

INVITATION FOR BIDS

SOLICITATION INFORMATION AND SCHEDULE

Solicitation Number: **EN19-087**

Project Number: ST1365

Solicitation Title: Dysart/Rancho Santa Fe Intersection Improvements

Release Date: **May 22, 2019**

MANDATORY
Prospective Bidders' Conference: **June 03, 2019**
9:00 a.m. (local-time, Phoenix, Arizona)
Mojave Conference Room
11465 West Civic Center Drive
Avondale, Arizona 85323

Final Date for Inquiries: **June 06, 2019**

Bid Deadline and Opening: **June 19, 2019**
5:00 p.m. (local-time, Phoenix, Arizona)

City Representative: Chris Hamilton chamilton@avondaleaz.gov
623-333-4218

Procurement Administrator: Tiffany Copp tcopp@avondaleaz.gov
623-333-4213

In accordance with the City of Avondale Procurement Code, competitive sealed Bids for the services specified herein will be received by the City Clerk at the City Clerk's Office at the above-referenced location until the date and time referenced above (the "Bid Deadline"). Bids received by the Bid Deadline shall be publicly opened and the Bid Price read. Bids must be in the actual possession of the City Clerk on, or prior to, the Bid Deadline. Late Bids shall not be considered, except as provided in the City Procurement Code. Each Bid shall be submitted in a sealed envelope with the Solicitation Number and the Bidder's name and address clearly indicated on the front of the envelope.

There is no charge for the first set of Plans and Specifications.
Each additional set may be obtained in accordance with the City's Fee Schedule.
Plans and Specifications may be picked up at the City of Avondale.

*** The City of Avondale reserves the right to amend the solicitation schedule as necessary.**

**CITY OF AVONDALE
DEVELOPMENT AND ENGINEERING DEPARTMENT
EN19-087**

OFFER

The undersigned (the "Bidder") hereby offers this Bid as an offer to contract with the City under the terms and conditions set forth below and certifies that Bidder has read, understands and agrees to fully comply with, and be contractually bound by, all terms and conditions as set forth in this Invitation For Bids ("IFB"), the Contract formed hereby (as defined below) and any amendments thereto, together with all Exhibits, Specifications, Plans and other documents included as part of this Contract (the "Contract Documents").

Arizona Transaction (Sales) Privilege Tax License Number: _____ Federal Employer Identification Number: _____ <hr/> <p style="text-align: center;">Contractor Name</p> <hr/> <p style="text-align: center;">Address</p> <hr/> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">City</td> <td style="width: 33%;">State</td> <td style="width: 33%;">Zip Code</td> </tr> </table>	City	State	Zip Code	For Clarification of this Bid contact: Name: _____ Telephone: _____ Facsimile: _____ Email: _____ <hr/> <p style="text-align: center;">Authorized Signature for Contractor</p> <hr/> <p style="text-align: center;">Printed Name</p> <hr/> <p style="text-align: center;">Title</p>
City	State	Zip Code		

ACCEPTANCE OF OFFER (FOR CITY OF AVONDALE USE ONLY)

Effective Date: _____ Contract No. _____ Official File: _____

CITY OF AVONDALE, an Arizona municipal corporation	
_____ Charles A. Montoya, City Manager	
ATTEST:	APPROVED AS TO FORM:
_____ Marcella Carrillo, City Clerk	_____ Michael Wawro, City Attorney

**CITY OF AVONDALE
ACKNOWLEDGMENT OF PLANS AND SPECIFICATIONS RECEIVED**

INVITATION FOR BIDS

DYSART/RANCHO SANTA FE INTERSECTION IMPROVEMENTS

EN19-087

Vendor certifies that it has reviewed and verified the following plans and specifications were included as part of IFB EN19-087, released on May 22, 2019, and that the information contained therein has been incorporated in formulating the Vendor's Offer:

_____, _____ 2019
Signed Date

Print Name and Title

Company Name

ARTICLE I - DEFINITIONS

For purposes of this Invitation for Bids, the following definitions shall apply:

- 1.1 “Bid” or “Offer” means a responsive bid or quotation submitted by a Bidder in response to this Invitation for Bids.
- 1.2 “Bid Deadline” means the date and time set forth on the cover of this IFB for the City Clerk to be in actual possession of the sealed Bids.
- 1.3 “Bid Opening” means the date and time set forth on the cover of this Invitation for Bids for opening of sealed Bids.
- 1.4 “Bidder” means any person or firm submitting a competitive Bid in response to this IFB.
- 1.5 “City” means the City of Avondale, an Arizona municipal corporation.
- 1.6 “City Representative” means the City employee who has specifically been designated to act as a contact person to the City’s Procurement Administrator, and who is responsible for monitoring and overseeing the Contractor’s performance under this Contract and for providing information regarding details pertaining to the Work.
- 1.7 “Confidential Information” means that portion of a Bid, proposal, Offer, Specification or protest that contains information that the person submitting the information believes should be withheld, provided (i) such person submits a written statement advising the City of this fact at the time of the submission and (ii) the information is so identified wherever it appears.
- 1.8 “Contract” means, collectively, (i) the executed Offer/Bid, (ii) the executed Acknowledgment of Plans and Specifications, (iii) this IFB, including all completed exhibits, (iv) the Notice of Award, (v) the Notice to Proceed or Purchase Order(s), (vi) any approved Addendum, Change Order or Amendment, (vii) the Contractor’s Certificates of Insurance and a copy of the Declarations Page(s) of the insurance policies, (viii) the Certificate of Completion and (ix) any Plans, Specifications, Reference Documents or other documents attached, appended or incorporated herein by reference. Alternate or optional bid items will become part of this Contract only if they are accepted by the City in writing on the Price Sheet.
- 1.9 “Contractor” means the individual, partnership, corporation or limited liability company who has submitted a Bid in response to this IFB and who, as a result of the competitive bidding process, is awarded a contract for Materials or Services by the City.
- 1.10 “Contract Time” means the time period during which the Contractor must complete all of the Work related to the Project.
- 1.11 “Day(s)” means calendar day(s) unless otherwise specified.
- 1.12 “Engineer” means the City Engineer or authorized designee.
- 1.13 “Final Completion” shall be defined as set forth in Section 3.18 and shall occur not later than 30 Days from the date of Substantial Completion unless otherwise designated by the Engineer and subject to modification by changes in the Work as provided in Section 3.16 below.
- 1.14 “Invitation for Bids” or “IFB” means this request by the City for participation in the competitive bidding process according to all documents, including those attached or incorporated herein by reference, utilized for soliciting Bids for the Materials and/or Services in compliance with the City’s Procurement Code.

1.15 “MAG Specifications” means, collectively, the “Uniform Standard Specifications for Public Works Construction,” current edition as of the date of Contract award and the “Uniform Standard Details for Public Works Construction,” current edition as of the date of Contract award, which are sponsored and distributed by the Maricopa Association of Governments (“MAG”) and any amendments or supplements adopted by the City.

1.16 “MAG Supplement” means the City of Avondale Supplement to the MAG Uniform Standard Specifications and Details for Public Works Construction, dated April, 2008.

1.17 “Materials” means any personal property, including equipment, materials, replacements and supplies provided by the Contractor in conjunction with this Contract and shall include, in addition to Materials incorporated in the Project, equipment and other material used and/or consumed in the performance of the Work.

1.18 “Multiple Award” means an award of an indefinite quantity contract for one or more similar products, commodities or Services to more than one Bidder.

1.19 “Plans” means drawings relating to the Project, prepared by or on behalf of the City, bearing the seal of the professional who is responsible for their preparation.

1.20 “Price” means the total expenditure for the defined Project, inclusive of all Materials, commodities or Services.

1.21 “Procurement Administrator” means a City employee, as designated on the cover of this IFB, who has specifically been designated to act as a contact person to the Bidders and/or Contractor relating to their IFB.

1.22 “Procurement Agent” means the City Manager or authorized designee.

1.23 “Procurement Code” means the City’s Procurement Code, as amended from time to time.

1.24 “Project” means the purpose and Work described as set forth in Section 2.1, in the “Purpose/Scope of Work” of the IFB.

1.25 “Punch List” means that list of items provided by City to Contractor at the time of Substantial Completion indicating items to be completed or corrected, including the time for completion or correction by Contractor after Substantial Completion.

1.26 “Reference Documents” means information provided by the City relating to the Project that must be evaluated by the Contractor and incorporated into its Bid.

1.27 “Services” means the furnishing of labor, time or effort by a Contractor, not involving the delivery of a specific end product other than reports which are merely incidental to the required performance and as further defined in this Contract. This term does not include “professional and technical services” as defined in the Procurement Code.

1.28 “Specification” means any description of the physical characteristics, functional characteristics, or the nature of a commodity, product, supply or Services. The term may include a description of any requirements for inspecting, testing, or preparing a supply or service item for delivery.

1.29 “Subcontractor” means those persons or groups of persons having a direct contract with the Contractor to perform a portion of the Work and those who furnish Materials according to the plans and/or Specifications required by this Contract.

1.30 “Substantial Completion” shall be defined as set forth in Section 3.17 below and shall occur not later than the date set forth in the Schedule, subject to modification by changes in the Work as provided in Section 3.16 below.

1.31 “Substitutions” means Contractor’s proposed changes in products, materials, equipment and methods of construction from those required by the Contract Documents.

1.32 “Substitutions for Cause” means changes proposed by Contractor that are required due to changed product conditions, such as unavailability of product, regulatory changes, or unavailability of required warranty terms.

1.33 “Substitutions for Convenience” means changes proposed by Contractor or City that are not required in order to meet other Project requirements, but which may offer advantage to Contractor or City.

1.34 “Vendor” means any firms, entities or individuals desiring to prepare a responsive Bid in response to this Invitation for Bids.

1.35 “Work” means all labor, Materials and equipment incorporated or to be incorporated in the Project that are necessary to accomplish the construction required by this Contract.

ARTICLE II – BID PROCESS; BID AWARD

2.1 Purpose/Scope of Work. The Work included in this Project consists of the widening of Dysart Road for a right turn lane onto Rancho Santa Fe and includes the installation of new pavement, curb, gutter, sidewalk, storm drain, traffic signals, pavement marking and other related miscellaneous work as further described in the Price Sheet attached hereto as Exhibit C. The City is issuing this IFB to secure a qualified Engineering Contracting (Commercial) Class A Licensed Contractor to perform the Work and provide Materials as more particularly described in the Specifications attached hereto as Exhibit A, and incorporated herein by reference. Bidders must submit Bids encompassing the entire Project, inclusive of the related Plans, Specifications, related construction drawings and Reference Documents. Failure to do so may result in a determination that the Bid is non-responsive.

2.2 Amendment of IFB. Except as set forth in Section 3.57 below, no alteration may be made to this IFB or the resultant Contract without the express, written approval of the City in the form of an official IFB addendum or Contract amendment. Any attempt to alter this IFB/Contract without such approval is a violation of this IFB/Contract and the City Procurement Code. Any such action is subject to the legal and contractual remedies available to the City including, but not limited to, Contract cancellation and suspension and/or debarment of the Bidder or Contractor.

2.3 Preparation/Submission of Bid. Bidders are invited to participate in the competitive bidding process for the Project specified in this IFB. Bidders shall review their Bid submissions to ensure the following requirements are met.

A. Irregular/Non-responsive Bids. The City will consider as “irregular” or “non-responsive” and shall reject any Bid not prepared and submitted in accordance with the IFB and Specifications, or any Bid lacking sufficient information to enable the City to make a reasonable determination of compliance with the Specifications. Unauthorized or unreasonable exceptions, conditions, limitations, or provisions shall be cause for rejection. Bids may be deemed non-responsive at any time during the evaluation process if, in the sole opinion of the Procurement Agent, any of the following are true:

1. Bidder does not meet the minimum required skill, experience or requirements to perform the Work or provide the Materials.
2. Bidder has a past record of failing to fully perform or fulfill contractual obligations.

3. Bidder cannot demonstrate financial stability.

4. Bid submission contains false, inaccurate or misleading statements that, in the opinion of the Procurement Agent, are intended to mislead the City in its evaluation of the Bid.

B. Specification Minimums. Bidders are reminded that the Specifications in this IFB are the minimum levels required and that Bids submitted must be for products that meet or exceed the minimum level of all features specifically listed in this IFB. Bids offering less than the minimums specified will be deemed not responsive. It shall be the Bidder's responsibility to carefully examine each item listed in the Specifications.

C. Required Submittal. Bidders shall provide **the entire IFB document (all pages)** that contains the following completed pages/documents to be considered a responsive Bid:

1. Offer, signed in ink by a person authorized to bind the Bidder (Page i).

2. Acknowledgement of Plans and Specifications, signed in ink (Page ii). (The full set of Plans and Specifications does not need to be returned with the IFB.)

3. Price Sheet (Exhibit C or as subsequently replaced by Addendum).

4. Licenses; DBE/WBE Status (Exhibit D).

5. References (Exhibit E).

6. Bid Bond (Exhibit F).

7. Key Personnel/Subcontractor Listing (Exhibit G).

8. Acknowledgment page, signed in ink, for each Addendum received, if any (Exhibit J). (Revised Plans and Specifications attached to the Addendum do not need to be returned with the Acknowledgment.)

D. Bidder Responsibilities. All Bidders shall (1) examine the entire Bid package, (2) seek clarification of any item or requirement that may not be clear, (3) check all responses for accuracy before submitting a Bid and (4) submit the entire completed Bid package, in accordance with Subsection 2.3(C) above, by the official Bid Deadline. Late Bids shall not be considered. Bids not submitted with an **original, signed** Offer page by a person authorized to bind the Bidder shall be considered non-responsive. Negligence in preparing a Bid shall not be good cause for withdrawal after the Bid Deadline.

E. Sealed Bids. All Bids shall be sealed and clearly marked with the **IFB title and number on the lower left hand corner** of the mailing envelope. A return address must also appear on the outside of the sealed Bid.

F. Address. All Bids shall be directed to the following address: Tiffany Copp, c/o City Clerk, 11465 West Civic Center Drive, Suite 200, Avondale, Arizona 85323, or hand-delivered to the City Clerk's office.

G. Bid Forms. All Bids shall be on the forms provided in this IFB. It is permissible to copy these forms if required. Telegraphic (facsimile), electronic (email) or mailgram Bids will not be considered.

H. Modifications. Erasures, interlineations, or other modifications in the Bid shall be initialed in original ink by the authorized person signing the Bid.

I. Withdrawal. At any time prior to the specified Bid Opening, a Bidder (or designated representative) may amend or withdraw its Bid. Facsimile, electronic (email) or mailgram Bid amendments or

withdrawals will not be considered. No Bid shall be altered, amended or withdrawn after the specified Bid Deadline, unless otherwise permitted pursuant to the City Procurement Code.

2.4 Inquiries: Interpretation of Plans, Specifications and Drawings.

A. Inquiries. Any question related to the IFB, including any part of the Plans, Specifications, Scope of Work or other Contract Documents, shall be directed to the City Representative and Procurement Administrator whose names appear on the cover page of this IFB. Verbal or telephone inquiries directed to City staff **will not be answered**. Within two business days following the Final Date for Inquiries listed on the cover page of this IFB, answers to all questions received in writing or via e-mail will be mailed, sent via facsimile and/or e-mailed to all parties who obtained an IFB package from the City and who legibly provided a mailing address, facsimile and/or e-mail address to the City. Questions shall be submitted in writing by the date indicated on the cover page of this IFB; the City will not respond to any inquiries submitted later than the Final Date for Inquiries. The Vendor submitting such inquiry will be responsible for its prompt delivery to the City. Any correspondence related to the IFB shall refer to the title and number, page and paragraph. However, the Bidder shall not place the IFB number and title on the outside of any envelope containing questions, because such an envelope may be identified as a sealed Bid and may not be opened until the Bid Opening. Any interpretations or corrections of the proposed Contract Documents will be made only by addenda duly approved and issued by the City. The City will not be responsible for any other explanations or interpretations of the Contract Documents.

B. Addenda. It shall be the Bidder's responsibility to check for addenda issued to this IFB. Any addendum issued by the City with respect to this IFB will be available on the City's procurement website at www.avondaleaz.gov/procurement.

C. Approval of Substitutions. The Materials, products, and equipment described in this IFB establish a standard or required function, dimension, appearance and quality to be met by any proposed substitution. No substitute will be considered unless written Substitution/Equal Request in the form attached hereto as Exhibit B, has been received by the City Representative at least 10 Days prior to the Bid Deadline. Each such request shall include the name of the Material or equipment for which it is to be substituted and a complete description of the proposed substitute, including any drawings, performance and test data and any other information necessary for evaluation of the substitute. If a substitute is approved, the approval shall be by written addendum to the IFB. Bidder shall not rely upon approvals made in any other manner.

D. Use of Equals. When the Specifications for materials, articles, products and equipment include the phrase "*or equal*," Bidder may bid upon and use materials, articles, products and equipment that will perform equally the requirements imposed by the general design. The Engineer will have the final approval of all materials, articles, products and equipment proposed to be used as an "equal." No such "equal" shall be purchased or installed without prior, written approval from the Engineer. No "equal" will be considered unless a written Substitution/Equal Request, in the form attached hereto as Exhibit B, has been received by the City Representative at least 10 Days prior to the Bid Deadline. The request shall include the name of the material or equipment for which the item is sought to be considered an equal and a complete description of the proposed equal including any drawings, cuts, performance and test data and any other information necessary for evaluation of the equal. All approval of equals shall be issued in the form of written addendum or amendment, as applicable, to this IFB or the Contract.

E. Bid Quantities. It is expressly understood and agreed by the parties hereto that the quantities of the various classes of Services and/or Materials to be furnished under this Contract, which have been estimated as stated in the Bidders' Offer, are only approximate and are to be used solely for the purpose of comparing, on a consistent basis, the Bidders' Offers presented for the Work under this Contract. The selected Contractor agrees that the City shall not be held responsible if any of the quantities shall be found to be incorrect and the Contractor will not make any claim for damages or for loss of profits because of a difference between the quantities of the various classes of Services and/or Materials as estimated and the Services and/or Materials

actually provided. Contractor is responsible for ensuring that all Materials contained in the Plans for the project are bid on the Price Sheet. Contractor shall bring any potential discrepancy between the Plans and the Price Sheet to the City's attention, either at the Prospective Bidders' Conference or by written inquiry, as set forth in Subsection 2.4(A) above. If any error, omission or misstatement is found to occur, the same shall not (1) invalidate this Contract or the whole or any part of the Scope of Work, (2) excuse Contractor from any of the obligations or liabilities hereunder or (3) entitle Contractor to any damage or compensation except as may be provided in this Contract.

2.5 Prospective Bidders' Conference. A Prospective Bidders' Conference may be held. If scheduled, the date and time of the Prospective Bidders' Conference will be indicated on the cover page of this IFB. The Prospective Bidders' Conference may be designated as mandatory or non-mandatory on the cover of this IFB. Bids shall not be accepted from Bidders who do not attend a mandatory Prospective Bidders' Conference. Bidders are strongly encouraged to attend those Prospective Bidder's Conferences designated as non-mandatory. The purpose of the Prospective Bidders' Conference will be to clarify the contents of the IFB in order to prevent any misunderstanding of the City's requirements. Any doubt as to the requirements of this IFB or any apparent omission or discrepancy should be presented to the City at the Prospective Bidders' Conference. The City will then determine if any action is necessary and may issue a written amendment or addendum to the IFB. Oral statements or instructions will not constitute an amendment or addendum to the IFB.

2.6 New Materials. All Materials to be provided by the Contractor and included in the Bid shall be new, unless otherwise stated in the Specifications.

2.7 Prices. Work shall be performed at the unit prices as set forth in the Price Sheet attached hereto as Exhibit C and incorporated herein by reference. Bid prices shall be submitted on a per unit basis by line item, when applicable and include all applicable transaction privilege, sales or use tax. In the event of a disparity between the unit price and extended price, the unit price shall prevail. **NOTE: All pricing blanks must be filled in. Empty or unfilled spaces in the Bid Price Sheet shall result in a determination that a Bid is non-responsive.**

2.8 Payment; Discounts. Any Bid that requires payment in less than 30 Days shall not be considered. Payment discounts of 30 Days or less will not be deducted from the Bid Price in determining the low Bid. The City shall be entitled to take advantage of any payment discount offered, provided payment is made within the discount period. Payment discounts shall be indicated on Price Sheet.

2.9 Taxes. The City is exempt from Federal Excise Tax, including the Federal Transportation Tax. Please be advised that ARIZ. REV. STAT. § 42-5075(P) applies to the Project contemplated within this Contract. Transaction privilege tax, sales tax and use tax, if any, shall be included in the unit price for each line item. It shall not be considered a lump sum payment item. Bidder should not include tax on any allowances. It is the sole responsibility of the Bidder to determine any applicable tax rates and calculate the tax accordingly. Failure to accurately tabulate any applicable taxes may result in a determination that a Bid is non-responsive. The Bidder shall not rely on, and shall independently verify, any tax information provided by the City.

2.10 Federal Funding. It is the responsibility of the Bidder to verify and comply with federal requirements that may apply to the Work (the "Federal Requirements"). It is also the responsibility of the Bidder to incorporate any necessary amounts in the Bid to accommodate for required federal record-keeping, necessary pay structures or other matters related to the Federal Requirements. In addition to any applicable Federal Requirements, this procurement is subject to a number of state and City regulations. In general, where these rules conflict, the more stringent law or rule applies.

2.11 Cost of Bid/Proposal Preparation. Bids submitted for consideration should be prepared simply and economically, providing adequate information in a straightforward and concise manner. The City does not reimburse the cost of developing, presenting or providing any response to this solicitation; the Bidder is responsible for all costs

incurred in responding to this IFB. All materials and documents submitted in response to this IFB become the property of the City and will not be returned.

2.12 Public Record. All Bids shall become the property of the City. After Contract award, Bids shall become public records and shall be available for public inspection in accordance with the City's Procurement Code, except that any portion of a Bid that was designated as confidential pursuant to Section 2.13 below shall remain confidential from and after the time of Bid opening to the extent permitted by Arizona law.

2.13 Confidential Information. If a Vendor/Bidder believes that a Bid, Specification, or protest contains information that should be withheld from the public record, a statement advising the Procurement Agent of this fact shall accompany the submission and the information shall be clearly identified. The information identified by the Vendor or Bidder as confidential shall not be disclosed until the Procurement Agent makes a written determination. The Procurement Agent shall review the statement and information with the City Attorney and shall determine in writing whether the information shall be withheld. If the City Attorney determines that it is proper to disclose the information, the Procurement Agent shall inform the Vendor or Bidder in writing of such determination.

2.14 Vendor Licensing and Registration. Prior to the award of the Contract, the successful Bidder shall (A) be registered with the Arizona Corporation Commission and authorized to do business in Arizona and (B) have a completed Vendor Registration Packet on file with the City Finance and Budget Department. Bidders shall provide license and certification information with the Bid, attached as Exhibit D and incorporated herein by reference. Upon the City's request, corporations and limited liability companies shall provide Certificates of Good Standing from the Arizona Corporation Commission.

2.15 Bidder Qualifications.

A. Experience and References. Bidder must demonstrate successful completion of at least three similar projects within the past 60 months, one of which must have a dollar value of at least 75% of the total bid for this Project as set forth in the Price Sheet, attached as Exhibit C. Total bid price does not include any City allowances identified. For the purpose of this Solicitation, "successful completion" means completion of a project within the established schedule and budget and "similar projects" resemble this Project in size, nature and scope. References for these three projects shall be listed on the sheet attached hereto as Exhibit E and incorporated herein by reference. *These references will be checked*, and it is Bidder's responsibility to ensure that all information is accurate and current. Bidder authorizes the City's representative to verify all information from these references and releases all those concerned from any liability in connection with the information they provide.

B. Investigation. The City's representative may conduct any investigation deemed necessary to determine the Bidder's ability to perform the Work in accordance with the Contract Documents. The three lowest Bidders may be requested to submit additional documentation within 72 hours (or as specified) to assist the City in its evaluation.

2.16 Certification. By submitting a Bid, the Bidder certifies:

A. No Collusion. The submission of the Bid did not involve collusion or other anti-competitive practices.

B. No Discrimination. It shall not discriminate against any employee or applicant for employment in violation of Federal Executive Order 11246.

C. No Gratuity. It has not given, offered to give, nor intends to give at any time hereafter, any economic opportunity, future employment, gift, loan, gratuity, special discount, trip favor or service to a City employee, officer, agent or elected official in connection with the submitted Bid or a resultant Contract. In the event that the resultant Contract is canceled pursuant to this provision, the City shall be entitled, in addition to any other rights and remedies, to recover and withhold from the Contractor an amount equal to 150% of the gratuity.

D. Financial Stability. It is financially stable, solvent and has adequate cash reserves to meet all financial obligations including any potential costs resulting from an award of the Contract.

E. No Signature/False Statement. The signature on the Bid and the Vendor Information Form is genuine. Failure to sign the Bid and the Vendor Information Form, or signing either with a false statement, shall void the submitted Bid and any resulting Contract, and the Bidder may be debarred from further bidding in the City.

2.17 Bid Bond. All Vendors desiring to prepare a responsive Bid shall submit a non-revocable bid security payable to the City in the amount of ten percent (10%) of the total Bid Price. This security shall be in the form of a bid bond, certified check or cashier's check and must be in the possession of the City Representative by the Bid Deadline. All bid security from Contractor(s) who have been issued a Notice of Award shall be held until the successful execution of all required Contract Documents and bonds. If the Contractor fails to execute the required contractual documents and bonds within the time specified, or 10 Days after Notice of Award if no period is specified, the Contractor may be found to be in default and this Contract terminated by the City. In case of default, the City reserves all rights inclusive of, but not limited to, the right to purchase material and/or to complete the Work and to recover any actual excess costs associated with such completion from the Contractor. All bid bonds shall be executed in the form attached hereto as Exhibit E, duly executed by the Bidder as Principal and having as Surety thereon a Surety company holding a Certificate of Authority from the Arizona Department of Insurance to transact surety business in the State of Arizona. Individual sureties are unacceptable. All insurers and sureties shall have, at the time of submission of the proposal, an A.M. Best's Key Rating Guide of "A-" or better as currently listed in the most recent Best Key Guide, published by the A.M. Best Company. As soon as is practicable after the completion of the evaluation, the City will (A) issue a Notice of Award for those Offers accepted by the City and (B) return all checks or bonds to those Bidders who have not been issued a Notice of Award.

2.18 Award of Contract.

A. Multiple Award. The City may, at its sole discretion, accept Bidder's Offer as part of a Multiple Award.

B. Evaluation. The evaluation of this Bid will be based on, but not limited to, the following: (1) compliance with Specifications, (2) tax-inclusive Price, including alternates selected by the City, if any, and taxes, but excluding "as-needed" services requested by the City and (3) Bidder qualifications to perform the Work.

C. Waiver, Rejection, Reissuance. Notwithstanding any other provision of this IFB, the City expressly reserves the right to: (1) waive any immaterial defect or informality, (2) reject any or all Bids or portions thereof and (3) cancel or reissue an IFB.

D. Offer. A Bid is a binding offer to contract with the City based upon the terms, conditions and Specifications contained in this IFB and the Bidder's responsive Bid, unless any of the terms, conditions, or Specifications are modified by a written addendum or Contract amendment. Bids become binding Contracts when the Acceptance of Offer and Notice of Award is executed in writing by the City. Bidder Offers shall be valid and irrevocable for **90** Days after the Bid Opening.

E. Protests. Any Bidder may protest this IFB, the proposed award of a Contract, or the actual award of a Contract. All protests will be considered in accordance with the City Procurement Code.

ARTICLE III – GENERAL TERMS AND CONDITIONS

PART A - GENERAL

3.1 Reference Standards and Reference Documents. The Contractor shall perform the Work required in conformance with MAG Specifications and the MAG Supplement, each of which is incorporated herein by reference. In the event of a conflict between the MAG Specifications and the MAG Supplement, the MAG

Supplement shall prevail. The Contractor shall also perform the Work in accordance with the Reference Documents, a list of which is attached hereto as part of Exhibit A.

3.2 Plans and Specifications to Successful Contractor. The successful Contractor may obtain one set of Plans and Specifications for this Project from the Engineer at no cost.

3.3 Contract Time. The Contract Time for this Project shall be 120 days from the Notice to Proceed. All Work on the Project shall be completed on or before the expiration of the Contract Time.

3.4 Pre-Construction Conference. Within 30 Days of the issuance of the Notice of Award, the Contractor shall attend a pre-construction conference. The City will contact the Contractor to schedule a specific date, time and location for the pre-construction conference. The purpose of this conference is to outline specific items and procedures and to address items that require special attention on the part of the Contractor. The Contractor may also present proposed variations in procedures that the Contractor believes may (A) improve the Project, (B) reduce cost or (C) reduce inconvenience to the public. Any necessary coordination and procedures for construction inspection and staking will be addressed during the pre-construction conference. The Contractor will be required to provide the following items at, or prior to, the pre-construction conference, each of which is subject to review and approval by the Engineer:

A. Key Personnel; Subcontractors. A list of the names and emergency telephone numbers of all proposed key personnel, Subcontractors and suppliers that the Contractor intends to utilize on the Project, in the form attached hereto as Exhibit G and incorporated herein by reference. The term "Key Personnel" means individuals who will be directly assigned to this Project and includes, but is not limited to, the owner, principals, project manager, project superintendent, scheduler, construction engineer and supervisory personnel. At least two of the Bidder's Key Personnel must have a minimum of three years' experience in similar projects (defined above) and the scheduler must have experience in employing scheduling techniques appropriate for this Project. Resumes of Key Personnel shall be submitted upon request by the City's representative. Proposed Subcontractors shall be qualified and have the requisite professional or technical licenses and be licensed to do business in the State of Arizona. The list shall include such information on the professional background of each of the assigned key individuals as may be requested by the City Representative. Such key personnel and Subcontractors shall be satisfactory to the Engineer and shall not be changed except with the consent of the Engineer. Additionally, the Engineer shall have the right to request that the Contractor personnel and Subcontractors be removed from the Project if, in the Engineer's sole discretion, such personnel or Subcontractor(s) are detrimental to the Project delivery process. Upon receipt of such request, the Contractor shall remove such personnel or Subcontractor(s) unless the Contractor can provide the City with sufficient documentation to prove it is commercially impractical to replace the personnel or Subcontractor(s) with substitute personnel possessing similar qualifications. The Engineer's approval of substituted personnel or Subcontractor(s) shall not be unreasonably withheld.

B. Progress Schedule. A construction progress schedule showing the estimated time for start and completion of the major items of Work.

C. Payment Schedule. A payment schedule showing the estimated dollar volume of Work for each calendar month during the life of the Project.

D. Traffic Control. A written proposal, prepared by an individual who is IMSA or ATSSA certified, outlining the intended plans for traffic control and for maintaining continuous access to residences and businesses along the construction site.

E. Drawings, Materials & Equipment. An itemized list of all required shop drawings, material and equipment submittals and a schedule indicating the dates each of these items will be transmitted to the City for review.

3.5 Notice to Proceed. Within 45 Days of the issuance of the Notice of Award the City may issue a written Notice to Proceed. The Notice to Proceed shall stipulate the actual Contract start date, the Contract Time and the dates of Substantial Completion and Final Completion. The time required for the Contractor to obtain permits, licenses and easements shall be included in the Contract Time and shall not be justification for a delay claim by the Contractor. The time required for the Contractor to prepare, transmit and obtain approval of applicable submittals shall be included in the Contract Time and shall not be justification for a delay claim by the Contractor. No Work shall be started until after all required permits, licenses, and easements have been obtained. The Contractor shall notify the Engineer, in writing, at least 72 hours before the following events:

- A. Commencement. The start of construction.
- B. City Services Shut Down. Shutdown of City water, sewer, drainage, irrigation and/or traffic control facilities.
- C. Well or Pump Shut Down. Shutdown of existing water wells and booster pumps. Such shutdown shall not exceed 72 hours of any facility and only one facility may be shutdown at any one time.
- D. Water Lines. All draining and filling of water lines and irrigation laterals and all operations of existing valves or gauges. The City will furnish all required water meters; provided however, that the meter provided is only for construction purposes. Any domestic water meter necessary for the Project shall be included in the Bid.
- E. Start-up and Testing. Start-up or testing of any water well or booster pump to be connected to any part of the existing City water system. This includes operation of existing valves necessary to accommodate the water.

3.6 Laws and Regulations. The Contractor shall keep fully informed of all rules, regulations, ordinances, statutes or laws affecting the Work herein specified, including existing and future (A) City and County ordinances and regulations, (B) State and Federal laws and (C) Occupational Safety and Health Administration (“OSHA”) standards.

3.7 Affirmative Action Report. It is the policy of the City that suppliers of goods or services to the City adhere to a policy of equal employment opportunity and demonstrate an affirmative effort to recruit, hire, and promote regardless of race, color, religion, gender, national origin, age or disability. On any Contract in excess of six months, the Contractor shall provide an annual report to the Engineer highlighting its activities to comply with this Section 3.7.

3.8 Rights-of-Way. The Contractor shall obtain a right-of-way permit for any of the Work completed in the public right-of-way. The Contractor will be responsible for any required Maricopa County permits or other agency permits. The City will provide any necessary easements for Work specified under this Contract, and the Contractor shall not enter or occupy with workers, tools, equipment or materials any private ground outside the property of the City without the written consent of the owner thereof. The Contractor, at its own expense, is responsible for the acquisition of any additional easements or rights-of-way.

3.9 Inspection and Compliance. Each Contractor must inform itself fully of the conditions relating to the construction of the Project and the employment of labor thereon. Failure to do so will not relieve the Contractor of its obligation to furnish all material and labor necessary to carry out the provisions of this Contract. Insofar as possible in carrying out its work, the Contractor must employ such methods or means as will not cause any interruption of or interference with the Work of any other contractor. Contractor affirms that it has inspected the jobsite and has thoroughly reviewed this Contract including, without limitation, the Specifications listed on Exhibit A, as the same may be revised by the City, and is not relying on any opinions or representations of City. Contractor agrees to perform and complete such Work in strict accordance with this Contract and under the general direction of the City. Contractor agrees that any exclusions of any Work must be approved in writing by the City prior to

acceptance of this Contract or same shall not be excluded hereunder. Contractor shall provide all competent supervision necessary to execute all Work and any Work incidental thereto in a thorough, first-class, workmanlike manner. It is Contractor's responsibility that all of the Work and any Work incidental thereto conforms to, and is performed in accordance with, all applicable Federal, State, County and City laws, codes, ordinances, regulations (including National Pollutant Discharge Elimination System and air pollution standards) and orders of public authorities bearing on performance of the Work.

3.10 Safety Plan. Contractor is responsible for all safety precautions and programs and shall perform the Work in accordance with a safety plan that is compliant with OSHA, American National Standards Institute and National Institute for Occupational Safety and Health standards. Contractor shall provide all protection and necessary supervision to implement said safety plan. Contractor shall take all reasonable precautions for the safety of and provide reasonable protection to prevent damage, injury or loss to: (A) employees or others on the Project, (B) the Work and materials and (C) other property at the Project or adjacent thereto. Contractor shall designate a responsible person on the Project whose duty shall be prevention of accidents.

3.11 Traffic Regulations. All traffic affected by the Work under this Contract shall be regulated in accordance with the then-current version of the *City of Phoenix-Traffic Barricade Manual* (the "Barricade Manual") which is incorporated herein by reference; provided, however, that this Contract shall govern in a conflict with the terms of the Barricade Manual. At the time of the pre-construction conference, the Contractor shall designate an employee who is well qualified and experienced in construction traffic control and safety to be responsible for implementing, monitoring and altering traffic control measures, as necessary. At the same time, the City will designate a representative who will be responsible to see that all traffic control and any alterations are implemented and monitored to the extent that traffic is carried through the Work area in an effective manner and that motorists, pedestrians, bicyclists and workers are protected from hazard and accidents.

A. Major Streets. The following shall be considered major streets: All major parkway, mile (section line), arterial and collector (mid-section line and quarter section line) streets so classified by the City.

B. Traffic Control Devices. All traffic control devices required for the Work under this Contract shall be the responsibility of the Contractor. The Contractor shall place advance warning signs (such as REDUCE SPEED, LOOSE GRAVEL, 25 MPH SPEED LIMIT and DO NOT PASS) in accordance with the Barricade Manual. The Contractor shall provide, erect and maintain all necessary flashing arrow boards, barricades, suitable and sufficient warning lights, signals and signs and shall take all necessary precautions for the protection of the Work and safety of the public. The Contractor shall provide, erect and maintain acceptable and adequate detour signs at all closures and along detour routes. All barricades and obstructions shall be illuminated at night, and all safety lights shall be illuminated from sunset until sunrise. All barricades and signs used by the Contractor shall conform to the standard design generally accepted for such purposes and payment for all such services and materials shall be considered as included in the other pay items of this Contract.

C. Existing Signs. The Contractor shall ensure that all existing traffic signs are erect, clean and in full view of the intended traffic at all times. Street name signs at major street intersections shall be maintained erect at all times. If these signs should interfere with construction, the Contractor shall notify the Engineer, in writing, at least 48 hours in advance for City personnel to temporarily relocate or cover said signs. The Engineer will direct the Contractor as to the correct positions to re-set all traffic and street name signs to permanent locations when notified by the Contractor that the interfering construction is complete.

D. Manual Traffic Control. Manual traffic control shall be in conformity with the Barricade Manual, except that the designated liaison officer shall be contacted at the Avondale Police Department. When construction activities or traffic hazards at the construction site require the use of flagmen, it shall be the Contractor's responsibility to provide trained flagmen to direct traffic safely. When traffic hazards at construction sites warrant the use of certified police personnel to direct traffic, arrangements must be made with the liaison officer at the Avondale Police Department.

E. Contractor Equipment. The assembly and turnarounds of the Contractor's equipment shall be accomplished using adjacent local streets when possible. Equipment used and/or directed by the Contractor shall travel with traffic at all times. Supply trucks shall travel with traffic except when being spotted. Contractor shall provide a flagman or off-duty, uniformed Avondale officer to assist with spotting.

F. Traffic Alterations. During construction, it may be necessary to alter traffic control. Any such alterations shall be in accordance with the Barricade Manual. No street within the Project area may be closed to through traffic or to local emergency traffic without prior, written approval of the Engineer. Written approval may be given if sufficient time exists to allow for notification of the public at least 72 hours in advance of such closing. Partial closure of streets within the Project shall be done in strict conformity with the Barricade Manual and the Engineer's written directions.

G. Intersections. Caution should be used when excavating near intersections with traffic signal underground cable. Contractor shall notify the Engineer, in writing, 24 hours in advance of any Work at such intersections. The Contractor shall install and maintain temporary overhead traffic signal cable as specified by the Engineer when underground conduit is to be severed by excavations at intersections. The Contractor shall provide an off-duty, uniformed Avondale police officer to direct traffic while the traffic signal is turned off and the wiring is transferred. All damaged or modified traffic signal overhead and underground items shall be repaired and restored to the Engineer's satisfaction. Magnetic detector loops shall, under no circumstances, be spliced.

H. Adjacent Property Access. The Contractor shall maintain access to all businesses, schools and residences along the Project alignment at all times in accordance with the MAG Supplement, Section 107.7.1 (Access).

I. Covered Crossings. Where crossings of existing pavement occurs, no open trenches shall be permitted overnight, but plating may be permitted if conditions allow, as determined by the Engineer in his sole discretion. If plates cannot be used, crossings shall either be back-filled or the Contractor shall provide a detour.

3.12 Indemnification. To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the City and each council member, officer, employee or agent thereof (the City and any such person being herein called an "Indemnified Party"), for, from and against any and all losses, claims, damages, liabilities, costs and expenses (including, but not limited to, reasonable attorneys' fees, court costs and the costs of appellate proceedings) to which any such Indemnified Party may become subject, under any theory of liability whatsoever ("Claims") to the extent that such Claims (or actions in respect thereof) are caused by the negligent acts, recklessness or intentional misconduct of the Contractor, its officers, employees, agents, or any tier of subcontractor in connection with Contractor's work or services in the performance of this Agreement. The amount and type of insurance coverage requirements set forth below will in no way be construed as limiting the scope of the indemnity in this Section.

3.13 Insurance.

A. General.

1. Insurer Qualifications. Without limiting any obligations or liabilities of Contractor, Contractor shall purchase and maintain, at its own expense, hereinafter stipulated minimum insurance with insurance companies authorized to do business in the State of Arizona pursuant to ARIZ. REV. STAT. § 20-206, as amended, with an AM Best, Inc. rating of A- or above with policies and forms satisfactory to the City. Failure to maintain insurance as specified herein may result in termination of this Contract at the City's option.

2. No Representation of Coverage Adequacy. By requiring insurance herein, the City does not represent that coverage and limits will be adequate to protect Contractor. The City reserves the right to review any and all of the insurance policies and/or endorsements cited in this Contract but has no

obligation to do so. Failure to demand such evidence of full compliance with the insurance requirements set forth in this Contract or failure to identify any insurance deficiency shall not relieve Contractor from, nor be construed or deemed a waiver of, its obligation to maintain the required insurance at all times during the performance of this Contract.

3. Additional Insured. All insurance coverage, except Workers' Compensation insurance and Professional Liability insurance, if applicable, shall name, to the fullest extent permitted by law for claims arising out of the performance of this Contract, the City, its agents, representatives, officers, directors, officials and employees as Additional Named Insured as specified under the respective coverage sections of this Contract.

4. Coverage Term. All insurance required herein shall be maintained in full force and effect until all Work or Services required to be performed under the terms of this Contract are satisfactorily performed, completed and formally accepted by the City, unless specified otherwise in this Contract.

5. Primary Insurance. Contractor's insurance shall be primary insurance with respect to performance of this Contract and in the protection of the City as an Additional Insured.

6. Claims Made. In the event any insurance policies required by this Agreement are written on a "claims made" basis, coverage shall extend, either by keeping coverage in force or purchasing an extended reporting option, for three years past completion and acceptance of the services. Such continuing coverage shall be evidenced by submission of annual Certificates of Insurance and necessary endorsements citing applicable coverage is in force and contains the provisions as required herein for the three-year period.

7. Waiver. All policies, except for Professional Liability, including Workers' Compensation insurance, shall contain a waiver of rights of recovery (subrogation) against the City, its agents, representatives, officials, officers and employees for any claims arising out of the Work or Services of Contractor. Contractor shall arrange to have such subrogation waivers incorporated into each policy via formal written endorsement thereto.

8. Policy Deductibles and/or Self-Insured Retentions. The policies set forth in these requirements may provide coverage that contains deductibles or self-insured retention amounts. Such deductibles or self-insured retention shall not be applicable with respect to the policy limits provided to the City. Contractor shall be solely responsible for any such deductible or self-insured retention amount.

9. Use of Subcontractors. If any Work under this Contract is subcontracted in any way, Contractor shall execute written agreement with its Subcontractors containing the indemnification provisions set forth above and insurance requirements set forth herein protecting the City and Contractor. Contractor shall be responsible for executing any agreements with its Subcontractor and obtaining certificates of insurance verifying the insurance requirements.

10. Evidence of Insurance. Contractor will provide to the City within 10 business days after receipt of the executed Agreement, and prior to commencing any Work or Services under this Contract, suitable evidence of insurance in the form of certificates of insurance and a copy of the declaration page(s) of the insurance policies as required by this Contract, issued by Contractor's insurance insurer(s) as evidence that policies are placed with acceptable insurers as specified herein and provide the required coverages, conditions and limits of coverage specified in this Contract and that such coverage and provisions are in full force and effect. Confidential information such as the policy premium may be redacted from the declaration page(s) of each insurance policy, provided that such redactions do not alter any of the information required by this Contract. The City shall reasonably rely upon the certificates of insurance and declaration page(s) of the insurance policies as evidence of coverage but such acceptance and reliance shall not waive or alter in any way the insurance requirements or obligations of this Contract. If any of the policies required by this

Contract expire during the life of this Contract, it shall be Contractor's responsibility to forward renewal certificates and declaration page(s) to the City 30 Days prior to the expiration date. All certificates of insurance and declarations required by this Contract shall be identified by referencing this Contract. A \$25.00 administrative fee shall be assessed for all certificates or declarations received without a reference to this Contract. Additionally, certificates of insurance and declaration page(s) of the insurance policies submitted without referencing this Contract will be subject to rejection and may be returned or discarded. Certificates of insurance and declaration page(s) shall specifically include the following provisions:

a. The City, its agents, representatives, officers, directors, officials and employees are Additional Insureds as follows:

(i) Commercial General Liability - Under Insurance Services Office, Inc., ("ISO") Form CG 20 10 03 97 or equivalent.

(ii) Auto Liability - Under ISO Form CA 20 48 or equivalent.

(iii) Excess Liability - Follow Form to underlying insurance.

b. Contractor's insurance shall be primary insurance with respect to performance of this Contract.

c. All policies, except for Professional Liability, including Workers' Compensation, waive rights of recovery (subrogation) against City, its agents, representatives, officers, officials and employees for any claims arising out of Work or Services performed by Contractor under this Contract.

d. ACORD certificate of insurance form 25 (2014/01) is preferred. If ACORD certificate of insurance form 25 (2001/08) is used, the phrases in the cancellation provision "endeavor to" and "but failure to mail such notice shall impose no obligation or liability of any kind upon the company, its agents or representatives" shall be deleted. Certificate forms other than ACORD form shall have similar restrictive language deleted.

11. Endorsements. Contractor shall provide the City with the necessary endorsements to ensure City is provided the insurance coverage set forth in this Subsection.

B. Required Insurance Coverage.

1. Commercial General Liability. Contractor shall maintain "occurrence" form Commercial General Liability insurance with an unimpaired limit of not less than \$1,000,000 for each occurrence, \$2,000,000 Products and Completed Operations Annual Aggregate and a \$2,000,000 General Aggregate Limit. The policy shall cover liability arising from premises, operations, independent contractors, products-completed operations, personal injury and advertising injury. Coverage under the policy will be at least as broad as ISO policy form CG 00 010 93 or equivalent thereof, including but not limited to, separation of insured's clause. To the fullest extent allowed by law, for claims arising out of the performance of this Contract, the City, its agents, representatives, officers, officials and employees shall be cited as an Additional Insured under ISO, Commercial General Liability Additional Insured Endorsement form CG 20 10 03 97, or equivalent, which shall read "Who is an Insured (Section II) is amended to include as an insured the person or organization shown in the Schedule, but only with respect to liability arising out of "your work" for that insured by or for you." If any Excess insurance is utilized to fulfill the requirements of this subsection, such Excess insurance shall be "follow form" equal or broader in coverage scope than underlying insurance.

2. Vehicle Liability. Contractor shall maintain Business Automobile Liability insurance with a limit of \$1,000,000 each occurrence on Contractor's owned, hired and non-owned vehicles assigned to or used in the performance of the Contractor's Work or Services under this Contract. Coverage will be at least as broad as ISO coverage code "1" "any auto" policy form CA 00 01 12 93 or equivalent thereof. To the fullest extent allowed by law, for claims arising out of the performance of this Contract, the City, its agents, representatives, officers, directors, officials and employees shall be cited as an Additional Insured under ISO Business Auto policy Designated Insured Endorsement form CA 20 48 or equivalent. If any Excess insurance is utilized to fulfill the requirements of this subsection, such Excess insurance shall be "follow form" equal or broader in coverage scope than underlying insurance.

3. Professional Liability. If this Contract is the subject of any professional Services or Work, or if the Contractor engages in any professional Services or Work in any way related to performing the Work under this Contract, the Contractor shall maintain Professional Liability insurance covering negligent errors and omissions arising out of the Services performed by the Contractor, or anyone employed by the Contractor, or anyone for whose negligent acts, mistakes, errors and omissions the Contractor is legally liable, with an unimpaired liability insurance limit of \$2,000,000 each claim and \$2,000,000 annual aggregate.

4. Workers' Compensation Insurance. If Contractor employs anyone who is required by law to be covered by workers' compensation insurance, Contractor shall maintain Workers' Compensation insurance to cover obligations imposed by Federal and State statutes having jurisdiction over Contractor's employees engaged in the performance of Work or Services under this Contract and shall also maintain Employers Liability Insurance of not less than \$500,000 for each accident, \$500,000 disease for each employee and \$1,000,000 disease policy limit.

5. Builder's Risk Insurance. Unless expressly waived by the City Manager in a written addendum or amendment to this Contract, the Contractor shall be responsible for purchasing and maintaining insurance to protect the Project from perils of physical loss. The insurance shall provide for the full cost of replacement for the entire Project at the time of any loss. The insurance shall include as named insureds the City, the Contractor, the Contractor's Subcontractors and sub-subcontractors and shall insure against loss from the perils of fire and all-risk coverage for physical loss or damage due to theft, vandalism, collapse, malicious mischief, transit, flood, earthquake, testing, resulting loss arising from defective design, negligent workmanship or defective material. The Contractor shall increase the coverage limits as necessary to reflect changes in the estimated replacement cost.

C. Cancellation and Expiration Notice. Insurance required herein shall not expire, be canceled, or be materially changed without 30 Days' prior written notice to the City.

3.14 Performance Bond. The Contractor shall be required to furnish non-revocable security binding the Contractor to provide faithful performance of this Contract in the amount of one hundred percent (100%) of the total Contract Price payable to the City. Performance security shall be in the form of a performance bond, certified check, cashier's check or irrevocable letter of credit. This security must be in the possession of the Engineer within 10 business days after receipt of the executed Agreement from the City. If the Contractor fails to execute and deliver the security instrument as required, the Contractor may be found in default and this Contract terminated by the City. In case of default the City reserves all rights. All performance bonds shall be executed in the form attached hereto as Exhibit H, duly executed by the Contractor as Principal and having as Surety thereon a Surety company approved by the City and holding a Certificate of Authority to transact surety business in the State of Arizona by the Arizona Department of Insurance. Individual sureties are unacceptable. All Insurers and Sureties shall have, at the time of submission of the performance bond, an A.M. Best's Key Rating Guide of "A-" or better as currently listed in the most recent Best Key Guide, published by the A.M. Best Company.

3.15 Payment Bond. The Contractor shall be required to furnish non-revocable security for the protection of all persons supplying labor and material to the Contractor or any Subcontractor for the performance of any Work

related to this Contract. Payment security shall be in the amount of one hundred percent (100%) of the total Contract Price and be payable to the City. Payment security shall be in the form of a payment bond, certified check, cashier's check or irrevocable letter of credit. This security must be in the possession of the Engineer within 10 business days after receipt of the executed Agreement from the City. If the Contractor fails to execute and deliver the security instrument as required, the Contractor may be found in default and this Contract terminated by the City. In case of default the City reserves all rights. All payment bonds shall be executed in the form attached hereto as Exhibit I, duly executed by the Contractor as Principal and having as Surety thereon a Surety company approved by the City and holding a Certificate of Authority to transact surety business in the State of Arizona by the Arizona Department of Insurance. Individual sureties are unacceptable. All Insurers and Sureties shall have, at the time of submission of the payment bond, an A.M. Best's Key Rating Guide of "A-" or better as currently listed in the most recent Best Key Guide, published by the A.M. Best Company.

3.16 Changes in the Work. The City may, without invalidating this Contract, order changes in the Work consisting of additions, deletions or other revisions to this Contract and the Contract Price and the Contract Time shall be adjusted as provided below. The Contract Price and/or the Contract Time may only be changed by the City's written approval authorizing said change, and said changes shall be performed under the applicable conditions of this Contract. The Contract Price shall be adjusted as a result of a change in the Work as follows:

A. Additions. When the City increases the scope of the Work, Contractor will perform the increased work pursuant to Contractor's unit prices set forth on the Price Sheet.

B. Deletions. When the City decreases the Work resulting in a decrease in Contractor's quantity of the Work, the City shall be allowed a decrease in the Contract Price amounting to the quantity of the deleted Work multiplied by the Contractor's unit prices.

C. Estimating. Whenever the City is considering a change to the Work, Contractor shall promptly, and in any event within five business days, estimate the price of the contemplated additional or deleted Work in good faith and as accurately as is then-feasible. The estimate shall show quantities of labor, material and equipment and shall be pursuant to the rates set forth in the Contractor's Bid.

3.17 Substantial Completion. When the Contractor considers that the Work is Substantially Complete, the Engineer shall prepare and submit to the Contractor a comprehensive list of Punch List items, which the Contractor may edit and supplement. The Contractor shall proceed promptly to complete and correct Punch List items. Failure to include an item on the Punch List does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents. The City shall determine when the Project and the Contractor's Work is substantially complete. "Substantial Completion" means construction has been completed in accordance with the Contract Documents to the extent that the City can use or occupy the entire Project, or the designated portion of the Project, for the use intended without any outstanding, concurrent construction at the site, except as may be required to complete or correct Punch List items. A prerequisite for Substantial Completion, over and above the extent of construction completion required, is receipt by the City of acceptable documentation that Contractor has successfully tested and demonstrated all systems for their intended use. The date of Substantial Completion shall be confirmed by a Certificate of Substantial Completion signed by the City and Contractor. The Certificate of Substantial Completion signed by the City and Contractor shall state the respective responsibilities of the City and the Contractor for security, maintenance, utilities, damage to the Work and insurance. The Certificate of Substantial Completion shall also include the Punch List as created by the Contractor and modified by the City and establish the time for completion and correction of all Punch List items. If the City and the Contractor cannot agree as to the appropriate date of Substantial Completion, such issue shall be submitted for dispute resolution in accordance with the procedures set forth in Article III, Part B below. Notwithstanding such disagreement, the Contractor shall diligently proceed with completion of the Punch List items.

3.18 Final Completion. The City shall determine when the Project and the Contractor's Work is finally completed. "Final Completion" means completion of the Project by the Contractor in accordance with the Contract Documents, certified to the City by the Contractor. Final Completion shall be achieved only upon the City's written

acceptance of (A) the construction, (B) all testing, (C) demonstration by Contractor that the Work functions as required by the Contract Documents and meets all Contract requirements, (D) resolution of all outstanding system deficiencies and Punch List items, if any, (E) delivery of all as-built documentation, drawings, completed record documents (with revisions made after Substantial Completion), annotated submittals and design document deliverables, (F) submittal, acceptance, and delivery of the one hundred percent (100%) complete O&M manuals, (G) delivery of warranties, inspection certificates, bonds and all other required documents, (H) all pre-requisites for final payment and (I) submittal of Contractor's request for final payment and acceptance enclosing all required documentation. Upon Final Completion the Engineer shall issue a Certificate of Final Completion to the Contractor on behalf of the City. Following receipt of payment from the City, the Contractor shall make all payments due to the Subcontractors.

3.19 Payments to Contractor. Payment shall be conditioned upon Contractor's compliance with the payment terms and conditions set forth below. Contractor expressly acknowledges and agrees that (A) the Contract Price is an estimated amount based upon an engineer's estimate of the quantities of the Materials deemed necessary to perform the Work and (B) the amount of any payment to be made pursuant to this Contract shall be determined by the field-measured quantities of Materials actually installed by Contractor. Material or equipment delivered to the Project by or on behalf of Contractor shall not constitute material or equipment furnished in the performance of the Work until same has been incorporated into the improvements constituting the Project. Payment shall not constitute acceptance by the City or evidence thereof of any Work performed.

A. Progress Payments.

1. On or before the 15th day of each month after construction has commenced, the Contractor shall submit to the City an application for payment consisting of the cost of the Work performed up to the end of the prior month, including the cost of material stored on the site or at other locations approved by the City. The application shall be deemed approved and certified for payment seven Days after it is submitted unless before that time the City prepares and issues a specific written finding setting forth those items in detail that are not approved for payment under this Contract. Prior to submission of the next application for payment, the Contractor shall make available at the request of the City a statement accounting for the disbursement of funds received under the previous application for purposes of audit. The extent of such statement shall be as agreed upon between the City and Contractor.

2. Within 14 Days after approval of each monthly application for payment, the City shall pay directly to the Contractor the appropriate amount for which application for payment is made, less amounts (a) previously paid by the City, (b) sufficient to pay expenses the City reasonably expects to incur in correcting deficiencies which are set forth in writing and provided to the Contractor and (c) any retainage as set forth in subsection 3.19(B) below.

3. The City's progress payment, occupancy or use of the Project, whether in whole or in part, shall not be deemed as acceptance of any Work not conforming to the requirements of this Contract.

4. Upon Substantial Completion of the Work, the City shall pay the Contractor the unpaid balance of the cost of the Work, less a sum equal to the Contractor's estimated cost of completing any unfinished items as agreed to between the City and the Contractor as to extent and time for Final Completion. The City thereafter shall pay the Contractor monthly the amount retained for unfinished items as each item is completed.

B. Retainage. With respect to the Work, the City shall retain ten percent (10%) of the amount of each estimate until Final Completion and acceptance of all Material, equipment and Work covered by this Contract.

1. Any securities submitted by Contractor in lieu of retainage as may be allowed by law, shall be deposited in an escrow account by the City. The City shall be listed as payee or multiple payees with Contractor on all such securities.

2. When the Work is fifty percent (50%) completed, one-half of the amount retained including any securities substituted pursuant to subsection 3.19 (B)(1) shall be paid to the Contractor upon the Contractor's request, provided the Contractor is making satisfactory progress on the Work and there is no specific cause or claim requiring a greater amount to be retained. After the construction Work is fifty percent (50%) completed, no more than five percent (5%) of the amount of any subsequent progress payments made under this Contract may be retained, provided the Contractor is making satisfactory progress on the Project. If, at any time, the City determines satisfactory progress is not being made, ten percent (10%) retention shall be reinstated for all progress payments made under this Contract after the determination.

C. Payment for On-site and Off-site Stored Materials. Payment shall be made on account of Materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. Payment may similarly be made for Materials and equipment suitably stored off the site, conditioned upon the Contractor furnishing evidence to the City that (1) title to the Materials and equipment will pass to the City upon payment therefore, (2) the Materials and equipment are adequately safeguarded and insured, including during transit from the off-site location to the Project site and (3) such other matters as the City may reasonably request in order to protect its interests. With the prior, written approval of the City, Contractor may advance order the bulk delivery of Materials to be incorporated into the Work over the course of this Contract. Upon delivery and receipt of supplier invoice, the City shall pay for the bulk delivery, either directly to the Contractor or to the vendor or by joint check to Contractor and vendor, and shall receive a full release for the amount paid from vendor and Contractor. Contractor agrees to assume full responsibility for the safekeeping of all such Materials and shall guarantee to the City that such Materials shall remain safe from theft or damage from any and all causes (unless caused by the sole negligence of the City). Contractor shall immediately replace, repair or restore said Materials to their original condition so as to not cause any delay in the Work, and Contractor shall indemnify and hold harmless the City for, from and against any and all loss, cost, liability or expense resulting from any loss or damage to any of the Materials described herein from any cause unless due to the City's sole negligence. Should the City have reason to believe Contractor is not properly safeguarding any of the Materials, the City shall have the right, but not the affirmative duty, to immediately take such steps as it deems necessary to do so, including removing Contractor from the job, replacing any Materials or expending any sums to properly carry out Contractor's responsibility hereunder, and any amounts so expended shall be billed back to Contractor or deducted from any sums then or thereafter due to Contractor. Contractor shall fully insure all Materials stored on site as required by the City, and if such insurance is not obtained due to a lack of insurable interest, the City shall have the right to obtain such insurance and charge the amount thereof back to Contractor or deduct said amount from any funds then or thereafter due to Contractor.

D. Title to Construction Work. The Contractor warrants that title to all Work covered by an application for payment shall pass to the City no later than the time of payment. The Contractor further warrants that upon submittal of an application for payment, all Work for which applications for payment have been previously issued and payments received from the City shall be free and clear of liens, claims, security interests or encumbrances in favor of the Contractor, Subcontractors, material suppliers, or other persons or entities making a claim by reason of having provided labor, Materials and equipment relating to the Work.

E. Final Payment.

1. Final payment, consisting of the unpaid balance of the cost of the Work shall be due and payable at Final Completion and acceptance by the City. Before issuance of final payment, the City may request satisfactory evidence that all payrolls, Materials bills and other indebtedness connected with the Work have been paid or otherwise satisfied.

2. In making final payment the City waives all claims except for:

- a. Outstanding liens.
- b. Improper workmanship or defective Materials.
- c. Work not in conformance with this Contract or Work not completed.
- d. Terms of any special warranties required by this Contract.
- e. Delivery to City of all warranties, operation and maintenance manuals, “AS-BUILT” record drawings and other documents as required by this Contract.
- f. Right to audit Contractor records for a period of three years.
- g. Claims previously made in writing and which remain unsettled.

3. Acceptance of final payment by the Contractor shall constitute a waiver of affirmative claims by the Contractor, except those previously made in writing and identified as unsettled at the time of final payment.

F. Warranty. Contractor or its assignee shall give to the City a one-year warranty against deficiencies in material and workmanship for all Work on the Project or other such warranty as required by the City Engineer, which warranty shall begin on the date that the City accepts the Work as provided in this Section. Any material deficiencies in material or workmanship identified by City staff during the one-year warranty period shall be brought to the attention of the Contractor or its assignee that provided the warranty, which shall promptly remedy or cause to be remedied such deficiencies to the reasonable satisfaction of the City Engineer. Continuing material deficiencies in a particular portion of the Work shall be sufficient grounds for the City to require (1) an extension of the warranty for an additional one-year period and (2) the proper repair of or the removal and reinstallation of, that portion of the Work that is subject to such continuing deficiencies. Regardless of whether the applicable warranty period has expired, the Contractor agrees to repair any damage to the Work caused by Contractor’s construction activities on the Property. Nothing contained herein shall prevent the City or Contractor from seeking recourse against any other third party for damage to the Work caused by such third party.

3.20 Offset.

A. Offset for Damages. In addition to all other remedies at law or equity, the City may offset from any money due to the Contractor any amounts Contractor owes to the City for damages resulting from breach or deficiencies in performance or breach of any obligation under this Contract.

B. Offset for Delinquent Fees or Taxes. The City may offset from any money due to the Contractor any amounts Contractor owes to the City for delinquent fees, transaction privilege use taxes and property taxes, including any interest or penalties.

PART B - PERFORMANCE OF THE WORK

3.21 Project Videotape. The Contractor shall produce and provide a project videotape to the Engineer as required by MAG Supplement Section 105.5.3. All costs associated with the Project videotape produced in accordance with this Section shall be deemed incidental.

3.22 Soil and Subsurface Conditions. In addition to conformance to MAG Specifications, Section 102.4 (Examination of Plans, Special Provisions and Site Work), the Contractor shall make its own determinations as to the soil and subsurface conditions, including rock, caliche and ground water and shall complete the Work in whatever material and under whatever conditions may be encountered or created, without extra cost to the City pursuant to the provisions of the MAG Supplement Section 102.4.1.

3.23 Work Scheduling. Time is of the essence for this Contract. Contractor shall provide the Engineer with any requested scheduling information and a proposed schedule for performance of the Work within the Contract Time in a form acceptable to the Engineer and approved by the Engineer, in his sole and absolute discretion, providing for commencement and completion of the Work (the "Schedule"). The Schedule shall include the date for Substantial Completion of the Work. The Engineer may revise the Schedule during the course of the Work. Contractor, to induce the City to enter into this Contract, has and does hereby agree to fully perform and complete the Work for the Contract Price within the Schedule.

3.24 Contractor's Representative. The Contractor or his authorized representative shall be present at the Work site at all times during working hours. Instructions and information provided by the Engineer to the Contractor's representative shall be considered as having been given to the Contractor, per MAG Supplement Section 105.5.2.

3.25 Prosecution of the Work. The Contractor shall prosecute the Work so that the portion of the Work completed at any point in time shall be not less than as required by the Schedule. If the delay is an Inexcusable Delay, as defined below, the Contractor shall prepare a recovery schedule for the Engineer's review and approval, showing how the Contractor will compensate for the delays and achieve Substantial Completion by the date(s) shown on the Schedule. If the Contractor is unable to demonstrate how it will overcome Inexcusable Delays, the Engineer may order the Contractor to employ such extraordinary measures as are necessary to bring the Work into conformity with the Substantial Completion date(s) set forth therein, the costs of which shall be included as part of the Cost of the Work. If the delay is an Excusable Delay, as defined below, the Engineer shall either (A) authorize an equitable extension in the Schedule to account for such delay, and equitably adjust the contract sum on account of such delay or (B) request that the Contractor prepare a recovery schedule showing how (if possible) the Contractor can achieve Substantial Completion by the applicable date shown on the Schedule, and equitably adjust the Contract Price in accordance with the provisions of this Contract on account of any extraordinary activities required of the Contractor on account of such recovery schedule.

3.26 Extensions of Time.

A. Allowable Extensions. An extension in the scheduled date of Substantial Completion will only be granted in the event of Excusable Delays affecting the Schedule for the Work. The Contractor shall be entitled to general condition costs and extra costs related to the Excusable Delay for idle labor, equipment inefficiency and lost productivity of the performance of the Work. The Contractor must submit evidence reasonably satisfactory to the City substantiating such costs. Such adjustment to the Price and Substantial Completion date shall be issued in a Change Order or Contract amendment, as applicable.

B. Excusable Delay. To the extent any of the following events results in an actual delay in the Work, such shall constitute an "Excusable Delay" (to the extent not set forth below, a delay will be considered an "Inexcusable Delay"):

1. Delays resulting from Force Majeure.
2. Differing, unusual or concealed site conditions that could not reasonably have been anticipated by the Contractor in preparing the Schedule, including, without limitation, archaeological finds and unusual soil conditions (including rock or other geological conditions), underground foundations, abandoned utility lines and water conditions.
3. Delays resulting from the existence or discovery of Hazardous Materials on the Site not brought to the Site by the Contractor.
4. Delays resulting from changes in Applicable Laws occurring after the date of execution of this Contract.

5. Delays occurring due to the acts or omissions of the City and those within the control of the City.

6. Delays occurring due to the acts or omissions of a utility, so long as Contractor has coordinated with the utility causing the delay and the delay occurs despite reasonable steps taken by Contractor to avoid the delay.

7. Delays resulting from weather conditions that make it unreasonable to perform the Work in accordance with the Schedule; provided, however, that Contractor's Schedule shall be deemed to include fourteen days for weather delays (the "Expected Delay Days"), regardless of whether such weather delays are specifically set forth in the Schedule. Contractor shall notify the City within 24 hours in writing of a weather-related delay. If Contractor fails to give the required 24-hour notice, no such weather delay will be subtracted from the Expected Delay Days. Weather delays shall not be deemed "Excusable" unless all of the Expected Delay Days have been exhausted.

8. Delays resulting from Additional Work (defined below) that cannot be performed concurrently with the Work on the Schedule.

C. Required Notice. In order to obtain an extension of time due to an Excusable Delay, the Contractor shall comply with the following requirements. The Contractor shall notify the Engineer in writing of the Excusable Delay as soon as practicable, but in no event more than seven Days after the Contractor becomes aware of the occurrence of the Excusable Delay. Such notice shall describe the Excusable Delay and shall state the approximate number of Days the Contractor expects to be delayed. After the cessation of the Excusable Delay, the Contractor shall notify the Engineer of the number of Days the Contractor believes that its activities were in fact delayed by the Excusable Delay. In the event that the delay arises as a result of a Change Order request by the City, the request for an extension of time contained in the resulting Change Order proposal shall be deemed sufficient for purposes of this subsection.

D. Determination. Within 10 Days after cessation of an event giving rise to either an Excusable Delay or Inexcusable Delay, the parties will use good faith efforts to agree on the extent to which the Work has been delayed and whether the delay is an Excusable Delay or an Inexcusable Delay. In the absence of agreement between the parties as to the then-current status of Excusable Delays and Inexcusable Delays, the Engineer will provide the Contractor with written notice of Engineer's determination of the respective number of Days of Excusable Delay and/or Inexcusable Delay. The Engineer's determination may be issued at such time as the Engineer deems reasonable, but not later than 10 Days after receipt by the Engineer of the Contractor's written request for such determination. The Contractor shall not, however, deem an issuance by the Engineer of such a determination to be a concurrence of the matters set forth in the Contractor's request. The Contractor may invoke the dispute resolution procedures set forth in Part D below with respect to such determination.

E. Concurrent Delay. To the extent the Contractor is entitled to an extension of time due to an Excusable Delay, but the performance of the Work would have been suspended, delayed or interrupted by the fault or neglect of the Contractor or by an Inexcusable Delay, the Contractor shall not be entitled to any additional costs for the period of such concurrency.

3.27 Liquidated Damages. It is expressly understood that should Contractor fail to complete the Work covered hereby within the Contract Time, the Contractor agrees to pay and shall pay to the City upon request therefore for each Day of delay beyond the original or revised scheduled time of completion of Contractor's Work as liquidated damages, and not as a penalty, in the amount per day as set forth in MAG Specifications for each Day of delay.

A. Prior to Termination. If this Contract is not terminated, the Contractor shall continue performance and be liable to the City for the liquidated damages until the Work is complete.

B. After Termination. In the event the City exercises its right of termination, the Contractor shall be liable to the City for any excess costs and, in addition, for liquidated damages until such time as the City may reasonably obtain delivery or performance of similar Services.

3.28 Suspension by the City for Convenience.

A. City Determination. The City may order the Contractor in writing to suspend, delay or interrupt all or any part of the Work without cause for such period of time as the City may determine to be appropriate for its convenience.

B. Contract Adjustments. Adjustments caused by suspension, delay or interruption shall be made for increases in the applicable contract sum and/or the date(s) of Substantial Completion. No adjustment shall be made if the Contractor is or otherwise would have been responsible for the suspension, delay or interruption of the Work, or if another provision of this Contract is applied to render an equitable adjustment.

3.29 Termination by the City for Convenience. The City may, upon 30 Days' written notice to the Contractor, terminate this Contract, in whole or in part, for the convenience of the City without prejudice to any right or remedy otherwise available to the City. Upon receipt of such notice, the Contractor shall immediately discontinue all Services affected unless such notice directs otherwise. In the event of a termination for convenience of the City, the Contractor's sole and exclusive right and remedy shall be payment for all Work performed through the date of termination. The Contractor shall not be entitled to be paid any amount as profit for unperformed Services or consideration for the City's termination by convenience.

3.30 Termination by the City for Cause.

A. Default; Cure. If the Contractor refuses or fails to supply sufficient properly skilled staff or proper Materials, or disregards laws, ordinances, rules, regulations, or orders of any public authority jurisdiction, or otherwise substantially violates or materially breaches any term or provision of this Contract, and such nonperformance or violation continues without cure for 15 Days after the Contractor receives written notice of such nonperformance or violation from the City, then the City may, without prejudice to any right or remedy otherwise available to the City, terminate this Contract.

B. Substitute Performance. Upon termination of this Contract by the City, the City shall be entitled to furnish or have furnished the Services to be performed hereunder by the Contractor by whatever method the City may deem expedient. Also, in such case, the Contractor shall not be entitled to receive any further payment until completion of the Work, and the total compensation to the Contractor under this Contract shall be the amount that is equitable under the circumstances. If the City and the Contractor are unable to agree on the amount to be paid under the foregoing sentence, the City shall fix an amount, if any, that it deems appropriate in consideration of all of the circumstances surrounding such termination, and shall make payment accordingly. The Contractor may dispute the City's assessment of the termination amount pursuant to the dispute resolution process set forth in in Part D of this Contract.

C. Contractor Insolvency. Upon the appointment of a receiver for the Contractor, or if the Contractor makes a general assignment for the benefit of creditors, the City may terminate this Contract, without prejudice to any right or remedy otherwise available to the City, upon giving three business days' written notice to the Contractor. If an order for relief is entered under the bankruptcy code with respect to the Contractor, the City may terminate this Contract by giving three business days' written notice to the Contractor unless the Contractor or the trustee completes all of the following:

1. Promptly cures all breaches within such three-day period.
2. Provides adequate assurances of future performance.
3. Compensates the City for actual pecuniary loss resulting from such breaches.

4. Assumes the obligations of the Contractor within the established time limits.

3.31 Contract Subject to Appropriation. The City is obligated only to pay its obligations set forth in this Agreement as may lawfully be made from funds appropriated and budgeted for that purpose during the City's then current fiscal year. The City's obligations under this Agreement are current expenses subject to the "budget law" and the unfettered legislative discretion of the City concerning budgeted purposes and appropriation of funds. Should the City elect not to appropriate and budget funds to pay its Agreement obligations, this Agreement shall be deemed terminated at the end of the then-current fiscal year term for which such funds were appropriated and budgeted for such purpose and the City shall be relieved of any subsequent obligation under this Agreement. The parties agree that the City has no obligation or duty of good faith to budget or appropriate the payment of the City's obligations set forth in this Agreement in any budget in any fiscal year other than the fiscal year in which this Agreement is executed and delivered. The City shall be the sole judge and authority in determining the availability of funds for its obligations under this Agreement. The City shall keep Contractor informed as to the availability of funds for this Agreement. The obligation of the City to make any payment pursuant to this Agreement is not a general obligation or indebtedness of the City. Contractor hereby waives any and all rights to bring any claim against the City from or relating in any way to the City's termination of this Agreement pursuant to this section.

3.32 Additional Work, Materials and/or Overtime. Contractor expressly agrees that if overtime or additional workers or materials are necessary to meet the Schedule, that such overtime will be performed or additional workers or materials will be procured by the Contractor, and the additional expense thereof shall be borne by Contractor unless the delay requiring overtime was directly caused by the City, in which event Contractor shall be entitled to compensation for such overtime Work. If the City requests Contractor to perform additional Work in connection with the Project ("Additional Work"), Contractor shall charge the City a negotiated fixed amount for the Additional Work. In the event a fixed amount cannot be negotiated, Contractor shall invoice the City on a time and materials basis for the Additional Work at the unit prices set forth in the price sheet.

3.33 No Damage for Delay or Additional Work by the City. Contractor shall adjust its operations to conform to any progress schedule changes and hereby waives and releases the City from any liability for damages or expenses that may be caused to or sustained by Contractor by reason of such changes or by reason of delays in the Work, whether caused in whole or in part by conduct on the part of the City, including without limitation, any breach of this Contract or delays by other contractors or Subcontractors. Contractor's exclusive remedy in the event of delay or Additional Work by the City shall be an extension of time hereunder to complete the Work.

3.34 Risk of Loss. Contractor shall assume the risk of loss occasioned by fire, theft or other damage to Materials, machinery, apparatus, tools and equipment relating to the Work prior to actual installation in final place on the Project and acceptance by the City. Contractor shall be responsible for damage to the Materials, machinery, apparatus, tools, equipment and property of the City and other contractors resulting from the acts or omissions of its Subcontractors, employees, agents, representatives Subcontractors, and for payment of the full costs of repair or replacement of any said damage.

3.35 Protection of Finished or Partially Finished Work. The Contractor shall properly guard and protect all finished or partially finished Work and shall be responsible for the same until the entire Contract is completed and accepted by the Engineer. The Contractor shall turn over the entire Work in full accordance with this Contract before final settlement shall be made.

3.36 Character and Status of Workers. Only skilled foremen and workers shall be employed on portions of the Work requiring special qualifications. When required by the Engineer, the Contractor shall discharge any person who is, in the opinion of the Engineer, disorderly, dangerous, insubordinate, incompetent or otherwise objectionable. The Contractor shall indemnify and hold harmless the City from and against damages or claims for compensation that may occur in the enforcement of this Section. The Contractor shall be responsible for ensuring the legal working status of its employees and its Subcontractor's employees. The Contractor agrees that once assigned to Work under this Contract, key personnel shall not be removed or replaced without written notice to the

City. If key personnel are not available for Work under this Contract for a continuous period exceeding 30 Days, or are expected to devote substantially less effort to the Work than initially anticipated, the Contractor shall immediately notify the City and shall, subject to the concurrence of the City, replace such personnel with personnel of substantially equal ability and qualifications.

3.37 Work Methods. The methods, equipment and appliances used on the Work shall be such as will produce a satisfactory quality of Work, and shall be adequate to complete this Contract within the Contract Time. Except as is otherwise specified in this Contract, the Contractor's procedure and methods of construction may, in general, be of its own choosing, provided such methods (A) follow best general practice and (B) are calculated to secure results which will satisfy the requirements of this Contract. The Work covered by this Contract shall be carefully laid out in advance and performed in a manner to minimize interference with normal operation and utilization of the City's right-of-way. The Contractor shall exercise caution during the course of this Work to avoid damage to all known existing or possible unknown existing underground utilities. It shall conduct its operations in such a manner as to avoid injury to its personnel and to avoid damage to all utilities. Any damage done will be repaired without delay and at the expense of the Contractor.

3.38 Safety Fencing Requirement for Trenches and Excavations. The Contractor shall provide safety construction fencing around all open trenches and excavations during all non-working hours. In addition, the Contractor shall provide safety fencing around the Project site during working hours in order to ensure public safety. The Contractor shall provide for the safety and welfare of the general public by adequately fencing all excavations and trenches that are permitted by the Engineer to remain open when construction is not in progress. Fencing shall be securely anchored to approved steel posts located not less than six feet on center, having a minimum height of six feet, and shall consist of wire mesh fabric of sufficient weight and rigidity to adequately span a maximum supporting post separation of six feet. The fencing, when installed about the periphery of excavations and trenches, shall form an effective barrier against intrusion by the general public into areas of construction. The Contractor, at all times when construction is not in progress, shall be responsible for maintaining the fencing in good repair, and upon notification by the Engineer, shall take immediate action to rectify any deficiency. Prior to the start of any excavation or trenching required for the execution of the proposed Work, the Contractor shall submit to the Engineer for approval, detailed plans showing types of materials and methods of fabrication for the protective fencing. There will be no separate measurement or payment for furnishing, installing, or maintaining protective fencing. The cost shall be considered incidental to the cost of the pipe, bridge, and any other structures for which trenching is necessary.

3.39 Plans and Shop Drawings, Samples and Substitution of Materials. All submittals shall conform to MAG Specifications, Section 105.2 (Plans and Drawings) as modified by the MAG Supplement. Contractor shall furnish, within three business days following request therefore by the City, detailed drawings of the Work, samples of Materials and other submittals required for the performance or coordination of the Work. Substitutions shall be equal or superior to Materials specified in the Contract Documents, shall be clearly identified on submittals as "proposed substitutions" and shall be approved by the City in accordance with Section 2.4 above. Contractor shall be fully responsible for the adequacy, completeness and promptness of all such submittals. Materials shall not be furnished to the jobsite unless same is in strict compliance with the Specifications or otherwise approved in writing by the City. Approval by the City shall not relieve Contractor of full responsibility for compliance with scope, intent and performance in accordance with this Contract.

3.40 Cooperation with Utilities. The Contractor shall comply with the requirements of MAG Specifications 105.6, as modified by the MAG Supplement.

3.41 Sampling and Testing. Sampling and testing shall conform to the requirements of the MAG Specifications, Section 106, as modified by the MAG Supplement.

3.42 Cooperation between Contractors. The Contractor shall comply with the requirements of MAG Specifications, Section 105.7, as modified by the MAG Supplement.

3.43 Outdoor Construction Time Restrictions. Unless otherwise permitted by the Engineer, construction will be restricted as listed in the following table:

May 1 – October 31	November 1 – April 30
5:00 a.m. to 7:00 p.m.	6:00 a.m. to 7:00 p.m.

Construction Work shall not begin Work prior to 7:00 a.m. and shall stop by 7:00 p.m. on Saturdays, Sundays and all City, State and Federal holidays.

3.44 Construction Survey. Construction survey and as-built record drawings shall conform to the requirements of the MAG Specifications, Section 105.8 (Construction Stakes, Lines and Grades), as modified by the MAG Supplement.

3.45 Survey Control Points. Existing survey markers (either brass caps or iron pipes) shall be protected by the Contractor or removed and replaced under direct supervision of the Engineer. Survey monuments shall be constructed to the requirements of MAG Specifications, Section 405. Lot corners shall not be disturbed without knowledge and consent of the property owner. The Contractor shall replace benchmarks, monuments or lot corners moved or destroyed during construction at no expense to the City. Contractor and its sureties shall be liable for correct replacement of disturbed survey benchmarks except where the City elects to replace survey benchmarks using its own forces.

3.46 Stockpile of Materials.

A. Engineer Approval. The Contractor may, if approved by the Engineer, place or stockpile Materials in the public right-of-way provided such Materials do not prevent access to adjacent properties or prevent compliance with traffic regulations.

B. No Traffic Interference. Traffic shall not be required to travel over stockpiled Materials and proper dust control shall be maintained.

3.47 Excess Materials. When excavations are made, resultant loose earth shall be (A) utilized for filling by compacting in place or (B) disposed of off-site. Excess or unsuitable material, broken asphaltic concrete and broken portland cement concrete excavated from the right-of-way shall be removed from the Project Site and disposed of by the Contractor. Disposal of material within the Avondale City Limits or Planning Area must be approved by the Engineer. Waste material shall not be placed on private property without express permission of the property owner. The Contractor shall, at all times, keep the premises free from accumulation of waste materials or rubbish caused by its operations. At the completion of the Work, Contractor shall remove all equipment, tools and surplus materials, and shall completely clean the premises, removing and disposing of all debris and rubbish and cleaning all stains, spots, marks, dirt, smears or other blemishes. When the Work premises are turned over to the City, they shall be thoroughly clean and ready for immediate use. Clean-up shall include removal of all excess pointing mortar materials within pipes and removal of oversized rocks and boulders left after finish grading. The Contractor shall provide for the legal disposal of all waste products and debris and shall make necessary arrangements for such disposal.

3.48 Dust Control and Water. Contractor shall implement dust control measures in accordance with MAG Specifications, Section 104.1, and the MAG Supplement. Installation and removal of fire hydrant meters should be scheduled at least three business days in advance through the City Water Billing Department. Watering shall conform to the provisions of MAG Specifications, Section 225. A deposit and installation fee in amounts set forth in the City’s fee schedule is required for each meter. The cost of the water is at the prevailing rate.

3.49 Temporary Sanitary Facilities. The Contractor shall provide ample toilet facilities with proper enclosures for the use of workers employed on the Work site. Toilet facilities shall be installed and maintained in conformity with all applicable State and local laws, codes, regulations and ordinances and shall be properly lit and

ventilated, and kept clean at all times. Adequate and satisfactory drinking water shall be provided at all times and under no circumstances and under no conditions will the use of common cups be permitted. The Contractor must supply sanitary drinking cups for the benefit of all employees.

3.50 Electric Power, Water and Telephone. Unless otherwise specified, the Contractor shall make its own arrangements for electric power, water and telephone. Subject to the convenience of the utility, it may be permitted to connect to existing facilities where available, but Contractor shall meter and bear the cost of such power or water, and installation and disconnect of such power, water and telephone services.

3.51 Energized Aerial Electrical Power Lines. Utility companies may maintain energized aerial electrical power lines in the immediate vicinity of this Project. Contractor shall not presume any such lines to be insulated. Construction personnel working in proximity to these lines may be exposed to an extreme hazard from electrical shock. Contractor shall ensure that its employees and all other construction personnel working on this Project are warned of the danger and instructed to take adequate protective measures, including maintaining a minimum ten feet of clearance between the lines and all construction equipment and personnel. (see: OSHA Std. 1926.550 (a) 15, as amended). As an additional safety precaution, Contractor shall call the affected utility companies to arrange, if possible, to have these lines de-energized or relocated when the Work reaches their immediate vicinity. The cost of such temporary arrangements shall be borne by the Contractor. Contractor shall account for the time necessary to cause such utility disconnection in the preparation of its Bid. Electrical utility companies may maintain energized underground electrical power lines in the immediate vicinity of this Project. These power lines represent an extreme hazard of electrical shock to any construction personnel or equipment coming in contact with them. Arizona law requires all parties planning excavations in public rights-of-way to contact all utility firms for locations of their underground facilities. Contractor shall ensure that its employees and all other personnel working near any underground power lines must be warned to take adequate protective measure. (see: OSHA Std. 1926-651 (A), as amended).

3.52 Site Clean Up. Contractor shall at all times, but not less than daily unless otherwise agreed by City Representative, keep the premises on which the Work is being performed clean and free from accumulation of any waste materials, trash, debris and excess dirt, and at all times shall remove Contractor's implements, machinery, tools, apparatus and equipment from the jobsite when not needed on the jobsite. Should the City Representative find it necessary in his/her opinion to employ help to clean up, remove or store any of the foregoing due to failure of Contractor to do so, the expense thereof shall be charged to Contractor. Verbal notice from the City Representative on clean-up or removal is considered adequate notice hereunder, and failure to conform with his/her request within 24 hours thereof will be construed as a breach of this Contract by the Contractor and such charges will be made against Contractor's account as are necessary to accomplish the clean-up or removal. The cost of cleanup, removal or storage by the City, if not deducted by the City from monies due Contractor, shall be paid by Contractor within five business days of written demand by the City.

3.53 Use of the Site. Contractor shall at all times comply fully with all laws, orders, citations, rules, regulations, standards and statutes with respect to occupational health and safety, the handling and storage of hazardous materials, accident prevention and safety equipment and practices, including any accident prevention and safety program of the City; provided, however, that the City shall not be required to impose any safety requirements or administer any such programs and the review or requirement of any safety plan by the City shall not be deemed to release Contractor or in any way diminish its liability, by way of indemnity or otherwise, as assumed by it under this Contract. Contractor shall conduct inspections regularly to determine that safe working conditions and equipment exist and accepts sole responsibility for providing a safe place to Work for its employees and employees of its Subcontractors, laborers, suppliers of material and equipment and any other person visiting the Site, for adequacy of and required use of all safety equipment and for compliance herewith. When so ordered, Contractor shall stop any part of the Work that the City deems unsafe until corrective measures satisfactory to the City have been taken. Should Contractor neglect to adopt such corrective measures, the City may do so and deduct the cost from payments due Contractor. Contractor shall timely submit copies of all accident or injury reports to the City.

3.54 Public Information and Notification. The Contractor shall submit a public information and notification plan for this Project (the “Notification Plan”) to the City Representative at the first pre-construction meeting held prior to start of construction. The Notification Plan shall include, at a minimum, the items set forth in this Section 3.54; provided, however, that the Engineer may waive any portion of the requirements of this Section upon a written determination that the Project scope does not warrant such notification. Contractor shall provide Project information to affected residents and homeowners’ associations prior to and throughout the Project’s duration. The Contractor shall use the Notification Plan to inform the local citizens, businesses and City officials, not less than five business days in advance, of (A) necessary operations that create high noise levels, (B) street closures, (C) detour locations, (D) haul routes and material delivery routes and (E) disruption of bus routes, mail routes and other delivery/pick-up routes.

A. Neighborhood Notification. Prior to the start of any Work on the Project, the Contractor shall distribute a preliminary “Dear Neighbor” letter (8-1/2”x11”), as submitted to and subject to the approval of the Engineer, to all businesses, property owners and residents within 600 feet of any portion of this Project. This “Dear Neighbor” letter shall include, at a minimum, the following information:

1. Contractor’s name, business telephone number and the 24-hour “Hot Line” telephone number for this Project.
2. Name of Contractor’s Project Manager.
3. Name of Contractor’s Project Superintendent.
4. Brief description of the Project.
5. Construction schedule, including anticipated Work hours.
6. Anticipated lane restrictions, including the expected duration thereof.
7. Name of City’s Project Manager.
8. Name of the Engineer.

The Engineer shall provide the Contractor with a distribution list for this “Dear Neighbor” letter. Contractor shall (1) ensure that the letter is distributed to all persons and businesses indicated on the list provided by the Engineer and (2) provide the Engineer with a copy of the letter sent and sufficient proof of mailing. Subsequent to delivery of the “Dear Neighbor” letter, the Contractor shall distribute bi-monthly construction progress updates, including construction schedule and any additional information the Engineer deems important as a result of construction activities, to all persons and businesses included on the aforementioned distribution list. At the request of the Engineer, Contractor may be required to distribute additional public notifications. At the end of construction a final “Dear Neighbor” letter shall be distributed to the persons and businesses on the aforementioned distribution list highlighting the Contractor’s and the City’s appreciation for their patience during construction of the Project.

B. Project Signs. Unless otherwise directed by the Engineer, the Contractor shall furnish and install at least 2 Project signs, not less than five business days before beginning construction, at locations determined by the Engineer, to inform the public of the forthcoming Project, construction dates and 24-Hour Hotline number. The Contractor shall submit the proposed layout of the Project signs to the Engineer for approval prior to fabrication of the signs. The Contractor shall maintain the signs as necessary and update the information as directed by the Engineer. At the Final Completion of the Project, the Contractor shall remove and dispose of the signs. The Project signs shall be fabricated as follows: (1) the vinyl sheeting for the background, legend, and border shall be applied by heat bonding, except that the decal and legend for the project title, cost, and Contractor’s name shall be pressure sensitive application; (2) the four foot by eight foot (4’ x 8’) signs shall be mounted four feet above the ground level and anchored three feet into the ground with concrete backfill around the posts; and (3) sign colors shall be black letters on white background, over a ghost image of the City of Avondale logo. The information on the Project signs

shall be in the format and fonts proportions as depicted on the sample sign below. The image template may be obtained from the City of Avondale Engineering Department as a computer image file.



C. 24-Hour Project Hotline. The Contractor shall be required to furnish a private 24-hour telephone line to be used solely for receiving incoming calls from local citizens or businesses with questions or complaints concerning Project construction operations or procedures (the “Hotline”). The Contractor shall include this Hotline telephone number on all public information distributed throughout the duration of the Project. Contractor shall ensure that Contractor personnel man the Hotline during all hours that there is any Work being performed on this Project; the Hotline shall be answered by a live answering service during all other hours. The Contractor shall maintain a log of incoming calls, responses and action taken that shall be submitted to the Engineer weekly and upon request.

D. Public Meetings. The Contractor shall attend such public meetings as deemed necessary by the Engineer.

E. Press Releases. The Contractor shall, at the request of the Engineer, prepare press releases regarding the Project.

F. Payment for Public Notification. The City will pay, based on time and materials invoices, an amount not to exceed the amount designated in the Price Sheet and entitled COMMUNITY RELATIONS, for Work performed in accordance with the Notification Plan. Work that is eligible for reimbursement includes: the Project signs; the “Dear Neighbor” letters; bi-monthly progress reports; meetings with impacted businesses, residents, schools, churches or other groups; scheduling newsletter when necessary (at least monthly); temporary signs for local access; and maintaining the Hotline. No payment will be made under this item for any Day during which there are substantial deficiencies in compliance, as determined by the Engineer. The Contractor shall submit a final report/evaluation of its Notification Plan process performed for this Project. The report shall be submitted before the Contractor receives final payment.

PART C - MISCELLANEOUS

3.55 Applicable Law; Venue. This Contract shall be governed by the laws of the State of Arizona and suit pertaining to this Contract may be brought only in courts in Maricopa County, Arizona.

3.56 Conflict of Interest. This Contract is subject to the provisions of ARIZ. REV. STAT. § 38-511. The City may cancel this Contract without penalty or further obligations by the City or any of its departments or agencies

if any person significantly involved in initiating, negotiating, securing, drafting or creating this Contract on behalf of the City or any of its departments or agencies is, at any time while this Contract or any extension of this Contract is in effect, an employee of any other party to this Contract in any capacity or a consultant to any other party of this Contract with respect to the subject matter of this Contract.

3.57 Contract Amendments. This Contract may be modified only by a written amendment signed by persons duly authorized to enter into contracts on behalf of the City and the Contractor; provided, however, that Change Orders may be issued and approved administratively by the City when such changes do not alter the Contract Price.

3.58 Provisions Required by Law. Each and every provision of law and any clause required by law to be in this Contract will be read and enforced as though it were included herein and, if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party, this Contract will promptly be physically amended to make such insertion or correction.

3.59 Severability. The provisions of this Contract are severable to the extent that any provision or application held to be invalid by a Court of competent jurisdiction shall not affect any other provision or application of this Contract which may remain in effect without the invalid provision or application.

3.60 Independent Contractor. It is clearly understood that each party will act in its individual capacity and not as an agent, employee, partner, joint venturer, or associate of the other. An employee or agent of one party shall not be deemed or construed to be the employee or agent of the other for any purpose whatsoever. The Contractor acknowledges and agrees that the Services provided under this Agreement are being provided as an independent contractor, not as an employee or agent of the City. Contractor, its employees and subcontractors are not entitled to workers' compensation benefits from the City. The City does not have the authority to supervise or control the actual work of Contractor, its employees or subcontractors. The Contractor, and not the City, shall determine the time of its performance of the services provided under this Agreement so long as Contractor meets the requirements of its agreed scope of work and the Specifications, Plans/construction drawings and Reference Documents as set forth in Section 2.1 above and Exhibit A. Contractor is neither prohibited from entering into other contracts nor prohibited from practicing its profession elsewhere. City and Contractor do not intend to nor will they combine business operations under this Agreement.

3.61 Entire Agreement; Interpretation-Parol Evidence. This Contract represents the entire agreement of the parties with respect to its subject matter, and all previous agreements, whether oral or written, entered into prior to this Contract are hereby revoked and superseded by this Contract. No representations, warranties, inducements or oral agreements have been made by any of the parties except as expressly set forth herein, or in any other contemporaneous written agreement executed for the purposes of carrying out the provisions of this Contract. This Contract shall be construed and interpreted according to its plain meaning, and no presumption shall be deemed to apply in favor of, or against the party drafting this Contract. The parties acknowledge and agree that each has had the opportunity to seek and utilize legal counsel in the drafting of, review of, and entry into this Contract.

3.62 Assignment; Delegation. No right or interest in this Contract shall be assigned or delegated by Contractor without prior, written permission of the City, signed by the City Manager. Any attempted assignment or delegation by Contractor in violation of this provision shall be a breach of this Contract by Contractor.

3.63 Subcontracts. No subcontract shall be entered into by the Contractor with any other party to furnish any of the Materials, Services or construction specified herein without the prior, written approval of the City. The Contractor is responsible for performance under this Contract whether or not Subcontractors are used.

3.64 Rights and Remedies. No provision in this Contract shall be construed, expressly or by implication, as waiver by the City of any existing or future right and/or remedy available by law in the event of any claim of default or breach of this Contract. The failure of the City to insist upon the strict performance of any term or condition of this Contract or to exercise or delay the exercise of any right or remedy provided in this Contract, or by law, or

the City's acceptance of and payment for Materials or Services, shall not release the Contractor from any responsibilities or obligations imposed by this Contract or by law, and shall not be deemed a waiver of any right of the City to insist upon the strict performance of this Contract.

3.65 Attorneys' Fees. In the event either party brings any action for any relief, declaratory or otherwise, arising out of this Contract or on account of any breach or default hereof, the prevailing party shall be entitled to receive from the other party reasonable attorneys' fees and reasonable costs and expenses, determined by the court sitting without a jury, which shall be deemed to have accrued on the commencement of such action and shall be enforced whether or not such action is prosecuted through judgment.

3.66 Notices and Requests. Any notice or other communication required or permitted to be given under this Contract shall be in writing and shall be deemed to have been duly given if (A) delivered to the party at the address set forth below, (B) deposited in the U.S. Mail, registered or certified, return receipt requested, to the address set forth below or (C) given to a recognized and reputable overnight delivery service, to the address set forth below:

If to the City: City of Avondale
 11465 West Civic Center Drive
 Avondale, Arizona 85323
 Attn: Charles A. Montoya, City Manager

With copies to: City of Avondale
 11465 West Civic Center Drive
 Avondale, Arizona 85323
 Attn: Tiffany Copp, RFQ Administrator

 City of Avondale
 11465 West Civic Center Drive
 Avondale, Arizona 85323
 Attn: Michael Wawro, City Attorney

If to Contractor: _____

 Attn: _____

or at such other address, and to the attention of such other person or officer, as any party may designate in writing by notice duly given pursuant to this Section. Notices shall be deemed received (A) when delivered to the party, (B) three business days after being placed in the U.S. Mail, properly addressed, with sufficient postage or (C) the following business day after being given to a recognized overnight delivery service, with the person giving the notice paying all required charges and instructing the delivery service to deliver on the following business day. If a copy of a notice is also given to a party's counsel or other recipient, the provisions above governing the date on which a notice is deemed to have been received by a party shall mean and refer to the date on which the party, and not its counsel or other recipient to which a copy of the notice may be sent, is deemed to have received the notice.

3.67 Overcharges by Antitrust Violations. The City maintains that, in practice, overcharges resulting from antitrust violations are borne by the purchaser. Therefore, to the extent permitted by law, the Contractor hereby assigns to the City any and all claims for such overcharges as to the goods and services used to fulfill this Contract.

3.68 Force Majeure. Except for payment for sums due, neither party shall be liable to the other nor deemed in default under this Contract if and to the extent that such party's performance of this Contract is prevented by reason of force majeure. The term "*force majeure*" means an occurrence that is beyond the control of the party affected and occurs without its fault or negligence. Without limiting the foregoing, force majeure includes acts of God; acts of the public enemy; war; riots; strikes; mobilization; labor disputes; civil disorders; fire; floods; lockouts,

injunctions-intervention-acts, or failures or refusals to act by government authority; and other similar occurrences beyond the control of the party declaring force majeure which such party is unable to prevent by exercising reasonable diligence. The force majeure shall be deemed to commence when the party declaring force majeure notifies the other party, in accordance with Section 3.66, of the existence of the force majeure and shall be deemed to continue as long as the results or effects of the force majeure prevent the party from resuming performance in accordance with this Contract. Force majeure shall not include the following occurrences:

A. Late Delivery. Late delivery of equipment or materials caused by congestion at a manufacturer's plant or elsewhere, an oversold condition of the market, inefficiencies or similar occurrences.

B. Late Performance. Late performance by a Subcontractor unless the delay arises out of a force majeure occurrence in accordance with this Section 3.68.

Any delay or failure in performance by either party hereto shall not constitute default hereunder or give rise to any claim for damages or loss of anticipated profits if, and to the extent that such delay or failure is caused by force majeure. If either party is delayed at any time in the progress of the Work by force majeure, then the delayed party shall notify the other party in accordance with Section 3.66 and shall make a specific reference to this Section, thereby invoking its provisions. The delayed party shall cause such delay to cease as soon as practicable and shall notify the other party in writing. The time of Substantial Completion or Final Completion shall be extended by written Contract amendment for a period of time equal to the time that the results or effects of such delay prevent the delayed party from performing in accordance with this Contract.

3.69 Confidentiality of Records. The Contractor shall establish and maintain procedures and controls that are acceptable to the City for the purpose of ensuring that information contained in its records or obtained from the City or from others in carrying out its obligations under this Contract shall not be used or disclosed by it, its agents, officers, or employees, except as required to perform Contractor's duties under this Contract. Persons requesting such information should be referred to the City. Contractor also agrees that any information pertaining to individual persons shall not be divulged other than to employees or officers of Contractor as needed for the performance of duties under this Contract.

3.70 Records and Audit Rights. To ensure that the Contractor and its Subcontractors are complying with the warranty under Section 3.71 below, Contractor's and its Subcontractors' books, records, correspondence, accounting procedures and practices, and any other supporting evidence relating to this Contract, including the papers of any Contractor and its Subcontractors' employees who perform any Work or Services pursuant to this Contract (all of the foregoing hereinafter referred to as "Records"), shall be open to inspection and subject to audit and/or reproduction during normal working hours by the City, to the extent necessary to adequately permit (1) evaluation and verification of any invoices, payments or claims based on Contractor's and its Subcontractors' actual costs (including direct and indirect costs and overhead allocations) incurred, or units expended directly in the performance of Work under this Contract and (2) evaluation of the Contractor's and its Subcontractors' compliance with the Arizona employer sanctions laws referenced in Section 3.71 below. To the extent necessary for the City to audit Records as set forth in this Section, Contractor and its Subcontractors hereby waive any rights to keep such Records confidential. For the purpose of evaluating or verifying such actual or claimed costs or units expended, the City shall have access to said Records, even if located at its Subcontractors' facilities, from the effective date of this Contract for the duration of the Work and until three years after the date of final payment by the City to Contractor pursuant to this Contract. Contractor and its Subcontractors shall provide the City with adequate and appropriate workspace so that the City can conduct audits in compliance with the provisions of this Section. The City shall give Contractor or its Subcontractors reasonable advance notice of intended audits. Contractor shall require its Subcontractors to comply with the provisions of this Section by insertion of the requirements hereof in any subcontract pursuant to this Contract.

3.71 E-verify Requirements. To the extent applicable under ARIZ. REV. STAT. § 41-4401, the Contractor and its Subcontractors warrant compliance with all Federal immigration laws and regulations that relate to their employees and their compliance with the E-verify requirements under ARIZ. REV. STAT. § 23-214(A). Contractor's

or its Subcontractors' failure to comply with such warranty shall be deemed a material breach of this Contract and may result in the termination of this Contract by the City.

3.72 Israel. Contractor certifies that it is not currently engaged in, and agrees for the duration of this Agreement that it will not engage in a "boycott," as that term is defined in ARIZ. REV. STAT. § 35-393, of Israel.

3.73 Right to Inspect Plant. The City may, at reasonable times, inspect the part of the plant or place of business of the Contractor or Subcontractor that is related to the performance of this Contract.

3.74 Warranties. Contractor warrants to the City that all Materials and equipment furnished shall be new unless otherwise specified and agreed by the City and that all Work shall be of first class quality, free from faults and defects and in conformance with this Contract. If at any time within one year following the date of Final Completion and acceptance of the entire Project (or such longer period as may be provided under warranties for equipment or Materials): (A) any part of the Materials furnished in connection with the Work shall be or become defective due to defects in either labor or Materials, or both, or (B) Contractor's Work or Materials, or both, are or were not in conformance with original or amended Plans and Specifications, or supplementary shop drawings, then the Contractor shall upon written notice from the City immediately replace or repair such defective or non-conforming Material or workmanship at no cost to the City. Contractor further agrees to execute any special guarantees as provided by this Contract or required by law. Contractor shall require similar guarantees from all vendors and from all its Subcontractors. Contractor further agrees, upon written demand of the City and during the course of construction, to immediately re-execute, repair or replace any Work that fails to conform to the requirements of this Contract, whether caused by faulty Materials or workmanship, or both. In the event Contractor shall fail or refuse to make such change upon the City's written demand, the City shall have the right to have such Work re-executed, repaired or replaced, to withhold from or back charge to Contractor all costs incurred thereby.

3.75 Inspection. All Materials and/or Services are subject to final inspection and acceptance by the City. Materials and/or Services failing to conform to the Specifications of this Contract will be held at Contractor's risk and may be returned to the Contractor. If so returned, all costs are the responsibility of the Contractor. Upon discovery of non-conforming Materials or Services, the City may elect to do any or all of the following by written notice to the Contractor: (A) waive the non-conformance; (B) stop the Work immediately; or (C) bring material or service into compliance and withhold the cost of same from any payments due to the Contractor.

3.76 No Replacement of Defective Tender. Every tender of Materials shall fully comply with all provisions of this Contract. If a tender is made which does not fully conform, this shall constitute a breach of this Contract as a whole.

3.77 Shipment Under Reservation Prohibited. Contractor is not authorized to ship Materials under reservation and no tender of a bill of lading will operate as a tender of the Materials.

3.78 Liens. All Materials, Service or construction shall be free of all liens and, if the City requests, a formal release of all liens shall be delivered to the City.

3.79 Licenses. Contractor shall maintain in current status all Federal, State and Local licenses and permits required for the operation of the business conducted by the Contractor as applicable to this Contract.

3.80 Patents and Copyrights. All Services, information, computer program elements, reports and other deliverables, which may be patented or copyrighted and created under this Contract are the property of the City and shall not be used or released by the Contractor or any other person except with the prior written permission of the City.

3.81 Preparation of Specifications by Persons other than City Personnel. All Specifications shall seek to promote overall economy for the purposes intended and encourage competition and not be unduly restrictive in

satisfying the City's needs. No person preparing Specifications shall receive any direct or indirect benefit from the utilization of Specifications, other than fees paid for the preparation of Specifications.

3.82 Advertising. Contractor shall not advertise or publish information concerning this Contract without prior, written consent of the City.

PART D - ALTERNATIVE DISPUTE RESOLUTION

3.83 Scope. Notwithstanding anything to the contrary provided elsewhere in the Contract Documents, except for subsection 3.86(G) below, the alternative dispute resolution ("ADR") process provided for herein shall be the exclusive means for resolution of claims or disputes arising under, relating to or touching upon this Contract, the interpretation thereof or the performance or breach by any party thereto, including but not limited to original claims or disputes asserted as cross claims, counterclaims, third party claims or claims for indemnity or subrogation, in any threatened or ongoing litigation or arbitration with third parties, if such disputes involve parties to contracts containing this ADR provision.

3.84 Neutral Evaluator, Arbitrators. The City will select a Neutral Evaluator to serve as set forth in this ADR process, subject to the Contractor's approval, which approval shall not be unreasonably withheld. In the event that the City and the Contractor are unable to agree upon a Neutral Evaluator, the neutral evaluation process shall be eliminated and the parties shall proceed with the binding arbitration process set forth in Section 3.86 below. The City and Contractor shall each select an arbitrator to serve as set forth in this ADR process. Each arbitrator selected shall be a member of the State Bar of the State of Arizona and shall have experience in the field of construction law. None of the arbitrators nor any of the arbitrator's firms shall have presently, or in the past, represented any party to the arbitration.

3.85 Neutral Evaluation Process. If the parties have been unable to resolve the disputes after discussions and partnering, but the parties have agreed to a Neutral Evaluator, the following neutral evaluation process shall be used to resolve any such dispute.

A. Notification of Dispute. The City through its Engineer shall notify the Neutral Evaluator in writing of the existence of a dispute within 10 Days of the City or the Contractor declaring need to commence the neutral evaluation process.

B. Non-Binding Informal Hearing. The Neutral Evaluator shall schedule a non-binding informal hearing of the matter to be held within seven Days from receipt of notification of the existence of a dispute. The Neutral Evaluator may conduct the hearing in such manner as he deems appropriate and shall notify each party of the hearing and of its opportunity to present evidence it believes will resolve the dispute. The Neutral Evaluator shall require that each party submit a written outline of the issues and evidence intended to be introduced at the hearing and the proposed resolution of the dispute to the Neutral Evaluator before the hearing commences. Arbitrators shall not participate in such informal hearing or proceedings process. The Neutral Evaluator is not bound by the rules of evidence when admitting evidence in the hearing and may limit the length of the hearing, the number of witnesses or any evidence introduced to the extent deemed relevant and efficient.

C. Non-Binding Decision. The Neutral Evaluator shall render a non-binding, written decision as soon as possible, but not later than five Days after the hearing.

3.86 Binding Arbitration Procedure. The following binding arbitration procedure, except as provided in subsection 3.86(G) below, shall serve as the exclusive method to resolve a dispute if (A) the parties cannot agree to a Neutral Evaluator as set forth in Section 3.84 above or (B) any party chooses not to accept the decision of the Neutral Evaluator. The party requesting binding arbitration shall notify the Neutral Evaluator of a request for arbitration in writing within three business days' of receipt of the Neutral Evaluator's decision. If the Contractor requests arbitration or if Contractor rejects the City's selection of a Neutral Evaluator, it shall post a cash bond with the Neutral Evaluator in an amount agreed upon by the parties or, in the event of no agreement, the Neutral Evaluator

shall establish the amount of the cash bond to defray the cost of the arbitration as set forth in subsection 3.86(M) and the proceeds from the bond shall be allocated in accordance with subsection 3.86(M) by the Arbitration Panel.

A. Arbitration Panel. The Arbitration Panel shall consist of three arbitrators: the City's appointed arbitrator, the Contractor's appointed arbitrator and a third arbitrator (or "Neutral Arbitrator") who shall be selected by the parties' arbitrators as set forth in subsection 3.86(B) If more than one consultant or contractor is involved in a dispute, the consultants and/or contractors shall agree on an appointee to serve as arbitrator. The Neutral Evaluator shall not participate in the proceedings.

B. Selection of Neutral Arbitrator. The parties' arbitrators shall choose the Neutral Arbitrator within five business days of receipt of notification of a dispute from the Neutral Evaluator. The Neutral Arbitrator shall have the same qualifications as those of the arbitrators set forth in Section 3.84. In the event that the selected arbitrators cannot agree on the Neutral Arbitrator as set forth above, the Neutral Arbitrator shall be the "Default Neutral Arbitrator," a person or entity jointly selected by the City and the Contractor. If the City and the Contractor cannot agree on a Default Neutral Arbitrator, the City and the Contractor shall each submit two names to an appropriate judge who shall select one person to serve as the Default Neutral Arbitrator."

C. Expedited Hearing. The parties have structured this procedure with the goal of providing for the prompt, efficient and final resolution of all disputes falling within the purview of this ADR process. To that end, any party can petition the Neutral Evaluator to set an expedited hearing. If the Neutral Evaluator determines that the circumstances justify it, the Neutral Evaluator shall contact the selected Arbitration Panel and arrange for scheduling of the arbitration at the earliest possible date. In any event, the hearing of any dispute not expedited will commence as soon as practical but in no event later than 20 Days after notification of request for arbitration having been submitted. This deadline can be extended only with the consent of all the parties to the dispute, or by decision of the Arbitration Panel upon a showing of emergency circumstances.

D. Procedure. The Arbitration Panel will select a Chairman and will conduct the hearing in such a manner that will resolve disputes in a prompt, cost efficient manner giving regard to the rights of all parties. Each party shall supply to the Arbitration Panel a written pre-hearing statement which shall contain a brief statement of the nature of the claim or defense, a list of witnesses and exhibits, a brief description of the subject matter of the testimony of each witness who will be called to testify, and an estimate as to the length of time that will be required for the arbitration hearing. The Arbitration Panel shall review and consider the Neutral Evaluator decision, if any. The Chairman shall determine the nature and scope of discovery, if any, and the manner of presentation of relevant evidence consistent with deadlines provided herein and the parties' objective that disputes be resolved in a prompt and efficient manner. No discovery may be had of any materials or information for which a privilege is recognized by Arizona law. The Chairman, upon proper application, shall issue such orders as may be necessary and permissible under law to protect confidential, proprietary or sensitive materials or information from public disclosure or other misuse. Any party may make application to the Maricopa County Superior Court to have a protective order entered as may be appropriate to confirm such orders of the Chairman.

E. Hearing Days. In order to effectuate parties' goals, the hearing once commenced, will proceed from business day to business day until concluded, absent a showing of emergency circumstances.

F. Award. The Arbitration Panel shall, within 10 Days from the conclusion of any hearing, by majority vote, issue its award. The award shall include an allocation of fees and costs pursuant to subsection 3.86(M) herein. The award is to be rendered in accordance with this Contract and the laws of the State of Arizona.

G. Scope of Award. The Arbitration Panel shall be without authority to award punitive damages, and any such punitive damage award shall be void. The Arbitration Panel shall be without any authority to issue an award against any individual party in excess of 20% of the original Contract amount, but in no event shall any award exceed \$2,000,000, exclusive of interest, arbitration fees, costs and attorneys' fees. If an award is made against any individual party in excess of \$100,000, exclusive of interest, arbitration fees, costs and attorneys' fees, it must be supported by written findings of fact, conclusions of law and a statement as to how damages were calculated.

Any claim in excess of 20% of the original Contract amount or in excess \$2,000,000 shall be subject to the jurisdiction of the Superior Court of Arizona, Maricopa County. Any party can contest the validity of the amount claimed if an action is filed in the Superior Court.

H. Jurisdiction. The Arbitration Panel shall not be bound for jurisdictional purposes by the amount asserted in any party's claim, but shall conduct a preliminary hearing into the question of jurisdiction upon application of any party at the earliest convenient time, but not later than the commencement of the arbitration hearing.

I. Entry of Judgment. Any party can make application to the Maricopa County Superior Court for confirmation of an award, and for entry of judgment on it.

J. Severance and Joinder. To reduce the possibility of inconsistent adjudications: (1) the Neutral Evaluator or the Arbitration Panel may, at the request of any party, join and/or sever parties, and/or claims arising under other contracts containing this ADR provision, and (2) the Neutral Evaluator, on his own authority, or the Arbitration Panel may, on its own authority, join or sever parties and/or claims subject to this ADR process as they deem necessary for a just resolution of the dispute, consistent with the parties' goal of the prompt and efficient resolution of disputes, provided, however, that the Contractor, Architect/Engineer and Project professionals shall not be joined as a party to any claim made by a Contractor. Nothing herein shall create the right by any party to assert claims against another party not germane to this Contract or not recognized under the substantive law applicable to the dispute. Neither the Neutral Evaluator nor the Arbitration Panel are authorized to join to the proceeding parties not in privity with the City. Contractor cannot be joined to any pending arbitration proceeding, without Contractor's express written consent, unless Contractor is given the opportunity to participate in the selection of the non-City appointed arbitrator.

K. Appeal. Any party may appeal (1) errors of law by the Arbitration Panel if, but only if, the errors arise in an award in excess of \$100,000, (2) the exercise by the Chairman or Arbitration Panel of any powers contrary to or inconsistent with this Contract or (3) on the basis of any of the grounds provided in ARIZ. REV. STAT. § 12-1512, as amended. Appeals shall be to the Maricopa County Superior Court within 15 Days of entry of the award. The standard of review in such cases shall be that applicable to the consideration of a motion for judgment notwithstanding the verdict, and the Maricopa County Superior Court shall have the authority to confirm, vacate, modify or remand an award appealed under this Section, but not to conduct a trial, entertain the introduction of new evidence or conduct a hearing de novo.

L. Uniform Arbitration Act. Except as otherwise provided herein, binding arbitration pursued under this provision shall be governed by the Uniform Arbitration Act as codified in Arizona in ARIZ. REV. STAT. § 12-1501, *et seq.*

M. Fees and Costs. Each party shall bear its own fees and costs in connection with any informal hearing before the Neutral Evaluator. All fees and costs associated with any arbitration before the Arbitration Panel, including without limitation the Arbitration Panelists' fee, and the prevailing party's reasonable attorneys' fees, expert witness fees and costs, will be paid by the non-prevailing party, except as provided for herein. In no event shall any Arbitrator's hourly fees be awarded in an amount in excess of \$200 per hour and (1) costs shall not include any travel expenses in excess of mileage at the rate paid by the City, not to exceed a one way trip of 150 miles, and (2) all travel expenses, including meals, shall be reimbursed pursuant to the travel policy of the City in effect at the time of the hearing. The determination of prevailing and non-prevailing parties, and the appropriate allocation of fees and costs, will be included in the award by the Arbitration Panel. Fees for the Neutral Evaluator shall be divided evenly between the City and the Contractor.

N. Confidentiality. Any proceeding initiated under ADR shall be deemed confidential to the maximum extent allowed by Arizona law and no party shall, except for disclosures to a party's attorneys or accountants, make any disclosure related to the disputed matter or to the outcome of any proceeding except to the

extent required by law, or to seek interim equitable relief, or to enforce an agreement reached by the parties or an award made hereunder.

O. Equitable Litigation. Notwithstanding any other provision of ADR to the contrary, any party can petition the Maricopa County Superior Court for interim equitable relief as necessary to preserve the status quo and prevent immediate and irreparable harm to a party or to the Program pending resolution of a dispute pursuant to ADR provided herein. No court may order any permanent injunctive relief except as may be necessary to enforce an order entered by the Arbitration Panel. The fees and costs incurred in connection with any such equitable proceeding shall be determined and assessed in ADR.

P. Change Order. Any award in favor of the Contractor against the City or in favor of the City against the Contractor shall be reduced to a Change Order and executed by the parties in accordance with the award and the provisions of this Contract.

Q. Merger and Bar. Any claim asserted pursuant to this ADR process shall be deemed to include all claims, demands, and requests for compensation for costs and losses or other relief, including the extension of this Contract performance period which reasonably should or could have been brought against any party that was or could have been brought into this ADR process, with respect to the subject claim. The Arbitration Panel shall apply legal principles commonly known as merger and bar to deny any claim or claims against any party regarding which claim or claims recovery has been sought or should have been sought in a previously adjudicated claim for an alleged cost, loss, breach, error, or omission.

R. Inclusion in Other Contracts. The Contractor shall cooperate with the City in efforts to include this ADR provision in all other Project contracts. Subject to Contractor's reasonable agreement, the Contractor agrees that any modification to this ADR provision that is included in the construction or other contracts shall also apply to the Contractor. It is the intent of the parties that any changes to this ADR provision in later contracts will be evolutionary and designed to incorporate the terms of this ADR provision without material changes to the substance or procedure of this ADR provision.

EXHIBIT A
TO
INVITATION FOR BIDS NO. EN19-087

[Specifications, Plans/Construction Drawings/Reference Documents]

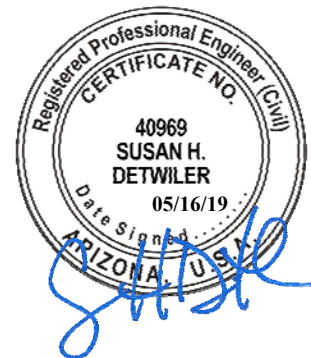
See following pages.



TECHNICAL SPECIFICATIONS

**Dysart Road Improvements
Dysart Road and Rancho Santa Fe Boulevard Intersection
ST1365
SOLICITATION #EN19-087**

**Prepared by:
Dibble Engineering
7878 North 16th Street
Suite 300
Phoenix, Arizona 85020**



May 2019

TECHNICAL SPECIFICATIONS

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PART 100 - GENERAL CONDITIONS

SECTION 104 – SCOPE OF WORK

104.01000 – Location and Project Boundaries:

The project is located on the intersection of Dysart Road and Rancho Santa Fe Boulevard in the City of Avondale, Arizona (City).

104.02000 – Scope of Work Overview:

The work consists of the widening of Dysart Road for a right turn lane onto Rancho Santa Fe and includes the installation of new pavement, curb, gutter, sidewalk, storm drain, traffic signals, pavement marking and other related miscellaneous work. Additional information is provided in ART. II, Section 2.1 of the IFB. Specific Scope of Work items are itemized as Bid Items in the PRICE SHEET, Exhibit “C”, of the IFB.

SECTION 105 – CONTROL OF WORK

105.01000 – Additional Reference Standards:

The following reference standards are added to Article III, Section 3.1 of the IFB’s General Terms and Conditions and are incorporated by reference.

The “ADOT Specifications” is more particularly defined as the Arizona Department of Transportation (ADOT), Standard Specifications for Road and Bridge Construction, 2008 Edition.

U.S. Department of Transportation, Manual on Uniform Traffic Control Devices (MUTCD), latest edition.

Latest revisions of ASTM, AWWA, ANSI or Federal specifications, standards and details, as applicable.

Latest revisions of MCDOT supplement to the MAG Uniform Specifications and Details for Public Works Construction, 2011, as applicable.

Latest revisions of City of Phoenix supplement to the MAG Uniform Specifications for Public Works Construction, as applicable.

In the event of a conflict between the Construction Drawings and the Contract language, the Contract language shall prevail.

In the event of a conflict between (i) the ASTM, AWWA, ANSI or Federal specifications, standards and details and (ii) the MAG Uniform Standard Specifications and Details for Public Works Construction and the City Supplement to MAG Uniform Standard Specifications and Details for Public Works Construction, the MAG Uniform Standard Specifications and Details for Public Works Construction and City Supplement to MAG Uniform Standard Specifications and Details for Public Works construction shall prevail.

In the event of a conflict between the AWWA, ANSI or Federal specifications, standards and details and the Contract, the Contract shall prevail.

In the event of a conflict between the City of Phoenix Traffic Barricade Manual and the U.S. Department of Transportation Manual on Uniform Traffic Control Devices (MUTCD), the City of Phoenix Traffic Barricade Manual shall prevail.

105.02000 – Additional Reference Information and Materials:

The following information can be downloaded from the City Engineering Website:

- Pothole Report

Section 105.2.1.G of the Avondale Supplement to MAG Uniform Standard Specifications and Details for Public Works Construction shall be modified to add:

- Electrical Materials
- Decomposed Granite
- Striping and Signing

Bid Item 105.30010– As-built Documentation:

The work under this item shall consist of furnishing all materials, equipment, and labor necessary for providing complete and competent as-built record document plans to the City. As-built plans shall reflect all in-place field dimensions, horizontal locations and vertical elevations for all constructed or installed improvements. All changes, additions and deletions shall be depicted graphically and represented numerically. All dimensions and elevations on the plan sheets must be verified.

The Contractor shall be required to keep a clean and current set of as-built plans during the Project's construction duration. The as-built plans must be kept up to date for each phase of construction throughout the Project's construction duration, especially for all underground utilities and improvements. These as-built plans shall be subject to review each month by the City's Engineering Inspector to verify compliance with this specification and will be part of the approval process for each of the Contractor's monthly progress payments.

Unless otherwise provided for, the Contractor shall be responsible for preparing and providing to the City all final as-built record documents for the Project using the most recent City approved plan sheets. An Arizona registered civil engineer or Arizona registered land surveyor shall seal the final as-built record documents. The final as-built record documents shall conform to the requirements of MAG Uniform Standard Specifications Sections 105.8 and 105.15; and as specified in the City MAG Supplement. Final as-built plan sheets shall be prepared on 4 MIL, double matte, MYLAR material. A CD/DVD back-up copy of the as-builts in [.tiff] digital file format shall also be required.

Measurement for the As-built Record Document Plans will be prorated (overall project percent completion) each month over the Project's duration. ***Payment*** shall be made at the **LUMP SUM** price bid and shall be considered full compensation for this work item.

105.60010 – Cooperation with Utilities:

The following utility companies may have facilities in the area of this Project. It shall be the Contractor's responsibility to determine the exact location of the utilities prior to any construction operations and to notify the below mentioned utility companies a minimum of five (5) working days prior to commencing any work on the project. Use caution and always follow all local Blue Stake laws.

City of Avondale Water
City of Avondale Sewer
City of Avondale Traffic Signals

Leonard Moreno (623) 764-2517
Michael Yracheta (623) 333-4414
Bennie Robinson (623) 764-2800

Liberty Utilities

Rovell Foggy (623) 298-3760

Liberty Utilities has water and sewer facilities within the Project area. These facilities are not expected to present a conflict with the Project. Appropriate care should be taken to avoid damaging existing facilities and to maintain existing conditions upon completion of the construction process.

Arizona Public Service (APS)

Ron Gandara (602) 371-7456

APS has facilities within the Project area. These facilities are not expected to present a conflict with the Project. Caution and proper clearances should be taken into consideration when doing work around APS facilities. Maintain a minimum 12 inches vertical clearance from APS underground lines. It is the Contractor's responsibility to maintain minimum OSHA clearances from APS underground facilities. Contact APS a minimum of 72 hours before starting construction around APS facilities.

Cox Communications

Jeffery Palen (623) 328-3554

Cox Communications has facilities within the Project area. These facilities are not expected to present a conflict with the Project. Appropriate care should be taken to avoid damaging existing facilities and to maintain existing conditions upon completion of the construction process.

CenturyLink

Eric Zohner (602) 630-5484

CenturyLink has facilities within the Project area. These facilities are not expected to present a conflict with the Project. Appropriate care should be taken to avoid damaging existing facilities and to maintain existing conditions upon completion of the construction process.

Southwest Gas

Adam Shochat (602) 484-5649

Southwest Gas has facilities within the Project. These facilities are not expected to present a conflict with the Project. Appropriate care should be taken to avoid damaging existing facilities and to maintain existing conditions upon completion of the construction process.

Coordination with Utilities is considered incidental to the work being performed, and no additional payment will be made for Coordination with Utilities.

Section 105.6.3 of the Avondale Supplement to MAG Uniform Standard Specifications and Details for Public Works Construction shall be modified to add:

Before any pipe excavation shall take place, the Contractor shall be required to pothole and

verify all utility conflicts or utility crossings; known, marked (Blue Staked) and shown on the approved plans. This includes all residential service lines which may not be marked. The Contractor shall work with the City's Blue Stake Specialist to coordinate locating services. Failure on the Contractor's behalf to adequately locate and verify the utility conflicts/crossings well in advance of any main line or lateral line trench excavation shall preclude any claims or extra costs by the Contractor for delays or stand-by time. All utility potholing in existing paved streets shall be done using the air/vacuum type method. Dimensions for the potholing pavement cuts shall be limited to 12 inch (12-in) by 12 inch (12-in) square holes. All potholes shall be backfilled and patched in accordance with MAG Standard Detail No. 212.

The City has obtained pothole data for the proposed utility crossings. The pothole information was used by the City of Avondale for the design purposes. The use of the pothole data is for additional information and does not release the Contractor from doing its due diligence when excavating near existing underground utilities. This data shall not relieve the Contractor from complying with the "Blue Stake Law" requirements.

Potholing is considered incidental to the work being performed, and no additional payment will be made for Potholing.

Bid Item 105.80010 – Construction Staking, Survey, and Layout:

The work under this item shall consist of furnishing all materials, equipment, and labor necessary for providing construction survey, staking and layout for the Project. This item shall comply with MAG Specification 105.8 and as modified by the Avondale Supplement to MAG Uniform Standard Specifications and Details for Public Works Construction. ***Measurement*** for survey, staking and layout will be prorated (overall project percent completion) each month over the Project's duration. ***Payment*** shall be made at the **LUMP SUM** price bid and shall be considered full compensation for this work item.

SECTION 107 – LEGAL REGULATIONS AND RESPONSIBILITY TO PUBLIC

Bid Item 107.02000 - AZPDES (NPDES) SWPPP:

The Lump Sum price bid for this SWPPP work item shall include all material, labor, equipment and other incidental costs related to furnishing, installing, and maintaining the SWPPP during the project construction. Maintenance shall include but is not limited to cleaning, repair and disposal of debris and compromised devices following storm events or other water runoff on the project. All administrative costs including plan and document preparation shall also be included.

This project is subject to the Arizona Pollutant Discharge Elimination System (AZPDES) Construction General Permit (CGP) requirements under the EPA General Permit for Arizona. All subcontractors shall comply with all AZPDES CGP requirements under the supervision of the General Contractor and shall submit a completed, signed subcontractor certification form, thereby designating themselves as co-permittees. The Contractor will be expected to develop the Storm Water Pollution Prevention Plans (SWPPP) following the most recent City of Avondale Approved SWPPP Template found on City of Avondale website. Completed SWPPPs must be submitted to the City's NPDES coordinator for review before a construction

permit will be issued by the City. All sections of the most recent City of Avondale Approved SWPPP Template must be complete in order for the City's NPDES coordinator to initiate a review of the submitted SWPPP. Any structural or non-structural best management practices included in the SWPPP that are not included in the City of Avondale Approved BMP List (found on the City of Avondale website) will be subject to the standards deviation process, and are not guaranteed approval.

Subsequent to approval by the City's NPDES coordinator, the Contractor will be expected to update/revise the approved SWPPP as necessary throughout the construction of the Project in order to ensure compliance with EPA, AZPDES, and CGP permit requirements. Revisions to the SWPPP requiring use of the SWPPP bid item, or any other additional items, shall be subject to approval by the City prior to implementation. The SWPPP document shall be kept at the project site at all times. The final SWPPP document shall be retained by the Contractor for three years following project completion and final acceptance by the City.

The contractor will be responsible to make submittals to the appropriate agencies. In addition to review by the City and Maricopa County Department of Transportation (MCDOT), portions of this project may be in the urbanized, non-incorporated area governed by Maricopa County Environmental Services Department. This department requires a submittal, fees, and process in addition to the standard NPDES requirements. In addition, portions of this project are within a quarter mile of the Gila River, which is an impaired waterway, and may require a special review or process from ADEQ.

The Contractor shall submit a completed, signed Notice of Intent (NOI) form (including the signed subcontractor certification forms) to the Arizona Department of Environmental Quality (ADEQ), Water Permits Section/Storm Water NOI (5415B-3), 1110 W. Washington Street, Phoenix, Arizona 85007; or fax to (602) 771-4674, or online at ADEQ's Smart NOI Web site at: <http://az.gov/app/smarnoi/>. The NOI shall be posted at the construction site at all times.

Failure by the Contractor (or any applicable subcontractors) to submit the NOI forms and certifications to ADEQ, and/or the SWPPP to the City's NPDES coordinator for review, by the start of construction activities will lead to delays in meeting EPA requirements, which will result in delay of the start of construction. The Contractor will not be entitled to any additional compensation for costs resulting from such delay of the construction start date and/or any construction activities. No construction activities shall begin until all applicable storm water pollution control devices are in place. Any additional work or costs caused by the Contractor's (or subcontractor's) failure to properly implement the SWPPP shall not be considered for compensation. The Contractor shall keep a copy of the latest STORM WATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITIES as printed in the Federal Register at the job site at all times. The Contractor shall keep a copy of the STORM WATER BASELINE CONSTRUCTION GENERAL PERMIT COVERAGE NOTICE received from the EPA (after submittal of the NOI) at the job site at all times.

All SWPPP reports required under this contract shall be available to the public in accordance with the requirements of Section 308(b) of the Clean Water Act. The Contractor shall make plans available to the public upon request through the EPA. No conditions of the Arizona General Permit or the SWPPP shall release the Contractor from any responsibilities or requirements under other environmental statutes or regulations. Asphalt plant and concrete

plants (including mobile plants) require separate AZPDES industrial permits.

Upon completion and acceptance of the work performed by a subcontractor co-permittee, either the Contractor or other subcontractors shall absolve such subcontractor of any involvement in, or responsibility for, any subsequent AZPDES violations on the project. After project completion, acceptance, and de-mobilization, the Contractor shall submit a completed, signed Notice of Termination (NOT) form to the ADEQ Water Permits Section/Storm Water NOT (5415B-3), 1110 W. Washington Street, Phoenix, Arizona 85007 or fax to (602) 771-4674, or online at ADEQ's Smart NOI Web site at: <http://az.gov/app/smarnoi/>.

As a minimum, the Contractor shall perform inspections in accordance with the scope and schedule specified in the most recent CGP Inspection and Corrective Action Report Form found on the ADEQ website. The Contractor is also encouraged to inspect all best management practices following all rainfalls, as it is the Contractor's responsibility to ensure the proper operation of each best management practice at all times. The Contractor shall maintain a record of each inspection. No other separate measurements or payments will be made relative to SWPPP items.

The Lump Sum price bid for this SWPPP work item shall include all material, labor, equipment and other incidental costs related to furnishing, installing, and maintaining the SWPPP during the project construction. Maintenance shall include but is not limited to cleaning, repair and disposal of debris and compromised devices following storm events or other water runoff on the project. All administrative costs including plan and document preparation shall also be included.

Measurement for AZPDES (NPDES) SWPPP will be prorated (overall project percent completion) each month over the project's duration. **Payment** shall be made at the **LUMP SUM** price bid and shall be considered full compensation for this work item.

Bid Item 107.15000 – Community Relations (Allowance):

The work under this item shall consist of furnishing all necessary materials, equipment, labor, services and incidentals for providing public information and notification in accordance with Article III, General Terms and Conditions, Part B Performance of the Work, Section 3.53, "Public Information and Notification" of the Contract Documents. The cost for providing a 24-hour project hot-line number service shall be reimbursed through this work item. **Payment** will be based on City-approved time and material invoices for an amount not to exceed fifteen thousand dollars (\$15,000.00) and shall be considered full compensation for this work item.

Bid Item 107.15010– Project Information Signs:

The Work under this item shall consist of furnishing all necessary materials, equipment, labor, services and incidentals for providing project information signs. The cost for installing and maintaining project information signs, in accordance with the contract documents, shall be included in this work item. The Contractor shall also be responsible for removing the project information signs once the Project has reached final completion.

Measurement and **Payment** will be based on **EACH** project sign and shall be considered full compensation for this work item.

107.20010 – Permits:

The City of Avondale Engineering Right-of-Way Permit fee will be waived for this project. All other required permits shall be the Contractor's responsibility to obtain and pay for which may include but not be limited to; ADOT ROW permit, Maricopa County Environmental Dust Control permit and City fire hydrant meter fees. The cost for all permits is considered incidental to the work being performed, and no additional payment will be made.

SECTION 108 – COMMENCEMENT, PROSECUTION AND PROGRESS

108.50010 – Limitation of Operations and Sequencing of Construction:

The Contractor shall be aware of and coordinate this Project's Work with any other ongoing construction and/or traffic control in the immediate vicinity of the Project area.

Night and weekend work are not allowed unless specifically pre-approved by the City. The Contractor shall assume no night or weekend work for bidding purposes.

A minimum of two thru lanes, one each direction, shall remain open at all times. Provisions shall be made to allow for left turns including dedicated turn bays at all signalized intersections and other major collector cross-street intersections, unless otherwise specifically pre-approved by the City.

Any activities that will affect peak time traffic shall be pre-approved for times, days, and method by the City prior to implementation. Generally, no activities that affect peak time traffic on major collector and arterial streets will be allowed between 7:00 a.m. - 9:00 a.m. and from 4:00 p.m. - 6:00 p.m. Deviations may only occur when specifically approved by the City Engineer.

All milling, crack sealing and pavement replacement shall be completed before any preservative seals or slurry/micro seals can be applied.

SECTION 109 - MEASUREMENT AND PAYMENT

109.00010 – General:

Bid Item Numbers listed herein correspond to the Item Numbers listed in the Price Sheet of the FB's Exhibit "C".

Measurement for each bid item shall be done in the units installed or percent complete as indicated in the Price Sheet of the IFB's Exhibit "C". Measurement shall be for all work that is satisfactorily completed in place, with no allowance for waste, and that which is verified by field measurements as applicable.

In general, payments to the Contractor shall be in accordance with Article 3, General Terms and Conditions, Section 3.13, "Payments to Contractor" of the Contract Documents. Specific bid item payment guidelines shall be in accordance with the MAG Uniform Standard Specifications as applicable unless as revised or more particularly described in these Technical Specifications. Payment will be made at the Unit Price or Lump Sum price that was bid and as shown in the

Price Sheet of the IFB's Exhibit "C" and shall constitute payment in full for furnishing all materials, equipment, appurtenances, labor, plant and tools necessary to provide a complete Project in a workmanlike and satisfactory manner as shown by the Plan Drawings and in the Contract Documents described herein.

Bid Item 109.04000 - Miscellaneous Reimbursable (Allowance):

The work under this item shall consist of furnishing all necessary materials, equipment, and labor for work not covered by the Contract plans or documents due to an unforeseen field condition or other circumstance that has been identified during the construction phase as necessary to complete the Project. No work shall be performed under this item unless it is authorized, in writing, by the City or authorized representative. The scope of work, conditions, completion schedule and pricing for any extra work must be mutually agreed on and approved by the City before the work can commence. **Measurement** shall be based on City-approved time and material invoices or on a pre-approved, mutually agreed on price. **Payment** shall be for an amount not to exceed Fifty Thousand dollars (\$50,000.00) based on the approved time and material invoices or the pre-determined, pre-approved price for each separate extra work item and shall be considered full compensation for the work item.

Bid Item 109.10010- Mobilization/Demobilization:

The work under this item shall consist of furnishing all materials, equipment, and labor necessary to provide the Contractor a one-time, round trip mobilization/demobilization of the Contractor's personnel equipment, supplies and incidentals, establishment of offices, buildings and other facilities, required for the performance of the work on the Project, including preparatory work and operations prior to the commencement of the work on the Project site. **Measurement** and **Payment** for mobilization and demobilization shall be done in two equal parts of the Contractor's Bid Item **LUMP SUM** price. The first half payment shall be included in the Contractor's initial invoice and the second half payment shall be made after the Project has reached Substantial Completion as declared by the City and shall be considered full compensation for this work item.

PART 200 – EARTHWORK

SECTION 201 – CLEARING AND GRUBBING

Bid Item 201.01010 – Remove Tree, Diameter <12”;

Bid Item 201.01014 – Remove Palm Tree:

The work under this item shall consist of furnishing all materials, equipment, and labor necessary for the removal and disposal of trees in accordance with MAG Uniform Standard Specifications Sections 201. **Measurement** of items shall be per **EACH** tree removed. **Payment** shall be made at the unit price bid and such payment shall be compensation in full for the item complete in place.

Bid Item 201.10000 – Clearing & Grubbing:

The work under this item shall consist of furnishing all materials, equipment, and labor necessary for the removing objectional material from the right-of-way and easements in accordance with MAG Uniform Standard Specifications Sections 201. Items to be removed may include, but are not be limited to, plants, shrubs and bushes. Clearing and grubbing shall be performed prior to grading operations. **Payment** for Clearing and Grubbing shall be made at the **LUMP SUM** price bid and shall be considered full compensation for this work item.

PART 300 – STREETS AND RELATED WORK

SECTION 301 – SUBGRADE PREPARATION

Bid Item 301.01000 – Subgrade Preparation:

The work under this item shall consist of furnishing all materials, equipment, and labor necessary for preparation of natural or excavated areas prior to the placement of any sub-base material, pavement or other structures. Unless provided for in another bid item, this work shall include the removal and disposal of all unsuitable material including existing pavement and other obstructions in accordance with MAG Specification Section 301. The Contractor shall be required to provide and pay for all quality control geotechnical testing in accordance with the MAG Uniform Standard Specifications and the Avondale Supplement to MAG Uniform Standard Specifications and Details for Public Works Construction. **Measurement** of item will be by the **SQUARE YARD**, measured by the total area of new concrete pavements. The areas under concrete curb and gutter, sidewalk and concrete driveway entrances will not be included in the item measurement. Unless provided for in other separate bid items or unless otherwise specified; Clearing and Grubbing, Roadway Excavation, Borrow Excavation, and Fill Construction shall not be measured, in which case payment for these earthwork items, if required, shall be included in the unit price for Subgrade Preparation. **Payment** shall be made at the unit price bid and such payment shall be compensation in full for the item complete in place.

SECTION 321 – PLACEMENT AND CONSTRUCTION OF ASPHALT CEMENT PAVEMENT

Bid Item 321.00203– Asphaltic Concrete Pavement (19mm) High Volume Marshall Mix:

The work under this item shall consist of furnishing all materials, equipment, and labor for the placement and compaction of asphaltic concrete base course shall be in accordance with MAG Section 321. Placement and compaction of material will be as a base course for new pavement, as indicated on the plans. The base course mix shall be provided with an asphalt binder in accordance with MAG Section 710.

The Contractor shall submit written certification that the asphalt meets all requirements of MAG Section 710 for a 19 mm mix matching MAG High Volume Marshall ¾” Mix. Materials and mix design proposed to be used in the project must meet all the quality/design criteria prescribed for that specific material/design in the MAG Standard Specification Section 710 or elsewhere within the Standard Specification. Mix design and materials submittals are required for review and approval by the City. Contractor shall be responsible for all costs incurred for resubmittal of rejected mix designs and or materials until they are approved by the City. The

City reserves the right to have a test laboratory do quality assurance testing for pavement materials. The results may be used by the Engineer during the approval process.

When specified to be placed over existing AB in the plans, the existing AB will need to be shaped for the new cross slope and centerline elevation and compacted to meet MAG Uniform Standard Specifications prior to the placement of Asphalt Concrete Pavement. In some locations, existing AB may need to be removed to accommodate the pavement structural section specified in the plan. Existing AB that is removed can be used in other areas of the project where additional AB may be needed to help form increased centerline elevations specified in the plans. Any waste AB material not used on the project will become the responsibility of the contractor. No additional payment will be made to the contractor for removing, compacting or forming of existing AB, or disposal of waste.

Paving shall not commence until the City Engineer or their representative has accepted the asphalt base course and bituminous tack coat has been applied. **Measurement** of item shall be per **TON** of asphaltic concrete pavement in place. **Payment** shall be made at the unit price bid and such payment shall be compensation in full for the item complete in place.

SECTION 324 – PORTLAND CEMENT CONCRETE PAVEMENT (PCCP)

Bid Item 324.01090– Portland Cement Concrete Pavement (PCCP) 9” Thickness:

The work under this item shall consist of furnishing all materials, equipment, and labor necessary for the installation of Portland Cement Concrete Pavement in accordance with MAG Uniform Standard Specifications Sections 324 and 725. **Measurement** of item will be by the **SQUARE YARD** of 9-inch PCCP installed in place. **Payment** shall be made at the unit price bid and such payment shall be compensation in full for the item complete in place.

SECTION 329 – TACK COAT

Bid Item 329.01000– Asphalt Emulsion Tack Coat (SS-1):

The work under this item shall consist of furnishing all materials, equipment, and labor necessary for the application of an emulsified asphalt tack coat in accordance with MAG Uniform Standard Specifications Sections 329 and 713 with the application rate set at **0.08** gallons per square yard. Immediately before application, the underlying base course or other designated surface area shall be thoroughly cleaned of dirt, debris or other objectionable material. Application shall not take place until the Engineer or authorized representative has inspected and approved the cleaned surface area. **Measurement** of item will be made by the **TON** of diluted material applied. **Payment** shall be made at the unit price bid and such payment shall be compensation in full for the item complete in place.

SECTION 331 – MICROSURFACING SPECIFICATIONS

Bid Item 331.03200 – Microsurfacing (Type II Aggregate):

The work under this item shall consist of furnishing all materials, equipment, and labor necessary for the placement of microsurfacing material on existing pavement at the locations shown on the plans. Work under this item shall be installed and tested in accordance with MAG

Section 331. The aggregate material shall meet the MAG 714 specification for Type II aggregate. The Contractor shall be responsible for any necessary testing of materials for compliance. The Loaded Wheel Sand Adhesion Test criteria will be based on traffic volumes greater than 3000 vehicles per day. The Contractor shall protect all survey monuments, manholes and valve covers from the microsurface application. The Contractor shall be responsible for measuring, documenting, setting off-set references and/or whatever necessary to re-establish location and alignment of any existing striping and pavement markings.

Traffic control set-up and maintenance shall be the responsibility of the contractor. Streets with new pavement or new pavement surface treatments shall not be open for public use until all permanent lane striping is complete, or until temporary striping and/or temporary traffic control (barricades) have been provided in accordance with an approved plan.

Material costs shall include the required quantities of mineral aggregates, filler material, asphalt emulsion, rolling and all incidentals necessary to complete the work. Costs for lay-out, any additional surface prep including cleaning/sweeping as necessary and removal of raised pavement markers, if required, shall be included in the unit bid price for this item. Application of blotting materials and other excess materials removal/clean-up to prevent tracking shall be included in the unit bid price for this item. Yellow RPM's will not be required to be replaced. Any re-striping will be performed under separate Bid Items. Adjustments of manholes and valve boxes are to be paid under separate Bid Items. **Measurement** of item will be made by **SQUARE YARD** of total area of existing pavement in which microsurface material is applied. **Payment** shall be made at the unit price bid and such payment shall be compensation in full for the item complete in place.

SECTION 340 – CONC CURB, GUTTER, S/W, CURB RAMPS, D/W & ALLEY ENTRANCE

Bid Item 340.01110 – 6” Vertical Curb and Gutter, MAG Std. Det. 220, Type A:

Bid Item 340.01160 – 6” Single Curb, MAG Std. Det. 222, Type B:

The work under this item shall consist of furnishing all materials, equipment, and labor necessary for the construction of new Portland Cement concrete curb and gutter at the locations, grades and elevations shown on the project plan documents. All curb and gutter work shall be constructed in accordance with MAG Specification Section 340, MAG Standard Detail as specified in plans, and the City of Avondale Supplement to the MAG Uniform Standard Specifications as applicable. The Contractor shall verify line and grade prior to placing any concrete. **Measurement** of items will be per each **LINEAR FOOT** of curb installed in place. **Payment** shall be made at the unit price bid and such payment shall be compensation in full for the item complete in place.

Bid Item 340.01210 – 4” Thick Sidewalk, MAG Std. Det. 230:

The work under this item shall consist of furnishing all materials, equipment, and labor necessary for the construction of concrete sidewalk at the locations, grades and elevations shown on the project plan documents. Also included in this work, is the material, equipment, and labor necessary to prepare subgrade under the sidewalk. The sidewalk width shall be five-foot minimum and match existing sidewalk unless otherwise shown on the plans. All concrete sidewalk work shall be constructed in accordance with MAG Specification Section 340, MAG

Detail No. 230 and the City of Avondale Supplement to the MAG Uniform Standard Specifications as applicable. Care shall be taken with the installation of concrete sidewalk ramps to protect in place any existing vegetation, irrigation system, signs, walls or concrete that may be present. Any damage to existing vegetation, irrigation system, signs, walls or concrete will need to be repaired to their current condition at the Contractor's expense. **Measurement** of item will be per each **SQUARE FOOT** of sidewalk installed in place. **Payment** shall be made at the unit price bid and such payment shall be compensation in full for the item complete in place.

Bid Item 340.01303– Curb Ramp, MAG Std. Det. 236-5 (Modified):

The work under this item shall consist of furnishing all materials, equipment, and labor for construction of Portland Cement concrete, ADA compliant pedestrian sidewalk ramps adjacent to sidewalk at the locations shown on the plans. Also included in this work, is the material, equipment, and labor necessary to provide a transition from the adjacent sidewalk to the ramp and any subgrade preparation for the curb ramp and transitions. Sidewalk ramps shall be in accordance with MAG standard specification section 340 and shall be constructed per MAG Standard Detail 253-3 including any modifications to that standard detail as identified in the plans and the City of Avondale Supplement to the MAG Uniform Standard Specifications as applicable. **Measurement** of item will be per **EACH** ramp installed in place. **Payment** shall be made at the unit price bid and such payment shall be compensation in full for the item complete in place.

Bid Item 340.01454 – Commercial Driveway Entrance, COA Std. Det. A1251-1 (Modified):

The work under this item shall consist of furnishing all materials, equipment, and labor for the construction of driveways at locations shown on the plans. Driveways shall be constructed in accordance with City of Avondale Standard Detail A1254 (including any modifications to that standard detail as identified in the plans), MAG Standard Specification Section 340, Avondale Supplement to MAG specifications, and as detailed in the project plans. Included in this work is the material, equipment, and labor necessary to install the concrete sidewalk ramps, detectable warning surface and curb as shown in Avondale Standard Detail A1254. Driveway width shall be as called out on the plans. All items shall be in accordance with Section 340 of the MAG Uniform Standard Specifications. Contractor must maintain vehicle access to the businesses at all times during driveway construction. Full driveway closures during driveway construction are prohibited. Care shall be taken with the installation of residential driveways to protect in place any existing fencing, gates, or walls that may be present. Any damage to existing fencing, gates or walls will need to be repaired to their current condition at the Contractor's expense. **Measurement** of item will be per **SQUARE FOOT** installed in place. **Payment** shall be made at the unit price bid and shall be considered full compensation for this work item

SECTION 350 – REMOVAL OF EXISTING IMPROVEMENTS

Bid Item 350.01001 – Remove & Salvage Meter Pedestal;

Bid Item 350.01002 – Remove & Salvage Controller Cabinet;

Bid Item 350.01003 – Remove & Salvage Traffic Signal Pole, Mast Arms & Equipment;

Bid Item 350.01004 – Remove & Salvage Traffic Signal Pole;

Bid Item 350.01005 – Remove & Salvage Internally Illuminated Street Name Sign:

The work under this item shall consist of furnishing all labor, equipment and materials required to remove and salvage the existing meter pedestal, controller cabinet, internally illuminated street name signs, traffic signal poles, mast arms and equipment, as called for on the plans in accordance with the requirements MAG Standard Specification Section 350. The Contractor shall carefully remove the existing meter pedestal, controller cabinet, signal poles, mast arms and equipment, as identified in the plans, in a manner so as to prevent any damage to the removed equipment, existing conductors or the existing foundations. Salvaged materials and equipment shall be delivered to the City of Avondale. The contractor shall contact City of Avondale Traffic Operations Supervisor, Bennie Robinson at 623-333-4231 a minimum of two (2) working days in advance of delivery for location. **Measurement** of items will be per **EACH** pedestal, cabinet, sign, and signal pole removed. **Payment** will be made at the unit price bid for the completed work and delivery of the salvaged items to the City of Avondale. No separate measurement or payment will be made for additional materials or hardware required to complete this work, the cost considered included in the contract price.

Bid Item 350.01006 – Remove Traffic Signal Conduit:

The work under this item shall consist of furnishing all labor, equipment and materials required to remove traffic signal conduit as called for in the plans in accordance with MAG Standard Specification Section 350. The Contractor shall carefully remove the existing traffic signal conduit, as identified in the plans, in a manner so as to prevent any damage to the existing cabinets, signal pole and signal equipment. Any voids created by removal operations shall be backfilled and compacted in accordance with MAG Standard Specification Section 211. **Measurement** of item will be per **LINEAR FOOT** of conduit removed. **Payment** will be made at the unit price bid for the completed work. No separate measurement or payment will be made for additional materials or hardware required to complete this work, the cost considered included in the contract price.

Bid Item 350.01007 – Remove Meter Pedestal Foundation, Backfill & Compact Void;

Bid Item 350.01008 – Remove Traffic Signal Pole Foundation, Backfill & Compact Void;

Bid Item 350.01009 – Remove Traffic Pull Box;

Bid Item 350.01010 – Remove Traffic Pull Box, Backfill & Compact Void:

The work under these items shall consist of furnishing all labor, equipment and materials required to remove existing meter pedestal and traffic pole foundations as well as pull boxes as called for in the plans and in accordance with MAG Standard Specification Section 350. The work shall include backfilling and compacting any voids resulting from foundation or pull box removals as identified on the plans in accordance with MAG Standard Specification Section 211. **Measurement** of items will be per **EACH** foundation or pull box removed. **Payment** will be made at the unit price bid for the completed work. No separate measurement or payment will be made for additional materials or hardware required to complete this work, the cost considered included in the contract price.

Bid Item 350.01011 – Remove 2 Pedestrian Indications & Mounting Assembly;

Bid Item 350.01012 – Remove Pedestrian Push Button Assembly;

The work under this item shall consist of furnishing all labor, equipment and materials required

to remove existing traffic signal indicators, traffic signal push buttons and any associated assemblies as called for in the plans in accordance with MAG Standard Specification Section 350. The Contractor shall carefully remove the existing items, as identified in the plans, in a manner so as to prevent any damage to the existing signal, signal pole and signal equipment. **Measurement** of items will be per **EACH** traffic signal indicator or push button removed. **Payment** will be made at the unit price bid for the completed work. No separate measurement or payment will be made for additional materials or hardware required to complete this work, the cost considered included in the contract price.

Bid Item 350.01013 – Remove & Salvage Video Detection System:

The work under this item shall consist of furnishing all labor, equipment and materials required to remove and salvage the existing traffic video detection systems and any associated assemblies as called for in the plans and shall be in accordance with MAG Standard Specification Section 350. The Contractor shall carefully remove the existing items, as identified in the plans, in a manner so as to prevent any damage to the existing traffic signal pole, mast arm, and video equipment. Salvaged materials and equipment shall be delivered to the City of Avondale. The contractor shall contact City of Avondale Traffic Operations Supervisor, Bennie Robinson at 623-333-4231 a minimum of two (2) working days in advance of delivery for location. **Measurement** of item will be measured and paid for at the contract **LUMP SUM** price and include removal of sensors plus peripherals, cable, brackets, etc. for the complete intersection system including all labor, lift vehicles, traffic control, tools and equipment necessary for installation of the emergency vehicle preemption system, complete in place. **Payment** will be made at the unit price bid for the completed work. No separate measurement or payment will be made for additional materials or hardware required to complete this work, the cost considered included in the contract price.

Bid Item 350.01014 – Plug Opening in Signal Pole:

The work under this item shall consist of furnishing all labor, equipment and materials required to plug openings in signal poles resulting from the removal of traffic signal equipment, as identified on the plans.

The contractor shall remove the existing traffic signal equipment, as directed on the plans and as directed by the Engineer. The contractor shall plug weld with a hot galvanized finish the remaining openings, including bolt holes on the traffic signal pole. The contractor shall paint the extents of their work in a color which matches the existing pole color. The plug assembly shall be weather-proof and constructed such that it will be impossible to receive any electrical shock under any weather condition. The plug shall be shaped to fit the curvature of the pole to which it is attached and shall provide a rigid, tamper proof installation. The contractor shall approval from the engineer prior to any further installation.

Measurement of item will be per **EACH** hole plugged to the satisfaction of the Engineer. **Payment** will be made at the unit price bid for the completed work. No separate measurement or payment will be made for additional materials or hardware required to complete this work, the cost considered included in the contract price.

Bid Item 350.01015 – Salvage & Reinstall Trombone Mast Arm with Equipment;
Bid Item 350.01016 – Salvage & Reinstall Luminaire Mast Arm with LED Luminaire;
Bid Item 350.01017 – Salvage & Reinstall Side Mounted Traffic Signal & Pedestrian Indications;
Bid Item 350.01018 – Salvage & Reinstall Pedestrian Push Button Assembly;
Bid Item 350.01019 – Salvage & Reinstall LED Luminaire;
Bid Item 350.01020 – Salvage & Reinstall Internally Illuminate Street Name Sign Assembly;
Bid Item 350.01021 – Salvage & Reinstall Emergency Vehicle Pre-Emption System;
Bit Item 350.01022 – Salvage & Reinstall Ethernet Radio Antenna:

The work under this item shall consist of furnishing all labor, equipment and materials required to remove and salvage on-site existing traffic signal mast arms and other traffic signal equipment listed above and as called for in the plans. The work under this item also includes the re-installation of the aforementioned mast arms and equipment onto the City furnished traffic signal poles, as identified on the plans.

The Contractor shall carefully remove the existing traffic signal mast arms and traffic signal equipment, as identified in the plans, in a manner so as to prevent any damage to the salvaged equipment, existing conductors or the existing foundations. This also includes equipment that is attached to the salvaged traffic signal and luminaire mast arms including, but not limited to; signal indications, mounting assemblies, closed circuit television cameras, emergency vehicle pre-emption units, etc. The re-installation of the existing equipment will conform to the requirements of Section 901 of the City of Avondale Supplement to MAG Standard Specifications and Details as well as the ADOT Specifications.

Salvaged equipment that is not re-installed at new locations shall be delivered to the City of Avondale. Contact City of Avondale Traffic Operations Supervisor, Bennie Robinson at 623-333-4231 a minimum of two (2) working days in advance of delivery for location.

Measurement of items will be per **EACH** mast arm or traffic signal equipment salvaged and reinstalled. ***Payment*** will be made at the unit price bid for the completed work. No separate measurement or payment will be made for additional materials or hardware required to complete this work, the cost considered included in the contract price.

Bid Item 350.01120– Remove Storm Drain Pipe, Backfill and Compact:

The work under this item shall consist of furnishing all materials, equipment, and labor for the excavation, removal and disposal of existing storm drain pipe and appurtenances including installing compacted backfill per MAG Uniform Standard Specifications Section 211 at the locations shown in the plans. The Contractor shall be required to provide and pay for all quality control geotechnical testing in accordance with the MAG Uniform Standard Specifications Section 350. Payment for pavement removal and pavement replacement shall be paid under separate bid items. ***Measurement*** of item will be per each **LINEAR FOOT** of pipe removed. ***Payment*** shall be made at the unit price bid and such payment shall be compensation in full for the item removal and disposal.

Bid Item 350.01300 – Remove Asphalt Concrete Pavement:

The work under this item shall consist of furnishing all materials, equipment, and labor necessary for removing existing asphalt concrete pavement as shown on the project plan documents. Pavement removal shall be in accordance with MAG Standard Specification Sections 336 and 350. The Contractor is responsible for protecting all adjacent pavement and concrete. The pavement removal operation shall not damage any underground utilities that are to remain in place. The Contractor shall include all removal related costs in this bid item work including saw cut, milling, loading, hauling, off-site disposal and clean-up. **Measurement** of item will be per each **SQUARE YARD** removed. **Payment** shall be made at the unit price bid and such payment shall be compensation in full for the item removal and disposal.

Bid Item 350.01400 – Remove Catch Basin:

The work under this item shall consist of furnishing all materials, equipment, and labor necessary for removal of existing catch basin as shown on the plans and in accordance with MAG Uniform Standard Specifications Section 350. Hauling and disposal shall be incidental to this item of work. **Measurement** of item will be per **EACH** catch basin removed. **Payment** shall be made at the unit price bid and such payment shall be compensation in full for the item removal and disposal.

Bid Item 350.01800 – Remove Concrete Curb and Gutter;

Bid Item 350.01850 – Remove Concrete Single Curb:

The work under this item shall consist of furnishing all materials, equipment, and labor necessary for the removal of existing concrete curb and gutter as shown on the project plan documents including roll, vertical and ribbon type curbing. Concrete curb and gutter removal shall be in accordance with MAG Standard Specification Section 350. The Contractor shall include all removal related costs in this bid item work including saw cut, loading, hauling and off-site disposal. Locations, limits and quantities shall be per plan. **Measurement** of items will be per each **LINEAR FOOT** of curb removed. **Payment** shall be made at the unit price bid and such payment shall be compensation in full for the item removal and disposal.

Bid Item 350.01900 – Remove Concrete Sidewalk;

Bid Item 350.01910 – Remove Concrete Driveway:

The work under this item shall consist of furnishing all materials, equipment, and labor necessary for the removal of existing concrete sidewalk, ramp, driveway and slabs as shown on the project plan documents. All flat concrete removals shall be in accordance with MAG Uniform Standard Specifications Section 350. The Contractor shall include all removal related costs in this bid item work including saw cut, loading, hauling and off-site disposal. Locations, limits and quantities shall be per plan and/or as designated by the City's Engineering Representative. Contractor must maintain vehicle access to the businesses at all times during driveway removal. Full driveway closures during driveway removal are prohibited. **Measurement** of items will be per each **SQUARE FOOT** of concrete removed. **Payment** shall be made at the unit price bid and such payment shall be compensation in full for the item removal and disposal.

PART 400 – RIGHT OF WAY & TRAFFIC CONTROL

SECTION 401 – TRAFFIC CONTROL

Bid Item 401.01000– Traffic Control:

The work performed under this Bid Item shall consist of providing all required traffic control barricades, devices, signage, temporary paint pavement markings (striping), flagmen set-ups, pilot cars and other related maintenance as necessary, in accordance with MAG Standard Specification Section 401 and as amended by the City’s “Traffic Regulations” Section of the General Terms and Conditions of the Contract Documents and the City of Avondale Supplement to the MAG Uniform Standard Specifications as applicable. Traffic control set-up and maintenance shall be the responsibility of the contractor. Traffic Control shall be further defined by site specific pre-approved traffic control plans (TCPs) and such costs consisting of preparing and submitting ATSSA certified traffic control plans for approval shall be included. Plans must be submitted to the City of Avondale for review and approval a minimum of three Avondale Business Days (M – TH) prior to the start of the related work. The plans must be complete, detailed and meet the City’s submittal guidelines. Work requiring traffic restrictions shall not start until the traffic control plans have been approved by the City.

Road closures for convenience of the Contractor shall not be allowed. During construction activities, a minimum of two thru lanes, one each direction, shall remain open at all times. Provisions shall be made to allow for left turns including dedicated turn bays at all signalized intersections and other major collector cross-street intersections, unless otherwise specifically pre-approved by the City. Any activities that will affect peak time traffic shall be pre-approved for times, days, and method by the City prior to implementation. Generally, no activities or traffic restrictions that affect peak time traffic on major collector and arterial streets will be allowed between 6:00 a.m. - 9:00 a.m. and from 4:00 p.m. - 7:00 p.m., M-F. Deviations may only occur when specifically pre-approved by the City. The Contractor shall maintain 24hr access for all Emergency vehicles through the project; no exceptions.

It shall be the responsibility of the Contractor to provide, erect, maintain, remove and/or relocate all temporary and existing traffic control devices and signal indications necessary to properly mark and control the construction area(s) for the safe and efficient movement of all roadway users including pedestrians. The Contractor shall inspect and maintain all installed temporary traffic control devices at least once during a twenty-four (24) hour period. More frequent intervals of inspection and maintenance shall be made during periods of high winds or other detrimental conditions including a continuing problem maintaining the signs and devices. All temporary traffic control devices shall be ballasted with sandbags.

If traffic cones are approved to be used in lieu of barricades for day-time pavement related work only, 28” tall, high visibility orange cones may be permitted until the streets are opened up to traffic. Traffic cones shall not be allowed for any over-night traffic control. The spacing of the cones and/or signs to be used shall be per the City of Phoenix Traffic Barricade Manual. The number of cones on hand must be sufficient for an entire day's work, including any patchwork done that same day. When construction activities require the use of flagmen, it shall be the contractor’s responsibility to provide ATSSA certified and trained personnel to serve as flagmen. Payment for uniformed off-duty police officers, if required, shall be paid under a separate bid item as an allowance.

Streets with new pavement or new pavement surface treatments shall not be open for public use until all permanent lane striping is complete, or until temporary striping and/or temporary traffic control (barricades) have been provided in accordance with an approved plan.

The Contractor shall maintain local access to all side streets, access roads, driveways and alleys, at all times and shall notify all affected residents 48 hours in advance of any restrictions which will affect their access. The Contractor shall restore full access as soon as possible. If access cannot be restored in a timely manner, the Contractor shall provide an alternative which shall be pre-determined with the residents prior to imposing any restrictions. Any local street restrictions imposed shall be such that local area traffic circulation and emergency vehicle access is maintained. The Contractor shall ensure that all existing sidewalks on this project that remain open are fully accessible and safe for pedestrian access.

Access to the Chevron Gas Station shall be maintained at all times during the project. Driveway removal and construction at Station 21+20 shall occur while maintaining access for customers and business deliveries at all times. A driveway closure is prohibited.

Measurement of item will be prorated (overall project percent completion) each month over the project's duration. The Contractor is responsible for all costs incurred in replacing lost or damaged traffic control devices and traffic control warning signs. **Payment** for Traffic Control shall be made at the **LUMP SUM** price bid and shall be considered full compensation for this work item.

Item 401.01100 – Uniformed Off-Duty Officer (Allowance):

This item shall consist of providing a Uniformed Off-Duty Police Officer to coordinate and direct on-site traffic control when construction activities are within 150 ft of a signalized street intersection and the activities impact traffic movement, or as otherwise required or directed by the City. Prior approval of the use of a Uniformed Off-Duty Police Officer shall be obtained from the City of Avondale. The City of Avondale Police Department shall have the first right of refusal to provide the service. Contractor shall provide at least 72 hours of prior notice. Contractor shall contact Frances Jones (fjones@avondale.org) or at (623) 333-7260 Monday through Thursday between 6 am and 4 pm to schedule a Uniformed Off-Duty Police Officer. If the Contractor contracts directly with the City of Avondale Police, then the Contractor will be responsible to provide worker's compensation insurance coverage. Measurement and Payment for a police officer will be on an hourly basis not to exceed fifteen thousand dollars (\$15,000.00).

SECTION 430 – LANDSCAPING & PLANTING

Bid Item 430.01003 – Landscape & Irrigation Restoration:

The work under this item shall consist of furnishing all materials, equipment, and labor necessary for the restoration of existing landscape related items due to the relocation of sidewalk, curb and gutter, or single curb as provided on the project plan documents. This will include, but not be limited to, removal and reconfiguration of irrigation systems, removal and restoration of turf, removal and restoration of decomposed granite and plantings that may be impacted due to proposed improvements. The area between the back of sidewalk and right-of-

way, or easement, if applicable, shall be restored to match the existing condition.

Disturbance areas shall be kept as small as possible to accomplish the new improvements so that disturbance to the existing landscape and irrigation systems is as minimal as possible. All landscape restoration work shall be in accordance with MAG Standard Specification Sections 430 and 440 and City of Avondale Supplement to MAG Uniform Standards Specifications and Details for Public Works Construction Section 430 and 440.

Contractor shall provide new decomposed granite within disturbed areas to adjacent locations within the same property. Contractor shall match color and gradation of any decomposed granite in these Landscape and Irrigation Restoration Areas and supply new granite as necessary to bring disturbed areas back to original condition that shall be a minimum of 2 inches in depth. Contractor shall contact the Engineer for review and approval of Landscape Restoration materials.

The work shall also consist of reconstructing or repairing the existing irrigation system in areas designated on the plans. The Contractor shall be required to repair and/or replace all disturbed or damaged irrigation components returning their operation to 100 percent within 24 hours following initial disturbance of any of the irrigation components. The existing irrigation that will be impacted includes the drip irrigation system for the trees, shrubs and ground covers, and turf irrigation spray systems. The work shall include furnishing and installing the various irrigation sleeping, piping, drip emitters, sprinklers, gate valves, electric control valves, wiring, and valve boxes, including required excavation and backfill at the designated locations shown on the project plans or as directed by the Engineer. The existing irrigation components shall be protected and maintained in their current condition where feasible or repaired, replaced, extended, and reconnected in areas including but not limited to, those areas that are disturbed during the construction, areas shown on the project plans, or as directed by the Engineer. The Contractor shall be required to maintain water to all existing plan materials throughout the duration of the contract using repairs, reconnections, replacements or rerouting of the system as approved by the Engineer.

Construct the irrigation system using the emitters, sprinklers, valves, piping, fittings, controllers, wiring, and other components, of sizes and types to match existing equipment and as called for in these specifications. All replacement or repair materials shall match the existing damaged materials. Irrigation materials and components shall be from the same manufacturer as originally installed. Emitters shall have the same volume output as the original. PVC pipe may be a different manufacturer, but the grade shall be the same as originally installed. All mainline fittings shall be Schedule 80; all lateral fittings shall be Schedule 40.

Measurement of item will be based on completed restoration work as a percent complete. Completed landscape restoration work shall be field verified by the City Engineering Inspector. **Payment** shall be made at the **LUMP SUM** price bid and shall be considered full compensation for this work item.

Bid Item 430.40002– Decomposed Granite & Turf Removal (East Side of Dysart Road):
The work under this item shall consist of furnishing all materials, equipment, and labor necessary for the removal of existing turf and irrigation systems, and installation of decomposed

granite where indicated on the plans.

Where removed turf is adjacent to existing turf to remain or near shrub irrigation systems, the Contractor shall restore the existing irrigation system per the requirements of Bid Item 430.01003 – Landscape and Irrigation Restoration. No additional measurement or payment shall be made for this work, the cost considered incidental to the new decomposed granite installation.

All decomposed granite work shall be in accordance with MAG Standard Specification Sections 430 and the City of Avondale Supplement to the MAG Uniform Standard Specifications Contractor shall match color, size and thickness of existing decomposed granite within project area adjacent to placement. Placement shall not commence until the City Engineer or their representative has accepted the color, size and application thickness of decomposed granite. Completed decomposed granite work shall be field verified by the City Engineering Inspector. Any removals and grading shall be incidental to this work. **Measurement** of item will be per each **SQUARE FOOT** of decomposed granite installed in place. **Payment** shall be made at the unit price bid and such payment shall be compensation in full for the item complete in place.

Bid Item 430.40003– Decomposed Granite & Turf Removal (West Side of Dysart Road):

The work under this item shall consist of furnishing all materials, equipment, and labor necessary for the removal of existing turf and irrigation systems, and installation of decomposed granite where indicated on the plans.

Where removed turf is adjacent to existing turf to remain or near shrub irrigation systems, the Contractor shall restore the existing irrigation system per the requirements of Bid Item 430.01003 – Landscape and Irrigation Restoration. No additional measurement or payment shall be made for this work, the cost considered incidental to the new decomposed granite installation.

All decomposed granite work shall be in accordance with MAG Standard Specification Sections 430 and the City of Goodyear Engineering Design Standards and Policies Manual, Section 7.2.2.G. Contractor shall match color, size and thickness of existing decomposed granite within project area adjacent to placement. Placement shall not commence until the City Engineer or their representative has accepted the color, size and application thickness of decomposed granite. Completed decomposed granite work shall be field verified by the City Engineering Inspector. Any removals and grading shall be incidental to this work. **Measurement** of item will be per each **SQUARE FOOT** of decomposed granite installed in place. **Payment** shall be made at the unit price bid and such payment shall be compensation in full for the item complete in place.

Bid Item 430.01004 – Shrubs & Irrigation System:

The work under this item shall consist of furnishing all materials, equipment, and labor necessary for installation of 6 new shrubs and extending the existing irrigation system at the northwest corner of Dysart Road and Cornerstone Boulevard as provided on the project plan documents. This will include, but not be limited to, reconfiguration of irrigation systems and providing and installing new shrubs. All work shall be in accordance with MAG Standard

Specification Sections 430 and 440 and City of Avondale Supplement to MAG Uniform Standards Specifications and Details for Public Works Construction Section 430 and 440. Plants to be added to the northwest corner of Dysart Road and Cornerstone Boulevard shall be selected to match the existing landscape adjacent to the area as well as meet the recommendations provided in Arizona Department of Water Resource's Low Water Use Drought Tolerant Plant List. Locations and type of planting shall be selected and located by a landscape architect and not inhibit sight triangles at the intersection. City Engineer must accept landscape architect's staked plant location prior to planting. **Measurement** of item will be based on completed restoration work as a percent complete. Completed landscape restoration work shall be field verified by the City Engineering Inspector. **Payment** shall be made at the **LUMP SUM** price bid and shall be considered full compensation for this work item.

PART 500 – STRUCTURES RELATED WORK

SECTION 505 – CONCRETE STRUCTURES

Bid Item 505.10110 – Catch Basin, MAG Std Det. 531, Type B:

The work under this item shall consist of furnishing all materials, equipment, and labor necessary for the installation of a concrete catch basin and vertical curb where indicated and as detailed in the plans. No separate measurement or payment will be made for the vertical curb shown in the catch basin detail in the plans, the cost considered included in the contract price. Construction shall be in accordance with MAG Standard Detail 531, Type B, MAG Standard Detail 222, Type B, and MAG Standard Specification Sections 340 and 505. **Measurement** of item will be per **EACH** catch basin constructed complete in place. **Payment** shall be made at the unit price bid and such payment shall be compensation in full for the item complete in place.

PART 600 – WATER & SEWER RELATED WORK

SECTION 618 – STORM DRAIN CONSTRUCTION

Item 618.76000 – 12” HDPE Drain Pipe:

The work under this item shall consist of furnishing all materials, equipment, and labor for the installation of 12-inch High Density Polyethylene Pipe (HDPE), fittings and all appurtenances for storm sewer drain use as shown on the plans and in accordance with MAG Standard Specification Sections 611, 618 and 738. The work shall include all excavation, removal of obstructions, pipe bedding, backfilling, compaction, connecting to existing storm drain lateral, sheeting and bracing, testing, supporting, disposal of trench spoils and protecting other utilities in accordance with MAG Standard Specification Sections 601 and 603. Contractor shall field verify location and elevation of any known (plan or Blue-Staked) crossing utilities in advance of trench excavation and ensure proper installation separation. All utilities should be protected in place. Pipe bedding, shading, and backfill shall be 100% ABC under new roadways being constructed and 100% 1 sack CLSM under existing roadways. **Measurement** of item will be per each **LINEAR FOOT** of pipe furnished and installed. **Payment** shall be made at the unit price bid and such payment shall be compensation in full for the item complete in place.

PART 900 – TRAFFIC SIGNALS

SECTION 901 – TRAFFIC SIGNALS

Bid Item 901.01001 – Traffic Signal Pole, Type Q (COA Furnished);

Bid Item 901.01002 – Traffic Signal Pole, Type R (COA Furnished);

Bid Item 901.01003 – Traffic Signal Pole, Type R w/ 55' Trombone Mast Arm:

The work under this item shall consist of furnishing all materials, equipment, and labor for the installation of traffic signal poles, mast arms and connecting bolts, conforming to the City of Avondale Standard Details A1741, A1742, A1746 as well as Section 901 of the City of Avondale Supplement to MAG Standard Specifications and Details, and Section 731 of the ADOT Specifications. Poles that will be furnished by the City of Avondale will be transported by the contractor to the project site for installation. The contractor shall contact City of Avondale Traffic Operations Supervisor, Bennie Robinson at 623-333-4231 a minimum of two (2) weeks in advance of installation for pick-up location. The contractor shall apply a fresh coat of paint to the City furnished pole in accordance with Section 901 of the City of Avondale Supplement to MAG Standard Specifications and Details.

Installation of signal poles and mast arms shall be measured per each, by type of pole and mast arm combination. No separate measurement or payment will be made for additional materials or hardware required to complete this work, the cost considered included in the contract price. ***Measurement*** of item will be per **EACH** type of pole or mast arm installed complete and in-place. ***Payment*** shall be made at the unit price bid and shall be considered full compensation for this work item.

Bid Item 901.01004 – Pedestrian Push Button Post:

The work under this item shall consist of furnishing all materials, equipment, and labor for the installation of pedestrian push button posts conforming to ADOT Drawing Number T.S. 4-22 and Section 731 of the ADOT Specifications.

Installation of pedestrian push button posts shall be measured per each. No separate measurement or payment will be made for additional materials or hardware required to complete this work, the cost considered included in the contract price. ***Measurement*** of item will be per **EACH** post installed complete and in-place. ***Payment*** shall be made at the unit price bid and shall be considered full compensation for this work item

Bid Item 901.02001 – Traffic Signal Pole Foundation, Type R;

Bid Item 901.02002 – Pedestrian Push Button Post Foundation:

The work under this item shall consist of furnishing all labor, equipment and materials required to construct traffic signal pole foundations. The foundations shall be constructed in accordance with City of Avondale Standard Detail A1740 and ADOT Drawing Number T.S. 4-22 for the Type R and Pedestrian Push Button Post respectively. All materials and construction shall conform to the requirements of Section 901 of the City of Avondale Supplement to MAG Standard Specifications and Details and Section 731 of the ADOT Specifications, except when otherwise indicated in these Technical Specifications or the Project Plans. The Contractor is responsible for furnishing all reinforcement cages, anchor bolts and other equipment as shown in applicable standard details. No separate measurement or payment will be made for additional

materials or hardware required to complete this work, the cost considered included in the contract price. **Measurement** of items will be per **EACH** signal foundation installed. **Payment** shall be made at the unit price bid and shall be considered full compensation for this work item.

Bid Item 901.03001 – Luminaire Mast Arm, 15':

The work under this item shall consist of furnishing all materials, equipment, and labor for the installation of luminaire mast arms. The luminaire mast arms shall be furnished and installed in accordance with City of Avondale Standard Detail A1741. All materials and construction shall conform to the requirements of Section 901 of the City of Avondale Supplement to MAG Standard Specifications and Details and Section 731 of the ADOT Specifications.

Measurement of luminaire mast arms will be per **EACH** luminaire mast arm installed complete, in-place, and operational. **Payment** shall be made at the unit price bid and shall be considered full compensation for this work item.

Bid Item 901.04001 – Traffic Signal Conduit, 2" Schedule 80 PVC, Trench;

Bid Item 901.04001 – Traffic Signal Conduit, 2½" Schedule 80 PVC, Trench;

Bid Item 901.04003 – Traffic Signal Conduit, 3" Schedule 80 PVC, Trench:

Bid Item 901.04002 – Traffic Signal Conduit, 3" Schedule 80 PVC, Directional Bore;

The work under this item shall consist of furnishing all materials, equipment, and labor for the installation of traffic signal conduit in accordance with City of Avondale Standard Detail A1731. All materials and construction shall conform to the requirements of Section 901 of the City of Avondale Supplement to MAG Standard Specifications and Details and Section 732 of the ADOT Specifications.

Measurement of traffic signal conduit will be per **LINEAR FOOT** of conduit installed complete and in-place. **Payment** shall be made at the unit price bid and shall be considered full compensation for this work item.

Bid Item 901.05001 – Pull Box, No 7 (Heavy Duty):

The work under this item shall consist of furnishing all materials, equipment, and labor necessary for installation of Heavy Duty Number 7 pull boxes and lids at the locations shown on the project plans or as otherwise directed by the City of Avondale. The Number 7 pull box and lid shall be in accordance with ADOT Drawing Number T.S. 1-2. All materials and construction shall conform to the requirements of Section 901 of the City of Avondale Supplement to MAG Standard Specifications and Section 732 of the ADOT Specifications.

Measurement of heavy duty pull boxes will be per **EACH** pull box installed. **Payment** shall be made at the unit price bid and shall be considered full compensation for this work item.

Bid Item 901.06001– Conductors:

All cabling not furnished by others elsewhere in these Special Provisions or specified as furnished and installed by City of Avondale in the project plans shall be furnished and installed by the Contractor as specified on the plans and will conform to and Section 732 of the ADOT

Specifications. **Measurement** of item will be based on conductor installation as a percent complete. **Payment** shall be made at the **LUMP SUM** price bid and shall be considered full compensation for this work item.

Bid Item 901.07001– Traffic Signal Indication, Type F;

Bid Item 901.07002– Traffic Signal Indication, Type Q;

Bid Item 901.07003– Traffic Signal Indication, Type S;

Bid Item 901.07004– Pedestrian Signal Indication:

The work under this item shall consist of furnishing all materials, labor, and equipment required to install traffic and pedestrian signal indications, backplates, and visors conforming to ADOT Drawing Numbers 8-1, 8-2, 8-3, and 8-7. Type S traffic signal indication refers to Type Q2 as shown in ADOT Detail Number T.S. 8-3. All materials and construction shall conform to the requirements of Section 733 of the ADOT Specifications. **Measurement** of item will be per **EACH** indication furnished and installed complete, in-place, and operational. **Payment** shall be made at the unit price bid and shall be considered full compensation for this work item.

Bid Item 901.08001– Accessible Pedestrian Push Button Assembly

The work under this item shall consist of furnishing all materials, labor, and equipment required to install pedestrian push buttons and associated pedestrian button signs conforming to ADOT Drawing Number T.S. 11-1. All materials and construction shall conform to the requirements of Section 901 of the City of Avondale Supplement to MAG Standard Specifications and Details as well as Section 733 of the ADOT Specifications. Pedestrian push buttons shall be mounted on the poles in a manner accessible by ADA requirements and applicable ADOT standards. **Measurement** of item will be per **EACH** pedestrian push button installed. **Payment** shall be made at the unit price bid and shall be considered full compensation for this work item.

Bid Item 901.09001– Mounting Assembly, 1 ½" Coupling

Bid Item 901.09002– Mounting Assembly, Type V

Bid Item 901.09003– Mounting Assembly, Type VII

Bid Item 901.09004– Mounting Assembly, Type XI

The work under this item shall consist of furnishing all materials, equipment, and labor for the installation of mounting assemblies conforming to City of Avondale Detail Number A1746-1 as well as ADOT Detail Numbers T.S. 9-1 through 9-9 for use with traffic signal and pedestrian indications. All materials and construction shall conform to the requirements of Section 901 of the City of Avondale Supplement to MAG Standard Specifications and Details as well as Section 733 of the ADOT Specifications. **Measurement** of items will be per **EACH** mounting assembly installed. **Payment** shall be made at the unit price bid and shall be considered full compensation for this work item.

Bid Item 901.10001– Internally Illuminated Street Name Sign Assembly

The work under this item shall consist of furnishing all materials, equipment, and labor for the installation of internally illuminated street name sign assemblies conforming to City of Avondale Detail Number A1745 and the project plans. All materials and construction shall conform to the requirements of Section 901 of the City of Avondale Supplement to MAG

Standard Specifications and Details. **Measurement** of items will be per **EACH** internally illuminated street name sign assembly installed. **Payment** shall be made at the unit price bid and shall be considered full compensation for this work item.

Bid Item 901.11001– Video Detection System

The work under this item shall consist of furnishing all materials, equipment, and labor for the installation of a fully operational video detection system. All materials and construction shall conform to the requirements of Section 901 of the City of Avondale Supplement to MAG Standard Specifications and Details and the manufacturer’s instructions. The video detection system shall be Vantage Next, manufactured by Iteris.

Video detection cameras shall be installed as directed by the Engineer. The Contractor is responsible for all adjustment of camera aiming, inclusive of associated traffic control, until the system is aimed and adjusted properly, as verified by the traffic signal technician setting up the video detection system in the controller cabinet.

The contractor shall verify the appropriate length of Coaxial/Power cable to provide for each camera installation prior to ordering the cable. The contractor shall provide ten (10) feet of slack in the controller, each pull box, and each camera along the Coaxial/Power cable runs. No splices shall be permitted between the Traffic Signal Controller Cabinet and each camera installation. The cost of ordering additional cable due to inaccurate measurements or damage caused by Contractor forces shall be the responsibility of the Contractor.

Measurement of this item will be per **LUMP SUM** for a four (4) camera video detection system with all required equipment for a fully operational traffic signal. **Payment** shall be made at the unit price bid and shall be considered full compensation for this work item.

Bid Item 901.12001 – Meter Service Pedestal

Bid Item 901.12002 – Meter Service Pedestal Foundation

Bid Item 901.12003 – Controller Cabinet

The work under this item shall consist of furnishing all materials, equipment, and labor for the installation of a new meter service pedestal and corresponding foundation as well as the replacement of the controller cabinet. The meter service pedestal shall be Model AZ-27-000/22-000BBS (100-amp 120/240-volt), manufactured by Tesco. The foundation for the meter pedestal shall conform to the requirements of ADOT Detail Number T.S. 2-6. The controller cabinet shall be a Model 332 Caltrans manufactured by either McCain or Econolite. The meter service pedestal, controller cabinet, and any corresponding foundations shall conform to the requirements of Section 901 of the City of Avondale Supplement to MAG Standard Specifications and Details as well as Sections 732, 733, and 734 of the ADOT Specifications.

The contractor shall remove and store all internal components of the traffic signal cabinet during the replacement of said cabinet. The contractor shall be responsible for the condition of all equipment until the contractor has completed the reinstallation of the aforementioned equipment in the new controller cabinet. If any equipment is found to be damaged, the contractor shall furnish new in-kind equipment at no cost to the City of Avondale. The contractor shall reinstall the internal components of the traffic signal cabinet in the new cabinet

in accordance with the requirements of Section 901 of the City of Avondale Supplement to MAG Standard Specifications and Details. The City of Avondale traffic signal technicians will remove and reinstall the fiber patch from the existing to the new cabinet. The contractor shall contact City of Avondale Traffic Operations Supervisor, Bennie Robinson at 623-333-4231 a minimum of three (3) working days in advance of scheduling cabinet replacement to schedule the day and time for the traffic signal inspector to be available to perform the work and to supervise the final turn-on of the traffic signal.

Measurement of these items will be per **EACH** pedestal, cabinet, and foundation installed, operational, and accepted in place. **Payment** shall be made at the unit price bid and shall be considered full compensation for this work item.

Bid Item 901.13001 – Paint Traffic Signal Poles, Mast Arms, & Equipment

The work under this item shall consist of furnishing all materials, equipment, and labor for apply a fresh coat of paint to traffic signal poles and hardware as well as a fresh coat of black enamel to all traffic signal and pedestrian indications. One application of powder coating shall be applied to traffic signal poles, traffic signal mast arms, luminaire mast arms, luminaires, base plates, anchor nuts, and shall be applied in accordance with Section 901 of the City of Avondale Supplement to MAG Standard Specifications and Details as well as Valmont paint specifications. One application of dull black enamel shall be applied to traffic signal indications, pedestrian indications, backplates, visors, and mounting assemblies in accordance with Section 733 of the ADOT Specifications. **Measurement** of items will be per **LUMP SUM** for all traffic signal equipment painted as shown on the project plans. **Payment** shall be made at the unit price bid and shall be considered full compensation for this work item accepted in place.

PART 1000 – PAVEMENT MARKING AND SIGNING

SECTION 1001 – PAVEMENT MARKING AND SIGNING

Bid Item 1001.01000 - Obliterate Stripe

Bid Item 1001.02000 - Obliterate Symbol

The work under these items shall consist of furnishing all materials, equipment, and labor necessary for the obliteration of pavement marking striping or symbols. Pavement marking striping or symbols in conflict with new pavement markings shall be obliterated in accordance with the City of Avondale Supplement to the MAG Uniform Standard Specifications and MCDOT Supplement to the MAG Uniform Standard Specifications Section 460. Prior to removal, contact the City for inspection. This item shall also include reapplying existing pavement markings which are not in conflict with the new markings and thus remain in place but which may have been faded or worn out during the construction work. The type and extent of such reapplying existing pavement markings shall be field determined by the City staff. Such reapplying existing pavement markings shall not be measured as a separate pay item and shall be considered as incidental to this item. **Measurement** of the Obliterate Stripe item will be per **LINEAR FOOT** four inch equivalent stripe removed and Obliterate Symbol item will be per **EACH** symbol obliterated. **Payment** shall be made at the unit price bid and such payment shall be compensation in full for the item removal and disposal.

Bid Item 1001.00500 – 100 mm (4”) White Thermoplastic Traffic Stripe

Bid Item 1001.00600 – 100 mm (4”) Yellow Thermoplastic Traffic Stripe

Bid Item 1001.00700 – Thermoplastic Symbol, Pavement Bike Lane

Bid Item 1001.00800 – Thermoplastic Thru Straight Arrow

Bid Item 1001.00900 – Thermoplastic Left Turn Arrow

Bid Item 1001.01000 – Thermoplastic Right Turn Arrow

Bid Item 1001.01100 – Thermoplastic Symbol Thru Straight/ Right Turn Arrow

The work under these items shall consist of furnishing all materials, equipment, and labor for the application of temporary paint, permanent thermoplastic, pavement symbols, and reflectorized raised pavement markers on new and/or existing pavement surfaces, and to replace or restore previous road striping or as otherwise directed by the City. All pavement marking, symbol and raised pavement marker installations shall conform to the latest ADOT Signing and Marking Details as applicable, City of Avondale Supplement to MAG Uniform Standard Specifications Section 1000, and the MCDOT Supplement to the MAG Uniform Standard Specifications and Details for Public Works Construction.

The Contractor shall be required to survey, layout and provide temporary marking and provide any associated temporary signage at no additional cost to the City. After layout, the contractor shall request City field inspection to verify and approve the layouts. The City requires two (2) Avondale business days (M-Th; daytime only) to schedule striping field inspections. Upon approval, the Contractor shall install temporary paint based striping. After a 30 day period, the Contractor shall return and install permanent thermoplastic striping. The Contractor shall proceed to complete installation if the permanent thermoplastic line striping, pavement markings, and reflectorized markers only after the City has approved the layout. For asphalt pavement overlays and other asphalt pavement surface treatments on existing streets, the Contractor shall be responsible for measuring, documenting, setting off-set references and/or whatever necessary to re-establish location and alignment of any existing striping and pavement markings. The Contractor shall replace any striping that has been obliterated or removed during construction.

Traffic control set-up and maintenance shall be the responsibility of the contractor. Streets with new pavement or new pavement surface treatments shall not be open for public use until all permanent lane striping is complete, or until temporary striping and/or temporary traffic control (barricades) have been provided in accordance with an approved plan.

Costs for striping lay-out, any additional surface prep including cleaning/sweeping as necessary and removal of raised pavement markers, if required, shall be included in the unit bid price for this item.

Measurement of the traffic stripe items will be per **LINEAR FOOT** of four-inch equivalent stripe installed and symbol and arrow items will be per **EACH** symbol or arrow installed.

Payment shall be made at the unit price bid and such payment shall be compensation in full for the item complete in place.

Bid Item 1001.12000 – Relocate Street Sign

The work under these items shall consist of furnishing all materials, equipment, and labor for the removing, salvaging and relocating existing signs. Existing signage shall be removed or relocated as noted on the plans, in accordance with MCDOT standard details, City of Avondale

details, the City of Avondale Supplement to the MAG Uniform Standard Specifications and the plans. Prior to actual removal or relocation, the contractor shall have new signage installed or temporary signage in-place keeping the roadway signage current with existing or improved conditions. Prior to removal the contractor shall contact the City for inspection and approval of proposed signage. Removal of existing signage will include salvage of removed signs. This item shall also include removal of sign post and foundation. The Contractor will store the signs at their construction site until delivering to the City's Municipal Operations Service Center (MOSC). City of Avondale MOSC Contact: Bennie Robinson, Traffic Operations Supervisor, 623-333-4231. **Measurement** of item will be per **EACH** sign relocated, including all posts and foundations. **Payment** shall be made at the unit price bid and such payment shall be compensation in full for the item complete in place.

Bid Item 1001.13000 – Traffic Sign Post & Foundation, COA Std. Det. A1600

The work under these items shall consist of furnishing all materials, equipment, and labor for installing sign posts and foundations per the City of Avondale Supplement to MAG Uniform Standard Specifications Section 1000 and City of Avondale Standard Detail A1600. Sign post and foundation installation shall conform to applicable City of Avondale and MCDOT Signing Standards. **Measurement** of item will be per **EACH** post and foundation complete in place. **Payment** shall be made at the unit price bid and such payment shall be compensation in full for the item complete in place.

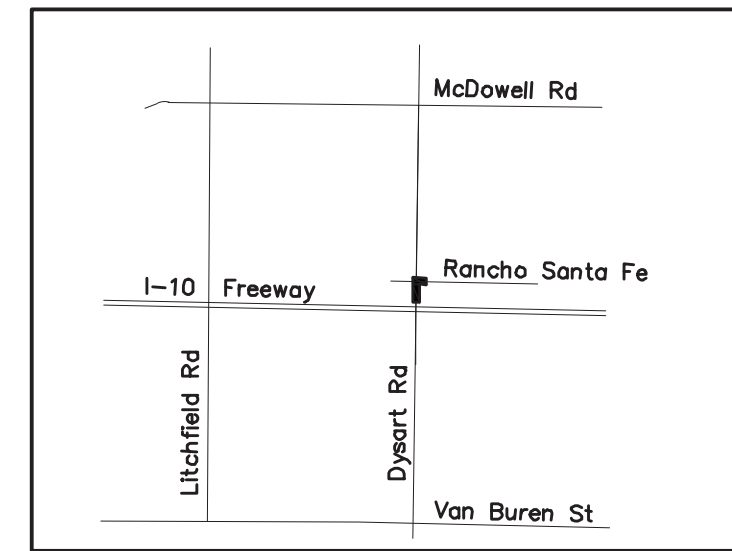
Bid Item 1001.14000 – Flat Sheet Aluminum Sign Panel, Diamond Grade

The work under these items shall consist of furnishing all materials, equipment, and labor for installing signs per the City of Avondale Supplement to MAG Uniform Standard Specifications Section 1000. Signing installation shall conform to applicable City of Avondale and MCDOT Signing standards. **Measurement** of item will be per **SQUARE FOOT** of sign complete in place. **Payment** shall be made at the unit price bid and such payment shall be compensation in full for the item complete in place. There shall be no direct measurement or payment for the flags or flashers on the TRAFFIC CONTROL CHANGE signs.

END TECHNICAL SPECIFICATIONS

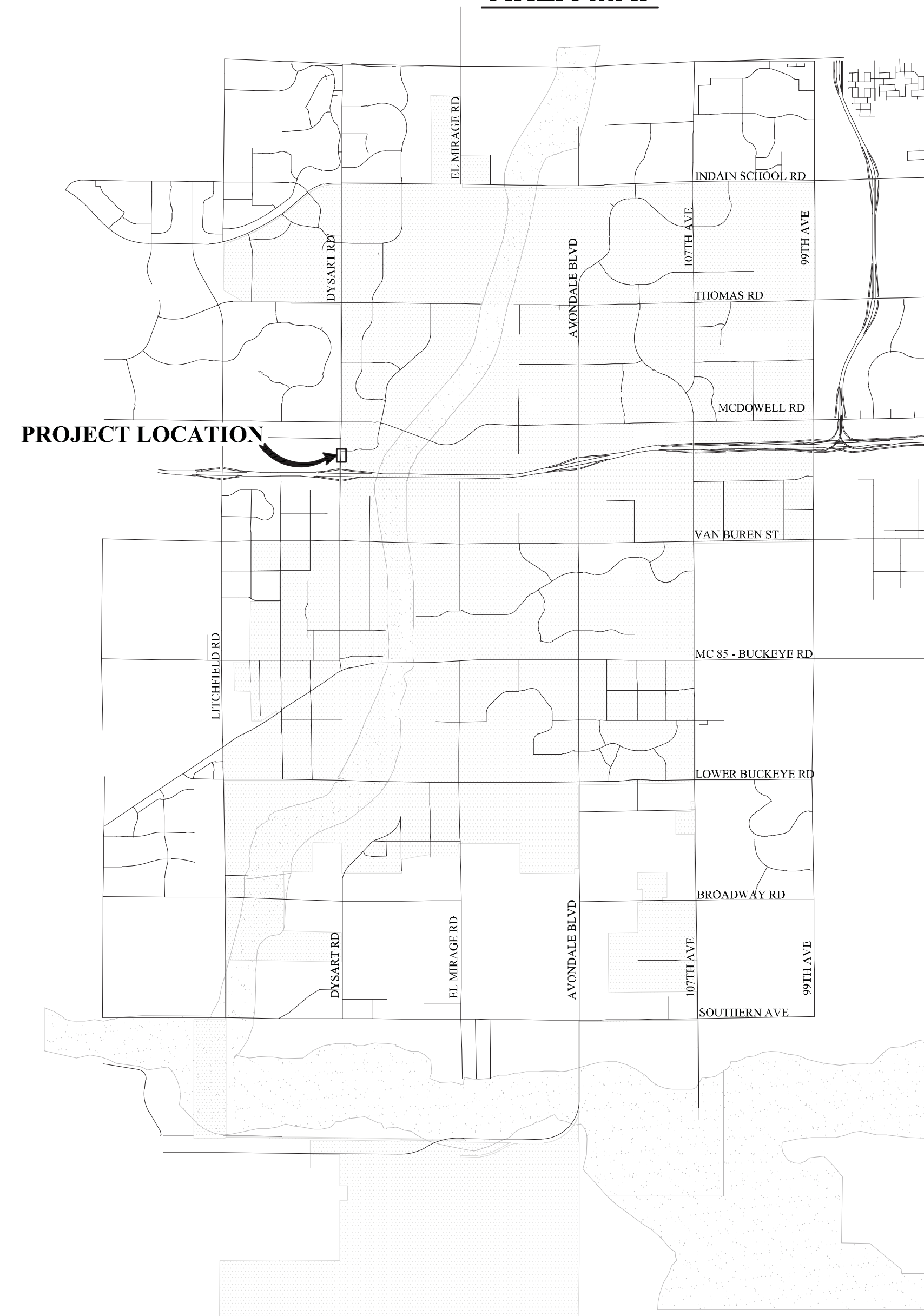
Avondale

DYSART ROAD IMPROVEMENTS CITY PROJECT NO. ST1365 NW 1/4 SECTION 2, T1N, R1W



VICINITY MAP

AREA MAP



Utility Notification

THESE PLANS HAVE BEEN SUBMITTED TO THE FOLLOWING UTILITY COMPANIES. WHERE THE WORK TO BE DONE CONFLICTS WITH ANY OF THESE UTILITIES, THE CONFLICTS SHALL BE RESOLVED AS SPECIFIED IN THE SPECIAL NOTES AND/OR AS OTHERWISE NOTED ON THESE PLANS. CONFLICTS ARISING DURING THE COURSE OF CONSTRUCTION FROM UNFORESEEN CIRCUMSTANCES SHALL BE REPORTED TO THE INTERESTED UTILITY COMPANY AND BE RESOLVED BY THEM AND THE DESIGN ENGINEER.

		CONTACTED	REPLIED
LIBERTY UTILITIES PHONE NUMBER: 623-298-3760	REVELL FOGGY COMPANY REPRESENTATIVE	8/30/17 DATE	6/1/18 DATE
ARIZONA PUBLIC SERVICE PHONE NUMBER: 602-371-7456	RONNIE GANDERA COMPANY REPRESENTATIVE	8/30/17 DATE	1/19/18 DATE
CENTURYLINK PHONE NUMBER: 602-630-5484	ERIC ZOHNER COMPANY REPRESENTATIVE	8/30/17 DATE	9/28/17 DATE
COX COMMUNICATIONS PHONE NUMBER: 623-328-3554	JEFFREY PALEN COMPANY REPRESENTATIVE	8/30/17 DATE	6/21/18 DATE
SOUTHWEST GAS PHONE NUMBER: 602-484-5649	ADAM SHOCHAT COMPANY REPRESENTATIVE	8/30/17 DATE	11/13/17 DATE

SHEET INDEX

SHEET	DRAWING	DESCRIPTION
1	G1	COVER SHEET
2	G2	LEGEND SHEET
3	G3	TYPICAL SECTION
4	G4	SURVEY CONTROL
5-6	G5-G6	DETAILS
7	P1	ROADWAY PLAN & PROFILE
8	M1	SIGNING & MARKING PLAN
9-12	S1-S4	SIGNAL PLANS

CITY OF AVONDALE

MAYOR
KENNETH WEISE

VICE MAYOR
BRYAN KILGORE

COUNCIL MEMBERS

TINA CONDE
LORENZO SIERRA
VERONICA MALONE
PAT DENNIS
MIKE PINEDA

CITY MANAGER

DAVID FITZHUGH

ACTING CITY CLERK

LINDA MENDENHALL

ENGINEER

DIBBLE ENGINEERING
SUSAN DETWILER, PE
7878 NORTH 16TH STREET
SUITE 300
PHOENIX, ARIZONA 85020
PHONE: (602) 957-1155
FAX: (602) 957-2838

OWNER

CITY OF AVONDALE
CHRIS HAMILTON
11465 W CIVIC CENTER DRIVE
AVONDALE, ARIZONA 85323
PHONE: (623) 333-4000
FAX: (623) 333-0420

SURVEYOR

DIBBLE ENGINEERING
JASON GRAHAM, RLS
7878 NORTH 16TH STREET
SUITE 300
PHOENIX, ARIZONA 85020
PHONE: (602) 957-1155
FAX: (602) 957-2838

BENCHMARK

BENCHMARK: PID #54004-1M BCHH
INTERSECTION OF DYSART RD & McDOWELL RD
ELEVATION: 995.83
DATE SHOT: MAY 2017
COA DATUM

APPROVALS

CITY ENGINEERING DEPARTMENT _____ DATE _____
THE CITY APPROVES THESE PLANS FOR CONCEPT ONLY
AND ACCEPTS NO LIABILITY FOR ERRORS OR OMISSIONS

"AS-BUILT CERTIFICATION"

I HEREBY CERTIFY THAT THE "AS-BUILT" INFORMATION SHOWN HEREON
WAS OBTAINED UNDER MY DIRECT SUPERVISION AND IS CORRECT AND
COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

REGISTERED LAND SURVEYOR/ENGINEER

REGISTRATION NUMBER _____ DATE _____
COMPANY NAME: DIBBLE ENGINEERING
ADDRESS: 7878 NORTH 16TH ST, SUITE 300
PHOENIX, AZ 85020
PHONE NUMBER: (602) 957-1155

NOTE:
ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH
THE MOST RECENT EDITION OF THE CITY OF
AVONDALE'S SUPPLEMENT TO M.A.G. SPECIFICATIONS
AND STANDARD DETAILS CURRENTLY ON FILE AND
AVAILABLE AT THE CITY OF AVONDALE'S
ENGINEERING DEPARTMENT OR ONLINE AT THE CITY
OF AVONDALE'S WEBSITE.



COVER

DRAWN BY:	DBB
DESIGNED BY:	ACC
CHECKED BY:	SHD
SHEET:	G1
DRAWN/ISSUED BY:	N/A



PROJECT TYPE: CAPITAL IMPROVEMENT PROJECT
PROJECT NAME: DYSART ROAD - RANCHO SANTA FE BLVD TURN LANE
PROJECT NUMBER: ST1365

SEAL: 40969 SUSAN H. DETWILER
11/15/18
LATEST REVISION DATE

SHEET NUMBER
1 OF 12
PROJECT NUMBER
ST1365

STANDARD ABBREVIATIONS & LEGEND

AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS	MAG	MARICOPA ASSOCIATION OF GOVERNMENTS	UNK	UNKNOWN
ABAND	ABANDONED	MAX	MAXIMUM	UPRR	UNION PACIFIC RAILROAD
ABC	ABNEGATE BASE COURSE	MB	MAILBOX	V	VERTICAL
AC	ACRES	MCDDOT	MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION	VC	VERTICAL CURVE
AC	ASPHALT CONCRETE	MCESD	MARICOPA COUNTY ENVIRONMENTAL SERVICES DEPARTMENT	VCP	VITRIFIED CLAY PIPE
ACFC	ASPHALT CONCRETE FRICTION COURSE	ME	MATCH EXISTING	VG	VALLEY GUTTER
ACI	AMERICAN CONCRETE INSTITUTE	MH	MANHOLE	VNAE	VEHICULAR NON ACCESS EASEMENT
ACP	ASBESTOS CEMENT PIPE	MI	MILES	W	WEST
ACSC	ASPHALT CONCRETE SURFACE COURSE	MIN	MINIMUM	W	WATER
ADA	AMERICANS WITH DISABILITIES ACT	MJ	MECHANICAL JOINT	W/	WITH
ADOT	ARIZONA DEPARTMENT OF TRANSPORTATION	ML	MONUMENT LINE	W/O	WITHOUT
AHD	AHEAD	MOD	MODIFIED	WM	WATER METER
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	N	NORTH, NORTHING	WSE	WATER SURFACE ELEVATION
APS	ARIZONA PUBLIC SERVICE	NC	NORMAL CROWN	WW	WATER VALVE
ASLD	ARIZONA STATE LAND DEPARTMENT	NE	NORTHEAST	XFMR	TRANSFORMER
ASTM	AMERICAN SOCIETY FOR TESTING MATERIALS	NO	NUMBER		
AVM	AVENUE	NPDES	NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM		
		NPI	NON-PAY ITEM		
B/C	BACK OF CURB	NSF	NATIONAL SANITATION FOUNDATION		
BC	BRASS CAP	NTS	NOT TO SCALE		
BCF	BRASS CAP FLUSH	NW	NORTHWEST		
BCHH	BRASS CAP IN HANDHOLE				
BCR	BEGIN CURB RETURN	OC	ON CENTER		
BK	BACK	OD	OUTSIDE DIAMETER		
BKFL	BACKFILL	OHE	OVERHEAD ELECTRIC		
BLDG	BUILDING	OHT	OVERHEAD TELEPHONE		
BLVD	BOULEVARD				
BM	BENCHMARK	P	PAVEMENT ELEVATION		
BOT	BOTTOM	PB	PHONE NUMBER		
		PC	POINT OF CURVATURE		
C	CONCRETE ELEVATION	PCC	POINT OF COMPOUND CURVATURE		
C	CONDUIT	PCCP	PORTLAND CEMENT CONCRETE PAVEMENT		
C&G	CURB AND GUTTER	PE	POLYETHYLENE PIPE		
CAP	CORRUGATED ALUMINUM PIPE	PED	TELEPHONE PEDESTAL		
CATV	CABLE TELEVISION	PGL	PROFILE GRADE LINE		
CB	CATCH BASIN	PH#	POTHOLE NUMBER		
CIP	CAST IRON PIPE	PI	POINT OF INTERSECTION		
CIP	CAST IN PLACE	PIP	PROTECT IN PLACE		
CIPP	CURED IN PLACE PIPE	P	PROPERTY LINE		
CK	CHECKED	PLSS	PUBLIC LAND SURVEY SYSTEM		
CL	CENTERLINE	POC	POINT ON CURVE		
CLR	CLEAR	POT	POINT ON TANGENT		
CMP	CORRUGATED METAL PIPE	PP	POWER POLE		
CO	CLEAN OUT	PRC	POINT OF REVERSE CURVATURE		
COMM	COMMUNICATION	PROP	PROPOSED		
CONC	CONCRETE	PSI	POUNDS PER SQUARE INCH		
CONST	CONSTRUCTION	PT	POINT OF TANGENCY		
COR	CORRECTION	PT	POINT		
CORR	CORRECTED	PUE	PUBLIC UTILITY EASEMENT		
CSP	CORRUGATED STEEL PIPE	PVC	POLY VINYL CHLORIDE		
CTB	CEMENT TREATED BASE	PVI	POINT OF VERTICAL INTERSECTION		
		PVMT	PAVEMENT		
D/W	DRIVEWAY	PVRC	POINT OF VERTICAL REVERSE CURVATURE		
DB	DUCT BANK	PVT	POINT OF VERTICAL TANGENCY		
DES	DESIGN				
DET	DETAIL	R	RADIUS		
DO	DECOMPOSED GRANITE	R	RANGE		
DIP	DUCTILE IRON PIPE	R/W	RIGHT-OF-WAY		
DR	DRIVE	RCBC	REINFORCED CONCRETE BOX CULVERT		
DRN	DRAWN	RCP	REINFORCED CONCRETE PIPE		
DRNG	DRAINAGE	RD	ROAD		
DWG	DRAWING	RDWY	ROADWAY		
		RELOC	RELOCATE		
E	EAST, EASTING	RGRCP	RUBBER GASKET REINFORCED CONCRETE PIPE		
E/P	EDGE OF PAVEMENT	RR	RAILROAD		
EAB	EACH	RT	RIGHT		
EB	ELECTRIC PULLBOX				
ECR	END CURB RETURN	S	SLOPE		
EGL	ENERGY GRADE LINE	S	SOUTH		
EL	ELEVATION	S/W	SIDEWALK		
ELEC	ELECTRIC	SD	STORM DRAIN		
ESMT	EASEMENT	SE	SOUTHEAST		
EVAC	EAST VALLEY ASPHALT COMMITTEE	SEC	SECTION		
EXST	EXISTING	SF	SQUARE FOOT		
		SG	SUBGRADE ELEVATION		
F	FAX NUMBER	SHLDR	SHOULDER		
F/C	FACE OF CURB	SHT	SHEET		
FCDMC	FLOOD CONTROL DISTRICT OF MARICOPA COUNTY	SPEC	SPECIFICATIONS		
FF	FINISH FLOOR ELEVATION	SRP	SALT RIVER PROJECT		
FG	FINISH GRADE ELEVATION	SS	SANITARY SEWER		
FH	FIRE HYDRANT	SSD	STOPPING SIGHT DISTANCE		
FHWA	FEDERAL HIGHWAY ADMINISTRATION	ST	STREET		
FL	FIRE LINE	STA	STATION		
FL	FLOWLINE	STD	STANDARD		
FL	FLANGE	STL	STEEL		
FND	FOUND	SW	SOUTHWEST		
FO	FIBER OPTIC	SWG	SOUTHWEST GAS COMPANY		
FT	FOOT OR FEET	SY	SQUARE YARD		
		T	TOWNSHIP		
G	GUTTER ELEVATION	T	TANGENT LENGTH		
G	GAS	T/W	TOP OF WALL		
GAF	GRID ADJUSTMENT FACTOR	TBM	TEMPORARY BENCHMARK		
GB	GRADE BREAK	TC	TOP OF CURB		
GM	GAS METER	TCE	TEMPORARY CONSTRUCTION EASEMENT		
GND	GROUND	TEL	TELEPHONE		
GV	GAS VALVE	TEMP	TEMPORARY		
		TN	TOP OF NUT		
H	HORIZONTAL	TOE	TOE OF EMBANKMENT		
HDPE	HIGH DENSITY POLYETHYLENE	TOP	TOP		
HDWL	HEADWALL	TRAN	TRANSITE PIPE		
HGL	HYDRAULIC GRADE LINE	TS	TRAFFIC SIGNAL		
HP	HIGH PRESSURE	TYP	TYPICAL		
HW	HIGH WATER				
HWY	HIGHWAY				
ID	INSIDE DIAMETER				
INV	INVERT				
IRR	IRRIGATION				
IV	IRRIGATION VALVE				
L	LENGTH OF CURVE				
LF	LINEAR FEET				
LS	LUMP SUM				
LT	LEFT				

V	VERTICAL
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
VG	VALLEY GUTTER
VNAE	VEHICULAR NON ACCESS EASEMENT
W	WEST
W	WATER
W/	WITH
W/O	WITHOUT
WM	WATER METER
WSE	WATER SURFACE ELEVATION
WW	WATER VALVE
XFMR	TRANSFORMER

EXISTING	NEW	EXISTING	NEW

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Dibble Engineering

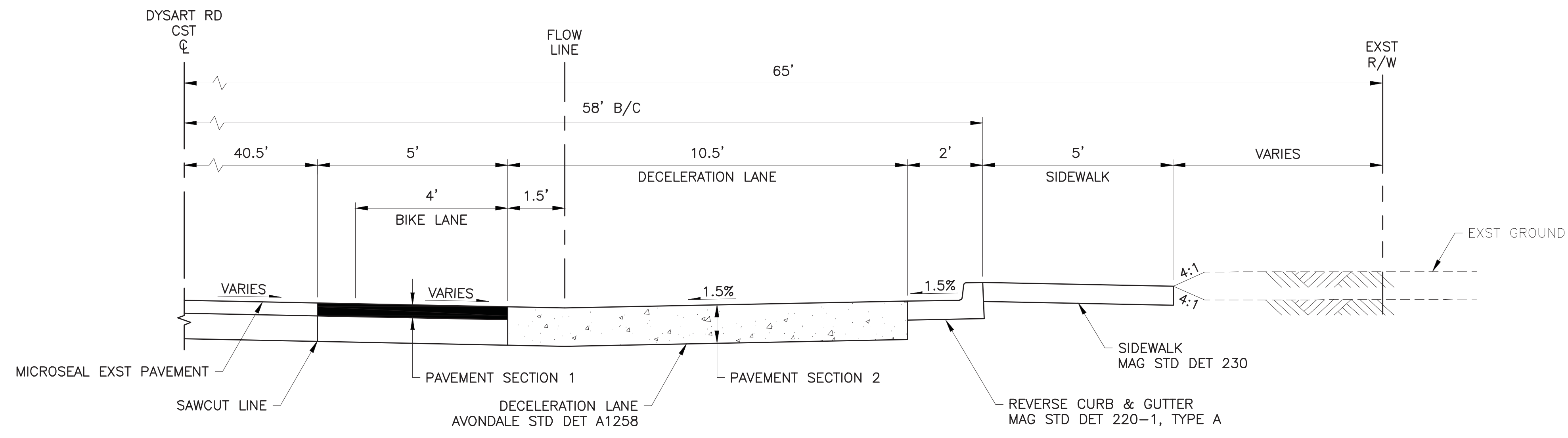
PROJECT TYPE: CAPITAL IMPROVEMENT PROJECT
 PROJECT NAME: DYSART ROAD - RANCHO SANTA FE BLVD TURN LANE
 PROJECT NUMBER: ST1365

SEAL: 40969 SUSAN H. DETWILER
 REGISTERED PROFESSIONAL ENGINEER
 STATE OF ARIZONA
 EXPIRES: 11/15/18

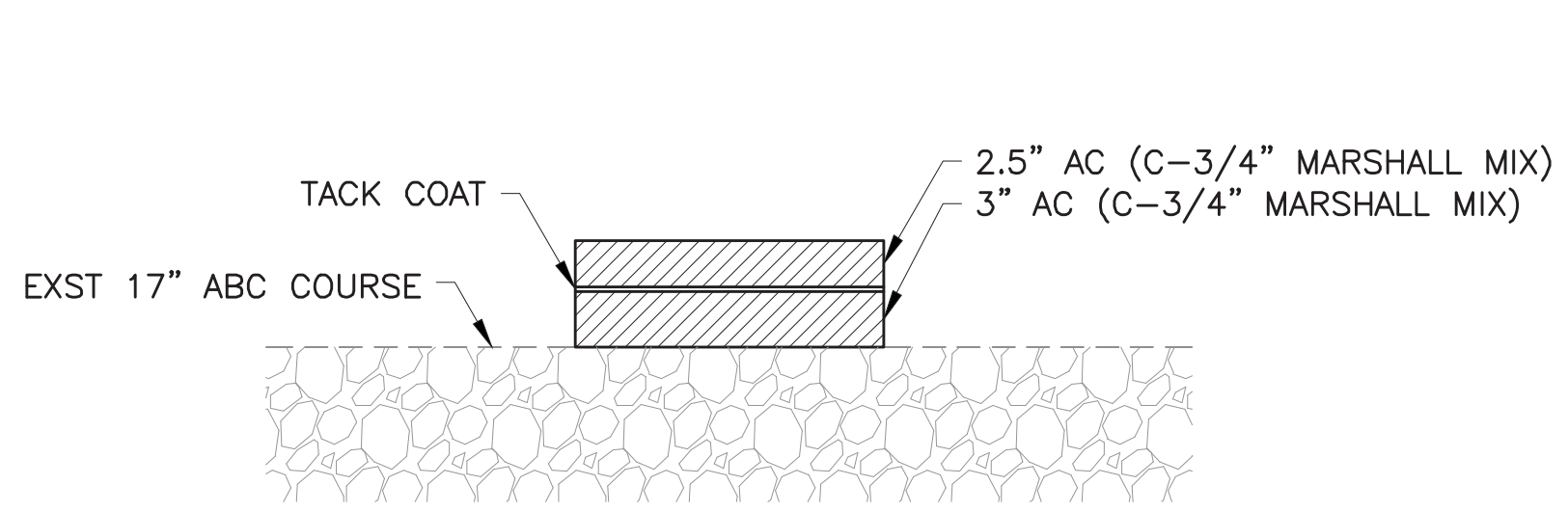


DATE: 11/15/18
 LATEST REVISION DATE:
 SHEET NUMBER: 2 OF 12
 PROJECT NUMBER: ST1365

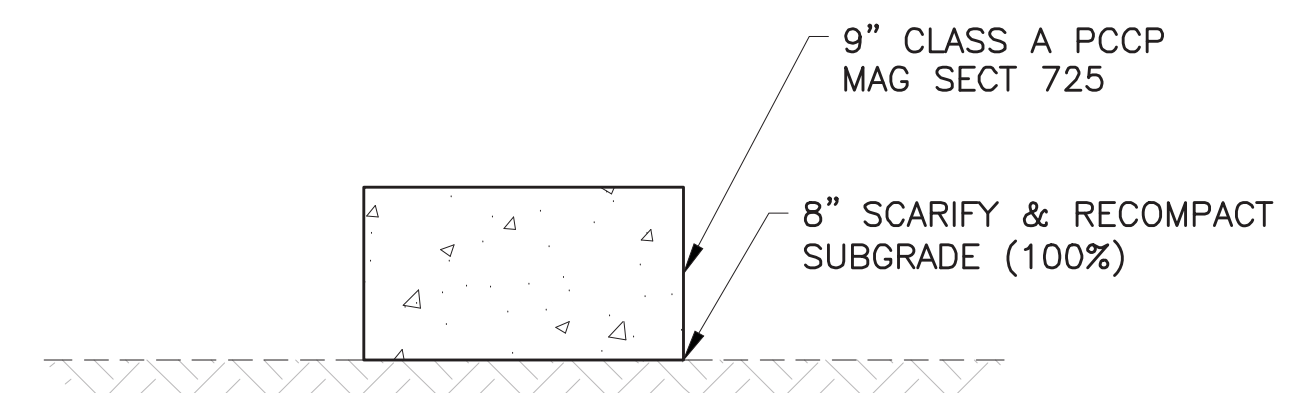
LEGEND SHEET



DYSART ROAD TYPICAL SECTION
STA 20+29.59 TO STA 22+40.30



PAVEMENT SECTION 1
TOTAL THICKNESS = 5.5"



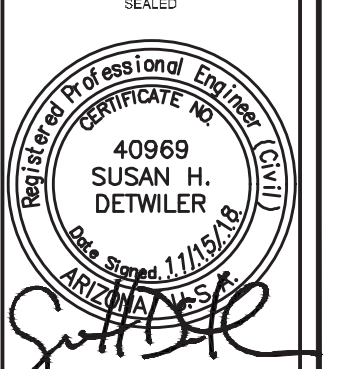
PAVEMENT SECTION 2
TOTAL THICKNESS = 9"



DRAWN BY:	DBB
DESIGNED BY:	ACC
CHECKED BY:	SHD
SHEET:	G3
SCALE:	N/A

Dibble
Engineering

PROJECT TYPE	CAPITAL IMPROVEMENT PROJECT
PROJECT NAME	DYSART ROAD - RANCHO SANTA FE BLVD TURN LANE
PROJECT NUMBER	ST1365

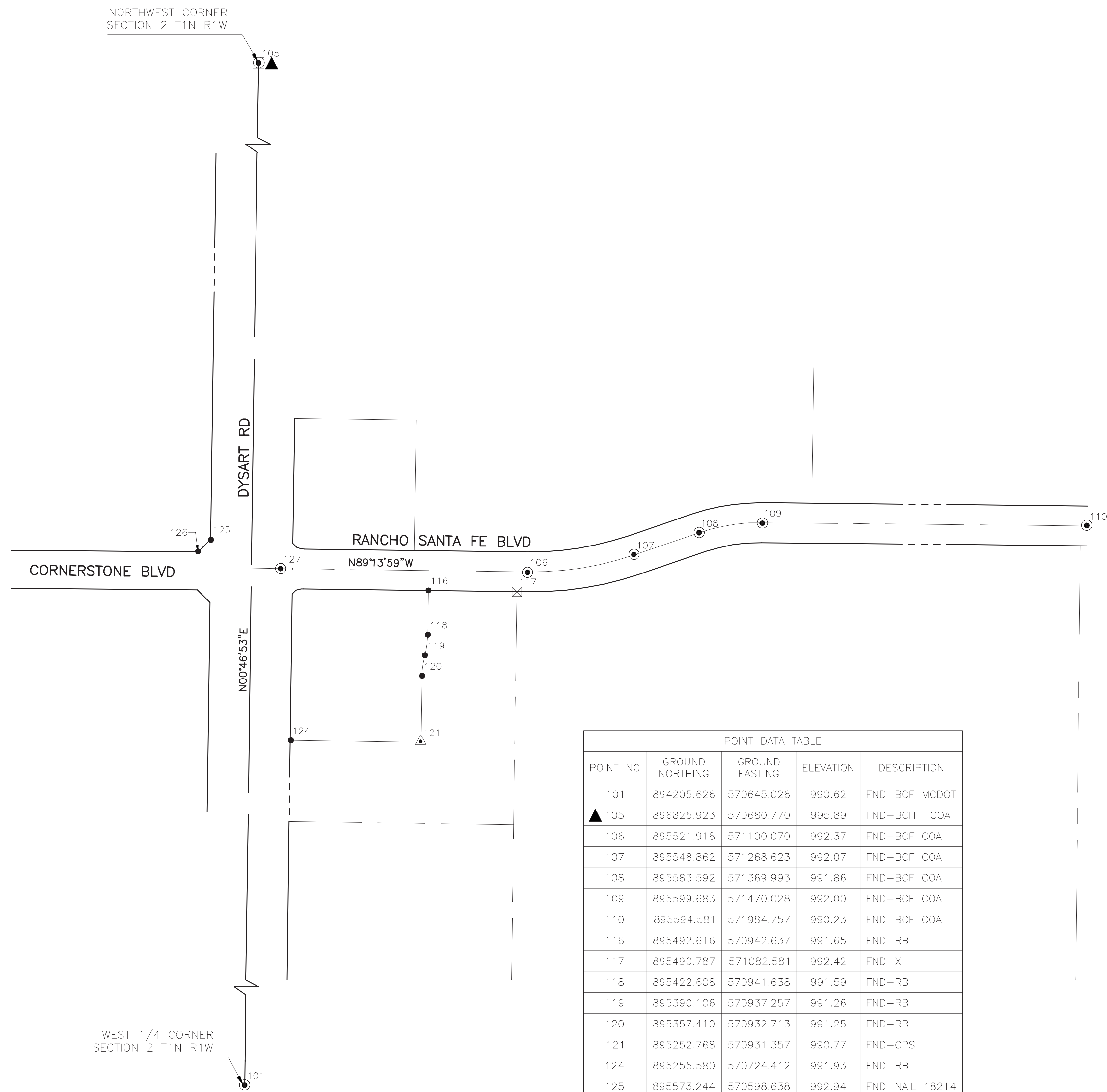


11/15/18
LATEST REVISION DATE

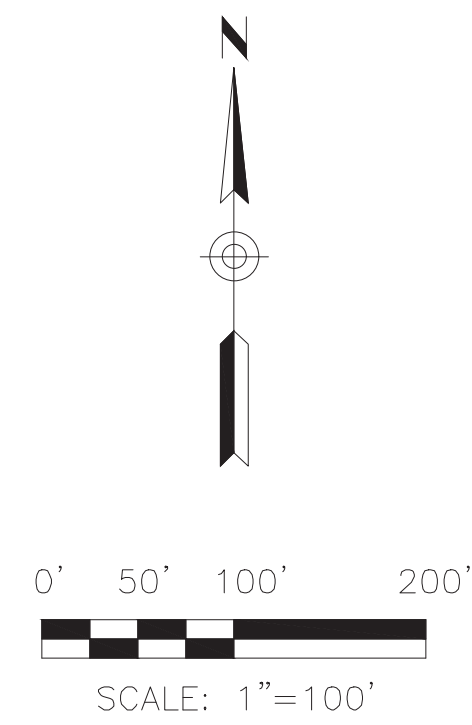
SHEET NUMBER	3 OF 12
PROJECT NUMBER	ST1365

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POINT DATA TABLE				
POINT NO	GROUND NORTHING	GROUND EASTING	ELEVATION	DESCRIPTION
101	894205.626	570645.026	990.62	FND-BCF MCDOT
▲ 105	896825.923	570680.770	995.89	FND-BCHH COA
106	895521.918	571100.070	992.37	FND-BCF COA
107	895548.862	571268.623	992.07	FND-BCF COA
108	895583.592	571369.993	991.86	FND-BCF COA
109	895599.683	571470.028	992.00	FND-BCF COA
110	895594.581	571984.757	990.23	FND-BCF COA
116	895492.616	570942.637	991.65	FND-RB
117	895490.787	571082.581	992.42	FND-X
118	895422.608	570941.638	991.59	FND-RB
119	895390.106	570937.257	991.26	FND-RB
120	895357.410	570932.713	991.25	FND-RB
121	895252.768	570931.357	990.77	FND-CPS
124	895255.580	570724.412	991.93	FND-RB
125	895573.244	570598.638	992.94	FND-NAIL 18214
126	895553.432	570578.385	993.27	FND-NAIL 18214
127	895527.145	570709.643	992.18	FND-BCF COA



SURVEYOR'S NOTES

- COORDINATES WERE VERIFIED IN THE FIELD USING REAL TIME KINEMATIC GPS OBSERVATIONS RELATIVE TO NGS PUBLISHED CONTROL POINTS.
- SURVEYED DURING THE MONTH OF MAY 2017.
- CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL CONTROLS IN THE FIELD PRIOR TO CONSTRUCTION.
- PROJECT META DATA
UNITS:
COORDINATES, DISTANCES AND ELEVATIONS ARE SHOWN IN INTERNATIONAL FEET.

HORIZONTAL DATUM:
NAD83 (2011 Epoch) ARIZONA CENTRAL ZONE

HORIZONTAL ADJUSTMENT:
COMBINED SCALE FACTOR (CSF): 0.999763806
GROUND NORTHING (CSF) = GRID NORTHING
GROUND EASTING (CSF) = GRID EASTING

VERTICAL DATUM:
NAVD '88

PROJECT BENCHMARK:
POINT NUMBER 105
FOUND GDACS PUBLISHED BENCHMARK DESCRIBED AS:
PID#54004-1M BRASS CAP IN HAND HOLE AT THE INTERSECTION OF DYSART RD AND MCDOWELL RD.
GROUND NORTHING = 896825.92
GROUND EASTING = 570680.77
PUBLISHED ELEVATION = 995.83
OBSERVED ELEVATION = 995.89
- THE COORDINATES PRESENTED ARE SHOWN TO THREE DECIMAL PLACES FOR CALCULATION PURPOSES AND ARE NOT REPRESENTATIVE OF THE PRECISION OF THE SURVEY MEASUREMENTS
- THIS IS NOT A PROPERTY BOUNDARY SURVEY.

LEGEND

- — — — — SECTION LINE
- - - - - PROPERTY LINE
- — — — — ROAD CENTERLINE
- ▲ PROJECT BENCHMARK
- FND-BCHH [Symbol] FOUND BRASS CAP IN HANDHOLE
- FND-BCF [Symbol] FOUND BRASS CAP FLUSH
- FND-RB [Symbol] FOUND REBAR/NAIL
- FND-X [Symbol] FOUND MARKED "X"
- FND-CPS [Symbol] FOUND COTTON PICKER SPINDLE
- COA CITY OF AVONDALE
- MCDOT MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION

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DESIGNED BY:	JPG
CHECKED BY:	BAR
SHEET:	G4
DRAWN SCALE:	



PROJECT TYPE: CAPITAL IMPROVEMENT PROJECT
PROJECT NAME: DYSART ROAD - RANCHO SANTA FE BLVD TURN LANE
PROJECT NUMBER: ST1365

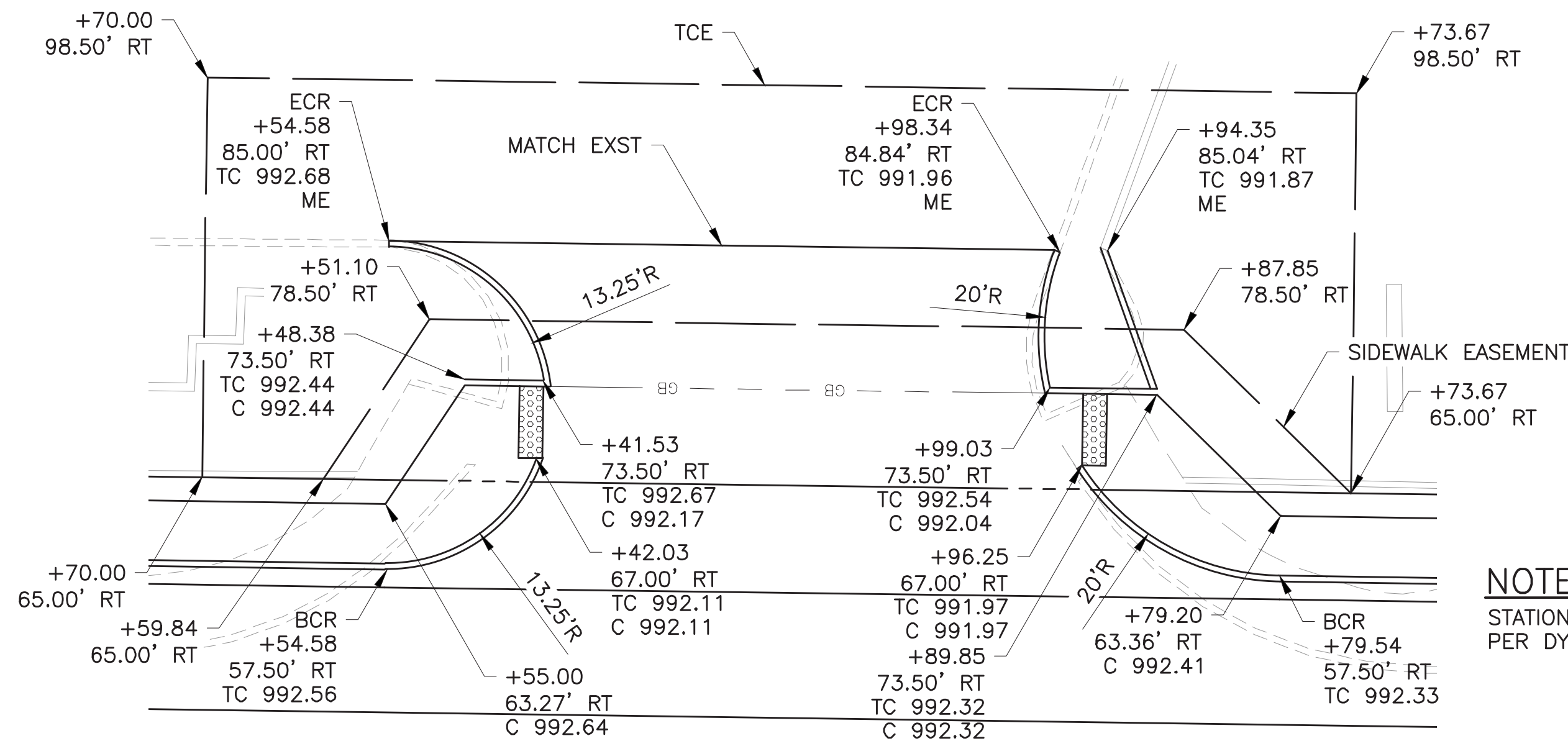
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DATE: 11/15/18
LATEST REVISION DATE: 11/15/18

SURVEY CONTROL

SHEET NUMBER
4 OF 12
PROJECT NUMBER
ST1365

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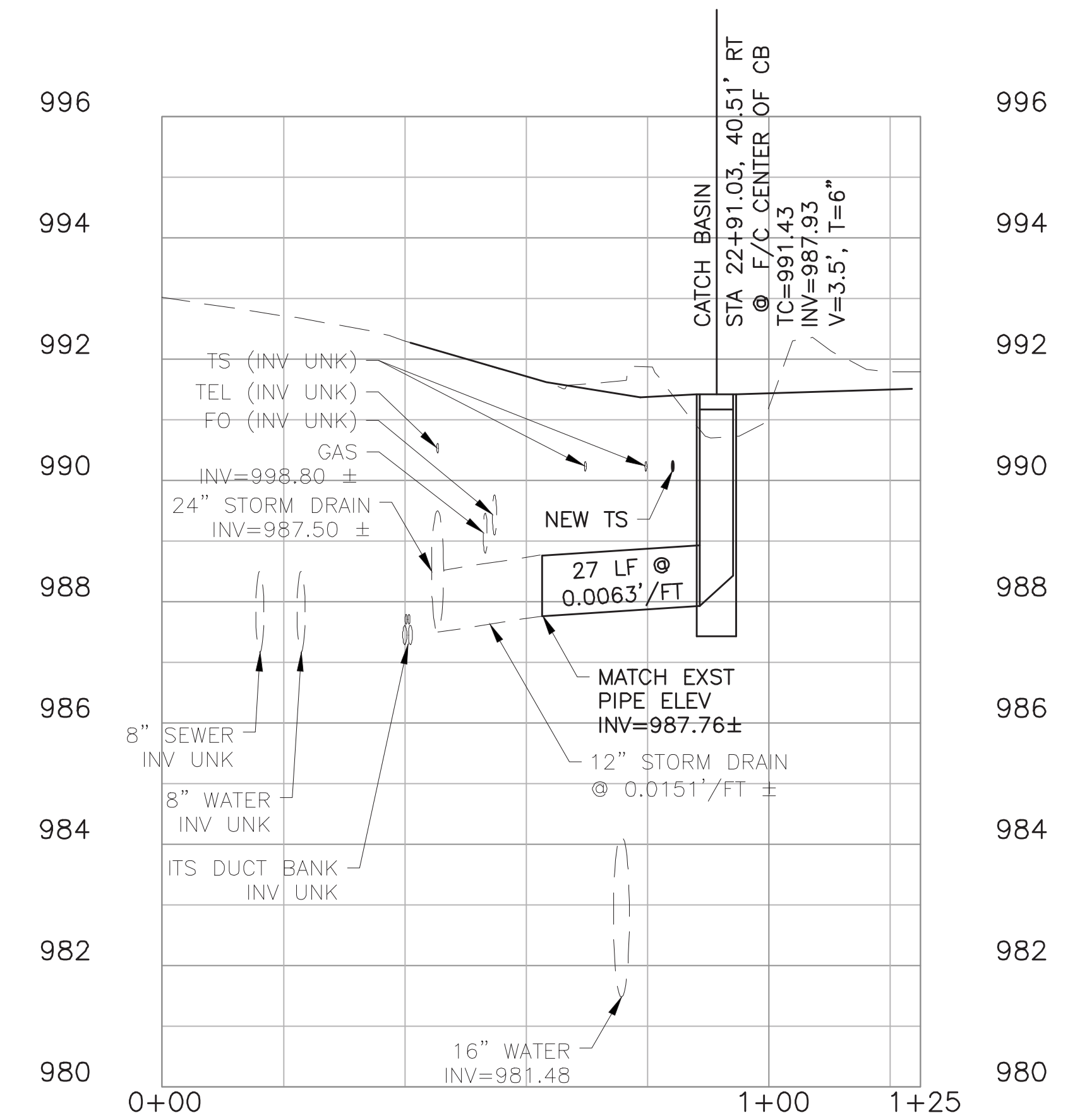


DRIVEWAY CONTROL & RIGHT-OF-WAY

SCALE: 1" = 10'



NOTE:
STATION & OFFSET FOR ALL CALLOUTS
PER DYSART RD CENTERLINE



STORM DRAIN CONNECTOR

SCALE: 1" = 20' HORIZ
1" = 2' VERT



DRAWN BY:	DBB
DESIGNED BY:	ACC
CHECKED BY:	SHD
SHEET:	G5
DATE:	AS NOTED

Dibble
Engineering

PROJECT TYPE: CAPITAL IMPROVEMENT PROJECT
PROJECT NAME: DYSART ROAD - RANCHO SANTA FE BLVD TURN LANE
PROJECT NUMBER: ST1365

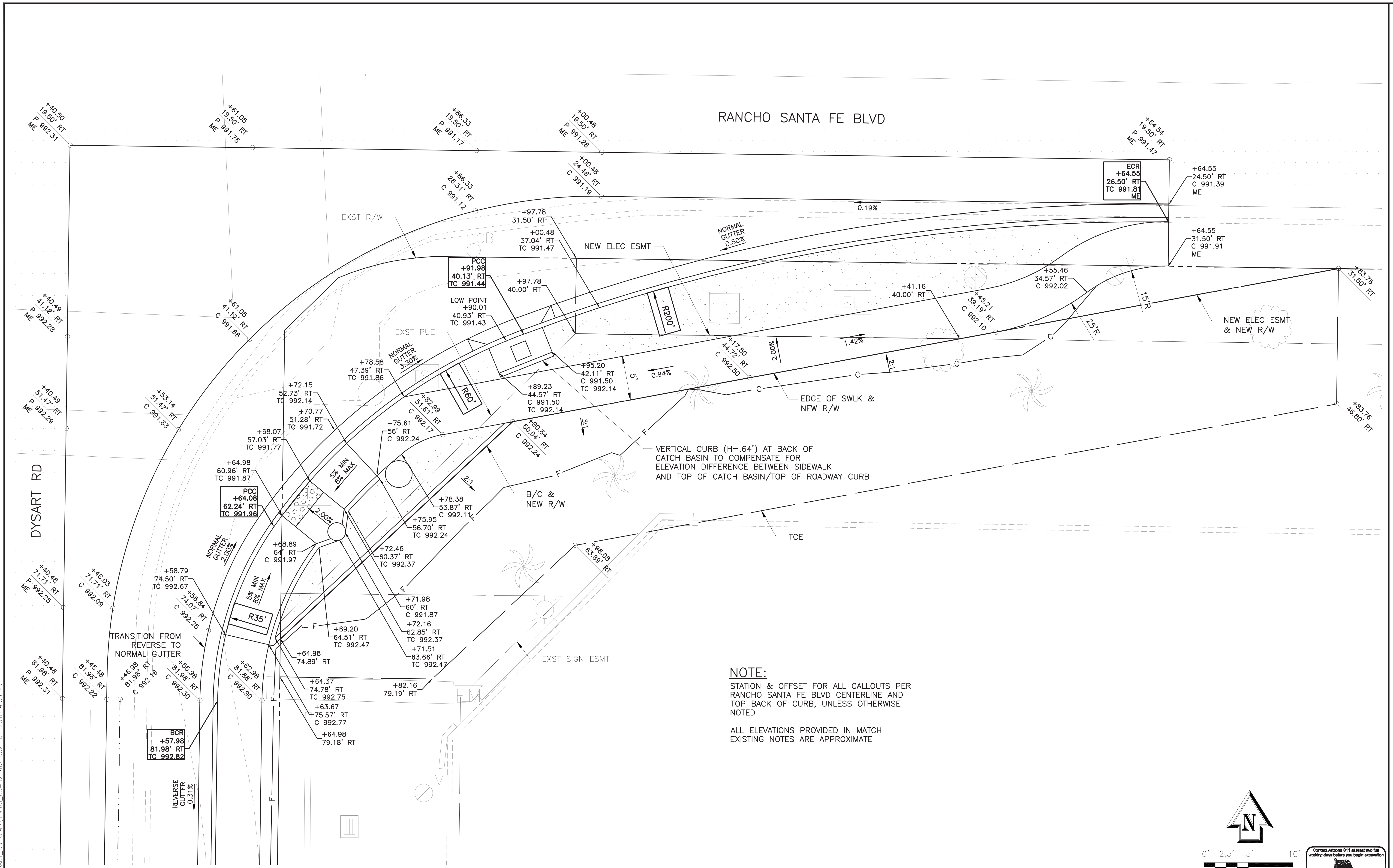
SEAL: [Signature]
SUSAN H. DETWILER
Professional Engineer
No. 40969
08/20/11 to 08/20/18

11/15/18
LATEST REVISION DATE

SHEET NUMBER: 5 OF 12
PROJECT NUMBER: ST1365

DETAILS

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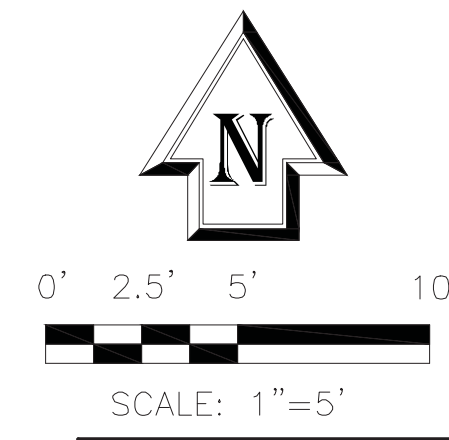
RANCHO SANTA FE BLVD

DYSART RD

NOTE:
 STATION & OFFSET FOR ALL CALLOUTS PER RANCHO SANTA FE BLVD CENTERLINE AND TOP BACK OF CURB, UNLESS OTHERWISE NOTED

ALL ELEVATIONS PROVIDED IN MATCH EXISTING NOTES ARE APPROXIMATE

INTERSECTION DETAIL

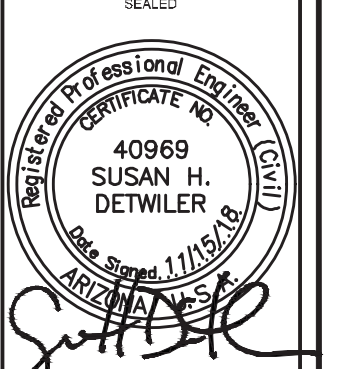


DETAIL

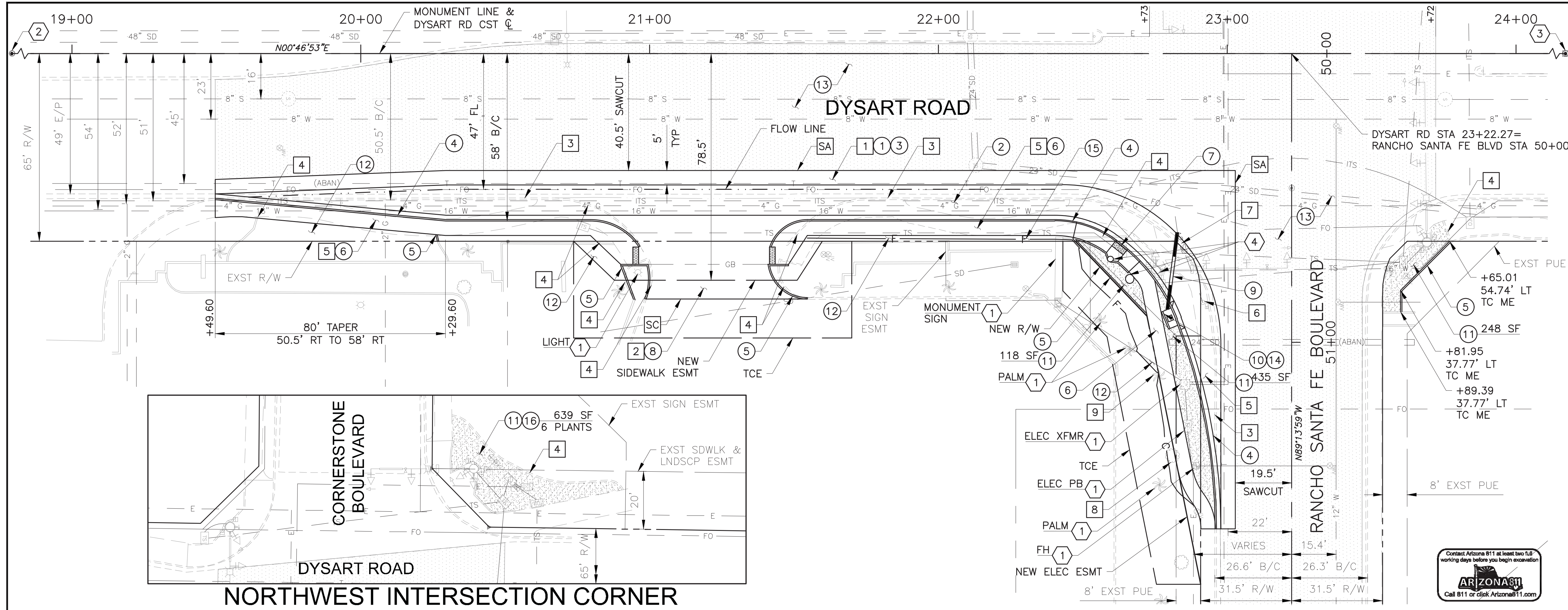
DRAWN BY:	DBB
DESIGNED BY:	ACC
CHECKED BY:	SHD
SHEET:	G6
SCALE:	1" = 6' HORIZ

Dibble
Engineering

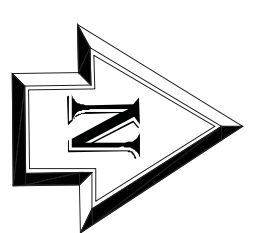
PROJECT TYPE: CAPITAL IMPROVEMENT PROJECT
 PROJECT NAME: DYSART ROAD - RANCHO SANTA FE BLVD TURN LANE
 PROJECT NUMBER: ST1365



DATE: 11/15/18
 SHEET NUMBER: 6 OF 12
 PROJECT NUMBER: ST1365



NORTHWEST INTERSECTION CORNER

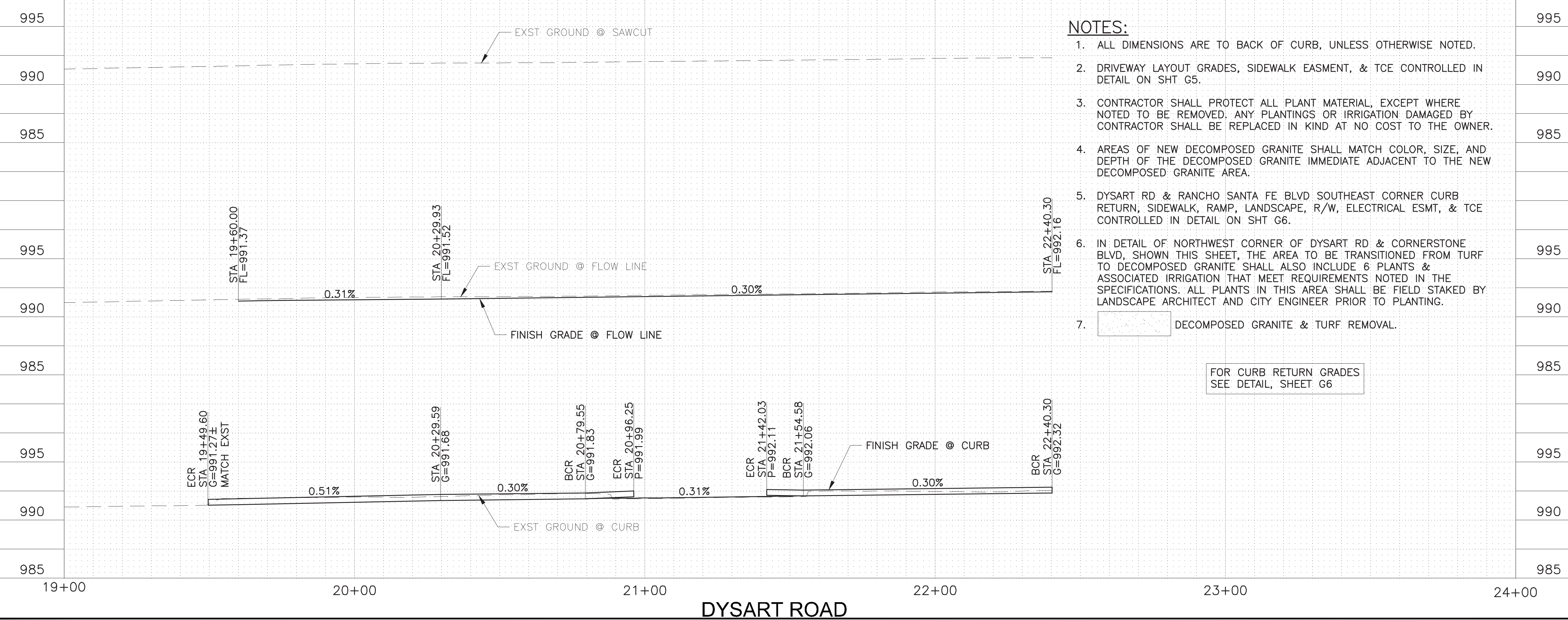


REMOVAL NOTES	
1	REMOVE AC PAVEMENT 437 SY
2	REMOVE CONCRETE DRIVEWAY 2126 SF
3	REMOVE CONCRETE CURB & GUTTER 332 LF
4	REMOVE CONCRETE SINGLE CURB 237 LF
5	REMOVE CONCRETE SIDEWALK 2394 SF
6	REMOVE CATCH BASIN 1 EA
7	REMOVE STORM DRAIN PIPE BACKFILL & COMPACT 26 LF
8	REMOVE TREE DIAMETER <12" 1 EA
9	REMOVE PALM TREE 1 EA
SA	SAWCUT AC PAVEMENT MATCH EXISTING 487 LF
SC	SAWCUT CONCRETE PAVEMENT MATCH EXISTING 56 LF

CONSTRUCTION NOTES	
1	AC PAVEMENT PAVEMENT SECTION NO 1 103 TON
2	CONCRETE PAVEMENT PAVEMENT SECTION NO 2 429 SY
3	ASPHALT EMULSION TACK PAVEMENT SECTION NO 1 0.1 TON
4	VERTICAL CURB AND GUTTER 351 LF MAG STD DET 220-1, TYPE A H=6"
5	SINGLE CURB 128 LF MAG STD DET 222, TYPE B SEE DETAILS, SHT G5 & G6
6	SIDEWALK 1477 SF MAG STD DET 230 SEE DETAIL, SHT G6
7	CURB RAMP 1 EA MAG STD DET 236-5 (MOD) SEE DETAIL, SHT G5
8	COMMERCIAL DRIVEWAY 1748 SF COA STD DET A1251-1(MOD) SEE DETAIL, SHT G5
9	12" HDPE DRAIN PIPE 27 LF
10	CATCH BASIN 1 EA MAG STD DET 531 SEE DETAIL, SHT G5
11	DECOMPOSED GRANITE & TURF REMOVAL 1440 SF
12	LANDSCAPE & IRRIGATION RESTORATION, BACK OF SIDEWALK TO R/W OR ESMT
13	MICROSURFACING (TYPE II AGGREGATE) SEE LIMITS ON SIGNING & MARKING PLAN 3768 SY
14	SINGLE CURB 6 LF MAG STD DET 222, TYPE B H=0.64'
15	TRIM SHRUBS AS NECESSARY FOR SIDEWALK CLEARANCE
16	SHRUBS PER SPECIAL PROVISIONS

- NOTES:**
- ALL DIMENSIONS ARE TO BACK OF CURB, UNLESS OTHERWISE NOTED.
 - DRIVEWAY LAYOUT GRADES, SIDEWALK EASMENT, & TCE CONTROLLED IN DETAIL ON SHT G5.
 - CONTRACTOR SHALL PROTECT ALL PLANT MATERIAL, EXCEPT WHERE NOTED TO BE REMOVED. ANY PLANTINGS OR IRRIGATION DAMAGED BY CONTRACTOR SHALL BE REPLACED IN KIND AT NO COST TO THE OWNER.
 - AREAS OF NEW DECOMPOSED GRANITE SHALL MATCH COLOR, SIZE, AND DEPTH OF THE DECOMPOSED GRANITE IMMEDIATE ADJACENT TO THE NEW DECOMPOSED GRANITE AREA.
 - DYSART RD & RANCHO SANTA FE BLVD SOUTHEAST CORNER CURB RETURN, SIDEWALK, RAMP, LANDSCAPE, R/W, ELECTRICAL ESMT, & TCE CONTROLLED IN DETAIL ON SHT G6.
 - IN DETAIL OF NORTHWEST CORNER OF DYSART RD & CORNERSTONE BLVD, SHOWN THIS SHEET, THE AREA TO BE TRANSITIONED FROM TURF TO DECOMPOSED GRANITE SHALL ALSO INCLUDE 6 PLANTS & ASSOCIATED IRRIGATION THAT MEET REQUIREMENTS NOTED IN THE SPECIFICATIONS. ALL PLANTS IN THIS AREA SHALL BE FIELD STAKED BY LANDSCAPE ARCHITECT AND CITY ENGINEER PRIOR TO PLANTING.
 - DECOMPOSED GRANITE & TURF REMOVAL.

FOR CURB RETURN GRADES SEE DETAIL, SHEET G6



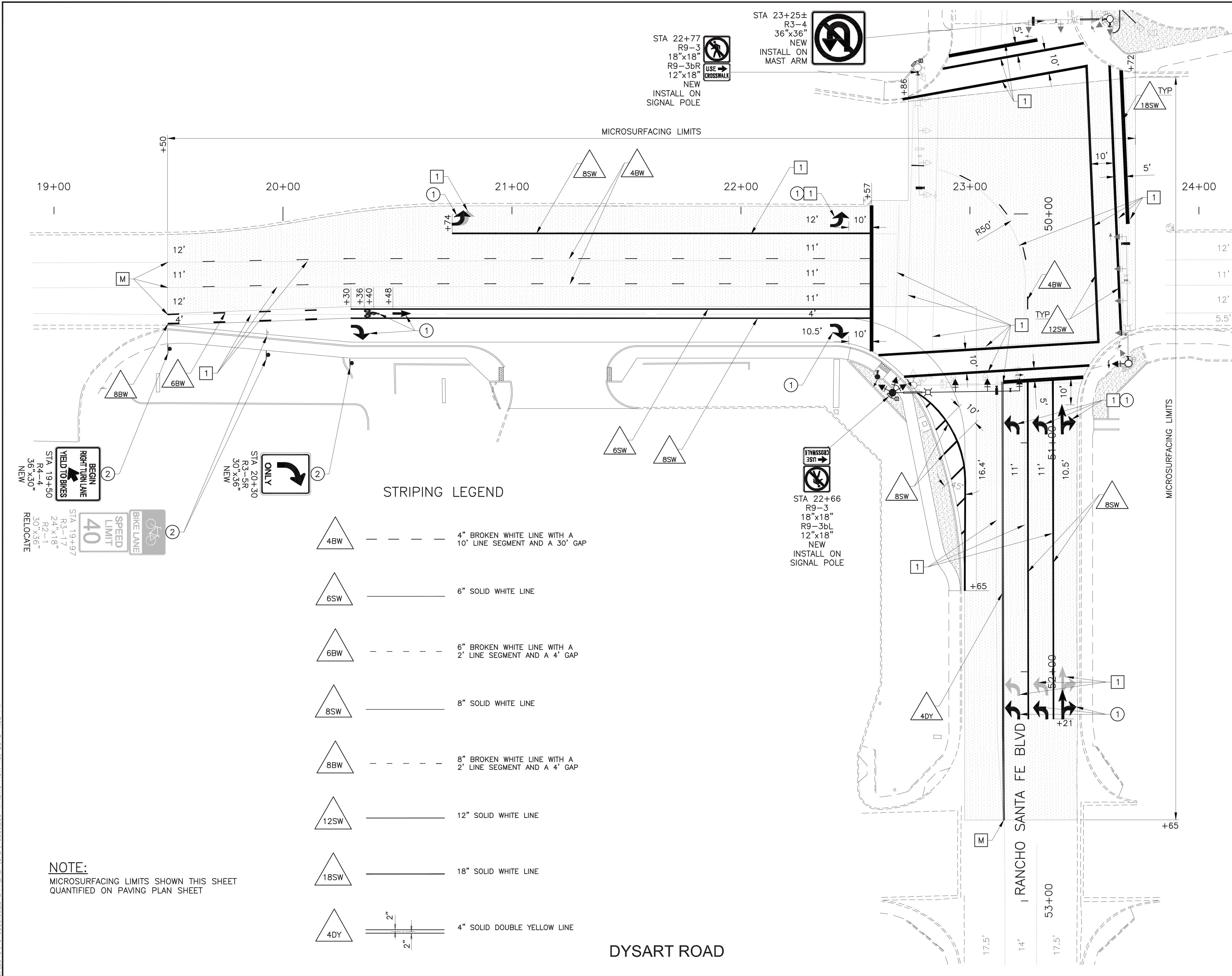
REFERENCE NOTES	
1	PROTECT IN PLACE
2	FND MCDOT BCF, W 1/4 COR SEC 2 BEGIN ALIGNMENT, STA 10+00 N: 894205.63 E: 570645.03
3	FND COA BCHH, NW COR SEC 2 END ALIGNMENT, STA 36+20.54 N: 896825.92 E: 570680.77
4	REFER TO TRAFFIC SIGNAL PLANS, SHT S1-S4

PAVING PLAN & PROFILE
Sta 19+00 to 24+00

DBB	ACC	SHD	P1
DRAWN BY: _____			
DESIGNED BY: _____			
CHECKED BY: _____			
SHEET: _____			
SCALE: 1" = 20' HORIZ 1" = 2' VERT			
Dibble Engineering			
CAPITAL IMPROVEMENT PROJECT			
DYSART ROAD - RANCHO SANTA FE BLVD TURN LANE			
PROJECT NUMBER: ST1365			
11/15/18			
LATEST REVISION DATE			
SHEET NUMBER: 7 OF 12			
PROJECT NUMBER: ST1365			

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STA 22+77
R9-3
18"x18"
R9-3bR
12"x18"
NEW
INSTALL ON
SIGNAL POLE

USE CROSSWALK

STA 23+25±
R3-4
36"x36"
NEW
INSTALL ON
MAST ARM

STA 19+97
R3-17
24"x18"
R2-1
30"x36"
RELOCATE

STA 19+50
R4-4
36"x30"
NEW

STA 20+30
R3-5R
30"x36"
NEW

STA 22+66
R9-3
18"x18"
R9-3bL
12"x18"
NEW
INSTALL ON
SIGNAL POLE

- STRIPING LEGEND**
- 4BW --- 4" BROKEN WHITE LINE WITH A 10' LINE SEGMENT AND A 30' GAP
 - 6SW --- 6" SOLID WHITE LINE
 - 6BW --- 6" BROKEN WHITE LINE WITH A 2' LINE SEGMENT AND A 4' GAP
 - 8SW --- 8" SOLID WHITE LINE
 - 8BW --- 8" BROKEN WHITE LINE WITH A 2' LINE SEGMENT AND A 4' GAP
 - 12SW --- 12" SOLID WHITE LINE
 - 18SW --- 18" SOLID WHITE LINE
 - 4DY --- 4" SOLID DOUBLE YELLOW LINE

NOTE:
MICROSURFACING LIMITS SHOWN THIS SHEET
QUANTIFIED ON PAVING PLAN SHEET

- REMOVAL NOTES**
- 1 OBLITERATE PAVEMENT MARKING
 - M MATCH EXISTING STRIPING
- CONSTRUCTION NOTES**
- 1 PAVEMENT MARKING LEGEND
COA STD DET A1610
 - 2 SIGN INSTALLATION
COA STD DET A1600

SIGNING & MARKING PLAN

	<p>DBB DRAWN BY: ACC</p> <p>SHD CHECKED BY: M1</p> <p>M1 SHEET: 8 OF 12</p> <p>SCALE: 1" = 20' HORIZ SCALE: 1" = 20' HORIZ</p>	<p>Dibble Engineering</p>
<p>PROJECT: CAPITAL IMPROVEMENT PROJECT</p> <p>PROJECT NAME: DYSART ROAD - RANCHO SANTA FE BLVD TURN LANE</p> <p>PROJECT NUMBER: ST1365</p>		
<p>SEAL: </p> <p>DATE: 11/15/18</p> <p>LATEST REVISION DATE: 11/15/18</p>		
<p>SHEET NUMBER: 8 OF 12</p> <p>PROJECT NUMBER: ST1365</p>		

TRAFFIC SIGNAL GENERAL NOTES:

1. ALL TRAFFIC SIGNAL EQUIPMENT AND CONSTRUCTION SHALL CONFORM TO THE CITY OF AVONDALE (COA) GENERAL ENGINEERING REQUIREMENTS MANUAL, LATEST EDITION, ARIZONA DEPARTMENT OF TRANSPORTATION (ADOT) "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), MAG SPECIFICATIONS AND DETAILS, ADOT "SIGNALS AND LIGHTING STANDARD DRAWINGS," COA "SUPPLEMENT TO MAG STANDARD SPECIFICATIONS AND DETAILS," THE SPECIAL PROVISIONS, AND THESE PLANS.
2. ALL UTILITIES SHALL BE BLUE STAKED PRIOR TO THE START OF CONSTRUCTION, CONTACT BLUE STAKE A MINIMUM OF 72 HOURS IN ADVANCE OF CONSTRUCTION AT (602)263-1100 OR 1-800-STAKE-IT (OUTSIDE OF MARICOPA COUNTY).
3. FOR ELECTRICAL SERVICE REQUIREMENTS, CONTACT ARIZONA PUBLIC SERVICE (APS) CONTACT, CASSANDRA AGUILAR (623) 975-5706, AT LEAST FORTY-FIVE (45) WORKING DAYS BEFORE SERVICE IS REQUIRED AND A MINIMUM OF FIVE (5) WORKING DAYS IN ADVANCE TO SCHEDULE FINAL METER CONNECTION.
4. VIDEO DETECTION TO BE PROVIDED & INSTALLED BY CONTRACTOR IN ACCORDANCE WITH THE SPECIAL PROVISIONS. VIDEO DETECTION SHALL BE MOUNTED ON SIGNAL MAST ARM WITH A COMPLETE ITERIS VANTAGE NEXT FOUR CAMERA INTERSECTION, WITH ALL REQUIRED CABLING, USING PELCO 6' EXTENSION BRACKET WITH 1 PIECE GALAXY CABLE MOUNT ON SIGNAL MAST ARM, SEE SPECIAL PROVISIONS.
5. TOP OF ALL SIGNAL STRUCTURE FOUNDATIONS SHALL BE AT THE SAME ELEVATION AS THE ADJACENT SIDEWALK OR FLUSH WITH THE SIDEWALK. IF NO SIDEWALK IS PRESENT, FOUNDATION SHALL MATCH TOP OF CURB AS SPECIFIED ON THE PLANS, OR NOT LESS THAN FOUR (4) INCHES ABOVE THE ADJACENT ROADWAY CROWN, WHERE CURBING DOES NOT EXIST.
6. TRAFFIC CONTROL PLANS SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST, PER MAG SPECIFICATIONS SECTION 107.7, AS AMMENDED BY THE CITY OF AVONDALE MAG SUPPLEMENTAL SPECIFICATIONS AND DETAILS, AND MAG SPECIFICATION SECTION 401.2, THE MUTCD, AND/OR AS DIRECTED BY THE CITY OF AVONDALE.
7. GROUND ROD SHALL BE INSTALLED IN METER FOUNDATION WITH BARE BOND #8 CONDUCTOR ATTACHED.
8. CITY ENGINEERING DIVISION SHALL BE NOTIFIED SEVENTY-TWO (72) HOURS IN ADVANCE OF EVERY MAJOR PHASE OF CONSTRUCTION WORK AT (623) 333-4200.
9. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING NEW ECONOLITE MODEL 332 CABINET WITH 6" EXTENSION. THE CONTRACTOR SHALL PICK UP, DELIVER AND INSTALL THE CABINET. THE CONTRACTOR SHALL NOTIFY THE CITY STREETS DEPARTMENT AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO HAVING THE CITY INSTALL THE CONTROLLER.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING THE FINAL AS-BUILT DRAWINGS FOR THE TRAFFIC SIGNAL PLANS. THE DRAWINGS SHALL BE SEALED BY AN ARIZONA REGISTERED CIVIL ENGINEER. FINAL AS-BUILT PLANS SHALL BE ON 4-MIL, DOUBLE MATTE, MYLAR SHEETS, THE CONTRACTOR SHALL PROVIDE ONE (1) SET MYLAR AND THREE (3) SETS BLUELINES.
11. ANY PAVEMENT MARKINGS SHOWN ON THESE PLANS ARE FOR REFERENCE ONLY. SEE PAVEMENT MARKING SHEETS FOR DETAILS.
12. METER PEDESTAL SHALL INCLUDE PHOTO ELECTRIC CELL (PEC) FOR STREET LIGHTS & INTERNALLY ILLUMINATED STREET NAME SIGNS (IISNS) PER CITY OF AVONDALE SPECS. CABINET EXTERIOR TO BE ANODIZED ALUMINUM. METER PEDESTAL SHALL BE TESCO PADMOUNT TYPE 27-000/22-000BBS SERIES ANODIZED ALUMINUM METERED SERVICE ENCLOSURE, SEE SPECIAL PROVISIONS.
13. THE CONTRACTOR SHALL CONTACT THE CITY OF AVONDALE ENGINEERING DIVISION TO COORDINATE THE LOCATION AND ORIENTATION OF RE-INSTALLED EMERGENCY VEHICLE PRE-EMPTION DETECTORS.
14. SIGNAL POLES, SIGNAL AND LUMINAIRE MAST ARMS, EXPOSED BASE PLATES, AND ANCHOR NUTS AND BOLTS TO BE PROVIDED AND INSTALLED BY THE CONTRACTOR AND SHALL BE PAINTED "COCOA BROWN" PER VALMONT POWDER COATED STANDARDS AND SPECIFICATIONS. MINIMUM ACCEPTANCE PAINTING SPECIFICATION SHALL COMPLY WITH VALMONT PAINT SPECIFICATIONS.
15. THREE (3) SUBMITTAL SETS ARE REQUIRED FOR ALL MATERIALS AND EQUIPMENT. ALL SUBMITTALS MUST BE APPROVED BY CITY OF AVONDALE BEFORE ORDERING EQUIPMENT, MATERIALS AND CONSTRUCTION.
16. SIGNAL TESTING AND TURN ON PROCEDURE: SEE SPECIAL PROVISIONS FOR TRAFFIC CONTROL DURING TESTING AND TURN ON.

(A) THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEERING DIVISION TWENTY-FOUR (24) HOURS PRIOR TO ACTIVATION OF THE TRAFFIC SIGNAL. THE CONTRACTOR SHALL CONDUCT A TEST, WITH THE CITY OF AVONDALE TRAFFIC SIGNAL TECHNICIAN TO ENSURE THAT THE INDIVIDUAL TRAFFIC AND PEDESTRIAN SIGNAL HEADS AND INDICATIONS ARE OPERATING FOR THE APPROPRIATE PHASE AND IN THE APPROPRIATE SEQUENCES.
17. ANY TRAFFIC SIGNAL CONSTRUCTION, PRIVATE OR PUBLIC, MUST BE SUPERVISED BY A CERTIFIED IMSA LEVEL II TECHNICIAN ON SITE. THE CONTRACTOR SHALL SUBMIT THE NAME OF THE TECHNICIAN AND A COPY OF THEIR CERTIFICATION TO THE CITY OF AVONDALE ENGINEERING DIVISION PRIOR TO THE START OF CONSTRUCTION ACTIVITIES. ALL TRAFFIC SIGNAL WORK ON THE PROJECT SHALL BE SUPERVISED BY THIS TECHNICIAN AT ALL TIMES. IF A JOB SITE INSPECTION SHOWS NO CERTIFIED TECHNICIANS ON SITE, THE TRAFFIC SIGNAL WORK WILL BE SUSPENDED.

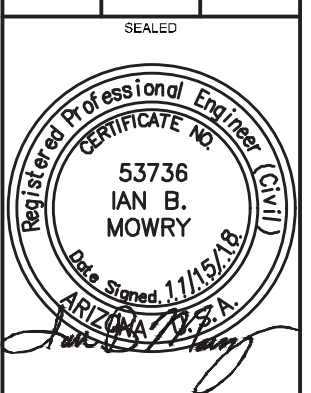
18. THE CONTRACTOR SHALL TRENCH TO WITHIN TWO (2) FEET OF THE APS POWER SOURCE AND PROVIDE A 4' X 4' WORKING PIT AS SHOWN ON THE SRP PLANS. THE CONTRACTOR WILL PROVIDE AND INSTALL A 2 1/2 INCH CONDUIT FROM THE POWER SOURCE TO THE ELECTRICAL SERVICE CONDUIT. APS WILL PULL THE SERVICE WIRE TO THE ELECTRICAL SERVICE CABINET AND TERMINATE.
19. ALL TYPE V & VII MOUNTING BRACKETS SHALL HAVE TERMINAL STRIPS ON THE POLE.
20. ALL CONDUIT SHALL BE SCHEDULE 80 PVC.
21. RED, YELLOW, GREEN, ARROW SIGNAL, AND PEDESTRIAN HEAD INDICATIONS SHALL BE PROVIDED & INSTALLED BY THE CONTRACTOR. ALL INDICATIONS SHALL MEET "LED" TECHNOLOGY.
22. ALL NEW AND EXISTING RAMPS SHALL PROVIDE PROPER ADA ACCESS TO PEDESTRIAN PUSH BUTTONS.
23. ALL EXISTING TRAFFIC SIGNALS AND EQUIPMENT SHALL REMAIN IN OPERATION UNTIL THE NEW TRAFFIC SIGNAL IS ENERGIZED AND FULLY OPERATIONAL.
24. PRIOR TO ACCEPTANCE BY THE CITY OF AVONDALE, DAMAGE TO ANY SIGNAL EQUIPMENT, POLE, ETC., SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE, IN CONFORMANCE WITH THE SPECIFICATIONS.
25. ALL SIGNAL POLE FOUNDATIONS SHALL BE CONSTRUCTED BY THE CONTRACTOR IN ACCORDANCE WITH THE CITY OF AVONDALE FOUNDATION DETAIL PROVIDED IN COA DETAIL NO A1740.
26. ALL TROMBONE STYLE SIGNAL POLES AND ARMS SHALL BE MANUFACTURED BY VALMONT. ALL SIGNALS SHALL HAVE 24" DIAMETER BOLT PATTERN ON BASE PLATE.
27. TRAFFIC SIGNAL POLE AND PULL BOX LOCATIONS, ELEVATIONS, AND ORIENTATIONS SHALL BE FIELD VERIFIED WITH THE CITY OF AVONDALE TRAFFIC SIGNAL INSPECTOR PRIOR TO EXCAVATION. THE CITY OF AVONDALE TRAFFIC SIGNAL INSPECTOR MAY MAKE FIELD ADJUSTMENTS IN RESPONSE TO FIELD CONDITIONS AND TO AVOID UTILITIES. THE CONTRACTOR SHALL CONTACT THE CITY ENGINEERING DIVISION 72-HOURS IN ADVANCE OF SCHEDULING EXCAVATIONS.
28. THE CONTRACTOR SHALL CONTACT THE CITY OF AVONDALE TRAFFIC SIGNAL INSPECTOR FOR EXACT LOCATIONS OF TRAFFIC SIGNAL MOUNTING ASSEMBLIES 72-HOURS IN ADVANCE OF SCHEDULING THE INSTALLATION.

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DESIGNED BY:	IBM
CHECKED BY:	SHD
SHEET:	S1
DRAWN SCALE:	

Dibble Engineering

PROJECT TYPE: CAPITAL IMPROVEMENT PROJECT
 PROJECT NAME: DYSART ROAD - RANCHO SANTA FE BLVD TURN LANE
 PROJECT NUMBER: ST1365

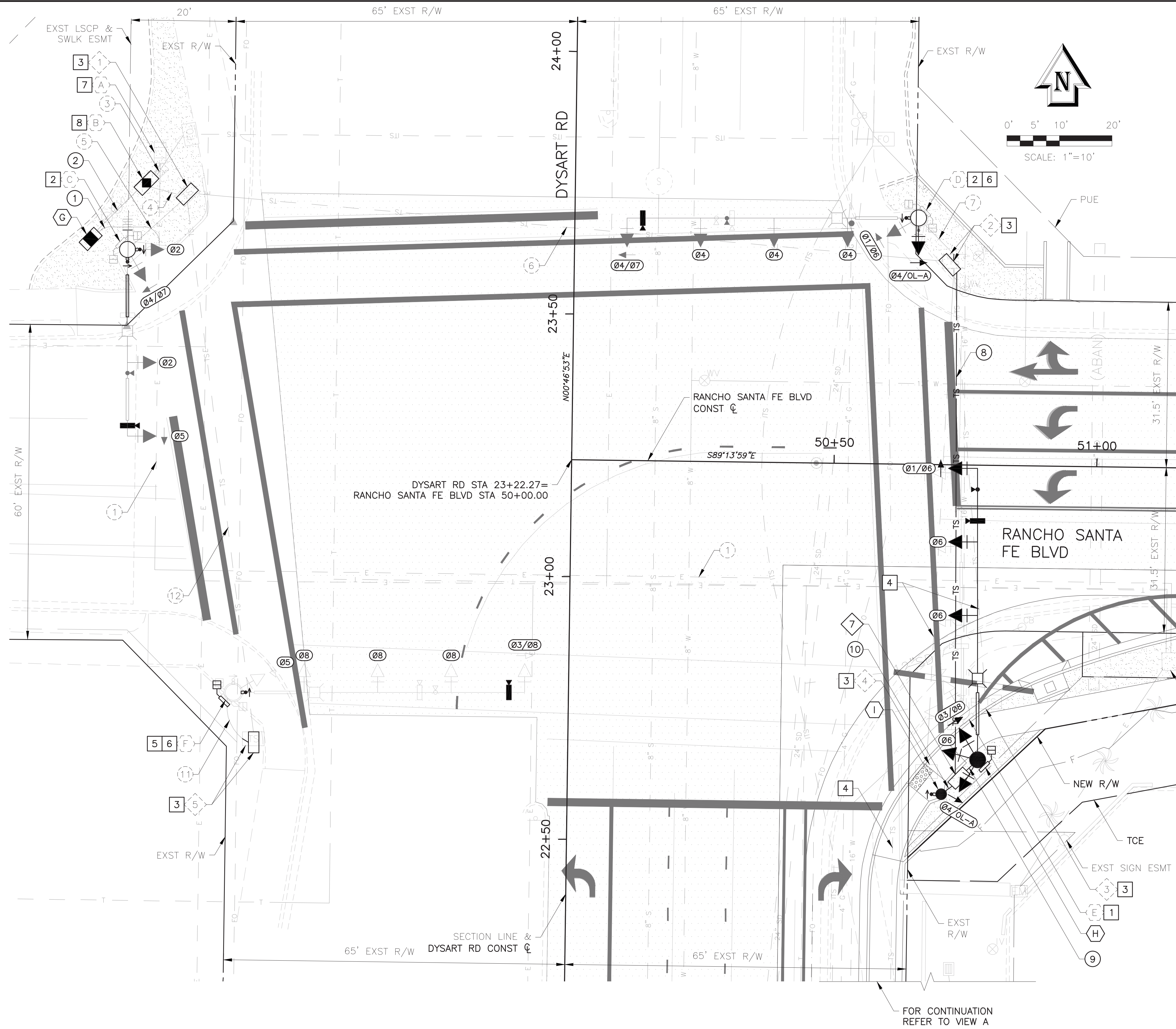


11/15/18
 LATEST REVISION DATE

**TRAFFIC SIGNAL
 GENERAL NOTES**
 DYSART RD & RANCHO SANTA FE BLVD

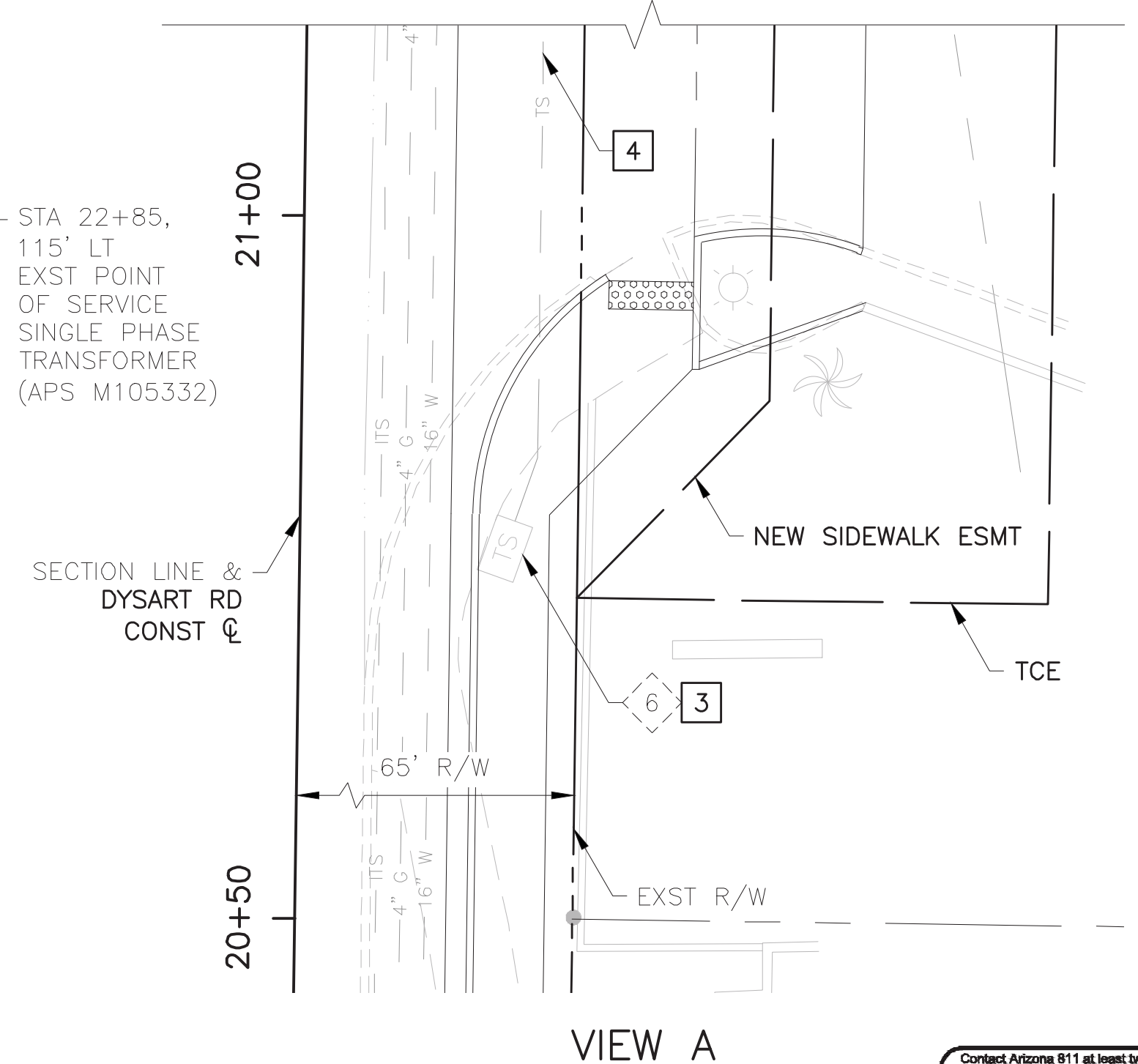
SHEET NUMBER
 9 OF 12
 PROJECT NUMBER
 ST1365

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LEGEND		DESCRIPTION
EXISTING	NEW	
— TS —	— TS —	TRAFFIC SIGNAL CONDUIT
□	□	NO 7 PULLBOX
□	□	METER PEDESTAL
□	□	CONTROLLER CABINET W/ FOUNDATION
○	●	TRAFFIC SIGNAL FOUNDATION
↑	↑	TRAFFIC SIGNAL INDICATION
↑	↑	PEDESTRIAN INDICATION (PED)
↑	↑	PEDESTRIAN PUSH BUTTON (PB)
□	□	VIDEO DETECTION CAMERA (VDC)
□	□	EMERGENCY VEHICLE PRE-EMPTION (EVP)
□	□	INTERNALLY ILLUMINATED STREET NAME SIGN (IISNS)
○	○	CLOSED CIRCUIT TELEVISION (CCTV) CAMERA
—	—	WIRELESS ANTENNA (ERA)

- CONSTRUCTION NOTES**
- 1 REMOVE & SALVAGE EXST TRAFFIC SIGNAL POLE & EQUIPMENT TO COA
REMOVE, SALVAGE, & RELOCATE EVP TO POLE H
REMOVE FOUNDATION, BACKFILL & COMPACT VOID
 - 2 REMOVE & SALVAGE EXST TRAFFIC SIGNAL POLE TO COA
 - 3 REMOVE EXST PULLBOX
 - 4 CAP & REMOVE EXST PVC CONDUIT
 - 5 REMOVE & SALVAGE PEDESTRIAN INDICATIONS (Ø6P & Ø8P) TO COA
 - 6 REMOVE & SALVAGE PEDESTRIAN PUSH BUTTON & PLUG
ANY REMAINING OPENING, EQUIPMENT NOTE 6, SHEET 10
 - 7 REMOVE & SALVAGE EXST METER PEDESTAL TO COA
REMOVE FOUNDATION, BACKFILL & COMPACT VOID
 - 8 REMOVE & SALVAGE EXST CONTROLLER CABINET TO COA
PROTECT FOUNDATION IN PLACE



TRAFFIC SIGNAL PLAN
DYSART RD & RANCHO SANTA FE BLVD

DRAWN BY: IBM DESIGNED BY: IBM CHECKED BY: SHD SHEET: S2 DRAWING NUMBER: ST1365		PROJECT TYPE: CAPITAL IMPROVEMENT PROJECT PROJECT NAME: DYSART ROAD - RANCHO SANTA FE BLVD TURN LANE PROJECT NUMBER: ST1365
11/15/18 <small>LATEST REVISION DATE</small>		
SHEET NUMBER 10 OF 12 PROJECT NUMBER ST1365		

EQUIPMENT SCHEDULE

TRAFFIC SIGNAL CONTROLLER									
CABINET	TYPE	EQUIPMENT	FOUNDATION	LOCATION	REMARKS				
(A) METER	METERED SERVICE PEDESTAL	-	-	23+80 79' LT	SERVICE ADDRESS: 13102 W RANCHO SANTA FE BLVD REMOVE & SALVAGE METER PEDESTAL TO COA REMOVE FOUNDATION, BACKFILL & COMPACT VOID				
(B) CONTROLLER	CONTROLLER CABINET	MCCAIN OR ECONOLITE SAFETRAN CONTROL CABINET MODEL 332 SYSTEM	-	23+75 82' LT	REMOVE & SALVAGE CABINET TO COA, SALVAGE EQUIPMENT ON-SITE PROTECT FOUNDATION IN PLACE INSTALL NEW CABINET ON EXST FOUNDATION W/ NEW HARDWARE RE-INSTALL AND RE-WIRE CONTROLLER & APPURTENANCES				
(G) METER	METERED SERVICE PEDESTAL	TESCO AZ-27-000/22-000BBS COMBO UNIT 100A 120V/240V	ADOT T.S. 2-6	23+63 92' LT	SERVICE ADDRESS: 13102 W RANCHO SANTA FE BLVD FURNISH & INSTALL ALL EQUIPMENT				
POLES		MAST ARMS		SIGNALS		PED PUSH BUTTON W/ SIGN	FOUNDATION	LOCATION	REMARKS
ID	TYPE	SIGNAL	LUMIN.	MTG.	FACE				
(C)	Q MOD	35' TROMBONE	15'	●	1-R ● 1-F VII 1-Q/1-F VII 2-PED	2-ADA W/ R10-3	Q	23+61 85' LT	PROTECT FOUNDATION IN PLACE SALVAGE SMA, LMA, & EQUIPMENT ON SITE REMOVE & SALVAGE Q POLE TO COA REMOVE & SALVAGE IISNS TO COA INSTALL COA FURNISHED Q POLE REINSTALL SMA & LMA W/ CORRESPONDING EQUIPMENT REINSTALL SIDEMOUNT INDICATIONS REINSTALL ERA TO NEW SIGNAL POLE REWIRE EVP, EQUIPMENT NOTE 2 FURNISH & INSTALL IISNS, EQUIPMENT NOTE 4 REMOVE & REPLACE VDC, EQUIPMENT NOTE 5 REMOVE & REPLACE PED PB (Ø2P & Ø8P) REPAINT TRAFFIC SIGNAL & EQUIPMENT, EQUIPMENT NOTE 7
(D)	R MOD	55' TROMBONE	15'	●	1-S ● 1-F ● 1-F ● 1-F V 1-Q VII 2-PED	2-ADA W/ R10-3	R	23+69 65' RT	PROTECT FOUNDATION IN PLACE REMOVE & SALVAGE R POLE TO COA SALVAGE SMA, LMA, & EQUIPMENT ON SITE REMOVE & SALVAGE PED PB (Ø2P) ON-SITE INSTALL COA FURNISHED R POLE REINSTALL SMA & LMA W/ CORRESPONDING EQUIPMENT REINSTALL SIDEMOUNT INDICATIONS & PED PB (Ø2P) REINSTALL IISNS TO SMA REWIRE EVP, EQUIPMENT NOTE 2 REMOVE & REPLACE VDC, EQUIPMENT NOTE 5 REMOVE & REPLACE PED PB (Ø4P) REPAINT TRAFFIC SIGNAL & EQUIPMENT, EQUIPMENT NOTE 7
(E)	R MOD	45' TROMBONE	15'	●	1-S ● 1-F ● 1-F VII 1-Q/1-F VII 2-PED	2-ADA W/ R10-3	R	22+75 75' RT	REMOVE & SALVAGE POLE & EQUIPMENT TO COA REMOVE & RELOCATE EVP FROM POLE E TO POLE H REMOVE FOUNDATION, BACKFILL & COMPACT VOID REMOVE & RELOCATE LUMINAIRE FROM POLE E LMA TO POLE H LMA
(F)	R MOD	55' TROMBONE	15'	●	1-S ● 1-F ● 1-F ● 1-F V 1-R VII 2-PED V 1-PED	1-ADA W/ R10-3 (Ø6P) REMOVE 1-ADA W/ R10-3 (Ø8P) REMOVE & REPLACE	R	22+77 64' LT	PROTECT POLE & EQUIPMENT IN PLACE REMOVE & REPLACE VDC, EQUIPMENT NOTE 5 REMOVE PED INDICATION (Ø6P & Ø8P) & MOUNTING ASSEMBLY FURNISH & INSTALL PED INDICATION (Ø8P) & MOUNTING ASSEMBLY REMOVE PED PB (Ø6P) & COVER OPENING, EQUIPMENT NOTE 6 REMOVE & REPLACE PED PB (Ø8P) REPAINT TRAFFIC SIGNAL & EQUIPMENT, EQUIPMENT NOTE 7
(H)	R A1741 A1742	55' TROMBONE A1746	15' A1741	●	1-S ● 1-F ● 1-F XI 1-Q XI 1-F XI 1-Q V 1-PED	-	R A1740	22+66 78' RT	REINSTALL EVP, EQUIPMENT NOTE 2 REINSTALL LUMINAIRE, EQUIPMENT NOTE 3 FURNISH & INSTALL IISNS, EQUIPMENT NOTE 4 FURNISH & INSTALL VDC, EQUIPMENT NOTE 5 FURNISH & INSTALL ALL REMAINING EQUIPMENT
(I)	PB ADOT T.S. 4-22	-	-	-	-	1-ADA W/ R10-3	PB ADOT T.S. 4-22	22+60 71' RT	FURNISH & INSTALL ALL EQUIPMENT

EQUIPMENT SCHEDULE LEGEND:
 ● 1.5" SIGNAL ARM COUPLING (A1746-1 DET 1) ■ SIGN CALLOUTS ARE PROVIDED FOR REFERENCE ONLY. REFER TO SHEET 8 FOR SIGN CODE, SIZE, AND LOCATION.

PULLBOX SCHEDULE

NO	TYPE	LOCATION	REMARKS
1	NO 7	23+72, 74' LT	REMOVE & REPLACE W/ HEAVY DUTY TIER 22 NO 7, ADOT DWG NO T.S. 1-2
2	NO 5	23+61, 72' RT	REMOVE & REPLACE W/ HEAVY DUTY TIER 22 NO 7, ADOT DWG NO T.S. 1-2
3	NO 5	22+77, 80' RT	REMOVE
4	NO 5	22+64, 68' RT	REMOVE
5	NO 5	22+68, 60' LT	REMOVE & REPLACE W/ HEAVY DUTY TIER 22 NO 7, ADOT DWG NO T.S. 1-2
6	NO 3½	20+77, 60' RT	REMOVE
7	NO 7	22+63, 75' RT	HEAVY DUTY TIER 22 NO 7 ADOT DWG NO T.S. 1-2

EQUIPMENT NOTES:

- REFER TO COA STANDARD SPECIFICATIONS SECTION 900 FOR POLE EQUIPMENT NOTES NOT PROVIDED.
- THE CONTRACTOR SHALL INSTALL AND RE-CONNECT THE SALVAGED EVP SYSTEM FROM THE MAST ARMS OF EXISTING POLE E TO THE MAST ARM OF NEW POLE H. THE CONTRACTOR SHALL PROTECT IN PLACE AND RE-CONNECT THE EVP ON POLES C & D. THE CONTRACTOR SHALL RE-INSTALL OR REPLACE ALL EQUIPMENT REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM IN ACCORDANCE WITH COA SPECIFICATION SECTION 901.14.
- THE CONTRACTOR SHALL INSTALL AND RE-CONNECT THE SALVAGED LUMINAIRE FROM POLE E TO THE LUMINAIRE MAST ARM OF NEW POLE H.
- THE CONTRACTOR SHALL FURNISH AND INSTALL INTERNALLY ILLUMINATED STREET NAME SIGNS (IISNS) IN ACCORDANCE WITH COA STD DET A1745 & A1747, COA SPECIFICATION SECTION 901.4, AND IISNS DETAIL, SHEET 12. THE CONTRACTOR SHALL CONTACT THE COA DEVELOPMENT & ENGINEERING SERVICES, ENGINEERING DIVISION FOR EXACT FORMATTING FOR EACH NEW IISNS PANEL.
- THE CONTRACTOR SHALL REMOVE AND SALVAGE THE EXISTING VDC SYSTEM TO COA. THE CONTRACTOR SHALL FURNISH AND INSTALL A NEW VDC SYSTEM (VANTAGE NEXT, MANUFACTURED BY ITERIS). EACH VDC SHALL BE INSTALLED IN ACCORDANCE WITH THE COA SPECIFICATIONS AND THE MANUFACTURER'S REQUIREMENTS. EACH VDC SHALL BE INSTALLED WITH EXTENSION BRACKETS ON THE SIGNAL MAST ARM AND ORIENTED TOWARD THE APPROACHING LEFT TURN LANE, REFER TO TRAFFIC SIGNAL GENERAL NOTE NO 4.
- THE CONTRACTOR SHALL REMOVE THE EXISTING PEDESTRIAN PUSH BUTTON, PUSH BUTTON HOUSING, CORRESPONDING PUSH BUTTON SIGN, AND CONDUCTORS AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL PLUG WELD WITH HOT GALVANIZED FINISH THE REMAINING OPENINGS, INCLUDING BOLT HOLES ON THE TRAFFIC SIGNAL POLE. THE CONTRACTOR SHALL PAINT THE EXTENTS OF THEIR WORK IN A COLOR WHICH MATCHES THE EXISTING POLE COLOR. THE PLUG ASSEMBLY SHALL BE WEATHER-PROOF AND CONSTRUCTED SUCH THAT IT WILL BE IMPOSSIBLE TO RECEIVE ANY ELECTRICAL SHOCK UNDER ANY WEATHER CONDITION. THE PLUG SHALL BE SHAPED TO FIT THE CURVATURE OF THE POLE TO WHICH IT IS ATTACHED AND SHALL PROVIDE A RIGID, TAMPER PROOF INSTALLATION. THE CONTRACTOR SHALL APPROVAL FROM THE ENGINEER PRIOR TO ANY FURTHER INSTALLATION.
- THE CONTRACTOR SHALL APPLY ONE APPLICATION OF POWDER COATING TO ALL TRAFFIC SIGNAL POLES, MAST ARMS, BASE PLATES, ANCHOR NUTS, AND BOLTS IN ACCORDANCE WITH COA SPEC SEC 901.15. THE CONTRACTOR SHALL APPLY ONE APPLICATION OF DULL BLACK ENAMEL TO ALL EXISTING SIGNAL AND PEDESTRIAN INDICATIONS AS WELL AS THE CORRESPONDING MOUNTING ASSEMBLIES IN ACCORDANCE WITH ADOT SPEC SEC 733.

ENGINEER'S NOTES:

- THE STATION AND OFFSET OF ALL EQUIPMENT IS REFERENCED TO THE CENTROID OF FOUNDATION FROM THE DYSART RD CONST C UNLESS NOTED OTHERWISE.
- FOR HORIZONTAL CONTROL OF CONST C REFER TO SHEET 7.
- DETAIL AND SPECIFICATION REFERENCES PROVIDED ON THESE PLANS REFER TO THE 2018 COA SUPPLEMENT TO MAG UNIFORM STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS CONSTRUCTION UNLESS NOTED OTHERWISE.

IBM DRAWN BY:	IBM DESIGNED BY:	SHD CHECKED BY:	S3 SHEET:	S3 SHEET:
Dibble Engineering				
CAPITAL IMPROVEMENT PROJECT DYSART ROAD - RANCHO SANTA FE BLVD TURN LANE				
ST1365				
11/15/18				
SHEET NUMBER 11 OF 12 PROJECT NUMBER ST1365				

TRAFFIC SIGNAL NOTES & SCHEDULES
 DYSART RD & RANCHO SANTA FE BLVD

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CONDUIT & CONDUCTOR SCHEDULE

CONDUIT RUN NO	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫
CONDUIT SIZE (NO), IN INCHES	2½	3	2	3	3	2	3	2	3	3	2	3
CONDUIT RUN APPROXIMATE LENGTH, IN FEET	15	15	-	-	-	-	-	100	100	5	5	-
CONDUIT SERVES	G	B	B	C	C	D	D	G	G	G	H	F

DEVICES	PHASE	NO. WIRES													
SIGNAL HEAD PED HEAD PED PB	#14 IMSA 19-1, 20 CONDUCTOR			6		1	4	2	2			2		1	1
	#14 IMSA 19-1, 4 CONDUCTOR			1			1		1					1	
	#8 WHITE THW COMMON, SOLID			1		1	1	1	1			1	1	1	1
GROUND	#8 GREEN THW, SOLID	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	#10 BLACK THW, SOLID RED TAPE			1		1	1	1	1			1		1	1
LUMINAIRES	#10 BLACK THW, SOLID			1		1	1	1	1			1		1	1
	#10 WHITE THW, SOLID			1		1	1	1	1			1		1	1
EVP	STROBESWITCH DETECTOR CABLING ○				4	1	2	1			1	1		1	1
	#10 BLACK THW, SOLID; BROWN TAPE			1		1	1	1	1			1		1	1
IISNS	#10 BLACK THW, SOLID			1		1	1	1	1			1		1	1
	#10 WHITE THW, SOLID			1		1	1	1	1			1		1	1
VDC	VDC CABLING ●				4	1	2	1			1	1		1	1
ERA	WIRELESS ANTENNA CABLING ◆				1	1									
CCTV	CCTV POWER & COMM CABLING ■				1		1	1							
ITS	12 STRAND SMFO ITS ▽			1											
SERVICE	#6 (120/240) HOT-BLACK	1													
	#6 (120/240) NEUTRAL-WHITE	1													

CONDUCTOR SCHEDULE LEGEND:

- ◆ POWER CABLING CONDUCTORS SHALL BE FURNISHED AND INSTALLED BY ARIZONA PUBLIC SERVICE (APS). 2½" RED CONDUIT SHALL BE FURNISHED AND INSTALLED BY CONTRACTOR IN ACCORDANCE WITH APS REQUIREMENTS.
- EVP CABLING CONTRACTOR SHALL VERIFY EXISTING EVP CABLING PRIOR TO CONSTRUCTION AND REPLACE IN KIND
- VDC CABLING VDC CABLING SHALL BE PER THE MANUFACTURER'S REQUIREMENTS
- ◆ ERA CABLING CONTRACTOR SHALL VERIFY EXISTING ERA CABLING PRIOR TO CONSTRUCTION AND REPLACE IN KIND
- CCTV CABLING CONTRACTOR TO VERIFY EXISTING CCTV CABLING PRIOR TO CONSTRUCTION AND REPLACE IN KIND
- ▽ ITS SMFO CITY OF AVONDALE FORCES TO REMOVE AND RE-INSTALL SMFO TO NEW CONTROLLER CABINET

CONDUIT & CONDUCTOR NOTES:

- REFER TO COA STANDARD SPECIFICATIONS SECTION 900 FOR CONDUIT & CONDUCTOR NOTES NOT PROVIDED.
- CONDUIT & CONDUCTOR SCHEDULE ONLY DEPICTS NEW CONDUCTOR TO BE INSTALLED.
- THE IMSA 20-CONDUCTOR SHALL BE 90°C HI TEMP #14 AWG IMSA 19-1. THE IMSA 4- AND 7- CONDUCTOR SHALL BE #14 AWG IMSA 19-1. ALL IMSA CONDUCTORS SHALL BE SOLID.
- THE CONTRACTOR SHALL SUPPLY AND INSTALL ALL CONDUCTORS REQUIRED FOR A COMPLETE AND OPERATIONAL TRAFFIC SIGNAL SYSTEM.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING MULTICOLOR CONDUCTORS WHICH MEET THE COLOR CODING PROVIDED ON THIS SHEET.
- THE CONTRACTOR SHALL INSTALL PULL TAPE AND TRACER WIRE IN ALL EMPTY CONDUITS.
- THE CONTRACTOR SHALL RUN CABLING FOR THE EVP, VDC, ERA, AND CCTV UNSPLICED FROM THE EQUIPMENT TO THE CONTROLLER CABINET.

IMSA CABLE 19-1, #14 AWG SOLID, 20 CONDUCTOR

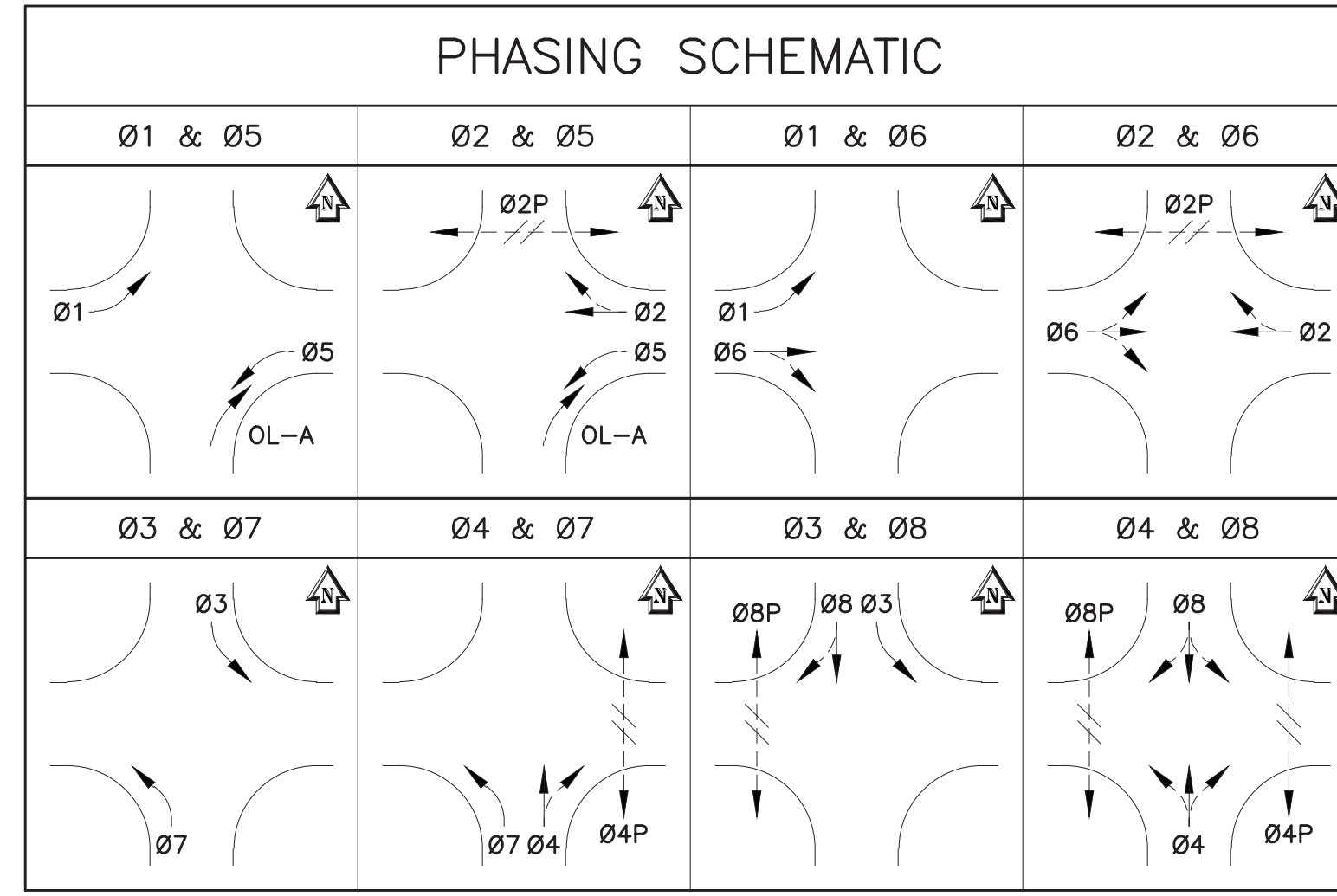
CABLE #1	CABLE #2	CONDUCTOR COLOR		SIGNAL INTERVAL
		BASIC COLOR	TRACER STRIPE	
Ø1	Ø5 OR OVERLAP A	RED	WHITE	RED
		BLACK	WHITE	YELLOW
		GREEN	WHITE	GREEN
Ø2	Ø6 OR OVERLAP B	RED	-	RED
		ORANGE	-	YELLOW
		GREEN	-	GREEN
Ø3	Ø7 OR OVERLAP C	BLACK	RED	RED
		ORANGE	RED	YELLOW
		BLUE	RED	GREEN
Ø4	Ø8 OR OVERLAP D	RED	BLACK	RED
		ORANGE	BLACK	YELLOW
		GREEN	BLACK	GREEN
Ø2 PED	Ø6 PED	BLUE	-	WALK
		BLACK	-	DON'T WALK
		WHITE	BLACK	PUSH BUTTON
Ø4 PED	Ø8 PED	BLUE	WHITE	WALK
		RED	GREEN	DON'T WALK
		WHITE	RED	PUSH BUTTON
		WHITE	-	P.B. COMMON
		BLUE	BLACK	SPARE

NOTE: CABLES SHALL BE TAGGED ON BOTH ENDS AS FOLLOWS: RED FOR NORTHWEST, WHITE FOR NORTHEAST, BLUE FOR SOUTHEAST, AND GREEN FOR SOUTHWEST.

IMSA CABLE 19-1, #14 AWG SOLID, 7 CONDUCTOR & 4 CONDUCTOR

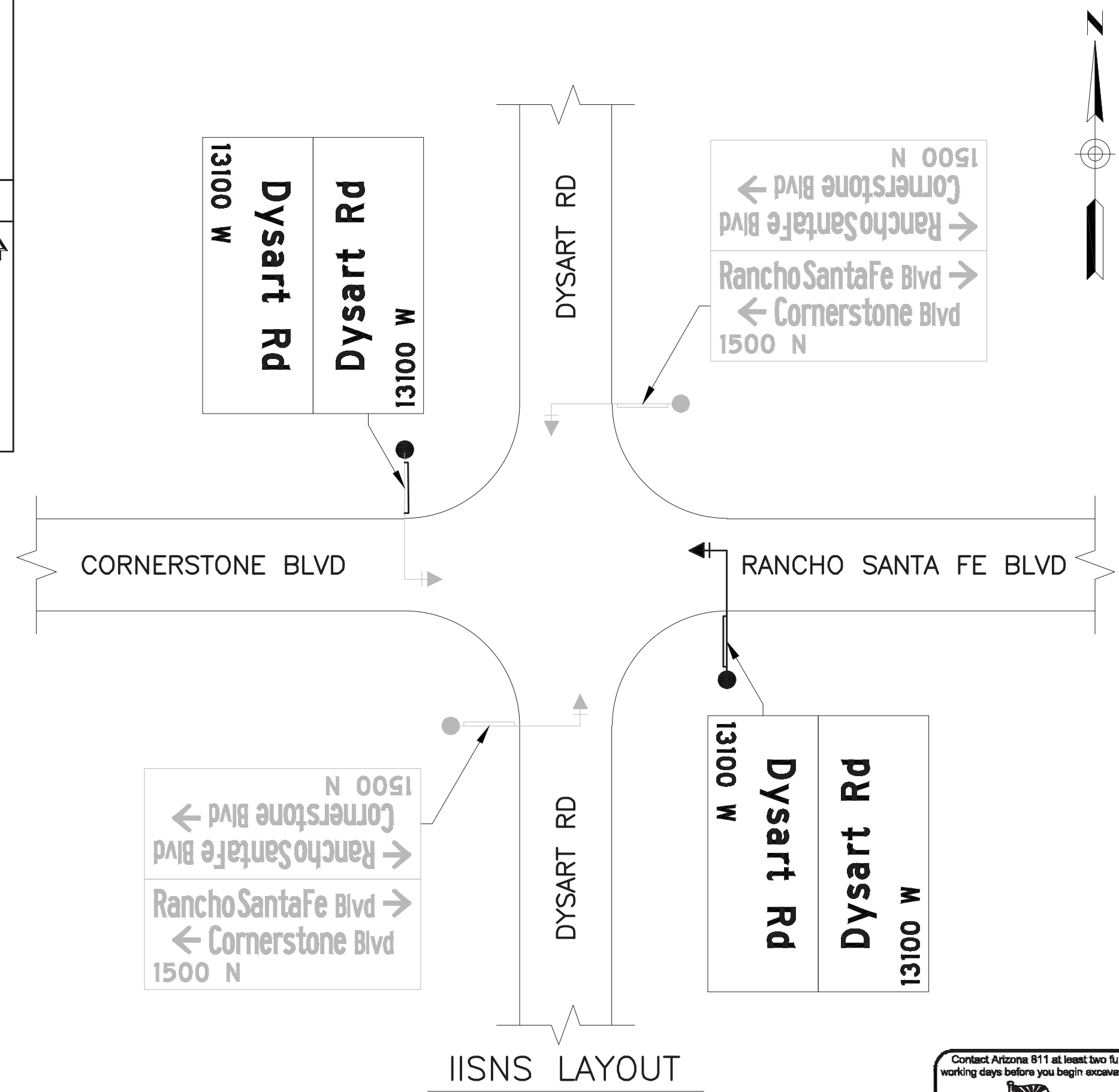
SIGNAL HEADS OUTBOARD & FAR LEFT		PEDESTRIAN HEADS	
BASIC COLOR	SIGNAL INTERVAL	BASIC COLOR	SIGNAL INTERVAL
7 CONDUCTOR CABLE			
RED	RED	RED	DON'T WALK
BLACK	YELLOW	GREEN	WALK
GREEN	GREEN	WHITE	PED. COM.
ORANGE	YELLOW ARROW	BLACK	SPARE
BLUE	GREEN ARROW		
WHITE	VEH. COM.		
WHT/BLK TR	VEH. COM.		
SIGNAL HEADS INBOARD & SIDEMOUNT		PUSH BUTTON	
4 CONDUCTOR CABLE			
RED	RED	BLACK	PUSH BUTTON
BLACK	YELLOW	WHITE	P.B. COM.
GREEN	GREEN	RED	SPARE
WHITE	VEH. COM.	GREEN	SPARE

NOTE: THE CABLE SHALL BE TAGGED TO INDICATE PHASE.



FLASHING SEQUENCE

Ø2 & Ø6	RED
Ø4 & Ø8	RED



TRAFFIC SIGNAL NOTES & SCHEDULES
DYSART RD & RANCHO SANTA FE BLVD

IBM	IBM	SHD	S4
DRAWN BY:	DESIGNED BY:	CHECKED BY:	SHEET:
Dibble Engineering			
CAPITAL IMPROVEMENT PROJECT			
DYSART ROAD - RANCHO SANTA FE BLVD TURN LANE			
PROJECT NUMBER: ST1365			
11/15/18			
SHEET NUMBER: 12 OF 12			
PROJECT NUMBER: ST1365			

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EXHIBIT B
TO
INVITATION FOR BIDS NO. EN19-087

[Substitution/Equal Request Form]

See following pages.

SUBSTITUTION/EQUAL REQUEST FORM

DYSART/RANCHO SANTA FE INTERSECTION IMPROVEMENTS
EN 19-087

Bidder _____ hereby submits for City's consideration the following product, instead of the specified item, for the above Project.

1.	<u>Section</u>	<u>Page</u>	<u>Paragraph/Line</u>	<u>Specified Item</u>
<hr/>				

Proposed Substitution: _____

Statement indicating why specified product, fabrication or installation cannot be provided, if applicable:

(NOTE: See Article II – Bid Process; Bid Award, Section 2.4(C), Approval of Substitutions, or Section 2.4(D), Use of Equals, as applicable, for additional criteria concerning prior approval for substitutions or use equals of material and equipment.)

2. Attach complete product description, drawings, photographs, performance and test data, and other information necessary for evaluation, indicating by highlighting all comparable data between specified item and proposed substitution or equal. Identify specific model numbers, finishes, options, etc.

A. Will changes be required to Project design (architecturally, structurally, mechanically or electrically) in order to properly install proposed substitution? Yes _____ No _____ If Yes, explain:

B. Will the undersigned pay for changes to the Project design, including engineering and drawing costs, caused by requested substitution? Yes _____ No _____

C. List differences between proposed substitution and specified item. Include annotated copy of applicable Specification Section.

<u>Specified Item</u>	<u>Proposed Substitution</u>
<hr/>	<hr/>
<hr/>	<hr/>

D. Does substitution affect Drawing dimensions? Yes _____ No _____ If Yes, explain:

E. What effect does substitution have on other trades? _____

F. Does manufacturer's warranty of proposed substitution differ from that specified?
Yes _____ No _____ If Yes, explain: _____

G. Will substitution affect progress schedule? Yes ____ No ____ If Yes, explain:

H. Will substitution require more license fees or royalties than specified product?

Yes ____ No ____ If Yes, explain: _____

I. Will maintenance and service parts be locally available for substitution?

Yes ____ No ____ If Yes, explain: _____

J. Will substitution be compatible with all adjacent material and/or applications to or on the proposed substitution? Yes ____ No ____ If no, explain what material substitutions will be required to make your proposed substitution compatible: _____

List materials that will be required to provide compatibility: _____

3. The undersigned hereby assumes all responsibility for all provisions indicated herein and agrees that, if adequate comparable information is not provided as required by Section 2.4(C), Approval of Substitutions, or Section 2.4(D), Use of Equals, as applicable, and this Form, the proposed substitution or equal shall be subject to rejection.

4. The undersigned understands and agrees that the substitution requested, including all supporting data, will only be considered if it is submitted to the City Representative 10 full Days prior to the Bid Deadline. Telegraphic (facsimile) or electronic (email) copies will **not** be considered.

Submitted by:

For City's Use Only:

Signature

Accepted

Print Name

Rejected

Title

Remarks: _____

Company Name

Address

Signature

City, State, Zip Code

Print Name

Date

Telephone No.

Date

EXHIBIT C
TO
INVITATION FOR BIDS NO. EN19-087
[Price Sheet]

See following pages.

PRICE SHEET
DYSART/RANCHO SANTA FE INTERSECTION IMPROVEMENTS
EN19-087

NOTE: All pricing blanks must be filled in. Incomplete or unfilled spaces in the Bid Price Sheet shall result in a determination that a Bid is non-responsive.

Item No.	Description of Materials and/or Services	Unit	Quantity	Unit Price	Total Price
105.30010	As-Built Documentation	L SUM	1		
105.80010	Construction Staking, Survey, & Layout	L SUM	1		
107.02000	AZPDES (NPDES) SWPP	L SUM	1		
107.15010	Project Information Signs	EA	2		
109.10010	Mobilization/Demobilization	L SUM	1		
201.01010	Remove Tree, Diameter <12"	EA	1		
201.01014	Remove Palm Tree	EA	1		
201.10000	Clearing and Grubbing	L SUM	1		
301.01000	Subgrade Preparation	SY	429		
321.00203	Asphalt Concrete Pavement (19mm) High Volume Marshall Mix	TON	103		
324.01090	Portland Cement Concrete Pavement (PCCP) 9" Thickness	SY	429		
329.01000	Asphalt Emulsion Tack Coat (SS-1)	TON	0.1		
331.03200	Microsurfacing (Type II Aggregate)	SY	3,768		
340.01110	6" Vertical Curb & Gutter, MAG Std. Det. 220, Type A	LF	351		
340.01160	6" Single Curb, MAG Std. Det. 222, Type B	LF	128		
340.01210	4" Thick Sidewalk, MAG Std. Det. 230	SF	1,477		
340.01303	Curb Ramp, MAG Std. Det. 236-5 (Modified)	EA	1		
340.01454	Commercial Driveway Entrance, COA Std. Det. A1251-1 (Mod)	SF	1,748		

Item No.	Description of Materials and/or Services	Unit	Quantity	Unit Price	Total Price
350.01001	Remove & Salvage Meter Pedestal	EA	1		
350.01002	Remove & Salvage Controller Cabinet	EA	1		
350.01003	Remove & Salvage Traffic Signal Pole, Mast Arms & Equipment	EA	1		
350.01004	Remove & Salvage Traffic Signal Pole	EA	2		
350.01005	Remove & Salvage Internally Illuminated Street Name Sign	EA	1		
350.01006	Remove Traffic Signal Conduit	LF	280		
350.01007	Remove Meter Pedestal Foundation, Backfill & Compact Void	EA	1		
350.01008	Remove Traffic Signal Pole Foundation, Backfill & Compact Void	EA	1		
350.01009	Remove Traffic Signal Pull Box	EA	3		
350.01010	Remove Traffic Signal Pull Box, Backfill & Compact Void	EA	3		
350.01011	Remove 2 Pedestrian Indications & Mounting Assembly	EA	1		
350.01012	Remove Pedestrian Push Button Assembly	EA	5		
350.01013	Remove & Salvage Video Detection System	L SUM	1		
350.01014	Plug Opening in Signal Pole	EA	1		
350.01015	Salvage & Reinstall Trombone Mast Arm with Equipment	EA	2		
350.01016	Salvage & Reinstall Luminaire Mast Arm with LED Luminaire	EA	2		
350.01017	Salvage & Reinstall Side Mounted Traffic Signal & Pedestrian Indications	EA	2		
350.01018	Salvage & Reinstall Pedestrian Push Button Assembly	EA	1		
350.01019	Salvage & Reinstall LED Luminaire	EA	1		
350.01020	Salvage & Reinstall Internally Illuminate Street Name Sign Assembly	EA	1		
350.01021	Salvage & Reinstall Emergency Vehicle Pre-emption System	EA	1		

Item No.	Description of Materials and/or Services	Unit	Quantity	Unit Price	Total Price
350.01022	Salvage & Reinstall Ethernet Radio Antenna	EA	1		
350.01120	Remove Storm Drain Pipe, Backfill & Compact	LF	26		
350.01300	Remove Asphalt Concrete Pavement	SY	437		
350.01400	Remove Catch Basin	EA	1		
350.01800	Remove Concrete Curb and Gutter	LF	332		
350.01850	Remove Concrete Single Curb	LF	237		
350.01900	Remove Concrete Sidewalk	SF	2,394		
350.01910	Remove Concrete Driveway	SF	2,126		
401.01000	Traffic Control	L SUM	1		
430.01003	Landscape & Irrigation Restoration	L SUM	1		
430.40002	Decomposed Granite & Turf Removal (East Side of Dysart Road)	SF	801		
430.40003	Decomposed Granite & Turf Removal (West Side of Dysart Road)	SF	639		
430.40004	Shrubs and Irrigation per Plans and Specifications	L SUM	1		
505.10110	Catch Basin, MAG Std. Det. 531, Type B	EA	1		
618.76000	12" HDPE Drain Pipe	LF	27		
901.01001	Traffic Signal Pole, Type Q (COA Furnished, Contractor Installed)	EA	1		
901.01002	Traffic Signal Pole, Type R (COA Furnished, Contractor Installed)	EA	1		
901.01003	Traffic Signal Pole, Type R w/ 55' Trombone Mast Arm	EA	1		
901.01004	Pedestrian Push Button Post	EA	1		
901.02001	Traffic Signal Pole Foundation, Type R	EA	1		
901.02002	Pedestrian Push Button Post Foundation	EA	1		

Item No.	Description of Materials and/or Services	Unit	Quantity	Unit Price	Total Price
901.03001	Luminaire Mast Arm, 15'	EA	1		
901.04001	Traffic Signal Conduit, 2" Schedule 80 PVC, Trench	LF	5		
901.04002	Traffic Signal Conduit, 2 1/2" Schedule 80 PVC, Trench	LF	15		
901.04003	Traffic Signal Conduit, 3" Schedule 80 PVC, Trench	LF	20		
901.04004	Traffic Signal Conduit, 3" Schedule 80 PVC, Directional Bore	LF	200		
901.05001	Pull Box, No 7 (Heavy Duty)	EA	4		
901.06001	Conductors	L SUM	1		
901.07001	Traffic Signal Indication, Type F	EA	3		
901.07002	Traffic Signal Indication, Type Q	EA	3		
901.07003	Traffic Signal Indication, Type S	EA	1		
901.07004	Pedestrian Signal Indication	EA	2		
901.08001	Accessible Pedestrian Push Button Assembly	EA	5		
901.09001	Mounting Assembly, 1 1/2" Coupling	EA	3		
901.09002	Mounting Assembly, Type V	EA	2		
901.09003	Mounting Assembly, Type VII	EA	4		
901.09004	Mounting Assembly, Type XI	EA	3		
901.10001	Internally Illuminated Street Name Sign Assembly	EA	2		
901.11001	Video Detection System	L SUM	1		
901.12001	Meter Service Pedestal	EA	1		
901.12002	Meter Service Pedestal Foundation	EA	1		
901.12003	Controller Cabinet	EA	1		

Item No.	Description of Materials and/or Services	Unit	Quantity	Unit Price	Total Price
901.13001	Paint Traffic Signal Poles, Mast Arms, & Equipment	L SUM	1		
1001.01000	Obliterate Stripe	LF	5,566		
1001.02000	Obliterate Symbol	EA	8		
1001.05000	100 mm (4") White Thermoplastic Traffic Stripe	LF	4,599		
1001.06000	100 mm (4") Yellow Thermoplastic Traffic Stripe	LF	384		
1001.07000	Thermoplastic Symbol, Pavement Bike Lane	EA	1		
1001.08000	Thermoplastic Thru Straight Arrow	EA	1		
1001.09000	Thermoplastic Left Turn Arrow	EA	6		
1001.10000	Thermoplastic Right Turn Arrow	EA	2		
1001.11000	Thermoplastic Symbol, Thru Straight/ Right Turn Arrow	EA	2		
1001.12000	Relocate Street Sign	EA	1		
1001.13000	Traffic Sign Post & Foundation, COA Std. Det. A1600	EA	3		
1001.14000	Flat Sheet Aluminum Sign Panel, Diamond Grade	SF	27		
	SUBTOTAL				
107.15000	Community Relations	ALLOW	1	\$15,000.00	\$15,000.00
109.04000	Miscellaneous Reimbursable	ALLOW	1	\$50,000.00	\$50,000.00
401.01100	Uniformed Off-Duty Officer	ALLOW	1	\$15,000.00	\$15,000.00
	ALLOWANCES SUBTOTAL			\$80,000.00	\$80,000.00
	TOTAL CONSTRUCTION COST*				

* ALL BIDS ARE PRESUMED TO INCLUDE ALL APPLICABLE TAXES. PLEASE BE ADVISED THAT ARIZ. REV. STAT. § 42-5075(P) APPLIES TO THE PROJECT CONTEMPLATED WITHIN THIS CONTRACT. CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL WORK CONTEMPLATED BY THE PLANS FOR THE PROJECT IS BID ON THE PRICE SHEET.

Company Name: _____

Date: _____

EXHIBIT D
TO
INVITATION FOR BIDS NO. EN19-087

[Licenses; DBE/WBE Status]

See following page.

LICENSES; DBE/WBE STATUS

DYSART/RANCHO SANTA FE INTERSECTION IMPROVEMENTS
EN19-087

Attach a copy of your Contractor's License to your bid submittal.

Attach a copy of your Business License to your bid submittal.

* Business License must be a current Arizona Transaction Privilege (Sales) Tax License reflecting City as a reporting jurisdiction or current City Business License.

Has your firm been certified by any jurisdiction in Arizona as a minority or woman owned business enterprise? Yes _____, No _____.

If yes, please provide details and documentation of the certification.

EXHIBIT E
TO
INVITATION FOR BIDS NO. EN19-087

[References]

See following page(s).

REFERENCES

DYSART/RANCHO SANTA FE INTERSECTION IMPROVEMENTS
EN19-087

Provide the following information for three clients for whom Bidder has successfully completed similar projects as set forth in Section 2.15 within the past 60 months. Failure to provide three accurate and suitable references will result in disqualification. Bidder may also attach another sheet with additional references.

1. Company: _____
Address _____
City/State/Zip Code _____
Contact: _____
Telephone Number: _____
Date of Contract Initiation: _____
Date of Contract Expiration: _____
Final Project Cost: _____
Project Description: _____

2. Company: _____
Address _____
City/State/Zip Code _____
Contact: _____
Telephone Number: _____
Date of Contract Initiation: _____
Date of Contract Expiration: _____
Final Project Cost: _____
Project Description: _____

3. Company: _____
Address _____
City/State/Zip Code _____
Contact: _____
Telephone Number: _____
Date of Contract Initiation: _____
Date of Contract Expiration: _____
Final Project Cost: _____
Project Description: _____

EXHIBIT F
TO
INVITATION FOR BIDS NO. EN19-087

[Bid Bond]

See following page.

BID BOND

DYSART/RANCHO SANTA FE INTERSECTION IMPROVEMENTS
EN19-087

KNOW ALL PERSONS BY THESE PRESENTS:

THAT, _____ (hereinafter called Principal), as Principal, and _____, a corporation organized and existing under the laws of the State of _____ with its principal office in the City of _____, (hereinafter called the Surety), as Surety, are held and firmly bound unto the City of Avondale, (hereinafter called the Obligee) in the penal sum of Ten Percent (10%) of Bid Amount, _____ (Dollars) (\$_____) lawful money of the United States of America, to be paid to the order of the City of Avondale, 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 and in conformance with A.R.S. Section 34-201.

WHEREAS, the Principal has submitted a bid/proposal for:_____.

NOW, THEREFORE, if the Obligee accepts the proposal of the Principal and the Principal enters into a Contract with the Obligee in accordance with the terms of the proposal and gives the Bonds and Certificates of Insurance as specified in the Standard Specifications with good and sufficient surety for the faithful performance of the Contract and for the prompt payment of labor and materials furnished in the prosecution of the Contract, or in the event of the failure of the Principal to enter into the Contract and give the Bonds and Certificates of Insurance, if the Principal pays to the Obligee the difference not to exceed the penalty of the Bond between the amount specified in the proposal and such larger amount for which the Obligee may in good faith contract with another party to perform the Work covered by the proposal then this obligation is void. Otherwise it remains in full force and effect provided, however, that this Bond is executed pursuant to the provisions of Section 34-201, Arizona Revised Statutes, and all liabilities on this Bond shall be determined in accordance with the provisions of the section to the extent as if it were copied at length herein.

The prevailing party in a suit on this bond shall recover as part of the judgment reasonable attorney fees that may be fixed by a judge of the Court.

Witness our hands this _____ day of _____ 20____.

Principal Seal

By: _____

Surety Seal

By: _____

Agency of Record

EXHIBIT G
TO
INVITATION FOR BIDS NO. EN19-087

[Key Personnel/Subcontractor Listing]

See following page.

KEY PERSONNEL/SUBCONTRACTOR LISTING

DYSART/RANCHO SANTA FE INTERSECTION IMPROVEMENTS
EN19-087

Key Personnel and Subcontractors listed herein shall be utilized on this Project.

Category:

Personnel/ Subcontractor Name, Contact Information:

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EXHIBIT H
TO
INVITATION FOR BIDS NO. EN19-087

[Performance Bond]

See following page.

PERFORMANCE BOND

DYSART/RANCHO SANTA FE INTERSECTION IMPROVEMENTS
EN19-087

KNOW ALL PERSONS BY THESE PRESENTS:

THAT, _____ (hereinafter called Principal), as Principal, and _____, a corporation organized and existing under the laws of the State of _____, with its principal office in the City of _____ (hereinafter called the Surety), as Surety, are held and firmly bound unto the City of Avondale (hereinafter called the Obligee) in the amount of _____ (Dollars) (\$_____), 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 Obligee, dated the _____ day of _____ 20____, for the material, service or construction described as _____ is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the Principal faithfully performs and fulfills all of the undertakings, covenants, terms, conditions and agreements of the Contract during the original term of the Contract and any extension of the Contract, with or without notice to the Surety, and during the life of any guaranty required under the Contract, and also performs and fulfills all of the undertakings, covenants, terms, conditions and agreements of all duly authorized modifications of the Contract that may hereafter be made, notice of which modifications to the surety being hereby waived, the above obligation is void. Otherwise it remains in full force and effect.

PROVIDED, however, that this bond is executed pursuant to the provisions of Title 34, Chapter 2, Article 2, Arizona Revised Statutes, and all liabilities on this bond shall be determined in accordance with the provisions of Title 34, Chapter 2, Article 2, Arizona Revised Statutes, to the extent as if it were copied at length in this agreement.

The prevailing party in a suit on this bond shall recover as part of the judgment reasonable attorney fees that may be fixed by a judge of the Court.

Witness our hands this _____ day of _____ 20____.

Principal Seal

By: _____

Surety Seal

By: _____

Agency of Record

EXHIBIT I
TO
INVITATION FOR BIDS NO. EN19-087

[Payment Bond]

See following page.

PAYMENT BOND

DYSART/RANCHO SANTA FE INTERSECTION IMPROVEMENTS
EN19-087

KNOW ALL PERSONS BY THESE PRESENTS:

THAT, _____ (hereinafter called Principal), as Principal, and _____, a corporation organized and existing under the laws of the State of _____, with its principal office in the City of _____ (hereinafter called the Surety), as Surety, are held and firmly bound unto the City of Avondale (hereinafter called the Obligee) in the amount of _____ (Dollars) (\$_____), 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 Obligee, dated the _____ day of _____ 20____, for the material, service or construction described as _____ which Contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the Principal promptly pays all monies due to all persons supplying labor or materials to the Principal or the Principal's Subcontractors in the prosecution of the Work provided for in the Contract, this obligation is void. Otherwise it remains in full force and effect.

PROVIDED, however, that this bond is executed pursuant to the provisions of Title 34, Chapter 2, Article 2, Arizona Revised Statutes, and all liabilities on this bond shall be determined in accordance with the provisions, conditions and limitations of Title 34, Chapter 2, Article 2, Arizona Revised Statutes, to the same extent as if they were copied at length in this agreement.

The prevailing party in a suit on this bond shall recover as a part of the judgment reasonable attorney fees that may be fixed by a judge of the Court.

Witness our hands this _____ day of _____, 20____.

Principal Seal

By: _____

Surety Seal

By: _____

Agency of Record

EXHIBIT J
TO
INVITATION FOR BIDS NO. EN19-087

[Acknowledgments of Addenda received]

See following page(s).