.

3. Proper Designation of Trade

A work classification from the Prevailing Wage Poster for each worker must be made based on the actual type of work he/she performed on the job. In summary the work performed, not the "title" determines the correct worker classification and wage. Each worker must be paid no less than the wage rate on the wage decision for that classification **regardless** of his/her level of skill (exclusive of a bona fide apprentice currently registered in a DOL approved apprentice program - proof of individual registration must be supplied in advance to the City of Austin).

4. Split Classification

If a firm has employees that perform work in more than one classification, it can pay the wage rates specified for each classification ONLY if it maintains accurate time records showing the amount of time spent in each classification. If accurate time records are not maintained, these employees must be paid the highest wage rate of all the classifications of work performed by each worker. Accurate time records tracking how many hours a worker performed the work of one trade and then switched to another trade must be accounted for on a daily basis and reflected on Employer Certified Payroll accordingly.

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

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

In the listing above, the "SU" designation means that rates listed under the identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

----- WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

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

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

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

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

Wage and Hour Administrator
U.S. Department of Labor

200 Constitution Avenue, N.W.
Washington, DC 20210

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

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

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

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

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Division 1 General Requirements
SUMMARY OF WORK
Section 01010

PART 1 - GENERAL

1.1 Related Documents:

Drawings and general provisions of Contract, including General Conditions of the Contract, and Supplemental General Conditions, Section 00810, and Division 1 requirements.

1.2 General

1.21 Scope of Work

- A. This section describes the Project in general and provides an overview of the extent of the Work to be performed by the CONTRACTOR. Detailed requirements and extent of Work is stated in the applicable Specification Sections and shown on the Drawings. CONTRACTOR shall, except as otherwise specifically stated herein or in any applicable part of these Contract Documents, provide and pay for all labor, materials, equipment, tools, construction equipment, and other facilities and services necessary for proper execution, testing, and completion of the Work.
- B. Any part or item of the Work which is reasonably implied or normally required to make the installation satisfactorily operable shall be performed by the CONTRACTOR and the expense thereof shall be included in the applicable unit prices or lump sum prices bid for the Work. It is the intent of these Specifications to provide the OWNER with the complete system. All miscellaneous appurtenances and other items of Work that are incidental to meeting the intent of the Specifications shall be considered as having been included in the applicable unit prices or lump sum prices bid for the Work even though these appurtenances and items may not be specifically called for in the Bid Documents.
- C. The Work shall include furnishing all tools, labor, materials, equipment, and miscellaneous items necessary for the complete construction of a Dynamic Parking System including signage, poles, concrete work, and electrical work to provide a complete and operational system. Saw cutting, drilling, and lane closures will be required for the installation of poles along the street.
- D. The Contractor shall use his best efforts and all reasonable due diligence to expedite the progress and prosecution of the Work which shall include the prosecution of the Work seven (7) days per week, eleven (11) hours per day.
- E. The Contractor shall coordinate sequencing and phasing of work with the COA Project Manager in conjunction with planned events, and shall provide project schedule and updates to schedule per requirements in Specifications. Work within Central Library shall be performed first. Physical work shall take no more than 5 business days at any one location.

1.22 Location of Project

The Project is located at multiple exterior sites and City of Austin facilities in downtown Austin, Texas:

- 1) Exterior Sites along E. and W. Cesar Chavez Street

- 2) City Hall – S. 1st Street
- 3) Central Library - 710 W. Cesar Chavez Street
- 4) Seaholm Parking Garage - 211 Walter Seaholm Drive

1.23 Contractor's Responsibilities

- A. Execute all Work, including poles, concrete, electrical, and testing. The Work of this Contract is specified in the City of Austin Standard Specifications, Special Provisions and Special Specifications listed in the Table of Contents.
- B. Secure all construction-related permits, other than those provided by OWNER as described in paragraph 6.6 of Section 00810, Supplemental General Conditions, and pay for the same.
- C. Provide adequate temporary sanitary facilities for workers.

1.24 Operation of Existing Facilities

Existing electrical, water, and wastewater facilities shall be kept in continuous operation throughout the construction period. No interruption will be permitted which adversely affects the degree of service provided. Provided permission is obtained from OWNER in advance, portions of the existing facilities may be taken out of service for short periods corresponding with periods of minimum service demands.

CONTRACTOR shall provide temporary facilities and make temporary modifications as necessary to keep the existing facilities in operation during the construction period.

1.25 Connections to Existing Facilities

Unless otherwise specified or indicated, CONTRACTOR shall make all necessary connections to existing facilities including structures, and utilities. In each case, CONTRACTOR shall receive permission from OWNER prior to undertaking connections. CONTRACTOR shall protect facilities against deleterious substances and damage.

Connections to existing facilities which are in service shall be thoroughly planned in advance, and all required equipment, materials and labor shall be on hand at the time of undertaking the connection. Work shall proceed continuously (around the clock) if necessary to complete connections in the minimum time. Operation of valves or other appurtenances on existing utilities, when required, shall be by or under the direct supervision of the Owner.

1.26 Unfavorable Construction Conditions

No portion of the Work shall be constructed under conditions which adversely affect the quality or efficiency thereof, unless special means or precautions are taken by CONTRACTOR to perform the Work in a proper and satisfactory manner.

End

Division 1 General Requirements
Grades, Lines and Levels
Section 01050

1. CONTRACTOR shall perform all layout work to transfer all controls for grades, lines, levels and measurements from a minimum of two reference points provided by OWNER. All survey work will be performed under the direct supervision of a Texas Registered Professional Land Surveyor (RPLS).
2. Within 5 work days of the Notice To Proceed date, or within 10 Working Days of initiating work based on the approved Schedule in a new area of the Project, the CONTRACTOR shall survey and stake the locations of all proposed improvements behind the curb and within the ROW (examples: manholes, storm inlets, fire hydrants, etc.), or any other improvements identified by the OWNER'S REPRESENTATIVE, for the purpose of identifying the nature and location of these improvements to the adjacent property owner(s). The OWNER'S REPRESENTATIVE will identify to the CONTRACTOR the improvements to be staked.
3. OWNER will not stake for construction and will not be on site for survey layout activities, except to perform quality control checks.
4. CONTRACTOR shall be required to set elevation hubs (blue tops) for subgrade and base course on centerline, at quarter points and curb lines or edge of pavement at intervals not exceeding 50 feet.
5. The construction plans will include horizontal and vertical control points. References to approved COA benchmarks used in establishing controls on the drawings will be provided by the Owner's E/A. In addition, on building projects and/or projects not built within an existing public ROW, a boundary survey will be supplied together with a legal description of the property and all easements where Work will take place.
6. CONTRACTOR shall submit construction staking layout sheets sealed by a Professional Engineer or Registered Professional Land Surveyor registered in the State of Texas. CONTRACTOR shall use a qualification based selection process consistent with the Professional Services Procurement Act, Chapter 2254.004 of the Texas Government Code, when securing the services of a Professional Engineer or Registered Professional Land Surveyor. It is a violation of State Law to solicit bids for the services of a Professional Engineer or Registered Professional Land Surveyor.
 - 6.1 Any discrepancies found with the construction documents' dimensional layout will be corrected. CONTRACTOR shall assure that the Owner's Representative and E/A are notified so that the appropriate actions are taken to correct the Contract drawings.
 - 6.2 All Work shall be done to the lines, grades and elevations indicated on the drawings. Information concerning basic horizontal and vertical control points will be provided by the E/A, **Encotech**. These points shall be used as the datum basis under this Contract.
 - 6.3 All work to transfer all controls for grades, lines, levels, layout and measurements shall be performed under the supervision of a Texas Registered Professional Land Surveyor, provided by the CONTRACTOR. Such work shall conform to the standards

for construction staking in the most recent edition of the Texas Society of Professional Surveyors Manual of Practice for Land Surveying, Category 5, Sections 1-12 inclusive.

- 6.4 The offset centerline stakes will be set at no greater than fifty (50) foot intervals **points of alignment or grade changes**. References to lines and grades as established by the CONTRACTOR's surveyor shall be in reference to these stake lines. The CONTRACTOR is required to provide a sealed statement from his RPLS that the controls are correct and the site layout has been done by their professional staff.
- 6.5 The CONTRACTOR shall place grade stakes and submit construction staking layout sheets. The CONTRACTOR shall allow a minimum of ten (10) days after submission to the Owner's Representative for review of construction staking layout sheets. Construction staking layout sheets shall include, at a minimum, the information contained in the form included at the end of this section. No Work shall be performed without Owner's Representative review and return to CONTRACTOR of construction staking layout sheets. The Owner's Representative, E/A and the CONTRACTOR shall review the survey controls on the ground.
- 6.6 Prior to any excavation, the CONTRACTOR shall establish the elevation to top of ground at offset stakes at the distance deemed appropriate by the CONTRACTOR to preclude disturbance of offset stakes during construction.
- 6.7 The CONTRACTOR shall furnish, without charge, experienced personnel and such calibrated survey equipment, tools, stakes, and other materials that the Owner's Representative may require in establishing or checking control points, or in checking survey, layout, and measurement work performed by the CONTRACTOR.
- 6.8 The CONTRACTOR shall keep the Owner's Representative informed in a reasonable time in advance of the times and places at which he wishes to do work, so that any checking deemed necessary by the OWNER may be done with minimum inconvenience to the E/A and minimum delay to the CONTRACTOR. Surveying will be coordinated between the Owner's Representative and CONTRACTOR in a manner convenient to both.
- 6.9 During layout, CONTRACTOR shall field verify the elevation and alignment of all tie-in points to existing infrastructure. This work shall be performed sufficiently in advance of construction so that any conflicts may be resolved without delay. Any work done without being properly located may be ordered removed and replaced at the CONTRACTOR's expense.
- 6.10 The CONTRACTOR shall carefully preserve all monuments, benchmarks, reference points, and stakes. In case of the destruction thereof, the CONTRACTOR shall bear the cost of replacement and shall be responsible for any mistake or loss of time that may be caused. Permanent monuments or benchmarks, which must be removed or disturbed, shall be protected until properly referenced for relocation. The CONTRACTOR shall furnish materials and assistance for the proper replacement of such monuments or benchmarks.
- 6.11 The CONTRACTOR shall satisfy himself before commencing work as to the meaning and correctness of all survey control stakes, marks, etc., and no claim will be entertained by the OWNER for or on account of any alleged inaccuracies, unless the CONTRACTOR notifies the OWNER in writing before commencing the affected Work.

7. As needed for necessary documentation of the work progress, the CONTRACTOR shall maintain and/or protect offset or survey staking for the duration of the project. Any re-staking required to meet this requirement shall be done at the CONTRACTOR'S expense.
8. This item is subsidiary to the work as a whole.
9. Upon completion of construction, or at intervals specified in the Contract, CONTRACTOR shall provide a record survey of the work in progress or completed. This information will be submitted to the Owner's Representative and shall be supplied electronically and on a separate full size plan sheet to be transmitted to the E/A for evaluation and merging into the Record Drawings.

End

DEFINITIONS

General: Basic Contract definitions are included in the General Conditions, Section 00700 included herein.

Approved: The term approved, when used in conjunction with the Owner's Representative's action on the CONTRACTOR'S submittals, applications, and requests, is limited to the Owner's Representative's duties and responsibilities as stated in the Conditions of the Contract. A stamp reading "No Exceptions Taken" shall have the same intent as "Approved".

Furnish: The term furnish means supply and deliver to the Project site, ready for unloading, unpacking, assembly, installation, and similar operations.

Indicated: The term indicated refers to graphic representations, notes, or schedules on the Drawings, or other paragraphs or schedules in the Specifications, and similar requirements in the Contract Documents. Terms such as shown, noted, scheduled, and specified are used to help the reader locate the reference. There is no limitation on location.

Install: The term install describes operations at the Project site including the actual unloading, unpacking, assembly, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.

Installer: An Installer is the CONTRACTOR or another entity engaged by the CONTRACTOR, either as an employee, subcontractor, or contractor of lower tier, to perform a particular construction activity, including installation, erection, application, and similar operations. Installers are required to be experienced in operations they are engaged to perform.

Project Site: The space available to the CONTRACTOR for performing construction activities either exclusively or in conjunction with others performing other work as part of the Project. The extent of the Project site is shown on the Drawings and may or may not be identical with the description of the land on which the Project is to be built.

Provide: The term provide means to furnish and install, complete and ready for the intended use.

Regulations: The term regulations includes laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, as well as rules, conventions, and agreements within the construction industry that control performance of the Work.

Trades: Using terms such as carpentry is not intended to imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as carpenter. It also does not imply that requirements specified apply exclusively to trades persons of the corresponding generic name.

INDUSTRY STANDARDS

Applicability of Standards: Except where the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.

Publication Dates: Comply with the standards in effect as of the date of the Contract Documents.

Conflicting Requirements: Where compliance with two or more standards is specified and where the standards may establish different or conflicting requirements for minimum quantities or quality levels, refer to the Owner's Representative for a decision before proceeding.

Copies of Standards: Each entity engaged in construction on the Project is required to be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.

Abbreviations and Names: Trade association names, titles of general standards, and names and titles of government agencies are frequently abbreviated. Where such acronyms or abbreviations are used in the

Specifications or other Contract Documents, they mean the recognized name of the trade association, standards-generating organization, authority having jurisdiction, or other entity applicable to the context of the text provision. Refer to the "Encyclopedia of Associations," published by Gale Research Co., available in most libraries.

AA	Aluminum Association
AABC	Associated Air Balance Council
AAMA	American Architectural Manufacturer's Association
AAN	American Association of Nurserymen.
AASHTO	American Association of State Highway and Transportation Officials.
AATCC	American Association of Textile Chemists and Colorists
ACI	American Concrete Institute
ACIL	American Council of Independent Laboratories
ACPA	American Concrete Pipe Association
ADC	Air Diffusion Council
AFBMA	Anti-Friction Bearing Manufacturers Association
AGA	American Gas Association
AGC	Associated General Contractors of America
AGMA	American Gear Manufacturers Association
AHA	American Hardboard Association
AHAM	Association of Home Appliance Manufacturers
AI	Asphalt Institute
AIA	American Institute of Architects
AIHA	American Industrial Hygiene Association
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
AITC	American Institute of Timber Construction.
ALCA	Associated Landscape Contractors of America
ALI	Associated Laboratories, Inc.
ALSC	American Lumber Standards Committee
AMCA	Air Movement and Control Association
ANSI	American National Standards Institute.
AOAC	Association of Official Analytical Chemists

AOSA	Association of Official Seed Analysts
APA	American Plywood Association
API	American Petroleum Institute.
AREA	American Railroad Engineers Association
ARI	Air Conditioning and Refrigeration Institute
ARMA	Asphalt Roofing Manufacturers Association
ASA	Acoustical Society of America
ASA	American Standards Association.
ASC	Adhesive and Sealant Council
ASCE	American Society of Civil Engineers
ASHRAE	American Society of Heating, Refrigerating & Air Conditioning Engineers
ASME	American Society of Mechanical Engineers
ASPE	American Society of Plumbing Engineers
ASSE	American Society of Sanitary Engineering
ASTM	American Society for Testing and Materials.
AWCMA	American Window Covering Manufacturers Association
AWG	American Wire Gage
AWI	Architectural Woodwork Institute
AWPA	American Wood Preservers Association
AWPB	American Wood Preservers Bureau
AWPI	American Wood Preservers Institute
AWS	American Welding Society
AWWA	American Water Works Association
BHMA	Builders Hardware Manufacturers Association
BIA	Brick Institute of America
BIFMA	Business and Institutional Furniture Manufacturers Association
CAGI	Compressed Air and Gas Institute
CAUS	Color Association of the United States
CBM	Certified Ballast Manufacturers
CCC	Carpet Cushion Council

CDA	Copper Development Association
CE	Corps of Engineers
CFR	Code of Federal Regulations
CGA	Compressed Gas Association
CISCA	Ceiling and Interior Systems Construction Association
CISPI	Cast Iron Soil Pipe Institute
CPSC	Consumer Product Safety Commission
CRI	Carpet and Rug Institute
CRSI	Concrete Reinforcing Steel Institute
CS	Commercial Standard of NBS (U.S. Dept. of Commerce)
CTI	Ceramic Tile Institute
DFPA	Douglas Fir Plywood Association
DHI	Door and Hardware Institute
DLPA	Decorative Laminate Products Association
DOC	U.S. Department of Commerce
DOT	Department of Transportation
ECSA	Exchange Carriers Standards Association
EIA	Electronic Industries Association
EIMA	Exterior Insulation Manufacturers Association
EJMA	Expansion Joint Manufacturers Association
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FCC	Federal Communications Commission
FGMA	Flat Glass Marketing Association
FHA	Federal Housing Administration
FM	Factory Mutual Research Organization
FS	Federal Specifications
FSC	Forest Stewardship Council
FTI	Facing Tile Institute
GA	Gypsum Association
GSA	General Services Administration

HEI	Heat Exchange Institute
HI	Hydronics Institute
H.I.	Hydraulic Institute
HMA	Hardwood Manufacturers Association
HPMA	Hardwood Plywood Manufacturers Association
IBD	Institute of Business Designers
ICEA	Insulated Cable Engineers Association, Inc.
IEEE	Institute of Electrical and Electronic Engineers, Inc.
IESNA	Illuminating Engineering Society of North American
IGCC	Insulating Glass Certification Council
ILI	Indiana Limestone Institute of America
IMSA	International Municipal Signal Association
IRI	Industrial Risk Insurers
ISA	Instrument Society of America
ITE	Institute of Transportation Engineers
LEED™	Leadership in Energy and Environmental Design
LIA	Lead Industries Association, Inc.
LPI	Lightning Protection Institute
MBMA	Metal Building Manufacturer's Association
MCAA	Mechanical Contractors Association of America
MFMA	Maple Flooring Manufacturers' Association
MIA	Marble Institute of America
ML/SFA	Metal Lath/Steel Framing Association
MSS	Manufacturers Standardization Society of the Valve and Fittings Industry
MUTCD	Texas Department of Transportation Manual on Uniform Traffic Control Devices
NAAMM	National Association of Architectural Metal Manufacturers
NAIMA	North American Insulation Manufacturers Association
NAPA	National Asphalt Pavement Association
NBFU	National Board of Fire Underwriters

NBGQA	National Building Granite Quarries Association
NBS	National Bureau of Standards (U.S. Dept. of Commerce)
NCMA	National Concrete Masonry Association
NCRPM	National Council on Radiation Protection and Measurements
NCSPA	National Corrugated Steel Pipe Association
NEC	National Electrical Code (Published by NFPA)
NECA	National Electrical Contractors Association
NEII	National Elevator Industry, Inc.
NEMA	National Electrical Manufacturers Association
NETA	International Electrical Testing Association
N.F.P.A.	National Forest Products Association
NFPA	National Fire Protection Association
NHLA	National Hardwood Lumber Association
NIST	National Institute of Standards and Technology
NLGA	National Lumber Grades Authority
NOFMA	National Oak Flooring Manufacturers Association
NPA	National Particleboard Association
NPCA	National Paint and Coatings Association
NRCA	National Roofing Contractors Association
NWMA	National Woodwork Manufacturers Association
OSHA	Occupational Safety and Health Administration
PCA	Portland Cement Association
PCI	Precast/Prestressed Concrete Institute
PDI	Plumbing and Drainage Institute
PE	Professional Engineer
REA	Rural Electrification Administration
RFCI	Resilient Floor Covering Institute
RMA	Rubber Manufacturing Association
RPLS	Registered Professional Land Surveyor
SDI	Steel Deck Institute
S.D.I.	Steel Door Institute

SFPA	Southern Forest Products Association
SGCC	Safety Glazing Certification Council
SIGMA	Sealed Insulating Glass Manufacturers Association
SJI	Steel Joist Institute
SMACNA	Sheet Metal and Air Conditioning Contractors National Association
SPIB	Southern Pine Inspection Bureau
SPRI	Single Ply Roofing Institute
SSPC	Steel Structures Painting Council
SSPMA	Sump and Sewage Pump Manufacturers Association
SWI	Steel Window Institute
SWPA	Submersible Wastewater Pump Association
TCA	Tile Council of America
TEX TEST	TxDOT Laboratory Test
TIMA	Thermal Insulation Manufacturers Association
TPI	Truss Plate Institute
TxDOT	Texas Department of Transportation
UL	Underwriters Laboratory, Inc.
USDA	U. S. Department of Agriculture
USGBC	U. S. Green Building Council
USPS	U. S. Postal Service
WCLIB	West Coast Lumber Inspection Bureau
WCMA	Wallcovering Manufacturers Association
WIC	Woodwork Institute of California
WLPDIA	Western Lath, Plaster, Drywall Industries Association
WRI	Wire Reinforcement Institute
WSC	Water Systems Council
WSFI	Wood and Synthetic Flooring Institute
WWPA	Western Wood Products Association
W.W.P.A.	Woven Wire Products Association

END

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Documents related to this section will include the construction drawings and general provisions of the Contract, including the General Conditions of the Contract, Section 00700, Supplemental General Conditions, Section 00810, and other Division 1 requirements.

1.2 SUMMARY

- A. This section describes the preconstruction conference and other Project related meetings which may be held on a routine schedule throughout the duration of the Project.
- B. The CONTRACTOR, or his authorized representative(s), shall attend all Project related meetings as indicated herein. The CONTRACTOR's representatives, as a minimum, shall include his Project Manager and/or Superintendent. Other CONTRACTOR's representatives may attend Project related meetings; however, there shall be a maximum of two (2) CONTRACTOR's representatives at any one meeting unless the ENGINEER approves a larger number.
- C. The CONTRACTOR shall provide all pertinent reports, copies of reports, etc., for each meeting as may be required by this or other sections of the Contract.

1.3 PRECONSTRUCTION CONFERENCE

A. Attendees

A preconstruction conference shall be held as soon after the award and execution of the Contract as possible and before any Work at the site is started. The conference will be held at a location selected by the Owner's Project Manager. The Owner's Project Manager shall prepare and distribute the meeting agenda, preside over the conference, and may distribute meeting minutes. The conference shall be attended by:

- 1. CONTRACTOR's Project Manager.
- 2. CONTRACTOR's Superintendent.
- 3. Any Subcontractors' and/or Suppliers' representatives whom the CONTRACTOR may desire to invite or whom the ENGINEER or OWNER may request to attend.
- 4. ENGINEER's representative.
- 5. OWNER's Project Manager.
- 6. OWNER's REPRESENTATIVE

B. Meeting topics

The topics to be discussed may include, but will not be limited to, the following items:

- 1. Introduction of persons attending the meeting.
- 2. General project description, including length of contract and liquidated damages.
- 3. Key personnel associated with the construction.
- 4. Lines of communication and chains of command.
- 4. Wage and personnel records and reporting requirements.
- 5. Subcontractors and suppliers.

6. Submittal review and approval procedure. Submittals may include, but are not limited to the following:
 - Schedule of Values
 - Schedule for submittals
 - Shop drawings
 - Construction schedule (The schedule shall indicate the phases of work in which subcontractors will be participating. Subcontractors shall be indicated by name.)
 - Payroll reports
 - Substitution of subcontractors
 - Non-use of asbestos materials affidavit
8. Job safety.
9. Permits.
10. Utility coordination report.
11. Notification of property owners and other affected by the project
12. Job meetings.
13. Use of the site for construction, storage, staging, etc., and interrelationship with other contracts.
14. Equal opportunity requirements.
15. Inventory of materials stored on site provisions.
16. Progress estimate and payment procedure.
17. Posting of signs.
18. Prompt payment procedure.
19. Review of contract - addenda, supplementary general conditions, special provisions, special specifications, and other unique project items.
20. Other

1.4 JOB MEETINGS

A. General

Job meetings shall be held as deemed necessary by the ENGINEER or OWNER or as requested by the CONTRACTOR throughout the duration of the Project. The meetings shall be held at a location selected by or approved by the Owner's Representative. The OWNER's REPRESENTATIVE or CONTRACTOR, as agreed to, shall preside over the meeting and issue meeting minutes.

B. Attendees

Job meetings will be attended by the following:

1. CONTRACTOR's Project Manager, when requested to attend.
2. CONTRACTOR's Construction Superintendent.
3. Any subcontractors' and/or suppliers' representatives whom the CONTRACTOR may desire to invite or whom the ENGINEER or OWNER request to attend.
4. OWNER's REPRESENTATIVE
5. ENGINEER's representative(s), if needed or required.
6. OWNER's PROJECT MANAGER, if needed or required
7. OWNER's Sponsor Department representative(s), if needed or required.

C. Meeting topics

The topics will include, but not necessarily be limited to, the following subjects:

1. Review of previous meetings' notes and update of pertinent information and Project status.
2. Identification and discussion of new job related construction problems. Such discussion will be toward resolving identified problems.
3. Review work accomplished to date and establish proposed construction activities for the upcoming week(s).
4. Discuss the status of or need for change orders.
5. Check of required bonds and insurance certificates (including Workers' Compensation Insurance verification for CONTRACTOR's, Subcontractor's, and Sub-Subcontractor's employees as stated in Section 00700, General Conditions, 5.2 Workers' Compensation).
6. Status of pay requests.
7. Work in progress.
8. Review and update construction schedule.
9. Review of submittals schedule and status of submittals.
10. Other.

END

PART 1 - GENERAL**1.1 RELATED DOCUMENTS:**

The Contractor prepares submittals. Drawings and general provisions of Contract, including Section 00700, "General Conditions of the Contract"; Section 00810, and "Supplemental General Conditions"; Division 1 requirements, should be used as the related documents for this requirement.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for submittals required for performance of the Work, including the following:
 - 1. Contractor's construction schedule.
 - 2. Submittal schedule.
 - 3. Shop drawings.
 - 4. Product data.
- B. Administrative Submittals: Refer to other Division 1 Sections and other Contract Documents for requirements for administrative submittals. Such submittals include, but are not limited to, the following:
 - 1. Permits.
 - 2. Applications for Payment.
 - 3. Performance and Payment bonds.
 - 4. Insurance certificates.
 - 5. Monthly Subcontractors expense report.
 - 6. Non-use of asbestos affidavits

PART 2 - PRODUCTS - not used**PART 3 - EXECUTION****3.1 SUBMITTAL PROCEDURES**

Contractor shall be responsible for the following:

- A. Coordination: Coordinate preparation and processing of submittals with performance of construction activities. Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delay.
 - 1. Coordinate each submittal with delivery, other submittals, and related activities that require sequential activity.
 - 2. Coordinate transmittal of different types of submittals for related elements of the Work so processing will not be delayed by the need to review submittals or resubmittals concurrently.
 - 3. Processing: To avoid the need to delay installation as a result of the time required to process submittals, allow sufficient time for submittal review, including time for resubmittals.
- B. Submittal Preparation: Provide identification for each submittal. Indicate the name of the entity that prepared each submittal.

C. Number of Copies:

1. Two (2) copies of the proposed Construction schedule and subsequent revision are required.
2. Two (2) copies of the proposed Submittal schedule and subsequent revision are required.
3. Five (5) copies of Shop Drawings, and Product submittals are required.

D. Submittal Transmittal: Package each submittal appropriately for transmittal and handling. Transmit each submittal from the Contractor to the ENGINEER through the Owner's Representative using a transmittal form (An example Transmittal Form is provided at the end of this section). The ENGINEER will not accept submittals received from sources other than the Contractor.

1. On the transmittal, record relevant information and requests for data. On the form, or separate sheet, record deviations from Contract Document requirements, including variations and limitations. Include Contractor's certification that information complies with Contract Document requirements.
2. Number transmittals in sequence for each Series of the Specifications thus: x-xxx. The number after the dash indicates the Section of the Specifications, and the number before the dash is the sequence number of the transmittal. For example, the first item submitted related to Specification Item No. 506, "Manholes" would be labeled **1-506**, the second item submitted would be labeled **2-506**, etc. Identify resubmittals with a letter of the alphabet following the original sequence number, using "A" for the first resubmittal, "B" for the second resubmittal, etc. For example, the first resubmittal of the second item submitted for Specification 506 would be labeled **2A-506**.

3.2 CONTRACTOR'S CONSTRUCTION SCHEDULE

A. Construction Schedule: As described in Section 2.4.2 of Section 00700 "General Conditions", prepare a fully developed Contractor's construction schedule ("Baseline Schedule") using Microsoft Project[®] software unless otherwise approved by Owner's Representative. Submit Baseline Schedule prior to or at the preconstruction conference, and submit updated schedules as specified by the ENGINEER, usually at each regularly scheduled Project Meeting and with each pay application.

1. Detail each significant construction activity and use a weekly timeframe for the schedule. Use the same breakdown of units of the Work as indicated in the "Schedule of Values."
2. With each update, revise task completion percentage and mark completed tasks.
3. Prepare the schedule on a sheet, or series of sheets, of stable transparency, or other reproducible media, of sufficient width to show data for the entire construction period.
4. Secure time commitments for performing critical elements of the Work from parties involved. Coordinate each element on the schedule with other construction activities; include minor elements involved in the sequence of the Work. Show each activity in proper sequence. Indicate graphically the critical path items and the sequences necessary for completion of related portions of the Work.
5. Indicate the phases of work in which subcontractors will be participating. Subcontractors shall be indicated by name.
6. Coordinate the Contractor's Construction Schedule with the Schedule of Values, list of subcontracts, Submittal Schedule, progress reports, payment requests, and other schedules.

7. Indicate substantial completion in advance of the date established for Final Completion to allow time for the ENGINEER's procedures necessary for certification of Substantial and Final Completion.
- B. Work Stages: Indicate important stages of construction for each major portion of the Work, including submittal review, testing, and installation.
- C. Cost Correlation: Within the Baseline Schedule, provide cost information indicating planned and actual costs. On the appropriate task line(s), show dollar volume of Work performed as of the dates used for preparation of applications for payment. Refer to Section 00700, "General Conditions", Article 14 Payment to Contractor and Completion for cost reporting and payment procedures.
- D. Distribution: Following response to the Baseline Schedule submittal, distribute electronic copies to the ENGINEER, subcontractors, suppliers, and other parties required to comply with scheduled dates. Keep a copy at the Project Site at all times.
 1. When revisions are made, distribute to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in construction activities.
- E. Schedule Updating: Revise the schedule after each meeting, event, or activity where revisions have been recognized or made and as requested by the ENGINEER. Issue the updated schedule concurrently with the report of each meeting, or as requested by the ENGINEER.

3.3 SUBMITTAL SCHEDULE

- A. Concurrently with the development of the Contractor's Construction Schedule, prepare a complete schedule of submittals. Submit the initial Submittal Schedule along with the Construction Schedule, at, or prior to, the Pre-construction Conference.
 1. Coordinate Submittal Schedule with the list of subcontractors, Schedule of Values, and the list of products as well as the Contractor's Construction Schedule.
 2. Prepare the schedule in chronological order. Provide the following information:
 - a. Scheduled date for the first submittal.
 - b. Related Section number or Specification number.
 - c. Submittal category (Shop Drawings, Product Data, Calculations, Test Results, or Samples).
 - d. Name of the subcontractor.
 - e. Description of the part of the Work covered.
 - f. Scheduled date for resubmittal.
 - g. Scheduled date for completion of the ENGINEER's review.
- B. Distribution: Following Owner's response to the initial submittal, print and distribute copies to the Owner's Representative, ENGINEER, Owner, subcontractors, suppliers, and other parties required to comply with submittal dates indicated. Keep copies at the Project Site at all times.
 1. When revisions are made, distribute to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in construction activities.
- C. Schedule Updating: Revise the schedule after each meeting or activity where revisions have been recognized or made. Issue the updated schedule concurrently with the report of each meeting, or as requested by the ENGINEER.

3.4 CONSTRUCTION SEQUENCE PLANS

The Contractor is required to submit construction sequence plans to the City at, or prior to, the pre-construction conference for approval. The Project shall be divided into phases

according to the sequence of construction given in the Drawings and traffic control plans. The Contractor shall arrange his/her work schedule to complete all Work on each phase, including patching of concrete, before moving on to the next work area.

3.5 PRODUCT DATA

- A. Collect Product Data into a single submittal for each element of construction or system. Product Data includes printed information, such as manufacturer's installation instructions, catalog cuts, standard color charts, roughing-in diagrams and templates, standard wiring diagrams, applicable certifications and performance curves.
 - 1. Mark each copy to show applicable choices and options. Where printed Product Data includes information on several products that are not required, mark copies to indicate the applicable information. Include the following information:
 - a. Manufacturer's printed recommendations;
 - b. Compliance with trade association standards;
 - c. Compliance with recognized testing agency standards;
 - d. Application of testing agency labels and seals;
 - e. Notation of dimensions verified by field measurement; and
 - f. Notation of coordination requirements.
 - 2. Do not submit Product Data until compliance with requirements of the Contract Documents has been confirmed.
 - 3. Distribution: Furnish copies of final submittal to installers, subcontractors, suppliers, manufacturers, fabricators, and others required for performance of construction activities. Show distribution on transmittal forms.
 - a. Do not proceed with installation until a copy of the final submission of Product Data is in the Installer's possession.
 - b. Do not permit use of unmarked copies of Product Data in connection with construction.

3.6 ENGINEER/ARCHITECT'S ACTION

- A. Except for submittals, for the record, or for information where action and return is not required, the ENGINEER will review each submittal, mark to indicate action taken, and return within the time frame specified in Paragraph 3.1.A.3.
 - 1. Compliance with specified characteristics is the Contractor's responsibility.
- B. Action Stamp: The ENGINEER will stamp each submittal with a uniform, action stamp. The ENGINEER will mark the stamp appropriately to indicate the action taken, as follows:
 - 1. "Reviewed": the Work covered by the submittal may proceed provided it complies with requirements of the Contract Documents. Final payment depends on that compliance.
 - 2. "Reviewed with Comments": the Work covered by the submittal may proceed provided it complies with notations or corrections on the submittal and requirements of the Contract Documents. Final payment depends on that compliance.
 - 3. "Revise and Resubmit" or "Rejected": do not proceed with Work covered by the submittal, including purchasing, fabrication, delivery, or other activity. Revise or prepare a new submittal according to the notations and resubmit without delay. Repeat if necessary to obtain different action mark.
 - a. Do not use, or allow others to use, submittals marked "Revise and Resubmit" or "Rejected" at the Project Site or elsewhere where Work is in progress.

4. Other Action: Where a submittal is for information, or for record purposes, or for special processing, or for other activity, the ENGINEER will return the submittal marked "Record Copy", "Action Not Required" or "No Action Taken."
- C. Unsolicited Submittals: The ENGINEER will return unsolicited submittals to the sender without action.

3.7 PREPARATION AND SUBMITTAL OF CONSTRUCTION RECORD DRAWINGS

The Owner's Representative and the Contractor's Superintendent will each maintain a set of bluelines noting any changes in ink during construction of the Project. The Owner's Representative and the Contractor's Superintendent will compare bluelines at least weekly (at a time mutually acceptable to both) to exchange information and compare notes to ensure all items installed and changes are documented. The following is a recommended minimum of items to be noted:

GENERAL

1. Notes should be sufficiently clear to allow a draftsman to easily make the necessary changes without the need for field checks and interpretation.
2. One complete set of Construction Record bluelines will be submitted prior to the final pay request and forwarded to the Owner.

Any information noted which could be used for future maintenance, location and construction projects is encouraged to be noted on the bluelines.

3.8 CONSTRUCTION DIARIES

The Contractor shall prepare a daily construction diary recording as a minimum the following information concerning events at the site and submit duplicate copies to the Owner's Representative at weekly intervals. The copies are to be signed by the project Superintendent as defined in Section 00700, Article 6.1.2.

1. Work performed;
2. Approximate count of Contractor's personnel, by classification, on the site;
3. List by classification, of all Subcontractors, personnel and any professionals on the site that day;
4. List of all equipment on the site by make and model;
5. High and low temperatures together with general weather conditions;
6. Start time and finish time of day's work;
7. Accidents and / or unusual events;
8. Meetings and significant decisions made;
9. Stoppages, delays, shortages and / or losses;
10. Meter readings and / or similar recordings;
11. Emergencies procedures that may have been needed;
12. Orders and requests of governing authorities;
13. Change Orders received and implemented;
14. Services connected and / or disconnected;
15. Installed equipment and / or system tests and / or startups and results;
16. Partial completions and / or occupancies; and
17. Date of substantial completion certified.

Shop Drawing Transmittal

Month XX, 2008

Transmittal No. _____
Previous Transmittal No. _____
Previous Submittal Date _____

City of Austin
Construction Inspection Division
Public Works Department
P.O. Box 1088
Austin, Texas 78767

Project Name: Austin Lakeside Drive

Attention: Owner's Representative

Enclosed are nine (9) copies of the following items for your review:

<u>Item No.</u>	<u>Description</u>	<u>Submittal Type</u>	<u>Specification Section</u>	<u>Subcontractor/Supplier</u>
1.	6" DI Pipe	Produce Data	510	ABC Company
2.	8" Resilient Seat Gate Valve	Product Data	511	DEF Company

NOTE: Item 1 above contains a deviation from the Specifications as indicated on the item

Submitted by: _____
XYZ Company
101 Ranch Road 2974
Austin, Texas 78759

END

Division 1 General Requirements
SUSTAINABLE CONSTRUCTION REQUIREMENTS
Section 01352

Non-Building Project – Watershed, Sitework, Landscape

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A.** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section. The requirements may or may not include reference to sustainability.

Related Sections include the following Division 1 Sections:

- 1.** The contents of this Section are related to all Sections of these Specifications.
- 2.** Section 01300 Submittals.
- 3.** Section 01505 Construction and Demolition Waste Management and Disposal.

1.2 SUMMARY

- A.** This Section includes requirements and procedures for compliance with certain Sustainable Construction requirements.
- 1.** Some Sustainability requirements are dependent on material selections and may not be specifically identified as sustainability requirements. Compliance with requirements may be used as one criterion to evaluate substitution requests.
 - 2.** Additional Sustainability Construction requirements are dependent on design and other aspects of the Project that are not part of the Work of the Contract.

1.3 DEFINITIONS

- A. Regionally Manufactured Materials:** Materials that are manufactured within a radius of 500 miles (800 km) from the Project location. Manufacturing refers to the final assembly of components into the product that is installed at the Project site.
- B. Regionally Extracted, Harvested, or Recovered Materials:** Materials that are extracted, harvested or recovered and manufactured within a radius of 500 miles (800 km) from the Project site.
- C. Recycled Content:** The percentage by weight of constituents that have been recovered or otherwise diverted from the solid waste stream, either during the manufacturing process (pre-consumer), or after consumer use (post-consumer).
- D. Post-consumer recycled content:** The percentage (by weight) of a reclaimed waste material contained in a product. A reclaimed waste material (e.g., newspaper, magazines, beverage containers, etc.) has already served a purpose to a consumer and has been diverted or separated from waste stream for recycling.
- E. Pre-Consumer Recycled Content:** (or Post-industrial recycled content). The percentage (by weight) of a waste material obtained from industrial processes that are contained in a product. Discarded materials from one manufacturing process that are used in another manufacturing process are pre-consumer recycled materials. Wastes from the original manufacturing process used in the same product after minimal reprocessing are not recycled material.

- F. Recycled material:** A material that would otherwise be destined for landfill disposal but is diverted or separated from the waste stream, reintroduced as material feedstock, and processed into marketed end products.
- G. Reused Material:** Any item that is salvaged or reused without significant reprocessing as in a recycling process.
- H. Source reduction:** Minimization of waste at the start of a process or activity so that there is a reduced amount of waste to recycle or dispose. Also called precycling.
- I. Xeriscape:** Quality landscaping that conserves water and protects the environment through its employment of seven principles: planning and design; soil analysis; appropriate plant selection; practical turf areas; efficient irrigation; use of mulches; and appropriate maintenance.

1.4 SUSTAINABILITY OBJECTIVES/GOALS

The City of Austin is committed to sustainability and expects the Project to reflect this commitment. The specific Sustainable (Design & Construction) goals for this project include:

1. Protection of the environment.
2. Limiting construction site area and disturbance of natural habitat and protection of trees and vegetation.
3. Reduction of waste created by construction activity through Source Reduction.
4. Increasing the use of materials and products with recycled content.
5. Chemically safe construction materials and pest management.
6. Construction materials that use less energy and create less pollution in manufacture, delivery, installation, renovation, and demolition.

1.5 SUBMITTALS

- A. Sustainability submittals** If required submitted item is identical to that submitted for another requirement, submit duplicate copies for each separate submittal.
- B. Sustainable Construction Action Plans:** Provide preliminary submittals within 14 calendar days of date established for the Notice to Proceed indicating how the following requirements will be met.
 1. Construction & Demolition Waste Management Plan complying with Division 1 Section 01505 "Construction Waste Management."
 2. List of proposed materials with recycled content, indicating cost, post consumer recycled content, and pre-consumer recycled content for each product having recycled content.
 3. List of proposed regionally manufactured materials and regionally extracted, harvested, or recovered materials, identifying each regionally manufactured material and its source.
- C. Sustainability Contract Closeout Documentation:**
 1. Comply with Division 1 Section 01505 "Construction Waste Management."
 2. Provide manufacturer's product Data indicating percentages by weight of post-consumer and pre-consumer recycled content for products having recycled content. Include statement indicating costs for each product having recycled content.
 3. Provide manufacturer's and or supplier's product Data indicating location of material manufacturer for regionally manufactured, harvested, recovered and extracted materials.

1.6 QUALITY ASSURANCE

- A. Sustainability Coordinator:** Engage a responsible person on the construction team who is familiar with Sustainable practices and procedures. The Coordinator may also serve as the Waste Management coordinator.

PART 2 – PRODUCTS

Provide and maximize to the greatest extent economically feasible, a combination of salvaged, refurbished, recycled, regional materials within the scope of the project.

PART 3 – EXECUTION

A. SITE DISTURBANCE - Special Site Practices:

- 1.** Construction Activity Pollution Prevention: Comply with City of Austin standard requirements.
- 2.** Protect and restore natural vegetation per division 1 Sections and plans.
- 3.** Replace any removed or destroyed vegetation with equivalent species that are within City guidelines for native and adaptive plants.
- 4.** Restrict construction activity only to defined site limits per plans and avoid activity and practices that would adversely affect environment, property, soils, vegetation and water courses.

END

Division 1 General Requirements
CONSTRUCTION EQUIPMENT EMISSIONS REDUCTION PLAN
Section 01353

1. GENERAL

1.1. RELATED DOCUMENTS

- A.** This Section applies to Drawings and all provisions of Contract.

1.2. SUMMARY – CONSTRUCTION EQUIPMENT EMISSIONS PLAN

- A.** The OWNER, as part of the Council Resolution No. 20100211-019, has decided to take steps to reduce emissions associated with construction process including Nitrogen Oxides (NO_x), particulate matter and greenhouse gas. Construction activity is a source of large quantities of particulate matter and ozone forming Nitrogen Oxides that adversely affect the health of our community and the natural environment.
- B.** The CONTRACTOR shall employ practices and take actions that reduce emissions from NO_x, particulate matter (black soot) and greenhouse gases resulting from activities associated with new construction and demolition Projects.
- C.** The CONTRACTOR shall maximize the use of equipment and vehicles with advanced emission controls in support of the City's goals, utilizing equipment that meets defined EPA emissions standards.

1.3. DEFINITIONS

- A.** "Construction Equipment" means equipment powered by an internal combustion engine and used for performing or otherwise advancing the Work on the Project, other than motor vehicles intended for use on public highways and registered pursuant to Section 502.002 of the Texas Transportation Code.
- B.** The list of applicable Construction Equipment includes, but is not limited to excavators, backhoes, loaders, bulldozers, graders, rock saws, generators, and other similar equipment.
- C.** "EPA" means the United States Environmental Protection Agency.
- D.** "Low-Use Equipment" means any piece of construction equipment which is used for less than ten (10) hours per week on site for a single construction contract.
- E.** "Greenhouse Gases" are emissions that absorb and emit radiation within the atmosphere. Greenhouse Gases can be one or a combination of, these gases: carbon dioxide, methane, nitrous oxide and three groups of fluorinated gases (sulfur hexafluoride, hydro fluorocarbons, and perfluorocarbons)

1.4. REQUIREMENTS – Not Used

1.5. SUBMITTALS

A. CONSTRUCTION EQUIPMENT EMISSIONS REDUCTION PLAN:

- 1.** The CONTRACTOR agrees to prepare a draft Emissions Reduction Plan (referred to as PLAN) prior to start of construction. This PLAN shall include an inventory report

containing identifying data for each piece of equipment to be used on the worksite and shall include the following:

- Vehicle/Equipment: Make & Model Year
 - Vehicle/Equipment: Engine Make & Model Year
 - Vehicle/Equipment: Fuel Type
 - Vehicle/Equipment: Expected gallons or hours used for project duration
- a) The OWNER will provide Emissions Reduction Toolkit to help the CONTRACTOR in preparation of the PLAN and inventory.
- 2.** The CONTRACTOR shall develop a list of strategies to be used in this Project in order to reduce emissions from NOx, particulate matter and greenhouse gas (CO₂ equivalent). Once prepared, the agreed upon strategies shall be incorporated into the PLAN. The PLAN will then be signed by the CONTRACTOR and made ready for implementation. Implementation progress will be reviewed once a month in regularly scheduled project progress meetings. The PLAN may be modified during construction if changes are made to the Project, but adjustments shall be approved by the OWNER prior to implementation.
- 3.** This PLAN may be used by the Owner's Representative or Inspector to conduct site inspections and/or verify compliance with specification elements.
- 4.** If additional equipment is brought on-site after construction begins, the Contractor shall provide this same inventory information to the Owner's Representative for the new equipment on or before the day it begins work on-site. All additional equipment shall conform to the PLAN.
- 5.** Reports shall be provided for all equipment used on-site.

B. EQUIPMENT EMISSIONS CLOSEOUT DOCUMENTATION:

- 1.** Submit the following prior to final payment:
- a) Record of changes made to the original PLAN and reasons.
 - b) Provide a summary and documentation of strategies used and estimated reductions in fuel & emissions.
 - c) Provide documentation of amount and % of alternative fuel used.

2. PRODUCTS

Not used

3. EXECUTION

3.1. GENERAL

- A.** Implement the submitted PLAN. Provide personnel, documentation, equipment, signage, transportation, and other items as required to implement the PLAN during the entire duration of the Contract.

3.2. EQUIPMENT EMISSIONS PLAN IMPLEMENTATION

- A.** Plan Coordinator (Could be same as superintendent): Designate an on-site person responsible for instructing workers on the Owner's intent to reduce emissions, overseeing implementation and documenting results of the PLAN for the Project.

- B.** Plan Review: Review the PLAN in monthly progress meeting and include comments in the meeting notes.
- C.** Instruction: Provide on-site instructions to all subcontractors of emissions reduction methods to be used by all parties for the appropriate activities of the Project.
- D.** Discuss Owner's goals and requirements at the following meetings:
 - 1.** Pre-bid conference.
 - 2.** Pre-construction conference.
 - 3.** Progress meetings (monthly).

3.3 EQUIPMENT EMISSIONS REDUCTION TOOLKIT

- A.** Equipment Emissions Reduction Toolkit available at:
 - 1.** Website: (<http://austintexas.gov/departments/capital-improvement-program>)
 - 2.** City of Austin Public Works Department, Project Management Division, One Texas Center, Suite 900
 - 3.** Construction Job Site Office (after contract award)
- B.** Equipment Emissions Reduction Toolkit consists of:
 - 1.** A list of Construction Equipment Emissions Reduction Strategies
 - 2.** EPA fuel savings calculator by idling reductions
 - 3.** Posting of Anti-idling signs
 - 4.** Memorandum of Agreement by Local Area Governments
 - 5.** Equipment Inventory Form

3.4 A LIST OF EQUIPMENT EMISSIONS REDUCTION STRATEGIES

The following are suggested emissions reduction strategies and references. As per the specification section 01353, 1.5 Submittals, the CONTRACTOR shall develop a list of strategies to be used in this Project at the start of construction.

C-1 Anti-Idling Strategies:

- 1.** Implement and enforce anti-idling practices for all equipment and vehicles on and adjacent to the site and associated with the project. City will provide a construction site sign and stickers for vehicles and equipment. (<http://www.engineoff.org/>)
- 2.** Limit all idling of project associated vehicles and equipment operations to five (5) minutes unless the idling is applicable to one or more of the following exceptions:
 - a) Idling is being used for emergency response purposes;
 - b) Idling is necessary for component of mechanical operation, maintenance, or diagnostic purposes; or
 - c) Idling is for the health or safety of the equipment operator.
- 3.** Provide education to all staff, vendors and subcontractors about emissions hazards and anti-idling practices and encourage use of EPA calculator for fuel savings.

4. To the extent possible, do not stop or idle haulage trucks directly under tree limbs and foliage overhanging the street along the haul route. Further avoid such damage from truck exhaust by means of exhaust diversion devices to redirect or diffuse exhaust from being directed in a concentrated manner to tree limbs and foliage.
5. Avoid vehicle loitering or queuing outside or inside the gates of the work area to minimize degradation of localized air quality.

([http://data.capcog.org/air-quality/engineoff/AntiIdlingBrochure\(2\).pdf](http://data.capcog.org/air-quality/engineoff/AntiIdlingBrochure(2).pdf))

(<http://data.capcog.org/air-quality/engineoff/template-1/HowtoOrderSign.html>)

(<http://data.capcog.org/air-quality/engineoff/smartwaycalculator.xls>)

(<http://austintexas.gov/airquality/>)

C-2 Alternative Fuels:

6. Utilize **alternative fuels** including, Texas LED Compliant B20 (or higher) biodiesel, Compressed Natural Gas (CNG), propane and electric. (Refer to EPA Energy Policy Act for full list).
7. Avoid unnecessary fuel use by providing on-site fuelling for alternate fuels.

(<http://www.tceq.texas.gov/airquality/mobilesource/txled/cleandiesel.html>)

(<http://www.eere.energy.gov/cleancities>)

(<http://lonestarcfa.org>)

C-3 Vehicle/Equipment Improvements:

8. Eliminate use of vehicles in tier 0 and 1 categories per EPA and rent or purchase tier 2 and 3 or (4) compliant vehicles.
9. It is recommended that CONTRACTOR takes advantage of the **Texas Emission Reduction Plan (TERP)** grant incentives to upgrade (replace or repower) vehicles with retrofitted emission reduction technologies.
(<http://www.tceq.texas.gov/airquality/terp/index.html>) or (www.terpgrants.com)
10. Utilize **battery powered and/or solar powered equipment** where available. This strategy can be combined with anti-idling strategies by using this technology for sign boards. (evtransportal.org/dieselengineidlerreduction.pdf)

C-4 Maintenance Program:

11. Establish a preventative **maintenance program** addressing issues including but not limited to, fuel use, air emissions, tire pressure, smoke from exhaust and noise.
12. Make all efforts to **prevent oil/fuel spillage** on to site surfaces.

C-5 Resource Management:

13. Utilize equipment companies that are located closest to the construction site.
14. Store equipment on site during construction use or arrange for closest overnight storage including **temporary use of the Right of Way** if possible.

15. To the extent possible, CONTRACTOR shall maximize use of **local and regional materials** to reduce transportation emissions.
16. CONTRACTOR shall maximize **salvage and reuse** of appropriate on-site materials. (<http://www.usgbc.org/ShowFile.aspx?DocumentID=1095>)
17. To the greatest extent possible, stage equipment and vehicles away from, and minimize operation near, sensitive receptors including, but not limited to, operable windows, fresh air intakes, hospitals, schools, licensed day care facilities, residences and areas where people congregate.

END

Division 1 General Requirements
CONSTRUCTION AND DEMOLITION WASTE
MANAGEMENT
Section 01505

Non-Building Projects using Non-Building Baseline Sustainability Criteria (Minimal Waste)

PART 1 – GENERAL

1.1 Related Documents

1. Division 01 Section 01200 "Project Meetings"
2. Division 01 Section 01500 "Temporary Facilities"
3. Division 00 Section "Hazardous Waste Management"
4. Division 01 Section 01700 "Contract Closeout"
5. Division 02 Section "Demolition" & "Clearing and Grubbing".
6. Division 01 Section 01352 "Sustainable Construction Requirements".

1.2 SUMMARY

- A.** The Owner has established that the Project shall minimize the creation of construction and demolition waste on the Project site and shall recycle and/or salvage non-hazardous construction, demolition, and land clearing debris to divert waste from Landfills.
1. Contractor shall minimize factors that contribute to waste such as over packaging, improper storage, ordering error, poor planning, breakage, mishandling, and contamination.
 2. Contractor shall reuse, salvage, or recycle as many of the non-hazardous waste materials as economically feasible.
 3. All profits resulting from salvaging and recycling shall go to the Contractor.
 4. Where there is little to no cost difference between recycling/salvaging and land-filling of items, the Contractor is directed to recycle/salvage.
- B.** Hazardous materials are an exception to this Section. Comply with applicable requirements of Local, State and Federal regulations.
- C.** This Section includes administrative and procedural requirements for recycling, salvaging and disposing of non-hazardous demolition and construction waste

1.3 REFERENCES

- A.** The standards listed below form a part of this Section to extent referenced. Standards are referred to in the text by basic reference only.
1. Sustainable Building Sourcebook – Austin Energy Green Building: www.austinenergy.com/Energy%20Efficiency/Programs/Green%20Building/Sourcebook/constructionWasteManagement.htm
 2. Resource Exchange Network for Eliminating Waste (RENEW), TCEQ (MC-112), Biannual catalog lists materials available and wanted; serves Texas and surrounding states; lists are posted on the Internet: <http://www.tceq.state.tx.us/assistance/P2Recycle/renew/renew.html>

3. Recycle Texas Online, A service of the Texas Commission on Environmental Quality. Contains information on about 1000 businesses and local governments handling materials from Texas. Organizations' information is self-reported and listings are free of charge. www.tceq.state.tx.us/assistance/P2Recycle/rtol/rtol.html
4. "WasteSpec", Triangle J Council of Governments, Research Triangle Park, NC 27709, (919) 549-9390.

1.4 DEFINITIONS

- A. Chemical Waste: Includes petroleum products, bituminous materials, salts, acids, alkalis, herbicides, pesticides, organic chemicals, and inorganic wastes.
- B. Clean: Untreated, unpainted, not contaminated with oils, solvents, caulk, or other materials.
- C. Disposal: Acceptance of solid wastes at legally permitted and operating facility for the purposes of land-filling.
- D. Diversion: Avoidance of demolition and construction waste sent for disposal to landfill or incineration. Diversion does not include using materials for landfill, alternate daily cover on landfills, or materials used as fuel in waste-to-energy processes.
- E. Hazardous Waste: Byproducts of society that can pose a substantial or potential hazard to human health or the environment when improperly managed, and possessing at least 1 of 4 of the following characteristics, or appearing on a special Environmental Protection Agency (EPA) list.
 1. Ignitability.
 2. Corrosivity.
 3. Reactivity.
 4. Toxicity.
- F. Landfill: Authorized land waste disposal site that is located to minimize waste pollution from runoff and leaching.
- G. Recycling: The process of sorting, cleansing, treating, and reconstituting solid waste and other discarded materials for the purpose of using the altered form. Recycling does not include burning, incinerating, or thermally destroying waste.
- H. Return: To give back reusable items or unused products to vendors for credit.
- I. Reuse: A strategy to return materials to active use in the same or a related capacity.
- J. Salvage: To remove a waste material from the Project site to another site for resale or reuse by others.
- K. Source Separation: The act of keeping different types of waste materials separate beginning from the first time they become a waste.
- L. Toxic: Poisonous to living beings either immediately or after a long period of exposure.
- M. Trash: Any product or material unable to be reused, returned, recycled, or salvaged.
- N. Waste: Extra material or material that has reached the end of its useful life in its intended use. Waste includes all materials removed from the Project site to be land-filled, recycled, or salvaged for reuse. Pallets, containers, packaging and packing materials in which construction products are delivered to the Project site are considered waste materials.

1.5 WASTE MANAGEMENT GOALS

- A. The Owner has established that at least 50% of the “waste” materials produced as a result of the Work, shall be employed, salvaged, reused, or recycled in order to minimize the impact of construction and demolition waste on landfills and reducing disposal costs.
- B. Contractor shall employ and encourage practices that ensure the generation of as little waste as possible due to error, poor planning, breakage, mishandling, contamination, or other factors.
- C. Contractor is responsible for knowing and complying with regulatory requirements, including but not limited to Federal, State and local laws and regulations, pertaining to legal disposal of all construction waste materials.
- D. Contractor shall recycle and divert materials for secondary uses whenever economically feasible.
- E. Acceptable methods of diversion include:
 - Recycling, reuse and salvage
 - Donation to nonprofit organizations
 - Removal from jobsite by staff or subcontractors for use (not disposal)
 - Return to supplier
 - Sale to organizations or individuals
- F. The Contractor shall develop a Construction and Demolition Waste Management Plan that results in end-of-Project rates for recycle and/or salvage of at least 50% of non-hazardous construction and demolition waste. The plan shall identify the materials to be diverted from disposal and define the materials to be separated on-site or off-site. Calculations can be done by weight or volume, but must be consistent throughout.

1.6 SUBMITTALS

- A. **Waste Management Plan:** A Project-specific plan for the collection, transportation, and disposal of the waste generated at the construction site, shall be submitted for approval within 14 calendar days after date of the Notice to Proceed, or prior to any waste removal, whichever occurs first. The approved Plan shall be distributed to all subcontractors and the owner and will not relieve the Contractor’s responsibility for compliance with applicable environmental regulations.

An example template is included as “Appendix A” to this section.

- 1. The Waste Management Plan shall include the following:
 - a. Identify each type of waste material produced as a result of the Work on the Project Site.
 - b. Identify each type and quantity of demolished and waste material intended to be recycled, salvaged or reused.
 - c. Identify material separation requirements.
 - e. Identify location of temporary on-Site storage for recycled and reused materials.
 - f. Identify final destination means of transportation for each recycled and reused material.
 - h. Identify the name/phone number of the Contractor’s on-site coordinator of the Waste Management Plan.

- i. Indicate permit or license and the location of the municipal solid waste landfills and other disposal area(s) to be used.
 - j. List of materials that cannot be recycled or reused.
- B. CWM Closeout Documentation:** Submit the following upon the completion of The Work and prior to final payment:
- a. A Summary of Solid Waste Disposal and Diversion (refer example template "Appendix B") prepared and maintained through Project duration, demonstrating that 100% of all non-hazardous construction wastes were recycled, salvaged or disposed of properly and includes as a minimum the following information:
 - 1. Dates
 - 2. Materials Description
 - 3. Materials Quantity
 - 4. Indicate whether recycled, salvaged, reused or sent to landfill for disposal.
 - 5. Name and location of accepting facility.
 - 6. Destination
 - b. Copies of all receipts, manifests, weight tickets, and other documentation that identify all materials recycled, salvaged, land-filled or incinerated.

PART 2 - PRODUCTS

Not used

PART 3 – EXECUTION

3.1 GENERAL

- A.** Implement the Waste Management Plan as approved by the City of Austin Project Manager. Provide handling, containers, storage, signage, transportation, and other items as required to implement Waste Management Plan during the entire duration of the Contract.
- B.** Satisfy the requirements outlined in Subsection 1.5, Waste Management Goals.

3.2 WASTE MANAGEMENT PLAN IMPLEMENTATION

- A.** Plan Coordinator: Designate an on-site party (or parties) responsible for instructing workers, overseeing implementation and documenting results of the Waste Management Plan for the Project.
- B.** Plan Distribution: Provide copies of the Waste Management Plan to the Contractor's superintendent, each Subcontractor, the Owner, and the Engineer.
- C.** Meetings: Include Construction Waste Management in progress meetings to maintain the Plan for achieving the owners waste management goals:
- D.** Carefully order materials to avoid over supply.
- E.** Protect materials from contamination during handling, storage and transport to meet the requirements of the accepting facilities.
- F.** The Contractor shall assign and label a specific area to facilitate separation of materials for potential recycling, salvage, reuse, return and disposal. This area shall be kept neat and clean and clearly marked in order to avoid contamination of materials.

3.3 RECYCLING REQUIREMENTS

A. Materials: In general, the following types of construction waste materials generated during the course of this project that are not salvaged shall be recycled:

- a. Asphalt concrete pavement.
- b. Concrete materials.
- c. Metals, including the following.
 - i. Banding straps.
 - ii. Reinforcing steel.
 - iii. Iron.
 - iv. Brass and bronze.
 - v. Lead.
 - vi. Extruded aluminum.
 - vii. Aluminum sheet.
 - viii. Stainless steel sheet.
 - ix. Steel studs.
 - x. Copper pipe.
 - xi. Steel pipe.
 - xii. Galvanized steel pipe.
- d. Clean dimensional lumber.
- e. Wood crates and pallets.
- f. Glass and glass containers.
- g. Plastics.
- h. Plumbing fixtures.
- i. Electrical conduit.
- j. Electrical wiring.
- k. Cardboard, paper, and packaging.
- l. Beverage containers.

B. Methods: The following recycling methods, or a combination of, may be used.

1. On-site separation: Each material to be recycled shall be separated at the Project site and delivered to the recycling markets or directly from the Project site.
 - a. If on-site separation method is used, designate a specific area or areas to facilitate separation of materials for potential reuse, salvage, recycling, and return.
 - b. Maintain recycling and waste bin areas neat and clean and clearly marked, both in Spanish and in English, in order to avoid co-mingling of materials.
 - c. Protect materials from contamination.
2. Off-site separation: Materials to be recycled are delivered unsorted from the Project site to a materials recovery facility or transfer station where recyclable materials are separated from other waste.
 - a. Contractor shall verify that the entity responsible for the off-site separation has a market for all materials required to be recycled from the Project site.
 - b. The same Submittals procedures shall apply.

- c. Protect materials from contamination.

3.4 REUSE

- A.** Contractor is encouraged to reuse as many demolished and waste materials as possible.
- B.** Reuse of waste materials includes the following:
 - a. Salvaging materials scheduled for disposal.
 - b. Off-Site storage of waste materials for future reuse by Contractor on other projects.
 - c. Returning unused and reusable materials, packaging and pallets, to vendor.
 - e. Assemble designated reuse items in a single location safe from damage, for review and approval by the owner's representative.

3.5 SALVAGE

- A.** Salvage materials as identified on the Engineering Plans.
- B.** Salvage Guidelines:
 - 1. The contractor shall salvage as many items as deemed economically possible, considering reduction of land filling fees and possible use by others.
 - 2. Assemble potentially salvageable items in one area and donate or sell to the public after review by the City of Austin Project Manager.
 - 3. All proceeds from the sale of salvaged items shall go to the contractor.

Appendix A. Sample Construction Waste Management Plan

Construction Waste Management Plan

Project:
Contractor:
Date:
Contact:
Phone:
Prepared by:

Diversion Goal: Recycle, reuse and/or salvage at least 50% (by weight or volume) of land-clearing and construction waste

I. Coordination and Training

- a. Name of Contractor's representative responsible for CWM implementation & coordination.
- b. Describe method(s) of waste recycling management – on-site and/or off-site.
- c. Describe how Contractor's staff and subcontractors will be informed regarding proper recycling and separation procedures
- d. Describe and/or show on an attached site map where the temporary waste material storage area(s) will be located, and how will contamination of separated waste materials will be prevented?

II. Waste Minimization

- a. What waste minimization techniques will be employed during the construction phase?

- b. Which employees and / or subcontractors will be involved with each technique?

III. Construction Waste Analysis (including site / land-clearing materials, as applicable)

- a. **Diverted Materials:** For each material anticipated to be reused or recycled (diverted from the landfill) to meet the minimum 50% diversion goal, provide information to complete the table below. (Note: Whenever possible, attempt to use or donate construction waste materials rather than recycling.)

Material or Item	Storage Method (roll-off, bin, area, on pallet, etc.)	Quantity estimate (no., linear ft., square ft., etc.)	Proposed Recipient

Add rows (or paper pages) as required

- b. **Landfill:** For construction phase trash and materials / items that will not be diverted, complete the following table:

Quantity estimate (weight or volume)	Number and size of roll offs anticipated	Proposed landfill site

Appendix B. Summary of Solid Waste Disposal and Diversion

Project name _____

Project Number _____

Contractor Name _____

License Number _____

Contractor Address _____

Solid Waste Material	Recycled, Reused, salvaged or disposed	Date Material Disposed or diverted	Amount Disposed/ Diverted (Ton or cubic yd.)	Municipal Solid Waste Facility (Name, address, Phone)	Recycling/Reuse Facility Name Address Phone	Comment (If disposed state why not diverted)
Vegetation						
Soil						
Trench spoils						
Rock						
Asphalt						
Concrete						
Metal						
Wood						
Debris						
Glass						
Trash						
Other						

Signature _____

Date _____



Page / of / total pages

END

SECTION 01700

CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
 - 1. Substantial Completion procedures.
 - 2. Final completion procedures.
 - 3. Warranties.
 - 4. Final cleaning.
- B. Related Sections:
 - 1. Divisions 10 and 26 Sections for specific closeout and special cleaning requirements for the Work in those Sections.

1.2 SUBSTANTIAL COMPLETION

- A. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete with request.
 - 1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
 - 2. Advise Owner of pending insurance changeover requirements.
 - 3. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
 - 4. Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 - 5. Prepare and submit Project Record Documents, operation and maintenance manuals, and similar final record information.
 - 6. Deliver tools, spare parts, extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.
 - 7. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
 - 8. Complete startup testing of systems.
 - 9. Submit test/adjust/balance records.
 - 10. Terminate and remove temporary facilities from Project site, along with construction tools, and similar elements.
 - 11. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
 - 12. Complete final cleaning requirements, including touchup painting.
 - 13. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

- B. Inspection: Submit a written request for inspection for Substantial Completion. On receipt of request, Engineer and Construction Manager will either proceed with inspection or notify Contractor of unfulfilled requirements. Engineer will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Engineer, that must be completed or corrected before certificate will be issued.
 - 1. Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.
 - 2. Results of completed inspection will form the basis of requirements for final completion.

1.3 FINAL COMPLETION

- A. Preliminary Procedures: Before requesting final inspection for determining final completion, complete the following:
 - 1. Submit a final Application for Payment according to Division 01 Section "Payment Procedures."
 - 2. Submit certified copy of Engineer's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Engineer. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
 - 3. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
 - 4. Submit pest-control final inspection report and warranty.
 - 5. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems.
- B. Inspection: Submit a written request for final inspection for acceptance. On receipt of request, Engineer and Construction Manager will either proceed with inspection or notify Contractor of unfulfilled requirements. Engineer will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.
 - 1. Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.

1.4 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Organization of List: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction
 - 1. Organize list of locations in order indicated in Drawings.
 - 2. Submit list of incomplete items in the following format: PDF electronic file.

1.5 WARRANTIES

- A. Submittal Time: Submit written warranties on request of Engineer for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated.
- B. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual.
 - 1. Bind warranties and bonds in heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch paper.
 - 2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.
 - 3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.
 - 4. Scan warranties and bonds and assemble complete warranty and bond submittal package into a single indexed electronic PDF file with links enabling navigation to each item. Provide table of contents at beginning of document.
- C. Provide additional copies of each warranty to include in operation and maintenance manuals.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.
 - 1. Use cleaning products that meet Green Seal GS-37, or if GS-37 is not applicable, use products that comply with the California Code of Regulations maximum allowable VOC levels.

PART 3 - EXECUTION

3.1 FINAL CLEANING

- A. General: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.

1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a portion of Project:
 - a. Clean Project sites in areas disturbed by construction activities, including grassy areas, of rubbish, waste material, litter, and other foreign substances.
 - b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
 - c. Remove tools, construction equipment, machinery, and surplus material from Project sites.
 - d. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
 - e. Remove labels that are not permanent.
 - f. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
 - 1) Do not paint over "UL" and other required labels and identification, including mechanical and electrical nameplates.
 - g. Wipe surfaces of electrical equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
 - h. Replace parts subject to operating conditions during construction that may impede operation or reduce longevity.
 - i. Leave Project clean and ready for operation.

END OF SECTION 017700

ARTICLE 1 - GENERAL**1.1 RELATED DOCUMENTS**

The following documents are a part of this section:

All documents in Bidding Requirements, Contract Forms and Conditions of the Contract.

Other sections of Division 1 - General Requirements apply to this section.

1.2 DESCRIPTION AND INTENT OF THE WORK

No asbestos containing material (ACM) shall be brought onto the Project site, and/or incorporated into the Project construction without the written consent of the OWNER. Any asbestos containing material found at any time including after contract completion, to have been brought onto the site or incorporated into the Project construction by the CONTRACTOR, or any Subcontractors, Sub-Subcontractors or Suppliers, shall be removed and disposed of in accordance with the then current governmental regulatory standards.

All costs associated with the inspection, sampling, testing, removal and disposal of ACM as described above shall be paid by the CONTRACTOR.

1.3 DEFINITIONS

ASBESTOS: The asbestiform varieties of serpentine (chrysotile), riebeckite (crocidolite) cummingtonite-grunerite (amosite), anthophyllite, actinolite and tremolite.

ASBESTOS CONTAINING MATERIAL (ACM): Any material containing more than one percent (1%) by weight of asbestos of any type or mixture of types.

ASBESTOS CONTAINING BUILDING MATERIAL (ACBM): Any material used in the construction of, or incorporated into the construction of, any building that contains more than one percent (1%) by weight of asbestos of any type or mixture of types.

MSDS: A material safety data sheet (MSDS) is a form containing data regarding the properties of component substances that comprise a manufactured product. They are a basic hazard communication tool that gives details on chemical and physical dangers, safety procedures, and emergency responses for chemicals.

1.4 QUALITY ASSURANCE**PROHIBITION OF ASBESTOS CONTAINING MATERIALS**

The E/A has been instructed to not permit any asbestos containing materials to be specified, requested or approved for use in conjunction with this Project.

The E/A has signed the following:

- A. 01900A Statement of Non-Inclusion of Asbestos Containing Material (E/A, Prior to Design): stating that the Engineer/Architect shall not specify, request or approve any ACM in this Project without prior written approval of OWNER.
- B. 01900B Statement of Non-Inclusion of Asbestos Containing Material (E/A, After Design): stating that the Engineer/Architect has not specified, requested or approved any ACM in this Project

without the prior written approval of the OWNER, and that any ACM allowed in this Project is identified in the Statements.

These Statements are included in the Construction Documents.

ASBESTOS CONTAINING MATERIALS PROHIBITED FROM SITE

No asbestos containing materials will be permitted as part of the Project construction. The following list is intended to be used as a general guide to show which types of materials are suspected to contain asbestos:

- Cement Pipes
- Cement Wallboard
- Cement Siding
- Asphalt Floor Tile
- Vinyl Floor Tile
- Vinyl Sheet Flooring/vinyl wall coverings
- Flooring Backing
- Construction Mastics (floor tile, carpet, ceiling tile, etc.)
- Acoustical Plaster
- Decorative Plaster / stucco
- Textured Paintings/Coatings
- Ceiling Tiles and Lay-in Panels
- Spray-Applied Insulation
- Blown-in Insulation
- Fireproofing Materials
- Taping Compounds (thermal)
- Packing Materials (for wall/floor penetrations)
- High Temperature Gaskets
- Laboratory Gloves
- Fire Blankets
- Fire Curtains
- Elevator Equipment Panels
- Elevator Brake Shoes
- HVAC Duct Insulation
- Boiler Insulation
- Breeching Insulation
- Ductwork Flexible Fabric Connections
- Cooling Towers
- Pipe Insulation (corrugated air-cell, block, etc.)
- Heating and Electrical Ducts
- Electrical Panel Partitions
- Electric Cloth
- Electric Wiring Insulation
- Chalkboards
- Roofing Shingles / tiles / membranes
- Roofing Felt
- Roof Coatings
- Base Flashing
- Thermal Paper Products
- Fire Doors
- Caulking/Putties
- Adhesives / mastics
- Wallboard
- Joint Compounds
- Spackling Compounds
- Laboratory hoods/tabletops
- CMU block fill materials

If any of these suspect materials are specified for use on the Project, and if they do not have specific labelling identifying them as asbestos free, then the CONTRACTOR shall notify the OWNER immediately. Laboratory analysis of the material by an OWNER-approved laboratory shall be performed at CONTRACTOR's expense in order to warrant that the material does not contain asbestos. A copy of the package labelling or results of laboratory testing must be provided to the OWNER prior to inclusion of the specified material during construction. Contractor's construction submittals must include MSDSs for all new materials used in construction of buildings, facilities and infrastructure.

1.5 SUBMITTALS

NON-USE OF ASBESTOS AFFIDAVITS

At the time that the CONTRACTOR signs the Agreement, they shall sign a Non-Use of Asbestos Affidavit (Contractor Prior to Construction), Contract Document 00680. This Affidavit certifies that the CONTRACTOR agrees that they will not allow any asbestos containing materials to be incorporated into the construction of the Project or allow any asbestos containing building materials on the site for which the OWNER has not given prior written approval.

Prior to final payment, the CONTRACTOR will provide to the OWNER a Non-Use of Asbestos Affidavit (Contractor After Construction), Contract Document 00681. This Affidavit certifies that the CONTRACTOR did not allow asbestos containing materials to be incorporated into the construction or allowed any

asbestos containing building materials on the site for which the OWNER of the Project did not give prior written approval.

ASBESTOS CONTAINING MATERIALS: When any asbestos containing materials are used on the Project, provide the following information:

A detailed description of the material containing the asbestos.

The type and percent of asbestos contained in the material.

The quantity of the materials used, including the square footage, or in the case of pipe insulation, the size and linear footage.

A drawing showing the exact location of any asbestos containing materials.

Final payment shall be withheld until the above described Affidavits, submittals and/or information are received and approved.

END

STATEMENT OF NON-INCLUSION OF ASBESTOS CONTAINING MATERIALSTATE OF TEXAS
COUNTY OF TRAVIS**ENGINEER/ARCHITECT
PRIOR TO DESIGN**

"My name is _____, hereinafter known as Authorized Representative.

"I am over the age of 18 years and I have never been convicted of a crime. I am the _____ of _____ hereinafter known as ENGINEER/ARCHITECT.

"I am fully competent to make this statement. I have personal knowledge of the facts set forth below and they are all true and correct.

"WHEREAS ENGINEER/ARCHITECT has been selected to provide designs, to prepare the bid and construction documents, and to assist the City of Austin, Texas, hereinafter known as OWNER, during the construction of _____

_____, located at _____

_____, Austin, Texas, hereinafter known as Project, and

"WHEREAS asbestos in a dust form is a recognized health hazard, and

"WHEREAS the OWNER desires not to have any asbestos containing materials used or incorporated into the construction of the Project;

"THEREFORE the ENGINEER/ARCHITECT affirms that to the best of its knowledge and belief:

1. The ENGINEER/ARCHITECT, any person, firm or organization representing or represented by the ENGINEER/ARCHITECT, shall not knowingly specify, request, or approve for use in conjunction with the Project, any asbestos containing materials or any other materials defined as containing asbestos by any laws, rules or regulations promulgated by the United States Government, the State of Texas or any governmental organization or agency operating under the authority of either of those entities.
2. Realizing that there might be materials required in which a satisfactory non-asbestos containing material cannot be obtained, the ENGINEER/ARCHITECT will do the following before specifying any asbestos containing material:
 - A. Inform the OWNER's Project Manager for this Project, in writing, of any intent to specify asbestos containing materials.
 - B. Receive written approval from the City of Austin Project Manager for the specifying of any asbestos containing materials.
 - C. At the completion of the design phase, and before the OWNER receives any bids for this Project, provide to the Project Manager, in writing, the proposed location of any asbestos containing materials, the type of asbestos they contain, and the percent of asbestos by types.
3. The ENGINEER/ARCHITECT states its understanding that if any asbestos containing materials not approved by the OWNER for inclusion into the Project, are determined, as a result of any inspection and sample analysis performed by an individual(s) and/or firm(s) certified and/or licensed to perform such inspection by the United States Government and/or the State of Texas, to have been knowingly specified, requested and/or approved by the ENGINEER/ARCHITECT for inclusion in the Project, the OWNER shall look to the ENGINEER/ARCHITECT for reimbursement of any and all costs incurred in the removal and/or other abatement of said asbestos containing materials.
4. ENGINEER/ARCHITECT further understands that OWNER shall also look to the ENGINEER/ARCHITECT for any and all damages to OWNER which result from the inability of the OWNER to use any portion or all of the Project due to the incorporation of asbestos containing materials that have been knowingly specified, requested and/or approved by the ENGINEER/ARCHITECT.
5. ENGINEER/ARCHITECT further understands that OWNER will pursue reimbursement of any said cost and compensation for any said damages from the ENGINEER/ARCHITECT by any and every means within OWNER's right and power.

Signature of Authorized Representative: _____

STATE OF TEXAS
COUNTY OF TRAVIS

ON _____, 20____, personally appeared _____

_____ and been duly sworn by me, subscribed to the foregoing statement and has stated that the facts stated therein are true and correct.

Notary Public, State of Texas _____

Printed Name of Notary _____

My Commission Expires: _____

01605A.00/110392

STATEMENT OF NON-INCLUSION OF ASBESTOS CONTAINING MATERIALSTATE OF TEXAS
COUNTY OF TRAVIS**ENGINEER/ARCHITECT
AFTER DESIGN**

"My name is _____, hereinafter known as Authorized Representative.

"I am over the age of 18 years and I have never been convicted of a crime. I am the _____ of _____ hereinafter known as ENGINEER/ARCHITECT.

"I am fully competent to make this statement. I have personal knowledge of the facts set forth below and they are all true and correct.

"WHEREAS ENGINEER/ARCHITECT has been selected to provide designs, to prepare the bid and construction documents, and to assist the City of Austin, Texas, hereinafter known as OWNER, during the construction of _____

_____, located at _____ Austin, Texas, hereinafter known as Project, and

"WHEREAS asbestos in a dust form is a recognized health hazard, and

"WHEREAS the OWNER desires not to have any asbestos containing materials used or incorporated into the construction of the Project;

"THEREFORE the ENGINEER/ARCHITECT affirms that to the best of its knowledge and belief:

1. The ENGINEER/ARCHITECT, any person, firm or organization representing or represented by the ENGINEER/ARCHITECT, shall not knowingly specify, request, or approve for use in conjunction with the Project, any asbestos containing materials or any other materials defined as containing asbestos by any laws, rules or regulations promulgated by the United States Government, the State of Texas or any governmental organization or agency operating under the authority of either of those entities.
2. The only exceptions to the above statement are the following materials that are required because a satisfactory non-asbestos containing material cannot be obtained. The inclusion of these materials has been approved by the OWNER's Project Manager for this Project.

3. The ENGINEER/ARCHITECT states its understanding that if any asbestos containing materials not approved by the OWNER for inclusion into the Project, are determined, as a result of any inspection and sample analysis performed by an individual(s) and/or firm(s) certified and/or licensed to perform such inspection by the United States Government and/or the State of Texas, to have been knowingly specified, requested and/or approved by the ENGINEER/ARCHITECT for inclusion in the Project, the OWNER shall look to the ENGINEER/ARCHITECT for reimbursement of any and all costs incurred in the removal and/or other abatement of said asbestos containing materials.
4. ENGINEER/ARCHITECT further understands that OWNER shall also look to the ENGINEER/ARCHITECT for any and all damages to OWNER which result from the inability of the OWNER to use any portion or all of the Project due to the incorporation of asbestos containing materials that have been knowingly specified, requested and/or approved by the ENGINEER/ARCHITECT.
5. ENGINEER/ARCHITECT further understands that OWNER will pursue reimbursement of any said cost and compensation for any said damages from the ENGINEER/ARCHITECT by any and every means within OWNER's right and power.

Signature of Authorized Representative: _____

STATE OF TEXAS
COUNTY OF TRAVIS

ON _____, 20____, personally appeared _____

_____ and been duly sworn by me, subscribed to the foregoing statement and has stated that the facts stated therein are true and correct.

Notary Public, State of Texas _____

Printed Name of Notary _____

My Commission Expires: _____

01605B/110392

SECTION 839S

TRAFFIC SIGNAL POLES

839S.1 - Description

This item shall govern furnishing and installation of traffic signal poles in accordance with the specifications contained herein, the Drawings, Standard Detail No. 839S-4, "Traffic Signal Structures Mast Arm Details," the manufacturer's recommendations and/or written instructions from the Engineer or designated representative.

Traffic signal poles shall be of the size and type shown on the project drawings and referenced details.

This specification is applicable for projects or work involving either inch-pound or SI units. Within the text and accompanying tables, the inch-pound units are given preference followed by SI units shown within parentheses.

839S.2 - Design Requirements

All design drawings and calculations for traffic signal poles shall be signed, dated and sealed by a Licensed Professional Engineer registered in the State of Texas, who shall be wholly responsible for the design of all poles, arms and davit extensions. Acceptance of traffic signal pole designs by the City of Austin shall not relieve the designer of this responsibility.

839S.3 - Submittals

The Contractor shall submit to the City of Austin, with the submittal data, the design drawings showing design details and copies of the design strength and deflection calculations for each completed pole/arm/davit extension structure for review and acceptance prior to fabrication. The ASTM specifications numbers for the materials to be used shall be included as part of the design strength calculations.

839S.4 - Materials

A. General Requirements

This section of the Specifications describes steel poles, mast arms and davit extensions for traffic signal and street light support. The Specifications cover monotube steel strain and mast arm poles, monotube steel cantilevered mast arms and davit type steel luminaire poles and extensions for steel strain and mast arm poles. The general design of the poles, arms and extensions shall conform to the requirements of the plans and the typical drawings with no guys, struts, rods, stay braces, or clamps of U-bolts, except where noted otherwise.

B. AASHTO Specifications

The design of the completed assembly of poles, davit extensions, mast arms and hardware shall equal or exceed the most current version of AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals, and addenda thereto, assuming ice and 80 mph. (128 kmph) winds with 104 mph (167kmph) gusts when loaded in accordance with the typical drawings and these Specifications.

C. Dimension Limits

Each complete pole/arm/extension assembly shall be within the dimension limits shown on the drawings.

D. Structural Cross-Sections

All poles, arms and davit extensions shall have a round cross-sectional design with a uniform taper between 0.1 and 0.2 inches of diameter change per foot of length (between 8.0 and 16.0 mm of diameter change per meter of length).

E. Mounting Points

Suitable mounting points with 1.5-inch (38-mm) internally threaded half-couplings shall be provided for mounting the signals and pedestrian pushbuttons to poles and mast arms as indicated on the typical drawings. The couplings shall be internally threaded according to the National Pipe Thread (N.P.T.) and shall be mounted within the poles and arms. All couplings shall be essentially flush with the outside surfaces of the poles and arms. The couplings shall be installed before galvanizing. All mounting points shall have sufficient strength to support the signal and pedestrian pushbutton loads described below when mounted in accordance with the typical drawings. A threaded plug shall be furnished and installed (after galvanization to ensure a good threaded fit) in each mounting point including the end of the mast arm. The surface of the plug shall be essentially flush with the outer end of the mounting point when installed and shall have a recessed hole to accommodate a standard wrench.

F. Cable Outlets

The design shall permit all cables to be installed inside poles, mast arms and davit extensions. Cable passages from the signal heads to the insides of the poles and mast arms shall be inside the 1.5-inch (38-mm) internally threaded couplings.

G. Galvanizing

The complete pole and arms, including all parts used in the assembly shall be completely hot-dip galvanized after fabrication. All threaded material shall be brushed and re-tapped as necessary after galvanizing. Threaded plugs shall be separately galvanized and installed after the mast arms and poles have been galvanized. Hot-dipped galvanizing on the structure shall be in accordance with ASTM Standard A-123, and galvanizing on the hardware shall be in accordance with ASTM Standard A-153.

H. Weights and Areas of Signal Heads, Luminaires and Signs to be Supported

In the design of the pole/arm/extension structures, the following weights and areas shall be assumed:

- 1) Signal head (or sign) at end of mast arm:
2-way, 5-section, 12 inch (300 mm) with backplate
Weight: 145 pounds (66 kilograms)
Projected area: 15 square feet (1.39 square meters)
- 2) Each inboard signal head (or sign) on mast arm:
1-way, 3-section, 12-inch (300 mm) with backplate
Weight: 50 pounds (22.7 kilograms)
Projected area: 9.75 square feet (0.9 square meters)
- 3) All signal heads (or signs) attached to pole shaft, worst case, common mounting:
Weight: 135 pounds (59 kilograms)
Projected area: 15 square feet (1.39 square meters)

I. POLES

1) General

- a) **Worst-Case Loads.** The poles and hardware shall be designed to support the worst-case loads, including twin davit extensions, shown in the typical drawings.
- b) **Pole Deflection.** The allowable pole deflection, when loaded with a twin davit extension and the worst-case signal and sign dead loads specified above and in the typical drawings, shall not exceed an angular rotation of one degree forty minutes, as measured between the intersection of the vertical centerline through the base and the projection of the centerline through the top. The deflection of the pole when loaded in this manner shall not exceed 0.35 inch/foot (29 mm/m).

2) Base Plate

Each pole shall have a base plate as shown in the typical drawings. The anchor boltholes in the pole base plate shall be $\frac{1}{4}$ -inch (6.35 mm) larger than the anchor bolts diameters. Anchor bolt holes in the base plates shall be elongated as shown on the typical drawings to provide adequate adjustment of the pole's orientation.

3) Handholes

Each pole shall have a 4" × 6.5" (102 mm by 165 mm) handhole with a reinforced frame located as shown on the typical drawings. The hand hole shall be furnished with a cover and screws. In addition, 20 percent spare handhole covers shall be furnished with each order. For small orders, at least one spare cover shall be furnished with each order.

4) Pole Types

Each kind of pole (mast arm or strain) shall be classified by type. Type 0 applies only to strain poles and indicates that the pole does not support a mast arm. Types 1,2 and 3 apply to mast arm poles. The types indicate the lengths of mast arms, which the pole shall be designed to support as follows:

- a) Type 1 - 15 to 30-foot (4.57 to 9.14 meter) arm;
- b) Type 2 - 35 to 45-foot (10.67 to 13.724 meter) arm; and
- c) Type 3 - 50 to 60-foot (15.24 to 18.29) arm.

The poles shall be permanently stamped above the hand holes with their type numbers, the manufacturer's name and logo, and the date of manufacture.

5) Davit Extension Provisions

Each pole shall be furnished with a steel plate in the top to accommodate the mounting of a davit extension as shown in the typical drawings. The plate shall have eight (8) threaded holes arranged at 45-degree intervals to accommodate the extension attachment bolts. Four (4) bolts shall be used to attach the extension and the eight holes in the plate shall allow the extension to be oriented at any 45-degree increment with respect to the pole. Six (6) (2 spare) bolts shall be provided with each pole.

6) Pole Cap and Base Cover

Each pole shall be furnished with a removable pole cap for the top, to be used in the absence of a davit extension, and with a base cover. Suitable attachment screws shall also be furnished.

7) Grounding Lugs

Each pole shall be equipped with a grounding lug, which will accommodate an A.W.G. #6 ground wire. The lug shall be electrically bonded to the pole and shall be located inside the pole opposite the handhole.

8) Mast Arm Poles

- a) Davit Extension. Mast arm poles shall accommodate Type 1 davit extension, both single and twin. For the purpose of pole design, the pole shall be assumed to have a twin davit oriented to be in the same vertical plan as the mast arm.
- b) Mast Arm Attachment. Each mast arm pole shall be furnished with a pole plate and associated gussets and fittings as shown in the typical drawings for the attachment of the appropriate type of mast arm. Type 1 poles shall include six (6) (2 spare) bolts, which mate with the threaded holes in the pole plate.

J. MAST ARMS

1. Arm Fabrication

All mast arms up to and including 40-foot (12.2-meter) arms shall be one piece. 45-foot, 50-foot, 55-foot and 60-foot (13.72, 15.24, 16.76 and 18.29 meter) arms may be fabricated in two pieces which overlap each other by at least 1.5 times the inside diameter of the outside section. Each of the two pieces of 45, 50, 55, and 60 foot (13.72, 15.24, 16.76 and 18.29 meter) arms shall be fabricated of one piece monotube steel. Mast arms shall not have any transverse butt welds.

2. Mast Arm and Pole Types

All mast arms up to and including 30-foot (9.14-meter) arms shall be interchangeable on any Type 1 pole. All 35-foot through 45-foot (10.67-meter through 13.72-meter) arms shall be interchangeable on any Type 2 pole. All 50-foot through 60-foot (15.24-meters through 18.29-meters) arms shall be interchangeable on any Type 3 pole.

3. Variance From Horizontal

Each mast arm shall have a variance within the range of -0 degrees and +1.5 degrees from the horizontal plane when loaded as discussed above and as shown in the typical drawings and with the pole exactly vertical. This may be achieved with or without shims or other similar devices. If shims are required, then the manufacturer shall include these shims with the material delivery. All mast arms and mast arm fastening plates shall be manufactured to maintain a vertical clearance between the bottom of the mounted signal heads to the top of the pole base plate between 17.5' to 19.0' (5.33 to 5.79 meters).

4. Mast Arm Attachment

The mast arm shall be fastened to the pole as shown on the typical drawings. The arm plate and all necessary attachment hardware, including bolts, nuts, washers and brackets, which is not included, as part of the pole shall be furnished as part of the arm.

5. Signal Clamps Required

A signal clamp corresponding to each mounting point on the arm shall be furnished as part of the arm. The number of clamps shall equal the number of mounting points. The diameter of each clamp shall correspond to the diameter of the arm at its intended location. The clamps shall conform to the requirements of the typical drawings.

6. Mounting for Signals

Couplings shall be provided on the mast arm for the mounting of signals as shown on the typical drawings.

839S.5 - Installation

The Contractor shall be responsible for installing the pole assemblies in the field on the pole foundations. The contractor will not be allowed to store signal poles at the job sites.

END OF SECTION 839S

SECTION 10 14 00**EXTERIOR SIGNAGE****PART 1 - GENERAL****1.01 REFERENCES**

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN WELDING SOCIETY (AWS)

AWS C1.1M/C1.1	(2012) Recommended Practices for Resistance Welding
AWS D1.1/D1.1M	(2010) Structural Welding Code – Steel
AWS D1.2/D1.2M	(2008) Structural Welding Code – Aluminum

ASTM INTERNATIONAL (ASTM)

ASTM A1011/A1011M	(2013) Standard Specification for Steel, Sheet, and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength, Low-Alloy With Improved Formability and Ultra-High Strength
ASTM A123/A123M	(2013) Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron And Steel Products
ASTM A36/A36M	(2012) Standard Specification for Carbon Structural Steel
ASTM A653/A653M	(2011) Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvanized) by the Hot-Dip Process
ASTM A924/A924M	(2013) Standard Specification for General Requirements for Sheet Steel, Metallic-Coated by the Hot-Dip Process
ASTM B209	(2010) Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate
ASTM B221	(2013) Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes
ASTM B26/B26M	(2012) Standard Specification for Aluminum-Alloy Sand Castings

NATIONAL ASSOCIATION OF ARCHITECTURAL METAL MANUFACTURES (NAAMM)

NAAMM AMP 500

(2006) Metal Finishes Manual

1.02 GENERAL REQUIREMENTS

- A. All exterior signage shall be by a single manufacturer. Exterior signage shall be of the design, sizes, types, and message content shown on the drawings, shall conform to the requirements specified, and shall be provided at the locations indicated. Submit exterior signage schedule in electronic media with spread sheet format. Spread sheet shall include sign location, sign type, and message. Signs shall be complete with lettering, framing as detailed, and related components for a complete installation.

1.03 WINDLOAD REQUIREMENTS

- A. Exterior signage shall be designed to withstand indicated wind load. Submit analysis and supporting calculations performed in support of specified signage.

1.04 CHARACTER PROPORTIONS AND HEIGHTS

- A. Letters and numbers shall be as indicated in the Downtown Austin Wayfinding Graphics Manual. The letter height is measured using an upper case "X". Lower case letters are permitted.

1.05 SUSTAINABILITY REQUIREMENTS

- A. Materials in this technical specification may contribute towards contract compliance with sustainability requirements.

1.06 SUBMITTALS

- A. Submit for review and approval qualifications of sign installation Contractor.
- B. Furnish plans, elevations, sections, and details of fabrication and erection for all signs. Include all materials, shapes, dimensions, finishes, mounting heights, method of anchoring and connections, and mounting methods. Provide notations for reinforcement, structural members, supports, surfaces, finishes, materials, and accessories.
- C. Provide wiring diagrams and electrical load requirements for signs with illuminated characters, panels or faces.
- D. Provide (3) sets of 10" x 10" samples of all materials, colors, and finishes as specified.

1.07 QUALIFICATIONS

- A. Signage and car counting system shall be the standard product of a manufacturer regularly engaged in the manufacture for the products. Items of equipment shall

essentially duplicate equipment that has been in satisfactory use at least two years prior to bid opening.

B. Approved Manufacturers

1. TSC International, a division of Q-Free, Sudbury, MA
2. or Approved Equivalent.

1.08 DELIVERY AND STORAGE

- A. Materials shall be delivered and stored on site or at a location to be approved by the Owner.

1.09 WARRANTY

- A. Manufacturer's standard performance guarantees or warranties that extend beyond a one year period shall be provided.

PART 2 – PRODUCTS

2.1 Sign Type Park.5 Free Standing Electronic Parking Directional Sign with real time electronic parking information as per Wayfinding Graphics Manual.

- A. Fabricate sign frames from extruded aluminum with welded construction. Extrusion alloy and thickness shall be as required to withstand wind load. Surface shall be free of extrusion marks or imperfections. Provide insulation between dissimilar materials to prevent galvanic corrosion. Provide hinged or removable retainers for future service access. Sign frames shall have a painted finish.
- B. "Parking" faces are pan formed high impact modified acrylic with internal illumination. Copy and background are 3M Series 3630 translucent vinyl.
- C. Non-illuminated faces are .090 aluminum sheet with a painted background and 3M Engineer Grade Series 3200 reflective vinyl copy.
- D. Finishes shall be factory applied using Matthews Acrylic Polyurethane (MAP) paints. Pretreat metal as per MAP specifications and apply epoxy primer in 1.5 to 2.0 mils thickness. Topcoat color shall be selected by Owner and applied in 2.0 mils thickness.
- E. Structural steel supports shall conform to ASTM A36 and will have welded steel base plates. Welding for steel products shall conform to ASTM A1011.
- F. Freestanding signs shall be mounted using cast in place galvanized steel anchor bolts. The steel bolts shall conform to ASTM A36 and will have galvanized leveling nuts and washers. Footings and anchor bolts shall be as required to withstand wind loads.
- G. Refer to City of Austin Specification Section 839S for standards governing the furnishing and installation of traffic signal poles.

2.2 – Sign Type PARK.6 Wall Mounted Parking Sign with real time electronic parking information as per Wayfinding Graphics Manual.

- A. Fabricate sign frames from extruded aluminum with welded construction. Extrusion alloy and thickness shall be as required to withstand wind load. Surface shall be free of extrusion marks or imperfections. Provide insulation between dissimilar materials to prevent galvanic corrosion. Provide hinged or removable retainers for future service access. Sign frames shall have a painted finish.
- B. “Parking” faces are pan formed high impact modified acrylic with internal illumination. Copy and background are 3M Series 3630 translucent vinyl.
- C. Non-illuminated faces are .090 aluminum sheet with painted background and 3M Engineer Grade Series 3200 reflective vinyl copy.
- D. Finishes shall be factory applied using Matthews Acrylic Polyurethane (MAP) paints. Pretreat metal as per MAP specifications and apply epoxy primer in 1.5 to 2.0 mils thickness. Top color shall be as selected by Owner and applied in 2.0 mils thickness.
- E. Structural steel supports shall conform to ASTM A36 and will have welded steel base plates. Welding for steel products shall conform to ASTM A1011.
- F. Building signs shall be attached to walls with galvanized or stainless steel hardware. Thickness of hardware shall be as required to withstand wind loads.

PART 3 - EXECUTION**3.1 – INSPECTION**

- A. Prior to installation of Prior to installation of signs, examine the site conditions and the Work of Others insofar as it affects this work and report immediately in writing to the Owner representative any conditions that interfere with the installation. Begin installing signs only after deficiencies have been corrected in an acceptable manor.

3.2 – PREPARATION

- A. Prior to sign installation, Contractor shall arrange a meeting with the Owner’s representative at sites to review sign placements. Coordinate the placement of signs with any other affected trades.

3.3 – INSTALLATION

- A. Signs shall be installed in accordance with manufacturer's instructions at locations as approved by the Owner. Sign shall be installed plumb and level at mounting heights indicated and by method shown or specified.

END OF SECTION

SECTION 26 0500**ELECTRICAL GENERAL PROVISIONS****PART 1 - GENERAL****1.01 RELATED DOCUMENTS**

- A. Drawings and general provisions of Contract, including General Conditions, Project Meetings, Submittals, Testing, Contract Close-out.

1.02 SUMMARY

- A. The work covered by the electrical specifications shall include the furnishing of all materials, labor, transportation, tools, permits, fees, utilities, and incidentals necessary for the complete installation of all electrical work required in the contract documents and specified herein. The intent of the contract documents is to provide an installation complete in every respect. In the event that additional details of special construction may be required for the work indicated or specified in this section or work specified in other sections, it shall be the responsibility of the Contractor to provide all material and equipment which is usually furnished with such systems in order to complete the installation, whether mentioned or not.
- B. The Contractor shall be responsible for the coordination and proper relation of his work to the building structure and to the exact location of all utilities work of all trades. The Contractor shall visit the site and thoroughly familiarize himself with the existing site conditions, and all details of the work and the working conditions and to verify all dimensions in the field. The Contractor shall advise the Architect of any discrepancy prior to bidding. The submission of bids shall be deemed evidence of the Contractors site visit, the coordination of all existing conditions, and the inclusion of all consideration for existing conditions.

1.03 DRAWINGS AND SPECIFICATIONS

- A. These specifications are accompanied by the contract drawings and details of the installations indicating the locations of equipment, piping, ductwork, outlets, light fixtures, switch controls, receptacles, circuits, lines, etc. The contract drawings and these specifications are complementary to each other, and what is required by one shall be as binding as if required by both.
- B. If any departures from the construction contract documents are deemed necessary by the Contractor, details of such departures and the reasons therefore shall be submitted in writing to the Architect for review and approval. No departures shall be made without prior written approval of the Architect.
- C. Should the contract documents disagree in themselves, or with the specifications, the better quality or greater quantity of work shall be estimated upon, and unless otherwise directed by the Architect in writing, shall be performed or furnished.

Figures indicated on drawings govern scale measurements and large scale details govern small scale drawings. In case of disagreement between specifications and drawings, see Division I of these specifications for clarification.

- D. Items specifically mentioned in the specifications but not shown on the contract drawings and/or items shown on the contract drawings but not specifically mentioned in the specifications shall be installed by the Contractor under the appropriate section of work as if they were both specified and shown.

1.04 CODE REQUIREMENTS

- A. All work shall comply with the applicable rules and regulations of the National Electrical Code, the National Electrical Safety Code, the National Fire Codes, including 2008 version of the NFPA 70 (published by National Fire Protection Association), the City Electrical Codes and Ordinances, American Disabilities Act, City of Austin Utilities and the terms and conditions of services of the electrical utility, as well as any other authorities that may have lawful jurisdiction pertaining to the work specified. None of the terms or provisions of this specification shall be construed as waiving any of the rules, regulations, or requirements of these authorities. All work shall be in compliance with all Austin Independent School District requirements and Educational Specifications and all City of Austin codes and Ordinances.
- B. Resolve any code violation discovered in the Contract Documents with the Engineer prior to award of the Contract. After award of the Contract, make any corrections or additions necessary for compliance with applicable codes at no additional cost to Owner.
- C. If the Mechanical Contractor makes a substitution requiring changes in the Electrical systems, this change shall be made in coordination with the Electrical Contractor at no additional cost to the Owner. Coordinate with the Mechanical Contractor as required.
- D. Obtain and pay for all permits and inspections.

1.05 ELECTRICAL UTILITIES

- A. The contract documents reflect the general location, voltage, ampacity, size and manner of routing for all utilities known to be required on this project. It shall be the responsibility of the Contractor to visit the site, meet with the local Utility and Telephone Companies personnel in order to coordinate and confirm the exact requirements for all electrical and telephone utilities. The bid submitted by the Contractor shall include costs for all such coordination work as well as any and all utility and telephone company charges and/or fees.

1.06 BUILDING CONSTRUCTION

- A. It shall be the responsibility of the Contractor to consult the Architectural and Engineering Drawings and Details so as to thoroughly familiarize himself with the type and quality of construction to be provided on this project.
- B. The electrical drawings are diagrammatic in character and cannot show every connection in detail or every line or conduit in its exact location. These details are subject to the requirements of local ordinances and also structural and Architectural conditions. The Contractor shall carefully investigate structural and finish conditions and shall coordinate with all other trades in order to avoid interference between the various phases of work, including, but not limited to, mechanical, plumbing, Architectural, structural, etc. Work shall be laid out so that it will be concealed in finished room areas, unless specifically noted or indicated to be exposed. Work shall be installed to avoid crippling of structural members—therefore, inserts to accommodate conduit hangers shall be set before concrete is poured, and proper openings through floor, walls, beams, etc., shall be provided as hereinafter specified or as otherwise indicated or required before concrete is poured. All work shall be run parallel or perpendicular to the lines of the building unless otherwise noted.
- C. The approximate location of electrical items is indicated on the electrical drawings. These drawings are not intended to give complete and exact details in regard to location of outlets, apparatus, etc. Exact locations are to be determined by actual measurements at the building and will in all cases be subject to the approval of the Architect. The Architect reserves the right to make any reasonable changes in the location indicated without additional cost.

1.07 PERMITS

- A. The Contractor shall obtain and pay for all certificates of inspection or any other permits required as part of the work.

1.08 CONTRACTOR QUALIFICATIONS

- A. An acceptable contractor for the work under this division shall be a specialist in this field, be licensed for this work in the State of Texas and have the personal experience, training, skill and the organization to provide a practical working system. If required, he shall be able to furnish acceptable evidence of having contracted for and installed not less than three systems of comparable size and type to this one, that have served their owners satisfactorily for not less than three years.
- B. The foreman for this work shall have had experience in installing not less than three such systems and shall be approved before the work is begun. Adequate and competent supervision shall be provided to ensure first class workmanship and installation.

- C. Work shall be executed and all materials installed in accordance with the best practice of the trades in a thorough, substantial, workmanlike manner by competent workmen, presenting a neat appearance when completed. Work shall be performed by mechanics skilled in the trade.
- D. The Contractor shall be responsible for all construction techniques required for all electrical systems specified and shown on the drawings.

1.09 PRELIMINARY APPROVAL OF MANUFACTURERS

- A. Within six (6) working days after award of construction contract, prior to purchase of equipment or submission of shop drawings and review data, the Contractor shall be required to furnish CITY OF AUSTIN a complete list of proposed manufacturers of MEP equipment for approval. CITY OF AUSTIN will review the submittals and return them with direction to proceed or return to the Contractor for resubmittal. Once the submittal is accepted by CITY OF AUSTIN and processed to the A/E, the A/E normal review process will proceed and be completed before the Contractor places orders for equipment.
- B. If a submittal has been rejected, the Contractor shall have a additional five(5) working days to propose alternative manufacturers to CITY OF AUSTIN (The District review process then reoccurs before the A/E reviews the resubmittal).
- C. If MEP equipment submittals or substitutions do not receive CITY OF AUSTIN and A/E approval within the required time limit, the Contractor must furnish the contract specified items without further consideration.
- D. The entire Preliminary Approval procedure will be waived should the Contractor purchase components within the range of acceptable manufacturers listed in the specifications, and submittal may be made directly from the CITY OF AUSTIN to the A/E pursuant to review and approval for purchasing.

1.10 SHOP DRAWINGS AND SUBMITTALS

- A. This section includes general administrative and procedural requirements for electrical installations. The following administrative and procedural requirements are included in this section to expand the requirements specified in Division 0.
 - 1. Submittals.
 - 2. Coordination drawings.
 - 3. Record documents.
 - 4. Maintenance manuals.
- B. Data Required. Submit shop drawings and product data as specified in Division 0 General Requirements. Submittal data must show manufacturer's name, published ratings or capacity data, detailed equipment drawings for fabricated items, panel diagrams, wiring diagrams, installation instructions and other pertinent data. Where literature is submitted covering a group or series of similar items, the applicable items must be clearly indicated. All shop drawings shall be clearly

marked highlighting all proposed equipment and devices to be used in this project. Shop drawing submittals that do not comply with this requirement will be returned without review. All shop drawings and product data submitted for approval that have not been checked and signed by the Contractor will be returned for checking before being considered. Shop drawings shall note all deviations from contract documents.

- C. Shop drawing review is only for general conformance with design concept of project and general compliance with the contract documents. The Contractor is responsible for conforming and correlating equipment dimensions at job site; for information which pertains to fabrication processes or construction techniques; and for coordination of work of all trades. Review of shop drawings shall not relieve the Contractor, any Subcontractor, and/or material supplier of responsibility for deviation from requirements of contract documents nor errors of omissions in shop drawings.
- D. Contractor's Check. Shop drawings will be submitted only by the Contractor. Indicate by signed stamp that the drawings have been checked, that the work shown on the drawings is in accordance with contract requirements and that dimensions and relationship with work of other trades have been checked. If drawings are submitted for approval that have not been checked and signed by the Contractor, they will be returned for checking before being considered by the Architect.
- E. Engineer's approval of submitted material constitutes an acknowledgement only and in no way relieves the contractor of full responsibility for providing all systems complete in accordance with the intent of the drawings and specifications. Contractor is responsible for confirming and correlating dimensions at job site, for information which pertains to fabrication processes or construction techniques and for coordination of work with all other trades. Any materials or equipment provided by this contractor without approved shop drawings constitutes the contractor's agreement to comply with the engineer's intent whether specified, shown or implied.
- F. The Contractor shall submit within thirty (30) days the complete shop drawings, certified ratings, catalogue descriptions, and associated data covering all items of the mechanical and electrical equipment for use on the Project. The A/E shall review all shop drawings and submittal data for complete compliance with the Contract Documents.
- G. Within seven (7) working days, the A/E shall return submittals for correction and resubmission if not approved as compliant.
- H. The A/E shall within seven (7) days, transmit approved submittals to CITY OF AUSTIN.
- I. The Contractor shall submit a minimum of six (6) copies for CITY OF AUSTIN and the A/E and further more copies as needed for the Contractor and

subcontractors coordination and record. Two (2) copies of the original submittal will be retained by CITY OF AUSTIN, two (2) by the Project Administrator, One (1) by the Architect and one (1) by the Engineer and all others returned to the Contractor for processing and record purposes.

- J. Form of Submittal. Submit data for review before placing purchase orders. Organize data in a 3-ring binder indexed by specification reference. Show any revisions to equipment layouts required by use of selected equipment.
- K. Submittal Items. Submittals are required for, but not limited to, the following items:
1. Shop Drawings.
 - a. Motor controllers.
 - b. Fire detection & indication components.
 - c. Generator.
 - d. Automatic transfer switches.
 - e. Panelboards.
 - f. Safety switches.
 - g. Lighting contactors.
 - h. Electrical rooms.
 - i. Light saver lighting control system
 2. Product Data.
 - a. Ballasts.
 - b. Fire Detection and indication components.
 - c. Battery charger.
 - d. Boxes.
 - e. Cables.
 - f. Enclosed circuit breakers.
 - g. Enclosed safety switches.
 - h. Fuses.
 - i. Grounding materials and equipment.
 - j. Insulated conductors.
 - k. Lighting fixtures, including lamps and ballasts.
 - l. Metal framing.
 - m. Motor starters.
 - n. Raceways.
 - o. Photocells.
 - p. Conductors.
 - q. Wiring devices.
 - r. Signaling equipment.
- L. Manufacturer's Certification. Each manufacturer is required to review the system design as related to the proper operation of his equipment, including electrical requirements, automatic controls, mechanical systems and equipment, locations and related items. With shop drawings submit a letter from the manufacturer stating that his equipment will operate satisfactorily under the design conditions, including air flows for all duct mounted smoke detectors. The manufacturer will also be required to review the final installation at the site and submit a second

letter stating that the installation conforms to the design criteria and that the equipment will operate satisfactorily as installed, including air flows for all duct mounted smoke detectors. Furnish certification for the following systems:

1. Fire detection & indication components.
2. Duct mounted smoke detector.

1.11 SUBSTITUTIONS

- A. Products List. Within 30 days after contract date, submit to Architect a complete list of major products proposed to be used, with the name of the manufacturer and the installing subcontractor.
- B. Contractor's Options.
1. For products specified only by reference standard, select any product meeting that standard.
 2. For products specified by naming several products or manufacturers, select any one of the products or manufacturers named, which complies with the specifications.
 3. For products specified by naming one or more products or manufacturers and "or equal," Contractor must submit a request for substitutions for any product or manufacturer not specifically named.
 4. For products specified by naming only one product and manufacturer, there is no option.
- C. Substitution Standards. Manufacturers' names and catalog numbers specified under sections of Division-26 are used to establish standards of design, performance, quality and serviceability and not to limit competition, nor to discriminate against an "approved equal" product made by other manufacturer. Equipment of equal design to that specified, will be acceptable upon approval by the Engineer. Provide itemized cost list for the proposed product substitutions indicating savings and/or additional cost. There will be no exceptions to this requirement. Submit complete design and performance data to the Architect.
- D. The specified products have been used in preparing the drawings and specifications, and thus, establish the minimum qualities which substitutes must meet to be acceptable. The burden of proof of quality rest with the bidder.
- E. Architect shall be the judge of the acceptability of the proposed substitution.

1.12 COORDINATION DRAWINGS

- A. Prepare coordination drawings in accordance to a scale of 1/4"=1'-0" or larger; detailing major elements, components, and systems of electrical equipment and materials in relationship with other systems, installations, and building components. Indicate locations where space is limited for installation and access and where sequencing and coordination of installations are of importance to the efficient flow of the Work, including (but not necessarily limited to) the following:

1. Indicate the proposed locations of major raceway systems, equipment, and materials. Include the following:
 - a. Clearances for servicing equipment, including space for equipment disassembly required for periodic maintenance.
 - b. Exterior wall and foundation penetrations.
 - c. Fire-rated wall and floor penetrations.
 - d. Equipment connections and support details.
 - e. Sizes and location of required concrete pads and bases.
2. Indicate scheduling, sequencing, movement, and positioning of large equipment into the building during construction.
3. Prepare floor plans, elevations, and details to indicate penetrations in floors, walls, and ceilings and their relationship to other penetrations and installations.
4. Prepare reflected ceiling plans to coordinate and integrate installations, air outlets and inlets, light fixtures, communications systems components, sprinklers, and other ceiling-mounted devices.

1.13 RECORD DOCUMENTS

- A. Prepare record documents in accordance with the requirements in Division 0. In addition to the requirements specified in Division 0, indicate the following installed conditions.
 1. Major raceway systems, size and location, for both exterior and interior; locations of control devices- distribution and branch electrical circuitry- and fuse and circuit breaker size and arrangements.
 2. Equipment locations (exposed and concealed), dimensioned from prominent building lines.
 3. Approved substitutions, Contract Modifications, and actual equipment and materials installed.
- B. The Contractor shall maintain a set of clearly marked black line record "AS-BUILT" prints on the job site on which he shall mark all work details, alterations to meet site conditions and changes made by "Change Order" notices. These shall be kept available for inspection by the Owner, Architect or Engineer at all times.
- C. Refer to Division 0 for additional requirements concerning record drawings. If the Contractor does not keep an accurate set of as-built drawings, the pay request may be altered or delayed at the request of the Architect. Mark the drawings with a colored pencil. Delivery of as-built prints and reproducibles is a condition of final acceptance.
- D. The record prints shall be updated on a daily basis and shall indicate accurate dimensions for all buried or concealed work, precise locations of all concealed conduit, or duct bank, locations of all controls, panels transformers, switches and devices and any deviations from the work shown on the Construction Documents

which are required for coordination. All dimensions shall include at least two dimensions to permanent structure points.

- E. When the option described in paragraph F., above is not exercised then upon completion of the work, the Contractor shall transfer all marks from the submit a set of reproducible record "AS-BUILT" drawings using and shall submit the reproducible drawings and three (3) sets of black line prints to the Architect or Engineer for review prior to scheduling the final inspection at the completion of the work. The reproducible record "AS-BUILT" drawings shall have the Engineers Name and Seal removed or blanked out.

PART 2 - PRODUCTS

1.01 CONSTRUCTION MATERIALS

- A. Materials and equipment must be new, and shall conform to the National Electrical Code. All materials and equipment shall be listed, inspected, and approved by the Underwriters Laboratories and shall bear the U.L. label where labeling service is available. The label or listing of the Underwriters Laboratories, Inc., will be accepted as evidence that the materials or equipment conform to the applicable standards of that agency.

2.02 STANDARD PRODUCTS

- A. Furnish new and unused materials and equipment of domestic manufacturer's meeting the requirements of these specifications. All materials and equipment shall be standard catalog products of manufacturers regularly engaged in the manufacture of products conforming to these specifications. Materials and equipment shall have been in satisfactory use at least two years prior to bid opening. Where custom or special items are required, these shall be fully described by shop drawings, which fully describe in detail the item proposed for use on this project.
- B. The Contractor is fully responsible for furnishing the proper electrical equipment and/or material and for seeing that it is installed as intended by the manufacturer written instructions. If needed for proper installation, operation, or startup, the Contractor shall request advice and supervisory assistance from the representative of the specific manufacturer. The manufacturers' published instructions shall be followed for preparing, assembling, installing, erecting, and cleaning manufactured materials or equipment, unless otherwise indicated. The Contractor shall promptly notify the Architect in writing of any conflict between the requirements of the contract documents and the manufacturer's directions and shall obtain the Architect's instructions before proceeding with the work. Should the Contractor perform any such work that does not comply with the manufacturer's directions or such instructions from the Architect, he shall bear all costs arising in connection with the deficiencies.

- C. Space Limitations. Equipment selected must conform to the building features and must be coordinated with them. Do not provide equipment which will not suit arrangement and space limitations.

2.03 RUST PREVENTION

- A. AU metallic materials shall be protected against corrosion. Exposed metallic parts of outdoor apparatus shall be given a rust inhibiting treatment and standard finish by the manufacturer. All parts such as boxes, bodies, fittings, guards, and miscellaneous parts shall be protected in accordance with the AS TM A 1 2 3 or A 1 5 3, except where other equivalent protective treatment is specifically approved in writing.

2.04 DELIVERY AND STORAGE

- A. The Contractor shall not receive any equipment at the jobsite until ready for installation or until there is suitable space provided to properly protect equipment from rust, weather, humidity, dust, or physical damage.
- B. All delivered equipment shall be protected in accordance with the manufacturer's recommendations and the requirements of NFPA 70B, Appendix I, titled "Equipment Storage and Maintenance During Construction". The Contractor shall replace with new equipment all damaged or defective equipment.
- C. AU equipment injured or damaged in transit from factory, during delivery to premises, while in storage on premises, while being erected and installed, and while being tested, until time of final completion, shall be replaced by this Contractor without extra cost to Owner.

2.05 CAPACITIES

- A. Capacities shall be not less than those indicated but shall be such that no component or system becomes inoperative or is damaged because of start-up or other overload conditions. Where approved equipment requires electrical power other than those used for design purposes, the Contractor shall be responsible to adjust protective devices, starter sizes, conductors, conduits, etc., to accommodate this approved device electrically.

PART 3 - EXECUTION

3.01 PROTECTION OF EQUIPMENT

- A. Moisture. During construction, protect switchgear, transformers, motors, control equipment, and other items from insulation moisture absorption and metallic component corrosion by appropriate use of strip heaters, lamps or other suitable means. Apply protection immediately on receiving the products and maintain continually.

- B. Clean. Keep products clean by elevating above ground or floor and by using suitable coverings.
- C. Damage. Take such precautions as are necessary to protect apparatus and materials from damage. Failure to protect materials is sufficient cause for rejection of the apparatus or material in question.
- D. Finish. Protect factory finish from damage during construction operations and until acceptance of the project. Satisfactorily restore any finishes that become stained or damaged.

3.02 INSTALLATION

- A. Cooperation with trades of adjacent, related or affected materials or operations, and of trades performing continuations of this work under subsequent contracts, is considered a part of this work in order to effect timely and accurate placing of work and to bring together, in proper and correct sequence, the work of such trades.
- B. Workmanship. Work must be completed by workmen skilled in their trade. The installation must be complete whether the work is concealed or exposed.
- C. Concrete Equipment Pads. Install 4-inch thick concrete foundation pads for indoor floor-mounted equipment, except where direct floor mounting is required. Pour pads on roughened floor slabs, sized so that outer edges extend a minimum of 3-inches beyond equipment. Trowel pads smooth and chamfer edges to a 1-inch bevel. Secure equipment to pads as recommended by the manufacturer.
- D. Setting of Equipment. Equipment must be leveled and set plumb. Sheet metal enclosures mounted against a wall must be separated from the wall not less than 1/4-inch by means of corrosion-resistant spacers or by 3-inches of air for freestanding units. Use corrosion-resistant bolts, nuts and washers to anchor equipment. In sufficient time to be coordinated with work of others, provide drawings and layout work showing exact size and location of sleeves, openings or inserts for electrical equipment in slabs, walls, partitions and chases.
- E. Sealing of Equipment. Permanently seal outdoor equipment at the base using concrete grout. Seal or screen openings into equipment to prevent entrance of animals, birds and insects. Use galvanized steel or copper mesh with openings not larger than 1/16-inch for screened openings. Seal small cracks and openings from the inside with silicon sealing compound.
- F. Motors.
 - 1. Motors are specified in Division 23.
 - 2. Electrical work includes the electrical connection of all motors, except those which are wired as a part of equipment.

3. Connection of motors specified in Division 23 but not reflected on electrical drawings shall be included in Division-26 scope of work.
- G. Concealed Work. Conceal electrical work in walls, floors, chases, under floors, underground and above ceilings except:
1. Where shown or specified to be exposed. Exposed is understood to mean open to view.
 2. Where exposure is necessary to the proper function.
 3. Where size of materials and equipment preclude concealment.
- H. Application. Unless otherwise indicated, power will be utilized as follows:
1. 208 volts, three phase- motors 3/4 horsepower and larger.
 2. 120 volts, single phase; motors 1/2 horsepower and smaller.
 3. 120 volts, single phase; incandescent lighting, convenience outlets, special outlets and fluorescent lighting.
 4. 120 volts, single phase; H.I.D. lighting.
 5. 208 volts, single-phase- Air conditioning condensing units.

3.03 EQUIPMENT AND DEVICE MARKING

- A. Nameplates. Externally mark electrical equipment by means of suitable nameplates identifying each and the equipment served. Provide each piece of equipment with a black-white-black lamacoid nameplate with 3/16-inch-high white lettering secured to front of equipment. Supply blank nameplates for spare units and bussed spaces. Actual nameplate legend, which may consist of up to three lines, will be provided by the Architect on submittals.
- B. Nameplate Fasteners. Fasten nameplates to equipment only by means of appropriate noncorroding screws. Stick-ons or adhesives will not be allowed.
- C. Nameplate Information. In general, the following information is to be provided for the types of electrical equipment as listed.
1. Generators - KW and voltage.
 2. Switchboards, Motor Controls Centers and Distribution Panelboards. On the mains, identify the piece of equipment, the source and voltage characteristics, i.e., 208/120V 3PH 4W. For each branch circuit protective device, identify the load served.
 3. Automatic transfer switches - designation, voltage, amperage # of poles.
 4. Panelboards. Identify the service source, panelboard designation and voltage characteristics.
 5. Distribution panelboards same as item (4), but in addition, provide lamacoid 3/16" nameplates, same as above 3.3 a., for each branch circuit breaker describing load served.
- D. Panelboards. Prepare a neatly typed circuit directory behind clear heat-resistant plastic for each panelboard. Identify circuits by equipment served and by room numbers selected by the Architect; names and numbers may be different from

those shown on drawings. Indicate spares and spaces with light, erasable pencil marking.

E. Boxes and Small Equipment.

1. Pull boxes, individually mounted disconnect switches, motor starters and similar items shall be marked with Dymo No. 158-4 vinyl embossing tape with adhesive back in lieu of nameplates. Use Dymo No. 7123 perma-stick liquid adhesive with the tape. Tape color, placement and spacing must be approved before starting this work.

F. Power Receptacles. Use nameplate or engrave plate to identify power receptacles where the nominal voltage between any pair of contacts is greater than 150 volts with circuit number, voltage and phases.

G. Wall Switches. Engrave with the switch function switch plates of wall switches controlling equipment which is not in sight of the control switch.

3.04 OPERATION AND MAINTENANCE INSTRUCTIONS

A. Owner's Manual. Collect and submit in 3-ring binders 3 sets of product data, shop drawings, wiring diagrams, instructions and parts lists for operating and maintaining equipment and systems installed as electrical work. Include in the instructions a description of normal adjustments and a list of items to be lubricated. Specify the type and frequency of lubrication required. For the Owner's use, provide special servicing tools as required for this equipment. Deliver manuals and tools to the Architect as a condition of final acceptance. The Owner's manual shall include:

1. Complete electrical submittals as approved.
2. Manufacturer's installation instruction brochures.
3. Manufacturer's local representative and/or distributor's name and address.
4. Manufacturer's operating and maintenance brochures.
5. Manufacturer's internal wiring diagram.
6. Contractor's installation wiring diagram.
7. Control system installation drawings.
8. Replacement part number listings and/or descriptions.
9. Framed operating instructions when required.
10. A final electrical distribution riser with all pertinent information, including capacities, sizes, fuse types required, feeder sizes, etc.
11. Manufacturer's warranties and guarantees.

B. This manual shall include all of the listed data bound into a permanent hard-back binder identified on the cover as "Operating and Maintenance Manual" with additional cover display of the names and location of Building, the Owner, the Architect, the Engineers, the General Contractor, and the Contractors installing equipment represented in the brochure.

- C. Contents of the manual shall be grouped in sections according to the various sections of Division-26, and shall be listed in a Table of Contents, preceded by a copy of these pages of these Specifications. Sections shall be organized as follows:
1. Each "tab" in the brochure shall identify the grouping of all literature required for a single class of equipment- i.e., "transformers", "lighting fixtures", "switchgear", etc., for all types of equipment on the job. In addition include specification section or drawing sheet number.
 2. Contents under each "tab" shall be refer to a single class of equipment, and shall be arranged in the following sequence: First, the approved engineering submittals with complete performance and technical data; second, the manufacturer's installation brochure; third, the manufacturer's operating and maintenance brochure- fourth, the manufacturer's installation wiring diagram; fifth, the Contractor's field wiring diagram; if different, and sixth, the manufacturer's brochure listing replacement part numbers and description. 3 . Provide final tab "Warranties and Guarantees" behind which all such items will be located.
- D. Operation. Upon completion of the work and at a time designated by the Architect, instruct the Owner's operating personnel in operation and maintenance of electrical equipment and systems. Before proceeding with instruction, prepare a typed outline in triplicate listing the subjects that will be covered. Submit the outline for review by the Architect. At the conclusion of the instruction, obtain the signatures of the people instructed on each copy of the outline to signify that they have a proper understanding of the operation and maintenance of the system. Submit the signed outlines to the Architect as a condition of final acceptance. Provide a minimum of 8 hours of general instruction in addition to any time specified in other sections of Division-26.

3.05 HOISTING, SCAFFOLDING, AND TRANSPORTATION

- A. The Contractor shall provide his own hoisting facilities to set his materials and equipment in place in the building, as indicated on drawings.
- B. The Contractor shall provide his own scaffolding, ladders, etc., to facilitate the installation of items which cannot otherwise be reached.
- C. The Contractor shall provide necessary transportation to facilitate the delivery of all materials, equipment, tools, and labor to job, in accordance with intent of these documents.

3.06 CLEANING

- A. The Contractor shall, at all times, keep the premises free from accumulations of waste material or rubbish caused by him, his employees, or his work. This debris shall be removed, not only from the building, but also from the site and from any street or alley adjacent to the site.

- B. At completion of the project, the Contractor shall remove all of his tools, scaffolding, and surplus materials. He shall leave the area "broom clean". Before final acceptance, vacuum all panels, switchboards, starters, and other electrical devices. Wipe clean all fixture lens and reflectors, all panelboards and switchboards interior and exterior surfaces, being careful to remove all stray paint and construction materials, dust and particles. Touch up all marred surfaces to restore existing conditions to those provided by the manufacturer.

3.07 CONDUIT SLEEVES

- A. Generally, where conduits pass through walls or floors not on fill, galvanized sheet metal sleeves shall be used. In walls, they shall be flush with each finished surface. In pipe chases, they shall extend 1-1/2" above floor slab and be cemented in a water tight manner. Size of these sleeves shall be at least 1/2" greater than outside diameter of the conduit.
- B. For conduits passing through outside walls, provide and install galvanized steel sleeves having an inside diameter at least 4" greater than the outside diameter of contained conduit. Where these occur in walls having a waterproof coating applied, the sleeves shall have flanges welded onto them to build into waterproofing. When conduits are installed, the annular space between pipe and sleeve shall be effectively sealed, using shredded lead hammered in place or an approved mastic sealer, 1/2" thick, equal to Thiokol.
- C. Pipe and duct sleeves, pitch pockets, and flashings compatible with the roofing installation shall be provided for roof penetrations.
- D. Caulk all sleeves water and airtight. Seal annular space between pipes and sleeves with one part sealant similar to Dow Corning No. 2000 fire stop sealant to make the space water and airtight. Seal space between pipe and openings in walls and floors with same compound. Install per manufacturer's instructions to meet or exceed fire rating of penetrated wall (minimum 1-1/2 hour). Reference Architectural drawings for wall fire rating.

3.08 COORDINATION WITH OTHER TRADES

- A. Contractor shall coordinate with Division 23 and other divisions as required to verify all electrical requirements of those division(s). This is to include but not be limited to verification of power, voltage, phase and other characteristics as being compatible with that called for on the electrical drawings and Division-26 specifications, as well as that called for in Division 23 drawings and specifications or other divisions requiring electrical connections. This shall be done prior to placing orders for equipment or material, and prior to any rough-in, etc.
- B. Provide 1/4" scale drawings showing NEC working clearances in electrical rooms to demonstrate compliance with all codes and that working clearances have been maintained for all equipment supplied.

3.09 TEST

- A. Tests to be completed by the Contractor shall be of two types. During construction, system testing shall be accomplished to determine whether systems are suitably wired, or if systems operated as prescribed. Later, demonstration testing shall be accomplished for the purpose of showing that the systems operated as designed.
1. Following each system test, a certified record of each test shall be made, giving the results of the test, and the persons conducting and/or witnessing the test to the Engineer for review.
 2. When performing demonstration testing, the Contractor shall make a similar certificate of the test, but this test shall be witnessed by the Architect or his representative. These certificates will require being signed by the person conducting and witnessing the test. Demonstration tests will not be considered completed unless such a signed certificate is provided on each item here-in-after mentioned. Other items may be added by the Architect depending on the items being installed.
 3. The Contractor shall provide all test equipment, temporary wiring, labor, etc., required to perform the test.
- B. System Tests
1. With the system energized, make line-to-line voltage and line current measurements at all motors under full load conditions. Should measured values deviate +/- 5% from the nameplate ratings, the condition shall be corrected. Notify the Architect immediately should deviations occur.
 2. Any wiring device, lighting fixture or electrical apparatus in this contract, if grounded or shorted in an integral "line" part, shall be removed and the trouble corrected or device replaced.
 3. Systems such as computerized EMC, fire alarm, security and special access systems shall be tested by the system supplier. Following the test, provide an affidavit that the system has been tested by him, and that the system is complete and operating in accordance with the operations as described in the drawings and specifications and in accordance with the systems regulating agency requirements.
 4. System voltages shall be measured and recorded under maximum load conditions available during construction. Incoming service voltage, as well as transformer secondary voltages shall be checked and adjusted to be equal to the voltage rating, or not exceeding 2-1/2% above the voltage rating. Line-to-line voltages should be adjusted between 460 and 480 volts, or 208 and 213 volts. A record of each final test along with time of day, date, and conditions of loading should be recorded for each test location.
 5. Test for load division between all conductors in parallel feeders. Division of currents shall not exceed 10% of feeder current. Record of test for each parallel feeder shall be made. Records shall be complete and amperage, voltage, and feeder identification. Where corrective measures are taken,

before and after tests shall be provided. All tests shall be signed by the tester and the witness of the test.

6. Submit three copies of all tests, certified by the Contractor for approval. Test data shall include the name of the building, equipment driven, and nameplate data of all integral horsepower motors.
7. Special tests shall be made where called for in these drawings and specifications.

C. Demonstration Test of Completed Systems

1. Demonstrate the essential features of the following systems:
 - a. Communications Systems:
 - 1) Alarms and bells.
 - 2) Fire and smoke detection systems.
 - 3) Sound systems
 - b. Electrical entrance equipment:
 - 1) Fuses, fuseholders and switches.
 - 2) Switching.
 - 3) Circuit breakers.
 - c. Electrical systems controls and equipment:
 - 1) Electrical power equipment.
 - 2) Motor control devices
 - 3) Generator.
 - 4) Starting devices.
 - 5) Contactors.
 - 6) Automatic transfer switch.
 - 7) Switches.
 - d. Lighting fixtures:
 - 1) Indoor and outdoor light fixtures.
 - 2) Specialty light fixtures.
 - e. Panelboards:
 - 1) Distribution panels.
 - 2) Lighting panels
 - 3) Main panels and power panels.
 - 4) Switchboards.
 - f. Wiring Devices:
 - 1) Coverplates.
 - 2) Low-voltage controls.
 - 3) Outlets: convenience and special purpose.
 - 4) Switches: standard.
2. Each system shall be demonstrated once only, after completion of satisfactory testing and acceptance.
3. The demonstration shall be held upon completion and acceptance of all systems at a date to be agreed upon in writing by the Architect.
4. The demonstration shall be held by the appropriate Contractors in the presence of the Architect or his representative and the manufacturer's representative.
5. Demonstrate the functions and location (in the structure) of each system, and indicate its relationship to the riser diagrams and drawings.

6. Demonstrate by "start-stop operation" how to work the controls, how to reset protective devices, how to replace fuses, and what to do in case of emergency.
7. The Contractor shall test all receptacles for power polarity and ground to assure that all receptacles are operating properly, correctly wired and suitably grounded. Provide an affidavit to the effect that this work has been accomplished, when and by whom performed.
8. Check rotation of all equipment and correct if necessary.

3.10 CONDITIONS OF EQUIPMENT AT FINAL ACCEPTANCE

- A. At time of acceptance, the Contractor shall have inspected all installed systems to assure the following has been completed:
 1. Fixtures are operating, lenses and reflectors are free of dust, debris, and fingerprints.
 2. Panelboards have all conductors neatly formed, laced and made-up tight. Cans shall be vacuum cleaned, surfaces clean of stray paint, dust, grease and fingerprints. All circuit directories to be neatly typed and in place.
 3. Wall plates and exposed switch and receptacle parts to be clean, free of paint, plaster, etc.
 4. Safety and disconnect switches and motor starters to be vacuum cleaned of debris, dust and all surfaces free of stray paint, grease and fingerprints.
 5. Switchgear, transformers and system devices shall be cleaned internally and externally and have all surfaces restored to initial surface conditions.
 6. Touch-up all scratched surfaces using paint matching the existing equipment paint. Where paint cannot be matched, the entire surface shall be repainted in a color and manner approved by the Architect.
 7. All electrical equipment shall have proper labeling as specified under this section.

3.11 CONTRACTOR RESPONSE

- A. Contractor shall provide written response to each item on Engineer's Field Observation Report(s), prior to Engineer re-visiting the site to observe completion of work.

3.12 GUARANTEE

- A. The Contractor shall guarantee all materials and workmanship for a period of twelve (12) months after the final acceptance of work.

END OF SECTION

SECTION 26 0513

600 VOLT INSULATED CONDUCTORS

PART 1 - GENERAL

1.01 SCOPE

- A. This section specifies the furnishing and installation of 600 volt insulated conductors.

1.02 REFERENCE STANDARDS

- A. ANSI/UL 4 – Armored Cable
- B. ANSI/UL 83 – Thermoplastic-Insulated Wires.
- C. ICEA S-61-402 (NEMA WC 5) – Thermoplastic-Insulated Wire and Cable for the Transmission and Distribution of Electrical Energy.
- D. UL 486A – Standard for Safety Wire Connectors and Soldering Lugs for Use with Copper Connectors.

1.03 APPLICABLE PROVISIONS

- A. Refer to Section 260500– Electrical General Provisions.

1.04 SUBMITTALS

- A. Submit Manufacturer’s technical product data on conductors and connectors. Include data substantiating that materials comply with the requirements of this section.

1.05 DELIVERY, STORAGE AND HANDLING

- A. Deliver conductors properly packaged in factory-fabricated containers, or wound on NEMA-standard type wire and cable reels.
- B. Store conductors in a clean dry space in original containers. Protect products from weather, damaging fumes, construction debris and traffic.
- C. Handle conductors carefully to avoid abrading, puncturing and tearing wire and cable insulation and sheathing. Ensure that dielectric resistance integrity of conductors is maintained.

PART 2 – PRODUCTS

2.01 600-VOLT INSULATED CONDUCTORS

- A. Conductors shall be soft-drawn annealed copper with conductivity of not less than 98% at 20⁰ C (68° F).
- B. Minimum wire size shall be No. 12 AWG unless otherwise noted on the drawings.
- C. Conductors No. 10 AWG and smaller shall be solid and conductors No. 8 AWG and larger shall be stranded.
- D. Conductors shall be permanently marked to indicate voltage, insulation type and temperature rating in accordance with NEC Article 310-11.
- E. Furnish factory colored insulation for conductors No. 10 AWG and smaller. Color code No. 8 AWG and larger insulated conductors with a field applied tape.
- F. Insulation shall be as follows:
 - 1. Type THW: For dry and wet locations; maximum operating temperature 75° C. Flame retardant moisture and heat resistant thermoplastic.
 - 2. Type THHN or THWN: For dry and wet locations; maximum operating temperature 75° C.(THWN) or 90° C (THHN). Flame retardant heat and/or moisture and/or oil-resistant thermoplastic insulation with nylon outer jacket.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Mechanically protect conductors by installing in raceways. Do not install the conductors until raceway system is complete and properly cleaned. Use an approved wire-pulling compound when pulling large conductors. Wiring pulling compound shall be UL listed and as recommended by the conductor manufacturer. Do not bend any conductor either permanently or temporarily during insulation to radii less than four times the outer diameter of the insulated conductors. Do not exceed manufacturer's recommended values for maximum pulling tension.
- B. Pull conductors simultaneously where more than one conductor is being installed in the same raceway.
- C. Use pulling means including fish tape, rope and basket weave wire/cable grips which will not damage cable or raceway.
- D. Tighten electrical connectors and terminals, including screws and bolts, in accordance with manufacturer's published torque tightening values. Where manufacturer's torquing requirements are not indicated, tighten connectors and terminals to comply with tightening torques specified in UL Standard 486A.
- E. Neatly and securely bundle all conductors in enclosures using nylon straps with a locking hub or head on one end and a taper on the other.

3.02 SPLICES AND TERMINATIONS

- A. Use crimp or compression type connectors for splices of all stranded conductors. Mechanical type connectors for conductor splices are not acceptable. Splices shall be kept to a minimum. Splices shall be made in junction and/or pull boxes. Splices in conduit fittings (i.e. conduit bodies), and in panelboards are not acceptable. Use ring-tongue type terminators on all control wiring. All connectors shall be of material recommended by conductor manufacturer(s) to prevent any corrosion or electrolysis between dissimilar metals.

3.03 CONDUCTOR SIZING

- A. Install conductor size required by the more stringent requirements of the drawings or specifications.
- B. Install No. 10 AWG conductors for single-phase, 120-volt, 20 ampere branch circuits for which distance from panelboard to the first outlet is no more than 100 feet.
- C. Install No. 10 AWG conductors for single-phase, 227-volt, 20 ampere branch circuits for which distance from panelboard to the first outlet is no more than 200 feet.

3.04 HOMERUNS

- A. Install no more than three current carrying conductors of different phases, a neutral and a grounding conductor in a single raceway unless specifically noted on the drawings.
- B. Use homerun circuit numbers as indicated for panelboard connections.
- C. Comply with ampacity adjustment factors as required by the NEC Article 310-16.
- D. Install a separate neutral conductor for each receptacle circuit serving isolated ground receptacles.

3.05 IDENTIFICATION

- A. Refer to Section 260553 for requirements for the identification of 600 volt insulated conductors.

END OF SECTION

SECTION 26 0526**GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS****PART 1 - GENERAL****1.01 SCOPE**

- A. This section specifies the furnishing and installation of grounding and bonding equipment for electrical systems.

1.02 REFERENCE STANDARDS

- A. ANSI/IEEE Std 142 - Recommended Practice for Grounding of Industrial and Commercial Power Systems.
- B. ANSI/UL 467 - Safety Standard for Grounding and Bonding Equipment.

1.03 APPLICABLE PROVISIONS

- A. Refer to Section 260500 - Electrical General Provisions.

PART 2 - PRODUCTS**2.01 CONNECTIONS**

- A. Type. Unless otherwise noted, for below grade connections provide exothermic welded type. For above grade connections provide bonds and clamps of a nonferrous material which will not cause electrolytic action between the conductor and the connector.
- B. Listing. UL 467.
- C. Acceptable Manufacturers.
 - 1. Below grade: Cadweld, Thermoweld.
 - 2. Above grade: Blackhawk Industries, Burndy, Copperweld Corporation, ITT Blackburn, Ilco, Joslyn, OZ/Gedney, Square D, T & B.

2.02 WIRING

- A. Provide bare conductors for bonding jumpers. Provide 600-volt insulated conductors having a green-colored insulation for grounding electrode and equipment grounding conductors. Use solid conductors for No. 12 and No. 10 wire; stranded for No. 8 and larger.

2.03 GROUND BUS

- A. Where a field-provided ground bus is required, use round-edge copper bar with 98 percent International Annealed Copper Standard (IACS) conductivity. Size the bus for not less than 25 percent of the cross-sectional area of the related feeder. A minimum size of 1/4-inch by 2-inches is required.

PART 3 - EXECUTION

3.01 SYSTEM GROUND

- A. System Neutral- Where a system neutral is used, ground the system neutral conductor as required by NEC Article 250. Ground the system neutral only at the point of service and isolate it from ground at all other points in the system.
- B. Size. Size grounding electrode conductors to comply with NEC Table 250-94, unless shown larger. Bond to conduit at conduit entrance and where conductor emerges with appropriate grounding bushing.
- C. System Ground. If ground rods are chosen as the grounding method and multiple rods are required, maximum spacing shall be 6'-0" or less.

3.02 EQUIPMENT GROUND

- A. Raceway Systems and Equipment Enclosures.
 - 1. Ground cabinets, junction boxes, outlet boxes, motors, controllers, raceways, fittings, switchgear, transformer enclosures, other equipment and metallic enclosures. Ground equipment and enclosures to the continuous-grounded, metallic raceway system in addition to any other specific grounding shown.
 - 2. Provide bonding jumpers and ground wire throughout to ensure electrical continuity of the grounding system.
 - 3. Provide grounding-type insulated bushings for metal conduits terminating in equipment enclosures containing a ground bus and connect the bushing to the ground bus.
 - 4. Provide a green insulated equipment grounding conductor for each lighting branch circuit supplying fixtures installed less than 8-feet above floor or grade, each receptacle branch circuit, each power branch circuit and each feeder.
 - 5. Provide bonding jumper and bonding bushing on each metallic conduit entering or leaving the enclosure of the service equipment.

- B. Size. When grounding and bonding conductors are not sized on drawings, size the grounding conductors in accordance with NEC Table 250-95. Size bonding jumper so that minimum cross-sectional area is greater than or equal to that of the equivalent grounding conductor as determined from NEC Table 250-95.

END OF SECTION

SECTION 26 0533**RACEWAYS****PART 1 - GENERAL****1.01 WORK INCLUDED**

- A. This section specifies the furnishing and installation of electrical raceway systems.

1.02 REFERENCE STANDARDS

- A. ANSI/ANSI C80.1 - Specification for Zinc-Coated Rigid Steel Conduit.
- B. ANSI/ANSI C80.3 - Specification for Zinc-Coated Electrical Metallic Tubing.
- C. ANSI/ANSI C80.4 - Specification for Fittings for Rigid Metal Conduit and Electrical Metallic Tubing.
- D. ANSI/ANSI C80.5 - Specification for Rigid Aluminum Conduit.
- E. ANSI/UL I - Safety Standard for Flexible Metal Conduit.
- F. ANSI/UL 5 - Safety Standard for Surface Metal Raceways and Fittings.
- G. ANSI/UL 651 - Safety Standard for Rigid Nonmetallic Conduit.
- H. ANSI/UL 797 - Electrical Metallic Tubing.
- I. ANSI/UL 870 - Safety Standard for Wireways, Auxiliary Gutters and Associated Fittings.
- J. NEMA TC 3 - PVC Fittings for Use with Rigid PVC Conduit and Tubing.
- K. UL 6 - Rigid Metal Electrical Conduit.
- L. UL 360 - Liquid-tight Flexible Steel Conduit.
- M. UL 467 - Electrical Grounding and Bonding Equipment.
- N. UL 1242 - Intermediate Metal Conduit.

1.03 APPLICABLE PROVISIONS

- A. Refer to Section 260500 - Electrical General Provisions.

PART 2 - PRODUCTS

2.01 CONDUIT AND FITTINGS

- A. Rigid Metal Conduit.
 - 1. Conduit. Hot-dipped galvanized rigid steel conduit (RSC with zinc-coated threads and an outer coating of zinc chromate).
 - 2. Fittings. Threaded, malleable iron, either cadmium plated or hot-dipped galvanized.
 - 3. Listing. UL 6.
- B. Electrical Metallic Tubing (EMT).
 - 1. Conduit. Galvanized electrical steel tubing.
 - 2. Fittings. Compression type, steel.
 - 3. Listing. UL 797.
- C. Rigid Nonmetallic Conduit.
 - 1. Conduit. Schedule 40 polyvinyl chloride (PVC).
 - 2. Fittings. Solvent weld socket type.
 - 3. Listing. UL 6.
- D. Flexible Metal Conduit.
 - 1. Conduit. Spiral-wound, square-locked, hot-dipped galvanized steel strip.
 - 2. Fittings. Two-screw, double-clamp malleable iron, either cadmium plated or hot-dipped galvanized.
 - 3. Listing. UL 1 for conduit and UL 467 for fittings.
- E. Liquid-tight Flexible Metal Conduit.
 - 1. Conduit. Spiral-wound, square-licked, hot-dipped galvanized steel strip plus a bonded outer jacket of PVC.
 - 2. Fittings. Compression type, malleable iron, with insulated throat, either cadmium plated or hot-dipped galvanized.
 - 3. Listing. UL 3 for conduit and UL 467 for fittings.

2.02 WIREWAYS

- A. Material: Not less than 16-gage sheet steel.
- B. Dimensions: Cross section dimensions not less than 4 inches by 4 inches.
- C. Finish: Not less than two coats of enamel over a rust-inhibiting prime coat.
- D. Type:
 - 1. Indoors: NEMA 1.
 - 2. Outdoors: NEMA 3R.

- E. Listing. UL 870.

PART 3 - EXECUTION

3.01 CONDUIT AND FITTINGS

- A. Minimum Trade Size. 3/4-inch, except that 3/8-inch flexible metal conduit may be used in lengths not exceeding 72 inches for tap conductors supplying lighting fixtures.
- B. Types According to Use. Use rigid steel conduit (RSC) throughout the project except as specified below.
1. Use rigid galvanized steel exposed to rain, condensation, moisture, or constant high humidity, in exposed areas below 7'-0" above finish floor and where "EYS" sealing fittings are to be installed (explosion proof fittings) and for main feeders.
 2. Use EMT in interior walls or ceiling spaces and where exposed when installed more than 7'-0" inches above finished floor in open work areas, mechanical rooms or electrical rooms.
 3. IMC may be used in lieu of RSC.
 4. Use rigid galvanized steel or rigid nonmetallic conduit encased in concrete with minimum 3-inch-thick walls, where installed below grade. Concrete encasement may be omitted when conduit is installed below floor slabs, or when branch circuits are installed in paved parking areas.
 5. Connect all electrical equipment subject to vibration or movement with liquid-tight flexible metal conduit, 36 inches maximum length. Where the equipment, other than motors, is located in an air-conditioned space, flexible metal conduit may be used.
 6. Transitions.
 - a. Continue the heavier, more protective type conduit application not less than 4 inches into the area where lighter, less protective type conduit is permitted.
 - b. For below-grade to above-grade outdoor locations, extend concrete encasement around conduit 4-inches above finished grade and slope top away from conduit with a 6-inch-per-foot slope. After concrete has set, caulk the concrete conduit joint with a silicone rubber compound.
 - c. For below-grade to above-grade locations using PVC to metal conduit, make the transition from PVC to metal conduit before turning up with the factory steel long radius 90 degree elbow.
- C. Preparation. Place sleeves in the forms of walls and floor slabs for the free passage of conduits. Set sleeves in place a sufficient time ahead of concrete placement so as not to delay the work. Apply caulking for sleeves through floors and through exterior walls. Be sure that plugs or caps are installed before concrete placement begins.
- D. Installation Requirements.

1. Metallic conduits must be continuous between enclosures such as outlet, junction and pull boxes, panels, cabinets, motor control centers, etc. The conduit must enter and be secured to enclosures so that each system is electrically continuous throughout. Where knockouts are used, provide double locknuts, one on each side. At conduit terminations, provide insulated bushings for conductor protection. Where conduits terminate in equipment having a ground bus, such as in switchgear, motor control centers and panelboards, provide conduit with an insulated grounding bushing and extend a suitable grounding wire to the ground bus.
2. Have rigid nonmetallic conduit adequately solvent welded at joints to form a tight, waterproof connection.
3. Run concealed conduit as directly and with the largest radius bends as possible. Run exposed conduit parallel or at right angles to building or other construction lines in a neat and orderly manner. Conceal conduit in finishing areas. Unless otherwise shown, remaining conduit may be exposed. Provide chrome-plated floor and ceiling plates around conduits exposed to view and passing through walls, floors, partitions, or ceilings in finished areas. Select properly sized plates to fit the conduit when securely locked in place.

E. Installation Methods.

1. Install each entire conduit system complete before pulling in any conductors. Clean the interior of every run of conduit before pulling in conductors to guard against obstructions and omissions.
2. Cut all joints square, then thread and ream smooth. Coat cuts, threads or scratches on steel conduit with an approved zinc chromate or with a 90 percent zinc paint. When dry, draw up tight.
3. Make bends with standard ells or conduit bent in accordance with the NEC. Make field bends using equipment designed for the particular conduit material and size involved. Bends must be free from dents or flattening. Use no more than the equivalent of four 90-degree bends in any run between terminals and cabinets, or between outlets and junction boxes or pull boxes.
4. Conduit bodies may be used in lieu of conduit ells where ease of installation and appearance warrants their use. Conduit bodies larger than 1 -inch may be used only where approved.
5. Securely fasten and support exposed conduit to metal framing using hot-dipped galvanized, malleable iron pipe straps or other approved means. Galvanized tie wires may be used for securing conduits, less than 1-1/2 inches, to the top of the bottom chord of bar joists. Do not use tie wires to secure any conduit from bottom of bar joists. Branch circuit raceways which are 1 -inch or smaller may be attached to ceiling support hangers or wall studs by use of manufactured clips.
6. Provide a No. 30 nylon pulling line in conduits in which wiring is not installed under this work, such as telephone, signal, and similar systems. Identify both ends of the line by means of labels or tags reading "Pulling Line".

7. Suitably cap conduit during construction to avoid water, dirt and trash entrance.
8. Use expansion-deflection fittings on conduit crossing structural expansion joints and on exposed conduit runs where necessary. Provide bonding jumpers across fittings in metal raceway systems.
9. With a coupling, terminate concealed conduit for future use at structural surfaces. Install a pipe plug flush with the surface.
10. Openings around electrical penetrations of fire-resistance rated walls, partitions, floors or ceilings shall maintain the fire resistance rating using approved methods. See NEC 300-2 1.

END OF SECTION

SECTION 26 0553

ELECTRICAL IDENTIFICATION

PART 1 - GENERAL

1.01 SCOPE

- A. This section specifies the furnishing and installation of products for the identification of electrical materials and equipment.

1.02 REFERENCE STANDARDS

- A. ANSI/NFPA 70 – National Electrical Code
- B. OSHA – Occupational Safety and Health Act

1.03 APPLICABLE PROVISIONS

- A. Refer to Section 260500 – Electrical General Provisions

1.04 SUBMITTALS

- A. Submit manufacturer's technical product data for each type of product furnished. Include data substantiating that materials comply with the requirements of this section.

PART 2 - PRODUCTS

2.01 MARKERS

- A. Furnish Seton style M346 or approved equivalent vinyl cloth self-adhesive markers with 1" high characters for identifying exposed raceways and boxes.

2.02 COLORED TAPE

- A. Furnish Scotch No. 35 or approved equivalent 7-mil thick by 3/4" wide vinyl adhesive tape for color coding of No. 8 AWG and larger 600 volt insulated conductors.

2.03 METAL TAGS

- A. Furnish Seton style M1802 or approved equivalent 2 1/8" long by 1" high 18 gage engraved aluminum tags for identification of medium voltage conductors.

2.04 WARNING SIGNS

- A. Furnish Seton PSPL or approved equivalent 14" wide by 10" high vinyl self-adhesive OSHA approved "DANGER" signs for the identification of all medium voltage equipment and electrical rooms.

2.05 PLASTIC NAMEPLATES

- A. Furnish engraved black-white-black plastic laminate nameplates for identification of normal service equipment and red-white-red plastic laminate for identification of emergency service equipment. Edges of nameplates shall be chamfered.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Install identification products as required by the NEC and OSHA and elsewhere where required by this section.
- B. Install identification products in accordance with manufacturer's written instructions.
- C. Where identification is to be applied to surfaces that require a field finish, install identification after completion of the finish work.

3.02 OUTLET, JUNCTION AND PULLBOXES

- A. Label outlet box covers using a black marking pen with the identity of the circuits contained within the box.
- B. Install self-adhesive markers on the outside of the covers of all junction and pullboxes. Mark the cover to identify the circuits contained within the box.
- C. Paint all boxes used in the fire alarm system red.

3.03 INSULATED CONDUCTORS

- A. Color code all 600 volt insulated conductors by installing conductors with factory colored insulation for conductors No. 10 AWG and smaller in accordance with the table in paragraph c. below.
- B. Install colored tape on all 600 volt conductors No. 8 AWG and larger in accordance with the table in paragraph c. below. Apply tape in half-lapped turns for a distance of 6 inches from terminal points and in boxes where splices or taps are made. Apply the last two laps of tape with no tension to prevent possible unwinding. Do not cover factory applied cable identification markings with taping; tape locations may be adjusted slightly to prevent the coverings of factory markings. All color coding must meet NEC and City of Austin requirements.
- C. Color code conductors with the table below or as required by local codes, if different for the color scheme indicated.

Phase	<u>480Y/277</u>	<u>208Y/120</u>		
A or L1	Purple	Black		
B or L2	Brown	Red		
C or L3	Yellow	Blue		
Neutral	Gray	White		
Ground	Green	Green		
Isolated Ground	-----	Green with yellow tracer		

- D. Install metal tags to identify medium voltage conductors. Engrave each tag with the following information: voltage, circuit number, phase, and installation date. Attach the tag over conductor fireproofing using nylon cable ties. Install tags at connections to equipment and in each manhole.

3.04 EQUIPMENT

- A. Install nameplates labels in locations on the equipment for best convenience of viewing without interfering with the operation and maintenance of equipment. Secure nameplate to equipment by means of stainless steel self-tapping machine screws.

END OF SECTION

SECTION 26 2716**ELECTRICAL BOXES****PART 1 - GENERAL****1.01 SCOPE**

- A. This section specifies the furnishing and installation of all outlet boxes, floor boxes, junction boxes and pull boxes.

1.02 REFERENCE STANDARDS

- A. NEMA OS 1 – Sheet-Steel Outlet Boxes, Device Boxes, Covers and Box Supports.
- B. UL 50 – Standard for Safety Enclosures for Electrical Equipment.
- C. UL 514A – Standard for Safety Metallic Outlet Boxes.
- D. UL 514B – Standard for Safety Fittings for Conduit and Outlet Boxes.

1.03 APPLICABLE PROVISIONS

- A. Refer to Section 260500 – Electrical General Provisions

1.04 SUBMITTALS

- A. Submit manufacturer's technical product data on electrical boxes. Include data substantiating that materials comply with the requirements of this section.

1.05 DELIVERY, STORAGE AND HANDLING

- A. Deliver and store boxes in suitable conditions.

PART 2 - PRODUCTS**2.01 OUTLET BOXES**

- A. Flush Device Boxes. Furnish square or rectangular galvanized steel boxes, minimum 1 ½ inch deep by 4 inch high with raised cover for the device(s) to be installed.
- B. Exposed Device Boxes. Furnish FS or FD cast boxes for rigid metal conduit systems and galvanized steel boxes for EMT conduit systems.
- C. Boxes for Lighting Fixtures. Furnish octagonal galvanized steel boxes, minimum 1 ½ inch deep by 4 inch high with accessories to properly support fixtures.

- D. Masonry Boxes. Furnish rectangular galvanized steel boxes, minimum 3 ½ inch deep by 3 ¾ inch high.

2.02 JUNCTION AND PULL BOXES

- A. Junction and Pull Boxes: Furnish galvanized code-gage sheet steel junction and pull boxes where shown on the drawings or where installation conditions warrants their use. Boxes shall be furnished with screw-on covers or hinged covers. Size of cover shall be such that it can easily be handled by one person. All hardware and fasteners shall be stainless steel.
- B. Furnish NEMA 1 boxes in interior dry locations.
- C. Furnish NEMA 3R boxes in all exterior locations and interior locations subject to moisture.
- D. Furnish NEMA 4 cast iron boxes with external flush flanged cover when cast in concrete.

PART 3 - EXECUTION

3.01 COORDINATION

- A. In order that all outlets may come in proper relation to paneling, decorated areas, etc., the Contractor shall familiarize himself with the details of these spaces and shall carefully lay out all outlets so that the equipment or piping of other trades passing under, over, across or in close proximity to same, will not cause the device or fixtures at or in these outlets to be inaccessible for use or maintenance. The Contractor must consult with the other Contractors on the project and procure all details of the various locations so as to make the outlet boxes come in proper relation to the work of all other trades. The Architect/Engineer reserves the right to relocate any outlet within reason from its original location shown on the plans prior to the application of the walls at no cost.

3.02 OUTLET BOXES

- A. Flush Boxes. Unless otherwise noted indicated, install all outlet boxes flush within ¼ inch of the finished wall or ceiling line. Install galvanized steel extension rings where required to extend the box forward in conformance to NEC requirements. Attach ring with at least two machine screws. Securely fasten outlet boxes to framing.
- B. Fixture Boxes. Boxes for suspended lighting fixtures shall not be attached to or supported from suspended ceilings, unless specifically approved by ceiling installer/manufacture. Do not support boxes from ceiling suspension grid.

- C. Back-to-Back Boxes. Do not connect outlet boxes back to back unless specific approval is obtained from the Architect/Engineer. Where such a connection is necessary to complete a particular installation, fill the voids around the wire between the boxes with sound insulating material.
- D. Box Openings. Install only the conduit openings necessary to accommodate the conduits at the individual location. Install knockout closures to cap all unused openings.
- E. Gasketing. Install weatherproof outlets and outlets in areas subject to moisture with gaskets between the box and the coverplate.
- F. Coverplates. All boxes shall be installed with coverplates.
- G. Mounting Height. Mounting Height of a wall-mounted outlet box means the height from finished floor to horizontal center line of the cover plate. Where outlets are indicated adjacent to each other, mount these outlets in a symmetrical pattern with all the tops at the same elevation. Where outlets and indicated adjacent, but with different mounting heights, line up outlets to form a symmetrical vertical pattern on the wall.

3.03 JUNCTION AND PULL BOXES

- A. Installation. Install boxes as required to facilitate conductor installation in raceway systems. Junction and pull boxes shall be sized to accommodate conductor system splices and associated insulation. Generally install boxes in conduit runs of more than 100 feet or as required in Section 260533. Locate boxes strategically and make them of such shape to permit easy pulling of conductors. The use of extension rings to increase the junction boxes interior space capacity is not acceptable.
- B. Covers. Install boxes so that covers are readily accessible and easily removable after completion of the installation. Include suitable access doors for boxes above inaccessible ceilings. Select a particular size for each box and cover. All boxes shall have covers.

3.04 IDENTIFICATION

- A. Refer to Section 260553 for the requirements for the identification of electrical boxes.

END OF SECTION