

COLLIN COUNTY

Construction, Myers Park Hardscape Improvements

IFB 2018-042

**J. D. Griffin, CPPB
Jack Hatchell Administration Building
2300 Bloomdale Road, Ste. 3160
McKinney, TX 75071**

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Collin County exclusively uses IonWave Technologies, Inc. ([Collin County eBid](#)) for the notification and dissemination of all solicitations. The receipt of solicitations through any other means may result in your receipt of incomplete specifications and/or addendums which could ultimately render your bid/proposal non-compliant. Collin County accepts no responsibility for the receipt and/or notification of solicitations through any other means.

LEGAL NOTICE

By order of the Commissioners' Court of Collin County, Texas, sealed bids will be received by the Purchasing Agent, 2300 Bloomdale, Suite 3160, McKinney, TX 75071, until **2:00 P.M., Thursday, December 7, 2017**, for Invitation For Bid **Construction, Myers Park Hardscape Improvements (IFB No. 2018-042)**. A **Pre-Bid** conference will be held **Tuesday, November 28, 2017 at 2:00 p.m.** at Collin County Myers Park, 7117 CR 166 McKinney, TX 75071. Bidders shall use lump sum pricing. All Bidders must submit, prior to the bid opening time, a Cashier's Check or acceptable Bid Bond payable without recourse to Collin County in the amount of not less than five percent (5%) of the total bid plus alternates as submitted. Contractor must furnish a performance and payment bond within ten (10) consecutive calendar days following award of contract. Funds for payment have been provided through the Collin County budget approved by the Commissioner's Court for this fiscal year only. Bidders may obtain detailed specifications and other documents at Office of the Purchasing Agent: Collin County Administration Building, 2300 Bloomdale, Suite 3160, McKinney, TX 75071, 972-548-4165, or by going to: <https://collincountytx.ionwave.net>. Sealed bids will be opened on **Thursday, December 7, 2017 at 2:00 P.M.** by the Purchasing Agent, 2300 Bloomdale, Suite 3160, McKinney, TX 75071. The Commissioners' Court reserves the right to reject any and all bids.

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ATTENTION:	CLASSIFIEDS
BILL TO:	ACCOUNT NO 06100315-000
	COMMISSIONER'S COURT

NOTICE TO PUBLISHERS: Please publish in your issue on **Thursday, November 16, 2017** and **Thursday, November 23, 2017**. A copy of this notice and the publisher's affidavit must accompany the invoice when presented for payment.

NEWSPAPER:	<u>Plano Star Courier</u>
DATE:	<u>November 14, 2017</u>
FAX:	<u>972-529-1684</u>

CONTRACT DOCUMENTS AND SPECIFICATIONS
FOR

CONSTRUCTION
OF

MYERS PARK HARDSCAPE IMPROVEMENTS

COLLIN COUNTY



November 13, 2017

Prepared by:

DCBA Landscape Architecture

Project No.: IFB 2018-042



11/13/17

MYERS PARK - HARDSCAPE
COLLIN COUNTY • Texas

TABLE OF CONTENTS

	<u>NO. OF PAGES</u>
<u>DIVISION NO. 0 - BIDDING and CONTRACT REQUIREMENTS</u>	
Section 00100 - Advertisement for Bids.....	2 pages
Section 00200 - Instructions to Bidders.....	26 pages
Section 00410 - Bid Form/Bid Schedule.....	7 pages
Section 00430 - Bid Bond Form.....	1 page
Section 00485 - Warranty.....	1 page
Section 00500 - Construction Agreement.....	58 pages
Section 00510 - Conflict of Interest.....	3 pages
Section 00520 - Form W-9.....	1 page
Section 00530 - Chapter 2270 Verification.....	1 page
Section 00610 - Payment Bond.....	1 page
Section 00610 - Performance Bond.....	1 page
<u>DIVISION NO. 1 - GENERAL CONDITIONS</u>	
Section 01010 - Summary of Work.....	3 pages
Section 01050 - Field Engineering.....	2 pages
Section 01090 - References.....	2 pages
Section 01310 - Construction Schedules.....	2 pages
Section 01340 - Shop Drawings, Product Data and Samples.....	3 pages
Section 01370 - Schedule of Values	1 page
Section 01410 - Testing Laboratory Services.....	8 pages
Section 01510 - Temporary Facilities.....	2 pages
Section 01630 - Substitutions and Project Options.....	2 pages
Section 01700 - Closeout Procedures.....	1 page
Section 01710 - Cleaning.....	2 pages
Section 01780 - Project Record Documents.....	2 pages
<u>DIVISION NO. 2 - SITE WORK</u>	
Section 02050 - Demolition.....	2 pages
Section 02101 - Site Clearing and Preparation.....	2 pages
Section 02112 - Tree Pruning, Feeding and Protection.....	4 pages
Section 02200 - Earthwork.....	3 pages
Section 02245 - Finish Grading For Landscape Areas.....	2 pages
Section 02546 - Decomposed Granite (Stabilized).....	3 pages
Section 02920 - Sodding.....	5 pages
<u>DIVISION NO. 3 - CONCRETE</u>	
Section 03100 - Concrete Formwork.....	3 pages
Section 03200 - Concrete Reinforcement.....	3 pages
Section 03300 - Cast-in-Place Concrete.....	6 pages
<u>DIVISION NO. 4 - MASONRY</u>	
Section 04300 - Stone Masonry.....	2 pages
<u>DIVISION NO. 5 - METALS</u>	
Section 05500 - Metal Fabrications.....	5 pages

DIVISION NO. 6 - WOOD, PLASTICS AND COMPOSITES (Not used)

DIVISION NO. 7 - THERMAL AND MOISTURE PROTECTION

Section 07920 - Sealants..... 8 pages

DIVISION NO. 8 - OPENINGS (Not used)

DIVISION NO. 9 - FINISHES (Not used)

DIVISIONS NO. 10 THROUGH 16 (not used)

SECTION 00100 – ADVERTISEMENT FOR BIDS

BY ORDER OF the Collin County Commissioners Court, Collin County, Texas, bids will be received electronically through Collin County eBid located at <https://collincountytx.ionwave.net>. Bidders are encouraged to submit bids electronically by utilizing Collin County eBid. However, you may submit a sealed hard copy paper bid to the Office of the Collin County Purchasing Agent. All bids, both electronic or hard copy paper form must be submitted as stated below:

SUBMIT BIDS HARD COPY PAPER BIDS TO:

**Office of the Purchasing Agent
Collin County Administration Building
2300 Bloomdale Road, Suite 3160
McKinney, Texas 75071**

****NOTE:**

All Correspondence must include suite number to assist in proper delivery.**

SUBMIT NO LATER THAN:

2:00 P.M., Thursday, December 7, 2017

MARK ENVELOPE:

IFB 2018-042

Project: Construction, Myers Park Hardscape Improvements

<p><i>ALL BIDS MUST BE RECEIVED IN THE OFFICE OF THE PURCHASING AGENT BEFORE OPENING DATE AND TIME</i></p>
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SCOPE OF WORK INCLUDES all materials, labor, equipment and services to produce or be incorporated in such construction. Contract will be a general contract for hardscape improvements at Collin County Myers Park and Event Center. The contract will also include all necessary demolition work as needed to complete the project. Payment for the contract work shall be made pursuant to the terms of the Contract Documents.

Collin County uses Collin County eBid for the notification and dissemination of all solicitations for commodities and services. The receipt of solicitations through any other company may result in your receipt of incomplete specifications and/or addendums which could ultimately render your bid non-compliant. Collin County accepts no responsibility for the receipt and/or notification of solicitations through any other company.

COLLIN COUNTY APPRECIATES your time and effort in preparing a bid. Hard copy paper bid must be in a separate sealed envelope, manually signed in ink by a person having the authority to bind the firm in a contract and marked clearly on the outside as outlined above. Please note that all bids must be received at the designated location by the deadline shown. Bids received after deadline shall be considered void and unacceptable. Collin County is not responsible for lateness of mail, carrier, etc. and time/date stamp clock in the Collin County Purchasing Department shall be the official time of receipt. All bid forms provided in this Invitation for Bid must be completed prior to submission. Failure to complete the forms shall render your bid null and void. We

would appreciate you indicating on your "NO BID" response any requirements of this bid request which may have influenced your decision to "NO BID".

BIDS WILL BE publicly opened in the Office of the Purchasing Agent, 2300 Bloomdale Rd, Suite 3160, McKinney, TX 75071, at the date and time indicated above.

A PRE-BID CONFERENCE will be held by Collin County at Collin County Myers Park, located at 7117 CR 166, McKinney, TX 75071 on Tuesday, November 28, 2017, at 2:00 PM in order for bidders to ask questions regarding the proposed work.

No oral, telegraphic, telephonic or facsimile bids will be considered. IFB's, RFP's, RFQ's and RFI's may be submitted in electronic format via Collin County eBid at <https://collincountytx.ionwave.net>

BID SECURITY: All Bidders must submit, prior to the bid opening time, a Cashier's Check or acceptable Bid Bond payable without recourse to Collin County in the amount of not less than five percent (5%) of the total bid plus alternates as submitted.

1. Bid Bond or Cashier's Check may be mailed or hand delivered to the Office of the Collin County Purchasing Agent, Collin County Administration Building, 2300 Bloomdale Road, Ste 3160, McKinney, TX 75071 and shall be delivered in an envelope, marked plainly on the outside with the Bid Name and Number.
2. Bid Bond may be faxed to the Purchasing Department at 972-548-4694.
3. Bid Bond may be e-mailed to: jgriffin@co.collin.tx.us
4. Bid Bond may be uploaded to Collin County eBid at <https://collincountytx.ionwave.net>

Regardless of delivery method, all Bid Bonds shall be received prior to the bid opening time to be considered.

The original Bid Bond shall be received in the Collin County Purchasing Department **no later than** close of business on the third working day after the bid opening. Late receipt of original Bid Bond shall be cause for rejection of bid.

BONDS: Contractor must furnish a performance bond and payment bond within ten (10) consecutive calendar days following award of contract. The bonds shall be issued by a corporate surety in accordance with all Texas Law, including but not limited to, Chapter 2253 of the Texas Government Code and Chapter 3503 of the Texas Insurance Code, for public works projects.

SECTION 00200 - INSTRUCTIONS TO BIDDERS

PART 1 - GENERAL REQUIREMENTS

1.1 RELATED DOCUMENTS

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

1.2 DEFINITIONS

- A. All definitions set forth in the General Conditions of the Contract for Construction or in other Contract Documents are applicable to these Bidding Documents.
- B. Bidding Documents include the Advertisement or Invitation for Bids, Instructions to Bidders, the bid form, other sample bidding and contract forms and the proposed Contract Documents including any Addenda issued prior to receipt of bids.
- C. Addenda are written or graphic instruments issued prior to the opening of the Bidding Documents, which modify or interpret the Bidding Documents, including Drawings and Specifications, by additions, deletions, clarifications or corrections. Addenda will become part of the Contract Documents when the Construction Contract is executed.
- D. DCBA Landscape Architecture will be hereafter referred to in the Project Manual as "Landscape Architect" and all correspondence shall be addressed to: Billy Vicic, DCBA Landscape Architecture, 730 E. Park Blvd #100, Plano, TX 75074.
- E. "Bill Burke" will be hereinafter referred to in this Project Manual as "Project Manager".
- F. "Collin County" will be hereafter referred to in this Project Manual as "Owner".
- G. A Bid is a complete and properly signed submittal to do the Work for designated portion thereof for the sums stipulated therein, submitted in accordance with the Bidding Documents.
- H. The Base Bid is the sum stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents as the base, to which work may be added or from which work may be deleted for sums stated in Alternate Bids.
- I. An Alternate Bid (or Alternate) is an amount stated in the Bid to be added to or deducted from the amount of the Base Bid in the corresponding change in the Work, as described in the Bidding Documents or in the proposed Contract Documents.
- J. A Unit Price is an amount stated in the Bid as a price per unit of measurement for materials or service as described in the Bidding Documents or in the proposed Contract Documents.
- K. A Bidder is a person or entity who submits a Bid.
- L. A Sub-Bidder is a person or entity who submits a bid to a Bidder for materials or labor for a portion of the work.
- M. A Contractor is a person or entity who is determined to be the lowest responsible and responsive bidder to whom Owner (on the basis of Owner's evaluation as hereinafter provided) makes an award.

- N. The Bid Requirements and Other General Conditions, as provided under the Division of the North Central Texas Council of Governments Standard Specifications for Public Works Construction will be applicable to this project, unless noted otherwise in the Contract Documents

1.3 EXAMINATION OF DOCUMENTS AND SITE

- A. Each bidder, by making his/her Bid, represents that he/she has read and understands the Bidding Documents.
- B. Each Bidder, by making his/her Bid, represents that he/she has visited the site, performed investigations and verifications as he/she deems necessary, and familiarized himself/herself with the local conditions under which the Work is to be performed and will be responsible for any and all errors in his/her bid resulting from his/her failure to do so.
- C. The location and elevations of the various utilities and pipe work included within the scope of the work are offered as a general guide only, without guarantee as to accuracy. The Contractor shall verify and investigate to his/her own satisfaction the location and elevation of all utilities, pipe work, and the like and shall adequately inform himself/herself of their relation to the work before submitting a bid.
- D. Before submitting a bid each bidder will, at bidder's own expense, make or obtain any additional examinations, investigations, explorations, tests and studies and obtain any additional information (surface, subsurface, and underground facilities) at or contiguous to the site, or otherwise which may affect cost, progress, performance or furnishing of the work and which bidder deems necessary to determine its bid for performing and furnishing the work in accordance with the time, price and other terms and conditions of the Contract Documents. Bidder will rely solely on its own site investigation and assumes the risk of any site conditions not discovered that may result in additional costs and all errors in the bid.
- E. On request in advance, Owner will provide each bidder access to the site to conduct explorations and tests as each bidder deems necessary for submission of a bid. Bidder shall fill all holes, clean up and restore the site to its former condition upon completion of such explorations.
- F. The lands upon which the work is to be performed, right-of way and easement for access thereto and other lands designated for use by Contractor in performing the work are identified in the Contract Documents.
- G. Each bidder by making his/her bid represents that his/her bid is based upon the materials, systems, and equipment required by the Bidding Documents without exception.

1.4 BIDDING DOCUMENTS

- A. Complete sets of Bidding Documents shall be used in preparing bids; neither County, nor Architect assume any responsibility for errors or misinterpretations resulting from use of incomplete sets of Bidding Documents.
- B. County or the Architect, in making copies of the Bidding Documents available on the above terms, do so only for the purpose of obtaining Bids on the Work and do not confer a license or grant for any other use.

1.5 BIDDING PROCEDURES

- A. All bids shall be prepared on the forms provided by the Architect and submitted in accordance with the Instruction to Bidders. The Architect or owner will furnish bidders

with bid forms which will provide for the following bid items. Bidders shall provide all requested information. Prices bid/proposed shall *only* be considered if they are provided in the appropriate space(s) on the Collin County bid form(s). For consideration, any additions or deductions to the bid/proposal prices offered must be shown under the exceptions section of the bid/proposal in the case of electronic submittal, ONLY in the case of a hard copy submittal will an additional attachment be allowed. Extraneous numbers, prices, comments, etc. or bidder/offeror generated documents appearing elsewhere on the bid or as an additional attachment shall be deemed to have no effect on the prices offered in the designated locations.

1. A single contract price for each bid item as detailed and described in these specifications.
 2. Acknowledgment of Addenda.
 3. Number of consecutive calendar days to complete project.
 4. Alternate bids.
 5. Unit prices.
- B. A bid (electronic or hard copy) is invalid if it has not been deposited at the designed location prior to the time and date for receipt of bids indicated in the Advertisement or Invitation For Bid, or prior to any extension thereof issued to the bidders. Bids received in County Purchasing Department after submission deadline shall be returned unopened and will be considered void and unacceptable. Owner is not responsible for lateness of mail, carrier, etc. and time/date stamp clock in County Purchasing Department shall be the official time of receipt.
- C. Unless otherwise provided in any supplement to these Instructions to Bidders, no bidder shall modify, withdraw or cancel his/her bid or any part thereof for ninety (90) consecutive calendar days after the time designated for the receipt of bids in the Advertisement or Invitation For Bid.
- D. Bids shall not contain any recapitulation of the Work to be done.
- E. The Bidder shall make no additional stipulations on the Bid Form nor limit or qualify his/her bid in any other manner. Bids so qualified will be subject to disqualification.
- F. Collin County is by statute exempt from the State Sales Tax and Federal Excise Tax; therefore, the prices submitted shall not include taxes.

1.6 DISCREPANCIES AND AMBIGUITIES

Any interpretations, corrections and/or changes to an Invitation For Bid and related Specifications or extensions to the opening/receipt date will be made by addenda to the respective document by the Collin County Purchasing Department. Questions and/or clarification requests must be submitted no later than seven (7) days prior to the opening/receipt date. Those received at a later date may not be addressed prior to the public opening. Sole authority to authorize addenda shall be vested in Collin County Purchasing Agent as entrusted by the Collin County Commissioners' Court. Addenda may be transmitted electronically via Collin County eBid, by facsimile, E-mail transmission or mailed via the US Postal Service.

- 1.6.1 Addenda will be transmitted to all that are known to have received a copy of the IFB and related Specifications. However, it shall be the sole responsibility of the Bidder to verify issuance/non-issuance of addenda and to check all avenues of document availability (i.e. Collin County eBid at <https://collincountytx.ionwave.net>; telephoning Purchasing Department directly, etc.) prior to opening/receipt date and time to insure Bidder's receipt of any addenda issued. Bidder shall acknowledge receipt of all addenda.

1.7 SUBSTITUTIONS

- A. Each bidder represents that his/her bid is based upon the materials and equipment described in the Bidding Documents.
- B. No substitution will be considered unless written request has been submitted to the Architect for approval at least seven (7) consecutive calendar days prior to the date for receipt of bids.
- C. If the Architect and Owner approves a proposed substitution, such approval will be set forth in an Addendum.

1.8 QUALIFICATION OF BIDDERS

- A. Within seven (7) consecutive calendar days following bid opening, the apparent low bidder shall submit with a properly executed Contractor's Qualification Statement as evidence to establish bidder's financial responsibility, experience and possession of such equipment as may be needed to prosecute the work in an expeditious, safe and satisfactory manner. This Statement shall include:
 - 1. List of current projects.
 - 2. List of projects completed within the past five years.
 - 3. Experience of key individuals of the organization.
 - 4. Trade and Bank references.
 - 5. A recent financial statement to confirm that the bidder has suitable financial status to meet obligations incidental to performing the work. Audited financial statements are not mandatory. Unaudited financial statements will be accepted. If bidder's firm does, however, have audited statements, please include a copy with your bid.
 - 6. A statement of cost for each major item of Work included in the Bid.
 - 7. A designation of the Work to be performed by the Bidder with his/her own forces.
 - 8. A list of names of the Subcontractors or other persons or organizations (including those who are to furnish materials or equipment fabricated to a special design) proposed for each portion of the Work. The Bidder will be required to establish to the satisfaction of the Architect and Owner the reliability and responsibility of the proposed Subcontractors. Prior to the award of the Contract, the Architect will notify the Bidder in writing if either the County or the Architect, after due investigation, has reasonable and substantial objection to any person or organization on such lists. If Owner or Architect has a reasonable and substantial objection to any person or organization on such list, and refuses in writing to accept such person or organization, the Bidder may, at his/her option, withdraw his/her Bid without forfeiture of Bid Security or provide an acceptable substitute. Subcontractors and other persons and organizations proposed by the Bidder and accepted by Owner and Architect must be used on the Work for which they were proposed and accepted, and shall not be changed except with the written approval of Owner and the Architect.
- B. Bidders may be disqualified and their bids not considered for any of the following specific reasons:
 - 1. Reason for believing collusion exists among bidders.
 - 2. The bidder being interested in any litigation against Owner.
 - 3. The bidder being in arrears on any existing contract or having defaulted on a previous contract.
 - 4. Lack of competency as revealed by the financial statement, experience and equipment, questionnaires, or qualification statement.
 - 5. Uncompleted work which in the judgment of Owner will prevent or hinder the prompt completion of additional work if awarded.

C. Minimum Standards For Responsible Prospective Bidders: A prospective Bidder must meet the following minimum requirements:

1. have adequate financial resources, or the ability to obtain such resources as required;
2. be able to comply with the required or proposed delivery/ completion schedule;
3. have a satisfactory record of performance;
4. have a satisfactory record of integrity and ethics; and
5. be otherwise qualified and eligible to receive an award.

Collin County may request representation and other information sufficient to determine Bidder's ability to meet these minimum standards listed above.

D. In determining to whom to award the contract, the Owner may consider;

1. the purchase price;
2. the reputation of the bidder/contractor/vendor and of the bidder/contractor/vendor's goods or services;
3. the quality of the bidder/contractor/vendor's goods or services;
4. the extent to which the goods or services meet the Owner's needs;
5. the bidder/contractor/vendor's past relationship with the Owner;
6. the total long-term cost to the Owner to acquire the bidder/contractor/vendor's goods or services; and
7. any other relevant factors specifically listed in the Instruction to Bidders..

1.9 PREPARATION OF BID

- A. Bidder shall submit his/her bid on the forms furnished by the Architect. All blank spaces in forms shall be correctly filled in and the bidder shall state the prices, written in words and in figures. Where there is discrepancy between the price written in words and the price written in figures, the price written in words shall govern. If bid is submitted by an individual, his/her name must be signed by him/her or his/her duly authorized agency. If the bid is submitted by a firm, association or partnership, the name and address of each member must be given, and the bid must be signed by an official or duly authorized agent. Powers of attorney authorizing agents or others to sign bids must be properly certified and must be in writing and submitted with the bid.
- B. Bidder shall bear any/all costs associated with it's preparation of any bid, proposal or submittal.
- C. Public Information Act: Collin County is governed by the Texas Public Information Act, Chapter 552 of the Texas Government Code. All information submitted by prospective bidders during the bidding process is subject to release under the Act.
- D. The Bidder shall comply with Commissioners' Court Order No. 2004-167-03-11, County Logo Policy.

1.10 BID SECURITY

- A. Each bid must be accompanied by Bid Security (in accordance with instructions set forth in section 00100-Advertisement For Bids) made payable to Owner in an amount of five percent (5%) of the bidder's maximum bid price and in the form of a Cashier's Check or a Bid Bond, duly executed by bidder as principal and having as surety thereon, a corporate surety authorized and admitted to do business in the State of Texas and licensed to issue such bond, as a guarantee that the bidder will enter into a Contract and execute required

Performance, Payment, and one (1) year Maintenance Bonds within ten (10) consecutive calendar days of Collin County Commissioners' Court award of Contract.

- B. The Bid Security of the contractor will be retained until such bidder has executed the Contract Agreement and furnished the required Contract Security, whereupon, the Bid Security will be returned. If the contractor fails to execute and deliver the Agreement and furnish the required Contract Security within ten (10) consecutive calendar days of Collin County Commissioners' Court award of Contract, Owner may annul the award of contract and the Bid Security of that bidder will be forfeited. The Bid Security of the other bidders whom Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of the seventh (7th) consecutive calendar day after the effective date of the Agreement or the ninety-fifth (95th) consecutive calendar day after the bid opening, whereupon, the Bid Security furnished by such bidders will be returned. Bid Security with bids which are not competitive will be returned within seven (7) consecutive calendar days after the contract award.
- C. Should the bidder to whom the Contract is awarded refuse or neglect to execute and file the contract and bonds within ten (10) consecutive calendar days of Collin County Commissioners' Court award of Contract, Owner may annul award of Contract and the Bid Security filed with the bid shall become the property of Owner, not as a penalty, but as liquidated damages. Owner reserves the right to award canceled Contract to next responsible, lowest and best bidder as it deems to be in the best interest of the County.
- D. Owner will have the right to retain the bid security of all bidders until either:
 - 1. the Contract has been executed and the bonds have been furnished, or
 - 2. the specified time has elapsed so that bids may be withdrawn, or
 - 3. all bids have been rejected.

1.11 PERFORMANCE BOND, LABOR & MATERIAL PAYMENT BOND

- A. The Contractor shall post with Owner, not later than ten (10) consecutive calendar days of Collin County Commissioners' Court award of Contract, a Performance Bond in the amount of one hundred percent (100%) of the total contract price in such form as is satisfactory to Owner, in compliance with Chapter 2253 of the Texas Government Code and all other applicable Texas Law, and on the form specified in the Contract Documents. This bond shall be executed by a corporate surety company duly authorized and admitted to do business in the State of Texas and licensed to issue such a bond in the State of Texas. The Contractor shall notify its corporate surety of any Contract changes.
- B. The Contractor shall post with Owner, not later than ten (10) consecutive calendar days of Collin County Commissioners' Court award of Contract, a Payment Bond in the amount of one hundred percent (100%) of the total contract price in such form as is satisfactory to Owner, in compliance with Chapter 2253 of the Texas Government Code and all other applicable Texas Law, and on the form specified in the Contract Documents. This bond shall be executed by a corporate surety company duly authorized and admitted to do business in the State of Texas and licensed to issue such a bond in the State of Texas. The Contractor shall notify its corporate surety of any Contract changes.
- C. The Contractor must demonstrate to Owner that it can secure the required performance and payment bonds, issued by a corporate surety company authorized and admitted to do business in the State of Texas and licensed to issue such a bond in the State of Texas. Contractor must also demonstrate that the bond is not in excess of ten percent (10%) of the corporate surety company's capital and surplus. To the extent the amount of the bond exceeds ten percent (10%) of the corporate surety company's capital and surplus, such bond will not be accepted unless bidder provides written certification that the corporate surety

company has reinsured the portion of the risk that exceeds ten percent (10%) of the corporate surety company's capital and surplus with one or more insurers who are duly authorized, accredited or trusted to do business in the State of Texas. The amount reinsured by any reinsurer must not exceed ten percent (10%) of the reinsurer's capital and surplus.

- D. The Contractor must file with the performance bond and payment bond, all documents and information necessary to establish that the agent signing the bond is authorized to write the bond in the amount requested, and if applicable, that reinsurance requirements, have been met, including limits and ratings or other evidence of company solvency.
- E. If the corporate surety company on any bond furnished by Contractor to Owner is declared bankrupt or becomes insolvent or such corporate surety company's right to do business in the State of Texas is revoked, the Contractor shall within five (5) consecutive calendar days thereafter substitute another bond and corporate surety company, both of which shall be acceptable to Owner.

1.12 FILING BID

- A. All Bids, proposals, or submittals submitted in hard copy paper form shall be submitted in a sealed envelope, plainly marked on the outside with the Invitation for Bid (IFB) number and name. A hard copy paper form bid, proposal, or submittal shall be manually signed in ink by a person having the authority to bind the firm in a contract. Submittals, bids or proposals shall be mailed or hand delivered to the Collin County Purchasing Department.
- B. No oral, telegraphic or telephonic submittals will be accepted. Bids, proposals, or submittals may be submitted in electronic format via Collin County eBid at <https://collincountytx.ionwave.net>.
- C. All Bids, submittals or proposals submitted electronically via Collin County eBid at <https://collincountytx.ionwave.net> shall remain locked until official date and time of opening as stated in the Special Terms and Conditions of the IFB.
- D. For hard copy paper form bids, proposals, or submittals, any alterations made prior to opening date and time must be initialed by the signer of the bid, proposal, or submittal, guaranteeing authenticity. Bids, proposals, or submittals cannot be altered or amended after submission deadline.
- E. No bid, proposal, or submittal will be considered unless it is filed with the Owner Purchasing Department within the time limit for receiving bids as stated in the Advertisement for Bids or IFB. Each hard copy paper bid shall be in a sealed envelope plainly marked with the word "BID", and the name and bid number of the project as designated in the Advertisement for Bids or IFB.

1.13 MODIFICATION AND WITHDRAWAL OF BID

- A. No bid, proposal, or submittal may be withdrawn or modified after the bid opening except where the award of the contract has been delayed beyond ninety (90) consecutive calendar days after date of bid opening or as per Texas Local Government Code, Title 8, Chapter 262, Subchapter C., Section 262.0305. Modifications after Award.

1.14 IRREGULAR BID

- A. It is understood that Collin County, Texas reserves the right to accept or reject any and/or all Bids, proposals, or submittals for any or all products and/or services covered in an Invitation For Bid (IFB) and to waive informalities or defects in submittals or to accept such submittals as it shall deem to be in the best interest of Collin County.

1.15 REJECTION OF BID

- A. The bidder acknowledges the right of Owner to reject any or all bids and to waive any informality or irregularity in any bid received. In addition, the bidder recognizes the right of Owner to reject a bid if the bidder failed to furnish any required Bid Security, or to submit the data required by the Bidding Documents, or if the bid is in any way incomplete or irregular.

1.16 METHOD OF AWARD

- A. In evaluating bids, Owner will consider whether or not the bids comply with the prescribed requirements, base prices, any alternates, unit pricing, completion time, bidder's qualifications, bidder's proposed subcontractors, suppliers, etc., and other data as may be requested in the Bid Documents.
- B. Owner may conduct such investigations as Owner deems necessary to assist in the evaluation of any bid and to establish the responsibility, qualifications and financial ability of bidder, proposed subcontractors, suppliers and other persons and organizations to perform and furnish the Work in accordance with the Bidding Documents to Owner's satisfaction within the prescribed time.
- C. If the contract is to be awarded, it will be awarded to the lowest and best responsible bidder whose evaluation, by Owner, indicates to be in the best interests of the project. If no alternates are selected by Owner, the Owner may award the contract to a responsible bidder who submits the lowest and best bid.
- D. Evaluation of Alternates - Any and/or all or none of the alternates may be considered in evaluation. Owner may award Contract on base bid plus any and/or all or none of the alternates.
- E. Owner anticipates award within ninety (90) consecutive calendar days after bid opening.
- F. The bid, when properly accepted by the County, shall constitute a Contract equally binding between the contractor and Owner. No different or additional terms will become part of this Contract with the exception of a written Change Order, signed by both parties.
- G. No oral statement of any person shall modify or otherwise change, or affect the terms, conditions or specifications stated in the resulting contract. All change orders to the contract will be made in writing by Collin County Purchasing Agent.

1.17 EXECUTION OF CONTRACT

- A. The person or persons, partnership, company, firm, association or corporation to whom a contract is awarded shall within ten (10) consecutive calendar days after such award, sign the necessary contract agreements and submit the required bonds entering into the required Contract with Owner. No contract shall be binding on Owner until it has been executed by Owner or his/her duly authorized representative, and delivered to the Contractor.

1.18 FAILURE TO EXECUTE CONTRACT

- A. The failure of the Bidder to execute the required bonds or to sign the required Contract within ten (10) consecutive calendar days after the Contract is awarded, shall be considered by Owner as abandonment of his/her Bid, and Owner may annul the award, at the Owner's sole discretion.

1.19 PURCHASE ORDER

- A. A purchase order(s) shall be generated by Owner to the contractor. The purchase order number **must** appear on all itemized invoices. Collin County will not be responsible for any orders placed or delivered without a valid purchase order number.

1.20 NOTICE TO PROCEED

- A. Upon the execution and delivery of Bonds, Executed Contract by Contractor, progress schedule, proof of insurance, and all other documents required prior to commencing work herein, Owner will issue a written Notice to Proceed to the Contractor requesting that he/she proceed with construction, and the Contractor shall commence work within ten (10) consecutive calendar days after the date of Notice to Proceed.

1.21 PAYMENT PROCEDURES

- A. Contractor shall submit Applications for Payment in accordance with the Contract, and payments shall be made in accordance with the Contract Documents.
- C. Final Payment: Upon final completion and acceptance of the work, Owner shall pay the remainder of the contract price as recommended by Architect, in accordance with Texas Government Code, Title 10, Subtitle F., Chapter 2251. Contractor(s) is required to pay subcontractors within ten (10) days after the contractor has received payment from the County.
- D. The Contractor understands, acknowledges and agrees that if the Contractor subcontracts with a third party for services and/or material, the primary Contractor (awardee) accepts responsibility for full and prompt payment to the third party. Any dispute between the primary Contractor and the third party, including any payment dispute, will be promptly remedied by the Contractor. Failure to promptly render a remedy or to make prompt payment to the third party (subcontractor) may result in the withholding of funds from the primary Contractor by Collin County for any payments owed to the third party.

1.22 AFFIDAVIT OF BILLS PAID

- A. Prior to final acceptance of this project by Owner, the Contractor shall execute an affidavit that all bills for labor, materials, and incidentals incurred in the project construction have been paid in full, and that there are no claims pending.

1.23 EXEMPTION FROM STATE OF TEXAS AND LOCAL SALES TAX ON MATERIALS

- A. Owner qualifies for exemption from State and Local Sales Tax pursuant to the provisions of Chapter 151, Section 151.309 of the Texas Limited Sales, Excise and Use Tax Act. The Contractor performing this Contract may purchase all materials, supplies, equipment consumed in the performance of this Contract by issuing to his/her suppliers an exemption certificate in lieu of the tax. .

1.24 CONFLICT OF INTEREST

- A. No public official shall have interest, direct or indirect, in this contract, in accordance with Texas Local Government Code Title 5, Subtitle C, Chapter 171.

1.25 ETHICS

- A. The bidder/contractor shall comply with Commissioners Court Order No. 96-680-10-28, Establishment of Guidelines & Restrictions Regarding The Acceptance of Gifts by County Officials & County employees.

1.26 BID COMPLIANCE

- A. Bid must comply with all federal, state, county and local laws concerning this type of project and the fulfillment of all ADA (Americans With Disabilities Act) requirements.
- B. Design, strength, quality of materials and workmanship must conform to the highest standards of manufacturing and engineering practice.
- C. All products must be new and unused, unless otherwise specified, in first-class condition and of current manufacture.

1.27 DRUG FREE

- A. All bidders shall provide any and all notices as may be required under the Drug-Free Work Place Act of 1988, 41 U.S.C. 701, and Collin County Commissioners' Court Order No. 90-455-06-11, to its employees and all sub-contractors to insure that Owner maintains a drug-free work place. The use, possession or being under the influence of drugs and/or alcohol while working on this bid project or while on County property is prohibited and may result in removal of an individual from the project and/or immediate termination of contract. The County reserves the right to review drug testing records of any personnel involved in this bid project. The County may require, at contractor's expense, drug testing of contractor's personnel if no drug testing records exists or if such test results are older than six (6) months.
- B. Substances and cut-off levels are as follows:

<u>SUBSTANCE</u>	<u>MAXIMUM LEVEL</u>
Amphetamines	1000 NG/ML
Barbiturates	300 NG/ML
Benzodiazepines	300 NG/ML
Cocaine Metabolite	300 NG/ML
Opiates	300 NG/ML
Phencyclidine (PCP)	25 NG/ML
THC (Marijuana) Metabolite	100 NG/ML
Methadone, Urinary	300 NG/ML
Methaquaone, Urine	300 NG/ML
Propoxyphene	300 NG/ML

1.28 INDEMNIFICATION

- A. To the fullest extent permitted by law, the Contractor and his sureties shall indemnify, defend and hold harmless the Owner and all of its, past, present and future, officers, agents and employees from all suits, cause of action, claims, liabilities, losses, fines, penalties, liens, demands, obligations, actions, proceedings, of any kind, character, name and description brought or arising, on account of any injuries or damages received or sustained by any person, destruction or damage to any property on account of, in whole or part, the operations of the Contractor, his agents, employees or subcontractors; or on account of any negligent act or fault of the Contractor, his agents, employees or subcontractors in the execution of said Contract; failing to comply with any law, ordinance, regulation, rule or order of any governmental or regulatory body including those dealing with health, safety, welfare or the environment; on account of the failure of the Contractor

to provide the necessary barricades, warning lights or signs; and shall be required to pay any judgment, with cost, which may be obtained against the Owner growing out of such injury or damage. In no event shall Owner be liable to Contractor for indirect or consequential damages or loss of income or profit irrespective of the cause, fault or reason for same. Contractor's duty to indemnify herein shall not be limited by any limitation on the type or amount of damages payable by or for Contractor or any Subcontractor under workman's compensation acts, disability benefit acts or any other employee benefit acts.

In addition, the Contractor likewise covenants and agrees to, and does hereby, indemnify and hold harmless the Owner from and against any and all injuries, loss or damages to property of the Owner during the performance of any of the terms and conditions of this Contract, arising out of or in connection with or resulting from, in whole or in part, any and all alleged acts or omissions of officers, agents, servants, employees, contractors, subcontractors, licenses or invitees of the Contractor.

The rights and responsibilities provided in this indemnification provision shall survive the termination or completion of this Contract.

1.29 CONSTRUCTION SCHEDULE

- A. The time for completion is set forth herein and will be included in the Contract. All work shall be completed within the consecutive calendar day count shown in the Contractor's bid. The calendar day count shall commence ten (10) consecutive calendar days after the date of the Notice to Proceed.
- B. Prior to the issuance of the Notice to Proceed by Owner, the Contractor shall submit a detailed progress and schedule chart to Owner for review. This chart will be used to assure completion of the job within the number of consecutive calendar days stated in bid documents.

1.30 DELAYS AND EXTENSIONS OF TIME

- A. If the Contractor is delayed at any time in the commencement or progress of the Work by an act or neglect of the Owner or Architect, or of an employee of either, or of a separate contractor employed by the Owner, or by changes ordered in the Work, or by labor disputes, fire, unusual delay in deliveries, unavoidable casualties or other causes beyond the Contractor's control, or by delay authorized by the Owner pending mediation and arbitration, or by other causes which the Architect determines may justify delay, then the Contract Time shall be extended by Change Order for such reasonable time as the Architect may determine.
- B. If adverse weather conditions are the basis for a Claim for additional time, such Claim shall be documented by data substantiating that weather conditions were abnormal for the period of time and could not have been reasonably anticipated, and that the weather conditions had an adverse effect on the scheduled construction.
- C. Contractor's sole remedy for any delays in the project, which are not the fault of the Contractor, shall be an equitable extension of time to perform the work, required by the Contract. In no event shall the Contractor be entitled to make a claim for delay, impact or acceleration damages against the Owner.

1.31 DAMAGES

A. Should the contractor fail to complete the project within the specified completion schedule the sum of \$200.00 per calendar day will be deducted from the moneys due the contractor for the work. This sum shall not be considered as a penalty, but rather as reasonable liquidated damages, since it would be impracticable or extremely difficult to fix the actual damages. An extension of time may be allowed for delays beyond the control of the contractor at the discretion of Owner.

1.32 TERMINATION

This contract shall remain in effect until any of the following occurs:

- A. completion of project;
- B. acceptance of work ordered; or
- C. termination by either party pursuant to the terms of the Contract with a thirty (30) days written notice prior to cancellation that must state therein the reasons for such cancellation.
- D. Breach of the contract by the Contractor for failure
 - 1. to meet completion schedules, or
 - 2. otherwise perform in accordance with these specifications.

Breach of contract or default authorizes the County to purchase elsewhere and charge the full increase in cost and handling to the defaulting Contractor.

1.33 PATENTS - COPYRIGHTS

- A. The contractor agrees to protect Owner from any claims involving infringements of patents and/or copyrights. In no event shall Owner be liable to a contractor for any/all suits arising on the grounds of patent(s) or copyright(s) infringement.

1.34 VENUE; GOVERNING LAW

- A. This contract will be governed by the laws of the State of Texas. Should any portion of this contract be in conflict with the laws of the State of Texas, the State laws shall invalidate only that portion. The remaining portion of the contract shall remain in effect. This contract is performable in Collin County, Texas.

1.35 ASSIGNMENT

- A. The contractor shall not sell, assign, transfer or convey this contract, in whole or in part, without the prior written approval from Collin County Commissioners' Court.

1.36 SILENCE OF SPECIFICATION

- A. The apparent silence of any part of the specification as to any detail or to the apparent omission from it of a detailed description concerning any point, shall be regarded as meaning that only the best commercial practices are to prevail. All interpretations of the specification shall be made on the basis of this statement.

1.37 PROVISION CONCERNING ESCALATOR CLAUSES

- A. Bid(s) containing any condition which provides for changes in the stated bid prices due to increase or decrease in the costs of materials, labor, or other items required for this project, will be rejected and returned to the bidder without being considered.

1.38 ESTIMATES OF QUANTITIES

- A. The quantities listed in the Bid Form will be considered as approximate and will be used for the comparison of bids. Payments will be made to the Contractor only for the actual quantities of work performed or materials furnished in accordance with the contract. The quantity of work to be done and the materials may be increased or decreased as provided for in the Contract Documents.

1.39 TREE PROTECTION OUTSIDE LIMITS OF WORK

- A. The Contractor will be required to obtain written authorization from Owner for the removal of any tree three inches (3") in diameter or greater for any area outside the limits of the street right-of-way or slope easement. It is the intent of Owner to preserve as much as possible the natural condition of the floodplains.

1.40 EXCAVATION/TRENCH SAFETY

A. TRENCH SAFETY

The Contractor shall be responsible for complying with state laws and federal regulations relating to trench safety, including those which may be enacted during the performance under this contract. The Contractor shall be responsible for selecting an appropriate method of providing trench safety after due consideration of the job conditions, location of utilities, pavement conditions and other relevant factors. Slope-back methods which may result in unnecessary displacement of utilities and/or destruction of pavement may not be used without permission from the Owner. The Contractor shall be responsible for providing to the Owner an acceptable trench safety plan signed and sealed by a Professional Architect qualified to do such work and registered in Texas. Devices used to provide trench safety such as trench shields and shoring systems will be likewise certified by professional Architects registered in the State of Texas or by a professional Engineer registered in the state of manufacture of the shield.

B. PAYMENT FOR TRENCH SAFETY

Payment for trench safety shall be by the lineal feet of trench exceeding a depth of five (5) ft. Excavation for slope-back methods shall be subsidiary to the trench safety pay item including replacement and recompaction. Excess excavation for other trench safety methods is also subsidiary to the trench safety pay item. Costs relating to the preparation of the trench safety plan including geotechnical investigation, testing and report preparation fees are all subsidiary to the pay item for trench safety. Should trench safety measures be required during contract performance where no pay item has been provided, then the Contractor shall immediately notify the Owner and, if directed to do so, provide trench safety under the provisions of the contract. Should the Owner fail to authorize the work, then the Contractor shall proceed under the provisions of the Contract. Trench safety requirements are mandatory and may not be waived.

C. PAYMENT FOR SPECIAL SHORING

Payment for special shoring, if any, shall be based on the square feet of shoring used.

- D. The Contractor must be made aware that on construction projects in which trench excavation will exceed a depth of five feet (5'), the uniform set of general conditions must require that the bid documents and the contract include detailed plans and specifications for adequate safety systems that meet Occupational Safety and Health Administration standards that will be in effect during the period of construction of the project. The Contractor shall provide a separate pay item for trench excavation safety in accordance with the Texas Health & Safety Code Chapter 756. The Contractor shall verify that these plans and specifications include a pay item for these same trench excavation safety systems, in accordance with Texas Government Code, Title 10, Section 2166.303, Uniform Trench Safety Conditions. The contractor shall insure that drainage from adjacent properties is not blocked by his/her excavations. Measurement and payment for excavation/trench safety systems will not be made directly, but considered subsidiary to the work.
- E. The Contractor shall be responsible for obtaining and paying for all surveys and testing, including geotechnical surveys and testing, necessary to insure it can comply with all laws regarding adequate trench excavation safety.

1.41 CONSTRUCTION STAKING

- A. Architect will provide the Contractor with primary horizontal and vertical control to consist of one construction baseline and two benchmarks.
- B. The Contractor shall take all necessary precautions to preserve any and/or all markings and staking. Payment for costs of restaking shall be the responsibility of the Contractor.

1.42 PERMITS

- A. Contractor shall be responsible for obtaining all necessary permits.

1.43 MATERIALS TESTING

- A. Owner will be responsible for all materials testing.

1.44 STORM WATER PROTECTION

A. The Contractor shall perform, track, participate, implement, and comply with storm water pollution prevention minimum control measures, protocols, and best management practices (BMP) and ensure that water quality standards are not violated in accordance with all regulations and policies as they apply to the Texas Pollutant Discharge Elimination System general permits. Applicable permits include: 1) Texas Construction General Permit (TXR150000).

Contractors will obtain permit coverage for construction activities disturbing over one acre of land (total acreage is cumulative across all portions of the project). BMPs include, but are not limited to:

- Preparing and implementing a site-specific Storm Water Pollution Prevention Plan (SWPPP) as outlined in the permit and prior to any soil disturbance.
- Installing and managing erosion and sediment control.
- Make available, upon request, permit associated documentation.
- Practicing spill prevention and good housekeeping.
- Meeting the requirements of the MS4 permit.

1.45 WAGE SCALE

- A. In accordance with Texas Government Code, Title 10, Section 2258, Prevailing Wage Rates, the general prevailing wage rate has been determined for this locality for the craft or type of workman needed to execute work of a similar character of the project listed herein. The Contractor shall pay the prevailing wage rate in this locality to all his/her employees and

subcontractors performing work on this project, and in no event shall the Contractor pay less than the rate shown in the following schedule.

General Decision Number: TX170289 09/08/2017 TX289

Superseded General Decision Number: TX20160289

State: Texas

Construction Type: Building

County: Collin County in Texas.

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

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.20 for calendar year 2017 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.20 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2017. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number Publication Date

0	01/06/2017
1	01/27/2017
2	04/07/2017
3	04/14/2017
4	08/25/2017
5	09/08/2017

ASBE0021-011 06/01/2016

Rates Fringes

ASBESTOS WORKER/HEAT & FROST INSULATOR (Duct, Pipe and Mechanical System Insulation)....	\$ 24.32	7.52
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BOIL0074-003 01/01/2017

Rates Fringes

BOILERMAKER.....	\$ 28.00	22.35
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CARP1421-002 04/01/2016

Rates Fringes

MILLWRIGHT.....\$ 26.60 8.65

ELEV0021-006 01/01/2017

Rates Fringes

ELEVATOR MECHANIC.....\$ 38.77 31.585+a+b

FOOTNOTES:

A. 6% under 5 years based on regular hourly rate for all hours worked. 8% over 5 years based on regular hourly rate for all hours worked.

B. New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and Veterans Day.

ENGI0178-005 06/01/2014

Rates Fringes

POWER EQUIPMENT OPERATOR

(1) Tower Crane.....\$ 29.00 10.60

(2) Cranes with Pile

Driving or Caisson

Attachment and Hydraulic

Crane 60 tons and above.....\$ 28.75 10.60

(3) Hydraulic cranes 59

Tons and under.....\$ 27.50 10.60

* IRON0263-005 06/01/2017

Rates Fringes

IRONWORKER (ORNAMENTAL AND
STRUCTURAL).....\$ 23.25 7.32

PLUM0100-005 05/01/2017

Rates Fringes

HVAC MECHANIC (HVAC Unit
Installation Only).....\$ 30.19 11.31

PIPEFITTER (Excludes HVAC
Pipe Installation).....\$ 30.19 11.31

SUTX2014-015 07/21/2014

Rates Fringes

BRICKLAYER.....	\$ 21.06	0.00
CARPENTER, Excludes Drywall Hanging, Form Work, and Metal Stud Installation.....	\$ 15.78	0.00
CAULKER.....	\$ 15.16	0.00
CEMENT MASON/CONCRETE FINISHER...	\$ 13.04	0.00
DRYWALL HANGER AND METAL STUD INSTALLER.....	\$ 13.00	0.00
ELECTRICIAN (Alarm Installation Only).....	\$ 20.93	3.86
ELECTRICIAN (Communication Technician Only).....	\$ 15.35	1.39
ELECTRICIAN (Low Voltage Wiring Only).....	\$ 17.04	1.39
ELECTRICIAN, Excludes Low Voltage Wiring and Installation of Alarms/Sound and Communication Systems.....	\$ 20.01	2.69
FORM WORKER.....	\$ 11.89	0.00
GLAZIER.....	\$ 16.46	3.94
HIGHWAY/PARKING LOT STRIPING: Operator (Striping Machine).....	\$ 10.04	2.31
INSTALLER - SIDING (METAL/ALUMINUM/VINYL).....	\$ 14.74	0.00
INSTALLER - SIGN.....	\$ 15.50	0.00
INSULATOR - BATT.....	\$ 13.00	0.00
IRONWORKER, REINFORCING.....	\$ 12.29	0.00
LABORER: Common or General.....	\$ 10.52	0.00
LABORER: Mason Tender - Brick...	\$ 10.54	0.00
LABORER: Mason Tender -		

Cement/Concrete.....	\$ 10.93	0.00
LABORER: Pipelayer.....	\$ 13.00	0.35
LABORER: Plaster Tender.....	\$ 12.22	0.00
LABORER: Roof Tearoff.....	\$ 11.28	0.00
LABORER: Landscape and Irrigation.....	\$ 10.55	0.00
LATHER.....	\$ 16.00	0.00
OPERATOR: Backhoe/Excavator/Trackhoe.....	\$ 12.83	0.00
OPERATOR: Bobcat/Skid Steer/Skid Loader.....	\$ 13.93	0.00
OPERATOR: Bulldozer.....	\$ 18.29	1.31
OPERATOR: Drill.....	\$ 15.69	0.50
OPERATOR: Forklift.....	\$ 13.21	0.81
OPERATOR: Grader/Blade.....	\$ 13.03	0.00
OPERATOR: Loader.....	\$ 13.46	0.85
OPERATOR: Mechanic.....	\$ 17.52	3.33
OPERATOR: Paver (Asphalt, Aggregate, and Concrete).....	\$ 18.44	0.00
OPERATOR: Roller.....	\$ 15.04	0.00
PAINTER (Brush, Roller and Spray), Excludes Drywall Finishing/Taping.....	\$ 13.35	5.10
PAINTER: Drywall Finishing/Taping Only.....	\$ 14.24	3.83
PIPEFITTER (HVAC Pipe Installation Only).....	\$ 20.45	4.00
PLASTERER.....	\$ 16.58	0.00
PLUMBER, Excludes HVAC Pipe Installation.....	\$ 22.46	4.06

ROOFER.....	\$ 17.19	0.00
SHEET METAL WORKER (HVAC Duct Installation Only).....	\$ 21.13	4.79
SHEET METAL WORKER, Excludes HVAC Duct Installation.....	\$ 24.88	5.97
SPRINKLER FITTER (Fire Sprinklers).....	\$ 37.50	0.00
TILE FINISHER.....	\$ 11.22	0.00
TILE SETTER.....	\$ 14.25	0.00
TRUCK DRIVER: 1/Single Axle Truck.....	\$ 16.00	0.81
TRUCK DRIVER: Dump Truck.....	\$ 12.39	1.18
TRUCK DRIVER: Flatbed Truck.....	\$ 19.65	8.57
TRUCK DRIVER: Semi-Trailer Truck.....	\$ 12.50	0.00
TRUCK DRIVER: Water Truck.....	\$ 12.00	4.11

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

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

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

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

Union Rate Identifiers

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

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

Survey Rate Identifiers

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

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

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

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

WAGE DETERMINATION APPEALS PROCESS

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

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

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

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

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

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

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

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

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

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

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

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END OF GENERAL DECISION

- B. Except for work on legal holidays, the “General Prevailing Rate of Per Diem Wage” for the various crafts or type of workers or mechanics is the product of (a) the number of hours worked per day, except for overtime hours, times (b) the above respective rate per hour.
- C. For legal holidays, the “General Prevailing Rate of Per Diem Wage” for the various crafts or type of workers or mechanics is the product of (a) one and one-half times the above respective rate per hour, times (b) the number of hours worked on the legal holiday.
- D. For overtime work, the “General Prevailing Rate of Per Diem Wage” for the various crafts or type of workers or mechanics is the product of (a) one and one-half times the above respective rate per hour, times (b) the number of hours worked on overtime.
- E. Under the provisions of Texas Government Code, Title 10, Section 2258, Prevailing Wage Rates, the contractor or subcontractor of the contractor shall forfeit as a penalty to the entity on whose behalf the contract is made or awarded, sixty dollars (\$60.00) for each calendar day, or portion thereof, that the worker is paid less than the wage rates stipulated in the contract.
- F. If the construction project involves the expenditure of Federal funds in excess of \$2,000, the minimum wages to be paid various classes of laborers and mechanics will be based upon the wages that will be determined by the Secretary of Labor to be prevailing for the corresponding classes of laborers and mechanics employed on the project of a character similar to the contract work.

1.46 Collin County Purchasing Department shall serve as Contract Administrator or shall supervise agents designated by Collin County.

1.47 All warranties shall be stated as required in the Uniform Commercial Code.

1.48 The Contractor and Collin County agree that both parties have all rights, duties, and remedies available as stated in the Uniform Commercial Code.

1.49 Contractor shall not fraudulently advertise, publish or otherwise make reference to the existence of a contract between Collin County and Contractor for purposes of solicitation. As exception, Contractor may refer to Collin County as an evaluating reference for purposes of establishing a contract with other entities.

1.50 Contractor shall provide Collin County with diagnostic access tools at no additional cost to Collin County, for all Electrical and Mechanical systems, components, etc., procured through this contract.

1.51 **CRIMINAL HISTORY BACKGROUND CHECK:** If required, ALL individuals may be subject to a criminal history background check performed by the Collin County's Sheriff's Office prior to access being granted to Collin County property or facilities. Upon request, Contractor shall provide list of individuals to Collin County Purchasing Department within five (5) working days.

1.52 Vendors/Contractors/Providers must be in compliance with the Immigration and Reform Act of 1986 and all employees specific to this solicitation must be legally eligible to work in the United States of America.

1.53 **CERTIFICATION OF ELIGIBILITY:** This provision applies if the anticipated Contract exceeds \$100,000.00 and as it relates to the expenditure of federal grant funds. By submitting a bid

or proposal in response to this solicitation, the Bidder/Quoter/Offeror certifies that at the time of submission, he/she is not on the Federal Government's list of suspended, ineligible, or debarred contractors. In the event of placement on the list between the time of bid/proposal submission and time of award, the Bidder/Quoter/Offeror will notify the Collin County Purchasing Agent. Failure to do so may result in terminating this contract for default.

1.54 NOTICE TO CONTRACTORS: The Collin County Detention Facility houses persons who have been charged with and/or convicted of serious criminal offenses. When entering the Detention Facility, you could: (1) hear obscene or graphic language; (2) view partially clothed male inmates; (3) be subjected to verbal abuse or taunting; (4) risk physical altercations or physical contact, which could be minimal or possibly serious; (5) be exposed to communicable or infectious diseases; (6) be temporarily detained or prevented from immediately leaving the Detention Facility in the case of an emergency or "lockdown; and (7) subjected to a search of your person or property. While the Collin County Sheriff's Office takes every reasonable precaution to protect the safety of visitors to the Detention Facility, because of the inherently dangerous nature of a Detention Facility and the type of the persons incarcerated therein, please be advised that the possibility of such situations exist and you should carefully consider such risks when entering the Detention Facility. By entering the Collin County Detention Facility, you acknowledge that you are aware of such potential risks and willingly and knowingly choose to enter the Collin County Detention Facility.

1.55 Contractors doing business with OWNER agree to comply with Federal Executive Order 13465 E-Verify. It is OWNER's intention and duty to comply and support the Immigration and Nationality Act (INA) which includes provisions addressing employment eligibility, employment verification and non-discrimination. According to the INA, contractors/employers may hire only persons who may legally work in the United States. Subsequently, contractors and subcontractors doing business with OWNER must confirm their enrollment in the E-Verify system which verifies employment eligibility through completion and checking of I-9 forms. OWNER reserves the right to audit contractors process to verify enrollment compliance.

1.56 INSURANCE REQUIREMENTS

A. CONTRACTOR'S INSURANCE

1. Before commencing work, the CONTRACTOR and each subcontractor shall be required, at its own expense, to furnish the Collin County Purchasing Agent with certified copies of all insurance certificate(s) required by Texas Law, and the coverages required herein, indicating the coverage is to remain in force throughout the term of this Contract. Without limiting any of the other obligations or liabilities of the CONTRACTOR, during the term of the Contract the CONTRACTOR and each subcontractor at their own expense shall purchase and maintain the herein stipulated minimum insurance with companies duly approved to do business in the State of Texas and satisfactory to the OWNER. Certificates of each policy shall be delivered to the OWNER before any work is started, along with a written statement from the issuing company stating that said policy shall not be canceled, nonrenewed or materially changed without 30 days advance written notice being given to the OWNER.

2. In addition to any coverage required by Texas Law, the CONTRACTOR shall provide the following coverages at not less than the specified amounts:

B. Workers Compensation insurance required by Texas Law at statutory limits, including employer's liability coverage of not less than \$1,000,000. In addition to these, the CONTRACTOR must comply with all the requirements of the Texas

Department of Insurance, Division of Workers' Compensation; (Note: If you have questions concerning these requirements, you are instructed to contact the DWC.)

1. By signing this contract or providing or causing to be provided a certificate of coverage, the CONTRACTOR is representing to the OWNER that all employees of the CONTRACTOR and its subcontractors 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 commission's Division of Self-Insurance Regulation. Providing false or misleading information may subject the CONTRACTOR to administrative penalties, criminal penalties, civil penalties, or other civil actions.

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

- C. Broad form commercial general liability insurance, including independent contractor's liability, completed operations and contractual liability, written on an occurrence form, covering, but not limited to, the liability assumed under the indemnification provisions of this contract, fully insuring CONTRACTOR'S (or subcontractor's) liability for injury to or death of OWNER'S employees and third parties, extended to include personal injury liability coverage with damage to property, with minimum limits as set forth below:

General Aggregate \$2,000,000

Products — Components/Operations Aggregate \$2,000,000

Personal and Advertising Injury \$ 1,000,000

Each Occurrence \$ 1,000,000

1. The policy shall include coverage extended to apply to completed operations, asbestos hazards (if this project involves work with asbestos) and XCU (explosion, collapse and underground) hazards. The completed operations coverage must be maintained for a minimum of one year after final completion and acceptance of the work, with evidence of same filed with OWNER.

- D. Comprehensive automobile and truck liability insurance, covering owned, hired and non-owned vehicles, with a combined bodily injury and property damage minimum limit of \$1,000,000 per occurrence; or separate limits of \$1,000,000 for bodily injury (per person), \$1,000,000 for bodily injury (per accident) and \$1,000,000 for property damage. Such insurance shall include coverage for loading and unloading hazards.

- E. OWNER'S PROTECTIVE LIABILITY INSURANCE

CONTRACTOR shall obtain, pay for and maintain at all times during the prosecution of the work under this contract an OWNER'S protective liability insurance policy naming the OWNER as insured for property damage and bodily injury, which may arise in the prosecution of the Work or CONTRACTOR'S operations under this Contract. Coverage shall be on an "occurrence" basis, and the

policy shall be issued by the same insurance company that carries the CONTRACTOR'S liability insurance with a combined bodily injury and property damage minimum limit of \$1,000,000 per occurrence and \$2,000,000 aggregate.

F. "UMBRELLA" LIABILITY INSURANCE

CONTRACTOR shall obtain, pay for and maintain umbrella liability insurance during the contract term, insuring CONTRACTOR for an amount of not less than \$1,000,000 per occurrence combined limit for bodily injury and property damage that follows from and applies in excess of the primary liability coverages required hereinabove. The policy shall provide "drop down" coverage where underlying primary insurance coverage limits are insufficient or exhausted. OWNER shall be named as an additional insured.

G. RAILROAD PROTECTIVE INSURANCE

When required in the Special Provisions, CONTRACTOR shall obtain, maintain and present evidence of railroad protective insurance (RPI). The policy shall be in the name of the railroad company having jurisdiction over the right-of-way involved. The minimum limit of coverage shall meet the specifications provided by the railroad company. The OWNER shall specify the amount of RPI necessary.

H. POLICY ENDORSEMENTS AND SPECIAL CONDITIONS

1. Each insurance policy to be furnished by CONTRACTOR shall include the following conditions by endorsement to the policy:

- (a) each policy shall name the OWNER as an additional insured as to all applicable coverage;
- (b) each policy shall require that 30 days prior to the cancellation, nonrenewal or any material change in coverage, a notice thereof shall be given to OWNER by certified mail;
- (c) the term "OWNER" shall include all past, present or future, authorities, boards, bureaus, commissions, divisions, departments and offices of the OWNER and individual members, elected official, officers, employees and agents thereof in their official capacities and/or while acting on behalf of the OWNER;
- (d) the policy phrase "other insurance" shall not apply to the OWNER where the OWNER is an additional insured on the policy;
- (e) all provisions of the contract concerning liability, duty and standard of care together with the indemnification provision, shall be underwritten by contractual liability coverage sufficient to include such obligations within applicable policies;
- (f) each policy shall contain a waiver of subrogation in favor of OWNER, and its, past, present and future, officials, employees, and volunteers; and,
- (g) each certificate of insurance shall reference the Project and Contract number, contain all the endorsement required herein, and require a notice to the OWNER of cancellation.

2. Insurance furnished by the CONTRACTOR shall be in accordance with the following requirements:

- (a) any policy submitted shall not be subject to limitations, conditions or restrictions deemed inconsistent with the intent of the insurance requirements to be fulfilled by the CONTRACTOR. The OWNER'S decision thereon shall be final;
- (b) all policies are to be written through companies duly licensed to transact that class of insurance in the State of Texas with a financial ratings of A+ VII or better as assigned by BEST Rating Company or equivalent; and
- (c) All liability policies required herein shall be written with an "occurrence" basis coverage trigger.

3. CONTRACTOR agrees to the following:

- (a) CONTRACTOR hereby waives subrogation rights for loss or damage to the extent same are covered by insurance. Insurers shall have no right of recovery or subrogation against the OWNER, it being the intention that the insurance policies shall protect all parties to the Contract and be primary coverage for all losses covered by the policies;
- (b) Companies issuing the insurance policies and CONTRACTOR shall have no recourse against the OWNER for payment of any premiums or assessments for any deductibles, as all such premiums and deductibles are the sole responsibility and risk of the CONTRACTOR;
- (c) Approval, disapproval or failure to act by the OWNER regarding any insurance supplied by the CONTRACTOR (or any subcontractors) shall not relieve the CONTRACTOR of full responsibility or liability for damages and accidents as set forth in the Contract Documents. Neither shall the bankruptcy, insolvency or denial of liability by the insurance company exonerate the CONTRACTOR from liability; and
- (d) No special payments shall be made for any insurance that the CONTRACTOR and subcontractors are required to carry; all are included in the Contract Price and the Contract unit prices. Any of such insurance policies required under this section may be written in combination with any of the others, where legally permitted, but none of the specified limits may be lowered thereby.

1.57 Vendors/Contractors/Providers must be in compliance with the provisions of Section 2270.001 of the Texas Government Code which states a governmental entity may not enter into a contract with a company for goods or services unless the contract contains a written verification from the company that it: (1) does not boycott Israel; and, (2) will not boycott Israel during the term of the contract. By submitting a response to a Collin County solicitation, the vendor will be required to sign the Chapter 2270 Verification form prior to a recommendation of the contract. This Act is effective September 1, 2017.

1.58 Vendors/Contractors/Providers must be in compliance with the provisions of Section 2252.152 and Section 2252.153 of the Texas Government Code which states, in part, contracts with companies engaged in business with Iran, Sudan, or Foreign Terrorist Organizations are prohibited. A governmental entity may not enter into a contract with a company that is listed on the Comptroller of the State of Texas website identified under Section 806.051, Section 807.051 or Section 2253.253 which do business with Iran, Sudan or any Foreign Terrorist Organization. This Act is effective September 1, 2017.

Section 00410-Bid Form Collin County, Texas

Bid Information

Bid Owner JD Griffin, CPPB Buyer II
 Email jgriffin@co.collin.tx.us
 Phone (972) 548-4116
 Fax (972) 548-4694
 Bid Number 2018-042
 Title Construction, Myers Park
 Hardscape Improvements
 Bid Type IFB
 Issue Date 11/14/2017
 Close Date 12/7/2017 12:00:00 PM (CT)

Contact Information

Address 2300 Bloomdale Rd.
 Ste. 3160
 McKinney, TX 75071
 Contact JD Griffin, CPPB Buyer II
 Department Purchasing
 Building Admin. Building
 Floor/Room Ste.3160
 Telephone (972) 548-4116
 Fax (972) 548-4694
 Email jgriffin@co.collin.tx.us

Ship to Information

Address 7117 CR 166
 McKinney, TX 75071
 Contact
 Department Myers Park
 Building
 Floor/Room
 Telephone
 Fax
 Email

Supplier Information

Company Name _____
 Contact Name _____
 Address _____

 Telephone _____
 Fax _____
 Email _____

Supplier Notes

The undersigned hereby certifies the foregoing bid submitted by the company listed below hereinafter called "bidder" is the duly authorized agent of said company and the person signing said bid has been duly authorized to execute same. Bidder affirms that they are duly authorized to execute this contract; this company; corporation, firm, partnership or individual has not prepared this bid in collusion with any other bidder or other person or persons engaged in the same line of business; and that the contents of this bid as to prices, terms and conditions of said bid have not been communicated by the undersigned nor by any employee or agent to any other person engaged in this type of business prior to the official opening of this bid.

Signature _____ Date ____ / ____ / ____

Bid Notes

Please log in to view bid documents.

Bid Activities

Date	Name	Description
11/28/2017 02:00 PM (CT)	Pre-Bid Conference	A PRE-BID CONFERENCE will be held by Collin County at Collin County Myers Park, located at 7117 CR 166, McKinney, TX 75071 on Tuesday, November 28, 2017, at 2:00 PM in order for bidders to ask questions regarding the proposed work. Meet in front of park office (Haggard House).
12/1/2017 05:00 PM (CT)	Intent to Bid	Do you intend to submit a bid?

Bid Messages

Bid Attachments

The following attachments are associated with this opportunity and will need to be retrieved separately

#	Filename	Description
Header	LEGAL NOTICE-2018-042.doc	Legal Notice
Header	Specifications.pdf	Specifications
Header	Drawings.pdf	Drawings

Bid Attachments Requested

The following attachments are requested with this opportunity

#	Required	Specified Attachment
1	YES	Section 00410 Bid Schedule
2	YES	<p>Bid Bond : All Bidders must submit, prior to the bid opening time, a cashier's check or acceptable Bid Bond payable without recourse to Collin County in the amount of not less than five percent (5%) of the total bid plus alternates as submitted.</p> <p>1. Bid Bond or Cashier's Check may be mailed or hand delivered to the Office of the Collin County Purchasing Agent, Collin County Administration Building, 2300 Bloomdale Road, Ste 3160, McKinney, TX 75071 and shall be delivered in an envelope, marked plainly on the outside with the Bid Name and Number.</p> <p>2. Bid Bond may be faxed to the Purchasing Department at 972-548-4694.</p> <p>3. Bid Bond may be e-mailed to: jgriffin@co.collin.tx.us</p> <p>4. Bid Bond may be uploaded to Collin County eBid.</p> <p>Regardless of delivery method, all Bid Bonds shall be received prior to the bid opening time to be considered.</p>
3	NO	W-9
4	NO	Conflict of Interest Questionnaire

Bid Attributes

Please review the following and respond where necessary

#	Name	Note	Response
1	Calendar Days Bid	Please state the consecutive calendar days bid.	_____ (Required)
2	Exceptions	<p>Do you take exceptions to the specifications. If so, by separate attachment, please state your exceptions.</p> <p>Valid Responses: [Please Select], Yes, No</p>	_____ (Required)
3	Insurance	<p>I understand that the insurance requirements of this solicitation are required and a certificate of insurance shall be submitted to the Purchasing department if I am awarded all or a portion of the resulting contract.</p> <p>Please initial.</p>	_____ (Required)
4	Subcontractors	<p>State the business name of all subcontractors and the type of work they will be performing under this contract.</p> <p>If you are fully qualified to self-perform the entire contract, please respond with "Not Applicable-Self Perform".</p>	_____ (Required)
5	Reference No. 1	<p>List a company or governmental agency where these same/like products /services, as stated herein, have been provided.</p> <p>Include the following: Company/Entity, Contact, Address, City/State/Zip, Phone, and E-Mail.</p>	_____ (Required)
6	Reference No. 2	List a company or governmental agency where these same/like products /services, as stated herein, have been	_____ (Required)

provided.

Include the following: Company/Entity, Contact, Address, City/State/Zip, Phone, and E-Mail.

7 Reference No. 3

List a company or governmental agency where these same/like products /services, as stated herein, have been provided.

_____ (Required)

Include the following: Company/Entity, Contact, Address, City/State/Zip, Phone, and E-Mail.

8 Preferential Treatment

The County of Collin, as a governmental agency of the State of Texas, may not award a contract to a nonresident bidder unless the nonresident's bid is lower than the lowest bid submitted by a responsible Texas resident bidder by the same amount that a Texas resident bidder would be required to underbid a nonresident bidder to obtain a comparable contract in the state in which the nonresident's principal place of business is located (Government Code, Title 10, V.T.C.A., Chapter 2252, Subchapter A).

_____ (Required)

1. Is your principal place of business in the State of Texas?

2. If your principal place of business is not in Texas, in which State is your principal place of business?

3. If your principal place of business is not in Texas, does your state favor resident bidders (bidders in your state) by some dollar increment or percentage?

4. If your state favors resident bidders, state by what dollar amount or percentage.

9 Debarment Certification

I certify that neither my company nor an owner or principal of my company has been debarred, suspended or otherwise made ineligible for participation in Federal Assistance programs under Executive Order 12549, "Debarment and Suspension," as described in the Federal Register and Rules and Regulations.

_____ (Required)

Please initial.

10 Immigration and Reform Act

I declare and affirm that my company is in compliance with the Immigration and Reform Act of 1986 and all employees are legally eligible to work in the United States of America.

_____ (Required)

I further understand and acknowledge that any non-compliance with the Immigration and Reform Act of 1986 at any time during the term of this contract will render the contract voidable by Collin County.

Please initial.

11 Disclosure of Certain Relationships

Chapter 176 of the Texas Local Government Code requires that any vendor considering doing business with a local government entity disclose the vendor's affiliation or business relationship that might cause a conflict of interest with a local government entity. Subchapter 6 of the code requires a vendor to file a conflict of interest questionnaire (CIQ) if a conflict exists. By law this questionnaire must be filed with the records administrator of Collin County no later than the 7th business day after the date the vendor becomes aware of an event that requires the statement to be filed. A vendor commits an offense if the vendor knowingly violates the code. An offense under this section

_____ (Required)

is a misdemeanor.

By submitting a response to this request, the vendor represents that it is in compliance with the requirements of Chapter 176 of the Texas Local Government Code.

Please send completed forms to the Collin County County Clerk's Office located at 2300 Bloomdale Rd., Suite 2104, McKinney, TX 75071.

Please initial.

12 Anti-Collusion Statement

Bidder certifies that its Bid/Proposal is made without prior understanding, agreement, or connection with any corporation, firm, or person submitting a Bid/Proposal for the same materials, services, supplies, or equipment and is in all respects fair and without collusion or fraud. _____ (Required)

No premiums, rebates or gratuities permitted; either with, prior to, or after any delivery of material or provision of services. Any such violation may result in Agreement cancellation, return of materials or discontinuation of services and the possible removal from bidders list.

Please initial.

13 Disclosure of Interested Parties

Section 2252.908 of the Texas Government Code requires a business entity entering into certain contracts with a governmental entity to file with the governmental entity a disclosure of interested parties at the time the business entity submits the signed contract to the governmental entity. Section 2252.908 requires the disclosure form (Form 1295) to be signed by the authorized agent of the contracting business entity, acknowledging that the disclosure is made under oath and under penalty of perjury. Section 2252.908 applies only to a contract that requires an action or vote by the governing body of the governmental entity before the contract may be signed or has a value of at least \$1 million. Section 2252.908 provides definitions of certain terms occurring in the section. _____ (Required)

Section 2252.908 applies only to a contract entered into on or after January 1, 2016.

Please initial.

14 Notification Survey

In order to better serve our offerors, the Collin County Purchasing Department is conducting the following survey. We appreciate your time and effort expended to submit your bid. Should you have any questions or require more information please call (972) 548-4165. _____ (Required)

How did you receive notice of this request?

Valid Responses: [Please Select], Plano Star Courier, Plan Room, Collin County eBid Notification, Collin County Website, Other

15 Bid Bond Acknowledgement

Accompanying this bid, is a certified check, cashier's check or Bid Bond in the amount of five percent (5%) of the total amount bid. Also accompanying this bid, all the information required in Section 00200 – Instructions to Bidders. _____ (Required)

Please initial.

16 Construction Acknowledgement

Bidder, declares that the only person or parties interested in this bid are those principals named herein, that his/her _____ (Required)

bid is made without collusion with any other person, firm or corporation, that he/she has carefully examined the Contract Documents including the Advertisement for Bids, Instruction to Bidders, Construction Agreement, Specifications and the Drawings, and all Addenda therein referred to and has carefully examined the locations, conditions and classes of materials for the proposed work, and agrees that he/she will provide all the necessary labor, machinery, tools, equipment, apparatus and other items incidental to construction and will do all the work and furnish all the materials called for in the Contract Documents in the manner prescribed therein.

Bidder hereby declares that he/she has visited the site of the Work and has carefully examined the Contract Documents pertaining to the Work covered by the above Bid, and he/she further agrees to commence work within ten (10) consecutive calendar days after date of written Notice to Proceed and to substantially complete the work on which he/she has bid within the number of days specified subject to such extensions of time allowed by Specifications.

Bidder certifies that the bid prices contained in this bid have been carefully checked and are submitted as correct and final. The prices have been shown in words and figures for each item listed in this bid and it is understood that in the event of a discrepancy, the words shall govern.

Please initial.

Line Items

#	Qty	UOM	Description	Response
1	1	lump sum	Bid Grand Total	\$ _____ (Required) Price

Supplier Notes: _____

Item Attributes: Please review the following and respond where necessary

#	Name	Note	Response
1	Bid Grand Total- Written in Words	The contract award will be based on the total bid price.	_____ (Required)
2	Total Material Cost Incorporated in Project		\$ _____ (Required)
3	Total Material Cost Incorporated in Project- Written in Words		_____ (Required)
4	Total Labor Cost Incorporated in Project		\$ _____ (Required)
5	Total Labor Cost Incorporated in Project- Written in Words		_____ (Required)

Section 00410-Bid Schedule

MYERS PARK HARDSCAPE IMPROVEMENTS

<u>Item</u>	<u>Landscape Architect's Estimated Quantity</u>	<u>Contractor's Bid Quantity</u>	<u>Unit Price</u>	<u>Item Total Amount</u>
A. <u>HARDSCAPE</u>				
1. Survey and Layout of all Hardscape elements	1 l.s.	_____ l.s.	_____/l.s.	\$ _____
2. Fine Grading	1 l.s.	_____ l.s.	_____/l.s.	\$ _____
3. Remove & Reset Existing Stone Edgers	1 l.s.	_____ l.s.	_____/l.s.	\$ _____
4. Parking Paint Striping	1 l.s.	_____ l.s.	_____/l.s.	\$ _____
5. Flagstone Paving On Flex Base (Re: B/L2.1) Complete & In Place	2469 s.f.	_____ s.f.	_____/s.f.	\$ _____
6. Relocate Existing Brick Field Paver (Re: C/L2.1) Complete & In Place	1 l.s.	_____ l.s.	_____/l.s.	\$ _____
7. Stone Boulders & Topsoil Backfill (Re: A & E/L2.1)	1 l.s.	_____ l.s.	_____/l.s.	\$ _____
8. Flagstone Terrace Steps (Re: F/L2.1) Complete & In Place	37 l.f.	_____ l.f.	_____/l.f.	\$ _____
9. Flume Structure with Flagstone Paving and River Rock (Re: C & D/L2.2) Complete & In Place	2 ea.	_____ ea.	_____/ea.	\$ _____
10. Accessible Parking – 7" Thick 4000 PSI Reinforced Concrete	29 s.y.	_____ s.y.	_____/s.y.	\$ _____
11. Accessible Parking Sign (Re: A/L2.2) Complete & In Place	1 ea.	_____ ea.	_____/ea.	\$ _____
12. Handrail (Re: D/L2.1) Complete & In Place	58 l.f.	_____ l.f.	_____/l.f.	\$ _____
13. Solid Sod Bermuda Grass w/ Temporary Irrigation	1 l.s.	_____ l.s.	_____/l.s.	\$ _____
MISCELLANEOUS ITEMS NOT LISTED, BUT NEEDED FOR A COMPLETE HARDSCAPE INSTALLATION				
14. _____				\$ _____
15. _____				\$ _____
HARDSCAPE TOTAL BID:				\$ _____

00430 BID BOND

STATE OF TEXAS §
COUNTY OF COLLIN §

KNOW ALL MEN BY THESE PRESENTS:

THAT _____, a corporation organized and existing under the laws of the State of _____, and fully authorized to transact business in the State of Texas, whose address is _____ of the City of _____ County of _____, and State of _____, (hereinafter referred to as "Principal"), and _____ (hereinafter referred to as "Surety", a corporation organized under the laws of the State of _____ and authorized under the laws of the State of Texas to act as surety on bonds for principals, are held and firmly bound unto _____ (hereinafter referred to as "Owner") and unto all persons, firms and corporations who may furnish materials for or perform labor upon the buildings, structures or improvements referred to in the attached Contract, in the penal sum of _____ Dollars (\$ _____) in lawful money of the United States, for the payment whereof, the said Principal and Surety bind themselves, and their heirs, administrators, executors, successors, and assigns, jointly and severally, firmly by these presents:

SIGNED, SEALED and DATED this _____ day of _____ 20 _____.

WHEREAS, the Principal is herewith submitting its proposal for IFB 2018-042, Construction, Myers Park Hardscape Improvements

The condition of the above obligations are such that if the aforesaid Principal shall be awarded the Contract, the said Principal will, within the time required, enter into a Contract and give Bonds, if required, for the faithful performance of the Contract and the prompt payment for labor and materials in the prosecution thereof, then this obligation shall be null and void; otherwise the Principal and Surety will pay unto the OWNER the full penal sum hereof, as liquidated damages, it being difficult and impractical to determine accurately the actual amount of damages occurring to OWNER by reason of Principal's failure to execute said Contract and Bonds.

PROVIDED FURTHER, that if any legal action be filed on this Bond, venue shall lie in _____ County, Texas.

The Resident Agent of the Surety for delivery of notice and service of process is:

Name: _____
Address: _____
Phone Number: _____

WITNESS

PRINCIPAL

Printed/Typed Name _____
Title: _____
Company: _____

Address: _____

WITNESS

SURETY

Printed/Typed Name _____
Title: _____
Company: _____

Address: _____

NOTE: CERTIFIED COPY OF POWER-OF-ATTORNEY SHOULD BE ATTACHED HERETO.

DIVISION NO. 0

SECTION 00485

WARRANTY OF WORK AFTER FINAL PAYMENT

The Contractor does hereby warrant all work and materials to be in full and complete accordance with the Contract and all drawings, specifications, addendas and requirements appertaining thereto and that all work and materials are free from any and all defects and imperfections, and fully suitable for the use and purposes for which each and every part is intended. The Contractor also agrees that, should any defect develop or appear which the Landscape Architect finds was not caused by improper use, the Contractor shall promptly, upon demand, fully correct, substitute and make good any such defective material without any cost to the Owner and will save the Owner harmless against any claim, demand, loss or damage by reason of any breach of this warranty.

The period of warranty shall commence on the date that the Landscape Architect certifies Final Acceptance of all Work.

The warranty shall continue to be in full force and effect for the period on one (1) year, except for those items for which a longer period of warranty is specifically stated in the Technical Warranties of the Technical Sections. These additional warranties shall continue in full force and effect for the respective periods expressly stated.

IN WITNESS THEREOF, the undersigned has signed and sealed this instrument this ____ day of _____, 20____.

Firm Name: _____

By: _____

Title: _____

Attest: _____

(Seal if Bidder is a Corporation)

00500 CONSTRUCTION AGREEMENT

THIS CONSTRUCTION AGREEMENT is made and entered into by and between _____, a _____ corporation (hereinafter referred to as "Contractor"), and **COLLIN COUNTY, TEXAS**, a political subdivision of the State of Texas (hereinafter referred to as "County" or "OWNER"), to be effective from and after the date hereinafter provided.

For and in consideration of the covenants and agreements contained herein, and for the mutual benefits to be obtained hereby, the parties hereto agree as follows:

CONTRACT SUM

The County shall pay the Contractor in current funds for the performance of the work, subject to additions and deductions by Change orders as provided in the Contract Documents. The contract sum shall be the amount of (\$_____).

EFFECTIVE DATE

This Construction Agreement, having been previously approved by the Commissioners' Court of Collin County, Texas, shall be effective upon the date of delivery and execution by Contractor, provided the County executes the same within five (5) consecutive calendar days after said delivery and execution by Contractor.

I. CONTRACT GENERAL PROVISIONS

1.1 DEFINITIONS

Words which have well-known technical or construction industry meanings shall have their commonly understood meanings in the Contract Documents, unless a different meaning is stated in the Contract Documents. The following words and expressions, or pronouns used in their place, shall wherever they appear in this contract be construed as follows, unless a different meaning is clear from the context:

Addendum, Bulletin or Letter of Clarification: Any additional contract provisions, or change, revisions or clarification of the Contract Documents issued in writing by the OWNER, to prospective bidders prior to the receipt of bids.

Contract or Contract Documents: The written agreement covering the performance of the work. The Contract and Contract Documents include this written Construction Agreement between OWNER and CONTRACTOR, Advertisement for Bids, Instructions to Bidders, Requests for Proposal, all Addenda, the Specifications, including the general and supplemental special and technical conditions, Drawings, provisions, plans or working drawings — and any supplemental changes or agreements pertaining to the Work or materials therefor; and bonds and any additional documents incorporated by reference in the above.

CONTRACTOR: The person, persons, partnership, firm, corporation, association or organization, or any combination thereof, entering into the contract for the execution of the work, acting directly or through a duly authorized representative.

Other CONTRACTORS: Any contractor, other than the CONTRACTOR or his subcontractors, who has a direct contact with the OWNER for work on or adjacent to the site of the work.

Contract Work or Work: Everything expressly or impliedly required to be furnished and done by the CONTRACTOR by the Contract Documents.

Landscape Architect: The term “Landscape Architect” means the Landscape Architect’s duly authorized representative. The Landscape Architect shall be understood to be the Landscape Architect of the OWNER, and nothing contained in the Contract Documents shall create any contractual or agency relationship between the Landscape Architect and the CONTRACTOR.

Extra Work: Work other than that which is expressly or impliedly required by the Contract Documents at the time of the execution of the contract.

Change Order: A written order to the CONTRACTOR authorizing and directing an addition, deletion or revision in the work within the general scope of the Contract Documents, or authorizing an adjustment in the Contract Price or the Contract time.

Contract Price: The total amount of money payable to the CONTRACTOR under the terms and conditions of the Contract Documents. When used in such context, it may also mean the unit price of an item of work under the Contract terms.

OWNER’S Representative: The Landscape Architect or other duly authorized assistant, agent, engineer, inspector or superintendent acting within the scope of their particular duties.

Drawings or Contract Drawings: Those drawings that are the graphic and pictorial portions of the Contract Documents showing the design, location and dimensions of the Work, including but not limited to, the plans, elevations, sections, details, schedules, diagrams, any bulletin, or any detailed drawing furnished by the OWNER, pertaining or supplemental thereto.

Specifications: Those portions of the Contract Documents that specify the requirements for materials, equipment, systems, standards and workmanship for performance of the Work, and related services.

Inspector: Any representative of the OWNER designated to inspect the work.

Materialman or Supplier: Any subcontractor contracting with the CONTRACTOR, or any of his subcontractors, to fabricate or deliver or who actually fabricates or delivers materials, supplies or equipment to be consumed or incorporated into the Work.

Notice: Written notice effective the date of the postmark thereon, or if hand delivered, effective the date of hand delivery.

OWNER: COLLIN COUNTY, TEXAS, a political subdivision of the State of Texas. The term OWNER means the OWNER or its authorized representative.

Payment Bond: A bond in the amount of the Contract executed by a corporate surety in accordance with all Texas Law, including but not limited to, Chapter 2253 of the Texas Government Code and Chapter 3503 of the Texas Insurance Code, for public works projects as security furnished by the CONTRACTOR and his sureties solely for the protection of payment bond beneficiaries supplying labor and materials in the prosecution of the Contract Work.

Performance Bond: A bond in the amount of the Contract executed by a corporate surety in accordance with all Texas Law, including but not limited to, Chapter 2253 of the Texas Government Code and Chapter 3503 of the Texas Insurance Code, for public works projects as security furnished by the CONTRACTOR and his sureties solely for the protection of the Owner, conditioned on the faithful performance of the Contract Work in accordance with the plans, specification, and Contract Documents.

Maintenance Bond: A bond executed by a corporate surety for 10% of the Contract Price that complies with all Texas Laws, including but not limited to, Chapter 3503 of the Texas Insurance Code, guaranteeing the prompt, full and faithful performance of the general guaranty and warranty contained in the Contract Documents, and Texas Law.

Project: The total construction of the work described in the Contract Documents performed by the Contractor, Other Contractor or the Owner in whole or part.

Proposal: The written statement or statements duly submitted to the OWNER by the person, persons, partnership, company, firm, association or corporation proposing to do the Work contemplated, including the approved form on which the formal bids for the Work are to be proposed.

Plan, or Plans: The plans are the drawings or reproductions therefrom made by the Owner or Owner's Representative and approved by the Owner showing the dimensions, location, design and position of the various elements of the Project and Work, including plans, elevations, sections, details, schedules, diagrams, working drawings, preliminary drawings, and such supplemental drawings as the Owner may issue to clarify other drawings or for the purpose of showing changes in the Contract Work authorized by the Owner, or for showing details not shown therein.

Special Provisions or Conditions: The special clauses of the Contract, or Contract Documents, setting forth conditions or requirements peculiar to the specific Project involved, supplementing the standard or general specifications and taking precedence over any

conditions or requirements of the standard or general specifications with which they are in conflict.

Specifications or Contract Specifications: All of the general, special and technical conditions or provisions, and all addendum or supplements thereto consisting of written requirements for materials, equipment, systems, standards and performance of the work.

Site: The area upon or in which the CONTRACTOR'S operations are carried on, and such other areas adjacent thereto as may be designated as such by the OWNER.

Subcontractors: Any persons, firm or corporation, other than employees of the CONTRACTOR, who or which contracts with the CONTRACTOR to furnish, or who actually furnishes, labor and/or materials and equipment at or about the site.

Sureties: The corporate bodies which are bound by such bonds as are required with and for the CONTRACTOR. The sureties engaged to be responsible for the entire and satisfactory fulfillment of the Contract and for any and all requirements as set out in the specifications, Contract or plans.

The Work: All work including the furnishing of all labor, materials, tools, equipment, required submittals and incidentals to be performed by the CONTRACTOR under the terms of the Contract.

Directed, Required, Approved and Words of Like Import: Whenever they apply to the Work or its performance, the words "directed," "required," "permitted," "ordered," "designated," "established," "prescribed" and words of like import used in the Contract, specifications or upon the drawings shall imply the direction, requirement, permission, order, designation or prescription of the OWNER; and "approved," "acceptable," "satisfactory" and words of like import shall mean approved by, acceptable to or satisfactory to the OWNER.

Equal: Materials, articles or methods which are of equal or higher quality than those specified or shown on the drawings and as further defined in the "or equal" clause. Substitution of Materials shall be determined by the Landscape Architect at his or her discretion, and approved by the Owner.

Working Time, Completion Time or Contract Time: The time set forth in the Contract for the performance and completion of the Work contracted for. The time may be expressed as calendar days, working days or a specific date.

Calendar Day or Days: Any successive days of the week or month, no days being excepted.

Working Day: A working day is defined as a calendar day not including Saturdays, Sundays or those legal holidays as specified in the list prepared by the OWNER for contract purposes. Nothing in this definition shall be construed as prohibiting the CONTRACTOR from working on Saturdays if he so desires, however permission of the OWNER shall be necessary if the CONTRACTOR chooses to work on Saturday. Work on Sundays shall not be permitted

without the written permission of the OWNER. If Saturday or Sunday work is permitted, working time shall be charged on the same basis as week days. Where the working time is expressed as calendar days or a specific date, the concept of working days shall no longer be relevant to the contract.

CONTRACT DOCUMENTS

1.2 The parties agree that the Contract Documents shall consist of the following documents in addition to any other documents referenced or incorporated herein:

- A. This written Construction Agreement, including any changes or modifications;
- B. All addenda including the following listed and numbered addenda:
 - Addendum No. 1 dated _____ Received _____
 - Addendum No. 2 dated _____ Received _____
 - Addendum No. 3 dated _____ Received _____
- C. Advertisement for Bids, Instructions to Bidder, the Invitation to Bid and Bid Form;
- D. The Special/Supplemental Conditions;
- E. The Specifications and the Project Drawings (if any);
- F. The Construction Details shown on plans;
- G. The Standard Specifications and Standard Drawings from the Public Works Construction Standards-North Central Texas Council of Governments, 2004 edition and all subsequent addendums;
- H. The Performance Bond in the sum of ONE HUNDRED PERCENT (100%) of the total Contract Price;
- I. The Payment Bond in the sum of ONE HUNDRED PERCENT (100%) of the total Contract Price; and,

1.2.1 PRIORITY OF THE CONTRACT DOCUMENTS

These Contract Documents (A through I above) form the Construction Agreement and are a part of this Construction Agreement as if fully set forth herein. In the event of an inconsistency in any of the provisions of the Contract Documents, the inconsistency shall be resolved by giving precedence to the Contract Documents in the order in which they are listed above.

1.2.2 THE CONTRACT

The Contract Documents form the Contract. The Contract represents the entire integrated agreement between the OWNER and the CONTRACTOR and supercedes all prior negotiations, and representations by either party.

1.3 CORRELATION AND INTENT OF DOCUMENTS

The Contract Documents are complementary and what is called for by any one shall be as binding as if called for by all. The intent of the documents, unless otherwise specifically provided, is to produce complete and finished work, which the CONTRACTOR undertakes to do in full compliance with the Contract Documents. It is not intended to mention every item of work in the specifications which can be adequately shown on the drawings nor to

show on the drawings all items of work described or required by the specifications. All materials or labor for work shown on the drawings or reasonably inferable therefrom as being necessary to produce a finished job shall be provided by the CONTRACTOR whether or not same is expressly covered in the specifications. No verbal conversation, understanding or agreement with any officer or employee or agent of the OWNER, either before or after the execution of the Contract, shall affect or modify any of the terms, conditions or obligations contained in the Contract Documents.

1.3.1 CONTRACT DRAWINGS AND SPECIFICATIONS

The OWNER shall furnish the CONTRACTOR one copy of the Contract Drawings and any supplemental drawings and specifications reasonably necessary for the proper execution of the work. At least one copy of all drawings and specifications shall be accessible at all times to the OWNER at the job site.

1.3.2 SUPPLEMENTAL DRAWINGS AND SPECIFICATIONS

In order to carry out the intent of the Contract Documents and to assist the CONTRACTOR in performing its work, the OWNER, after the execution of the Contract, may, by supplemental drawings, specifications or otherwise, furnish additional information or instructions as may be necessary for construction purposes.

All such supplemental drawings, specifications or instructions are intended to be consistent with the Contract Documents and reasonably inferable therefrom. Therefore, no extra costs shall be allowed by the OWNER on a claim that particular supplemental drawings, specifications or instructions differ from the requirements of the Contract Documents, incurring extra costs, unless the CONTRACTOR has first brought the matter, in writing, to the OWNER'S attention for adjustment before proceeding with the work covered by such.

If the OWNER decides that there is no departure from the requirements of the Contract Documents, the CONTRACTOR shall then proceed with the work as shown, specified or directed. If the OWNER shall decide that extra work is involved, he shall so modify the supplemental drawings, specifications or instructions to eliminate the extra work, or cause a written Change Order to be issued in accordance with the Contract Documents.

1.3.3 ERRORS AND CORRECTIONS IN DRAWINGS AND SPECIFICATIONS

The CONTRACTOR shall not take advantage of any apparent errors, omissions or discrepancies in the drawings or specifications; and the Landscape Architect shall be permitted to make such corrections or interpretations as may be necessary for the fulfillment of the intent of the Contract Documents. In case of any errors, omissions or discrepancies in the drawings or specifications, the CONTRACTOR shall promptly submit the matter to the OWNER or OWNER'S Representative in

writing who, in turn, shall promptly make a determination and issue the necessary instructions in writing. Any adjustment by the CONTRACTOR without this determination and instructions shall be at the CONTRACTOR'S own risk and expense. The Work is to be made complete as intended by the Contract Documents.

1.3.4 EXISTING STRUCTURES

The plans show the general locations of some known surface and subsurface structures. The locations of many gas mains, water mains, conduits, sewers, other utilities, etc., however, are unknown, and the OWNER assumes no responsibility for failure to show any or all of these structures on the plans or to show them in their exact locations. It is mutually agreed that such failure shall not be considered sufficient basis for claims for additional compensation for Extra Work or for increasing the pay quantities in any manner whatsoever. The CONTRACTOR shall be solely responsible for locating all gas mains, water mains, conduits, sewers, other utilities etc., so as to perform the Work without damaging the same.

II. THE WORK

2.1 SCOPE OF WORK

Contractor shall provide all labor, supervision, materials, and equipment necessary to perform all work required by the Contract Documents in connection with IFB 2018-042, Construction, Myers Park Hardscape Improvements.

2.2 CHANGE OR MODIFICATION OF CONTRACT

2.2.1 ALTERATION OF PLANS AND SPECIFICATIONS

The OWNER reserves the right to make such changes in the plans and specifications and in the character of the work as may be necessary or desirable to insure completion in the most satisfactory manner, provided such changes do not materially alter the original plans and specifications or change the general nature of the Work as a whole. Such changes shall not be considered as waiving or invalidating any condition or provision of the Contract or bonds. Such changes shall be issued by the Architect.

2.2.2 INCREASED OR DECREASED QUANTITIES OF WORK

The OWNER reserves the right and may from time to time, by written order, and without notice to any surety, make changes in the quantity or time of performance of the Work, as may be considered necessary or desirable and such changes shall not be considered as waiving or invalidating any conditions or provisions of the Contract or bonds. The CONTRACTOR shall perform all the Contract Work in strict compliance with the Contract Documents, and shall not make any changes to the Work without prior written authorization from the OWNER, in the form of a written Change Order. If such changes increase or decrease either the cost or the

time necessary for the performance of the Work, then the parties will mutually agree upon an equitable adjustment to the price or time to perform the Work pursuant to the terms of the Contract.

2.2.3 EXTRA WORK/CHANGE ORDERS

When any work is necessary to the proper completion of the Project and for which no prices are provided for in the Bid or Proposal and Contract, the CONTRACTOR shall do such work, but only when and as ordered in writing by the OWNER. The OWNER may order changes in the Work without invalidating Contract. Payment for Extra Work shall be made as provided herein. Contractor agrees that overhead and profit for Extra Work shall not exceed 10% of the total cost of the Extra Work. The Contractor shall not be entitled to any additional funds for any work or extra work performed on the Project, unless a Change Order is issued and signed by the Owner. The CONTRACTOR shall perform the work as altered, whether increased or decreased, and no allowances shall be made for anticipated profits. Nothing in this section shall give rise to any claims for any delay or acceleration damages, and the CONTRACTORS sole remedy for any delays in the Project shall remain an equitable extension of time as provided for in the Contract Documents. CONTRACTOR acknowledges and agrees to waive all rights or claims for compensation for any additional or other work not specifically authorized by the OWNER.

2.3 DISPUTED WORK AND CLAIMS FOR ADDITIONAL COMPENSATION

If the CONTRACTOR is of the opinion that (a) the work necessary or required to accomplish the result intended by this Contract, or (b) any work ordered to be done as Contract Work by the OWNER is extra work or additional work and not Contract Work, or (c) any determination or order of the OWNER violates the terms and provisions of this Contract, the CONTRACTOR shall promptly, either before proceeding with such work or complying with such order or determination, notify the OWNER in writing of his contentions with respect thereto and request a final determination thereof.

Such determination of the OWNER shall be given in writing to the CONTRACTOR. If the OWNER determines that the work in question is Extra Work and not Contract Work, or that the order complained of requires performance by the CONTRACTOR beyond that required by the Contract or violates the terms and provisions of the Contract, thereupon the OWNER shall cause either (a) the issuance of a written Change Order covering the Extra Work as provided herein, or (b) the determination or order complained of to be rescinded or so modified so as to not require performance beyond that required by the terms and provisions of the Contract.

If the OWNER determines that the work in question is Contract Work and not Extra Work, or that the determination or order complained of does not require performance by the CONTRACTOR beyond that required by the Contract or violate the terms and provisions of the Contract, he shall direct the CONTRACTOR to proceed, and the CONTRACTOR must promptly comply. In order to reserve his right to claim compensation for such work

resulting from such compliance, however, the CONTRACTOR must, within 20 calendar days after receiving the OWNER'S determination and direction, notify the OWNER in writing that the work is being performed, or that the determination and direction is being complied with, under protest.

If the CONTRACTOR fails to so appeal to the OWNER for a determination or, having so appealed, should the CONTRACTOR thus fail to notify the OWNER in writing of his protest, the CONTRACTOR shall be deemed to have waived any claim for extra compensation or damages therefore. No oral appeals or oral protests, no matter to whom made, shall be deemed even substantial compliance with the provisions of this item.

In addition to the foregoing requirements, the CONTRACTOR shall, upon notice from the OWNER, for a minimum period of three (3) years following final payment or termination of contract, produce for examination and audit at the CONTRACTOR'S office, by the representatives of the OWNER, all his books and records showing all of his acts and transactions in connection with contractual performance as well as relating to or arising by reason of the matter in dispute. At such examination a duly authorized representative of the CONTRACTOR may be present.

Unless the aforesaid requirements and conditions are complied with by the CONTRACTOR, the OWNER shall be released from all claims arising under, relating to or by reason of disputed work or extra work. It is further stipulated and agreed that no conduct on the part of the OWNER or any agent or employee of the OWNER shall ever be construed as a waiver of the requirements of this section, when such requirements constitute an absolute condition precedent to any approval of any claim for extra compensation, notwithstanding any other provisions of the Contract Documents; and in any action against the OWNER to recover any sum in excess of the contract amount, the CONTRACTOR must allege and prove strict compliance with the provisions of this section. The CONTRACTOR ASSUMES THE RISK OF NONPAYMENT, for failing to comply with any of the requirements of this section.

III. CONTRACTORS RESPONSIBILITIES

3.1 CONTRACTOR'S REPRESENTATIONS, WARRANTIES AND ASSURANCES.

In consideration of, and to induce the award of this contract to him, the CONTRACTOR represents and warrants: (a) That he is financially solvent, and sufficiently experienced and competent to perform the work; (b) That the facts stated in the proposal and the information given by him pursuant to the bidding documents are true and correct in all respects; (c) That he has read, understood and complied with all the requirements set forth in the bidding documents; (d) That he is familiar with and understands all laws and regulations applicable to the work; and (e) unless otherwise specifically provided for in the Contract Documents, the CONTRACTOR shall do all the Work and shall furnish all the tools, equipment, machinery, materials, labor and appliances, except as herein otherwise specified, necessary or proper for performing and completing the work required by this Contract, in the manner and within the time herein prescribed.

By executing the contract, the CONTRACTOR represents that he has visited the site of Work, has fully familiarized himself with the local and on-site conditions under which the work is to be performed and has correlated his observation with the requirements of the Contract Documents. In addition, the CONTRACTOR represents that he has satisfied himself as to subsurface conditions at the site of the Work. Information, data and representations contained in the Contract Documents pertaining to the conditions at the site, including subsurface conditions, are for information only and are not warranted or represented in any manner to accurately show the conditions at the site of the Work. The CONTRACTOR agrees that he shall make no claims for damages, additional compensation or extension of time against the OWNER because of encountering actual conditions in the course of the Work which vary or differ from conditions or information contained in the Contract Documents. All risks of differing subsurface conditions shall be borne solely by the CONTRACTOR.

The CONTRACTOR shall carefully study and compare the Contract Documents and shall at once report to the OWNER any error, inconsistency or omission he may discover. The CONTRACTOR shall perform no portion of the Work at any time without Contract Documents or, where required, approved shop drawings, product data or samples for such portion of the work.

3.1.1 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

A. Shop drawings are drawings, diagrams, schedules and other data specially prepared for the work by the CONTRACTOR or any subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.

B. Product data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the CONTRACTOR to illustrate a material, product or system for some portion of the work.

C. Samples are physical examples which illustrate materials, equipment or workmanship and establish standards by which the work shall be judged.

D. the CONTRACTOR shall provide, review, approve and submit to the Landscape Architect with reasonable promptness and in such sequence as to cause no delay in the Work or in the work of the OWNER or any separate contractor, all shop drawings, product data and samples required by the Contract Documents. The Work will be performed in accordance with submittals approved by the Architect. The CONTRACTOR shall not be relieved responsibility for deviations from the requirements of the Contract Documents by errors or omissions by the OWNER or Landscape Architect approving Shop Drawings, Product Data, samples or any other submittals.

E. By approving and submitting shop drawings, product data and samples, the CONTRACTOR represents that he has determined and verified all materials, field measurements, and field construction criteria related thereto, or shall do so, and that he has checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.

F. As the Architect's review is only for general conformance with the requirements of the Contract Documents, the CONTRACTOR shall not be relieved of responsibility for any deviation from the requirements of the Contract Documents by the Architect's approval of shop drawings, product data or samples unless the CONTRACTOR has specifically informed the Landscape Architect in writing of such deviation at the time of submission and the Landscape Architect have given written approval to the specific deviation. The CONTRACTOR shall not be relieved from responsibility for errors or omissions in the shop drawings, product data or samples by the Architect's approval thereof. The CONTRACTOR shall direct specific attention, in writing or on resubmitted shop drawings, product data or samples, to revisions other than those requested by the Landscape Architect on previous submittals.

G. the CONTRACTOR shall be responsible for delays caused by rejection of the submittal of inadequate or incorrect shop drawings, product data or samples. The CONTRACTOR shall be responsible for seeing that any "approved" copies of shop drawings bearing the approval of the Landscape Architect are allowed on the job site. The CONTRACTOR shall be responsible for providing all copies of approved shop drawings necessary for the construction operations.

H. the CONTRACTOR shall keep adequate records of submittal and approvals so that an accurate up-to-date record file is maintained at the job site at all times.

I. No portion of the work requiring submission of a shop drawing, product data or sample shall be commenced until the submittal has been approved by the Architect. All such portions of the work shall be in accordance with approved submittals.

3.1.2 SURETY BONDS

With the execution and delivery of the contract, the CONTRACTOR shall furnish and file with the OWNER in the amounts herein required, the surety bonds specified hereunder. Without exception, the OWNER'S bond forms, attached hereto as Section 00610 must be used, and exclusive venue for any lawsuit in connection with such bonds shall be specified as the county in which the OWNER'S principal office is located. Such surety bonds shall be in accordance with Texas Law, including but not limited to, the provisions of Chapter 2253 of the Texas Government Code and Chapter 3503 of the Texas Insurance Code. These bonds shall automatically be increased by the amount of any change order or supplemental agreement which increases the contract price with or without notice to the surety,

but in no event shall a change which reduces the contract amount reduce the penal amount of such bonds.

A. Performance Bond. A good and sufficient bond in an amount not less than 100 percent of the total amount of the Contract Price guaranteeing the full and faithful execution of the Work and performance of the Contract in accordance with the plans, specifications and Contract Documents, including any extensions thereof, for the protection of the OWNER. This bond shall provide for the repair and/or replacement of all defects due to faulty materials and workmanship that appear within a period of one year from the date of completion and acceptance of the improvement by the OWNER or such lesser or greater period as may be designated in the Contract Documents.

B. Payment Bond. A good and sufficient bond in an amount not less than 100 percent of the total amount of the Contract Price guaranteeing the full and proper protection of all payment bond beneficiaries and claimants supplying labor and material in the prosecution of the work provided for in said Contract and for the use of each claimant.

C. Maintenance Bond. A good and sufficient bond in an amount not less than ten percent (10%) of the total amount of the Contract Price guaranteeing the project against defects.

D. Sureties. No sureties shall be accepted by the OWNER who are now in default or delinquent on any bonds or who are interested in any litigation against the OWNER. All bonds shall be made on forms furnished by the OWNER and shall be executed by not less than one corporate surety authorized to do business in the State of Texas and acceptable to the OWNER. The sureties shall be listed in the most current Federal Register Treasury List. Each bond shall be executed by the CONTRACTOR and surety. Each surety shall designate an agent resident in the OWNER'S jurisdictional area acceptable to the OWNER to whom any requisite notices may be delivered and on whom service of process may be had in matters arising out of such suretyship. The OWNER reserves the right to reject any and all sureties.

E. Additional or Substitute Bonds. If at any time the OWNER is or becomes dissatisfied with any surety, then upon the performance or payment bond, the CONTRACTOR shall, within five days after notice from the OWNER to do so, substitute an acceptable bond (or bonds), or provide an additional bond, in such form and sum and signed by such other surety or sureties as may be satisfactory to the OWNER. The premiums on such bonds shall be paid by the CONTRACTOR without recourse to the OWNER. No further payments under the contract shall be deemed due or payable until the substitute or additional bonds shall have been furnished and accepted by the OWNER.

3.1.3 PERMITS AND FEES

The CONTRACTOR shall secure and pay for all building permits and other permits and governmental fees, licenses and inspections necessary for proper execution and completion of the Work which are normally and legally required for the construction of similar projects in the State of Texas. The CONTRACTOR will give all notices required by laws, ordinances, rules, regulations and lawful orders of authorized public authorities required for the proper and legal performance of the Work.

3.14 CONTRACT DOCUMENTS AT SITE

The CONTRACTOR shall keep and maintain at the Project site one record copy of the Contract Documents, including but not limited to, the Drawings, Specifications, addenda, Change Orders, submittals, Product Data, Samples and other modifications, in good order and marked to show the current construction of the Project. These documents shall be available to the OWNER or Landscape Architect to review at any time and shall be submitted to the OWNER upon completion of the Project, along with a complete set of as built drawings.

3.2 CONTRACTOR'S RESPONSIBILITIES

3.2.1 PERFORMANCE OF THE WORK

In addition to those matters elsewhere expressly made the responsibility of the CONTRACTOR, the CONTRACTOR shall have the full and direct responsibility for the performance and completion of the Work under this Contract and for any act or neglect of the CONTRACTOR, his agents, employees or subcontractors. He shall bear all losses, if any, resulting on account of the amount and character of the Work, or because the conditions under which the work must be done are different from what were estimated or anticipated by him, or because of weather, floods, elements or other causes.

3.2.2 MEANS AND METHODS OF CONSTRUCTION

Unless otherwise expressly provided in the contract drawings, specifications or bulletins, the means and methods of construction shall be such as the CONTRACTOR may choose; subject, however, to the OWNER'S right to prohibit means and methods proposed by the CONTRACTOR which in the OWNER'S judgment:

- A. shall constitute a hazard to the Work, or to persons or property, or shall violate express requirements of applicable laws or ordinances; or
- B. shall cause unnecessary or unreasonable inconvenience to the public; or
- C. shall not produce finished work in accordance with the requirements of the Contract Documents; or

D. shall not assure the Work to be completed within the time allowed by the contract.

The OWNER'S approval of the CONTRACTOR'S means or methods of construction, or the OWNER'S failure to exercise his right to prohibit such means or methods, shall not relieve the CONTRACTOR of his responsibility for the Work or of his obligation to accomplish the result intended by the Contract Documents; nor shall the exercise or non-exercise of such rights to prohibit create a cause of action for damages or provide a basis for any claim by the CONTRACTOR against the OWNER. The CONTRACTOR shall be sole responsible for, the construction means and methods, techniques, sequences, procedures, and for the safety precautions and programs in connection with the Work or the Project.

If the Contract Documents specify any means, methods, techniques, sequences or procedures, the CONTRACTOR shall evaluate said specifications and determine that they are safe for the proper prosecution of the Work. The CONTRACTOR shall be sole responsible for the job site safety of such means, methods, techniques, sequences or procedures. If the CONTRACTOR determines the specified means, methods, techniques, sequences or procedures may not be safe, the CONTRACTOR shall immediately notify the OWNER and Landscape Architect and shall not proceed without further instructions.

3.2.3 CONSTRUCTION SCHEDULE

The CONTRACTOR, immediately after being awarded the contract, shall prepare and submit for the OWNER or Architect's information an estimated progress schedule for the work. The progress schedule shall be related to the entire Project to the extent required by the Contract Documents and shall provide for expeditious and reasonable execution of the work, not to exceed the time limits for completion provided in the Contract Documents. The progress schedule shall be updated as the Work proceeds or the schedule changes and immediately upon request by the OWNER. The CONTRACTOR shall also prepare a schedule of submittals that allows for a reasonable time for the OWNER or Landscape Architect to review the submittals so as not to delay the Project.

3.2.4 TIME OF PERFORMANCE OF THE WORK

The CONTRACTOR shall begin the work to be performed under this Contract not later than 10 days from the date specified in the purchase or work order and shall conduct the work in such a manner and with sufficient equipment, material and labor as is necessary to insure its completion within the working time. It is the intent of this specification to provide a continuous construction operation without delay except as occasioned by unforeseeable causes beyond the control and without the fault or negligence of the CONTRACTOR, and it shall be the CONTRACTOR's responsibility to execute the work in the most expeditious manner.

Work shall be done only during the regular and commonly accepted and prescribed working hours. No work shall be done on nights, Sundays or regular holidays unless permission is given by the OWNER

Time is of the Essence for the performance of the Work by the CONTRACTOR. CONTRACTOR agrees that the time allotted for the performance of the Work is reasonable.

3.2.5 PERFORMANCE OF EXTRA OR DISPUTED WORK

While the CONTRACTOR or his subcontractor is performing Extra Work in accordance with the OWNER'S written order, the cost of which is to be determined on a time and material basis, or is performing disputed work or complying with a determination or order under protest, the CONTRACTOR shall, on the Monday following the performance of the work, furnish the OWNER'S representative at the site with three copies of verified statements showing:

- A. the name and number of each workman employed on such extra work or engaged in complying with such determination or order, the character of extra work each is doing and the wages paid to him, including the rate and amount of payroll taxes, contributions for insurance, and federal social security; and
- B. the nature, cost and quantity of any materials, plant equipment or construction equipment furnished or used in connection with the performance of such extra work or in complying with such determination or order, and from who purchased or rented.

The CONTRACTOR and his subcontractors, when required by the OWNER, must also produce for inspection and audit by designated OWNER representatives for a minimum period of three (3) years following final payment or termination of contract any and all of his books, vouchers, records, daily job diaries and reports, canceled checks, etc. showing the nature and quantity of labor, materials and equipment actually used in the performance of the extra work; the amounts expended therefore; and the costs incurred for insurance premiums and other items of expense directly chargeable to such extra work. The CONTRACTOR must permit the OWNER'S representatives to make extracts therefrom or copies thereof as may be desired.

Failure of the CONTRACTOR to comply strictly with the requirements of this section shall constitute a waiver of any claim for extra compensation on account of the performance of such extra work.

3.3 QUALITY OF WORK

3.3.1 INSPECTION AND TESTS

The CONTRACTOR shall furnish the OWNER with every reasonable accommodation and opportunity to ascertain whether or not the work performed is in accordance with the requirements and intent of the plans and specifications. Any work done or materials used without suitable inspection by the OWNER may be ordered removed and replaced at the CONTRACTOR'S expense. The CONTRACTOR shall not be relieved from his obligations to perform the Work in accordance with the Contract Documents either by the activities or duties of the OWNER in his administration of the contract, or by inspections, tests or approvals required or performed by persons other than the CONTRACTOR.

Unless otherwise provided, the CONTRACTOR shall make arrangements for all tests, inspections and approvals with an independent testing laboratory or entity required by the Contract Documents or by laws, ordinances, rules, regulations or orders of public authorities having jurisdiction over the Work or items to be tested, inspected or approved. If additional testing or inspection is required they shall be performed at the CONTRACTOR'S expense.

3.3.2 REMOVAL OF DEFECTIVE AND UNAUTHORIZED WORK

All work which has been rejected or condemned shall be repaired, or if it cannot be repaired satisfactorily, it shall be removed and replaced at the CONTRACTOR'S expense. Defective materials shall be immediately removed from the site of the work. Work done without line and grade having been given, work done beyond the lines or not in conformity with the grades shown on the plans or as given, save as herein provided, work done without written authority and prior agreement in writing as to process, shall be done at the CONTRACTOR'S risk and shall be considered unauthorized and at the option of the OWNER may be ordered removed at the CONTRACTOR'S expense.

Upon failure of the CONTRACTOR to repair satisfactorily or to remove and replace, if so directed, rejected, unauthorized or condemned work or materials immediately after receiving notice from the OWNER, the OWNER shall, after giving written notice to the CONTRACTOR, have the authority to cause defective work to be remedied or removed and replaced, or to cause unauthorized work to be removed and to deduct the cost thereof from any monies due or to become due the CONTRACTOR. Alternatively, the OWNER may, at its option, declare the CONTRACTOR in default.

3.3.3 WORKING AREA; COORDINATION WITH OTHER CONTRACTORS; FINAL CLEANUP

The CONTRACTOR shall confine his equipment, storage of materials and construction operations to the area shown on the contract drawings or stated in the specifications, prescribed by ordinance, laws, or permits or as may be directed by

the OWNER, and shall not unreasonably encumber the site or public right-of-way with his construction equipment, plant or materials.

Such area shall not be deemed for the exclusive use of the CONTRACTOR. Other contractors of the OWNER may enter upon and use such portions of the area and for such items as determined by the OWNER are necessary for all purposes required by their contracts. The CONTRACTOR shall give to such other contractors all reasonable facilities and assistance to the end that the work on this and other contracts shall not be unduly or unreasonably delayed. Any additional areas desired by the CONTRACTOR for his use shall be provided by him at his own cost and expense.

The CONTRACTOR is responsible for cutting, fitting or patching any parts of the Work where such work is necessary to make the Work complete, for parts to fit together, or for any damage to the Work prior to Final Acceptance.

The CONTRACTOR shall keep the Project and the surrounding area clean and free from the accumulation of waste materials or trash. Upon completion of the work and before final acceptance and final payment shall be made, the CONTRACTOR shall completely clean and remove from the site of the work surplus and discarded materials, temporary structures and debris of every kind. He shall leave the site of the work in a neat and orderly condition equal to that which originally existed, or as called for in the Contract Documents. Surplus and waste materials removed from the site of the work shall be disposed of at locations satisfactory to the OWNER, and at the CONTRACTOR'S sole cost.

3.4 LEGAL RESPONSIBILITIES

3.4.1. PATENTS AND COPYRIGHTS

The CONTRACTOR shall pay all royalties and license fees and shall provide, by suitable legal agreement with the patentee or owner, for the use of any design, device, material or process covered by letters, patent or any copyright. The CONTRACTOR shall indemnify, defend, hold and save the OWNER and its officers, employees and agents harmless from all liability and claims for infringement of any patent or copyright.

In the event that any claims, suit or action at law or in equity of any kind whatsoever is brought against the OWNER, or its officers, employees or agents involving any such patents, copyrights or license rights, then the OWNER shall have the right to and may retain from any money due or to become due to the CONTRACTOR such sum deemed necessary by the OWNER for its protection until such claim or suit shall have been settled and satisfactory evidence to that effect shall have been furnished the OWNER.

3.4.2 INDEMNIFICATION

To the fullest extent permitted by law, the CONTRACTOR and his sureties shall indemnify, defend and hold harmless the OWNER and all of its, past, present and future, officers, agents and employees from all suits, cause of action, claims, liabilities, losses, fines, penalties, liens, demands, obligations, actions, proceedings, of any kind, character, name and description brought or arising, on account of any injuries or damages received or sustained by any person, destruction or damage to any property on account of, in whole or part, the operations of the CONTRACTOR, his agents, employees or subcontractors; or on account of any negligent act or fault of the CONTRACTOR, his agents, employees or subcontractors in the execution of said Contract; failing to comply with any law, ordinance, regulation, rule or order of any governmental or regulatory body including those dealing with health, safety, welfare or the environment; on account of the failure of the CONTRACTOR to provide the necessary barricades, warning lights or signs; and shall be required to pay any judgment, with cost, which may be obtained against the OWNER growing out of such injury or damage. In no event shall OWNER be liable to CONTRACTOR for indirect or consequential damages or loss of income or profit irrespective of the cause, fault or reason for same. CONTRACTOR'S duty to indemnify herein shall not be limited by any limitation on the type or amount of damages payable by or for CONTRACTOR or any Subcontractor under workman's compensation acts, disability benefit acts or any other employee benefit acts.

In addition, the CONTRACTOR likewise covenants and agrees to, and does hereby, indemnify and hold harmless the OWNER from and against any and all injuries, loss or damages to property of the OWNER during the performance of any of the terms and conditions of this Contract, arising out of or in connection with or resulting from, in whole or in part, any and all alleged acts or omissions of officers, agents, servants, employees, contractors, subcontractors, licenses or invitees of the CONTRACTOR.

The rights and responsibilities provided in this indemnification provision shall survive the termination or completion of this Contract.

3.5 SUPERVISION AND CONSTRUCTION PROCEDURES

3.5.1. SUPERVISION BY CONTRACTOR

The status of the CONTRACTOR is that of an independent CONTRACTOR under Texas law and the work under this Contract shall be under the direct charge and superintendence of the CONTRACTOR. Except where the CONTRACTOR is an individual and gives his personal superintendence to the work, the CONTRACTOR shall provide a competent superintendent or general foreman on the work site at all times during progress with full authority to act for the CONTRACTOR. The CONTRACTOR shall also provide an adequate staff for the coordination and expediting of the Work.

The superintendent and staff shall be satisfactory to the OWNER. The superintendent or general foreman shall not be changed during this Contract except with the written consent of the OWNER or unless the superintendent or general foreman proves unsatisfactory to the CONTRACTOR and ceases to be in his employ.

If the superintendent should be or become unsatisfactory to the OWNER, he shall be replaced by the CONTRACTOR upon written direction of the OWNER, and in such event, the CONTRACTOR shall not be entitled to file a claim for any additional working time or money from the OWNER.

3.5.2 EMPLOYEES

The CONTRACTOR shall employ only competent, efficient workmen and shall not use on the work any unfit person or one not skilled in the work assigned to him and shall at all times maintain good order among its employees. Whenever the OWNER shall inform the CONTRACTOR in writing that, in his opinion, any employee is unfit, unskilled, disobedient, or is disrupting the orderly progress of the work, such employee shall be removed from the work and shall not again be employed on it. Under urgent circumstances, the OWNER may orally require immediate removal of an employee for cause, to be followed by written confirmation.

The CONTRACTOR shall supervise and direct all the work, using his best skill and attention. He shall be solely responsible for all construction means, methods, techniques, sequences, procedures and safety procedures and for coordinating all portions of the Work under the Contract. The CONTRACTOR shall be responsible to the OWNER for the acts and omissions of his employees, subcontractors and their agents, employees and subcontractors performing any of the work under a contract with the CONTRACTOR.

3.5.3 LABOR AND MATERIALS

Unless otherwise provided in the Contract Documents, the CONTRACTOR shall provide and pay for all labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation and other facilities and services necessary for the proper execution and completion of the work, whether temporary or permanent and whether or not incorporated or to be incorporated into the work.

The CONTRACTOR shall at all times enforce strict discipline and good order among his employees and shall not employ on the work site any unfit person or anyone not skilled in the task assigned to him.

The rate of progress shall be such that the whole work shall be performed and the premises cleaned up in accordance with the Contract within the working time established in the Contract, unless an extension of time is made in the manner hereinafter specified.

3.5.4 WAGE SCALE

In accordance with The Texas Government Code, Title 10, Chapter 2258, Prevailing Wage Rates, the general prevailing wage rate has been determined for this locality for the craft or type of workman needed to execute work of a similar character of the project listed herein. The Contractor shall pay the prevailing wage rate in this locality to all his/her employees and subcontractors performing work on this project, and in no event shall the Contractor pay less than the rate shown in the following schedule.

General Decision Number: TX170289 09/08/2017 TX289

Superseded General Decision Number: TX20160289

State: Texas

Construction Type: Building

County: Collin County in Texas.

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

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.20 for calendar year 2017 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.20 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2017. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number Publication Date

0	01/06/2017
1	01/27/2017
2	04/07/2017
3	04/14/2017
4	08/25/2017
5	09/08/2017

ASBE0021-011 06/01/2016

Rates Fringes

ASBESTOS WORKER/HEAT & FROST
INSULATOR (Duct, Pipe and
Mechanical System Insulation)....\$ 24.32 7.52

BOIL0074-003 01/01/2017

	Rates	Fringes
BOILERMAKER.....	\$ 28.00	22.35

 CARP1421-002 04/01/2016

	Rates	Fringes
MILLWRIGHT.....	\$ 26.60	8.65

 ELEV0021-006 01/01/2017

	Rates	Fringes
ELEVATOR MECHANIC.....	\$ 38.77	31.585+a+b

FOOTNOTES:

A. 6% under 5 years based on regular hourly rate for all hours worked. 8% over 5 years based on regular hourly rate for all hours worked.

B. New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and Veterans Day.

 ENGI0178-005 06/01/2014

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
(1) Tower Crane.....	\$ 29.00	10.60
(2) Cranes with Pile Driving or Caisson Attachment and Hydraulic Crane 60 tons and above.....	\$ 28.75	10.60
(3) Hydraulic cranes 59 Tons and under.....	\$ 27.50	10.60

 * IRON0263-005 06/01/2017

	Rates	Fringes
IRONWORKER (ORNAMENTAL AND STRUCTURAL).....	\$ 23.25	7.32

PLUM0100-005 05/01/2017

	Rates	Fringes
HVAC MECHANIC (HVAC Unit Installation Only).....	\$ 30.19	11.31
PIPEFITTER (Excludes HVAC Pipe Installation).....	\$ 30.19	11.31

SUTX2014-015 07/21/2014

	Rates	Fringes
BRICKLAYER.....	\$ 21.06	0.00
CARPENTER, Excludes Drywall Hanging, Form Work, and Metal Stud Installation.....	\$ 15.78	0.00
CAULKER.....	\$ 15.16	0.00
CEMENT MASON/CONCRETE FINISHER...	\$ 13.04	0.00
DRYWALL HANGER AND METAL STUD INSTALLER.....	\$ 13.00	0.00
ELECTRICIAN (Alarm Installation Only).....	\$ 20.93	3.86
ELECTRICIAN (Communication Technician Only).....	\$ 15.35	1.39
ELECTRICIAN (Low Voltage Wiring Only).....	\$ 17.04	1.39
ELECTRICIAN, Excludes Low Voltage Wiring and Installation of Alarms/Sound and Communication Systems.....	\$ 20.01	2.69
FORM WORKER.....	\$ 11.89	0.00
GLAZIER.....	\$ 16.46	3.94
HIGHWAY/PARKING LOT STRIPING: Operator (Striping Machine).....	\$ 10.04	2.31

INSTALLER - SIDING (METAL/ALUMINUM/VINYL).....	\$ 14.74	0.00
INSTALLER - SIGN.....	\$ 15.50	0.00
INSULATOR - BATT.....	\$ 13.00	0.00
IRONWORKER, REINFORCING.....	\$ 12.29	0.00
LABORER: Common or General.....	\$ 10.52	0.00
LABORER: Mason Tender - Brick...	\$ 10.54	0.00
LABORER: Mason Tender - Cement/Concrete.....	\$ 10.93	0.00
LABORER: Pipelayer.....	\$ 13.00	0.35
LABORER: Plaster Tender.....	\$ 12.22	0.00
LABORER: Roof Tearoff.....	\$ 11.28	0.00
LABORER: Landscape and Irrigation.....	\$ 10.55	0.00
LATHER.....	\$ 16.00	0.00
OPERATOR: Backhoe/Excavator/Trackhoe.....	\$ 12.83	0.00
OPERATOR: Bobcat/Skid Steer/Skid Loader.....	\$ 13.93	0.00
OPERATOR: Bulldozer.....	\$ 18.29	1.31
OPERATOR: Drill.....	\$ 15.69	0.50
OPERATOR: Forklift.....	\$ 13.21	0.81
OPERATOR: Grader/Blade.....	\$ 13.03	0.00
OPERATOR: Loader.....	\$ 13.46	0.85
OPERATOR: Mechanic.....	\$ 17.52	3.33
OPERATOR: Paver (Asphalt,		

Aggregate, and Concrete).....\$ 18.44	0.00
OPERATOR: Roller.....\$ 15.04	0.00
PAINTER (Brush, Roller and Spray), Excludes Drywall Finishing/Taping.....\$ 13.35	5.10
PAINTER: Drywall Finishing/Taping Only.....\$ 14.24	3.83
PIPEFITTER (HVAC Pipe Installation Only).....\$ 20.45	4.00
PLASTERER.....\$ 16.58	0.00
PLUMBER, Excludes HVAC Pipe Installation.....\$ 22.46	4.06
ROOFER.....\$ 17.19	0.00
SHEET METAL WORKER (HVAC Duct Installation Only).....\$ 21.13	4.79
SHEET METAL WORKER, Excludes HVAC Duct Installation.....\$ 24.88	5.97
SPRINKLER FITTER (Fire Sprinklers).....\$ 37.50	0.00
TILE FINISHER.....\$ 11.22	0.00
TILE SETTER.....\$ 14.25	0.00
TRUCK DRIVER: 1/Single Axle Truck.....\$ 16.00	0.81
TRUCK DRIVER: Dump Truck.....\$ 12.39	1.18
TRUCK DRIVER: Flatbed Truck.....\$ 19.65	8.57
TRUCK DRIVER: Semi-Trailer Truck.....\$ 12.50	0.00
TRUCK DRIVER: Water Truck.....\$ 12.00	4.11

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

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

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

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

Union Rate Identifiers

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

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

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate

based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

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

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

WAGE DETERMINATION APPEALS PROCESS

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

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

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

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

Branch of Construction Wage Determinations

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

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

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

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

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

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

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

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END OF GENERAL DECISION

Except for work on legal holidays, the “General Prevailing Rate of Per Diem Wage” for the various crafts or type of workers or mechanics is the product of (a) the number of hours worked per day, except for overtime hours, times (b) the above respective rate per hour.

For legal holidays, the “General Prevailing Rate of Per Diem Wage” for the various crafts or type of workers or mechanics is the product of (a) one and one-half times the above respective rate per hour, times (b) the number of hours worked on the legal holiday.

For overtime work, the “General Prevailing Rate of Per Diem Wage” for the various crafts or type of workers or mechanics is the product of (a) one and one-half times the above respective rate per hour, times (b) the number of hours worked on overtime.

Under the provisions of Texas Government Code, Title 10, Chapter 2258, Prevailing Wage Rates, the contractor or subcontractor of the contractor shall forfeit as a penalty to the entity on whose behalf the contract is made or awarded, sixty dollars (\$60.00) for each calendar day, or portion thereof, that the worker is paid less than the wage rates stipulated in the contract.

If the construction project involves the expenditure of Federal funds in excess of \$2,000, the minimum wages to be paid various classes of laborers and mechanics will be based upon the wages that will be determined by the Secretary of Labor to be prevailing for the corresponding classes of laborers and mechanics employed on the project of a character similar to the Contract Work.

3.5.5 Contractors doing business with OWNER agree to comply with Federal Executive Order 13465 E-Verify. It is OWNER'S intention and duty to comply and support the Immigration and Nationality Act (INA) which includes provisions addressing employment eligibility, employment verification and non-discrimination. According to the INA, contractors/employers may hire only persons who may legally work in the United States. Subsequently, contractors and subcontractors doing business with OWNER must confirm their enrollment in the E-Verify system which verifies employment eligibility through completion and checking of I-9 forms. OWNER reserves the right to audit contractor's process to verify enrollment compliance.

3.5.6 COMPLIANCE WITH LAWS

The CONTRACTOR shall fully comply with all local, state and federal laws, including all codes, ordinances and regulations applicable to this Contract and the Work to be done thereunder, which exist or which may be enacted later by governmental bodies having jurisdiction or authority for such enactment.

All work required under this Contract is intended to comply with all requirements of law, regulation, permit or license. If the CONTRACTOR finds that there is a variance, he shall immediately report this to the OWNER for resolution.

3.5.6.1 EQUAL EMPLOYMENT OPPORTUNITY

The CONTRACTOR shall comply with all local, state and federal employment and discrimination laws and shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, age, national origin or any other class protected by law.

3.5.7 RAILWAY CROSSINGS

Where the Work encroaches upon any right-of-way of any railway, the OWNER shall secure the necessary easement for the work. Where railway tracks are to be crossed, the CONTRACTOR shall observe all the regulations and instructions of the railway company as to methods of doing the work or precautions for safety of

property and the public. All negotiations with the railway company, except for right-of-way, shall be made by the CONTRACTOR. The railway company shall be notified by the CONTRACTOR not less than five days prior to commencing the work. The CONTRACTOR shall not be paid separate compensation for such railway crossing but shall receive only the compensation as set out in the proposal.

3.5.8 OTHER CONTRACTORS; OBLIGATION TO COOPERATE

The OWNER reserves the right to perform construction on the Project with its own forces or may award other contracts for additional work on this Project, and the CONTRACTOR shall fully cooperate with such other contractors and shall coordinate and fit his work to be done hereunder to such additional work as may be contracted by the OWNER. The CONTRACTOR shall not commit or permit any act which shall interfere with the performance of work by any other contractor.

Upon receiving written notice from the CONTRACTOR that the OWNER or another contractor is failing to coordinate his work with the Work under this Contract as directed by the OWNER, the OWNER shall promptly investigate the charge and take such necessary action as the situation may require. However, the OWNER shall not be liable to the CONTRACTOR for damages suffered by the CONTRACTOR due to the fault or negligence of another contractor or through failure of another contractor to carry out the directions of the OWNER. Should any interference occur between contractors, the Landscape Architect may furnish the CONTRACTOR with written instructions designating priority of effort, whereupon the CONTRACTOR shall immediately comply with such direction. In such event, the CONTRACTOR shall be entitled to an extension of working time only for unavoidable delays verified by the Architect; however, no increase in the Contract Price shall be due the CONTRACTOR.

3.5.9 SUBCONTRACTS

The CONTRACTOR shall not make any subcontract for performing any portion of the Work included in the contract without written notice to the OWNER. This contract having been made pursuant to the bid submitted by the CONTRACTOR and in reliance with the CONTRACTOR'S personal qualifications and responsibility, the OWNER reserves the right to withhold approval of any subcontractor which the OWNER may deem would not be in the OWNER'S best interest.

The CONTRACTOR shall, as soon as practicable after signing the Contract, submit a separate written notice to the OWNER identifying each proposed subcontractor. Upon request of the OWNER, the CONTRACTOR shall promptly furnish additional information tending to establish that any proposed subcontractor has the necessary facilities, skill, integrity, past experience and financial resources to perform the work in accordance with the terms and conditions of this Contract.

If the OWNER determines that any proposed subcontractor is unacceptable, he shall so notify the CONTRACTOR, who may thereupon submit another proposed subcontractor unless the CONTRACTOR decides to do the work himself. Disapproval by the OWNER of any proposed subcontractor shall not provide a basis for any claim by the CONTRACTOR.

If an approved subcontractor fails to properly perform the work undertaken, he shall be removed from the job upon request of the OWNER, following notification to the CONTRACTOR in writing of the request for removal and the reasons therefore.

Each subcontract entered into shall provide that the provisions of this Contract shall apply to such subcontractor and his officers and employees in all respects as if he and they were employees of the CONTRACTOR. The OWNER'S decision not to disapprove of any subcontract shall not relieve the CONTRACTOR of any of his responsibilities, duties and liabilities hereunder. The CONTRACTOR shall be solely responsible for the acts, omissions, negligence or defaults of his subcontractors and of such subcontractor's officers, agents and employees, each of whom shall, for this purpose, be deemed to be the agent or employee of the CONTRACTOR to the extent of his subcontract.

The CONTRACTOR agrees to bind each subcontractor and each subcontractor agrees to be bound by the terms of the Contract Documents insofar as applicable to his work. The CONTRACTOR and each subcontractor jointly and severally agree that nothing in the Contract Documents or otherwise shall create or be deemed to create any rights in favor of a subcontractor against the OWNER; nor shall be deemed or construed to impose upon the OWNER any obligation, liability or duty to a subcontractor; or to create any contractual relation whatsoever between a subcontractor and the OWNER.

The provisions contained herein shall likewise apply to any sub-subcontracts.

3.6 PROTECTION OF WORK AND OF PERSONS AND PROPERTY

3.6.1 PROTECTION OF WORK

During performance and up to date of final acceptance, the CONTRACTOR shall be under the absolute obligation to protect the finished work against any damage, loss or injury. In the event of such damage, loss or injury, the CONTRACTOR shall promptly replace or repair such work, whichever the OWNER shall determine to be preferable. The obligation to deliver finished work in strict accordance with the Contract prior to final acceptance shall be absolute and shall not be affected by the OWNER'S approval of or failure to prohibit means and methods of construction used by the CONTRACTOR. All risk of loss or damage to the work shall be borne solely by the CONTRACTOR until final completion and acceptance of all work by the OWNER, as evidenced by the OWNER'S issuance of a certificate of acceptance.

3.6.2 PROTECTION OF PERSONS AND PROPERTY

The CONTRACTOR shall have the responsibility to provide and maintain all warning devices and take all precautionary measures required by law or otherwise to protect persons and property while said persons or property are approaching, leaving or within the work site or any area adjacent to said work site. No separate compensation shall be paid to the CONTRACTOR for the installation or maintenance of any warning devices, barricades, lights, signs or any other precautionary measures required by law or otherwise for the protection of persons or property.

The CONTRACTOR shall assume all duties owed by the OWNER to the general public in connection with the general public's immediate approach to and travel through the work site and the area adjacent to said work site.

Where the work is carried on in or adjacent to any street, alley, sidewalk, public right-of-way or public place, the CONTRACTOR shall at his own cost and expense provide such flagmen and watchmen and furnish, erect and maintain such warning devices, barricades, lights, signs and other precautionary measures for the protection of persons or property as may be prudent or necessary, or as are required by law. The CONTRACTOR'S responsibility for providing and maintaining flagmen, watchmen, warning devices, barricades, signs and lights and other precautionary measures shall not cease until the project shall have been completed and accepted by the OWNER, and shall cease when the certificate of acceptance is issued by the OWNER pursuant to the Contract Documents.

If the OWNER discovers that the CONTRACTOR has failed to comply with the applicable federal and state law (by failing to furnish the necessary flagmen, warning devices, barricades, lights, signs or other precautionary measures for the protection of persons or property), the OWNER may order the CONTRACTOR to take such additional precautionary measures as required by law to be taken to protect persons and property.

In addition, the CONTRACTOR shall be held responsible for all damages to the work and other public or private property due to the failure of warning devices, barricades, signs, lights or other precautionary measures in protecting said property; and whenever evidence is found of such damage, the OWNER may order the damaged portion immediately removed and replaced by and at the cost and expense of the CONTRACTOR.

3.6.3 STORM WATER PROTECTION

The Contractor shall perform, track, participate, implement, and comply with storm water pollution prevention minimum control measures, protocols, and best management practices (BMP) and ensure that water quality standards are not violated in accordance with all regulations and policies as they apply to the Texas

Pollutant Discharge Elimination System general permits. Applicable permits include: 1) Texas Construction General Permit (TXR150000).

Contractors will obtain permit coverage for construction activities disturbing over one acre of land (total acreage is cumulative across all portions of the project).

BMPs include, but are not limited to:

- Preparing and implementing a site-specific Storm Water Pollution Prevention Plan (SWPPP) as outlined in the permit and prior to any soil disturbance.
- Installing and managing erosion and sediment control.
- Make available, upon request, permit associated documentation.
- Practicing spill prevention and good housekeeping.
- Meeting the requirements of the MS4 permit.

3.6.4 SAFETY; TRENCH SAFETY; UNDERGROUND UTILITY SAFETY; PUBLIC CONVENIENCE AND SAFETY;

The CONTRACTOR shall be responsible for complying with state laws and federal regulations relating to safety, trench safety, and underground utility safety, including those which may be enacted during the performance under this Contract. The CONTRACTOR shall comply with the provisions of the The Standard Specifications and Standard Drawings from the Public Works Construction Standards-North Central Texas Council of Governments, 2004 edition and all subsequent addendums and the Instructions to Bidders regarding trench safety, public convenience and safety, and sanitary provisions. The CONTRACTOR shall be solely responsible for, the construction means and methods, techniques, sequences, or procedures, or for the safety precautions and programs in connection with the Work and the Project.

3.7 MATERIALS AND WORKMANSHIP; WARRANTIES AND GUARANTEES

Unless otherwise expressly provided in the contract drawings or specifications, the work shall be performed in accordance with the best modern practice with materials and workmanship of the highest quality and suitable for their purpose. The OWNER shall judge and determine the CONTRACTOR'S compliance with these requirements.

3.7.1 MATERIALS AND EQUIPMENT

The CONTRACTOR shall be free to secure the approved materials, equipment and articles from sources of his own selection. However, if the OWNER finds that the work shall be delayed or adversely affected in any way because a selected source of supply cannot furnish a uniform product in sufficient quantity and at the time required and a suitable source does exist, or the product is not suitable for the Work, the OWNER shall have the right to require the original source of supply changed by the CONTRACTOR. The CONTRACTOR shall have no claim for extra cost or damage because of this requirement.

The CONTRACTOR warrants to the OWNER that all materials and equipment furnished under this contract shall be new unless otherwise specified in the Contract Documents and that same shall be of good quality and workmanship, free from faults and defects and in conformance with the Contract Documents. All materials and equipment not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective and shall be promptly repaired or replaced by the CONTRACTOR at the CONTRACTOR's sole cost upon demand of the OWNER. If required by the OWNER, the CONTRACTOR shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

3.7.1.1 "OR EQUAL" CLAUSE

A. Whenever a material or article required is specified or shown on the plans, by using the name of a proprietary product or of a particular manufacturer or vendor, any material or article which the Landscape Architect determines shall perform adequately the duties imposed by the general design or which the Landscape Architect deems to be of similar appearance (in cases where appearance is of importance) shall be considered equal and satisfactory, provided the material or article so proposed is of equal substance and function. Authorization for any substitution of materials or articles must be obtained by the CONTRACTOR from the Landscape Architect before proceeding with such substitution.

B. Should an authorized substitution require redesign of a portion of the work or alterations to the plans or specifications in order for the materials or articles which are to be substituted to properly fit or in other ways to be satisfactory, the Landscape Architect shall accomplish such redesigns and alterations. The CONTRACTOR shall bear all reasonable costs associated with redesign and alteration efforts performed by the Architect.

3.7.2 WORKMANSHIP

The CONTRACTOR shall promptly correct or replace all work rejected by the OWNER as defective or as failing to conform to the Contract Documents whether observed before or after substantial completion and whether or not fabricated, installed or completed. The CONTRACTOR shall bear all costs of correcting such rejected work, including costs incurred for additional services made necessary thereby.

3.8 WARRANTIES

3.8.1 SPECIAL WARRANTY

If within one year after final acceptance of the work by the OWNER, as evidenced by the final certificate of acceptance or within such longer or shorter period of time as may be prescribed by law or by the terms of any other applicable special warranty on designated equipment or portions of work as required by the Contract Documents, any of the work is found to be defective or not in accordance with the Contract Documents, the CONTRACTOR shall correct it promptly after receipt of a written notice from the OWNER to do so. This obligation shall survive termination or completion of the Contract. The OWNER shall give such notice promptly after discovery of the condition.

The CONTRACTOR shall remove from the site all portions of the work which are defective or nonconforming and which have not been corrected unless removal is waived in writing by the OWNER.

3.8.2 SUBCONTRACTORS' AND MANUFACTURERS' WARRANTIES

All subcontractors', manufacturers' and suppliers' warranties and guarantees, express or implied, respecting any part of the work and any materials used therein, shall be obtained and enforced by the CONTRACTOR for the benefit of the OWNER without the necessity of separate transfer or assignment thereof.

3.8.3 CORRECTED WORK WARRANTY

Any work repaired or replaced, pursuant to this section, shall be subject to the provisions of this section to the same extent as work originally performed.

3.8.4 RIGHTS AND REMEDIES

The rights and remedies of the OWNER provided in this section are in addition to, and do not limit, any rights or remedies afforded to the OWNER by law or any other provision of the Contract Documents, or in any way limit the OWNER'S right to recovery of damage due to default under the Contract. No action or inaction by the OWNER shall constitute a waiver of a right or duty afforded it under the Contract.

IV. INSURANCE

4.1 CONTRACTOR'S INSURANCE

Before commencing work, the CONTRACTOR and each subcontractor shall be required, at its own expense, to furnish the Collin County Purchasing Agent with certified copies of all insurance certificate(s) required by Texas Law, and the coverages required herein, indicating the coverage is to remain in force throughout the term of this Contract. Without limiting any of the other obligations or liabilities of the CONTRACTOR, during the term of the Contract the CONTRACTOR and each subcontractor at their own expense shall purchase and maintain the herein stipulated minimum insurance with companies duly approved to do business in the State of Texas and satisfactory to the OWNER. Certificates of each policy shall be delivered to the OWNER before any work is started, along with a

written statement from the issuing company stating that said policy shall not be canceled, nonrenewed or materially changed without 60 days advance written notice being given to the OWNER.

In addition to any coverage required by Texas Law, the CONTRACTOR shall provide the following coverages at not less than the specified amounts:

- 4.2 Workers Compensation insurance required by Texas Law at statutory limits, including employer's liability coverage at \$1,000,000. In addition to these, the CONTRACTOR must comply with all the requirements of the Texas Department of Insurance, Division of Workers' Compensation; (Note: If you have questions concerning these requirements, you are instructed to contact the DWC.)

By signing this contract or providing or causing to be provided a certificate of coverage, the CONTRACTOR is representing to the OWNER that all employees of the CONTRACTOR and its subcontractors 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 commission's Division of Self-Insurance Regulation. Providing false or misleading information may subject the CONTRACTOR to administrative penalties, criminal penalties, civil penalties, or other civil actions.

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

- 4.3 Broad form commercial general liability insurance, including independent contractor's liability, completed operations and contractual liability, written on an occurrence form, covering, but not limited to, the liability assumed under the indemnification provisions of this contract, fully insuring CONTRACTOR'S (or subcontractor's) liability for injury to or death of OWNER'S employees and third parties, extended to include personal injury liability coverage with damage to property, with minimum limits as set forth below:

General Aggregate \$2,000,000

Completed Products — Components/Operations Aggregate \$2,000,000

Personal and Advertising Injury \$ 1,000,000

Each Occurrence \$ 1,000,000

- 4.3.1 The policy shall include coverage extended to apply to completed operations, asbestos hazards (if this project involves work with asbestos) and XCU (explosion, collapse and underground) hazards. The completed operations coverage must be maintained for a minimum of one year after final completion and acceptance of the work, with evidence of same filed with OWNER.

4.4 Comprehensive automobile and truck liability insurance, covering owned, hired and non-owned vehicles, with a combined bodily injury and property damage minimum limit of \$1,000,000 per occurrence; or separate limits of \$1,000,000 for bodily injury (per person), \$1,000,000 for bodily injury (per accident) and \$1,000,000 for property damage. Such insurance shall include coverage for loading and unloading hazards.

4.5 OWNER'S PROTECTIVE LIABILITY INSURANCE

CONTRACTOR shall obtain, pay for and maintain at all times during the prosecution of the work under this contract an OWNER'S protective liability insurance policy naming the OWNER as insured for property damage and bodily injury, which may arise in the prosecution of the Work or CONTRACTOR'S operations under this Contract. Coverage shall be on an "occurrence" basis, and the policy shall be issued by the same insurance company that carries the CONTRACTOR'S liability insurance with a combined bodily injury and property damage minimum limit of \$1,000,000 per occurrence and \$2,000,000 aggregate.

4.6 "UMBRELLA" LIABILITY INSURANCE

CONTRACTOR shall obtain, pay for and maintain umbrella liability insurance during the contract term, insuring CONTRACTOR for an amount of not less than \$1,000,000 per occurrence combined limit for bodily injury and property damage that follows from and applies in excess of the primary liability coverages required hereinabove. The policy shall provide "drop down" coverage where underlying primary insurance coverage limits are insufficient or exhausted. OWNER shall be named as an additional insured.

4.7 RAILROAD PROTECTIVE INSURANCE

When required in the Special Provisions, CONTRACTOR shall obtain, maintain and present evidence of railroad protective insurance (RPI). The policy shall be in the name of the railroad company having jurisdiction over the right-of-way involved. The minimum limit of coverage shall meet the specifications provided by the railroad company. The OWNER shall specify the amount of RPI necessary.

4.8 POLICY ENDORSEMENTS AND SPECIAL CONDITIONS

Each insurance policy to be furnished by CONTRACTOR shall include the following conditions by endorsement to the policy:

- A. each policy shall name the OWNER as an additional insured as to all applicable coverage;
- B. each policy shall require that 60 days prior to the cancellation, nonrenewal or any material change in coverage, a notice thereof shall be given to OWNER by certified mail;
- C. the term "OWNER" shall include all past, present or future, authorities, boards, bureaus, commissions, divisions, departments and offices of the OWNER and

individual members, elected official, officers, employees and agents thereof in their official capacities and/or while acting on behalf of the OWNER;

D. the policy phrase "other insurance" shall not apply to the OWNER where the OWNER is an additional insured on the policy;

E. all provisions of the contract concerning liability, duty and standard of care together with the indemnification provision, shall be underwritten by contractual liability coverage sufficient to include such obligations within applicable policies;

F. all policies shall contain a waiver of subrogation in favor of OWNER, and its, past, present and future, officials, employees, and volunteers; and,

G. each certificate of insurance shall reference the Project and Contract number, contain all the endorsement required herein, and require a notice to the OWNER of cancellation.

Insurance furnished by the CONTRACTOR shall be in accordance with the following requirements:

A. any policy submitted shall not be subject to limitations, conditions or restrictions deemed inconsistent with the intent of the insurance requirements to be fulfilled by the CONTRACTOR. The OWNER'S decision thereon shall be final;

B. all policies are to be written through companies duly licensed to transact that class of insurance in the State of Texas with a financial ratings of A+VII or better as assigned by BEST Rating Company or equivalent; and

C. All liability policies required herein shall be written with an "occurrence" basis coverage trigger.

CONTRACTOR agrees to the following:

A. CONTRACTOR hereby waives subrogation rights for loss or damage to the extent same are covered by insurance. Insurers shall have no right of recovery or subrogation against the OWNER, it being the intention that the insurance policies shall protect all parties to the Contract and be primary coverage for all losses covered by the policies;

B. Companies issuing the insurance policies and CONTRACTOR shall have no recourse against the OWNER for payment of any premiums or assessments for any deductibles, as all such premiums and deductibles are the sole responsibility and risk of the CONTRACTOR;

C. Approval, disapproval or failure to act by the OWNER regarding any insurance supplied by the CONTRACTOR (or any subcontractors) shall not relieve the CONTRACTOR of full responsibility or liability for damages and accidents as set forth in the Contract Documents. Neither shall the bankruptcy, insolvency or denial of liability by the insurance company exonerate the CONTRACTOR from liability; and

D. No special payments shall be made for any insurance that the CONTRACTOR and subcontractors are required to carry; all are included in the Contract Price and the Contract unit prices. Any of such insurance policies required under this section

may be written in combination with any of the others, where legally permitted, but none of the specified limits may be lowered thereby.

V. OWNERS RIGHTS AND RESPONSIBILITIES

MONTHLY ESTIMATE, PARTIAL PAYMENTS AND FINAL PAYMENTS

5.1 Progress and final payments shall be paid to the Contractor based upon the progress of the Project as indicated by the approved Applications for Payment, certificates of acceptance, or Certificates for Payment, that include an approved Schedule of Values that will be submitted by the CONTRACTOR to the OWNER prior to the commencement of the Work and in accordance with the following:

5.2 MONTHLY ESTIMATES

The CONTRACTOR shall deliver to the OWNER an itemized Application for Payment that shall include the work completed, materials stored at the Project site but not incorporated into the work, materials ready to be installed and stored at another agreed location, and the percentage of Work completed, through the 20th day of each month, on an Application for Payment with a schedule of values previously submitted by the Contractor and approved by the Owner. Prior to release of funds in connection with any Application for Payment, the Owner may request, and the Contractor must provide, properly executed statements of full or partial releases of claims acceptable to Owner in form and content, for all persons or entities supplying labor or materials to the Project.

5.2.1 The Application for Payment is a representation by the CONTRACTOR to the OWNER that the construction has progressed to the point indicated, the quality of the Work covered by the application is in accordance with the Contract Documents, and the Contractor is entitled to payment in the amount requested.

5.2.2 INSPECTION AND PARTIAL PAYMENTS

Whenever the CONTRACTOR shall submit an Application for Payment to the OWNER for work performed by the CONTRACTOR, the CONTRACTOR shall notify the Landscape Architect that the improvement is ready for inspection. The Landscape Architect shall then make such inspection, and will have the authority to reject work that does not conform to the Contract Documents. If the work is satisfactory and in accordance with the specifications and Contract Documents, the Landscape Architect shall issue a Certificate for Payment.

5.2.3 Within thirty (30) days of the Owner's receipt of a properly submitted and correct Application for Payment, and the issuance of a Certificate for Payment, the Owner shall make payment to the Contractor, in the amount approved by the Owner less 5% retainage. Such payment shall be adjusted for work that is incomplete or not in accordance with the Contract Documents or that is the subject of a separate contract, or subcontract or supplier claim or lien against the Contractor or the payment bonds for the project.

5.2.4 No partial or final payment or the entire use or occupancy of the Project by the OWNER shall be considered acceptance of work that does not strictly comply with the Contract Documents or release the CONTRACTOR of any of his responsibilities under the Contract.

5.2.5 PAYMENT FOR LABOR AND MATERIAL; NO LIENS

The CONTRACTOR for himself or any of his subcontractors shall pay all indebtedness which may become due to any person, firm or corporation having furnished labor, material or both in the performance of this Contract. It shall be the responsibility of each person, firm or corporation claiming to have furnished labor, materials or both, in connection with this Contract, to protect his or its interest in the manner prescribed by applicable laws of the State of Texas, provided, however, that as this Contract provides for a public works project, no lien of any kind shall ever exist or be placed against the Work or any portion thereof, or any public funds or retainage held by the OWNER; and any subcontractor shall look solely to the CONTRACTOR and the payment bond surety, and not the OWNER, for payment of any outstanding amounts due for labor, materials or any other indebtedness in connection with the Work. However, the OWNER may, at any time prior to making final payment, require the CONTRACTOR to furnish a Consent of Surety to any payment due the CONTRACTOR for completed work and may, at the discretion of the OWNER or the request of the Surety, make the check jointly payable to the CONTRACTOR and the Surety. The Owner shall have no obligation under this Agreement to pay or to be responsible in any way for payment to any, Architect, another design professional, contractor, subcontractor or supplier performing portions of the Work, pursuant to a contract with the Contractor.

5.2.6 PAYMENT WITHHELD

In addition to express provisions elsewhere contained in the contract, the OWNER may withhold from any payment otherwise due the CONTRACTOR such amount as determined necessary to protect the OWNER'S interest, or, if it so elects, may withhold or retain all or a portion of any progress payment or refund payment on account of:

- A. unsatisfactory progress of the Work not caused by conditions beyond the CONTRACTOR'S control,
- B. defective work not corrected,
- C. CONTRACTOR'S failure to carry out instructions or orders of the OWNER or his representative,
- D. a reasonable doubt that the Contract can be completed for the balance then unpaid,
- E. work or execution thereof not in accordance with the Contract Documents,
- F. claim filed by or against the CONTRACTOR or reasonable evidence indicating probable filing of claims,

- G. failure of the CONTRACTOR to make payments to subcontractor or for material or labor,
 - H. damage to another contractor,
 - I. unsafe working conditions allowed to persist by the CONTRACTOR,
 - J. failure of the CONTRACTOR to provide work schedules as required by the OWNER,
 - K. use of subcontractors without the OWNER'S approval or,
 - L. failure of the CONTRACTOR to keep current as-built record drawings at the job site or to turn same over in completed form to the OWNER.
- When the above grounds are removed, payment shall be made for amounts withheld because of them, and OWNER shall never be liable for interest on any delayed or late payment.

5.2.7 PAYMENT FOR EXTRA WORK

The extra work done by the CONTRACTOR as authorized and approved by the Landscape Architect shall be paid for in the manner hereinafter described, and the compensation thus provided shall be accepted by the CONTRACTOR as payment in full for all labor, materials, tools, equipment and incidentals and all superintendents' and timekeepers' services, all insurance, bond and all other overhead expense incurred in the performance of the extra work.

Payment for extra work shall be made by one of the following methods:

- A. Method "A" — by unit prices agreed on in writing by the OWNER and CONTRACTOR before said extra work is commenced, subject to all other conditions of the contract.
- B. Method "B" — by lump sum price agreed on in writing by the OWNER and the CONTRACTOR before said extra work is commenced, subject to all other conditions of the contract.

5.2.8 SUBSTANTIAL COMPLETION

The Project will be considered substantially complete when the OWNER can utilize the Project for its intended purpose and the Work is in conformance with the Contract Documents.

5.3 APPLICATION FOR FINAL PAYMENT.

Upon full performance of all the Contract Work and the full performance of all the provisions of the Contract, the CONTRACTOR shall submit a final application for payment to the OWNER, the CONTRACTOR shall notify the Landscape Architect that the improvement is ready for inspection. All warranties and guaranties required of the CONTRACTOR by the Contract Documents shall be assembled and delivered by the CONTRACTOR to the OWNER as Part of the final Application for Payment. The

Contractor will assign to the Owner all manufacturer's warranties relating to materials and labor used in the work and will perform the Work in such a manner as to preserve all such manufacturer's warranties. The CONTRACTOR will deliver a certificate evidencing that insurance and bonds required by the Contract Documents will remain in full force and effect pursuant to the requirements of the Contract. The final Certificate for Payment will not be issued until all such warranties and guaranties have been received and accepted by the Owner, and a Certificate of Acceptance is issued by the or Architect.

5.3.1 FINAL INSPECTION AND ACCEPTANCE

Whenever the improvements provided for by the Contract shall have been completely performed on the part of the CONTRACTOR, the CONTRACTOR shall notify the OWNER, and Landscape Architect that the improvement is ready for final inspection. The Landscape Architect shall then make such final inspection, and if the work is satisfactory and in accordance with the specifications and Contract Documents, the CONTRACTOR shall be issued a certificate of acceptance.

5.3.2 FINAL PAYMENT

Whenever the improvements provided for by the Contract shall have been completely performed on the part of the CONTRACTOR, as evidenced in the certificate of acceptance, and all required submissions provided to the OWNER, a final estimate showing the value of the work shall be prepared by the Landscape Architect as soon as the necessary measurements and computations can be made. All prior estimates upon which payments have been made are subject or necessary corrections or revisions in the final payment. The amount of this final estimate, less any sums that have been previously paid, or deducted under the provisions of the Contract, shall be paid the CONTRACTOR within 30 days after the final acceptance, provided that the CONTRACTOR has furnished to the OWNER a consent of surety and an affidavit or other satisfactory evidence that all indebtedness connected with the Work and all sums of money due for any labor, materials, apparatus, fixtures or machinery furnished for and used in the performance of the work have been paid or otherwise satisfied, or that the person or persons to whom the same may respectively be due have consented to such final payment.

The acceptance by the CONTRACTOR of the final payment as aforesaid shall operate as and shall be a release to the OWNER from all claims or liabilities under the Contract, including all subcontractor claims, for anything done or furnished or relating to the Work under the Contract or for any act or neglect of said OWNER relating to or connected with the Contract.

All warranties and guarantees shall commence from the date of the certificate of acceptance. No interest shall be due the CONTRACTOR on any partial or final payment or on the retainage.

5.3 MODIFICATIONS TO CONTRACT WORK OR TIME OF PERFORMANCE

5.3.1 OWNER'S RIGHT TO TEMPORARILY SUSPEND WORK

5.3.2 REASONS FOR SUSPENSION

The OWNER shall have the right by written order to temporarily suspend the work, in whole or in part, whenever, in the judgment of the OWNER, such temporary suspension is required:

- A. in the interest of the OWNER generally,
- B. due to government or judicial controls or orders which make performance of this contract temporarily impossible or illegal,
- C. to coordinate the work of separate contractors at the job site,
- D. to expedite the completion of a separate contract even though the completion of this particular Contract may be thereby delayed,
- E. because of weather conditions unsuitable for performance of the Work, or
- F. because the CONTRACTOR is proceeding contrary to contract provisions or has failed to correct conditions considered unsafe for workmen.

The written order of the OWNER to the CONTRACTOR shall state the reasons for suspending the work and the anticipated periods for such suspension. Upon receipt of the OWNER'S written order, the CONTRACTOR shall suspend the work covered by the order and shall take such means and precautions as may be necessary to properly protect the finished and partially finished work, the unused materials and uninstalled equipment, including the providing of suitable drainage about the work and erection of temporary structures where necessary. The CONTRACTOR shall not suspend the Work without written direction from the OWNER and shall proceed with the work promptly when notified by the OWNER to resume operations.

5.3.3 NO ADDITIONAL COMPENSATION

No additional compensation shall be paid to the CONTRACTOR for a temporary suspension of the Work by the OWNER or otherwise where same is caused by the fault of the CONTRACTOR. Where such temporary suspension is not due to the fault of the CONTRACTOR, he shall be entitled to:

- A. an equitable extension of working time for the completion of the work, not to exceed the delay caused by such temporary suspension, as determined by the OWNER; and

B. the actual and necessary costs of properly protecting the finished and partially finished work, unused materials and uninstalled equipment during the period of the ordered suspension as determined by the OWNER as being beyond the Contract requirements, such costs, if any, to be determined pursuant to the terms of the Contract; and

C. where the CONTRACTOR elects to move equipment from the job site and then return it to the site when the work is ordered resumed, the actual and necessary costs of these moves, in an amount determined by the OWNER pursuant to the terms of the Contract.

5.3.4 USE OF COMPLETED PORTIONS OF WORK

The OWNER may, after written notice to the CONTRACTOR, and without incurring any liability for increased compensation to the CONTRACTOR, take over and use any completed portion of the Work prior to the final completion and acceptance of the entire work included in the Contract, and notwithstanding that the time allowed for final completion has not expired. The OWNER and CONTRACTOR agree that occupancy of portions of the Work by the OWNER shall not in any way evidence the substantial completion of the entire work or signify the OWNER's acceptance of the Work.

The CONTRACTOR shall not object to, nor interfere in any way with, such occupancy or use after receipt of the OWNER'S written notice. Immediately prior to such occupancy and use, the OWNER shall inspect such portion of the Work to be taken over and shall furnish the CONTRACTOR a written statement of the work, if any, still to be done on such part. The CONTRACTOR shall promptly thereafter complete such unfinished work to permit occupancy and use on the date specified in the OWNER'S written order, unless the OWNER shall permit specific items of work to be finished after the occupancy and use by the OWNER.

In the event the CONTRACTOR is unreasonably delayed by the OWNER exercising its rights under this section, the CONTRACTOR may submit a request for an extension of time; CONTRACTOR'S sole remedy for an unreasonable delay shall be an extension of time and shall not be entitled to any additional compensation.

5.4 COMMENCEMENT; TIME OF COMPLETION; DELAYS; EXTENSION OF TIME; LIQUIDATED DAMAGES

5.4.1 COMMENCEMENT; TIME OF COMPLETION

Contractor shall commence work within ten (10) consecutive calendar days after receiving from County a notice to proceed. Contractor agrees and covenants that the number of consecutive calendar days allowed to complete all work following a notice to proceed shall be as follows:

5.4.2. LIQUIDATED DAMAGES FOR FAILURE TO COMPLETE ON TIME

Time is of the essence in the progress and completion of this Contract. For each calendar day that any Work shall remain uncompleted after the time specified in the proposal and the Contract, or the increased time granted by the OWNER, or as equitably increased by additional work or materials ordered after the Contract is signed, the sum per day given in the following schedule, unless otherwise specified in the special provisions, shall be deducted from the monies due the CONTRACTOR:

Two Hundred Dollars and Zero Cents (\$200.00)

The sum of money thus deducted for such delay, failure or noncompletion is not to be considered as a penalty, but shall be deemed, taken and treated as reasonable liquidated damages, per calendar day that the CONTRACTOR shall be in default after the time stipulated in the Contract for completing the Work. The said amounts are fixed and agreed upon by and between OWNER and CONTRACTOR because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the OWNER in such event would sustain; and said amounts are agreed to be the amount of damages which the OWNER would sustain and which shall be retained from the monies due, or that may become due, the CONTRACTOR under this Contract; and if said monies be insufficient to cover the amount owing, then the CONTRACTOR or his surety shall pay any additional amounts due.

5.4.3 EXTENTIONS OF TIME

The CONTRACTOR shall be entitled to an extension of working time under this Contract only when claim for such extension is submitted to the OWNER in writing by the CONTRACTOR within seven days from and after the time when any alleged cause of delay shall occur, and then only when such time is approved by the OWNER. In adjusting the Contract working time for the completion of the Project, unforeseeable causes beyond the control and without the fault or negligence of the CONTRACTOR, including, acts of God or the public enemy, acts of the OWNER, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, or delays of subcontractors due to such causes beyond their control shall be taken into consideration.

If the satisfactory execution and completion of the Contract should require work and materials in greater amounts or quantities than those set forth in the Contract, requiring more time for completion than the anticipated time, then the contract working time shall be equitably increased, but not more than in the same proportion as the cost of the additional work bears to the cost of the original work contracted for. No allowances shall be made for delays or suspension of the performance of the Work due to the fault of the CONTRACTOR.

No adjustment to working time shall be made if, concurrently with the equitable cause for delay, there existed a cause for delay due to the fault or negligence of the CONTRACTOR, his agents, employees or subcontractors; and no adjustment shall be made to the Contract Price and the CONTRACTOR shall not be entitled to claim or receive any additional compensation as a result of or arising out of any delay resulting in adjustment to the working time hereunder, including delays caused by the acts or negligence of the OWNER. Notwithstanding any other provision of the Contract Documents, all claims for extension of working time must be submitted in accordance with the provisions of this Contract, and no act of the OWNER shall be deemed a waiver or entitlement of such extension.

5.5 TERMINATION FOR CONVENIENCE OF THE OWNER

5.5.1 NOTICE OF TERMINATION

The performance of the Work under this Contract may be terminated by the OWNER in whole or from time to time in part, in accordance with this section, whenever the OWNER shall determine that such termination is in the best interest of the OWNER. Any such termination shall be effected by mailing a notice of termination to the CONTRACTOR specifying the extent to which performance of work under the Contract is terminated, and the date upon which such termination becomes effective. Receipt of the notice shall be deemed conclusively presumed and established when the letter is placed in the United States Mail by the OWNER. Further, it shall be deemed conclusively presumed and established that such termination is made with just cause as therein stated; and no proof in any claim, demand or suit shall be required of the OWNER regarding such discretionary action.

5.5.2 CONTRACTOR ACTION

After receipt of a notice of termination, and except as otherwise directed by the OWNER or Architect, the CONTRACTOR shall:

- A. stop work under the Contract on the date and to the extent specified in the notice of termination;
- B. place no further orders or subcontracts for materials, services or facilities except as may be necessary for completion of such portion the Work under the Contract as is not terminated;

- C. terminate all orders and subcontracts to the extent that they relate to the performance of work terminated by the notice of termination;
- D. transfer title to the OWNER and deliver in the manner, at the times, and to the extent, if any, directed by the OWNER or Architect:
 - 1. the fabricated or unfabricated parts, work in process, completed work, supplies and other material produced as a part of, or acquired in connection with the performance of, the work terminated by the notice of termination; and
 - 2. the completed or partially completed plans, drawings, information and other property which, if the Contract had been completed, would have been required to be furnished to the OWNER.
- E. complete performance of such part of the work as shall not have been terminated by the notice of termination; and
- F. take such action as may be necessary, or as the Landscape Architect may direct, for the protection and preservation of the property related to its Contract which is in the possession of the CONTRACTOR and in which the OWNER has or may acquire an interest.

At a time not later than 30 days after the termination date specified in the notice of termination, the CONTRACTOR may submit to the OWNER a list, certified as to the quantity and quality, of any or all items of termination inventory not previously disposed of, exclusive of items the disposition of which has been directed or authorized by the Architect. Not later than 15 days thereafter, the OWNER shall accept title to such items and remove them or enter into a storage agreement covering the same, provided that the list submitted shall be subject to verification by the Landscape Architect upon removal of the items, or, if the items are stored, within 45 days from the date of submission of the list, and provided that any necessary adjustments to correct the list as submitted shall be made prior to final settlement.

5.5.3 TERMINATION CLAIM

Within 60 days after notice of termination, the CONTRACTOR shall submit his termination claim to the Landscape Architect in the form and with the certification prescribed by the OWNER. Unless one or more extensions in writing are granted by the OWNER upon request of the CONTRACTOR, made in writing within such 60-day period or authorized extension thereof, any and all such claims shall be conclusively deemed waived.

5.5.4 AMOUNTS

The CONTRACTOR and OWNER may agree upon the whole or any part of the amount or amounts to be paid to the CONTRACTOR by reason of the total or partial termination of work pursuant hereto, provided that such agreed amount or amounts shall never exceed the total contract price as reduced by the amount of payments otherwise made and as further reduced by the Contract Price of work not

terminated. The contract shall be amended accordingly, and the CONTRACTOR shall be paid the agreed amount. No amount shall be due for lost or anticipated profits. Nothing prescribing the amount to be paid to the CONTRACTOR in the event of failure of the CONTRACTOR and the OWNER to agree upon the whole amount to be paid to the CONTRACTOR by reason of the termination of work pursuant to this section, shall be deemed to limit, restrict or otherwise determine or affect the amount or amounts which may be agreed upon to be paid to the CONTRACTOR pursuant to this paragraph.

5.5.5 FAILURE TO AGREE

In the event of the failure of the CONTRACTOR and the OWNER to agree, as provided herein, upon the whole amount to be paid to the CONTRACTOR by reason of the termination of work pursuant to this section, the OWNER shall determine, on the basis of information available to it, the amount, if any, due to the CONTRACTOR by reason of the termination and shall pay to the CONTRACTOR the amounts determined. No amount shall be due for lost or anticipated profits.

5.5.6 DEDUCTIONS

In arriving at the amount due the CONTRACTOR under this section, there shall be deducted (a) all unliquidated advance or other payments on account theretofore made to the CONTRACTOR, applicable to the terminated portion of this contract; (b) any claim which the OWNER may have against the CONTRACTOR in connection with this Contract; and (c) the agreed price for or the proceeds of sale of any materials, supplies or other things kept by the CONTRACTOR or sold, pursuant to the provisions of this clause, and not otherwise recovered by or credited to the OWNER.

5.5.7 ADJUSTMENT

If the termination hereunder be partial prior to the settlement of the terminated portion of this Contract, the CONTRACTOR may file with the Owner a request in writing for an equitable adjustment of the price or prices specified in the Contract relating to the continued portion of the Contract (the portion not terminated by the notice of termination), and such equitable adjustment as may be agreed upon shall be made in such price or prices; nothing contained herein, however, shall limit the right of the OWNER and the CONTRACTOR to agree upon the amount or amounts to be paid to the CONTRACTOR for the completion of the continued portion of the Contract when said contract does not contain an established contract price for such continued portion.

5.5.8 NO LIMITATION OF RIGHTS

Nothing contained in this section shall limit or alter the rights which the OWNER may have for termination of this Contract under any other provision of this Contract or any other right which OWNER may have for default or breach of contract by CONTRACTOR.

5.6 CONTRACTOR DEFAULT: OWNER'S RIGHT TO SUSPEND WORK AND ANNUL CONTRACT

The Work or any portion of the Work under contract shall be suspended immediately on written order of the OWNER declaring the CONTRACTOR to be in default. A copy of such notice shall be served on the CONTRACTOR'S surety. The contract may be annulled by the OWNER for any good cause or causes, among others of which special reference is made to the following:

- A. failure of the CONTRACTOR to start the work within 10 days from date specified in the written work order issued by the OWNER to begin the work;
- B. evidence that the progress of the work being made by the CONTRACTOR is insufficient to complete the work within the specified working time;
- C. failure of the CONTRACTOR to provide sufficient and proper equipment, materials or construction forces for properly executing the Work;
- D. evidence that the CONTRACTOR has abandoned the Work or discontinuance of the performance of the Work or any part thereof and failure to resume performance within a reasonable time after notice to do so;
- E. evidence that the CONTRACTOR has become insolvent or bankrupt, or otherwise financially unable to carry on the Work;
- F. deliberate failure on the part of the CONTRACTOR to observe any requirements of the specifications or to comply with any orders given by the Landscape Architect as provided for in the specifications;
- G. failure of the CONTRACTOR to promptly make good any defects in materials or workmanship, or any defects of any nature, the correction of which has been directed in writing by the OWNER;
- H. evidence of collusion for the purpose of illegally procuring a contract or perpetrating fraud on the OWNER in the construction of work under contract;
- I. repeated violations of safe working procedures;
- J. the filing by the CONTRACTOR of litigation against the OWNER prior to final completion of the Work. When the Work is suspended for any of the causes itemized above, or for any other cause or causes, the CONTRACTOR shall discontinue the Work or such part thereof as the OWNER shall designate, whereupon the surety may either at its option assume the Contract or that portion thereof which the OWNER has ordered the CONTRACTOR to discontinue and perform the same or, with the written consent of the OWNER, sublet the same, provided, however, that the surety shall exercise its option within two weeks after the written notice to discontinue the work has been served upon the CONTRACTOR and upon the surety or its authorized agents. The surety in such event shall assume the CONTRACTOR'S place in all respects and shall be paid by the OWNER for all work performed by it in accordance with the terms of the

Contract, but in no event shall such payments exceed the contract amount, regardless of the cost to the surety to complete the Work.

In the event that the surety assumes the CONTRACTOR'S place, duties and responsibilities in the Contract, all monies remaining due the CONTRACTOR at the time of his default shall thereupon become due and payable to the surety as the work progresses, subject to all terms of the Contract. In case the surety does not, within the hereinabove specified time, exercise its obligation to assume the Contract or that portion thereof which the OWNER has ordered the CONTRACTOR to discontinue, then the OWNER shall have the power to complete by contract or otherwise, as it may determine, the Work herein described or such part thereof as it may deem necessary; and the CONTRACTOR hereto agrees that the OWNER shall have the right to take possession of or use any or all of the materials, plans, tools, equipment, supplies and property of every kind provided by the CONTRACTOR for the purpose of the Work and to procure other tools, equipment and materials for the completion of the same and to charge to the account of the CONTRACTOR the expense of said contract for labor, materials, tools, equipment and expenses incident thereto. The expense so charged shall be deducted by the OWNER out of such monies as may be due or may at any time thereafter become due the CONTRACTOR under and by virtue of the Contract or any part thereof.

The OWNER shall not be required to obtain the lowest bid for the work of completing the Contract, but the expenses to be deducted shall be the actual cost of such work. In case such expense is less than the sum which would have been payable under the contract if the same had been completed by the CONTRACTOR, then in such case the OWNER may pay the CONTRACTOR the difference in the cost, provided that the CONTRACTOR shall not be entitled to any claim for damages or for loss of anticipated profits.

In case such expense shall exceed the amount which would have been payable under the Contract if the same had been completed by the CONTRACTOR, the CONTRACTOR and his surety shall pay the amount of the excess to the OWNER on notice from the OWNER for excess due including any costs incurred by the OWNER, such as inspection, legal fees and liquidated damages. When any particular part of the Work is being carried out by the OWNER by contract or otherwise under the provisions of this section, the CONTRACTOR shall continue the remainder of the Work in conformity with the terms of the contract and in such manner as not to hinder or interfere with the performance of workmen employed as above provided by the OWNER or surety.

5.7 SUSPENSION BY COURT ORDER AGAINST THE OWNER

The CONTRACTOR shall suspend such part or parts of the Work pursuant to a court order issued against the OWNER and shall not be entitled to additional compensation by virtue of such court order; neither shall the CONTRACTOR be liable to the OWNER in the event the Work is suspended by such court order, unless such suspension is due to the fault or negligence of the CONTRACTOR. A delay of the CONTRACTOR due to a court order against the OWNER, or due to the OWNER'S failure to secure right-of-way at the time required or because of a conflict of a utility with the Work, shall not be cause for additional

compensation for damages sustained by the CONTRACTOR, but may be a cause for extension of contract working time only. The CONTRACTOR'S sole remedy for any suspensions of the Work is an equitable extension of time to perform the Work.

5.8 NO WAIVER OF RIGHTS OR ESTOPPEL

The OWNER, or any officer or agent thereof, shall not be precluded at any time, either before or after final completion and acceptance of the Work and final payment therefore from:

A. showing the true and correct amount, classifications, quality and character of the Work done and materials furnished by the CONTRACTOR or any other person under this Contract, or from showing at any time that any determination, return, decision, approval, order, letter, payment or certification is untrue and incorrect or improperly made in any particular, or that the Work or the materials or any parts thereof do not in fact conform to the contract requirements; and (b) demanding the recovery from the CONTRACTOR of any overpayments made to him, or such damages as the OWNER may sustain by reason of the CONTRACTOR'S failure to perform each and every part of this Contract in strict accordance with its terms; or both.

VI. AUTHORITY OF THE ARCHITECT

6.1 All work shall be performed in a good and workmanlike manner and to the satisfaction of the Landscape Architect. The Landscape Architect shall decide all questions which arise as to the quality and acceptability of materials furnished, work performed, manner of performance, rate of progress of the work, sequence of the construction, interpretation of the plans and specifications, acceptable fulfillment of the Contract, compensation, mutual rights between contractors under these specifications and suspension of the Work. He shall determine the amount and quality of work performed and materials furnished, and his decisions and estimates shall be final. His estimate in such event shall be a condition precedent to the right of the CONTRACTOR to receive money due him under the Contract.

6.2 OWNER'S REPRESENTATIVES

Where the Contract Documents indicate that determinations, directions or approvals shall be made by the OWNER or "Owner's representatives," this shall mean the OWNER acting directly, or through duly authorized persons acting within the limit of authority delegated to them. Any determination, direction or approval of such authorized representatives shall be subject to review by the OWNER. For purposes of administering the schedule or the payment provisions of this Contract the Landscape Architect may act as the Owner's representative for purposes of approving payments, changes, scheduling, or acceptance of the Work, at the OWNER'S discretion.

6.3 INSPECTIONS OF WORK PROGRESS

The Landscape Architect shall visit the site at during construction of the Project as necessary as the Owner's Representative to verify that the Work is being performed in compliance with the Contract Documents and shall be given total access to the Project by the CONTRACTOR. Site visits or inspections by the Landscape Architect shall in no way relieve the CONTRACTOR of any of its responsibilities or duties pursuant to the Contract Documents. The Landscape Architect will neither have control over, nor be responsible for, the construction means and methods, techniques, sequences, or procedures, or for the safety precautions and programs in connection with the Work or the Project. The CONTRACTOR shall be solely responsible for, the construction means and methods, techniques, sequences, or procedures, or for the safety precautions and programs in connection with the Work or the Project.

6.4 CONSTRUCTION STAKES

Landscape Architect will provide the Contractor with primary horizontal and vertical control to consist of one construction baseline and two benchmarks.

The Contractor shall take all necessary precautions to preserve any and/or all markings and staking. Payment for costs of restaking shall be the responsibility of the Contractor.

6.5 APPROVAL OF SUBMITTALS

The Landscape Architect shall review and approve or take other appropriate action the CONTRACTOR's submittals such as Shop Drawings, Product Data and Samples, for the purpose of checking for conformance with the Contract Documents. The Architect's review of the submittals shall not relieve the CONTRACTOR of any of its obligations to perform the Work in strict compliance with the Contract Documents. The Architect's review shall not be considered approval of safety precautions, means and methods, techniques, sequences or procedures that are the responsibility of the CONTRACTOR.

VII. CLAIMS OR DISPUTES

7.1 CLAIMS AGAINST OWNER AND ACTION THEREON.

No claim against the OWNER under the Contract or for breach of the Contract or additional compensation for extra or disputed work shall be made or asserted against the OWNER under the Contract or in any court action, unless the CONTRACTOR shall have strictly complied with all requirements relating to the giving of notice and information with respect to such claim as required by the Contract.

7.2 CLAIM AGAINST OFFICERS, EMPLOYEES OR AGENT OF THE OWNER.

No claim whatsoever shall be made by the CONTRACTOR against any, past, present or future, officer, employee or agent of the OWNER for or on account of, anything done or omitted to be done in connection with this Contract.

VIII. MISCELLANEOUS PROVISIONS

8.1 FINANCIAL INTEREST IN ANY CONTRACT BY OWNER'S OFFICERS, EMPLOYEES OR AGENTS

No officer, employee or agent of the OWNER shall have a financial interest, direct or indirect, in any contract with the OWNER or be financially interested, directly or indirectly, in the sale to the OWNER of any land, materials, supplies or services, except on behalf of the OWNER as an officer or employee. Any willful violation of this article shall constitute malfeasance in office, and any officer or employee guilty thereof shall thereby forfeit his office or position. Any violation of this article with the knowledge, expressed or implied, of the persons, partnership, company, firm, association or corporation contracting with the OWNER shall render the contract involved voidable by the OWNER.

8.2 SERVICE OF NOTICES

The OWNER and the CONTRACTOR shall each designate addresses where all notices, directions or other communication may be delivered or to which they may be mailed.

Notices to the surety or sureties on contract bonds shall be directed or delivered to the home office, or to the agent or agents who executed the bonds on behalf of the surety or sureties, or to their designated agent for delivery of notices.

Actual delivery of any such notice, direction or communication to the aforesaid places or depositing it in a postpaid wrapper addressed thereto in any post office regularly maintained by the United States Postal Service shall be conclusively deemed to be sufficient service thereof upon the above persons as of the date of such delivery or deposit.

The designated addresses may be changed at any time by an instrument in writing executed by the party changing the addresses and delivered to the other party.

Nothing herein contained shall, however, be deemed to preclude or tender inoperative the service of any notice, direction or communication upon the above parties personally or, if the CONTRACTOR be a corporation, upon any officer or director thereof.

8.3 UNLAWFUL PROVISIONS DEEMED STRICKEN

In the event a term, condition, or provision of this Agreement is determined to be void, unenforceable, or unlawful by a court of competent jurisdiction, then that term, condition, or provision shall be deleted and the remainder of the Agreement shall remain in full force and effect.

8.4 ALL LEGAL PROVISIONS INCLUDED

It is the intent and agreement of the parties to this contract that all legal provisions of law required to be inserted herein shall be and are inserted herein. If through mistake or oversight, however, any such provision is not herein inserted, or is not inserted in proper form, then upon application of either party, the contract shall be amended so as to strictly comply with the law and without prejudice to the rights of either party hereunder.

8.5 ASSIGNMENTS

The CONTRACTOR shall not assign, transfer, convey or otherwise dispose of this contract, or his right to execute it, or his right, title or interest in it or any part thereof without the previous written consent of the surety company and the written approval of the OWNER.

The CONTRACTOR shall not assign, either legally or equitably, by power of attorney or otherwise, any of the monies due or to become due under this Contract or its claim thereto without the prior written consent of the surety company and the written approval of the OWNER.

The approval of the OWNER of a particular assignment, transfer or conveyance shall not dispense with such approval to any further or other assignments.

The approval by the OWNER of any assignment, transfer or conveyance shall not operate to release the CONTRACTOR or surety hereunder from any of the Contract and bond obligations, and the CONTRACTOR shall be and remain fully responsible and liable for the defaults, negligent acts and omissions of his assignees, their agents and employees, as if they were his own.

8.6 STATE AND LOCAL SALES AND USE TAXES

The OWNER qualifies for exemption from the state and local sales and use taxes, pursuant to the provisions of Section 151.309 of the Texas Limited Sales, Excise and Use Tax Act. Therefore, the CONTRACTOR shall not pay such taxes which would otherwise be payable in connection with the performance of this Contract.

The CONTRACTOR shall issue an exemption certificate in lieu of the tax on the purchase, rental or lease of:

- A. all materials, supplies, equipment and other tangible personal property incorporated into the real property being improved; and
- B. all materials, supplies, equipment and other tangible personal property used or consumed by the CONTRACTOR in performing the Contract with the OWNER. Materials and supplies "used in the performance of a contract" include only those materials actually incorporated into the property being improved and those supplies directly used to incorporate such materials into the property being improved. Overhead supplies and supplies used indirectly or only incidental to the performance of the Contract with the OWNER are not included in the exemption.

Under “reasons said purchaser is claiming this exemption” in the exemption certificate, the CONTRACTOR must name the OWNER and the project for which the equipment, material and supplies are being purchased, leased or rented.

8.7 VENUE AND GOVERNING LAW

The parties agree that the laws of the State of Texas shall govern the interpretation, validity, performance and enforcement of this Construction Agreement, and that the exclusive venue for any legal proceeding involving this Construction Agreement shall be in Collin County, Texas.

8.8 NO WAIVER OF LEGAL RIGHTS

Inspection by the Architect, or OWNER; any order, measurement, quantity or certificate by the Architect; any order by the OWNER for payment of money; any payment for or acceptance of any work; or any extension of time or any possession taken by the OWNER shall not operate as a waiver of any provisions of the contract or any power therein reserved to the OWNER of any rights or damages therein provided. Any waiver of any breach of contract shall not be held to be a waiver of any other or subsequent breach. The OWNER reserves the right to correct any error that may be discovered in any estimate that may have been paid and to adjust the same to meet the requirements of the Contract Documents. The OWNER reserves the right to recover by process of law sums as may be sufficient to correct any error or make good any deficiency in the Work resulting from such error, dishonesty or collusion by the CONTRACTOR or his agents, discovered in the Work after the final payment has been made.

Neither final acceptance of the Work, nor final payment shall relieve the CONTRACTOR of responsibility for faulty materials or workmanship, and the CONTRACTOR shall promptly remedy any defects due thereto and pay for any damage to other work resulting therefrom. Likewise, neither final acceptance nor final payment, nor partial or entire use or occupancy of the work by the OWNER shall constitute acceptance of work not done in accordance with the Contract Documents or relieve CONTRACTOR of liability with respect to any expressed or implied warranties or responsibility for faulty materials or workmanship, whether same be patently or latently defective.

8.9 OBLIGATION TO PERFORM FUNCTIONS

Any failure or neglect on the part of OWNER, Landscape Architect or inspectors to enforce provisions herein dealing with supervision, control, inspection, testing or acceptance and approval of the work shall never operate to relieve CONTRACTOR from full compliance with the Contract Documents nor render OWNER liable to CONTRACTOR for money damages, extensions of time or increased compensation of any kind.

8.10 SUCCESSORS AND ASSIGNS

Subject to the limitations upon assignment and transfer herein contained, this contract shall be binding upon and inure to the benefit of the parties hereto, their respective successors and assigns.

8.11 HEADINGS

The title and headings contained in the Contract Documents and the subject organization are used only to facilitate reference, and in no way define or limit the scope of intent of any of the provisions of this Contract.

8.12 ENTIRE AGREEMENT; AMENDMENTS; BINDING EFFECT

This Construction Agreement, including the Contract Documents and all the documents incorporated therein represents the entire and integrated agreement between the OWNER, Collin County, and the CONTRACTOR, and supersedes all prior negotiations, representations, or agreements, either written or oral. This Construction Agreement may be amended only by written instrument signed by both, the OWNER, Collin County, and the CONTRACTOR.

8.13 INTERPRETATION

Although this Agreement is drafted by the OWNER, Collin County, should any part be in dispute, the parties agree that this Construction Agreement shall not be construed more favorable for either party. No rule of construction requiring that ambiguities in this Contract shall be construed more favorably for either party shall apply.

8.14 EXPENSES FOR ENFORCEMENT

In the event either Party hereto is required to employ an attorney to enforce the provisions of this Agreement or is required to commence legal proceedings to enforce the provisions hereof, the prevailing Party shall be entitled to recover from the other, reasonable attorney's fees and court costs incurred in connection with such enforcement, including collection.

IN WITNESS WHEREOF, the parties have executed this Construction Agreement upon the year and date indicated beneath their signatures hereto.

CONTRACTOR:

By: _____

Date: _____

ATTEST:

Secretary

COLLIN COUNTY, TEXAS:

By: _____
Michalyn Rains, CPPO, CPPB, Purchasing Agent

Date: _____

Collin County Commissioners' Court Order No.

ATTEST:

Secretary

APPROVED AS TO FORM:

ACKNOWLEDGMENTS

STATE OF TEXAS §

COUNTY OF _____ §

BEFORE ME, _____ on this day personally appeared _____, of _____, a _____ corporation, known to me (or proved to me on the oath of) _____ or through _____ (description of identity card or other document) to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same as the act and deed of the corporation, for the purposes and consideration therein expressed and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the ___ day of _____, 2017

Notary Public, State of Texas

Printed Name

My Commission expires on the ____ day of _____, _____.

STATE OF TEXAS §

COUNTY OF COLLIN §

BEFORE ME, _____ on this day personally appeared _____, Purchasing Agent of COLLIN COUNTY, TEXAS, a political subdivision of the State of Texas, known to me (or proved to me on the oath of) _____ or through _____ (description of identity card or other document) to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same as the act and deed of COLLIN COUNTY, TEXAS, for the purposes and consideration therein expressed and in the capacity therein stated.

GIVEN under my hand and seal of office this the _____ day of _____, 2017.

Notary Public, State of Texas

Printed Name

My Commission expires on the ____ day of _____, _____.

SECTION 00510 - CONFLICT OF INTEREST

INFORMATION REGARDING **CONFLICT OF INTEREST QUESTIONNAIRE**

During the 79th Legislative Session, House Bill 914 was signed into law effective September 1, 2005, which added Chapter 176 to the Texas Local Government Code. Recent changes have been made to Chapter 176 pursuant to HB23, which passed the 84th Legislative Session. Chapter 176 mandates the public disclosure of certain information concerning persons doing business or seeking to do business with Collin County, including family, business, and financial relationships such persons may have with Collin County officers or employees involved in the planning, recommending, selecting and contracting of a vendor for this procurement.

For a copy of Form CIQ and CIS:

http://www.ethics.state.tx.us/filinginfo/conflict_forms.htm

The vendor acknowledges by doing business or seeking to do business with Collin County that he/she has been notified of the requirements under Chapter 176 of the Texas Local Government Code and that he/she is solely responsible for complying with the terms and conditions therein. Furthermore, any individual or business entity seeking to do business with Collin County who does not comply with this practice may risk award consideration of any County contract.

For a listing of current Collin County Officers:

<http://www.collincountytx.gov/government/Pages/officials.aspx>

The following County employees will be involved in the planning, recommending, selecting, and contracting for the attached procurement:

Department/Evaluation Team:

Bill Burke – Director of Building Projects

David Dooley – Building Projects Coordinator

Purchasing:

Michalyn Rains – Purchasing Agent

Michelle Charnoski - Assistant Purchasing Agent

J. D. Griffin – Buyer II

Commissioners' Court:

Keith Self – County Judge

Susan Fletcher – Commissioner Precinct No. 1

Cheryl Williams – Commissioner Precinct No. 2

Chris Hill – Commissioner Precinct No. 3

Duncan Webb – Commissioner Precinct No. 4

CONFLICT OF INTEREST QUESTIONNAIRE

For vendor doing business with local governmental entity

FORM CIQ

This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.

This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).

By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. See Section 176.006(a-1), Local Government Code.

A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

OFFICE USE ONLY

Date Received

1 Name of vendor who has a business relationship with local governmental entity.

2 Check this box if you are filing an update to a previously filed questionnaire. (The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)

3 Name of local government officer about whom the information is being disclosed.

Name of Officer

4 Describe each employment or other business relationship with the local government officer, or a family member of the officer, as described by Section 176.003(a)(2)(A). Also describe any family relationship with the local government officer. Complete subparts A and B for each employment or business relationship described. Attach additional pages to this Form CIQ as necessary.

A. Is the local government officer or a family member of the officer receiving or likely to receive taxable income, other than investment income, from the vendor?

Yes No

B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer or a family member of the officer AND the taxable income is not received from the local governmental entity?

Yes No

5 Describe each employment or business relationship that the vendor named in Section 1 maintains with a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership interest of one percent or more.

6 Check this box if the vendor has given the local government officer or a family member of the officer one or more gifts as described in Section 176.003(a)(2)(B), excluding gifts described in Section 176.003(a-1).

7

Signature of vendor doing business with the governmental entity

Date

CONFLICT OF INTEREST QUESTIONNAIRE

For vendor doing business with local governmental entity

A complete copy of Chapter 176 of the Local Government Code may be found at <http://www.statutes.legis.state.tx.us/Docs/LG/htm/LG.176.htm>. For easy reference, below are some of the sections cited on this form.

Local Government Code § 176.001(1-a): "Business relationship" means a connection between two or more parties based on commercial activity of one of the parties. The term does not include a connection based on:

- (A) a transaction that is subject to rate or fee regulation by a federal, state, or local governmental entity or an agency of a federal, state, or local governmental entity;
- (B) a transaction conducted at a price and subject to terms available to the public; or
- (C) a purchase or lease of goods or services from a person that is chartered by a state or federal agency and that is subject to regular examination by, and reporting to, that agency.

Local Government Code § 176.003(a)(2)(A) and (B):

(a) A local government officer shall file a conflicts disclosure statement with respect to a vendor if:

(2) the vendor:

(A) has an employment or other business relationship with the local government officer or a family member of the officer that results in the officer or family member receiving taxable income, other than investment income, that exceeds \$2,500 during the 12-month period preceding the date that the officer becomes aware that

- (i) a contract between the local governmental entity and vendor has been executed;
- or
- (ii) the local governmental entity is considering entering into a contract with the vendor;

(B) has given to the local government officer or a family member of the officer one or more gifts that have an aggregate value of more than \$100 in the 12-month period preceding the date the officer becomes aware that:

- (i) a contract between the local governmental entity and vendor has been executed; or
- (ii) the local governmental entity is considering entering into a contract with the vendor.

Local Government Code § 176.006(a) and (a-1)

(a) A vendor shall file a completed conflict of interest questionnaire if the vendor has a business relationship with a local governmental entity and:

- (1) has an employment or other business relationship with a local government officer of that local governmental entity, or a family member of the officer, described by Section 176.003(a)(2)(A);
- (2) has given a local government officer of that local governmental entity, or a family member of the officer, one or more gifts with the aggregate value specified by Section 176.003(a)(2)(B), excluding any gift described by Section 176.003(a-1); or
- (3) has a family relationship with a local government officer of that local governmental entity.

(a-1) The completed conflict of interest questionnaire must be filed with the appropriate records administrator not later than the seventh business day after the later of:

(1) the date that the vendor:

- (A) begins discussions or negotiations to enter into a contract with the local governmental entity; or
- (B) submits to the local governmental entity an application, response to a request for proposals or bids, correspondence, or another writing related to a potential contract with the local governmental entity; or

(2) the date the vendor becomes aware:

- (A) of an employment or other business relationship with a local government officer, or a family member of the officer, described by Subsection (a);
- (B) that the vendor has given one or more gifts described by Subsection (a); or
- (C) of a family relationship with a local government officer.

Section 00530 - CHAPTER 2270 VERIFICATION

I, _____, the undersigned representative
of
(PRINT NAME)

(COMPANY)

do hereby verify that the company named-above, under the provisions of Subtitle F, Title 10, Government Code Chapter 2270:

1. Does not boycott Israel currently; and
2. Will not boycott Israel during the term of the contract.

Pursuant to Section 2270.001, Texas Government Code:

1. *“Boycott Israel” means refusing to deal with, terminating business activities with, or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations specifically with Israel, or with a person or entity doing business in Israel or in an Israeli-controlled territory, but does not include an action made for ordinary business purposes; and*
2. *“Company” means a for-profit sole proprietorship, organization, association, corporation, partnership, joint venture, limited partnership, limited liability partnership, or any limited liability company, including a wholly owned subsidiary, majority-owned subsidiary, parent company or affiliate of those entities or business associations that exist to make a profit.*

DATE

SIGNATURE OF COMPANY REPRESENTATIVE

TITLE

00610 PAYMENT BOND

STATE OF TEXAS §
COUNTY OF COLLIN §

KNOW ALL MEN BY THESE PRESENTS:

That _____, a corporation organized and existing under the laws of the State of _____, and fully authorized to transact business in the State of Texas, whose address is _____ of the City of _____ County of _____, and State of _____, (hereinafter referred to as "Principal"), and _____ (hereinafter referred to as "Surety", a corporation organized under the laws of the State of _____ and authorized under the laws of the State of Texas to act as surety on bonds for principals, are held and firmly bound unto _____ (hereinafter referred to as "Owner") and unto all persons, firms and corporations who may furnish materials for or perform labor upon the buildings, structures or improvements referred to in the attached Contract, in the penal sum of _____ Dollars (\$ _____) (not less than 100% of the approximate total amount of the Contract as evidenced in the proposal) in lawful money of the United States, for the payment whereof, the said Principal and Surety bind themselves, and their heirs, administrators, executors, successors, and assigns, jointly and severally, firmly by these presents:

WHEREAS, the Principal has entered into a certain written contract with the Owner, dated the _____ day of _____, 201____, to which said Contract is hereby referred to and made a part hereof and as fully and to the same extent as if copied at length herein for the construction of IFB 2018-042, CONSTRUCTION, MYERS PARK HARDSCAPE IMPROVEMENTS

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that the bond guarantees the full and proper protection of all claimants supplying labor and material in the prosecution of the work provided for in said Contract and for the use of each claimant, and that conversely should the Principal faithfully perform said Contract and in all respects duly and faithfully observe and perform all and singular the covenants, conditions, and agreements in and by said Contract, agreed to by the Principal, and according to the true intent and meaning of said Contract and the claims and specifications hereto annexed, and any and all duly authorized modifications of said Contract that may hereafter be made, notice of which modification to Surety being hereby waived, then this obligation shall be void; otherwise, to remain in full force and effect. Provided further, that if any legal action be filed on this Bond, venue shall lie in Collin County, Texas.

"PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions Texas Government Code, Chapter 2253, as amended, and Chapter 3503 of the Texas Insurance Code, as amended, and all liabilities on this bond shall be determined in accordance with the provisions of said articles to the same extent as if they were fully copied at length herein.

Surety, for value received, stipulates and agrees that the bond shall automatically be increased by the amount of any Change Order or supplemental agreement which increases the Contract price with or without notice to the Surety and that no change, extension of time, alteration or addition to the terms of the Contract, or to the work performed thereunder, or the plans, specifications, or drawings accompanying the same, shall in anyway affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract, or to the work to be performed thereunder.

The undersigned and designated agent is hereby designated by Surety herein as the agent resident to whom any requisite notice may be delivered and on whom service of process may be had in matters arising out of such suretyship.

IN WITNESS WHEREOF, the said Principal and Surety have signed and sealed this instrument this _____ day of _____ 201____.

WITNESS

PRINCIPAL

Printed/Typed Name _____

Title: _____

Company: _____

Address: _____

WITNESS

SURETY

Printed/Typed Name _____

Title: _____

Company: _____

Address: _____

The Resident Agent of the Surety for delivery of notice and service of process is:
Name: _____
Address: _____
Phone Number: _____

Note: Date of Bond must NOT be prior to date of contract.

00610 PERFORMANCE BOND

STATE OF TEXAS §
COUNTY OF COLLIN §

KNOW ALL MEN BY THESE PRESENTS:

That _____, a corporation organized and existing under the laws of the State of _____, and fully authorized to transact business in the State of Texas, whose address is _____ of the City of _____ County of _____, and State of _____, (hereinafter referred to as "Principal"), and _____ (hereinafter referred to as "Surety", a corporation organized under the laws of the State of _____ and authorized under the laws of the State of Texas to act as surety on bonds for principals, are held and firmly bound unto _____ (hereinafter referred to as "Owner") and unto all persons, firms and corporations who may furnish materials for or perform labor upon the buildings, structures or improvements referred to in the attached Contract, in the penal sum of _____ Dollars (\$ _____) (not less than 100% of the approximate total amount of the Contract as evidenced in the proposal plus 10-percent of the stated penal sum as an additional sum of money representing additional court expenses, attorneys' fees, and liquidated damages arising out of or connected with the below identified Contract) in lawful money of the United States, for the payment whereof, the said Principal and Surety bind themselves, and their heirs, administrators, executors, successors, and assigns, jointly and severally, firmly by these presents:

WHEREAS, the Principal has entered into a certain written contract with the Owner, dated the _____ day of _____, 201____, to which said Contract is hereby referred to and made a part hereof and as fully and to the same extent as if copied at length herein for the construction of IFB 2018-042, CONSTRUCTION, MYERS PARK HARDSCAPE IMPROVEMENTS

CONDITION OF THIS OBLIGATION IS SUCH, that if the said Principal fully and faithfully executes the work and performance of the Contract in accordance with the plans specifications, and Contract Documents, including any extensions thereof which may be granted with or without notice to Surety, during the original term thereof, and during the life of any guaranty required under the Contract, and according to the true intent and meaning of said Contract and the plans and specifications hereto annexed, if the Principal shall repair and/or replace all defects due to faulty materials or workmanship that appear within a period of one year from the date of final completion and final acceptance of the work by OWNER; and if the Principal shall fully indemnify and save harmless the OWNER from all costs and damages which OWNER may suffer by reason of failure to so perform herein and shall fully reimburse and repay OWNER all outlay and expense which the OWNER may incur in making good any default or deficiency, then this obligation shall be void; otherwise, to remain in full force and effect; and in case said CONTRACTOR shall fail to do so, it is agreed that the OWNER may do said work and supply such materials and charge the same against said CONTRACTOR and Surety on this obligation. Provided further, that if any legal action be filed on this Bond, venue shall lie in Collin County, Texas.

"PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions Texas Government Code, Chapter 2253, as amended, and Chapter 3503 of the Texas Insurance Code, as amended, and all liabilities on this bond shall be determined in accordance with the provisions of said articles to the same extent as if they were fully copied at length herein.

Surety, for value received, stipulates and agrees that the bond shall automatically be increased by the amount of any Change Order or supplemental agreement which increases the Contract price with or without notice to the Surety, but in no event shall a Change Order or Supplemental Agreement which reduces the Contract price decrease the penal sum of the Bond. And further that no change, extension of time, alteration, or addition to the terms of the Contract, or to the work performed thereunder, or the plans, specifications, or drawings accompanying the same shall in any way affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration, or addition to the terms of the Contract or to the work to be performed thereunder.

Surety agrees that the bond provides for the repairs and/or replacement of all defects due to faulty materials and workmanship that appear within a period of one (1) year from the date of completion and acceptance of the improvement by the OWNER.

The undersigned and designated agent is hereby designated by Surety herein as the agent resident to whom any requisite notice may be delivered and on whom service of process may be had in matters arising out of such suretyship.

IN WITNESS WHEREOF, the said Principal and Surety have signed and sealed this instrument this _____ day of _____ 201____.

WITNESS

PRINCIPAL

Printed/Typed Name _____
Title: _____
Company: _____

Address: _____

WITNESS

SURETY

Printed/Typed Name _____
Title: _____
Company: _____

Address: _____

The Resident Agent of the Surety for delivery of notice and service of process is:
Name: _____
Address: _____
Phone Number: _____

Note: Date of Bond must NOT be prior to date of contract.
Revised 11/2008

DIVISION NO. 1

SECTION 01010

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and General Provisions of Contract, including General and Special Conditions and all applicable specification sections, apply to this section.

1.2 DESCRIPTION OF WORK INCLUDED:

- A. General: The Scope of Work for this Project shall consist of providing all supplies, support services, data, labor, tools, materials, equipment, supervision, construction, and all else required to complete the improvements to Myers Park in the City of McKinney, Texas.
- B. Project Scope: The Base Bid Work shall include, but not be limited to, the following major items, to the extent specified and indicated:
 - 1. Provide administration and construction support services to complete the work including construction staking and surveying.
 - 2. Apply for and procure all applicable permits from the applicable governing agencies. This project falls within the City of McKinney, Collin County, Texas.
 - 3. Procure necessary permits for personnel, equipment and construction operations.
 - 4. Coordinate and schedule work provided by others.
 - 5. Register all vendors, subcontractors who will be on the job.
 - 6. Video tape existing site conditions.
 - 7. Establish temporary utilities (water); Note – contractor pays for water.
 - 9. Utilities line locate and staking (coordinate with Engineering staff).
 - 10. Coordinate testing services (paid by Collin County). Contractor will contract with labs.
 - 11. Hardscape walkways & stairs
 - 12. Provide grading repair and grassing to all areas damaged by construction operations.
 - 13. Clean-up.
 - 14. Punch list to Substantial Completion.
 - 15. Final walk-through.
 - 16. Punch list and close-out to Final Acceptance.
 - 17. Coordination with local municipality and other governing agencies as required.
 - 18. Coordination with other contractors as required.
 - 19. Coordination as required regarding electrical service to controllers.

1.3 DRAWINGS

- A. Refer to Index of Drawings on Cover Sheet of the drawings.

1.4 PROJECT MANUAL

- A. Bidding and Contract Requirements; General Requirements - Division 1 and Technical Specifications, Divisions 2 through 16 as listed in Table of Contents, dated August, 2016.

1.5 UNIT PRICES

- A. Refer to Bid Form in Section I for Unit Prices.

1.6 QUALITY ASSURANCE

- A. The work shall comply with the requirements of the Contract Documents including cited national specifications and standards; state and local government authority codes and standards.
- B. In case of conflicts between cited national and local standards, local requirements shall govern unless otherwise directed in writing. All conflicts shall be brought to the attention of Owner's Representative in writing.

1.7 OTHER REQUIREMENTS

- A. Any affected utility owners shall be notified not less than 7 days prior to starting work in an area in which a utility may be located. Notices shall be in writing. Any affected utility owner and Owner's Representative shall be notified 72 hours prior to commencing construction operations.
- B. The Contractor shall prosecute the Work as indicated, in accordance with the Contract Documents, and in a timely manner so as to ensure coordination of all parts of the work with work of other parties under adjoining and interfacing contracts, including governmental bodies and utility companies.
- C. Proposals for scheduling work at times other than the normal work period of a calendar day shall be submitted to Owner's Representative not less than 48 hours in advance of those times. Such proposals shall outline all special precautions to be taken to control the hazards presented by prosecuting the work at times other than the normal work period of a calendar day. The proposal shall include supplementary lighting of work areas, availability of medical facilities, security precautions and all other precautions necessary.
- D. Construction equipment and vehicles which exceed the weight, size and noise limitation of the authorities having jurisdiction shall not be operated outside the construction limits of the site.

1.8 INTERPRETATION

- A. **Overlapping and Conflicting Requirements:** Where compliance with two or more industry standards or sets of requirements is specified or indicated, and overlapping of those different standards or requirements establishes different or conflicting minimums or levels of quality, the most stringent requirement is intended and will be enforced by Owner's Representative and Owner, unless specific language in the Contract Documents clearly indicates that a less stringent requirement is to be fulfilled. Refer apparently-equal-but-different requirements, and uncertainties as to which level of quality is more stringent, to Owner's Representative and Owner for a written decision before proceeding with the work in question.
- B. **Minimum Quality/Quantity:** In every instance, the quality level or quantity indicated or specified is intended to be the minimum for the work to be performed or provided. Except as otherwise indicated, the actual work may either comply exactly with that minimum (within specified tolerances), or may exceed that minimum within reasonable limits. In complying with these requirements, indicated numeric values are either minimums or maximums as noted, or as appropriate for context of the requirements. Refer instances of uncertainty to Owner's Representative and Owner for a written decision before proceeding with the work in question.

END OF SECTION

DIVISION NO. 1

SECTION 01050

PART 1 - GENERAL

1.1 REQUIREMENTS INCLUDED

- A. Field and construction staking (provided by Contractor). The base for this project was built all on aerial photo.
- B. Coordinate and schedule field and construction staking. Communicate to surveyor needed reference points, control points, etc.
- C. Civil, structural or other professional engineering services specified, or required to execute Contractor's construction methods.

1.2 RELATED REQUIREMENTS

- A. Conditions of the Contract.

1.3 QUALIFICATIONS OF SURVEYOR OR ENGINEER (if required)

- A. Qualified surveyor or engineer acceptable to City of McKinney. Provided and paid for by Contractor.

1.4 SURVEY REFERENCE POINTS

- A. Existing basic horizontal and vertical control points for the Project are those designated on the Drawings.
- B. Locate and protect control points prior to starting site work, and preserve all permanent reference points during construction.
 - 1. Make no changes or relocations without prior written notice to the Landscape Architect.
 - 2. Report to the Landscape Architect when any reference point is lost or destroyed, or requires relocation because of necessary changes in grades or locations.
 - 3. Require surveyor to replace Project control points which may be lost or destroyed.

1.5 PROJECT SURVEY REQUIREMENTS

- A. Establish a minimum of two permanent bench marks on site, referenced to data established by survey control points.
 - 1. Record locations, with horizontal and vertical data, on Project Record Documents.
- B. Establish lines and levels, locate and lay out, by instrumentation and similar appropriate means:
 - 1. Stakes for grading, fill and topsoil placement.
- C. From time to time, verify layouts by same methods.

1.6 RECORDS (provided by Contractor)

- A. Maintain a complete, accurate log of all control and survey work as it progresses.

END OF SECTION

DIVISION NO. 1

SECTION 01090

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section identifies abbreviations and acronyms and includes definitions of words and phrases used in Contract Documents, definitions of standard Specification language, and explanation of Specification format and content.

1.2 QUALITY ASSURANCE

- A. Application: When a standard is specified by reference, comply with requirements and recommendations stated in that standard, except when requirements are modified by the Contract Documents, or applicable codes establish stricter standards.
- B. Publication Date: The publication in effect on the date of issue of Contract Documents, except when a specific publication date is specified.

1.3 ABBREVIATIONS AND NAMES OF ORGANIZATIONS

- A. Obtain copies of referenced standards direct from publication source, when needed for proper performance of Work, or when required for submittal by Contract Documents. For abbreviations not listed, and for addresses and phone numbers, refer to the "Encyclopedia of Associations," published by Gale Research Co., Inc., available in most public libraries.

AA	Aluminum Association
AABC	Associated Air Balance Council
AAMA	Architectural Aluminum Manufacturers Association
AASHTO	American Association of State Highway and Transportation Officials
ACI	American Concrete Institute
ADC	Air Diffusion Council
AGC	Associated General Contractors of America
AIA	American Institute of Architects
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
AMCA	Air Movement and Control Association
ANSI	American National Standards Institute
ARI	Air Conditioning and Refrigeration Institute
ASHRAE	American Society of Heating, Refrigerating and Air Conditioning Engineers
ASLA	American Society of Landscape Architects
ASME	American Society of Mechanical Engineers
ASPA	American Sod Producers Association
ASTM	American Society for Testing and Materials
AWI	Architectural Woodwork Institute
AWPA	American Wood-Preservers' Association
AWS	American Welding Society
AWWA	American Water Works Association
CDA	Copper Development Association
CRSI	Concrete Reinforcing Steel Institute
CSI	Construction Specifications Institute

MYERS PARK HARDSCAPE IMPROVEMENTS

EJMA	Expansion Joint Manufacturer's Association
FGMA	Flat Glass Marketing Association
FM	Factory Mutual System
FS	Federal Specification
GA	Gypsum Association
IEEE	Institute of Electrical and Electronics Engineers
IMIAC	International Masonry Industry-All Weather Council
ISA	International Society of Arboriculture
MFMA	Maple Flooring Manufacturers Association
MIL	Military Specification
ML/SFA	Metal Lath/Steel Framing Association
NAAMM	National Association of Architectural Metal Manufacturers
NCMA	National Concrete Masonry Association
NCTCOG	North Central Texas Council of Governments
NEBB	National Environmental Balancing Bureau
NEMA	National Electrical Manufacturers Association
NFPA	National Fire Protection Association
NRCA	National Roofing Contractors Association
NSWMA	National Solid Waste Management Association
NTMA	National Terrazzo and Mosaic Association
NWMA	National Woodwork Manufacturers Association
PCA	Portland Cement Association
PCI	Prestressed Concrete Institute
PS	Product Standard
SCPI	Structural Clay Products Institute
SDI	Steel Deck Institute
SDI	Steel Door Institute
SIGMA	Sealed Insulating Glass Manufacturers Association
SJI	Steel Joint Institute
SMACNA	Sheet Metal and Air Conditioning Contractors' National Association
SPRI	Single Ply Roofing Institute
SSPC	Steel Structures Painting Council
TAS	Technical Aid Series
TCA	Tile Council of America, Inc.
UL	Underwriters' Laboratories, Inc.
WCLIB	West Coast Lumber Inspection Bureau

1.4 DEFINITIONS

- A. Indicated: The work "indicated" refers to graphic representations, notes or schedules on Drawings, Paragraphs or schedules in Specifications, and similar requirements in Contract Documents. Terms such as "shown," "noted," "scheduled," and "specified" are used to help locate a reference. No limitation on location is intended except as specifically noted.
- B. Directed: Terms such as "directed," "requested," "authorized," "selected," "approved," "required," and "permitted" are hereby defined as "directed by Landscape Architect," "requested by Landscape Architect," "authorized by Landscape Architect," etc. No implied meaning shall be interpreted to extend the Landscape Architect's responsibility into the Contractor's area of construction supervision.

END OF SECTION

REFERENCES (01090)

DIVISION NO. 1

SECTION 01310

PART 1 - GENERAL

1.1 REQUIREMENTS INCLUDED

- A. Promptly after award of the Contract, prepare and submit to the Owner's Project Manager estimated construction progress schedules for the Work, such subschedules of related activities which are essential to its progress.
- B. Submit revised progress schedules monthly to Owner's Project Manager and Landscape Architect.

1.2 RELATED REQUIREMENTS

- A. Conditions of the Contract.
- B. Section 01340: Shop Drawings, Product Data and Samples.

1.3 FORM OF SCHEDULES

- A. Prepare schedules in the form of a PERT chart.
 - 1. Provide separate horizontal bar for each trade or operation.
 - 2. Horizontal Time Scale: Identify the first work day of each week.
 - 3. Scale and Spacing: To allow space for notations and future revisions.
- B. Format of Listings: The chronological order of the start of each item of work.
- C. Identification of Listings: By major specification section numbers.

1.4 CONTENT OF SCHEDULES

- A. Construction Progress Schedule:
 - 1. Show the complete sequence of construction by activity.
 - 2. Show the dates for the beginning, and completion of, each major element of construction, including permits, fees, & inspections.
 - 3. Show projected percentage of completion for each item, as of the first day of each month.
- B. Submittals Schedule for Shop Drawings, Product Data and Samples. Show:
 - 1. The dates for Contractor's submittals.
 - 2. The dates approved submittals will be required from the Landscape Architect. Allow a minimum of 12 working days in the Landscape Architect's office.
- C. Provide subschedules to define critical portions of prime schedules.

1.5 PROGRESS REVISIONS

- A. Indicate progress of each activity to date of submission.

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- B. Show changes occurring since previous submission of schedule:
 - 1. Major changes in scope.
 - 2. Activities modified since previous submission.
 - 3. Revised projections of progress and completion.
 - 4. Other identifiable changes.

- C. Provide a narrative report as needed to define:
 - 1. Problem areas, anticipate delays, and the impact on the schedule.
 - 2. Corrective action recommended, and its effect.
 - 3. The effect of changes on schedules of other prime contractors.

1.6 SUBMISSIONS

- A. Submit initial schedules within 15 days after award of Contract.
 - 1. Landscape Architect will review schedules and return review copy within 10 days after receipt.
 - 2. If required, resubmit within 7 days after return of review copy.

- B. Submit revised progress schedules with each application for payment.

- C. Submit the number of opaque reproductions which the Contractor requires, plus one copy which will be retained by the Landscape Architect.

1.7 DISTRIBUTION

- A. Distribute copies of the reviewed schedules to:
 - 1. Job site file.
 - 2. Subcontractors.
 - 3. Other concerned parties.

- B. Instruct recipients to report promptly to the Contractor, in writing, any problems anticipated by the projections shown in the schedules.

END OF SECTION

DIVISION NO. 1

SECTION 01340

PART 1 - GENERAL

1.1 REQUIREMENTS INCLUDED

- A. Submit Shop Drawings, Product Data and Samples required by Contract Documents. Included are (Reference Plans):
- Handrails
 - Flexbase
 - Concrete
 - Stone (Samples)

1.2 RELATED REQUIREMENTS

- A. Conditions of the Contract: Definitions, and additional responsibilities of parties.
- B. Designate in the construction schedule, or in a separate coordinated schedule, the dates for submission and the dates that reviewed Shop Drawings, Product Data and Samples will be needed.

1.3 SHOP DRAWINGS

- A. Present drawings in a clear and thorough manner.
1. Identify details by reference to sheet, detail, or schedule shown on Contract Drawings.

1.4 PRODUCT DATA

- A. Preparation:
1. Clearly mark each copy to identify pertinent products or models.
 2. Show performance characteristics and capacities.
 3. Show dimensions and clearances required.
 4. Show wiring diagrams and controls.
- B. Manufacturer's Standard Schematic Drawings and Diagrams:
1. Modify drawings and diagrams to delete information which is not applicable to the work.
 2. Supplement standard information to provide information specifically applicable to the work.

1.5 SAMPLES

- A. Provide office samples of sufficient size and quantity to clearly illustrate:
1. Functional characteristics of the product, with integrally related parts and attachment devices.
 2. Full range of color, texture and pattern.

MYERS PARK HARDSCAPE IMPROVEMENTS

- B. Field Samples and Mock-ups:
1. Erect, at the Project site, at a location acceptable to the Owner's Representative.
 2. Size or Area: That specified in the respective specification section.
 3. Fabricate each sample and mock-up complete and finished.
 4. Remove mock-ups at conclusion of work or when acceptable to the Owner's Representative.

1.6 SUBMISSION REQUIREMENTS

- A. Make submittals promptly in accordance with approved schedule, and in such sequence as to cause no delay in the work or in the work of any other contractor.
- B. Submit Shop Drawings, Product Data and Samples for structural, mechanical and electrical items to the Owner's Representative with a copy of the transmittal sent to the Landscape Architect.
- C. Number of Submittals Required:
1. Shop Drawings: Submit two prints of each drawing.
 2. Product Data: Submit six copies of product data.
 3. Samples: Submit the number stated in each specification section, minimum of two samples for each item.
- D. Submittals Shall Contain:
1. The date of submission and the dates of any previous submissions.
 2. The Project title and number.
 3. Contract identification.
 4. The Names of:
 - a. Contractor
 - b. Supplier
 - c. Manufacturer
 5. Identification of the product, with the specification section number.
 6. Field dimensions, clearly identified as such.
 7. Relation to adjacent or critical features of the work or materials.
 8. Applicable standards, such as ASTM or Federal Specification numbers.
 9. Identification of deviations from Contract Documents.
 10. Identification of revisions on resubmittals.
 11. A 3" x 3" blank space for Landscape Architect's stamp and signature.
 12. Contractor's stamp, initialed or signed, certifying to review of submittal, verification of products, field measurements and field construction criteria, and coordination of the information within the submittal with requirements of the work and of Contract Documents.

1.7 RESUBMISSION REQUIREMENTS

- A. Make any corrections or changes in the submittals required by the Landscape Architect and resubmit until approved.
- B. Shop Drawings and Product Data:
1. Revise initial drawings or data, and resubmit as specified for the initial submittal.

MYERS PARK HARDSCAPE IMPROVEMENTS

2. Indicate any changes which have been made other than those requested by the Landscape Architect.
- C. Samples: Submit new samples as required for initial submittal.

1.8 DISTRIBUTION

- A. Distribute reproductions of Shop Drawings and copies of Product Data which have been reviewed by the Landscape Architect and do not require revisions.
 1. Owner
 2. Job site file.
 2. Record Documents file.
 3. Other affected contractors.
 4. Subcontractors.
 5. Supplier or fabricator.
- B. Distribute samples which have been approved by the Landscape Architect as directed by the Landscape Architect.

1.9 LANDSCAPE ARCHITECT DUTIES

- A. Review submittals with reasonable promptness and in accordance with schedule.
- B. Affix stamp and initials or signature, and indicate requirements for revisions and resubmittal, if any.
- C. Return submittals to the Contractor for distribution, or for resubmission.

END OF SECTION

DIVISION NO. 1

SECTION 01370

PART 1 - GENERAL

1.1 REQUIREMENTS INCLUDED

- A. Submit to the Owner's Project Manager a Schedule of Values at least 20 days prior to submitting the first Application for Payment.

1.2 RELATED REQUIREMENTS

- A. Conditions of the Contract.

1.3 FORM AND CONTENT OF SCHEDULE OF VALUES

- A. Schedule shall list the installed value of the component parts of the Work in sufficient detail to serve as a basis for computing values for progress payments during construction. Contractor to submit Schedule of Values within two weeks after execution of contract for Owner and Landscape Architect review and approval.
- B. Identify schedule with:
 - 1. Title of Project and location.
 - 2. Collin County project number.
 - 3. Landscape Architect
 - 4. Name and address of Contractor.
 - 5. Date of submission.
- C. The sum of all values listed in the schedule shall equal the total Contract Sum.
- D. Provide additional breakdown of values as requested by the Owner's Project Manager.
- E. Note: Collin County does not pay for stored materials.

END OF SECTION

DIVISION NO. 1

SECTION 01410

PART 1 - GENERAL

1.1 SCOPE

- A. An independent testing laboratory, engaged and paid for by the Owner, will perform the professional testing and laboratory services.
- B. Make all inspections and perform all tests in accordance with the rules and regulations of the building code, local authorities, the specifications of the ASTM and other applicable technical societies or organizations.
- C. Materials and workmanship not meeting the required standards or performance obligations are to be removed and replaced, including subsequent testing, at the expense of the Contractor.
- D. Where the terms "Inspector" and "Testing Laboratory" are used, they mean and refer respectively to an officially designated and accredited inspector of the testing laboratory engaged by the Owner.
- E. Testing, inspection, and certifications specified in other sections of these Specifications shall be paid by the Owner, unless otherwise indicated, and shall be by agencies approved by the Owner and the Landscape Architect.
- F. Inspection by the laboratory shall not relieve the Contractor or Fabricator of his responsibility to furnish materials and workmanship in accordance with the Contract Documents.
- G. Testing agencies shall meet the requirements of ASTM E 329, "Recommended Practice for Inspection and Testing Agencies for Concrete, Steel and Bituminous Materials as Used in Construction."
- H. The inspection and testing services of the testing agencies shall be under the direction of a registered engineer licensed in the State of Texas, charged with engineering managerial responsibility, and having at least five (5) years engineering experience in inspection and testing of construction materials.

1.2 RESPONSIBILITY OF CONTRACTOR

- A. Deliver to the laboratory, without cost to the Owner, adequate quantities of representative samples of materials proposed for use which are required to be tested.
- B. Advise laboratory and Owner 48 hours in advance of construction operations to allow laboratory to complete any required checks or tests and to assign personnel for field inspection and testing as specified.
- C. Provide adequate facilities for safe storage and proper curing of concrete test samples on project site for the first twenty-four (24) hours and also for subsequent field curing as required by ASTM Specifications C 31.
- D. Furnish such nominal labor as is required to assist laboratory personnel in obtaining and handling samples at the site.

- E. Furnish Concrete Mix Designs, in accordance with ACI 318-83, made by an independent testing laboratory approved by the Owner and paid for by the Contractor.

1.3 AUTHORITY AND DUTIES OF LABORATORY PERSONNEL

- A. Laboratory personnel shall inspect and/or test materials, assemblies, specimens, and work performed, including design mixes, methods and techniques as specified and report to the Landscape Architect the progress thereof.
- B. If the material furnished and/or work performed fails to meet requirements of Contract Documents, laboratory inspector shall promptly notify both the Contractor and the Landscape Architect of such failure.
- C. Laboratory technicians do not act as foreman, or perform other duties for Contractor. Work will be checked as it progresses, but failure to detect any defective work or materials shall not, in any way, prevent rejection when such defect is discovered.
- D. The laboratory inspector is not authorized to revoke, alter, relax, enlarge, or release any requirement of the Contract Documents or to approve or accept any portion of the work.

1.4 SUBMITTALS

- A. Submit copies or in PDF format, to the Owner, Contractor and to the Landscape Architect, of reports of each and every inspection and test required to be made as part of the work in this Section, or ordered by the Landscape Architect or the Contractor to be made either in addition to or supplementary to inspecting and testing specified herein or in other Sections of the Specifications.
- B. State in report all details of each inspection and test. Indicate satisfactory compliance with requirements of the Contract Documents. Also state in report and and all unsatisfactory conditions or failure to comply with requirements of the Contract Documents. This requirement is in addition to reporting immediately to the Contractor and the Architect all items of unsatisfactory conditions and failures to comply with the requirements of the Contract Documents.
- C. At completion of each trade or branch of work requiring inspecting and testing, submit a final certificate attesting to satisfactory completion of work inspected and full compliance with requirements, for all work and materials tested.

1.5 REFERENCED STANDARDS

- A. The latest edition of all standards referenced in this section shall apply, unless noted otherwise.

PART 2 - PRODUCTS

(NOT APPLICABLE)

PART 3 - EXECUTION

3.1 FILLING AND BACKFILLING

- A. The Contractor shall make available to the testing agency, free of charge, adequate samples of each fill and backfill material from the proposed sources of supply.

MYERS PARK HARDSCAPE IMPROVEMENTS

- B. A fifty (50) pound sample of each type of off-site and site-excavated material proposed for use shall be given to the testing agency by the Contractor not less than 10 calendar days prior to the start of the specified work. Analyze samples as required to provide a soil description and to determine compliance with gradation and quality requirements, and test as follows:
 - 1. Tests for liquid limit of soils in accordance with ASTM D423.
 - 2. Tests for plastic limit of soils and plasticity index of soils in accordance with ASTM D424.
 - 3. Tests of moisture/density relations of soil in accordance with ASTM D1557, Method D.
- C. Furnish a report for each individual test, describing variances from specified requirements, and state whether material is acceptable for the intended use.
- D. Inspect underslab drainage material and placement for compliance with specified gradation, quality, and compaction.
- E. Make in-place compaction test for moisture content, moisture density relations, and density of materials-in-place, to determine that backfill and fill materials have been compacted to the specified density. Tests shall be made at the following frequencies:
 - 1. One test for each five thousand (5,000) square feet of area of each lift placed under pavement. Stagger test locations in each lift from those in the previous lift. A minimum of three (3) tests will be required of each lift.
 - 2. One test for each one hundred (100) linear feet, or portion thereof, of each lift on each face of strip footings and walls, with locations staggered as above.
 - 3. One test of each lift placed at any free-standing footing, pier, or similar support, with locations taken on a different side in, each case from, the lift below.
- F. Reports may be combined on a daily basis, if so desired, provided that the location of each test and applicable lift are clearly identified and any problems are detailed.

3.2 FOOTING EXCAVATIONS

- A. Soils testing laboratory shall inspect each concrete footing excavation to determine that proper bearing stratum is obtained and utilized for bearing and that excavations are properly clean and dry before concrete is placed.

3.3 CONCRETE REINFORCING STEEL

- A. Inspect all concrete reinforcing steel prior to placing of concrete for compliance with Contract Documents and approved Shop Drawings. All cases of non-compliance with Contract Documents and approved Shop Drawings shall be immediately called to the attention of the Contractor and reported to the Owner and the Landscape Architect.

- B. Observe and report on the following:
 - 1. Number and size of bars.
 - 2. Bending and length of bars.
 - 3. Splicing.
 - 4. Clearance to forms including chair heights.
 - 5. Clearance between bars or spacing.
 - 6. Rust, form oil, and other contamination.
 - 7. Grade of steel.
 - 8. Securing, tying, and chairing of bars.
 - 9. Excessive congestion of reinforcing steel.
- C. Inspector shall have a minimum of three (3) years experience inspecting reinforcing steel in similar size projects.

3.4 CONCRETE CONTROL AND TESTING

- A. Receive and evaluate all proposed concrete mix designs submitted by the Contractor. If the mix designs comply with Drawings and Specifications, the laboratory shall submit a letter to Owner and the Architect certifying compliance. Mix designs not complying with the Drawings and Specifications shall be returned by the laboratory as unacceptable.
- B. Secure composite samples of concrete at the jobsite in accordance with ASTM C172, "Sampling Fresh Concrete."
- C. Mold and cure three (3) specimens from each sample in accordance with ASTM C31, "Making and Curing Concrete Test Specimens in the Field." Supervise the curing protection provided (by others) for test specimens in the field, and the transportation from the field to the laboratory. The test cylinders shall be stored in the field 24 hours and then be carefully transported to the laboratory and cured in accordance with ASTM C31.
- D. Test specimens in accordance with ASTM C39, "Test for Compressive Strength of Cylindrical Concrete Specimen." Two (2) specimens shall be tested at twenty-eight (28) days for acceptance and one (1) shall be tested at seven (7) days for information.
- E. Make one (1) strength test (three [3] cylinders) for each 100 cubic yards of fraction thereof, of each mix design of concrete placed in any one (1) day.
- F. Make slump tests from each truck load of concrete or more often at the option of the Architect, following the procedural requirements of ASTM C143 and C172. Slump tests shall always be made from the same batch from which strength tests are made.
- G. Determine total air content of air entrained normal-weight concrete sample for each strength test in accordance with ASTM C231, "Test for Air Content of Freshly Mixed Concrete by the Pressure Method."
- H. Determine air content and unit weight of light-weight concrete sample for each strength test in accordance with ASTM C172 and ASTM C567.

MYERS PARK HARDSCAPE IMPROVEMENTS

- I. Determine temperature of concrete sample for each strength test.
- J. The testing agency shall furnish and maintain a competent inspector at the mixing plant (at the start of each day's mixing). The inspector shall examine concrete materials for compliance with specifications and approved mix design, weighing and measuring devices, proportioning and mixing of materials, and water and cement content of each batch, the general operation of the plant and the transportation of concrete to the job site. The inspector shall make the necessary tests to determine the amount of free surface moisture contained in the fine and coarse aggregate, and shall determine by calculations the amount of water to be added to each batch to obtain concrete of proper consistency and water cement ratio as determined from data obtained in the preliminary test.
- K. The testing laboratory shall control the addition of water to the concrete at the jobsite and the length of time the concrete is allowed to remain in the truck during the placement. The inspector shall compare the mixture with the criteria on the approved mix design and report any significant deviation to the Architect, Contractor and design laboratory. Corresponding adjustments shall be made before the concrete is discharged.
- L. The testing laboratory shall certify each delivery ticket indicating class of concrete delivered (or poured), amount of water added and the time at which the cement and aggregate was discharged into the truck, and the time at which the concrete was discharged from the truck.
- M. Evaluation and Acceptance:
 - 1. If the measured slump, or air content of air entrained concrete falls outside the specified limits, a check test shall be made immediately on another portion of the same sample. In the event of a second failure, the concrete shall be considered to have failed to meet the requirements of the specifications, and shall not be used in concrete operations in the work.
 - 2. The strength level of the concrete will be considered satisfactory if 90% of the strength test results and the averages of all sets of three (3) consecutive strength tests results are equal to, or exceed specified strength and no individual test result is below specified strength by more than 500 psi.
 - 3. Completed concrete work will be accepted when the requirements of "Specifications for Structural Concrete for Buildings" ACI 301-72, Chapter 18, have been complied with.
 - 4. In any case where the average strength of the laboratory control cylinders, as shown by the tests for any portion of the structure, falls below the minimum ultimate compressive strength hereinbefore specified, the Architects shall have the right to require the Contractor to provide improved curing conditions of temperature and moisture to secure the required strength. Also, if the average strength of the laboratory control cylinders should fall so low as to cause the portions of the structure to which the respective unsatisfactory test reports apply to be in question by the Architect, the Contractor shall follow the core procedure set forth in the current edition of ASTM Designation C 42. If the results of the core tests indicate, in the opinion of the Architects, that the strength of the structure is inadequate, such replacement, load testing, or strengthening, as may be ordered by the Architect, shall be provided by the Contractor without cost to the Owner. If core tests are so ordered, and the results of such tests disclose that the strength of the structure is as required by the provisions of the Specifications and Drawings, the cost of the tests will be borne by the Owner.

- N. Concrete Test Reports:
1. Reports shall be made and distributed immediately after the respective tests or inspections are made.
 2. Where reports indicate deviations from the Contract Documents, they shall also include a determination of the probable cause of the deviation and, where applicable, a recommendation for corrective action.
 3. Whenever the testing laboratory recognizes a trend of decreasing quality in the concrete due to changing seasons, conditions of curing, or other cause; this shall be brought to the attention of the Architect, along with a recommendation for corrective action to be taken before the materials fall below the requirements of these Specifications.
- O. Comply with ACI 311-75, "Guide for Concrete Inspection."

3.5 STRUCTURAL STEEL

- A. Inspect all structural steel during fabrication and during and after erection for conformance with Contract Documents and Shop Drawings. Any cases of insufficient bracing or guying, or other unsafe conditions shall be immediately called to attention of Contractor and reported to Architect. Architect will review stage steel during construction. Notify Landscape Architect when stage support steel work commences.
- B. Shop Inspection:
1. Examination of all steel for straightness and alignment.
 2. Examination of all fabricated pieces and checking of same with erection plans and detail drawings.
 3. Visual examination of all shop welding.
 4. Ultrasonic testing of all full penetration welds.
 5. Examination of galvanizing.
 6. Examination of installation of shop welded shear studs.
 7. Examination of shop painting.
- C. Field Inspection:
1. Proper erection of all pieces.
 2. Proper installation of high-strength bolts, including the checking of calibration of impact wrenches.
 3. Plumbness of structure and proper bracing.
 4. Proper field painting.
 5. Visual examination of all field welding.

MYERS PARK HARDSCAPE IMPROVEMENTS

6. Ultrasonic testing of all penetration welds in moment connections, column splices, and column bases.
7. Installation of field welded shear studs.
8. Inspect all shop fabricated members, upon their arrival at the jobsite, for defects incurred during transit and handling.

D. Qualifications of Welders:

Fabricator and erector shall provide the testing laboratory with names of welders to be employed on work, together with certification that each of these welders has passed qualification tests within the last year using procedures covered in the American Welding Society Standard D1.1, latest edition.

E. Inspection of shop and field welding shall be in accordance with Section 6, of the AWS Structural Welding Code and as follows:

1. Visually inspect the welding of all shop fabricated members and note the location of all cover plates, connectors, bearing stiffeners, splicing ends, and fillet welds for proper return around ends of cover plates and check for seams, folds, and laminations.
2. Warped or out-of-plumb connectors shall be reported prior to any further welding.
3. Ultrasonically test all penetration welds in accordance with ASTM E 164.
4. Joints in which materials is 2" or more in thickness shall not have the weld interrupted after operations has started, unless at least 2/3 of its length, for its full depth, has been completed without an interruption of more than one hour. Welding may be interrupted for longer periods, provided the preheat temperature is maintained for the full length of joint for the entire time welding is interrupted.
5. Surfaces to be welded and all filler metal shall be carefully inspected. Surface preparations, fit-up and cleanliness of surface shall be noted. Electrodes shall be checked for size, type and condition.
6. Welds shall be sound, clean metal, free of slab inclusions and porosity. Filler metal shall be completely fused with base metal and shall have complete penetration of the joint. Root passes shall be checked for penetration from the back side of joint. Welds showing inclusions, porosity, lack of fusion, penetration and uneven contour (sagging or overlaps) shall be ordered gouged out and rewelded. Welds showing any undercut shall have a small stringer bead ordered to be run in along the toe of undercut using a smaller diameter electrode than that which made the original weld. No craters shall be left in welds. Any welding defects, including porosity, fusion, and undercuts in excess of that allowed shall be cause for rejection. Where craters occur, the inspector shall order them to be filled out with weld metal.
7. The welding inspector shall be present during alignment and fit-up of members being welded, and shall check for correct surface preparation of root openings, sound weld metal, and proper penetration in the root pass. Where weld has not penetrated completely, the inspector shall order the joint to be chipped down to sound metal, or gouged out, and rewelded. Root passes shall be thoroughly inspected for cracks. All cracks shall be gouged out and rewelded (2" beyond each end of crack).

MYERS PARK HARDSCAPE IMPROVEMENTS

8. The inspector shall check that all welds have been marked with the welder's symbol. The inspector shall mark the welds requiring repairs and shall make a reinspection. The inspector shall maintain a written record of all welds. Work completed and inspected shall receive an identification mark by the inspector. Unacceptable material and work shall be identified by work "reject" or "repair" marked directed on the material.
 9. The testing agency shall advise the Owner and the Architect of any shop and/or field conditions which in his opinion may require further tests and examination by means other than those specified. Such further tests and examinations shall be performed as authorized by the Owner and Architect.
 10. The Owner reserves the right to use ultrasonic inspection to verify the adequacy of all welds.
- F. Inspection of high-strength bolted construction shall be in accordance with Section 6, AISC "Specification for Structural Joints," and as follows:
1. All high-strength bolted connections shall be visually inspected.
 2. At least two (2) bolts of every third connection between floor beams and girders shall be checked with a calibrated torque wrench for proper torque.
 3. At least two (2) bolts of every connection between girders and columns shall be checked as above.
 4. All bolts in every connection in the primary exterior framing shall be checked as above.
 5. All bolted connections that fail shall be corrected and all bolts in that connection shall be retested.
- G. Inspection of stud welding shall be in accordance with Article 7.7, of the AWS Structural Welding Code (D1.1-83), and as follows:
1. A minimum of two (2) shear studs shall be welded at the start of each production period in order to determine proper generator, control unit and stud welder setting. These studs shall be capable of being bent 45 degrees from vertical without weld failure. If, after welding, visual inspection reveals that a sound weld or a full 360 degree fillet has not been obtained for a particular stud, such stud shall be struck with a hammer and bent 15 degrees off perpendicular to the nearest end of the beam. Studs failing under this test shall be replaced.
 2. When the temperature is below 32 degrees Fahrenheit, one (1) stud in each one hundred (100) shall be tested after cooling. Studs shall not be welded below 0 degrees Fahrenheit or when the surface is wet with rain or snow. If the stud fails in the weld, two (2) new studs shall pass the test before resumption of the welding.

END OF SECTION

DIVISION NO. 1

SECTION 01510

PART 1 - GENERAL

1.1 REQUIREMENTS INCLUDED

- A. Furnish, install and maintain temporary facilities and controls required for construction to be removed on completion of Work.

1.2 REQUIREMENTS OF REGULATORY AGENCIES

- A. Comply with National Electric Code.
- B. Comply with Federal, State and local codes and regulations and with utility company requirements.

1.3 USE OF PERMANENT FACILITIES

- A. Except as otherwise specified, permanent utility services and equipment may be used for construction purposes.
- B. Arrange with utility companies to install temporary meters, pay cost of meter installation and removal, and pay costs of utilities used during construction.
- C. Warranties for materials and equipment used for construction purposes shall begin upon date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MATERIALS, GENERAL

- A. Materials may be new or used for the temporary facilities, but must be adequate in capacity for the required usage, must not create unsafe conditions, and must not violate requirements of applicable codes and standards.

2.2 TEMPORARY ELECTRICITY AND LIGHTING

- A. Provide portable electric power generators for electrical power as needed, incidental to the Work.
- B. Provide adequate artificial lighting for all areas of Work when natural light is not adequate for Work, and for areas accessible to the public.

2.3 TEMPORARY WATER

- A. The Contractor shall arrange with the City of McKinney Utilities Division of the Community Services Department for connection to an on-site fire hydrant and temporary metering and backflow prevention to provide water for construction purposes and for grass establishment. Pay all costs for installation, maintenance and removal, and service charges for water used.

MYERS PARK HARDSCAPE IMPROVEMENTS

- B. Install branch piping with taps located so that water is available throughout the construction by the use of hoses. Protect piping and fittings against freezing.

2.4 TEMPORARY SANITARY FACILITIES

- A. Provide temporary chemical type sanitary facilities in compliance with laws and regulations.
- B. Service, clean and maintain facilities and enclosures.
- C. Permanent building toilets shall not be used by construction personnel.

2.5 TEMPORARY STORAGE FACILITIES

- A. Provide required storage sheds or trailers and maintain in good condition and neat appearance. Obtain approval from Owner as to location of storage sheds and trailers.
- B. Construct storage facilities on a proper foundation or base, securely anchored in place, and durable for the duration of the project.

2.6 TEMPORARY LADDERS, SCAFFOLDS AND HOISTS (IF NEEDED)

- A. Furnish and maintain temporary stairs, ladders, ramps, scaffolds, hoists, runways, derricks and chutes required for proper execution of the Work.
- B. Provide such apparatus, equipment and construction meeting requirements of applicable Federal, State and local safety and labor laws.

2.7 GUARDRAILS, BARRICADES AND TEMPORARY COVERINGS

- A. Provide barricades as required to protect existing site features, adjacent property and passers-by.
- B. At completion of construction, remove guardrails and barricades.

END OF SECTION

DIVISION NO. 1

SECTION 01630

PART 1 - GENERAL

1.1 REQUIREMENTS INCLUDED

- A. Furnish and install products under conditions for options and substitutions stated in this Section.

1.2 PRODUCTS LIST

- A. Within 15 days after award of the Contract, submit to the Landscape Architect five copies of complete list of major products which are proposed for installation.
- B. Tabulate products by specification section number and title.
- C. For products specified only by reference standards, list for each such product:
 - 1. Name and address of manufacturer.
 - 2. Trade name.
 - 3. Model or catalog designation.
 - 4. Manufacturer's data:
 - a. Reference standards.
 - b. Performance test data.

1.3 CONTRACTOR'S OPTIONS

- A. For products specified only by reference standard, select product meeting that standard, by any manufacturer.
- B. For products specified by naming several products or manufacturers, select any one of products and manufacturers named which complies with specifications.
- C. For products specified by naming one or more products or manufacturers, submit a request as for substitutions, for any product or manufacturer which is not specifically named.

1.4 SUBSTITUTIONS

- A. Within a period of 15 days after award of Contract, the Landscape Architect will consider formal requests from the Contractor for substitution of products in place of those specified.
 - 1. After end of that period, requests will be considered only in case of product unavailability or other conditions beyond the control of the Contractor.
- B. Submit separate request for each substitution. Support each request with:
 - 1. Complete data substantiating compliance of proposed substitution with requirements stated in Contract Documents:

MYERS PARK HARDSCAPE IMPROVEMENTS

- a. Product identification, including manufacturer's name and address.
 - b. Manufacturer's literature; identify:
 - 1) Product description.
 - 2) Reference standard.
 - 3) Performance and test data.
 - c. Samples, as applicable.
 - d. Name and address of similar projects on which product has been used, and date of each installation.
2. Itemized comparison of the proposed substitution with product specified; list significant variations.
 3. Data relating to changes in construction schedule.
 4. Any effect of substitution on separate contracts.
 5. List of changes required in other work or products.
 6. Accurate cost data comparing proposed substitution with product specified.
 7. Designation of required license fees or royalties.
 8. Designation of availability of maintenance services, sources of replacement materials.
- C. Substitutions will not be considered for acceptance when:
1. They are indicated or implied on Shop Drawings or product data submittals without a formal request from Contractor.
 2. They are requested directly by a subcontractor or supplier.
 3. Acceptance will require substantial revision of Contract Documents.
- D. Substitute products shall not be ordered or installed without written acceptance of the Owner or Landscape Architect.
- E. The Landscape Architect will determine acceptability of proposed substitutions.

1.5 CONTRACTOR'S REPRESENTATION

- A. In making formal request for substitution, the Contractor represents that:
1. He has investigated proposed product and has determined that it is equal to or superior in all respects to that specified.
 2. He will provide same warranties or bonds for substitution as for product specified.
 3. He will coordinate installation of accepted substitution into the Work, and will make such changes as may be required for the Work to be complete in all respects.
 4. He waives claims for additional costs caused by substitution which may subsequently become apparent.

1.6 LANDSCAPE ARCHITECT'S DUTIES

- A. Review Contractor's request for substitutions with reasonable promptness.
- B. Notify Contractor, in writing, of decision to accept or reject requested substitutions.

END OF SECTION

DIVISION NO. 1

SECTION 01700

PART 1 - GENERAL

1.1 DESCRIPTION

Comply with requirements stated in Conditions of the Contract and in Specifications for administrative procedures in closing out the work.

1.2 RELATED WORK SPECIFIED ELSEWHERE

A. Section 01710 - Cleaning

1.3 FINAL INSPECTION

A. When Contractor considers Work is complete, he shall submit written certification to the Owner's Representative that:

1. Contract Documents have been reviewed.
2. Work has been inspected and completed in compliance with Contract Documents.
3. Work is ready for final inspection.

B. Landscape Architect and Owner will make an inspection to verify status of completion with reasonable promptness after receipt of such certification. If Work is accepted, Final Acceptance of the project shall be issued to the Contractor by the Owner's Representative.

C. Should Landscape Architect consider that Work is incomplete or defective:

1. Landscape Architect will promptly notify Contractor, in writing, listing incomplete or defective Work.
2. Contractor shall take immediate steps to remedy stated deficiencies, and send a second written certification to Landscape Architect that Work is complete.
3. Landscape Architect and Owner will reinspect the Work and submit Final Acceptance if project is complete and acceptable.

1.4 CLOSEOUT SUBMITTALS

A. Prior to Final Acceptance, submit the following:

1. Warranties beginning the day the City issues its Notice of Final Acceptance
2. Evidence of Payment and Release of Liens.
3. As-built drawings in reproducible form.

1.5 FINAL APPLICATION FOR PAYMENT

Contractor shall submit final Application for Payment promptly after Final Acceptance.

END OF SECTION

DIVISION NO. 1

SECTION 01780

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for Project Record Documents, including the following:
 - 1. Record Drawings.
 - 2. Record Specifications.
 - 3. Record Product Data.
- B. See Division 1 Section "Closeout Procedures" for operation and maintenance manual requirements.
- C. See Divisions 2 through 16 Sections for specific requirements for Project Record Documents of products on those Sections.

1.2 SUBMITTALS

- A. Record Drawings: Comply with the following:
 - 1. Number of Copies: Submit one set of mark-up Record Prints.
 - 2. Record Specifications: Submit one copy of Project's Specifications, including addenda and contract modifications.
 - 3. Record Product Data: Submit one copy of each Product Data submittal.

PART 2 - PRODUCTS

2.1 RECORD DRAWINGS

- A. Record Prints: Maintain one set of blue or black-line white prints of the Contract Drawings and Shop Drawings.
 - 1. Preparation: Mark Record Prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to prepare marked-up Record Prints.
 - a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
 - b. Record data as soon as possible after obtaining it. Record and check the markup before enclosing concealed installations.
 - 2. Content: Types of items requiring marking include, but are not limited to, the following:
 - a. Dimensional changes to Drawings.
 - b. Revisions to details shown on Drawings.
 - c. Locations and depths of underground utilities.
 - d. Revisions of routing of piping and conduits.
 - e. Location of electrical circuitry.

MYERS PARK HARDSCAPE IMPROVEMENTS

- f. Actual equipment locations.
 - g. Changes made by Change Order or Construction Change Directive.
 - h. Changes made following Landscape Architect's written orders.
 - i. Details not on the original Contract Drawings.
 - j. Field records for variable and concealed conditions.
 - k. Record information on the Work that is shown on drawings schematically.
3. Mark the Contract Drawings or Shop Drawings, whichever is most capable of showing actual physical conditions, completely and accurately. If Shop Drawings are marked, show cross-reference on the Contract Drawings.
 4. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at the same location.
 5. Mark important additional information that was either shown schematically or omitted from original Drawings.
 6. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identifications, where applicable.

2.2 RECORD SPECIFICATIONS

- A. Preparation: Mark Specifications to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.
 1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
 2. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
 3. Record name of manufacturer, supplier, Installer, and other information necessary to provide a record of selections made.
 4. Note related Change Orders, Record Drawings, and Product Data where applicable.

2.3 RECORD PRODUCT DATA

- A. Preparation: Mark Product Data to indicate the actual product installation where installation varies substantially from that indicated in Product Data submittal.
 1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
 2. Include significant changes in the product delivered to Project site and changes in manufacturer's written instructions for installation.
 3. Note related Change Orders, Record Drawings and Product Data where applicable.

2.4 MISCELLANEOUS RECORD SUBMITTALS

- A. Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.

PART 3 - EXECUTION

3.1 RECORDING AND MAINTENANCE

- A. Recording: Maintain one copy of each submittal during construction period for Project Record Document purposes. Post changes and modifications to Project Record Documents as they occur; do not wait until end of Project.

- B. Maintenance of Record Documents and Samples: Store Record Documents and Samples apart from the Contract Documents used for construction. Do not use Project Record Documents for construction purposes. Maintain Record Documents in good order and in clean, dry, legible condition, protected from deterioration and loss. Provide access to Project Record Documents for Landscape Architect's reference during normal working hours.

END OF SECTION

DIVISION NO. 1

SECTION 01710

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Maintain premises and public properties (on a daily basis) free from accumulations of waste, debris, and rubbish caused by operations.
- B. At completion of work, remove waste materials, rubbish, tools, equipment, machinery, and surplus materials, and clean all sight-exposed surfaces; leave project clean and ready for occupancy.

1.2 SAFETY REQUIREMENTS

- A. Standards: Maintain project in accord with applicable safety and insurance standards.
- B. Hazards Control:
 - 1. Store volatile wastes in covered metal containers, and remove from premises daily.
 - 2. Prevent accumulation of wastes which create hazardous conditions.
 - 3. Provide adequate ventilation during use of volatile or noxious substances.
- C. Conduct cleaning and disposal operations to comply with local ordinances and anti-pollution laws.
 - 1. Do not burn or bury rubbish and waste materials on project site.
 - 2. Do not dispose of volatile wastes such as mineral spirits, oil, or paint thinner in storm or sanitary drains.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Use only cleaning materials recommended by manufacturer of surface to be cleaned.
- B. Use cleaning materials only on surfaces recommended by cleaning material manufacturer.

PART 3 - EXECUTION

3.1 DURING CONSTRUCTION

- A. Execute cleaning to ensure that building, grounds, and public properties are maintained free from accumulations of waste materials and rubbish.
- B. Wet down dry materials and rubbish to lay dust and prevent blowing dust.
- C. At reasonable intervals during progress of work, clean site and public properties, and dispose of waste materials, debris, and rubbish.

MYERS PARK HARDSCAPE IMPROVEMENTS

- D. Remove daily, all waste materials, debris, and rubbish.
- E. Remove waste materials, debris, and rubbish from site, and legally dispose of at public or private dumping areas off Owner's property.
- F. Handle materials in a controlled manner with as few handlings as possible; do not drop or throw material from heights.
- G. Schedule cleaning operations so that dust and other contaminants resulting from cleaning process will not fall on wet, newly painted surfaces.

3.2 FINAL CLEANING

- A. Employ experienced workmen, or professional cleaners, for final cleaning.
- B. In preparation for substantial completion or occupancy, conduct final inspection of high-exposed exterior surfaces, and of concealed spaces.
- C. Repair, patch, and touch-up marred surfaces to specified finish, to match adjacent surfaces.
- D. Broom clean paved surfaces; rake clean other surfaces of grounds.
- E. Owner will assume responsibility for cleaning as of time designated on Certificate of Substantial Completion for Owner's acceptance of project or portion thereof.

END OF SECTION

DIVISION NO. 2

SECTION 02050

PART 1 - GENERAL

1.1 WORK INCLUDED:

- A. Demolition, abandonment or removal from site of existing materials at the site except where specified to remain.
- B. Adjustment, relocation, extension and/or termination of all utilities as required by plans and specifications.

1.2 EXISTING CONDITIONS:

- A. An attempt has been made to show all utilities known to exist in their approximate location. The Contractor will be responsible to determine the exact location, nature and status of all utility lines whether shown on plans or not before removing, adjusting, or altering, extending or relocating and shall make all necessary caps, plugs and terminations as required by the utility owner and/or governing authorities to return said utility to complete operation at no additional cost to Owner. Any utility which is damaged due to demolition shall be repaired and/or replaced at no additional cost to the Owner by the Contractor.
- B. The Contractor shall verify the existence or non-existence of septic tanks, wells, cisterns, basements or cellars on the site. The existence of any of the above items not shown on the plans shall be brought to the attention of the Owner and Landscape Architect **immediately**. The above shall be demolished and the area filled and compacted as specified at no additional cost.
- C. The Contractor shall visit prior to submitting a bid to satisfy himself as the existing conditions and work to be done.

1.3 PROTECTION:

- A. Protect trees, shrubs and lawns, and other features remaining as part of final landscaping.
- B. Protect benchmarks, and existing structures, fences, roads, sidewalks, paving and curbs against damage from equipment and vehicular traffic.
- C. Protect aerial, surface, or underground utility lines or appurtenances which are to remain.

PART 2 - PRODUCTS

Not Applicable

PART 3 - EXECUTION

3.1 PREPARATION:

- A. Establish improvements to be removed and coordinate work with Owner.

MYERS PARK HARDSCAPE IMPROVEMENTS

- B. Maintain benchmarks, monuments, and other reference points. Re-establish if disturbed or destroyed, at no cost to Owner.
- C. Before start of demolition, establish the location and extent of utilities in the work areas. If applicable, notify utilities to remote and/or relocate lines which will be affected by demolition.
- D. Maintain, protect, reroute or extend as required, existing utilities to remain which pass through the work area.

END OF SECTION

DIVISION NO. 2

SECTION 02101

PART 1 - GENERAL

1.1 RELATED WORK SPECIFIED IN OTHER SECTION:

- A. Earthwork is specified in Section 02200.
- B. Do not start any work prior to installation of erosion control facilities.

1.2 PROTECT MONUMENTS:

Protect monuments and benchmarks and replace if damaged or destroyed.

PART 2 - SITE CLEARING

2.1 CLEARLY MARK TREES selected to remain with cloth strips or similar material, not less than four (4") inches wide, wrapped entirely around the trunk at a uniform height of four (4') feet above existing grade. Maintain marking devices until finish grading is accomplished.

2.2 PROTECT EXISTING TREES subject to site work and construction drainage. Light no fires under, or near, the spread of branches. Perform no excavation or grading under spread of branches without prior approval. Place no materials or debris, nor park equipment within the spread of the branches.

- A. Protect tops, trunks, and roots of existing trees to remain.
- B. Remove interfering branches, as directed, without injury trunks and cover scars immediately with tree paint.
- C. Refer to Section 02100 – Site Preparation for tree protection fencing specifications.

2.3 GRUBBING:

- A. IN CONSTRUCTED AREAS: Remove trees and shrubs, including their entire root system, which occur within or adjacent to building and paved areas.
- B. IN SITE CUT AND FILL AREA: Remove shrubs and their root system and trees, except those indicated to remain, including their root system down to a point two foot - zero inches (2'-0"), or more, below finished grade.
- C. EXECUTE SITE CLEARING for paved areas, driveways, and sidewalks. Trees to remain in or adjacent to these areas will be marked and shall be protected.

2.4 PROTECTION OF EXISTING WORK REMAINING:

- A. Selected trees and other existing work remaining shall be boarded, boxed, fenced, and/or protected from site work and construction operations. Maintain protection until removal is authorized. Refer to Section 02100 – Site Preparation for tree protection fencing specifications.

MYERS PARK HARDSCAPE IMPROVEMENTS

- B. Clearing operations shall be conducted so as to prevent damage to adjoining property, to existing structures and installations, and those under construction, and to provide for the safety of employees and others.
- C. Remove protection when danger or damage from these operations no longer exist, and when approved or directed by the Owner's Representative.

PART 3 - EXECUTION

3.1 EXCAVATED MATERIALS and all waste resulting from clearing and grubbing shall be disposed of off site at the contractor's expense, unless otherwise directed by the Owner's Representative.

3.2 BACKFILLING: The use of any debris, rubbish, or waste material for backfilling, or filling or erosion ditches, will not be permitted without the Owner's Representative's written permission.

3.2 CLEAN-UP:

- A. The entire site shall be cleared of broken concrete, stones, bricks, and other debris. All debris shall be hauled away from the site unless directed otherwise by the Owner's Representative.
- B. At the completion of the site work, the premises (including all areas within the limit of work boundaries) shall be cleaned of all minor debris and trash remaining and left in condition for grading operations.

3.4 SITE STRIPPING AND SITE PREPARATION:

Stripping shall consist of the removal of all topsoil, roots, vegetation and rubbish not removed by the clearing and grubbing operation. The actual stripping depth should be based on field observations with particular attention given to uneven topography, and excessively wet soils. The stripped areas should be observed to determine if additional excavations required to remove weak or otherwise objectionable materials that would adversely affect the fill placement.

The subgrade shall be firm and able to support the construction equipment without displacement. Soft or yielding subgrade shall be corrected and made stable before construction proceeds. The subgrade shall be proof rolled to detect soft spots, which if exist, shall be reworked. Proof rolling shall be performed using a heavy pneumatic tired roller, loaded dump truck, or similar equipment weighing approximately 25 tons. The proof rolling operations shall be observed by the project geotechnical engineer or his representative.

END OF SECTION

DIVISION NO. 2

SECTION 02112

PART 1 - GENERAL

1.1 GENERAL CONDITIONS

The requirements of the "General Conditions of the Agreement" shall apply to all work of this Section with the same force and effect as though repeated in full herein.

1.2 WORK INCLUDED

- Lateral pruning of existing trees.
- Root and crown pruning.
- Protection of existing trees.
- Fertilizing existing trees.
- Protection of existing utilities.
- Armoring.
- Borer protection.

1.3 RELATED WORK

Section 02245 - Finish Grading
Section 02820 - Turf Establishment
Section 02900 - Landscaping

1.4 PROJECT CONDITIONS

- A. **Review:** Visit and walk the site with the Owner's representative to clarify scope of work and understand project conditions.
- B. **Field Verification:** Confirm location of all plant materials to remain.
- C. **Acceptance:** Commencing work shall be taken as acceptance by the Contractor of responsibility for the protection of all existing site plantings, with the exception of discrepancies and corrections noted above.

1.5 REFERENCE STANDARDS

N.A.A.: "Pruning Standards for Shade Trees", 1979.

1.6 GENERAL PROVISIONS

- A. Trees and areas scheduled for work under this contract shall be identified in the field and indicated on plans and specifications where practical. Where this is not practical, work shall be directed in field by Owner.
- B. Provision for access to the site for heavy equipment will be as directed by Owner. Equipment shall use prescribed temporary roadways and shall not be allowed in areas other than designated construction areas and designated roadways. Open grass areas which are altered or disturbed by equipment during the work shall be returned to pre-existing conditions at no additional cost to Owner.

MYERS PARK HARDSCAPE IMPROVEMENTS

- C. Wood cuttings and debris shall become property of Contractor and shall be removed from site. Debris to be transported to nearest legal dump. Cost of disposal to be paid by Contractor. No burning will be permitted.
- D. Contractor shall protect root areas and crowns of trees not designated for work under this contract from damage from operations and equipment. The Contractor shall repair such damage at no cost to Owner. Provide fences or other barricades where necessary for such protection.

1.7 DEFINITIONS

- A. **Protection:** Provide all barricades as required to prevent damage to existing plant materials to remain, including but not limited to protection from mechanical damage and soil compaction, pollution from all sources, and disruption of environmental support which would result in the loss of vigor of said plantings.
- B. **Drip Line:** An imaginary line on the ground around a tree representing its outermost branch tips. All of the area within the drip line of existing trees to remain is to be protected from damage as specified herein, unless otherwise noted.

1.8 WARRANTY

- A. **General:** During the Warranty Period for new plantings, similarly warrant all existing plant materials against decline resulting from damage during construction. See Section 02900 - Landscaping.
- B. **Exclusions:** Damage due to vandalism, acts of God, or neglect by Owner.

1.9 REPLACEMENTS

- A. **General:** Existing planting to remain which exhibit conditions which are determined as unacceptable due to inadequate protection during construction shall be replaced by Contractor at no expense to Owner.
- B. **Quality:** Closely match replacements to adjacent specimens of the same species.
- C. **Planting, Maintenance and Warranty of Replanted Materials:** See Section 02900 - Landscaping.

1.10 **FINAL ACCEPTANCE** - See Section 02900 - Landscaping.

PART 2 - MATERIALS

2.1 TRENCHING MACHINE

Shall be small non-riding track type trencher equal to Case 300.

2.2 SHARP SAND

ASTM C-33 for fine aggregate.

2.3 TREE PAINT

Thompson Tree Seal, Cabot Tree Paint or approved equal.

2.4 ANTISEPTIC

Antiseptic shall consist of a mixture of one pound copper sulphate to one gallon of boiled linseed oil.

2.5 PRUNING TOOLS

Shall be of good quality and working condition, sharp, and of the approved type for arborcultural work.

2.6 WOOD FOR FENCES, BARRICADES AND ARMORING

Shall be construction grade Southern Yellow Pine or Douglas Fir.

- A. Posts - Four (4") inches X four (4") inches.
- B. Rails - Two (2") inches X eight (8") inches.
- C. Armoring - Two (2") inches X four (4") inches.

2.7 INSECTICIDE

Shall be Ortho "Lindane Borer and Leaf Miner Spray" by Ortho Consumer Products Division, Chevron Chemical Company, San Francisco, California 94119, or approved equal.

2.8 FERTILIZER

Arborgreen, or approved equal.

2.9 WATER

Suitable for irrigation.

PART 3 - EXECUTION

3.1 WORKMANSHIP

- A. Work shall be performed by personnel trained and experienced in this work and shall be done under the direction of a qualified forester or arborculturist on Contractor's staff.
- B. Work shall be performed in conformance with recognized horticultural and arborcultural practices. Where job requirements require deviation from normal practice, obtain approval from Owner.
- C. **Storage:** Do not store materials or equipment under the branches of all existing trees nor in lawn or ground cover areas to remain.
- D. **Traffic:** Do not operate nor park equipment within the drip line of existing trees to remain. Keep foot traffic out of existing groundcover areas. Limit foot traffic on existing lawns to periods when lawn is dry. Protect shrub areas from cross traffic.

3.2 EXCAVATING AND GRADING

- A. **Cut:** Do not permit machine excavation within the drip line of existing trees to remain. All such work shall be hand labor. Do not permit more than two (2) inches of existing soil to be removed within the drip line except as authorized in writing by Owner.
- B. **Fill:** Do not permit stockpiling of soil within the drip line of all existing trees nor on existing lawn or groundcover areas. Do not permit more than three (3) inches of fill to be placed within the drip line during grading operations without written acceptance by Owner.

3.3 ROOT PRUNING

- A. Root pruning by trenching shall be in the areas approved by Owner sixteen (16") inches deep and eight (8") inches wide.
- B. Trenching shall be performed by the approved trencher cutting any and all roots completely and cleanly. Tearing, shredding or pulling of the roots shall not be permitted.
- C. Treat cut roots with antiseptic only, immediately after trenching.
- D. Fill trench to existing finished grade with sharp sand, compact and water thoroughly.

3.4 CROWN PRUNING • CLASS IV • CUTTING BACK OR DROP CROTCH PRUNING (N.A.A. STANDARDS)

- A. Cutting back or drop crotch pruning shall consist of the reduction of tops, sides, underbranches or individual limbs. This practice is to be undertaken only where certain portions of the roots or root systems have been severed or severely damaged, or when there is unusual and rapid tree growth, where it is necessary to reduce the top, sides or underbranches.
- B. All cuts shall be made sufficiently close to the trunk or parent limb, without cutting into the branch collar or leaving a protruding stub, so that closure can readily start under normal conditions.
- C. It is necessary to precut heavy branches to prevent splitting or peeling the bark. Where necessary, to prevent tree or property damage, branches shall be lowered to the ground by proper ropes or equipment. Remove the weaker or least desirable or crossed or rubbing branches. Such removal should not leave large holes in the general outline of the tree.
- D. Treatment of cuts and wounds, with tree wound dressing, is optional except where open wounds in certain trees may attract insects that carry disease or allow fungus invasion. If such treatment is made, materials non-toxic to the cambium layer must be used, and care taken to treat only the exposed wood with a thin coat of dressing.
- E. Old injuries are to be inspected. Those not closing properly and where the callus growth is not already completely established should be traced where appropriate. If desired, for cosmetic purposes, the wound may be treated with a thin coat of wound dressing.
- F. Generally, in reducing size (cutting back), not more than one-third of the total area should be reduced at a single operation. When cutting back trees, only drop crotch as much as necessary. Where practical, avoid cutting back to small suckers. All effort should be made to cut back to a lateral, one-third of the diameter of the cut being made.
- G. In reducing overall size, attention is to be given to the symmetrical appearance. Top is to be higher and sides reduced in order to maintain a tree-like form.

MYERS PARK HARDSCAPE IMPROVEMENTS

- H. When cutting back trees, just enough limbs shall be removed to get the effect wanted without admitting too much sunlight to the trunk of the tree or the top of large branches. Care should be taken with oaks, and other thin barked trees susceptible to sunscald. Damage may be minimized by doing work on susceptible species during the dormant season.
- I. In lifting the lower bottom branches of trees for underclearance, care should be given to symmetrical appearance, and cuts should not be made so large that they will prevent normal sap flow.
- J. Prune as required and as directed. Pruning shall take no more than one-third of root and crown system except by special direction of Owner or Landscape Architect.
- K. Use clean, sharp tools, disinfected where necessary to prevent spread of disease. Paint crown cuts over one (1") inch in diameter with tree paint.
- L. Limbs and debris from this work shall be transported and not dragged over the site. Wood and debris shall become property of Contractor and shall be removed from site and legally disposed of. Cost of disposal to be paid by Contractor.
- M. No burning will be permitted.

3.5 FENCES AND BARRICADES

- A. Fences and/or barricades shall be placed where shown on the drawings or as herein described.
- B. In general, fences and barricades are intended to alert those working on the project that equipment and machinery are not to be stored or operated in the feeder root zone. Where not shown, the fences and barricades shall be placed not closer than nine (9x) times the caliper of the tree to the tree, or at the drip line. The exact location of fences or barricades shall be determined by the Owner or Landscape Architect.
- C. Posts shall be installed six (6') feet OC maximum, three (3') feet deep. Rails shall be installed approximately two feet, six inches (2'6") and five feet (5'0") above existing finished grade. Posts shall be installed plumb and rails level, and as approved.

3.6 TREE PROTECTION

- A. All trees to be preserved on the property shall be protected against damage during construction operations by fencing (subject to the approval of the Owner). The tree protection shall be placed before any excavating or grading is begin and maintained in repair for the duration of the construction work unless otherwise directed. No material shall be stored or construction operation shall be carried on within a distance as shown of any tree to be saved or within the tree protection fencing. Tree protection shall remain until all work is completed.
- B. Any damage done to existing tree crowns or root systems shall be repaired immediately by an approved tree surgeon at the Owner's direction. Roots exposed and/or damaged during demolition and/or grading operations shall be cut off cleanly inside the exposed or damaged area, the cut surfaces painted with an approved tree paint, and the topsoil and mulch placed over the exposed root area immediately. The Owner shall have his representative present on the site to observe these operations.

3.7 ARMORING

In close quarters, as approved, a single tree shall be protected by strapping (not nailing) a continuous shield of wood two (2") inches x four (4") inches x five (5') feet around the trunk.

3.8 BORER PROTECTION

Immediately after tree protection is complete, apply specified insecticide at the rate prescribed by the manufacturer's instructions.

3.9 APPLICATION OF TREE FERTILIZER

Inject by Ross Root Feeder, or approved equal.

END OF SECTION

DIVISION NO. 2

SECTION 02200

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Perform earthwork as shown and specified. The work includes:
 - 1. Site grading and filling to indicated elevations, profiles and contours.
- B. Related Work.
 - 1. Section 02245 - Finish Grading

1.2 SUBMITTALS

- A. Provide samples of materials proposed for use.
- B. Submit reports for testing and inspection of the following:
 - 1. Fill and backfill materials (if imported materials are needed).

1.3 PROJECT CONDITIONS

- A. Promptly repair damage to adjacent facilities caused by earthwork operations. Cost of repair at Contractor's expense.
- B. Promptly notify the Landscape Architect of unexpected subsurface conditions.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. **Topsoil:** Fertile, friable, natural topsoil of sandy loam character, without admixture of subsoil material, obtained from a well-drained, arable site, reasonably free from clay clods, stones, plants, roots and other foreign materials.
 - 1. Provide imported topsoil free of substances harmful to the plants which will be grown in the soil.
 - 2. Topsoil to have the following characteristics:
 - a. pH factor (range of 6 to 8).
 - b. Mechanical analysis (Plastic Index of 7 to 20. Minimum laboratory dry weight at optimum moisture content of 110 lbs./cu.ft.).
 - c. Percentage of organic content.
 - d. Recommendation on type and quantity of additives required to establish satisfactory pH factor and supply of nutrients to bring nutrients to satisfactory level for planting.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Establish extent of grading and excavation by area and elevation. Designate and identify datum elevation and project engineering reference points. Set required lines, levels, and elevations.

3.2 EXISTING UTILITIES

- A. Before starting grading and excavation, establish the location and extent of underground utilities in the work area. Exercise to protect existing utilities during earthwork operations. Perform excavation work near utilities by hand and provide necessary shoring, sheeting, and supports as the work progresses.
- B. Maintain, protect, relocate, or extend as required existing utility lines to remain which pass through the work area. Pay costs for this work, except as covered by the application utility companies.
- C. Protect active utility service lines from areas of excavation. Cap, plug, or seal abandoned lines and identify termination points at grade level with markers.
- D. Accurately locate and record abandoned and active utility lines rerouted or extended on project record documents.

3.3 SITE GRADING

- A. Perform grading within contract limits, including adjacent transition areas, to new elevation, levels, profiles, and contours indicated. Provide subgrade surfaces parallel to finished surface grades. Provide uniform levels and slopes between new elevation and existing grades.
- B. Grade surfaces to prevent ponding and pockets of surface drainage. Provide subgrade surfaces free from irregular surface changes and as follows:
 - 1. Rough grading: Plus or minus 0.10 ft. subgrade tolerance. Finish required will be that ordinarily obtained from either blade-grader or scraper operations.
 - 2. Provide subgrade surface free of exposed boulders or stones exceeding 2" in greatest dimension in paved areas, 1" lawn and planting areas.
 - 3. Lawn and planting areas: Allow 4" average depth of topsoil in all landscape areas, except as otherwise indicated on the drawings.

3.4 EXCAVATING

- A. Earth excavation shall include the satisfactory removal and disposal of all materials encountered, regardless of the nature of the materials, the condition of the materials at the time they are excavated, or the manner in which they were excavated, except materials classified as rock excavation.

3.5 FILLING, BACKFILLING, AND COMPACTING

- A. Obtain inspection and approval of subgrade surfaces by Landscape Architect prior to filling operations. Scarify, dry, and compact soft and wet areas; remove and replace unsuitable subgrade materials with an approved compacted fill material. Take corrective measures before placing fill materials.

MYERS PARK HARDSCAPE IMPROVEMENTS

- B. Spread approved fill material uniformly in layers not greater than 8" of loose thickness over entire fill area.
 - 1. Lift thickness requirements may be modified by Landscape Architect to suit equipment and materials or other condition when required to assure satisfactory compaction.
 - 2. Moisture condition fill material by aerating or watering and thoroughly mix material to obtain moisture content permitting proper compaction.
 - 3. Place and compact each layer of fill to indicated density before placing additional fill material. Repeat filling until proposed grade, profile, or contour is attained.
 - 4. Suspend fill operations when satisfactory results cannot be obtained because of environmental or other unsatisfactory site conditions. Do not use muddy fill materials. Do not place fill material on muddy subgrade surface.
 - 5. Maintain surface conditions which permit adequate drainage of rain water and prevent ponding of surface water in pockets. When fill placement is interrupted by rain, remove wet surface materials or permit to dry before placing additional fill material.
- C. Fill all areas of settlement to proper grade before subsequent construction operations are performed.
- D. Compaction:
 - 1. Provide compaction control for all fill and backfill.
 - 2. Compact top 12" of subgrade and each layer of fill or backfill material at foundations, slabs on grade retaining walls, and paved areas to 100% of maximum dry density at optimum moisture content in accordance with ASTM D698 Standard Proctor Method.
 - 3. Compact top 6" of subgrade and each layer of fill material at lawns and unpaved areas to 90% of maximum dry density at optimum moisture content in accordance with ASTM D698.
 - 4. Water settling, puddling, and jetting of fill and backfill materials as a compaction method are not acceptable.
 - 5. Maintain moisture content of materials, during compaction operations within required moisture range to obtain indicated compaction density.
 - 6. Provide adequate equipment to achieve consistent and uniform compaction to fill and backfill materials.

3.6 FINISH GRADING

- A. Refer to Section 02245 - Finish Grading for specification.
- B. Maintenance:
 - 1. Protect finish graded areas from traffic and erosion. Keep free of trash and debris. Repair and reestablish grades in settled, eroded, and damaged areas.
 - 2. Where existing landscape or completed areas are distributed by construction operations or adverse weather, scarify, reshape, and compact to required density.

3.7 CLEANING

- A. Upon completion of earthwork operation, clean areas within contract limits, remove tools and equipment. Provide site clear, clean, free of debris, and suitable for site work operations.

END OF SECTION

DIVISION NO. 2

SECTION 02245

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Perform topsoil grading work as shown and specified. The work includes:
 - 1. Site fine grading (raking and bed preparation of new shrub, groundcover, and grass areas) of topsoil.
 - 2. Removing debris and waste materials.
- B. Related Work.
 - 1. Section 02900 - Landscaping

1.2 QUALITY ASSURANCE

Comply with applicable city, state and federal requirements regarding materials and methods of work and disposal of waste materials.

1.3 SUBMITTALS (NOT APPLICABLE)

1.4 WORK SCHEDULE

- A. General: Work continuously on the site with the exception of bad weather delays until the work is complete.
- B. The Contractor shall be ready to tentatively begin work within seven (7) working days of notice to proceed from Owner.

1.5 JOB CONDITIONS

- A. Protect existing utilities, pavement and other facilities from damage caused by earthwork operations. Verify utility locations prior to start up of project.
- B. Locate, protect and maintain bench marks, monuments, control points and project engineering reference points.

PART 2 – PRODUCTS (None Required)

PART 3 - EXECUTION

3.1 PREPARATION

- A. Examine proposed rough grading area and conditions of installation prior to landscape construction. Do not start grading work until unsatisfactory conditions are corrected.
- B. Notify the Owner of unexpected subsurface conditions.
- C. Establish extent of grading by area and elevation.

3.2 FINE GRADING

- A. Fine grade topsoil eliminating rough and low areas to ensure positive drainage.
- B. Remove stones, roots, weeds, and debris while spreading topsoil materials. Rake surface clean of stones 1" or larger in any dimension and all debris. Provide surfaces suitable for soil preparation provided under lawn and planting work.
- C. Leave all graded areas approximately 1/2" below finished paved surfaces at edges only.

3.3 MAINTENANCE

- A. Protect graded areas from traffic and erosion. Keep free of trash and debris. Repair and re-establish grades in settled, eroded and damaged areas.
- B. Where completed areas are disturbed by construction operations or adverse weather, scarify surface, reshape and compact to required density.

3.4 WASTE MATERIALS

Haul from site and legally dispose of waste materials, including excess topsoil used for this project, rock, trash and debris.

3.5 CLEAN UP

Upon completion of filling and grading work, remove equipment and tools. Leave site clear, clean, free of debris and ready for landscaping work.

END OF SECTION

DIVISION NO. 2

SECTION 02546

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and General Provisions of contract, including General and Supplementary Conditions and all applicable specification sections, apply to this section.

1.2 GENERAL DESCRIPTION OF THE WORK OF THIS SECTION

- A. Provide labor, materials, equipment and appliances necessary to install and complete decomposed granite trail in accordance with Contract Documents.
- B. Work shall include, but not necessarily be limited to, compaction of subgrade, and installation of decomposed granite.

1.3 RELATED WORK OF OTHER SECTIONS

- A. Coordinate work of this Section with work of other Sections as required to properly execute the work and as necessary to maintain satisfactory progress of the work of other Sections.

1.4 QUALITY ASSURANCE

- A. The Contractor is responsible for correction of work which does not conform to the specified requirements, including strength, tolerances and colors. Correct deficient materials as directed by the Owner.

1.5 SUBMITTALS

- A. Product Data: Submit manufacturer's product data with application and installation instructions for all materials and items.
- B. Sample: Decomposed granite of size and color specified.
- C. Sample: Decomposed granite stabilizer material as specified.
- D. Create a 3' x 3' mock-up for approval.

1.6 WARRANTY

- A. Warrant the work specified herein for 1 year against becoming unserviceable or causing an objectionable appearance resulting from either defective or non-conforming materials and workmanship.
- B. Defects shall include, but shall not be limited to settling.

1.7 PRODUCT HANDLING

- A. Material shall be delivered and stockpiled at job site at a location agreed upon with the Landscape Architect and Owner.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Decomposed Granite: ½" minus decomposed granite, match existing/salvaged material. Supplied by Collier Materials, Inc. (phone: 1-877-603-3030) or approved equal.
- B. Decomposed Granite Stabilizer: Stabilizer as produced by Stabilizer, Inc. (Contact: Bill Paprocki at 1-404-915-1257). Stabilizers to be pre-mixed into decomposed granite at a rate of 15 lbs. per ton of decomposed granite.
- C. Weed Barrier (Filter Fabric): Woven soil separator/weed barrier to be installed on the path system shall be Pro 5 Weed Barrier as manufactured by DeWitt Company or approved equal.

PART 3 - EXECUTION

3.1 DELIVERY AND STORAGE

- A. Promptly notify the Owner in advance of the time of delivery of the decomposed granite material.

3.2 PREPARATION

- A. Review related drawings and stake out on the ground areas to receive decomposed granite and obtain approval of the Owner before excavation work is begun.
- B. In order to minimize conflict, locate all existing utilities prior to beginning work.

3.3 INSTALLATION

- A. Seating Area:
 - 1. Excavate for granite material as designated on the drawing. Excavation shall ensure that final trail installation will not create damming of surface drainage.
 - 2. Natural edge of trail should be hand excavated to create a clean, straight edge.
 - 3. Compact subgrade to 95% maximum density.
 - 4. Install weed barrier on compacted subgrade prior to decomposed granite installation.
 - 5. Decomposed granite shall be clean and free of foreign materials before installation.
 - 6. Contractor to install minimum 6" diameter PVC drainage pipes under trail in any areas of concentrated surface drainage which may cause erosion of the trail.
 - 7. Installation should start from one end and proceed forward over the undisturbed laying course.
 - 8. Prior to compaction (rolling), decomposed granite to be wetted to activate pre-mixed stabilizer.
 - 9. Work shall be level and true to line and grade; shall be installed properly to coincide and align with adjacent work and elevations. All edges must be retained as per Detail.
 - 10. All decomposed granite shall be rolled and compacted to a minimum 4" depth. Maximum cross slope shall be 1.5%. Crown at center or pitch to one side for drainage (depending on field conditions).

3.4 ACCEPTANCE

- A. Allow subgrade observation / approved by Landscape Architect and City prior to placing Decomposed Granite.

END OF SECTION

DIVISION NO. 2

SECTION 02920

PART 1 - GENERAL

1.1. RELATED SECTIONS:

- A. Section 02900 - Landscaping
- B. Section 02810 - Landscape Irrigation System

1.2 QUALITY ASSURANCE

- A. Deliver fertilizer to site in original, sealed containers bearing manufacturer's guaranteed statement of analysis.
- B. Complete herbicide application by a licensed applicator, with current license in good standing, thoroughly trained in the scope of work involved.
- C. ASTM - American Standard Testing Material - sand.
- D. Texas Seed Law & Regulations - latest edition.

1.3 WORK INCLUDED:

- A. Provide and install solid sod Bermudagrass in areas shown on drawings.

1.4 SUBMITTALS:

- A. Certificates:
 - 1. Growers Certification:
 - a. Grass species, and location of field from which sod is cut.
 - b. Compliance with state and federal quarantine restrictions.
 - 2. Manufacturer's certification of fertilizer and herbicide composition.

1.5 PRODUCT DELIVERY, STORAGE, AND HANDLING:

- A. Deliver sod on pallets.
- B. Protect root system from exposure to wind or sun.
- C. Protect sod against dehydration, contamination, and heating during transportation and delivery.
- D. Do not deliver more sod than can be installed within 24 hours.
- E. Keep stored sod moist and under shade, or covered with moistened burlap.
- F. Do not pile sod more than 2' deep.
- G. Do not tear, stretch, or drop sod.

MYERS PARK HARDSCAPE IMPROVEMENTS

1.6 JOB CONDITIONS:

- A. Begin installation of sod after preceding related work is accepted.
- B. Environmental Requirements:
 - 1. Do not install sod on saturated soil.
- C. Protection: Erect signs and barriers against vehicular traffic.

1.7 SPECIAL GRASSING PROVISIONS:

- A. Maintenance: Until Final Acceptance, and until an approved stand of grass is achieved, maintain lawn areas by watering, mowing, weeding, spraying, cleaning and replacing as necessary to keep the turf in a vigorous, healthy condition.
 - 1. Watering: As necessary to keep top 2 inches of soil moist.
 - 2. Mowing: Mow newly planted grass areas weekly after initial growth reaches 2-1/2 inches.
 - 3. Weeding: Remove weeds and foreign grass over lawn areas at least once a week. Herbicides may be used only when approved by Architect.
- B. Acceptance: The work will be accepted when a completed undamaged stand of grass, free of weeds, is achieved and as approved by Owner and Architect.
- C. **SCHEDULES:** Sodding operations can be performed year-round weather permitting. Do not install sod on frozen ground or if forecast calls for freezing conditions. Do not place sod until fine grading is approved.

1.8 GUARANTEE:

- A. Guarantee sod from period of twelve (12) months after date of Substantial Completion.
- B. Replacement sod under this guarantee shall be guaranteed for twelve (12) months from the date of Final Completion.
- C. Repair damage to other plants during sod replacement at no cost to the Owner.

PART 2 - PRODUCTS

2.1 SOD:

- A. Grass Species: Common Bermudagrass (*Cynodon dactylon*) as shown on drawings.
- B. American Sod Producers Association (ASPA) Grade: Nursery grown or approved. Field grown sod is not acceptable.
- C. Furnished in Pads:
 - 1. Size:
 - a. Length: 24 inches plus or minus 5%
 - b. Width: 18 inches plus or minus 5%

MYERS PARK HARDSCAPE IMPROVEMENTS

- c. Thickness: 1-1/2 inches excluding top growth and thatch.
- 2. Not stretched, broken, or torn.
- D. Uniformly Mowed Height When Harvested: 2-1/2 inches.
- E. Thatch: Maximum 1/2 inches uncompressed.
- F. Inspected and found free of diseases, nematodes, pests, and pest larvae, by entomologist of State Department of Agriculture.
- G. Weeds: Free of nut grass or any other objectionable weeds, or vegetation.
- H. Uniform in color, leaf texture, and density.

2.2 WATER:

- A. Free of substances harmful to plant growth.

2.3 FERTILIZER:

- A. Provide a complete fertilizer, part of elements of which are derived from organic sources and shall include trace elements. Fillers to be sulphur and iron sulphate.
 - 1. First Application: 10-20-10 or similar analysis with minimum 8% sulphur and 4% iron, plus micronutrients.
 - 2. Second Application: 20-5-10 or similar analysis. Nitrogen source to be a minimum 50% slow release organic Nitrogen (SCU or UF) plus minimum 8% sulphur and 4% iron plus micronutrients.

2.4 HERBICIDES:

- A. As recommended by the State Department of Agriculture and approved by Owner.

2.5 STAKES:

- A. Softwood, 3/4 inch diameter, 8 inch length.

PART 3 - EXECUTION

3.1 INSPECTION:

- A. Verify that soil to depth of 2 inches in compacted areas.
- B. Water dry soil to depth of 4"-6" before sodding.
- C. Ensure City has approved the Finish Grade.

3.2 PREPARATION:

- A. Verify finish grades are to elevations called for.
- B. Smooth area to be sodded to produce an even surface with no peaks or valleys and free of all debris.

- C. Wet surface to a uniform depth of 4"-6" or until upper surface is reasonably wet and compacted.

3.3 FERTILIZING:

- A. First Application:
 - 1. Distribute 10-20-10 fertilizer uniformly at rate of 15 pounds per 1,000 square feet and rake into seed bed prior to sodding.
- B. Second Application:
 - 1. Repeat fertilization with 20-5-10 commercial fertilizer after first cutting at rate of 15 pounds per 1,000 square feet.
- C. Water: Immediately water in fertilizer after each application.

3.4 INSTALLATION:

- A. Install sod species as indicated on planting plans.
- B. Transplant sod within 48 hours after harvesting.
- C. Begin sodding at bottom of slopes.
- D. Lay first row of sod in straight line with long dimension of pads parallel to slope contours.
- E. Butt side and end joints.
- F. Stagger end joints in adjacent rows.
- G. Do not stretch or overlap sod.
- H. Peg sod on slope ratio of 3 to 1 or greater with minimum of two stakes per square yard, using 6" minimum nursery grade bamboo stakes.
- I. Install a 24" diameter circular 'saucer' around all existing trees planted in areas to receive sod. Ensure that the trunk is in the center of the 'saucer'. Do not cut any roots or in any way injure or cause damage to trees.
- J. Water sod immediately after transplanting.
- K. Roll sod, except on pegged areas, with roller weighing not more than 150 lbs. per foot of roller width. Make two (2) passes or as required to provide a smooth, mowable surface without scalping.
- L. Water sod and soil to depth of 6" within four hours after rolling.

3.5 LAWN ESTABLISHMENT:

- A. Watering:
 - 1. Keep sod moist during first week after planting.

MYERS PARK HARDSCAPE IMPROVEMENTS

2. After first week, supplement rainfall to produce total of 1/2" per day until rooted.

B. Performance:

1. Establish a dense lawn of permanent grasses, free from lumps and depressions.
2. Regrass any area failing to show uniform cover. Such replacement shall continue until a dense lawn is established. Scattered bare or dead spots will not be allowed.
3. Mow and edge lawn a minimum of three times, each time after lawn has reached a height of 2-1/2 inches. Mow to a height of 2 inches returning clippings to lawn.
4. Keep lawn areas weeded removing broadleaf and grassy weeds as required.

3.6 GRADE MAINTENANCE AND EROSION DAMAGE

- A. Maintain original grades of lawn areas after commencement of planting and during maintenance period.
- B. Provide surface repair to ruts, ridges, tracks. Replant areas as required for final acceptance.

3.7 ACCEPTANCE

- A. The work will be accepted when a dense, undamaged stand of grass, free of weeds, is achieved, as approved by Architect.

3.8 CLEANUP:

- A. Immediately clean up spills, soil, and conditioners from paved and finished surface areas. All sidewalks, walkways and paved surfaces to be used for pedestrians shall be washed to remove soil, grass, debris, etc. that resulted from sodding.
- B. Remove debris, pallets and excess materials from project site within 24 hours of completion of sodding operations.

END OF SECTION

DIVISION NO. 3

SECTION 03100

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings, Bidding Requirements, Contract Forms, Conditions of the Contract and Division 1 - General Requirements apply to the work of this section

1.2 DESCRIPTION OF WORK

- A. Furnish all labor, materials, tools, equipment and related items required to install formwork and shoring for cast-in-place concrete, and installation into formwork of items furnished by others, such as anchor bolts, setting plates, bearing plates, anchorages, inserts, frames, nosings and other items to be embedded in concrete.
- B. Related work specified in other sections:
 - 1. Portland Cement Concrete Paving - Section 02514
 - 2. Concrete Reinforcement - Section 03200
 - 3. Cast-in-Place Concrete - Section 03300

1.3 QUALITY ASSURANCE

- A. It is Contractor's responsibility to design and engineer formwork.
- B. Reference Standards:
 - 1. ACI 301, Specifications for Structural Concrete for Buildings.
 - 2. U.S. Product Standard for Softwood Plywood, Construction and Industrial PS-1.
- C. Allowable Tolerances: Except when close coordination and fitting of various trades' work precludes allowance of tolerance, maximum total permissible deviations from established lines, grades and dimensions shall be as stated below. See and maintain forms in such manner as to ensure completed work within specified tolerance limits.
 - 1. Variation from plumb:
 - a. In lines and surfaces of arises:
 - In any 10 ft of length 1/8 in.
 - Maximum for the entire length 1/4in.
 - b. For exposed conspicuous lines:
 - In any 20 ft of length 1/8 in.
 - Maximum for the entire length 1/4 in.
 - 2. Variation in sizes and location of sleeves, floor and wall openings +/-1/4 in.
 - 3. Variation in cross-sectional dimensions of beams in thickness of slabs:
 - Minus 1/4 in.
 - Plus 1/2 in.
 - 4. Variation in steps 1/4 in.
 - 5. Variation in location of anchor bolts unless provided with sleeves or other means of adjustment 1/4 in.
- D. Max. deflection of form facing materials at concrete surfaces exposed to view shall be 1/240 of span between structural members.

- 1.4 A. Shop Drawings: Diagram of proposed construction joints not indicated on drawings.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Forms: Wood, metal or other approved material that will not adversely affect surface of concrete and will provide or facilitate obtaining specified surface finish.
- 1 Wood:
- a. Unexposed Surfaces:
1. No.2 Common or Better Southern Yellow Pine lumber, sufficient thickness to sustain loads to be imposed, dressed to uniform smooth contact surfaces, readily removable, or:
 2. Commercial Standard Douglas-Fir, moisture resistant, concrete form plywood, not less than 5 ply, at least 3/4" thick, one side smooth.
- b. Exposed Surfaces: Non-absorptive overlay plywood such as medium or high density overlay, Finn-Form or equal.
- B. Carton Forms: Trapezoidal configuration, Container Corporation of America, "Sure Void products" or equal, double wall, laminated using water resistant adhesive and coated with paraffin containing 10% polyethylene, sizes as indicated.
- C. Form Accessories:
1. Form ties: Bolt rods or patented devices having a minimum tensile strength of 3,000 pounds when fully assembled. Ties shall be adjustable in length and free of lugs, cones, washers or other features which would leave a hole larger than 1" in diameter. Ties shall be of such construction that, when forms are removed, there will be no metal remaining within 1" of finished surface.
 2. Form Release Agent: Non-Staining, wax barrier type, Symons Corp., "Magic Cote" or equal.
 3. Construction Joint Form: Burke Concrete Products "Keyed Kold Joint" or equal.

PART 3 - EXECUTION

3.1 PERFORMANCE

- A. Formwork Construction:
1. Construct forms tight to prevent loss of mortar. Use chamfer strips in corners of forms to produce beveled edges on permanently exposed surfaces.
 2. Camber formwork to compensate for deflections in formwork prior to concrete attaining design strength.
 3. Adjust shores and struts to take up settlement caused by concrete placement.
 4. Provide temporary openings in formwork to allow cleaning and observation.
 5. Construct forms for beams and girders so that sides may be removed without disturbing bottom of form or its support.
 6. Clean contact and screed surfaces of hardened concrete and foreign materials prior to assembly.
- B. Form Coatings:
1. Apply specified form release agent; follow manufacturer's direction.
 2. Do not allow agent to puddle in forms or to contact hardened concrete against which fresh concrete is to be placed.
 3. Do not coat forms with material that will stain or disfigure exposed concrete surfaces; do not use forms coated with such material.

MYERS PARK HARDSCAPE IMPROVEMENTS

- C. Form Accessories:
 - 1. Form Ties: Coat ties that are to be pulled from walls with cup grease or other approved material to facilitate removal.

- D. Construction Joints:
 - 1. Locate and install construction joints, which are not shown on the drawings, so as not to impair strength and appearance of the structure, and as acceptable to the Structural Engineer.
 - 2. Provide keyways at least 1-1/2" deep in construction joints in walls and slabs; accepted bulkheads designed for this purpose may be used for slabs.
 - 3. Place construction joints perpendicular to the main reinforcement. Continue reinforcement across construction joints.
 - 4. Construct isolation joints in slabs on ground at points of contact between slabs on ground and vertical surfaces, such as column pedestals, foundation walls, grade beams and elsewhere as indicated.

- E. Installation of Embedded Items:
 - 1. Set and build into work anchorage devices and other embedded items required for other work that is attached to, or supported by, cast-in-place concrete. Use setting drawings, diagrams, instructions and directions provided by suppliers of items to be attached thereto.

END OF SECTION

DIVISION NO. 3

SECTION 03200

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings, Bidding Requirements, Contract Forms, Conditions of the Contract and Division 1 - General Requirements apply to the work of this section.

1.2 DESCRIPTION OF WORK

- A. Furnish all labor, materials, tools, equipment and related items required to fabricate and place reinforcement for cast-in-place concrete, including bars, welded wire fabric, ties and bar supports.
- B. Related work specified in other sections:
 - 1. Testing Laboratory Services - Section 01400
 - 2. Non-Vehicular Concrete Paving and Sidewalks - Section 02514
 - 3. Concrete Formwork - Section 03100
 - 4. Cast-in-Place Concrete - Section 03300.

1.3 QUALITY ASSURANCE

- A. Reference Standards:
 - 1. ACI 301, Specifications for Structural Concrete for Buildings
 - 2. ACI 318, Building Code Requirements for Reinforced Concrete
 - 3. ASTM A615, Specification for Deformed Billet Steel Bars for Concrete.
 - 4. ASTM A185, Specifications for Welded Steel Wire Fabric for Concrete Reinforcement.
 - 5. Concrete Reinforcing Steel Institute, Manual of Standard Practice.
- B. Allowable Tolerances:
 - 1. Fabricating:
 - a. Sheared length: Plus or minus 1"
 - b. Stirrups and ties: Plus or minus 1/2".
 - c. Members more than 8" but not over 2'-0" deep: Plus or minus 1/2".
 - d. Members more than 2'-0" deep: Plus or minus 1".
 - e. Crosswise of members: Space evenly within 2" of stated separation.
 - f. Lengthwise of members: Plus or minus 2".
 - 2. Maximum bar relocation to avoid interference with other reinforcing steel, conduits or other embedded item: 1 bar diameter.

1.4 SUBMITTALS

- A. Shop Drawings: Include complete bending diagrams, assembly diagrams, splicing and laps, and rods, shapes, dimensions and details of bar reinforcing and accessories.
 - 1. Show diagrammatic elevations of walls at scale large enough to clearly show position and erection marks of marginal bars, around openings, dowels, splices, etc., for these bars.
 - 2. Show complete layout plan for each layer of reinforcing of structural slabs and beams showing number, arrangement, spacing, location, marking, orientation, etc., of reinforcement required for layer being described.

1.5 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Deliver reinforcement to project site in bundles marked with metal tags indicating bar size, length and mark.
- B. Unload reinforcing carefully to prevent damage. Store above ground in dry, well drained area; protect from mud, dirt and corrosion.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Reinforcing Bars: ASTM A615, deformed billet steel bars, domestic manufacture, Grades 40 and/or 60 as indicated on structural drawings.
- B. Welded Wire Fabric Reinforcing: ASTM A185, domestic manufacture, steel wire spot welded at intersections and of size indicated.
- C. Metal Accessories: Include spacers, chairs, bolsters, ties and other devices necessary for properly placing, spacing, supporting and fastening reinforcement in place, conforming to requirements to CRSI "Manual of Standard Practice for Detailing Reinforced Concrete Structures". Metal accessories shall be galvanized where legs will be exposed in finished concrete surfaces.
- D. Tie Wire: FS QQ-W-461, black enameled steel, 16 ga. min.

2.2 FABRICATION

- A. In accordance with CRSI "Manual of Standard Practice".

PART 3 - EXECUTION

3.1 PREPARATION

- A. Cleaning: Before placing in work, thoroughly clean reinforcement of loose rust, mill scale, dirt, oil and other coating which might tend to reduce bonding. Re-inspect reinforcing left protruding for future bonding, or following delay in work, and re-clean if necessary.

3.2 INSTALLATION

- A. Bar Placement: In accordance with ACI 301, ACI 318 and CRSI "Manual for Standard Practice".
1. Bending: Bend bars cold; do not heat reinforcing or bend by makeshift methods. Discard bent, kinked or otherwise damaged bars.
 2. Splices: In accordance with ACI 301 and ACI 318.
- B. Wire Fabric Placement:
1. Install in longest practicable length.
 2. Do not make end laps midway between supporting beams, or directly over beams of continuous structures.
 3. Offset end laps in adjacent widths to prevent continuous lap.
 4. Keep wire in proper position during concrete placement.
 5. All wire fabric shall be delivered in flat sheets, not rolled.

END OF SECTION

DIVISION NO. 3

SECTION 03300

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings, Bidding Requirements, Contract Forms, and Conditions of the Contract apply to the work of this section.

1.2 DESCRIPTION OF THE WORK

- A. Furnish all labor, materials, tools, equipment and related items required to provide cast-in-place concrete consisting of portland cement, fine and coarse aggregate, water and selected admixtures; combined, mixed, transported, placed, finished and cured as herein specified.
- B. Related work specified in other sections:
 - 1. Non-Vehicular Concrete Sidewalks and Paving - Section 02514
 - 2. Concrete Formwork - Section 03100
 - 3. Concrete Reinforcement - Section 03200

1.3 QUALITY ASSURANCE

- A. Referenced Standards:
 - 1. ACI 301, Specifications for Structural Concrete for Buildings.
 - 2. ASTM C33, Standard Specifications for Concrete Aggregate.
 - 3. ASTM C94, Standard Specifications for Ready-Mix Concrete.
 - 4. ASTM C150, Standard Specifications for Portland Cement.
 - 5. ASTM C260, Standard Specifications for Air-Entraining Admixtures for Concrete.
 - 6. ASTM C494, Standard Specifications for Chemical Admixtures for Concrete.
- B. Concrete Mix Design: Contractor shall employ and pay cost of a recognized independent Testing Laboratory to perform the following services:
 - 1. Design concrete mixes in accordance with ACI 301.
 - 2. For each concrete mix type proposed, make trial mix using aggregate proposed.
 - 3. Determination of required average strength above specified strength shall be in accordance with ACI 301.
 - 4. Make advance tests of trial mixes with proposed materials. Mold and cure in accordance with ASTM C31; test cylinders in accordance with ASTM C-39. Do not place concrete on project until laboratory reports and breaks of confirmation cylinders indicate that proposed mixes will develop required strengths.
 - 5. Submit proposed mix designs to Architect for review min. 14 days prior to placing concrete. Show:
 - a. Proportions of cement, fine and coarse aggregates and water.
 - b. Combined aggregate gradation.
 - c. Aggregate specific gravities and gradations.
 - d. Water-cement ratio, design strength, slump and air content.
 - e. Type of cement and aggregates.
 - f. Type of dosage of admixtures.
 - g. Type, color and dosage of integral coloring compounds, where applicable.
 - h. Special requirements for pumping.

MYERS PARK HARDSCAPE IMPROVEMENTS

- i. Range of ambient temperature and humidity for which design is valid.
 - j. Any special characteristics of mix which require precautions in mixing, placing, or finishing techniques to achieve finished product.
 6. Mix designs based on record of past performance in accordance with ACI 301, method 2, may be submitted in lieu of mix designs required above, provided all necessary information is included.
 7. Check mix designs and revise if necessary wherever changes are made in aggregates or in surface water content of aggregate or workability of concrete. Slump shall be minimum to produce workable mix. Laboratory shall prescribe maximum quantity of water.
- C. Test Cylinders: Make at least one (1) test of each day's pouring or each fifty (50) cu. yards, whichever comes first, on each different portion or section of the work. Mold and cure specimens in accordance with ASTM C31, and test in accordance with ASTM C39. Test cylinders shall be made and tested by the laboratory. Footings, walls, and floor systems constitute different sections. Each test shall consist of five (5) specimens: two (2) to be tested at twenty-eight (28) days, two (2) to be tested at seven days, and one held in reserve. Determine temperature and air content for each set of test cylinders in accordance with ASTM C231.
- D. Field Quality Control:
 1. Determine slump for each strength test and whenever consistency of concrete appears to vary, in accordance with ASTM C143.
 2. Monitor addition of water to concrete and length of time concrete is allowed to remain in truck.
 3. Certify delivery tickets indicating class of concrete, amount of water added during initial batching, and time initial batching occurred.
 4. Monitor work being performed in accordance with ACI (American Concrete Institute) recommendations as a standard of quality.
- E. Source Quality Control: Periodically inspect and control concrete mixing and loading of transit mix trucks at batch plant at intervals as agreed to by Architect and laboratory personnel.

1.4 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Mix and deliver concrete to project ready-mixed in accordance with ASTM C94. Mix concrete min. 70 revolutions of transit mix drum at mixing speed. Min. 40 revolutions shall be at production plant.
- B. Schedule delivery so that continuity of any pour will not be interrupted for over 15 minutes.
- C. Place concrete on site within 90 minutes after proportioning materials at batch plant.

1.5 JOB CONDITIONS

- A. Weather Requirements:
 1. Hot Weather Concreting:
 - a. Follow ACI 301.

MYERS PARK HARDSCAPE IMPROVEMENTS

- b. Provide retarding type admixture conforming to ASTM C494-Type A or D in accordance with manufacturer's recommendations.
2. Cold Weather Concreting:
 - a. Follow ACI 301.
 - b. Placement of concrete shall not be allowed when ambient temperature at site is below 40 degrees F, or is expected to fall to that temperature within ensuing 24 hours.
 - c. Maintain temperature of deposited concrete between 50 degrees F and 70 degrees F for min. 7 days after placing.
3. Temperature Changes: Maintain changes in concrete temperature as uniform as possible, but in no case exceed change of 5 degrees per hour or 25 degrees in any 25 hour period.
4. Admixture intended to accelerate hardening of concrete or produce higher than normal strength at early periods will not be permitted unless specified or prior approval is obtained from Architect.

1.6 SUBMITTALS

- A. Concrete Mix Design.
- B. Delivery Tickets: Furnish duplicate delivery tickets for each load of ready-mix concrete delivered to site, in accordance with ASTM C94. Show batch weights on each ticket.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Portland Cement: ASTM C-150, Type I. Type III may be used for cold weather concreting when approved by Architect.
- B. Aggregate:
 1. Fine: ASTM C-33, clean hard, durable, uncoated, natural non-staining sand free from silt, loam or clay.
 2. Coarse: ASTM C-33, hard, durable, uncoated, crushed stone, gradation in accordance with size No.57, unless otherwise approved in mix design. Max. aggregate size in accordance with ACI 318.
- C. Water: Clean and free from oil, acid and injurious amounts of vegetable matter, alkalies and other impurities.
- D. Admixtures:
 1. Water-reducing or water-reducing/set-retarding; ASTM C494.
 2. Air entraining agent: ASTM C260.
- E. Curing Materials:
 1. Waterproof Paper: FS UU-P-265a.
 2. Polyethylene Sheeting: Minimum 0.004" thick, free from defects, uniform in appearance, white.
 3. Curing Compounds: L&M "CURE" by L & M Construction Chemicals, Inc., or approved equal, for interior concrete slab surfaces. Curing compound must be compatible with floor hardener and sealer.
- F. Expansion Joint Filler: ASTM D1752, Type 1, non-asphaltic.
- G. Non-shrinking Cement Grout: U.S. GrouT Corp. "Five Star Grout" or equal.

CAST-IN-PLACE CONCRETE (03300)

MYERS PARK HARDSCAPE IMPROVEMENTS

- I. Non-Slip Stair Nosing: Equal to Wooster No. 101 "Alumograt" of required length.

2.2 MIXES

- A. Strength: Concrete is classified and specified by ultimate compressive strength (f'c) at age 28 days.
- B. Proportions: Proportions of cement, aggregate, and water to attain required plasticity and compressive strength shall be in accordance with ACI 318. Do not make changes in proportions without Architect's approval.
- C. Design concrete to yield the following characteristics:

Type	Min..28 day Compressive Strength	Cement Type	Min. Cement Content	Max. Dry Density	Slump Limits	
					Min.	Max.
II	4000 psi	Portland.	6	NA	3"	5"

* bags per cu. yd.

- D. Concrete Uses: Refer to structural drawings for type usage.
- E. Concrete permanently exposed to weather: Contain air-entraining admixture to produce 5% +/- 1% air by volume of concrete.
- F. Maximum Fly Ash content shall not exceed 20% by weight.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Notify Architect and Testing Laboratory at least 24 hours prior to when each concrete operation is to begin.
- B. Allow various trades ample time to install anchor bolts, sleeves, conduit and inserts necessary for proper execution of their work. Accurately position in form. Do not cut reinforcing steel to facilitate installation of inserts or accessories.
- C. If power screeds are to be used, recess sleeves and cap in manner to prevent water and cement from entering, but so that they may be located after finishing. Otherwise, extend sleeves 1" above finish floor.
- D. Remove impounded water from forms and excavations before concrete is deposited. Close temporary drains by grouting or by other satisfactory means. Close openings left in forms for cleaning and inspection, after forms have been cleaned out, inspected and approved.
- E. Remove debris from space to be occupied by concrete before concrete is deposited. Before beginning placement, remove hardened concrete and foreign substances from inner surface of mixing and conveying equipment.
- F. Provide runways, pumps, conveyors, etc. to convey concrete to point of deposit in order not to disturb forms or reinforcement or segregate concrete. Do not allow conveying equipment directly over reinforcement.

CAST-IN-PLACE CONCRETE (03300)

- G. Do not allow concrete to free-fall over 5'-0"; provide tremies, chutes or other approved means of conveyance when drop exceeds this amount.

3.2 INSTALLATION

- A. **Placing:** Place concrete in accordance with requirements of ACI 301 and as modified herein. Direct concrete rapidly from mixer to forms and deposit as nearly as possible in its final position to avoid segregation due to re-handling or flowing. Do not place partially hardened, contaminated or re-tempered concrete.
- B. **Consolidation:** Place concrete with aid of mechanical vibrating equipment unless otherwise approved by Architect. Apply vibration at point of deposit and in area of freshly placed concrete. Vibrate enough to accomplish thorough compaction and complete embedment or reinforcement and fixtures. Supplement vibration by hand-spading in corners and angles of forms to prevent honey-combing.
- C. **Bonding:** Before depositing new concrete on concrete that has set, roughen and clean surface of set concrete of laitance, foreign matter and loose particles. Wet surface of set concrete just prior to placing new concrete
- D. **Protection and Curing:**
 - 1. Protect concrete from frost damage and moisture loss.
 - 2. Provide artificial heat to maintain temperature of concrete above minimum required herein for duration of curing period.
 - 3. Keep forms sufficiently wet to prevent cracking of concrete or loosening of form joints.
 - 4. Cure surfaces of exposed concrete by means of curing compound or sheeting method, as applicable.
- E. **Patching Formed Surfaces of Exposed Concrete:**
 - 1. After forms have been removed, inspect concrete surfaces and patch pour joints, voids, stone pockets, other defective areas and tie holes before concrete is thoroughly dry. Chip away defective areas to depth of not less than 1" with edges perpendicular to surface. Wet areas to be patched and spaced at least 6" wide entirely surrounding it, to prevent absorption of water from patching mortar. Do not patch concrete in freezing weather.
 - 2. Apply chemical bonding agent to surface in accordance with manufacturer's recommendations, followed immediately by patching mortar. Make patch of same proportions as used for concrete except omit coarse aggregate. Add only enough water consistent with requirements for handling and placing.
 - 3. Thoroughly compact mortar into place and screed off; leave patch slightly higher than surrounding surface. Leave undisturbed for one to two hours to permit initial shrinkage before final finishing. Finish patch to match texture and color of adjoining surface. Completely fill tie holes left by withdrawal of rods and holes left by removal of end of ties. For holes passing entirely through wall, force mortar through with plunger type grease gun. Cure all patches.
- F. **Finishing Formed Surfaces:**
 - 1. As - Formed Finish.
 - a. Provide at surfaces not exposed to view in completed work.
 - b. Remove fins by stoning, otherwise leave texture imparted by forms.
 - 2. Rubbed Finish:
 - a. Provide at exterior vertical surfaces exposed to view in completed work.

MYERS PARK HARDSCAPE IMPROVEMENTS

- b. After removal of forms, patching and repairing, and while concrete is still green, spread slurry consisting of 1 part portland cement and 1-1/1 part damp, loose sand by volume, over pre-dampened surface. Apply using burlap pads or sponge rubber floats. Remove surplus materials, then rub with clean burlap. Water for completed surfaces for 7 days min.

G. Flatwork:

1. Forms and Screeds: Set edge forms and intermediate screed strips accurately to produce designed elevations and contours in finished surfaces. Align concrete surface to contours of screed strips using strike-off templates or compacting type screeds. When formwork is cambered, set screeds to like camber to maintain proper concrete thickness.
2. Floated Finish: Provide at slab surfaces to precede other finishes. Begin floating after concrete has been struck off, consolidated and leveled, surface water has disappeared and surface is sufficiently hardened to support power driven float. Finish surface with impact type power driven float or hand float. Test surface with 10'-0" straightedge placed at min. 2 different angles; correct irregularities exceeding 1/8". Refloat repaired areas.
3. Trowel Finish: Provide at interior slab surfaces under carpet, vinyl composite floor tile and exposed concrete floors.
4. Light Broom Finish: Light broom finish under thin ceramic tile floors, ramps and steps.

END OF SECTION

DIVISION NO. 4

SECTION 04300

PART 1 - GENERAL

1.1 WORK INCLUDED BY MASONRY CONTRACTOR

- A. Setting and “notching” of Hackett boulders, setting of moss boulders, river rock and rip rap dry stream construction, and cladding of stone columns.

1.2 RELATED WORK

- A. Concrete work as noted on drawings.

1.3 QUALITY ASSURANCE

Installer: Firm with not less than five (5) years successful experience in the required types of stonework. If requested, Contractor or his subcontractor shall submit an experience record with a list of completed projects (including address and phone number of client to contract) to Owner.

1.4 SUBMITTALS

- A. Samples of stone and rock types.
- B. Mock ups.

PART 2 – PRODUCTS

2.2 MATERIALS

- A. Reference drawings for specifications for stone, etc.
- B. **Mortar Mix:** Meeting ASTM C270 and as follows:
 - 1. One (1) part Portland Cement.
 - 2. One (1) part Lime Putty.
 - 3. Six (6) Parts approved sand.
 - 4. Clean water free of deleterious amounts of acid, alkalis or organic materials.

PART 3 – EXECUTION

3.1 JOB CONDITIONS

- A. Protect and store stone on dry ground allowing maximum air circulation. Stone to be clean and dry before use.

MYERS PARK HARDSCAPE IMPROVEMENTS

- B. Do not place if ambient temperature below 40 degrees F. or above 99 degrees F. in shade or if relative humidity is less than 50%.

3.2 INSTALLATION OF STONE

- A. Arrange stones with color and size variations uniformly dispersed for an evenly blended appearance.
- B. Maintain uniform joint widths except for variations due to different stone sizes and where minor variations are required to maintain bond alignment, if any. Lay flagstone with joints not less than 3/8 inch (10mm) at narrowest points nor more than 5/8 inch (16mm) at widest points.
- C. Set stone in full bed of mortar on drainage flume with full head joints, unless otherwise indicated. Build veneer anchors into mortar joints as stone is set.
- D. Provide 1-inch air space between stone veneer assemblies and backup construction, unless otherwise indicated. Keep air space free of mortar droppings and debris.
- E. Rake out joints for pointing with mortar to depth of not less than 3/4 inch (19 mm) before setting mortar has hardened. Rake joints to uniform depths with square bottoms and clean sides.

3.3 BOULDERS

- A. Boulders - Dry Locations
 - 1. Install boulders at locations indicated.
 - 2. Set boulders partially buried in soil or on concrete sub

3.4 CLEANING

Leave stonework and surrounding areas clean and free of mortar spots and stains. DO NOT CLEAN WITH ACID.

END OF SECTION

DIVISION NO. 5

SECTION 05500

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings, specifications and general provisions of Contract, including Division 1 Specification sections, apply to work of this section. It is the responsibility of the Trade Contractor and all subcontractors to locate information pertaining to required items of work specified or indicated elsewhere of work specified or indicated elsewhere in the Contract Documents.

1.2 SUMMARY

- A. This section includes the following metal fabrications:
 - 1. Handrails

1.3 SUBMITTALS

- A. General: Submit each item in this Article according to the conditions of the Contract and Division 1 Specification Sections.
- B. Product data for paint products, and grout.
- C. Shop drawings detailing fabrication and erection of each metal fabrication indicated. Include plans, elevations, section, and details of metal fabrication and their connections. Show anchorage and accessory items. Provide templates for anchors and bolts specified for installation.
- D. Samples representative of materials and finished products as may be requested by Landscape Architect.

1.4 QUALITY ASSURANCE

- A. Fabricator Qualifications: Firm experienced in producing metal fabrications similar to those indicated for this Project with a record of successful in-service performance, and with sufficient production capacity to produce required units without delaying the Work.
- B. Welding Standards: Comply with applicable provisions of AWS D1.1 "Structural Welding Code-Steel."
 - 1. Certify that each welder has satisfactory passed AWS qualification tests for welding processes involved and, if pertinent, has undergone recertification.

1.5 PROJECT CONDITIONS

- A. Field Measurements: Check actual locations of construction to which metal fabrications must fit by accurate field measurements before fabrication. Show recorded measurements on final shop drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
 - 1. Where field measurements cannot be made without delaying the Work, guarantee dimensions and proceed with fabricating products without field

MYERS PARK HARDSCAPE IMPROVEMENTS

measurements. Coordinate construction to ensure that actual dimensions correspond guaranteed dimensions. Allow for trimming and fitting.

PART 2 - PRODUCTS

2.1 FERROUS METALS

- A. Metal Surfaces, General: For metal fabrications exposed to view in the completed Work, provide materials selected for their surface flatness, smoothness, and freedom from surface blemishes. Do not use materials with exposed pitting, seam marks, roller marks, rolled trade names, or roughness.
- B. Steel Plates, Shapes, and Bars: ASTM A 36/A 36M.
- C. Steel Tubing: Product type (manufacturing method) and as follows:
 - 1. Cold-Formed Steel Tubing: ASTM A 500.
 - a. For exterior installations and where indicated, provide tubing with hot-dip galvanized coating per ASTM A 53.
- D. Steel Pipe: ASTM A 53, standard weight (schedule 40), unless otherwise indicated, or another weight required by structural loads.
 - 1. Galvanized finish for exterior installations and where indicated.
- E. Gray-Iron Castings: ASTM A 48, Class 30.
- F. Malleable-Iron Castings: ASTM A 47, Grade 32510 (ASTM A 47M, Grade 22010).
- G. Cast-in- Place Anchors in Concrete: Anchors of type indicated below, fabricated from corrosion-resistant materials capable of sustaining, without failure, the load imposed within a safety factor of 4, as determined by testing per ASTM E 488, conducted by a qualified independent testing agency.
 - 1. Threaded or wedge type, galvanized ferrous castings, either ASTM A 47 (ASTM A 47M) malleable iron or ASTM A 27/A 27M cast steel. Provide bolts, washers, and shims as required, hot-dip galvanized per ASTM A 153.
- H. Welding Rods and Bare Electrodes: Select according to AWS specifications for the metal alloy to be welding.

2.2 PAINT

- A. **Apply Shop Primer** to surfaces of metal fabrications except those which are galvanized or as indicated to be embedded in concrete or masonry, unless otherwise indicated, and in compliance with requirements of SSPC-PAL "Paint Application Specification No. 1" for shop painting.
- B. Metal paint shall be Sherwin Williams, Industrial Enamel oil base; minimum 4.5 mil wet / 2.4 mil dry; gloss; bronze color; minimum 2 coats or approved equal.

2.3 FASTENERS

MYERS PARK HARDSCAPE IMPROVEMENTS

- A. General: Provide plated fasteners complying with ASTM B 633, Class Fe/Zn 25 for electro-deposited zinc coating, for exterior use. Select fasteners for the type, grade, and class required.
- B. Bolts and Nuts: Regular hexagon-head bolts, ASTM A 307, Grade A (ASTM F 568, Property class 4.6), with hex nuts, ASTM A 563 (ASTM A 563M), and, where indicated, flat washers.
- C. Machine Screws: ANSI B18.6.3.
- D. Lag Bolts: ANSI B18.2.1 (ANSI B18.2.3.8M).
- E. Wood Screws: Flat head, carbon steel, ANSI B18.6.1.
- F. Plain Washers: Round, carbon steel, ANSI B18.22.1 (ANSI B18.22m).
- G. Lock Washers: Helical, spring type, carbon steel, ANSI B18.21.1.
- H. Expansion Anchors: Anchor bolt and sleeve assembly of material indicated below with capability to sustain, without failure, a load equal to 6 times the load imposed when installed in unit masonry and equal to 4 times the load imposed when installed in concrete as determined by testing per ASTM E 488 conducted by a qualified independent testing agency.
 - 1. Material: Carbon steel components zinc-plated to comply with ASTM B 633, Class Fe/ Zn 5.
 - 2. Material: Group 1 alloy 304 or 316 stainless-steel bolts and nuts complying with ASTM F 593 (ASTM F 738M) and ASTM F 594 (ASTM F 836M).

2.4 FABRICATION, GENERAL

- A. Form metal fabrications from materials of size, thickness, and shapes indicated but not less than that needed to comply with performance requirements indicated. Work to dimensions indicated or accepted on shop drawings, using proven details of fabrication and support. Use type of materials indicated or specified for various components of each metal fabrications.
- B. Form exposed work true to line and level with accurate angles and surfaces and straight sharp edges.
- C. Allow for thermal movement resulting from the following maximum change (range) in ambient temperature in the design, fabrication, and installation of installed metal assemblies to prevent buckling, opening up of joints, and overstressing of welds and fasteners. Base design calculations on actual surface temperatures of metals due to both solar heat gain and nighttime sky heat loss.
 - 1. Temperature Change (Range): 100 degrees F (55.5 degrees C).
- D. Shear and punch metals cleanly and accurately. Remove burrs.
- E. Ease exposed edges to a radius of approximately 1/32 inch (1 mm), unless otherwise indicated. Form bent-metal corners to smallest radius possible without causing grain separation or otherwise impairing work.
- F. Remove sharp or rough areas on exposed traffic surfaces.

MYERS PARK HARDSCAPE IMPROVEMENTS

- G. Weld corners and seams continuously to comply with the following:
 - 1. Use materials and methods and minimize distortion and develop strength and corrosion resistance of base metals.
 - 2. Obtain fusion without undercut or overlap.
 - 3. Remove welding flux immediately.
 - 4. At exposed connections, finish exposed welds and surfaces smooth and blended so that no roughness shows after finishing, and contour of welded surface matches those adjacent.
- H. Form exposed connections with hairline joints, flush and smooth, using concealed fasteners wherever possible. Use exposed fasteners of type indicated or, if not indicated, Phillips flat-head (countersunk) screws or bolts. Located joints where least conspicuous.
- I. Provide anchorage of type indicated; coordinate with supporting structure. Fabricate and space anchoring devices to secure metal fabrications rigidly in place and to support indicated loads.
- J. Shop Assembly: Preassemble items in shop to greatest extent possible to minimize field splicing and assemble. Disassemble units only as necessary for shipping and handling limitations. Use connections that maintain structural value of joined pieces. Clearly mark units for reassembly and coordinated installation.
- K. Cut, reinforce, drill, and tap metal fabrications as indicated to receive finish hardware, screws, and similar items.
- L. Fabricate joints that will be exposed to weather in manner to exclude water, or provide weep holes where water may accumulate.

2.5 FINISHES, GENERAL

- A. Comply with NAAMM "Metal Finishes Manual" for recommendations relative to applying and designing finishes.

2.6 STEEL AND IRON FINISHES

- A. Preparation for Shop Priming: Prepare uncoated ferrous metal surfaces to comply with minimum requirements indicated for SSPC surface preparation specifications and environmental exposure conditions of installed metal fabrications:
 - 1. Exteriors (SSPC Zone 1B): SSPC-SP 6 "Commercial Blast Cleaning"
- B. Apply shop primer to uncoated surfaces of metal fabrications, except those with galvanized finishes or to be embedded in concrete or masonry, unless otherwise indicated. Comply with requirements of SSPC-PA 1 "Paint Application Specification No. 1" for shop painting.
 - 1. Stripe paint corners, crevices, bolts, welds, and sharp edges.

PART 3 - EXECUTION

3.1 PREPARATION

MYERS PARK HARDSCAPE IMPROVEMENTS

- A. Coordinate and furnish anchorages, setting drawings, diagrams, templates, instructions, and directions for installing anchorages, including concrete inserts, sleeves, anchor bolts, and miscellaneous items having integral anchors that are to be embedded in concrete or masonry construction. Coordinate delivery of such items to Project site.
- B. Set sleeves (if applicable) in concrete with tops flush with finish surface elevation. Protect sleeves from water and concrete entry.

3.2 INSTALLATION, GENERAL

- A. **Fastening to In-Place Construction:** Provide anchorage devices and fasteners where necessary for securing miscellaneous metal fabrications to in-place construction. Include threaded fasteners for concrete and masonry inserts, toggle bolts, through-bolts, lag bolts, wood screws, and other connectors as required.
- B. **Cutting, Fitting, and Placement:** Perform cutting, drilling, and fitting required for installing miscellaneous metal fabrications. Set metal fabrication accurately in location, alignment, and elevation; with edges and surfaces level, plumb, true, and free of rack; and measured from established lines and levels.
- C. Provide temporary bracing or anchors in formwork for items that are to be built into concrete masonry or similar construction.
- D. Fit exposed connections accurately together to form hairline joints. Weld connections that are not to be left as exposed joints but cannot be shop-welded because of shipping size limitations. Do not weld, cut, or abrade the surfaces of exterior units that have been hot-dip galvanized after fabrication and are intended for bolted or screwed connections.
- E. **Field Welding:** Comply with the following requirements:
 - 1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
 - 2. Obtain fusion without undercut or overlap.
 - 3. Remove welding and flux immediately.
 - 4. At exposed connections, finish exposed welds and surfaces smooth and blended so that no roughness shows after finishing, and contour of welded surface matches those adjacent.

3.4 ADJUSTING AND CLEANING

- A. **Touchup Painting:** Immediately after erection, clean field welds, bolted connection, and abraded areas of shop paint, and paint exposed areas with same material as used for shop painting to comply with SSPC-PA 1 requirements for touching up shop-painted surfaces.
 - 1. Apply by brush or spray to provide a 2.0 mil (0.05 mm) minimum dry film thickness.
- B. For galvanized surfaces, clean welds, bolted connections, and abraded areas, and apply galvanizing repair paint to comply with ASTM A 780.

END OF SECTION

DIVISION NO. 7

SECTION 07920 – SEALANTS

PART 1 – GENERAL

1.1 DESCRIPTION

- A. Provide sealant over paving expansion joints as detailed.
- B. Related Sections:
 - 1. Section 02514 - Non-Vehicular Concrete
 - 2. Section 03300 - Cast-In-Place Concrete

1.2 DEFINITIONS

- A. Use definitions in ASTM C717.
- B. Non-Bleeding: Not capable of exuding liquid chemical components of sealant.
- C. Non-Staining: Not capable of discoloring joint substrate.
- D. Sealant System: Sealant, sealant backing, and primer intended for use in particular condition.

1.3 SUBMITTALS

- A. Product Data:
 - 1. Submit product data for each product.
 - 2. Include data to indicate performance criteria, limitations, substrate preparation, installation requirements, and curing requirements.
 - 3. Include information for accessories and other required components.
 - 4. Include color charts indicating manufacturer's full color range available of each sealant type for Landscape Architect's initial selection.
- B. Samples: Submit three 6 mm diameter by 50 mm long (1/4 inch diameter by 2 inch long) samples illustrating sealant colors for each product exposed to view.
- C. Submit the following Informational Submittals:
 - 1. Certifications specified in Quality Assurance article.
 - 2. Qualification Date: Manufacturer's and installer's qualification data.
 - 3. Manufacturer's instructions. Include requirements for surface preparation, priming, joint size ratios, adhesion testing, and perimeter conditions requiring special attention.

1.4 QUALITY ASSURANCE

- A. Single Source Responsibility:
 - 1. Provide products for each sealant system from one manufacturer for entire Project, unless otherwise acceptable to Architect.

MYERS PARK HARDSCAPE IMPROVEMENTS

2. Provide products from a single manufacturer to ensure material compatibility where different sealant materials come in direct contact with each other.
 3. Provide each sealant system as complete unit, including accessory items necessary for proper function.
- B. Manufacturer Qualifications: Company specializing in manufacturing products specified in this Section with minimum 10 years documented experience.
- C. Applicator Qualifications: Acceptable to manufacturer, specializing in applying sealants, with documented experience on at least 10 projects of similar nature in past 5 years.
- D. Certifications:
1. Manufacturer's certification that products:
 - a. Furnished for the specific project meet or exceed specified requirements.
 - b. Assembled for each joint are compatible with each other and with joint substrates under conditions of service and application.
 - c. Are suitable for the indicated use.
 2. Manufacturer's certification that sealants, primers, and cleaners comply with local regulations controlling the use of volatile organic compounds.
 3. Contractor's and installer's certification that products are installed in accordance with Contract Documents, based on inspection and testing specified as part of Field Quality Control.

1.5 FIELD SAMPLES

- A. Construct sealant joint mock-up 1500 mm (5 feet) long for each elastomeric joint sealants specified in this Section.
- B. Position at location directed by Landscape Architect.

1.6 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials to site in unopened containers and bundles with labels indicating:
1. Manufacturer's name.
 2. Product name and designation.
 3. Color.
 4. Expiration period for use.
 5. Working life.
 6. Curing time.
 7. Mixing instructions for multi-component materials.
- B. Storage and Protection:
1. Store products within manufacturer's required temperature and humidity ranges.
 2. Prior to use, condition products within manufacturer's required temperature range, humidity range, and time period.

1.7 PROJECT CONDITIONS

- A. Environmental Requirements:

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1. Perform sealing when the following are within manufacturer's limits during and for 24 hours after sealant installation:
 - a. Ambient and surface temperatures.
 - b. Relative humidity.
2. Do not apply sealants to wet or frozen surfaces.

1.8 WARRANTY

- A. Warrant installed products to be free from defects in material, labor, or installation techniques for two (2) years.
- B. Include coverage for installed sealants and accessories which:
 1. Fail to achieve airtight seal.
 2. Fail to achieve watertight seal.
 3. Exhibit loss of adhesion.
 4. Exhibit loss of cohesion.
 5. Do not cure.

PART 2 – PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Urethane Sealant Manufacturers:
 1. Dow Corning 888
 2. Pecora Corporation, Harleysville, PA.
 3. Sonneborn Building Products/ChemRex, Inc., Minneapolis, MN.

2.2 MATERIALS

- A. Urethane - Multi-Component (Designation U-MC): - Vertical Joints
 1. Description:
 - a. ASTM C920:
 - 1) Type: M
 - 2) Grade: NS
 - 3) Class: 25
 - 4) Uses: NT, M, A, O
 - b. Chemical curing, non-staining, and non-bleeding.
 - c. Joint movement range without cohesive/adhesive failure: Plus 25 percent to minus 25 percent of joint width.
 - d. Color: Selected by Architect from manufacturer's full color range.
 2. Acceptable products:
 - a. Vulkem 922, Mameco.
 - b. Dynatrol II, Pecora.
 - c. Sikaflex-2c NS, Sika.
 - d. Sonolastic NP-2, Sonneborn.
 - e. Dymeric 511, Tremco.

B. Urethane - Single-Component (Designation U-SC): - Vertical Joints

1. Description:

a. ASTM C920:

- 1) Type: S
- 2) Grade: NS
- 3) Class: 25
- 4) Uses: NT, M, A, O

- b. Chemical curing, non-staining, non-bleeding.
- c. Joint movement range without cohesive/adhesive failure: Plus 25 percent to minus 25 percent of joint width.
- d. Color: Selected by Architect from manufacturer's full color range.

2. Acceptable products:

- a. Vulkem 921, Mameco.
- b. Dynatrol 1, Pecora.
- c. Sikaflex-1a, Sika.
- d. Sonolastic NP-1, Sonneborn.
- e. Dymonic, Tremco.

C. Urethane - Traffic-Bearing (Designation U-TB): - Horizontal Joints (N.T.E. slopes 1:10) and Vertical joints (grade NS).

1. Description:

a. ASTM C0920:

- 1) Type: M
- 2) Grade: P or NS
- 3) Class: 25
- 4) Uses: T, M, O

- b. Chemical curing, non-staining, non-bleeding.
- c. Joint movement range without cohesive/adhesive failure: Plus 25 percent to minus 25 percent of joint width.
- d. Shore A Hardness: 40 minimum, when tested in accordance with ASTM C661.
- e. Color: Selected by Architect from manufacturer's full color range.

2. Acceptable products:

- a. Vulkem 45/245/227, Mameco.
- b. Dynatred, Cecora.
- c. Sikaflex 2c/SL, Sika.
- d. SL 2 Sealant, Sonneborn.
- e. HPL, Tremco.

2.3 ACCESSORIES

A. Joint Cleaner:

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1. Chemical cleaners required by sealant manufacturer for substrates encountered, compatible with sealant backing bond breaker materials.
 2. Free of substances capable of staining, corroding, or harming:
 - a. Joint substrates.
 - b. Adjacent nonporous surfaces.
 - c. Sealant.
 - d. Sealant backing.
 3. Formulated to promote optimum adhesion of sealants to joint substrates.
- B. Primer:
1. Dyed coating material required by sealant manufacturer for enhancing sealant adhesion to joint substrates.
 2. Non-staining to joint substrate beyond the substrate surface.
 3. Required for use on horizontal traffic-bearing joints and on vertical joints if recommended by manufacturer.
- C. Backer Rod:
1. Neoprene, butyl, EPDM, or silicone tubing compliant with ASTM D1056.
 2. Shore A Hardness of 70.
 3. Compatible with sealant, joint substrates, primers, and other sealant backing bond breakers.
 4. Use in pavement joints, unless otherwise required by sealant manufacturer.
 5. Use sealant backing bond breaker tape to separate sealant from rod.
 6. Unless otherwise required by sealant manufacturer, oversize rod to be larger than joint width by 25 percent the following minimum amounts:
- D. Sealant Backing Bond Breaker Tape:
1. Pressure sensitive polyethylene tape or tetraflouroethylene self-adhesive tape required by sealant manufacturer to suit application.
 2. Minimum Thickness of 0.275 mm.

2.4 MIXES

- A. Comply with manufacturer's instructions.
- B. Mix thoroughly with mechanical mixer without mixing air into sealants.
- C. Continue mixing until sealant is uniform in color and free from streaks of unmixed materials.

PART 3 – EXECUTION

3.1 EXAMINATION

- A. Ensure that concrete and masonry have cured minimum of 28 days.
- B. Verify that sealant backing is compatible with sealant.
- C. Verify that substrate surface:

1. Is within manufacturer's moisture content range.
 2. Complies with manufacturer's cleanliness and surface preparation requirements.
- D. Joint Width:
1. Verify joints are greater than minimum widths required by manufacturer.
 2. If joints are narrower than minimum required widths, widen narrow joints to indicated width.
 3. Do not place sealant in joints narrower than manufacturer's required minimum.

3.2 PREPARATION

- A. Prepare, clean, and prime joints in accordance with manufacturer's instructions.
- B. Remove loose materials and matter which might impair adhesion of primer and sealant to substrate.
- C. Remove form release agents, laitance, and chemical retarders, which might impair adhesion of primer and sealant to concrete and masonry surfaces.
- D. Comply with ASTM C1193.
- E. Protect elements adjoining and surrounding work of this Section from damage and disfiguration.
- F. Priming:
1. Prime joint substrates.
 2. Comply with manufacturer's sequencing requirements for joint priming and sealant backing bond breaker rod installation to assure required primer application coverage and rate without placement of primer on backer rod surface to be in contact with sealant and avoid three-sided sealant adhesion.
 3. Do not allow spillage and migration of primer onto surfaces not to receive primer.
 4. Install sealant to primed substrates after primer has cured.
- G. Masking Tape:
1. Use masking tape to prevent contact of primer and sealant with adjoining surfaces that would be permanently stained or damaged by:
 - a. Contact with primer and sealant.
 - b. Cleaning methods used to remove primer and sealant smears.
 2. Place continuously along joint edges.
 3. Apply masking tape so it does not shift in position after placement.

3.3 APPLICATION

- A. Backer Rod:
1. Measure joint dimensions and size materials to achieve manufacturer-required width-to-depth ratios.
 2. Install using blunt instrument to avoid puncturing.
 3. Do Not:
 - a. Twist, puncture, and tear material.

MYERS PARK HARDSCAPE IMPROVEMENTS

- b. Leave gaps between ends of material pieces.
 - c. Stretch or compress material along its length.
 - d. Stretch or compress tape material along its width.
 4. Install to provide optimum joint profile and in manner to provide not less than 6 mm (1/4 inch) sealant depth when tooled.
 5. Install tape where insufficient joint depth makes use of rod not possible. Match tape width to joint width to prevent three-side adhesion. Do not wrap tape onto sides of the joint.
 6. Replace backing bond breaker materials which have become wet with dry materials prior to sealant application.
- B. Sealant:
 1. Install sealants at same time as installation of backer rod materials.
 2. Do not exceed manufacturer's required:
 - a. Material shelf life.
 - b. Material working life.
 - c. Installation time after mixing.
 3. Comply with manufacturer's requirements for applying different sealant materials in direct contact with each other.
 4. Use gun nozzle size to suit joint size and sealant material.
 5. Install sealant with pressure-operated devices to form uniform continuous bead.
 6. Use sufficient pressure to fill voids and joints full.
 7. Install to adhere to both sides of joint.
 8. Install sealant free of air pockets and embedded matter
 9. Recess sealant 3 mm (1/8 inch) from surface of pavements and horizontal surfaces.
- C. Sealant Tooling:
 1. Comply with manufacturer's tooling method requirements.
 2. Tool sealant within manufacturer's tooling time limits.
 3. Tooling liquids:
 - a. Comply with manufacturer's requirements regarding use.
 - b. Do not use when not permitted by manufacturer.
 - c. Do not allow tooling liquids to come in contact with surfaces receiving sealant.
 4. Produce smooth exposed surface.
 5. Tool sealant to be free of:
 - a. Air pockets and voids.
 - b. Embedded impurities.
 - c. Surface ridges, sags, and indentations.
 6. Achieve full sealant contact and adhesion with substrate.
 7. Form a concave tooled joint shape indicated in Section A of Figure 5 of ASTM C1193, unless otherwise indicated.
 8. Remove excess sealant from surfaces adjacent to joint.

- D. Masking Tape:
 - 1. Remove immediately after tooling sealant and before sealant skin forms.
 - 2. Remove without disturbing sealant.

3.4 CLEANING

- A. Clean excess sealants and sealant smears from adjacent surfaces as application progresses; comply with sealant manufacturer's requirements and manufacturer of surface in which joints occur.
- B. Repair or replace defaced or disfigured finishes caused by work of this Section and replace where installation techniques result in unsatisfactory joining of materials and unsightly conditions.

3.5 PROTECTION

- A. Protect sealants from contamination until cured.
- B. Protect sealant joints in horizontal surfaces from foot and vehicular traffic until cured.

3.6 SCHEDULE

- A. Use appropriate grade traffic bearing urethane (U-TB) in flatwork paved areas. Remaining joints may be sealed with any of the appropriate grade urethane materials specified.

END OF SECTION

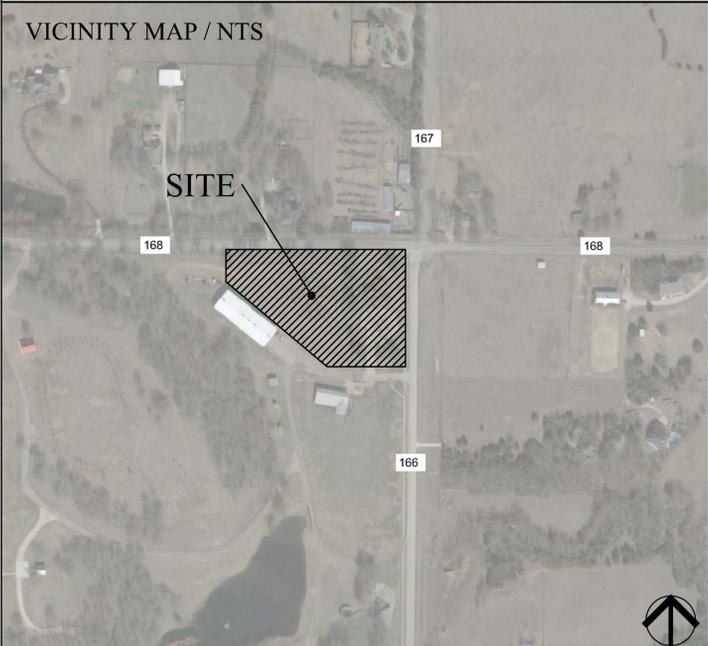
MYERS PARK

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CONSTRUCTION DOCUMENTS
PROJECT #: IFB 2018-042



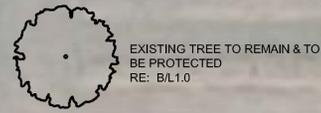
NOVEMBER 13, 2017

OWNER/DEVELOPER	LANDSCAPE ARCHITECT	SHEET INDEX
<p>COLLIN COUNTY COLLIN COUNTY PURCHASING DEPARTMENT 2300 Bloomdale Road STE 3160 McKinney, Texas 75071 Contact: Bill Burke / David Dooley Phone: (972) 547-5370 / (903) 421-2561</p>	 <p>DCBA DCBA LANDSCAPE ARCHITECTURE 730 East Park Boulevard, Suite 100 Plano, Texas 75074 Contact: BILLY J VICIC / TUNG D HUYNH Phone: (972) 509-1266 Fax: (972) 509-1269 dcbadesign.com</p>	<p><u>HARDSCAPE PLANS</u></p> <p>L1.0 DEMOLITION PLAN L1.1 HARDSCAPE & GRADING PLAN</p> <p><u>HARDSCAPE DETAILS</u></p> <p>L2.1 HARDSCAPE DETAILS L2.2 HARDSCAPE DETAILS</p>
<p>BID ITEMS</p> <p>THIS PACKAGE INCLUDES IMPROVEMENTS TO THE FOLLOWING AREAS OF THE PROPERTY:</p> <ul style="list-style-type: none"> EXISTING PARKING LOT AT THE HAGGARD HOUSE TWO SPINES OR WALKWAYS OF THE SHRUB DEMONSTATION GARDEN. OPEN SPACE 	<p>GENERAL NOTES</p> <ol style="list-style-type: none"> PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE CONTRACT DOCUMENTS, SPECIFICATIONS, THE PLANS (INCLUDING ALL NOTES), APPLICABLE COLLIN COUNTY SPECIFICATIONS AND ANY PROPER COMPLETION OF THE WORK SPECIFIED. FAILURE ON THE PART OF THE CONTRACTOR TO FAMILIARIZE HIMSELF WITH ALL STANDARDS OR SPECIFICATIONS PERTAINING TO THIS WORK SHALL IN NO WAY RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR PERFORMING THE WORK IN ACCORDANCE WITH ALL SUCH APPLICABLE STANDARDS AND SPECIFICATIONS. ALL WORK SHALL CONFORM TO APPLICABLE COLLIN COUNTY SPECIFICATIONS, STANDARDS, AND DETAILS AS APPLICABLE. CONTRACTOR SHALL HAVE AT LEAST ONE SET OF APPROVED LANDSCAPE PLANS AND SPECIFICATIONS ON-SITE AT ALL TIMES. CONSTRUCTION INSPECTION WILL BE PERFORMED BY REPRESENTATIVES FOR THE OWNER, LANDSCAPE ARCHITECT, AND REVIEWING AUTHORITIES AND AGENCIES. UNRESTRICTED ACCESS SHALL BE PROVIDED AT ALL TIMES. CONTRACTOR IS RESPONSIBLE FOR UNDERSTANDING AND SCHEDULING REQUIRED INSPECTIONS. ALL CONTRACTORS MUST CONFINE THEIR ACTIVITIES TO THE WORK AREA. NO ENCROACHMENTS ONTO OTHER DEVELOPED OR UNDEVELOPED AREAS WILL BE ALLOWED UNLESS SPECIFICALLY NOTED ON THE PLANS. ANY DAMAGE RESULTING THERE FROM SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR. IT WILL BE THE RESPONSIBILITY OF EACH CONTRACTOR TO PROTECT ALL EXISTING PUBLIC AND PRIVATE UTILITIES THROUGHOUT THE CONSTRUCTION OF THIS PROJECT. CONTRACTOR SHALL CONTACT THE APPROPRIATE UTILITY COMPANIES FOR LINE LOCATIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION AND SHALL ASSUME FULL LIABILITY TO THOSE COMPANIES FOR ANY DAMAGES CAUSED TO THEIR FACILITIES. IF UNFORESEEN PROBLEMS OR CONFLICTS ARE ENCOUNTERED IN THE CONSTRUCTION, FOR WHICH AN IMMEDIATE SOLUTION IS NOT APPARENT, THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE SHALL BE NOTIFIED IMMEDIATELY. ALL WASTE MATERIAL AND/OR EXCESS EXCAVATION NOT USED AS PART OF THE WORK SHALL BE REMOVED FROM THE JOB SITE IN A TIMELY MANNER AND DISPOSED OF AT ACCEPTABLE LOCATIONS IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS. PROVIDE A DUMPSTER FOR ON SITE WASTE MATERIAL IF NECESSARY. THE CONTRACTOR SHALL BE REQUIRED, AT ALL TIMES, DURING THE CONSTRUCTION TO PROVIDE 6' PLASTIC ORANGE MESH FENCING AROUND THE PERIMETER, WARNING SIGNS, BARRICADES, AND OTHER SAFETY DEVICES (INCLUDING THOSE NEEDED FOR TEMPORARY SAFETY AND HEALTH) UNTIL ALL OF THE WORK HAS BEEN COMPLETED AND ACCEPTED. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING FACILITIES IN AND AROUND THE PROJECT AREA. THESE INCLUDE TREES, PLANTINGS, BUILDINGS, CONCRETE, PAVING, SIGNS, AND OTHER FACILITIES FOUND ON SITE. THE CONTRACTOR SHALL REPAIR OR REPLACE, AT NO COST TO THE OWNER, ANY FACILITY DAMAGED DURING CONSTRUCTION OF THESE IMPROVEMENTS. TRAFFIC ROUTING, STREET CLOSURES, ETC. SHALL BE COORDINATED WITH THE CITY AND OWNER'S REPRESENTATIVE. BARRICADING SHALL BE IN ACCORDANCE WITH THE CITY STANDARDS. LOCAL ACCESS SHALL BE ALLOWED AT ALL TIMES. 	
<p>LOCATION MAP</p> <p>VICINITY MAP / NTS</p> 	<p>GENERAL NOTES</p> <ol style="list-style-type: none"> PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE CONTRACT DOCUMENTS, SPECIFICATIONS, THE PLANS (INCLUDING ALL NOTES), APPLICABLE COLLIN COUNTY SPECIFICATIONS AND ANY PROPER COMPLETION OF THE WORK SPECIFIED. FAILURE ON THE PART OF THE CONTRACTOR TO FAMILIARIZE HIMSELF WITH ALL STANDARDS OR SPECIFICATIONS PERTAINING TO THIS WORK SHALL IN NO WAY RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR PERFORMING THE WORK IN ACCORDANCE WITH ALL SUCH APPLICABLE STANDARDS AND SPECIFICATIONS. ALL WORK SHALL CONFORM TO APPLICABLE COLLIN COUNTY SPECIFICATIONS, STANDARDS, AND DETAILS AS APPLICABLE. CONTRACTOR SHALL HAVE AT LEAST ONE SET OF APPROVED LANDSCAPE PLANS AND SPECIFICATIONS ON-SITE AT ALL TIMES. CONSTRUCTION INSPECTION WILL BE PERFORMED BY REPRESENTATIVES FOR THE OWNER, LANDSCAPE ARCHITECT, AND REVIEWING AUTHORITIES AND AGENCIES. UNRESTRICTED ACCESS SHALL BE PROVIDED AT ALL TIMES. CONTRACTOR IS RESPONSIBLE FOR UNDERSTANDING AND SCHEDULING REQUIRED INSPECTIONS. ALL CONTRACTORS MUST CONFINE THEIR ACTIVITIES TO THE WORK AREA. NO ENCROACHMENTS ONTO OTHER DEVELOPED OR UNDEVELOPED AREAS WILL BE ALLOWED UNLESS SPECIFICALLY NOTED ON THE PLANS. ANY DAMAGE RESULTING THERE FROM SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR. IT WILL BE THE RESPONSIBILITY OF EACH CONTRACTOR TO PROTECT ALL EXISTING PUBLIC AND PRIVATE UTILITIES THROUGHOUT THE CONSTRUCTION OF THIS PROJECT. CONTRACTOR SHALL CONTACT THE APPROPRIATE UTILITY COMPANIES FOR LINE LOCATIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION AND SHALL ASSUME FULL LIABILITY TO THOSE COMPANIES FOR ANY DAMAGES CAUSED TO THEIR FACILITIES. IF UNFORESEEN PROBLEMS OR CONFLICTS ARE ENCOUNTERED IN THE CONSTRUCTION, FOR WHICH AN IMMEDIATE SOLUTION IS NOT APPARENT, THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE SHALL BE NOTIFIED IMMEDIATELY. ALL WASTE MATERIAL AND/OR EXCESS EXCAVATION NOT USED AS PART OF THE WORK SHALL BE REMOVED FROM THE JOB SITE IN A TIMELY MANNER AND DISPOSED OF AT ACCEPTABLE LOCATIONS IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS. PROVIDE A DUMPSTER FOR ON SITE WASTE MATERIAL IF NECESSARY. THE CONTRACTOR SHALL BE REQUIRED, AT ALL TIMES, DURING THE CONSTRUCTION TO PROVIDE 6' PLASTIC ORANGE MESH FENCING AROUND THE PERIMETER, WARNING SIGNS, BARRICADES, AND OTHER SAFETY DEVICES (INCLUDING THOSE NEEDED FOR TEMPORARY SAFETY AND HEALTH) UNTIL ALL OF THE WORK HAS BEEN COMPLETED AND ACCEPTED. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING FACILITIES IN AND AROUND THE PROJECT AREA. THESE INCLUDE TREES, PLANTINGS, BUILDINGS, CONCRETE, PAVING, SIGNS, AND OTHER FACILITIES FOUND ON SITE. THE CONTRACTOR SHALL REPAIR OR REPLACE, AT NO COST TO THE OWNER, ANY FACILITY DAMAGED DURING CONSTRUCTION OF THESE IMPROVEMENTS. TRAFFIC ROUTING, STREET CLOSURES, ETC. SHALL BE COORDINATED WITH THE CITY AND OWNER'S REPRESENTATIVE. BARRICADING SHALL BE IN ACCORDANCE WITH THE CITY STANDARDS. LOCAL ACCESS SHALL BE ALLOWED AT ALL TIMES. 	



DCBA
LANDSCAPE ARCHITECTURE
dcbadesign.com
730 EAST PARK BOULEVARD • SUITE 110
PLANO, TX 75074 • TEL: (972) 509-1266

LANDSCAPE DEMOLITION LEGEND



EXISTING METAL FENCE TO REMAIN

EXISTING LANDSCAPE BED TO REMAIN TYPICAL

EXISTING TREE TO REMAIN TYPICAL

REMOVE & STORE EXISTING STONE EDGER PIECES ALONG WALK & RESET ON NEW FLAGSTONE FLEXBASE SUBBASE ± 100 L.F.

TREE PROTECTION FENCE RE: BL1.0

HAGGARD HOUSE

EXISTING BRICK PAVER FIELD TO REMAIN TYPICAL

EXISTING LANDSCAPE BED TO REMAIN TYPICAL

EXISTING STONE EDGER TO REMAIN TYPICAL

EXISTING STONE PAVER EDGER TO REMAIN TYPICAL

EXISTING IRRIGATION BOXES (7) TO BE REMOVED AND RELOCATED BY OWNER

EXISTING PARKING LOT TO REMAIN

EXISTING BRICK PAVER FIELD TO BE REMOVED BY OWNER, GENERAL CONTRACTOR TO INSTALL PER SHEET L1.1

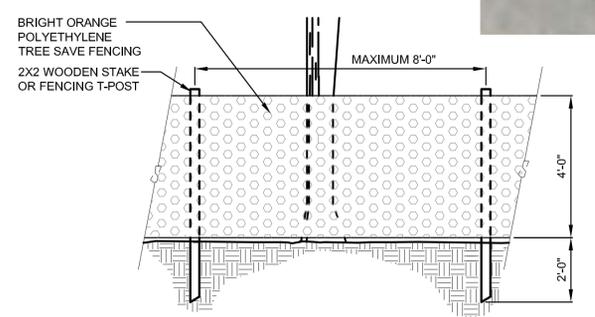
REMOVE & STORE EXISTING STONE EDGER PIECES ALONG WALK & RESET ON NEW FLAGSTONE FLEXBASE SUBBASE ± 53 L.F.

EXISTING LANDSCAPE BED TO REMAIN TYPICAL

DEMO STONE EDGER & GIVE STONE EDGER TO COUNTY

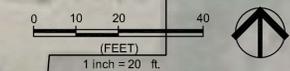
TREE PROTECTION:

- A. PRIOR TO CONSTRUCTION, ALL PROTECTED TREES AS SHOWN ON THE DEMOLITION PLANS SHALL BE CLEARLY MARKED WITH A BARRIER CONSISTING OF A 4' BARRICADE FENCE OR APPROVED EQUIVALENT TO PROTECT THE AREA UNDER THE CANOPY OF DRIP LINE OF ANY PROTECTED TREE OR GROUP OF PROTECTED TREES.
- B. DURING CONSTRUCTION, THE BUILDER SHALL PROHIBIT THE CLEANING OF EQUIPMENT OR STORAGE OF MATERIALS AND THE DISPOSAL OF ANY WASTE MATERIAL, INCLUDING, BUT NOT LIMITED TO, PAINT, OIL, SOLVENTS, ASPHALT, CONCRETE, MORTAR, ETC., UNDER THE CANOPY OR DRIP LINE OF ANY PROTECTED TREE OR GROUP OF TREES.
- C. NO ATTACHMENTS OR WIRES OF ANY KIND, OTHER THAN THOSE OF A PROTECTIVE NATURE, SHALL BE ATTACHED TO ANY PROTECTED TREE.
- D. IN ADDITION, CONTRACTOR WILL BE RESPONSIBLE FOR ANY PROTECTED TREE WHICH DIES OR IS DAMAGED DUE TO CONTRACTOR NEGLIGENCE. VALUE OF DEAD AND/OR DAMAGED PROTECTED TREE SHALL BE DETERMINED USING THE "GUIDE FOR PLANT APPRAISAL" PREPARED UNDER CONTRACT BY THE COUNCIL OF TREE AND LANDSCAPE APPRAISERS AND EDITED, PUBLISHED AND COPYRIGHTED BY THE INTERNATIONAL SOCIETY OF ARBORCULTURE, NINTH EDITION, 2000.



B TREE PROTECTION SCALE: N.T.S SECTION

A DEMOLITION PLAN SCALE: 1" = 20'-0"



PLAN

DATE	NO.	REVISIONS

PROJECT



MYERS PARK
HARDSCAPE
IMPROVEMENTS
COLLIN COUNTY,
TEXAS

SEAL



SHEET TITLE

DEMOLITION
PLAN

PROJECT MANAGER: TDH/BJV PROJECT DESIGNER: TDH/BJV

DRAWN BY: TDH CHECKED BY: BJV

ISSUE DATE: NOVEMBER 13, 2017 SCALE: AS NOTED

SHEET REFERENCE

L1.0



DCBA

LANDSCAPE ARCHITECTURE
dcbadesign.com
730 EAST PARK BOULEVARD - SUITE 100
PLANO, TX 75074 • TEL: (972) 509-1266

GENERAL NOTES:
ALL DISTURBED AREAS TO BE FINE GRADED AND SODDED WITH SOLID SOD BERMUDA GRASS WATERED WITH A TEMPORARY ABOVE GRADE IRRIGATION SYSTEM (RE: SPECIFICATION SECTION 02920). TYPICAL.

- GRADING AND DRAINAGE GENERAL NOTES
1. UNLESS NOTED, ALL FILL IS TO BE COMPACTED TO A MINIMUM OF 95% STANDARD PROCTOR DENSITY WITHIN 3% OF OPTIMUM MOISTURE CONTENT. FILL TO BE PLACED IN A MAXIMUM OF 6" LIFTS.
 2. SIDEWALKS AND ACCESSIBLE ROUTES SHALL HAVE A LONGITUDINAL SLOPE NO GREATER THAN 5% AND A CROSS FALL NO GREATER THAN 1% UNLESS NOTED OTHERWISE.
 3. FINAL ENHANCED PAVING, AND SIDEWALK ELEVATIONS WILL BE PLACED AT PLUS OR MINUS 0.03 FOOT.
 4. ANY CONCRETE, ROCK OR MATERIAL DEEMED UNSUITABLE FOR SUBGRADE, BY LANDSCAPE ARCHITECT, SHALL BE DISPOSED OF OFF SITE AT CONTRACTOR'S EXPENSE.

SYMBOL	DESCRIPTION
	701 PROPOSED CONTOUR
	* 701.80 EXISTING SPOT GRADE
	* 702.55 PROPOSED SPOT GRADE

EXISTING LANDSCAPE BED TYPICAL

TOP OF FLAGSTONE TO BE FLUSH WITH EXISTING CONCRETE WALKWAY

FLAGSTONE ON FLEX BASE RE: B/L2.1

FLAGSTONE BAND TO MATCH EXISTING

RELOCATED BRICK FIELD PAVER WITH FLAGSTONE RE: C/L2.1

ACCESSIBLE PARKING SPACE RE: B/L2.2

ACCESSIBLE PARKING SIGN RE: A/L2.2

DATE	NO.	REVISIONS

PROJECT



MYERS PARK
HARDSCAPE IMPROVEMENTS
COLLIN COUNTY,
TEXAS

SEAL



11/13/17

SHEET TITLE

HARDSCAPE &
GRADING PLAN

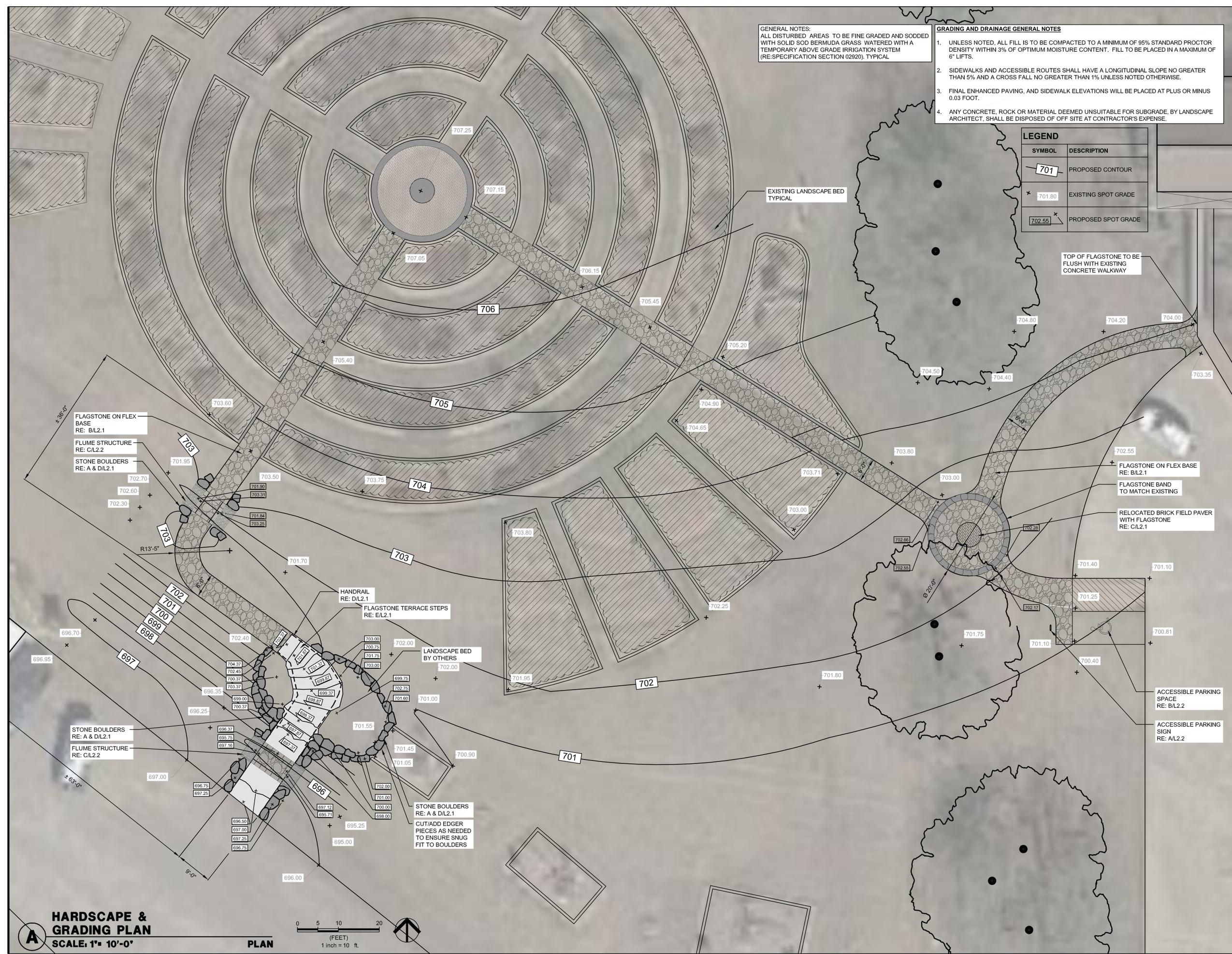
PROJECT MANAGER: TDH/BJV PROJECT DESIGNER: TDH/BJV

DRAWN BY: TDH CHECKED BY: BJV

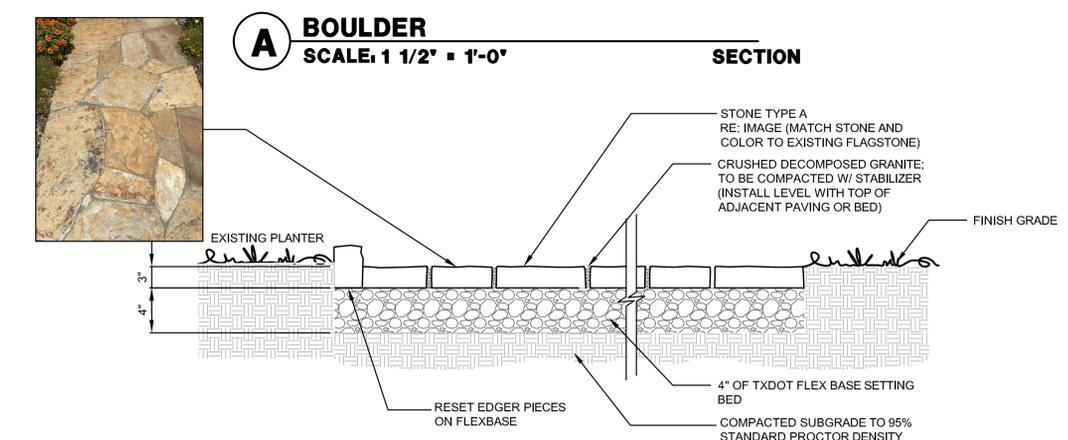
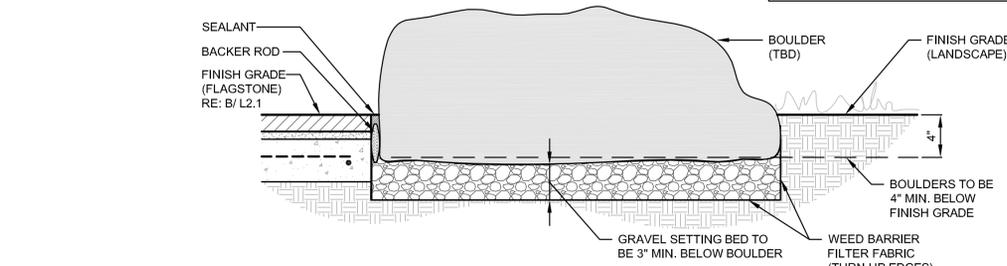
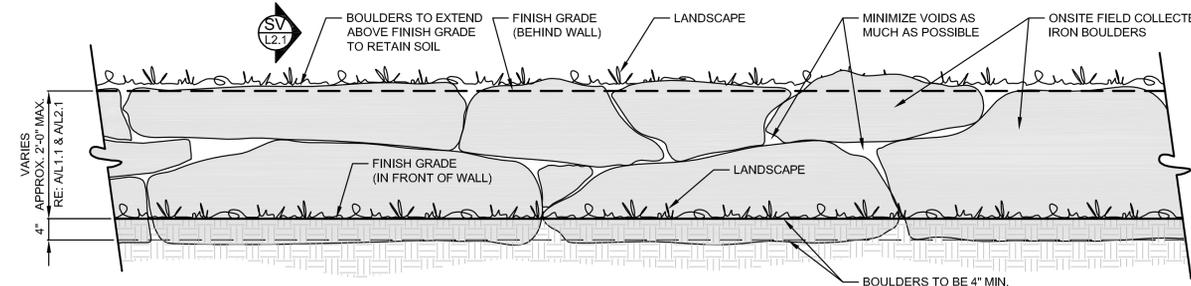
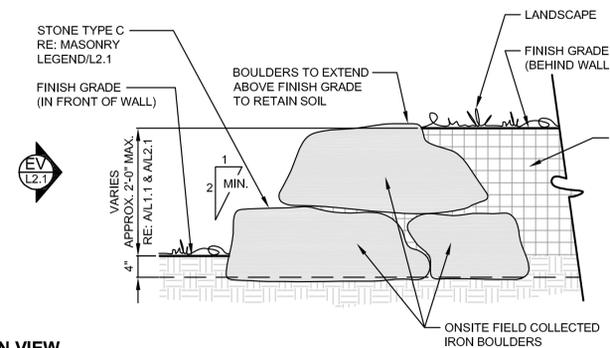
ISSUE DATE: NOVEMBER 13, 2017 SCALE: AS NOTED

SHEET REFERENCE

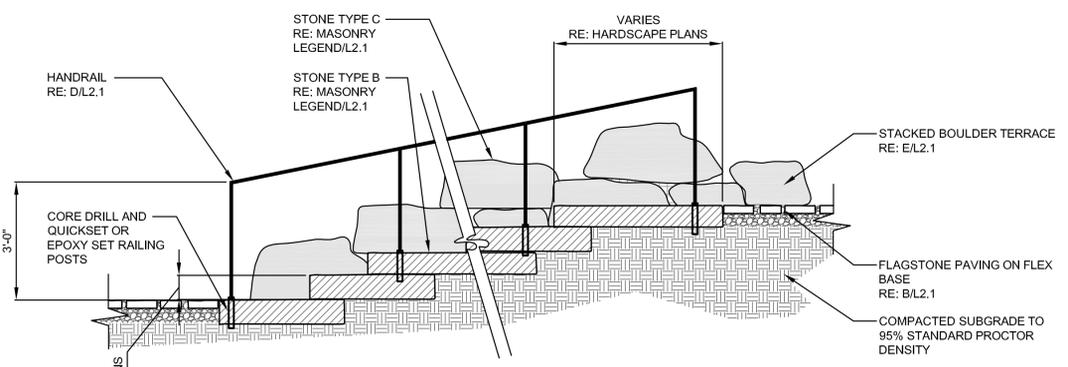
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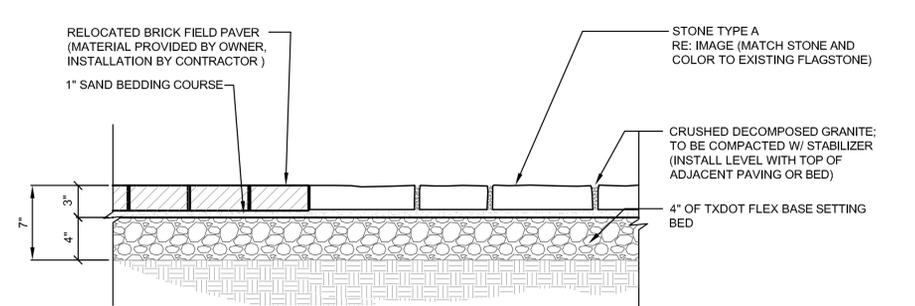
NOTES:
1. THESE DETAILS FOR ARCHITECTURAL DESIGN ONLY REFER TO STRUCTURAL DRAWINGS FOR STRUCTURAL DESIGN.
2. ANY LEFTOVER EXCAVATED DIRT AND ANY STONES OR PIECES OF STONE WOULD NEED TO BE TURNED OVER TO THE PARK.



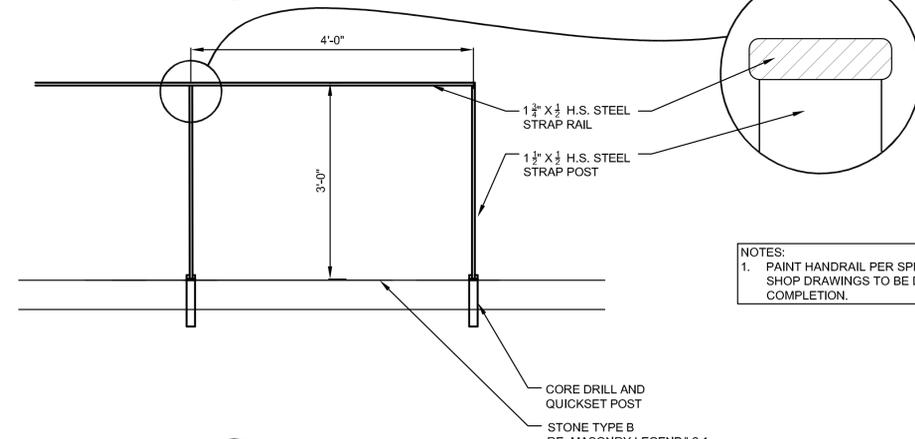
E STACKED BOULDER TERRACE
SCALE: 3/4"=1'-0" ELEVATION



F FLAGSTONE TERRACE STEPS
SCALE: 1/2"=1'-0" SECTION



C PAVERS & FLAGSTONE PAVING
SCALE: 1 1/2"=1'-0" SECTION



D HANDRAIL
SCALE: 1"=1'-0" ELEVATION

NOTES:
1. PAINT HANDRAIL PER SPECS. HANDRAIL SHOP DRAWINGS TO BE DONE AFTER STEP COMPLETION.



KEY	DESCRIPTION	AVAILABLE LOCATION
STONE TYPE A (FLAGSTONE)	OKLAHOMA TO MATCH EXISTING	ALLIANCE MATERIALS, INC. CONTRACT: CHAD ROGERS PHONE: (817) 379-0727 (OR APPROVED EQUAL)
STONE TYPE B (FLAGSTONE STEPS)	OKLAHOMA SLABS, COLOR TO MATCH EXISTING, 6" THICK	ALLIANCE MATERIALS, INC.
STONE TYPE C (STONE BOULDERS)	MOSS BOULDER - VARIOUS SIZES: VARIOUS SIZES: 24"-36" HIGH X ±36" WIDE X 36"-60" LONG - INSTALL BOTTOM OF STONE 4" BELOW FINISH GRADE (ON COMPACTED SUB-GRADE) INSTALLATION OF STONE BOULDERS TO BE DIRECTED IN FIELD BY LANDSCAPE ARCHITECT. CONTRACTOR TO CONSULT WITH LANDSCAPE ARCHITECT ON DESIGN INTENT PRIOR TO ORDERING BOULDERS. (OR BEFORE)	ALLIANCE MATERIALS, INC.

DATE	NO.	REVISIONS

PROJECT

MYERS PARK
HARDSCAPE IMPROVEMENTS
COLLIN COUNTY, TEXAS

REGISTERED LANDSCAPE ARCHITECT
DAVID C. BALDWIN
704
STATE OF TEXAS
11/13/17

SHEET TITLE
HARDSCAPE DETAILS

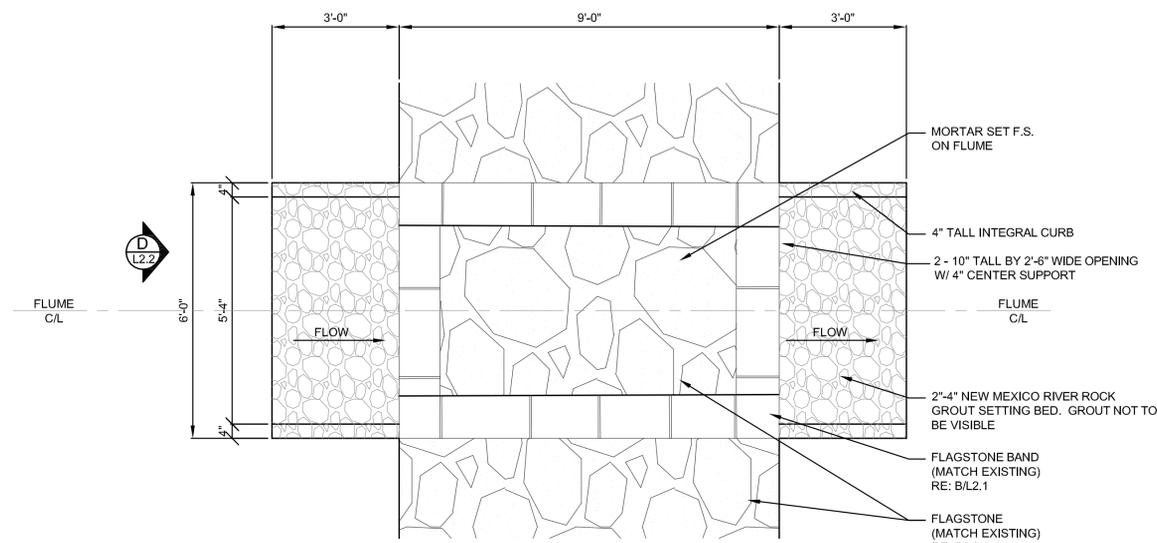
PROJECT MANAGER: TDH/BJV	PROJECT DESIGNER: TDH/BJV
DRAWN BY: TDH	CHECKED BY: BJV
ISSUE DATE: NOVEMBER 13, 2017	SCALE: AS NOTED

SHEET REFERENCE

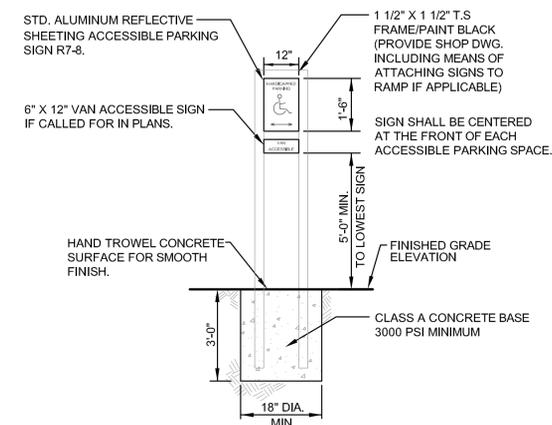
L2.1



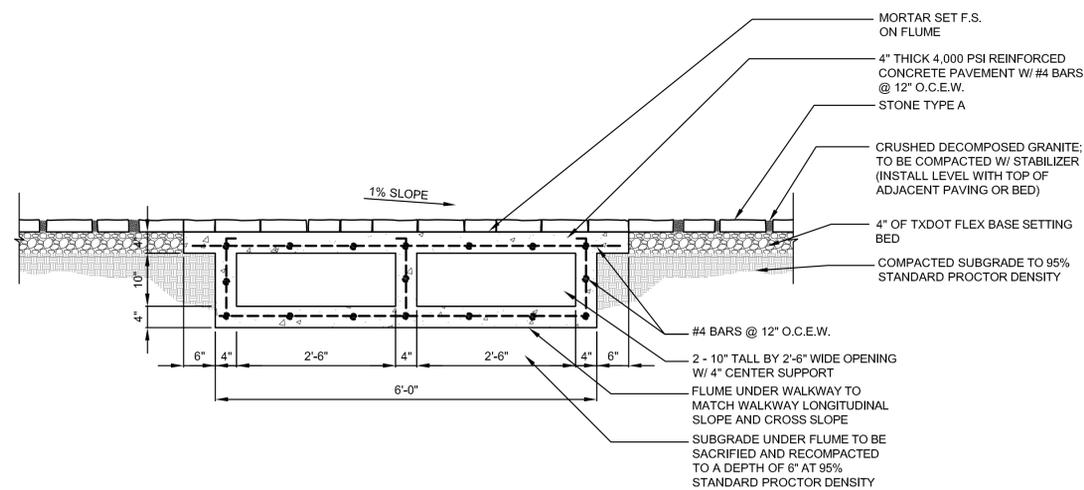
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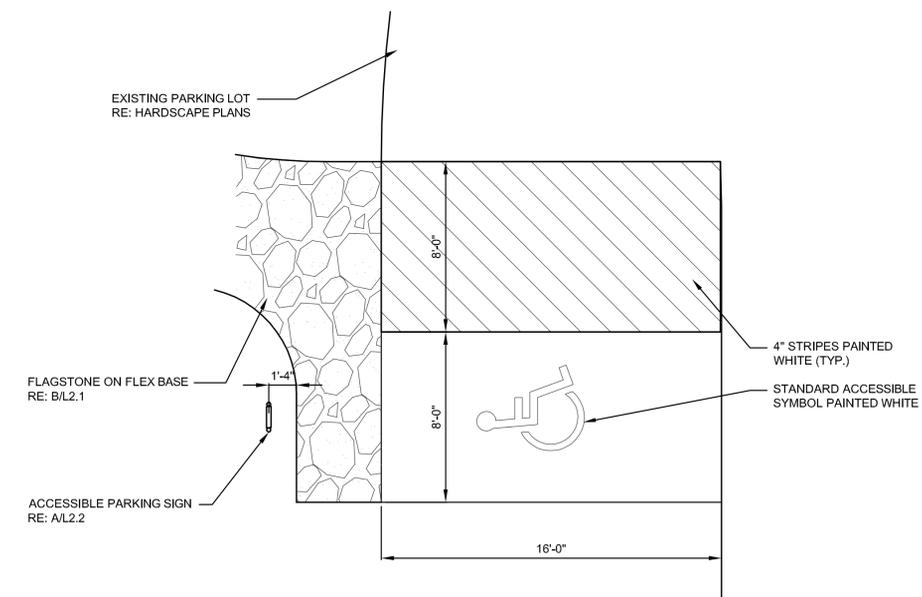
C FLUME STRUCTURE
SCALE: 1/2" = 1'-0" PLAN VIEW



A ACCESSIBLE PARKING SIGN
SCALE: N.T.S. SECTION



D FLUME STRUCTURE
SCALE: 3/4" = 1'-0" SECTION



B ACCESSIBLE PARKING, STRIPING, & PAVING
SCALE: 1/2" = 1'-0" PLAN VIEW

DATE	NO.	REVISIONS

PROJECT
COLLIN COUNTY
MYERS PARK HARDSCAPE IMPROVEMENTS
COLLIN COUNTY, TEXAS



11/13/17

SHEET TITLE
HARDSCAPE DETAILS

PROJECT MANAGER: TDH/BJV	PROJECT DESIGNER: TDH/BJV
DRAWN BY: TDH	CHECKED BY: BJV
ISSUE DATE: NOVEMBER 13, 2017	SCALE: AS NOTED

SHEET REFERENCE

L2.2