City of Phoenix, Arizona

Office of the City Engineer
on behalf of
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.

PROJECT SPECIFICATIONS AND CONTRACT DOCUMENTS

BASELINE ROAD IMPROVEMENTS
LOOP 202 & 57TH AVENUE

PROJECT NO. 18-3011

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CALL FOR BIDS

BASELINE ROAD IMPROVEMENTS
57TH AVENUE TO 202
DESIGN-BID-BUILD

PROJECT NO. 18-3011

BIDS WILL BE DUE: WEDNESDAY, JANUARY 23, 2019
AT 2:00 P.M., PHOENIX TIME
PHOENIX CITY HALL
200 W. WASHINGTON STREET, 6th FLOOR
PHOENIX, AZ. 85003-1611

The City of Phoenix on behalf of Civil & Environmental Consultants, Inc., is seeking a qualified construction contractor to perform the project listed below.

SCOPE OF WORK:

The scope of work will include construction of Baseline Road between 57th Avenue and the 202 Freeway that is currently under construction. The length of new roadway construction is 2,040 linear feet extending west from 57th Avenue. New roadway construction will consist of paving, medians, curb & gutter, sidewalk, scuppers, spillways, temporary retention basins, landscaping, streetlights, traffic signal at the intersection of 59th Avenue and Baseline Road, driveways, right-turn deceleration lanes, bus stops, public sewer main extension, public water main extension, domestic and landscape water taps, private fire line taps, private sewer line taps, and dry utility conduit for streetlights, Cox communications and CenturyLink. In addition, Southwest Gas service extensions and mainline extensions will also need to be constructed as part of this project, however the work will be done by Southwest Gas and this portion will only be coordination efforts. All work is shown on the plans, reports, and specifications and should be in accordance with the MAG Uniform Standard Specifications and Details for Public Works Construction and the 2015 City of Phoenix Supplements to MAG.

PRE-BID MEETING

A Pre-Bid Meeting will be held on Tuesday, January 8, 2019, at 3:00 p.m., Phoenix time, at Phoenix City Hall, 5th floor West Conference Room, located at 200 W. Washington Street, 5th Floor, Phoenix, AZ. At this meeting, staff will discuss the scope of work, general contract issues and respond to questions from the attendees. As City staff will not be available to respond to individual inquiries regarding the project scope outside of this pre-bid meeting, it is strongly recommended that interested firms send a representative to the pre-bid meeting.

REQUEST FOR BID PACKET

The bid packet will be available for download on the City of Phoenix Design and Construction Procurement's "Current Opportunities" web page as of Thursday, December 27, 2018. The web address is:

https://www.phoenix.gov/streets/procurement-opportunities/current-opportunities

Firms receiving a copy of the bid packet through any other means must download the bid packet from the City webpage and register as a plan holder for the project. The plan holder list is available for viewing within the project folder.

GENERAL INFORMATION

The City on behalf of Civil & Environmental Consultants, Inc., reserves the right to award the contract to the lowest responsible responsive bidder or all bids will be rejected, as soon as practicable after the date of opening bids.

The City of Phoenix on behalf of Civil & Environmental Consultants, Inc., will provide reasonable accommodations for alternate formats of the bid packet by calling George Goodale, Contracts Specialist, at (602) 534-8352 or calling TTY System (602) 256-4286. Requests will only be honored if made within the first week of the advertising period. Please allow a minimum of seven calendar days for production.

Questions pertaining to process or contract issues should be directed to George Goodale, Contracts Specialist, at george.goodale@phoenix.gov.

ED ZUERCHER
City Manager

KINI L. E. KNUDSON, PE
City Engineer

Published: Arizona Business Gazette
Date: Thursday, December 27, 2018
Date: Thursday, January 3, 2019
District 7

INFORMATION FOR BIDDERS

1. QUESTIONS ON PLANS AND SPECIFICATIONS

All questions regarding the plans and specifications must be received (in writing) at a minimum seven calendar days prior to bid opening. Questions received after that time may not be given any consideration.

A Planholder List is available within the project folder on the Design and Construction Procurement's website under "Current Opportunities". The web address is:

https://www.phoenix.gov/streets/procurement-opportunities/current-opportunities

For additional information prior to submitting your bid, contact:

Plans, Technical/Special Provisions, Proposal or Specifications:
NAME: George Goodale, Contracts Specialist, Design and Construction Procurement
ADDRESS: 200 W. Washington Street, 6th Floor, Phoenix, AZ 85003-1611
PHONE: (602) 534-8352 E-MAIL: George.Goodale@phoenix.gov

2. REQUEST FOR SUBSTITUTIONS

A. Civil & Environmental Consultants, Inc. will consider written request(s), by a prime bidder only, for substitution(s) which is/are considered equivalent to the item(s) specified in the contract documents. The written request will be considered only if it is received at least twelve (12) calendar days prior to the established bid date. Notification of acceptable substitutions will be made by addendum issued no fewer than 5 calendar days prior to the established bid date. (A.R.S. 34-104)

B. The prime bidder, at his own expense, shall furnish the necessary data of substitution and validate that the physical, chemical, and operational qualities of each substitute item is such that this item will fulfill the originally specified required function.

C. The substitution, if approved, will be authorized by a written addendum to the contract documents and will be made available to all bidders. The bid date and the scheduled completion time will not be affected by any circumstances developing from this substitution.

D. The request will be submitted to Design and Construction Procurement, Attention George Goodale, Contracts Specialist, Sixth Floor, Phoenix City Hall, 200 W. Washington Street, Phoenix, Arizona 85003-1611 or via email to George.Goodale@phoenix.gov

3. BID BOND

Bidders must submit a properly completed proposal guarantee, certified check, cashier's check or on the surety bond provided, an amount not less than ten (10) percent of the total bid amount included in the proposal as a guarantee that the contractor will enter into a contract to perform the proposal in accordance with the plans and specifications. Surety bonds submitted for this project shall be provided by a company which has been rated "A- or better for the prior four quarters" by the A.M. Best Company. ***A bid will be deemed non-responsive if not accompanied by this guarantee.***

The surety bond shall be executed solely by a surety company or companies holding a certificate of authority to transact surety business in the State of Arizona, issued by the Director of the Department of Insurance pursuant to Title 20, Chapter 2, Article 1. The surety bond shall not be executed by an individual surety or sureties even if the requirements of Section 7-101 are satisfied. Civil & Environmental Consultants, Inc. will return the certified check, cashiers check, or surety

bond to the contractors whose proposals are not accepted, and to the successful contractor upon the execution of a satisfactory bond and contract.

When providing a Surety Bond, ***failure to provide an "A- or better for the prior four quarters" bond will result in bid rejection.***

4. BID WITHDRAWALS

MAG Section 102-10, Withdrawal or Revision of Proposal, is hereby deleted and the following paragraph is submitted:

"No bidder may withdraw or revise a proposal after it has been deposited with the City on behalf of Civil & Environmental Consultants, Inc., except as provided in Phoenix City Code Chapter 2, Section 190.2. Proposals, read or unread, will not be returned to the bidders until after determination of award has been made."

5. ADDENDA

Acknowledge all addenda; a bid will be deemed non-responsive if all issued addenda for this project are not acknowledged in writing on Page P. -1.

Neither the City of Phoenix nor Civil & Environmental Consultants, Inc. will be responsible for any oral responses or instructions made by any employees or officers of the City of Phoenix or Civil & Environmental Consultants, Inc. in regard to the bidding instructions, plans, drawings, specifications, or contract documents. A verbal reply to an inquiry does not constitute a modification of the Invitation for Bid (IFB). Any changes to the plans, drawings and specifications will be in the form of an addendum.

It will be the responsibility of the prospective bidder to determine, prior to the submittal of its bid, if any addenda to the project have been issued by Design and Construction Procurement. All addenda issued must be acknowledged by bidder on Page P.-1. All addenda (if any) will be available online within each project's folder at the following website:

https://www.phoenix.gov/streets/procurement-opportunities/current-opportunities

The contractors are responsible for ensuring they have all addenda and/or notifications for all projects they are submitting on. Prospective bidders are strongly encouraged to check the Design and Construction Procurement website in order to ascertain if any addenda have been issued for this project.

6. BID SUBMITTAL

The properly completed bid documents along with the ten (10) percent bid guarantee shall be submitted in a sealed envelope. The outside of the envelope shall be marked as follows:

Bid of (Firm's Name, Address, and Phone Number)
For: Baseline Road Improvements – Loop 202 & 57th Avenue
Project Number: 18-3011

Sealed bids will be submitted to the bid box located by the Design and Construction Procurement Reception Desk located on the Sixth Floor of the Phoenix City Hall Building, 200 W. Washington Street, Phoenix, Arizona, 85003 prior to the time and date specified for bid opening.

7. BID SUBMITTAL CHECK LIST

BID SUBMITTAL CHECKLIST

This checklist is provided to remind bidders of several of the required elements of the bid packages. It is not intended to be a comprehensive list of all of the contract documents. Bidders are encouraged to review all of the Bid Instructions to determine compliance therein.

- ❑ Acknowledge all addenda? (Page P. -1)
- ❑ Complete all of the Bid Proposal forms? (Page P. -1 to P. -2 and P.S. -1)
- ❑ Include your Bid Bond (rated A- or better for the prior four quarters) or Guarantee Cashier's Check? (Page S.B.-1)
- ❑ Affidavit of Identity (A.O.I.-1) if applicable

PLEASE DO NOT SUBMIT THE ENTIRE SPECIFICATION BOOK WHEN SUBMITTING YOUR BID, INCLUDE ONLY THE REQUIRED BIDDING DOCUMENTS

8. PERMITS

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.'S RESPONSIBILITY – Civil & Environmental Consultants, Inc. will pay review and permit fees for grading and drainage, water, sewer, and landscaping. Civil & Environmental Consultants, Inc. shall also pay for utility design fees for permanent services.

CONTRACTOR RESPONSIBILITY – The Contractor will be responsible for all other permits and review fees not specifically listed above. The Contractor is responsible for the cost of water meter(s), water and sewer taps, fire lines and taps, and all water bills on the project meters until the project is accepted. Arrangements for construction water are the Contractor's responsibility. **The Contractor is specifically reminded of the need to obtain the necessary environmental permits or file the necessary environmental notices.** Copies of these permits and notices must be provided to Civil & Environmental Consultants, Inc.'s Project Manager prior to starting the permitted activity. In the case of Fire Department permits, a copy of the application for permit shall also be provided to Civil & Environmental Consultants, Inc.'s Project Manager.

9. CONTRACT AWARD

Contract award will be made to the responsive and responsible bidder based on the low total base bid or on the low combination of the total base bid and any selected alternate(s), whichever is in the best interest of Civil & Environmental Consultants, Inc. If unit pricing is required in the proposal, the extensions and additions will be verified to assure correctness. Award will be based on the revised total if any errors are found.

10. PERFORMANCE AND LABOR MATERIAL BOND

Prior to the execution of the Contract, the successful bidder must provide a performance bond and a labor and materials bond, each in an amount equal to the full amount of the Contract. Each such bond shall be executed by a surety company or companies holding a Certificate of Authority to transact surety business in the state of Arizona, issued by the Director of the Arizona Department of Insurance. A copy of the Certificate of Authority shall accompany the bonds. The Certificate shall have been issued or updated within two years prior to the execution of the Contract. The bonds shall be made payable and acceptable to Civil & Environmental Consultants, Inc. The bonds shall be written or countersigned by an authorized representative of the surety who is either a resident of the state of Arizona or whose principal office is maintained in this state, as by law required, and the bonds shall have attached thereto a certified copy of Power of Attorney of the signing official. The

Power of Attorney it shall be for the total Contract amount. Personal or individual bonds are not acceptable. Failure to comply with these provisions will be cause for rejection of the bidder's proposal.

All bonds submitted for this project shall be provided by a company which has been rated “A- or better for the prior four quarters” by the A.M. Best Company. Failure to provide an "A- or better for the prior four quarters" bond will result in bid rejection.

11. PROTEST PROCEDURES

Any bidder who has any objections to the awarding of a contract to any bidder by the City of Phoenix on behalf of Civil & Environmental Consultants, Inc., pursuant to competitive bidding procedures, will comply with Phoenix City Code Chapter 2-187 to 2-190.4.

12. TERMINATION OF CONTRACT FOR CONVENIENCE

Civil & Environmental Consultants, Inc. for its own convenience has the right for any reason and at any time to terminate the contract and require the Contractor to cease work hereunder. Such termination shall be effective at the time and in the manner specified in the notification to the Contractor of the termination. Such termination shall be without prejudice to any claims which Civil & Environmental Consultants, Inc. may have against the Contractor. In the event of a termination for convenience, the Contractor shall be paid only the direct value of its completed work and materials supplied as of the date of termination, and Contractor shall not be entitled to anticipated profit or anticipated overhead or any other claimed damages from Civil & Environmental Consultants, Inc. In the event of a termination of the Contractor for cause is determined to have been without legal right, then the termination shall be deemed to have been a termination for convenience.

13. SURVEY

The Contractor shall set the construction stakes establishing lines, grades, and elevations to include necessary utilities and appurtenances and shall be responsible for their conformance with plans and specifications. Construction staking shall be done in accordance with the applicable provisions of the Public Works Design and Construction Management Division’s "Standard Requirements for Staking, As-Builts, and Quantity Calculations", dated January 1, 1980. The Contractor will establish or designate a control line and benchmark of known location and elevation for use as a reference.

The Contractor shall furnish Civil & Environmental Consultants, Inc. a certified set of calculations and measurements to fully support the derivation of all pay quantities. This information will be prepared by a registrant of the Arizona State Board of Technical Registration.

The Contractor shall furnish Civil & Environmental Consultants, Inc. a set of "Record Drawings". Record drawings shall be certified by a registrant of the Arizona State Board of Technical Registration.

14. RECORD DRAWINGS

The Contractor shall maintain a record set of plans at the job site. These shall be kept legible and current and shall show all changes or work added in a contrasting, reproducible color. When the project is substantially complete, the Contractor shall submit these plans to Civil & Environmental Consultants, Inc. for approval. When landscaping is included, the Contractor shall submit, prior to final inspection, corrected landscape drawings showing the location of all utility services, controller, pipe, valves, and wiring. Civil & Environmental Consultants, Inc. shall be the sole judge as to the acceptability of the record plans and receipt of an acceptable set is a pre-requisite for final payment.

15. TESTINGS

Soils backfill, pad, welding, roofing should be included in the Contractor's proposal/price. Copies of all tests need to be simultaneously sent via email or messenger to Civil & Environmental Consultants, Inc.

16. PRECONSTRUCTION CONFERENCE

After the Contract documents are successfully completed, to include bonds, insurance, and signatures, and prior to the commencement of any work on the project, Civil & Environmental Consultants, Inc. will schedule a Pre-Construction Conference.

The purpose of this conference is to establish a working relationship between the Contractor, utility firms, and various agencies. The agenda will include critical elements of the work schedule, submittal schedule, cost breakdown of major lump sum items, payment application and processing, coordination with the involved utility firms, emergency telephone numbers for all representatives involved in the course of construction, and establishment of the notice to proceed date. Minimum attendance by the Contractor shall be a responsible company/corporate official, who is authorized to execute and sign documents on behalf of the firm, the job superintendent, and the Contractor's safety officer.

17. IMMIGRATION REFORM AND CONTROL ACT

Compliance with Federal Laws Required. Contractor understands and acknowledges the applicability of the American with Disabilities Act, Immigration Reform and control Act of 1986 and the Drug Free Workplace Act of 1989 to it. The Contractor agrees to comply with these laws in performing under this Agreement and to permit Civil & Environmental Consultants, Inc. to verify such compliance.

18. LEGAL WORKER REQUIREMENTS

Civil & Environmental Consultants, Inc. is prohibited by A.R.S. § 41-4401 from awarding a contract to any Contractor who fails, or whose subcontractors fail, to comply with A.R.S. § 23-214(A). Therefore, Contractor agrees that:

A. Contractor and each subcontractor it uses warrants their compliance with all federal immigration laws and regulations that relate to their employees and their compliance with § 23-214, subsection A.

B. A breach of a warranty under paragraph A shall be deemed a material breach of the contract that is subject to penalties up to and including termination of the contract.

C. Civil & Environmental Consultants, Inc. retains the legal right to inspect the papers of any Contractor or subcontractor employee who works on the contract to ensure that the Contractor or subcontractor is complying with the warranty under paragraph A.

19. LAWFUL PRESENCE REQUIREMENT

Pursuant to A.R.S. §§ 1-501 and 1-502, Civil & Environmental Consultants, Inc. is prohibited from awarding a contract to any natural person who cannot establish that such person is lawfully present in the United States. To establish lawful presence, a person must produce qualifying identification and sign a City-provided affidavit affirming that the identification provided is genuine. This requirement will be imposed at the time of contract award. This requirement does not apply to business organizations such as corporations, partnerships or limited liability companies.

20. FAIR TREATMENT OF WORKERS

The Contractor shall keep fully informed of all Federal and State laws, County and City ordinances, regulations, codes and all orders and decrees of bodies or tribunals having any jurisdiction or authority, which in any way affect the conduct of the work. He shall at all times observe and comply with all such laws, ordinances, regulations, codes, orders and decrees; this includes, but is not limited to laws and regulations ensuring fair and equal treatment for all employees and against unfair employment practices, including OSHA and the Fair Labor Standards Act (FLSA). The contractor shall protect and indemnify the Contracting Agency and its representatives against any claim or liability arising from or based on the violation of such, whether by himself or his employees.

21. BUSINESS AND OPERATION LICENSES, PERMITS AND CERTIFICATIONS REQUIRED

Prior to bidding on this project, the bidder must possess the correct license to perform the work described in the plans and specifications. Prior to award of the contract, the successful bidder must provide to the Contract Procurement Section its Contractor's License Classification and number, its City of Phoenix Privilege License number and Federal Tax Identification number.

Unless provided otherwise in this solicitation, Bidder will be deemed non-responsive and the bid rejected if Bidder fails to possess the proper Contractor's and Business Licenses at the time of bid.

22. TAX LIABILITIES; DISCLOSURE OF CONVICTIONS AND BREACH(S) OF CONTRACT

On or before the award of the contract for this project, the successful bidder will: (i) file all applicable tax returns and will make payment for all applicable State of Arizona and Maricopa County Transaction Taxes (ARS Sec. 41-1305) and City of Phoenix Privilege License Taxes (Phoenix City Code Sec.14-415); (ii) disclose any civil fines, penalties or any criminal convictions, other than for traffic related offenses, for violation of federal, state, county or city laws, rules or regulations including, but not limited to, environmental, OSHA, or labor compliance laws (collectively "Laws") by Bidder, Bidder's directors, managing members, responsible corporate officers or party who will be responsible for overseeing and administering this project (collectively "Bidder"); and (iii) disclose any material breach(s) of an agreement with the City of Phoenix, any termination for cause or any litigation involving the City of Phoenix occurring within the past three calendar years. Unless provided otherwise in this solicitation, the successful bidder will be deemed non-responsible and the bid rejected for any of the following: (i) Bidder's civil or criminal conviction, other than for traffic related offenses, for a violation of Laws within the past three calendar years; (ii) liability or culpability resulting in payment of fines or penalties in the cumulative total amount of $100,000 or greater for a violation of "Laws" within the past three calendar years; (iii) material breach of a City of Phoenix agreement, termination for cause or litigation with the City of Phoenix within the past three calendar years; and (iv) Bidder's failure to disclose the information as required by this provision. Further, after award of contract, in addition to any other remedy, Bidder's failure to remit proper taxes to the City of Phoenix may result in Civil & Environmental Consultants, Inc. withholding payment pursuant to Phoenix City Charter Chapter XVIII, Section 14 until all delinquent taxes, interest, and penalties have been paid.

State and Local Transaction Privilege Taxes

In accordance with applicable state and local law, transaction privilege taxes may be applicable to this transaction. The state and local transaction privilege (sales) tax burden is on the person who is conducting business in Arizona and the City of Phoenix. The legal liability to remit the tax is on the person conducting business in Arizona. Any failure by the Contractor to collect applicable taxes from Civil & Environmental Consultants, Inc. will not relieve the Contractor from its obligation to remit taxes.

It is the responsibility of the prospective bidder to determine any applicable taxes. Civil & Environmental Consultants, Inc. will review the price or offer submitted and will not deduct, add or alter pricing based on taxes.

If you have questions regarding tax liability, seek advice from a tax professional prior to submitting bid. Once your bid is submitted, the Offer is valid for the time specified in this Solicitation, regardless of mistake or omission of tax liability.

If the City finds over payment of a project due to tax consideration that was not due, the Contractor will be liable to the City for that amount, and by contracting with the City agrees to remit any overpayments back to the City for miscalculations on taxes included in a bid price.

For purposes of A.R.S. 42-5075(P), this contract is subject to A.R.S. Title 34.

Tax Indemnification

Contractor will, and require the same of all subcontractors, pay all federal, state and local taxes applicable to its operation and any persons employed by the Contractor. Contractor will, and require the same of all subcontractors, hold Civil & Environmental Consultants, Inc. harmless from any responsibility for taxes, damages and interest, if applicable, contributions required under federal, and/or state and local laws and regulations and any other costs including transaction privilege taxes, unemployment compensation insurance, Social Security and Worker's Compensation

Tax Responsibility Qualification

Contractor may be required to establish, to the satisfaction of Civil & Environmental Consultants, Inc., that any and all fees and taxes due to the City or the State of Arizona for any License or Transaction Privilege taxes, Use Taxes or similar excise taxes, are currently paid (except for matters under legal protest).

Contractor agrees to a waiver of the confidentiality provisions contained in the City Finance Code and any similar confidentiality provisions contained in Arizona statutes relative to State Transaction Privilege Taxes or Use Taxes.

Contractor agrees to provide written authorization to Civil & Environmental Consultants, Inc. and to the Arizona State Department of Revenue to release tax information relative to Arizona Transaction Privilege Taxes or Arizona Use Taxes in order to assist Civil & Environmental Consultants, Inc. in evaluating Contractor's qualifications for and compliance with contract for duration of the term of contract

23. ENVIRONMENTAL RESPONSIBILITIES

The contractor shall provide an easily accessible area to serve the construction site that is dedicated to the separation, collection and storage of materials for recycling including (at a minimum) paper, glass, plastics, metals, and designate an area specifically for construction and demolition waste recycling. The contractor must provide documentation that the materials have been taken to a Maricopa County approved recycling facility.

24. ADA AND ANSI ACCESS OF PREMISES DURING CONSTRUCTION

Contractor shall maintain ADA and ANSI accessibility requirements during construction activities in an occupied building or facility. ADA and ANSI accessibility requirements shall include, but not be limited to, parking, building access, entrances, exits, restrooms, areas of refuge, and emergency exit paths of travel. Contractor shall be responsible for the coordination of all work to minimize disruption to building occupants and facilities.

25. UTILITY-RELATED CONSTRUCTION DELAY DAMAGES CLAIM PROCEDURES

The following procedure is intended to provide a fair and impartial process for the settlement of construction delay claims associated with unknown or improperly located utility facilities.

The Contractor shall immediately notify Civil & Environmental Consultants, Inc., in writing, of any potential utility-related delay claim.

The Contractor shall immediately notify the appropriate liaison of the affected utility verbally, followed by a written notification.

The Contractor shall coordinate an investigation of the situation with the affected utility and Civil & Environmental Consultants, Inc.'s Utility Coordinator. After resolution, the Contractor will provide written notification of the settlement of the claim to all affected parties.

If the affected utility makes a decision to handle negotiations for a claim, their personnel will be responsible for monitoring the project and all negotiations with the Contractor regarding the claim.

The Contractor shall determine to document requirements of the affected utility for their acceptance of responsibility for the claims. The Contractor shall provide four copies of the required documentation to the utility involved and two copies of this documentation to Civil & Environmental Consultants, Inc. The Contractor shall obtain written confirmation from the utility company involved of their documentation requirements.

26. CHANGE ORDERS

Developer reserves the right to decrease adjustments made in any change order if, upon audit of Contractor's records, the audit discloses Contractor provided false or inaccurate cost and pricing data in negotiating the change order. In enforcing this provision, the parties shall follow the procedure provided in the Federal Acquisition Regulation (FAR) clause 52.214-27, found in 48 CFR Part 52.

27. PROMPT PAYMENT

A. **Contractor Payment to Subcontractor or Supplier**
Contractor shall pay its subcontractors or suppliers within seven (7) calendar days of receipt of each progress payment from Civil & Environmental Consultants, Inc. The Contractor shall pay for the amount of work performed or materials supplied by each subcontractor or supplier as accepted and approved by Civil & Environmental Consultants, Inc. with each progress payment. In addition, any reduction of retention by Civil & Environmental Consultants, Inc. to the Contractor shall result in a corresponding reduction to subcontractors or suppliers who have performed satisfactory work. Contractor shall pay subcontractors or suppliers the reduced retention within fourteen (14) calendar days of the payment of the reduction of the retention to the Contractor. No contract between Contractor and its subcontractors and suppliers may materially alter the rights of any subcontractor or supplier to receive prompt payment and retention reduction as provided herein. If the Contractor fails to make payments in accordance with these provisions, Civil & Environmental Consultants, Inc. may take any one or more of the following actions and Contractor agrees that Civil & Environmental Consultants, Inc. may take such actions: (1) to hold the Contractor in default under this agreement; (2) withhold future payments including retention until proper payment has been made to subcontractors or suppliers in accordance with these provisions; (3) reject all future bids from the Contractor for a period not to exceed one year from substantial completion date of this project; or (4) terminate agreement.

B. **Alternative Dispute Resolution Between Contractor and Subcontractor or Supplier**
If Contractor's payment to a subcontractor or supplier is in dispute, Contractor and subcontractor or supplier agree to submit the dispute to any of one of the following dispute resolution processes within fourteen (14) calendar days from the date of any party gives notice to the others: (a) binding arbitration; (b) a form of alternative dispute resolution (ADR)

agreeable to all parties or (c) Civil & Environmental Consultants, Inc. facilitated mediation. When disputed claim is resolved through ADR or otherwise, the Contractor and subcontractor or supplier agrees to implement the resolution within seven calendar days from the resolution date.

C. **Inspection and Audit**
Contractor, its subcontractors and suppliers shall comply with A.R.S 35-214 and Civil & Environmental Consultants, Inc. shall have all rights and remedies to inspect and audit the records and files of Contractor, subcontractor or supplier, as afforded the State of Arizona in, accordance with the provisions of A.R.S. Section 35-214.

D. **Non-Waiver**
Should Civil & Environmental Consultants, Inc. fail or delay in exercising or enforcing any right, power, privilege, or remedy under this section, such failure or delay shall not be deemed a waiver, release, or modification of the requirements of this section or of any of the terms or provisions thereof.

E. **Inclusion of Provisions in Subcontracts**
Contractor shall include these prompt payment provisions in every subcontract, including procurement of materials and leases of equipment for this Agreement.

F. **No Third Party Benefits or Rights**
Nothing contained in this Agreement is intended to benefit or confer any rights on any person or entity not a party to this Agreement, and no such person or entity, including but not limited to other Contractors, subcontractors or suppliers, may assert any claim, cause of action, or remedy against Civil & Environmental Consultants, Inc. hereunder.

28. MATERIALS CONTAINING ASBESTOS

Materials containing asbestos and/or lead in any form are unacceptable to incorporate into the project unless formally accepted in writing by the City of Phoenix and Civil & Environmental Consultants, Inc. This written approval shall take place prior to the material being incorporated into the project and/or brought to the site.

Repair kits or touch-up materials, materials that include asbestos and /or lead introduced into the product at the factory or applied at the assembly plant are all unacceptable. Any and all field-applied products that are comprised of asbestos and/or lead containing materials are also unacceptable.

If asbestos and/or lead are installed without written approval by the City of Phoenix and Civil & Environmental Consultants, Inc., the Contractor will remove these materials at its expense and dispose of these materials in accordance with all state and federal laws and pay for the supervision and reporting costs in addition to the cost to properly remove them.

29. DISPOSAL OF SURPLUS MATERIAL WHICH DOES NOT CONTAIN ASBESTOS

All surplus and/or waste material may be disposed of at the Contractor's discretion subject to the following conditions:

A. If the City of Phoenix landfills are used, the Contractor shall pay the normal dumping fee.

B. If private property within Phoenix city limits is used, the Contractor shall obtain written permission from the property owner and deliver a copy of this Agreement to Civil & Environmental Consultants, Inc. prior to any hauling or dumping. All disposal and grading shall be in strict conformance with the City of Phoenix Grading and Drainage Ordinance. The Contractor shall obtain and pay for the necessary permit(s).

C. If the surplus material is disposed of outside the Phoenix city limits, the Contractor shall comply with all applicable laws/ordinances of the agency concerned and be responsible for all cost incurred.

No measurement or direct payment will be made for the hauling and disposal of surplus and/or waste material, the cost shall be incidental to the cost of the project.

30. HAUL PERMIT

On any project, when the quantity of fill or excavation to be hauled exceeds 10,000 C.Y. or when the duration of the haul is for more than twenty (20) working days, the Contractor shall:

A. Obtain a written (no fee) haul permit from the City of Phoenix Planning and Development Department.

B. Obtain approval of the proposed haul route, number of trucks, etc., by the City of Phoenix Street Transportation Department.

31. UNDERGROUND FACILITIES

The Contractor will make whatever investigation it deems necessary to verify the location of underground utility facilities. If such facilities are not in the location shown in the drawings, then (regardless of whether this is discovered prior to or during construction) the Contractor's remedies, if any, pursuant to Art. 6.3, Chapter 2, Title 40, A.R.S. (A.R.S. 40-360.21 through 40-360.32, "Underground Facilities"), shall be the Contractor's sole remedy for extra work, delays, and disruption of the job, or any other claim based on the location of utility facilities. Locations of utility facilities shown on drawings furnished by Civil & Environmental Consultants, Inc. are to be regarded as preliminary information only, subject to further investigation by the Contractor. Civil & Environmental Consultants, Inc. does not warrant the accuracy of these locations, and the Contractor, by entering into this Contract, expressly waives and disclaims any claim or action against Civil & Environmental Consultants, Inc. under any theory for damage resulting from location of utility facilities.

The Contractor shall be responsible for obtaining all Blue Stake utility location information, and for performing all requirements as prescribed in A.R.S. 40-360.21 through .29, for all underground facilities, including those that have been installed on the current project, until the project is accepted by Civil & Environmental Consultants, Inc.

At least two working days prior to commencing any excavation, the Contractor shall call the Blue Stake Center, between the hours of 7:00 a.m. and 4:30 p.m., Monday through Friday, for information relative to the location of buried utilities. The number to be called is as follows: Maricopa County, (602) 263-1100.

32. AUDIT AND RECORDS

Records of the Contractor's direct personnel payroll, bond expenses, and reimbursable expenses pertaining to this Project, and records of accounts between Civil & Environmental Consultants, Inc. and Contractor shall be kept on the basis of generally accepted accounting principles. Civil & Environmental Consultants, Inc., its authorized representative, and/or the appropriate federal agency, reserves the right to audit the Contractor's records to verify the accuracy and appropriateness of all pricing data, including data used to negotiate this Contract and any change orders. Civil & Environmental Consultants, Inc. reserves the right to decrease Contract price and/or payments made on this Contract if, upon audit of the Contractor's records, the audit discloses the Contractor has provided false, misleading, or inaccurate cost and pricing data.

The Contractor shall include a similar provision in all of its Agreements with subcontractors providing services under this Contract to ensure Civil & Environmental Consultants, Inc., its

authorized representative, and/or the appropriate federal agency, has access to the subcontracting records to verify the accuracy of cost and pricing data. Civil & Environmental Consultants, Inc. reserves the right to decrease Contract price and/or payments made on this Contract if the above provision is not included in subcontracting contracts, and one or more subcontractors do not allow Civil & Environmental Consultants, Inc. to audit their records to verify the accuracy and appropriateness of pricing data.

SPECIAL PROVISIONS

.01 **TRAFFIC CONTROL**

Add the following to City of Phoenix Supplement to MAG, Subsection 401.10, Payment:
Payment for traffic control will be on a lump sum basis for Traffic Control Devices.

.02 **TRAFFIC REGULATIONS**

A. All traffic and/or traffic control devices on this project shall be provided, maintained and/or controlled as specified in the City of Phoenix Traffic Barricade Manual, 2017 edition.

B. Permission to restrict City streets, sidewalks and alleys (street closure permits) shall be requested as specified in Chapter 3 of the Traffic Barricade Manual, 2017 edition.

C. Unless otherwise provided for in the following "Special Traffic Regulations", all traffic on this project shall be regulated as specified in Chapter 4 of the Traffic Barricade Manual, 2017 edition.

D. No deviation to the "Special Traffic Regulations" will be allowed or implemented unless submitted to the Engineer for review and approval two (2) weeks prior to proposed work.

.03 **SPECIAL TRAFFIC REGULATIONS**

Two lanes on Baseline Road, one in each direction, shall remain open at all times during construction. The methods used for maintaining of this traffic shall be shown in the contractor's phasing and traffic control plans.

Police Officer Requirements

The Contractor shall provide one off-duty police officer, as defined in the City of Phoenix Traffic Barricade Manual, at signalized intersections affected from 6:00 a.m. to 7:00 p.m. weekdays, and during working hours nights and weekends when traffic is restricted (as described in the Traffic Barricade Manual).

When construction activities do not restrict traffic through the intersections, police officer hours may be reduced or suspended at the direction of the Engineer.

Local Access Requirements

The Contractor shall maintain local access to all side streets, access roads driveways, alleys, and parking lots at all times and shall notify residents 72 hours in advance of any restrictions which will affect their access. The Contractor shall restore the access as soon as possible. If the primary 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 is maintained.

Pedestrian Access Requirements

The Contractor shall ensure that sidewalk on north side of Baseline Road between 59th Avenue and 57th Avenue on this project remain open and safely usable at all times. Such measures as backfilling or ramping to existing sidewalks, or providing alternate sidewalk areas adjacent to existing sidewalks may be used. In high pedestrian use areas, the Engineer may request temporary hard-surface walkways, such as plywood sheets to be installed at no additional cost to the City.

Flagging of Traffic

No flagging of traffic will be permitted during the peak traffic hours of 6:00 a.m. to 8:30 a.m. and 4:00 p.m. to 7:00 p.m. weekdays. If construction requires, intermittent flagging will be allowed from 8:30 a.m. to 4:00 p.m. to facilitate access for heavy construction equipment.

Traffic Control Plan

The Contractor shall submit a traffic control plan for approval, showing placement of all traffic control devices, including all conflicting signs to be covered/removed or relocated, or other features that may conflict with the placement of temporary signage. This plan shall be professionally drawn on a 24" x 36" reproducible medium, and shall be submitted to the Engineer at the Pre-Construction meeting.

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.

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 six (6) feet on centers, having a minimum height of six (6) feet, and shall consist of wire mesh fabric of sufficient weight and rigidity to adequately span a maximum supporting post separation of six (6) 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 excavating 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 and/or structures.

Final Signing and Striping of Roadway

The Contractor, through the City project inspector, shall notify the Street Transportation Department, Traffic Operations Division (262-6456), at least thirty (30) days prior to desired

completion of final roadway signing and lane striping. This will allow adequate time for City crews to schedule and complete the task on time.

.04 **SEQUENCE OF CONSTRUCTION**

The sequence of construction shall conform to the requirements of the Special Traffic Regulations.

The project shall follow a phasing plan approved by the Engineer. All lanes shall be maintained on a paved surface at all times during construction. This may be accomplished by using existing, new, or temporary asphalt pavement. Trenches shall be completely backfilled and either paved with temporary asphalt pavement, or covered with metal plating as necessary to comply with this requirement and the "Special Traffic Regulations". Phasing shall incorporate the south half of Baseline Road to be constructed first.

Night work will **not** be allowed on this project.

The right to direct the sequence of construction is a function vested solely with the Engineer. Prior to commencement of the work, the Contractor shall prepare and submit to the Engineer, a written phasing plan and work schedule for the project. This plan and work schedule shall be submitted to the Engineer at the Preconstruction Conference for review.

When approved, the phasing plan and work schedule shall not be changed without the written consent of the Engineer. Orderly procedure of all work to be performed under this contract shall be the full responsibility of the Contractor. The work schedule shall include the hours per day and the days per week that the Contractor plans to work on the project site.

.05 **WORK HOURS**

The following paragraphs shall be added to Section 108.5 of the MAG Specifications:
Regular working hours shall be defined as one 8-1/2 hour shift per day, Monday through Friday, exclusive of City holidays.

Work in excess of regular working hours shall be defined as overtime. For overtime which becomes necessary, the Contractor shall make a written request to the Engineer at least eight (8) calendar days before the desired overtime. The request shall include the duration, dates, times, reason for overtime, and a statement of the consequences if overtime is not approved.

The Contractor shall not schedule any overtime work which requires inspection, survey, or material testing without written permission from the Engineer two (2) working days before the proposed overtime work. The Engineer reserves the right to deny the requested overtime. If an overtime request is denied, the Engineer may extend the contract time at no additional cost to the City, including extended overhead costs.

Unscheduled Overtime

Overtime that is not requested and approved in accordance with the above procedure shall be defined as unscheduled overtime. All costs (including appropriate overhead) shall be paid by the Contractor by deduction from the contract.

Emergency Overtime

An emergency is defined as work required for a situation that is not within the Contractor's control.

With the Engineer's approval, the Contractor will be permitted to work overtime without being responsible for paying the City's costs.

.06 **DUST PREVENTION**

The Contractor shall prevent any dust nuisance due to construction operations in accordance with MAG Specifications, Section 104.1.3, Cleanup and Dust Control. The Contractor shall use a power pick-up broom as part of the dust control effort. No separate measurement or payment will be made for cleanup or dust control, or for providing a power pick-up broom on the job.

.07 **UTILITY CROSSINGS OF EXISTING 54" TRANSMISSION LINE**

The Contractor shall coordinate construction of all utilities crossing the existing 54" water transmission line to occur within a specified timeframe due to shutdown required for the water line. All utility crossings must be completed prior to the last day of shutdown for the water line. Contractor shall coordinate with the City of Phoenix Water Services Department and Civil & Environmental Consultants, Inc. and notify them 48-hours in advance of any construction as is relates to being within 4-feet of the water transmission line. Any damages and costs for loss of service incurred if the water line is damaged during construction will be the responsibility of the contractor. If damages occur the contractor shall fix any damages to the water line as quickly as possible. Any detrimental effect to the

.08 **ADOT/CONNECT 202 COORDINATION**

Prior to any work COP contractor should call our Segment Manager and his staff to coordinate the work. The phasing will be important on the tie in and making sure that elevations are checked in the field with our data prior to final paving. Other items may need to be coordinated based on the schedule if C202P constructs first or if the COP contractor does.

.09 **LAVEEN PARK PLACE – PHASE 1 COORDINATION**

Contractor shall coordinate all construction with adjacent construction taking place for the Laveen Park Place – Phase 1 project located at the southwest corner of 59th Avenue and Baseline Road. Contractor shall coordinate construction scheduling and logistics with AR Mays Construction site superintendent Rocky Black. SRP electrical service for Laveen Park Place – Phase 1 will be installed by AR Mays and will include a perpendicular crossing of Baseline Road that will need to occur in concert with the Baseline Road roadway construction/utility crossings.

.09 **EARTHWORKS**

Earthworks quantities shown on plans are estimated quantities and intended for permit purposes. Contractor shall perform own earthwork analysis and bid accordingly.

.10 **REQUEST FOR CAD FILES FOR ESTIMATING PURPOSES**

CAD files may be requested for bidding purposes. Requests must be formally submitted via email to the contact person below. Distribution of CAD files is at the Engineer of Record's sole discretion. CAD files may only be used for bidding purposes and must be used in accordance with Civil & Environmental Consultants, Inc. CAD Disclaimer (below).

CAD File Requests: Jason Guerin
Civil & Environmental Consultants, Inc.
jguerin@cecinc.com

Civil & Environmental Consultants, Inc. – CAD Disclaimer

A formal request must be made for electronic file distribution. Civil & Environmental Consultants, Inc. will be happy to provide the requested drawings under the following terms and conditions:

It is understood and agreed that the drawings prepared pursuant to this Agreement, whether in hard copy or machine readable form, are instruments of professional service intended for one-time use in the characterization, concepts, designs or construction of this project.

Because of the possibility that information and data delivered in machine readable form may be altered, whether inadvertently or otherwise, Civil & Environmental Consultants, Inc., hereinafter referred to as the Engineer, will retain the original identification reflecting the involvement of the Engineer in their preparation. The Engineer also will retain hard copy originals of all project documentation delivered to the Owner and/or other recipients in machine readable form, which originals shall be referred to and shall govern in the event of any inconsistency between the two.

The Owner and/or other recipients understand that the automated conversion of information and data from the system and formatted by the Engineer to an alternate system or format cannot be accomplished without introduction of inexactitudes, anomalies, and errors. In the event project documentation provided to the owner in machine readable form is so converted, the Owner and/or other recipients agree to assume all risks associated therewith and, to the fullest extent permitted by the law, to hold harmless and indemnify the Engineer from and against all claims, liabilities, losses, damages, and costs, including but not limited to attorney's fees, arising therefrom or in connection therewith.

The Owner and/or other recipients recognize that the changes or modifications to the Engineer's instruments of professional services introduced by anyone other than the Engineer may result in adverse consequences which the Engineer can neither predict nor control. Therefore, and in consideration of the Engineer's agreement to deliver its instruments of professional service in machine readable form, the Owner and/or other recipients agree, to the fullest extent permitted by law to hold harmless and indemnify the Engineer from and against all claims, liabilities, losses, damages, and costs, including but not limited to attorney's fees, arising out of or in any way connected with the modification, misinterpretation, misuse or reuse by others of the machine readable information and data provided by the Engineer without limitation, to any use of the project documentation on other projects, for additions to this project, or for completion of this project by others, excepting only such use as may be authorized, in writing by the Engineer.

.11 **PROJECT ADMINISTRATOR**

Civil & Environmental Consultants, Inc. has been retained by involved stakeholders, including the City of Phoenix to serve as Project Administrator for this project and is acting on behalf of the involved parties.

BID PROPOSAL

PROJECT NO. 18-3011
BASELINE ROAD IMPROVEMENTS – LOOP 202 & 57TH AVENUE

BOND ISSUE OR BUDGET PROJECT
CITY OF PHOENIX, ARIZONA
OFFICE OF THE CITY ENGINEER
ON BEHALF OF
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.

PROPOSAL to Civil & Environmental Consultants, Inc.:

In compliance with the Advertisement for Bids, by Civil & Environmental Consultants, Inc., the undersigned bidder:

_____
(Print or type contractor name)

Having examined the contract documents, site of work and being familiar with the conditions to be met, hereby submits the following proposal for furnishing the material, equipment, labor and everything necessary for the completion of the work listed and agrees to execute the contract documents and furnish the required bonds and certificates of insurance for the completion of said work, at the locations and for the prices set forth on the inside pages of this form.

Understands that construction of this project shall be in accordance with all applicable Maricopa Association of Governments' (MAG) Uniform Standard Specifications and Uniform Standard Details, latest revision, except as otherwise required by the project plans and specifications, 2015 City of Phoenix Supplement to MAG Specifications and Details, and special provisions.

No proposal may be withdrawn for a period of 50 days after opening without consent of the Contracting Agency through the body or agent duly authorized to accept or reject the proposal except in the case of federally-assisted projects.

Understands that this proposal shall be submitted with a proposal guarantee of certified check, cashier's check or surety bond for an amount not less than ten (10) percent of the amount bid, as referenced in the Call for Bids.

Agrees that upon receipt of Notice of Award, from Civil & Environmental Consultants, Inc., the Contractor will execute the contract documents within 10 calendar days.

Work shall be completed within **185** calendar days, beginning with the day following the starting date specified in the Notice to Proceed. The time allowed for completion of the work includes lead time for obtaining the necessary materials and/or equipment and approvals.

The bidder shall acknowledge all addenda in writing. By writing the addenda number(s) below, the bidder agrees that this proposal is computed with consideration of the specification book(s) plus any and all addenda.

ADDENDA NO.	DATE	ADDENDA NO.	DATE
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

CITY OF PHOENIX, ARIZONA
OFFICE OF THE CITY ENGINEER
ON BEHALF OF
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.

PROJECT NO. 18-3011
BASELINE ROAD IMPROVEMENTS – LOOP 202 & 57TH AVENUE

CONSTRUCTION BID PROPOSAL

BASE BID

The undersigned agrees to perform the work as described in the Contract Documents for the following lump sum:

_____Dollars and _____Cents
(Written Word)

($_____._____)

FIRM NAME: _____

SIGNTURE: _____**DATE:** _____

PRINTED NAME: _____

PROJECT NO. 18-3011

THIS PROPOSAL IS SUBMITTED BY _____

a corporation organized under the laws of the state of _____

partnership consisting of _____

_____

a joint venture of _____

_____

or individual trading as _____

_____

_____

_____

of the City of _____

FIRM _____

ADDRESS _____

CITY _____ STATE _____ ZIP CODE _____

PHONE _____ FAX _____

EMAIL ADDRESS:_____

BY _____
Officer and Title (signature)

_____
Date

_____
WITNESS: If Contractor is an individual
(signature)

_____
ATTEST: If Contractor is Corporation or Partnership
(signature and title)

PROJECT NO. 18-3011

SURETY BOND

That we, _____, as Principal, (hereinafter called the Principal) and the _____, a corporation duly organized under the laws of the state of _____, a Surety, (hereinafter called Surety) are held and firmly bound unto Civil & Environmental Consultants, Inc. as Obligee, in the sum of ten (10) percent of the total amount of the bid of Principal, submitted by the Contractor to Civil & Environmental Consultants, Inc. for the work described below, for the payment of which sum, well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents and in conformance with A.R.S. 34-201.

WHEREAS, the said Principal is herewith submitting its proposal for Baseline Road Improvements: Loop 202 & 57th Avenue Design-Bid-Build (Project No. 18-3011).

NOW, THEREFORE, if Civil & Environmental Consultants, Inc. shall accept the proposal of the Principal and the Principal shall enter into a Contract with Civil & Environmental Consultants, Inc. in accordance with the terms of such proposal and give such Bonds and Certificates of Insurance as specified in the Standard Specifications with good and sufficient Surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter into such Contract and give such Bonds and Certificates of Insurance, if the Principal shall pay to Civil & Environmental Consultants, Inc. 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 shall be null and void, otherwise to remain in full force and effect.

Signed and sealed the _____ day of _____ A.D., 2019

_____
Principal

_____

TITLE

_____

_____
Surety

_____
WITNESS

_____

A.M. BEST RATING:

City of Phoenix on behalf of CIVIL & ENVIRONMENTAL CONSULTANTS, INC.

AFFIDAVIT OF IDENTITY

***Your completion of this form is required by Arizona state law. A.R.S. §§ 1-501 and -50 only if you are a* sole proprietor.**

I, _____(print full name exactly as on document), hereby affirm, upon penalty of perjury, that I presented the document marked below to the City of Phoenix, that I am lawfully present in the United States, and that I am the person stated on the document. (*select one category only*)

☐Arizona driver license issued after 1996.
Print first four numbers/letters from license: ☐☐☐☐

☐Arizona non-operating identification license.
Print first four numbers/letters: ☐☐☐☐

☐ Birth certificate or delayed birth certificate issued in any state, territory or possession of the U.S.
Year of birth: _____; Place of birth: _____

☐ United States Certificate of Birth Abroad.
Year of birth: _____; Place of birth: _____

☐United States Passport.
Print first four numbers/letters on Passport: ☐☐☐☐

☐Foreign Passport with United States Visa.
Print first four numbers/letters on Passport: ☐☐☐☐
Print first four numbers/letters on Visa: ☐☐☐☐

☐I-94 Form with a photograph.
Print first four numbers on I-94: ☐☐☐☐

☐USCIS Employment Authorization Document (EAD).
Print first four numbers/letters on EAD: ☐☐☐☐
***or* Perm. Resident Card (acceptable alternative):** ☐☐☐☐

☐Refugee Travel Document.
Date of issuance: _____; Refugee country: _____

☐U.S. Certificate of Naturalization.
Print first four digits of CIS Reg. No.: ☐☐☐☐

☐ U.S. Certificate of Citizenship.
Date of issuance:_____; Place of issuance: _____

☐Tribal Certificate of Indian Blood.
Date of issuance: _____; Name of tribe: _____

☐Tribal or Bureau of Indian Affairs Affidavit of Birth.
Year of birth: _____; Place of birth: _____

Signed: _____ Dated: _____

TECHNICAL SPECIFICATIONS

Reference:

* MAG Uniform Standard Specifications and Details for Public Works Construction
http://www.azmag.gov/

* 2015 City of Phoenix Supplements to MAG
https://www.phoenix.gov/streets/reference-material/2015maguniformstd

BASELINE ROAD OFFSITE IMPROVEMENT PLANS
LOOP 202 TO 57TH AVENUE

A PORTION OF THE WEST HALF OF SECTION 5 AND A PORTION OF THE EAST HALF OF SECTION 6, TOWNSHIP 1 SOUTH, RANGE 2 EAST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA

PAVING WITH DRAINAGE FACILITIES

SPECIAL NOTES

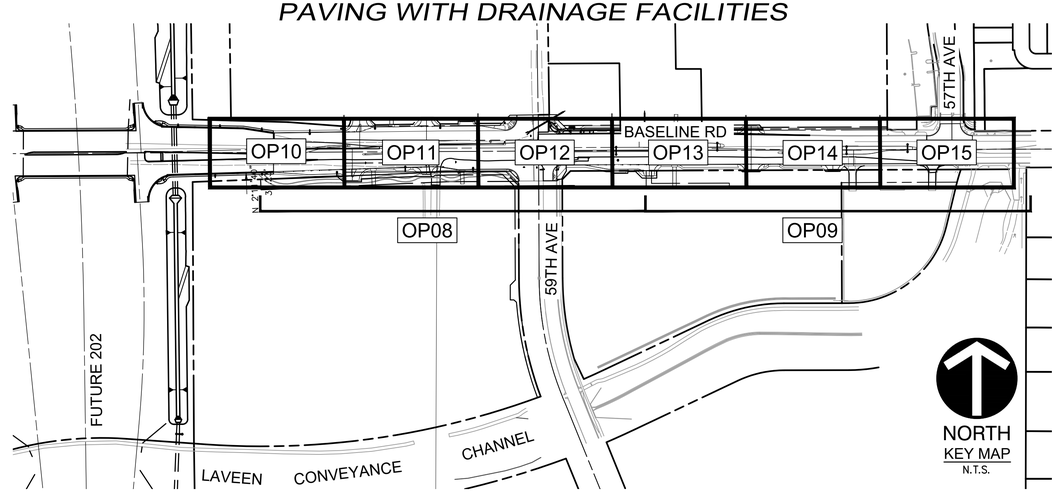
1. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS IN ADVANCE FOR ANY STAKING OR RESTAKING REQUIRED.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN PERMITS REQUIRED AT HIS OWN EXPENSE.
3. THE CONTRACTOR WILL MAKE EXPLORATORY EXCAVATIONS & LOCATE EXIST. UNDERGROUND FACILITIES SUFFICIENTLY IN ADVANCE OF CONSTRUCTION TO PERMIT THE REVISION OF THESE PLANS IF NECESSARY DUE TO CONFLICT BETWEEN A FACILITY PROPOSED HEREIN & AN EXIST. FACILITY.
4. IT IS THE CONTRACTORS SOLE RESPONSIBILITY TO VERIFY THE PRESENCE & LOCATION OF ANY & ALL EXIST. OVERHEAD &/OR UNDERGROUND UTILITIES THAT MAY INTERFERE WITH THE CONSTRUCTION, WHETHER OR NOT SAID UTILITIES ARE SHOWN ON THE CONSTRUCTION PLANS FOR THIS PROJECT. CONTRACTOR SHALL ADEQUATELY PROTECT & MAINTAIN SUCH UTILITIES.
5. THE ENGINEER DOES NOT ASSUME ANY LIABILITY FOR ERRORS OF LINE &/OR GRADE ON ANY STAKING WHICH HAS BEEN DISTURBED IN ANY WAY, NOR DOES THE ENGINEER ASSUME ANY LIABILITY FOR ERRORS OF LINE &/OR GRADE ON ANY STAKING THAT HAS BEEN IN PLACE FOR A PERIOD OF 24 HOURS OR MORE WITHOUT THE COMMENCEMENT OF CONSTRUCTION FOR WHICH IT WAS SET.
6. THE CONTRACTOR SHALL NOTIFY THE DEVELOPER AND SURVEYOR BEFORE BACKFILLING WATER &/OR SEWER SERVICES IN ORDER THAT THE ENGINEER MAY VERIFY THE AS-BUILT LOCATION OF THE SERVICE.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING ALL STAKES & CONTROL, & SHALL TAKE STEPS NECESSARY TO INSURE THAT THE STAKES & CONTROL ARE NOT DISTURBED OR TAMPERED WITH. IF STAKES ARE DISTURBED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST INCURRED TO RESTAKE.
8. ANY QUESTIONS RELATIVE TO THE ACCURACY OF IMPROVEMENT INSTALLATION SHALL BE RAISED SUBSEQUENT TO COMPLETION OF THE WORK UNLESS ALL SURVEY STAKES ARE MAINTAINED INTACT. SHOULD SUCH STAKES NOT BE PRESENT & VERIFIED AS TO THEIR ORIGIN, NO CLAIM FOR ADDITIONAL COMPENSATION FOR CORRECTION SHALL BE PRESENTED TO ANY PARTY & SUCH WORK SHALL BE CORRECTED BY THE CONTRACTOR AT HIS OWN EXPENSE.
9. ALL FRAMES, COVERS, VALVE BOXES & MANHOLE COVERS SHALL BE ADJUSTED TO FINISH GRADE PRIOR TO COMPLETION OF PAVING OR RELATED CONSTRUCTION. ADJUSTMENT OF UTILITIES SHALL BE PER SRPMIC ECS STD. DET. 703 & 704.
10. CONSTRUCTION OF SURFACE IMPROVEMENTS SHALL NOT BEGIN UNTIL CONFLICTING UNDERGROUND UTILITY CONSTRUCTION IS COMPLETED & SERVICE CONNECTIONS TO ALL PLATTED LOTS HAVE BEEN ADEQUATELY EXTENDED.
11. ALL SIGNS REQUIRE SEPARATE APPROVALS AND PERMITS.
12. ALL STORM DRAIN JOINTS TO BE WATER TIGHT.

STREET & RIGHT-OF-WAY QUANTITIES

1.	CONSTRUCT CONCRETE CURB & GUTTER PER MAG STD. DET. 220, TYPE A.	LF	3,184
2.	CONSTRUCT TRANSITION FROM MAG CURB TO ADOT CURB – 3' TYPICAL.	EA	1
3.	CONSTRUCT CONCRETE SIDEWALK PER COP STD. DET. P1230.	SF	16,490
4.	CONSTRUCT CONCRETE SINGLE CURB PER MAG STD. DTL. 222.	LF	3,192
5.	CONSTRUCT CONCRETE MEDIAN NOSE PER DETAIL ON SHEET OP06.	SF	319
6.	INSTALL NEW ASPHALT PAVEMENT.	SY	21,688
7.	CONSTRUCT CONCRETE BUS BAY PAVEMENT, COP STD. DTL. P1256–1, 9" THICK, CLASS 'A'.	SF	7,450
8.	CONSTRUCT CONCRETE DRIVEWAY PER COP STD. DTL. P1243.	EA	9
9.	CONSTRUCT CONCRETE SCUPPER PER MAG STD DET 206–1. INSTALL SAFETY RAIL PER MAG STD DET 145.	EA	5
10.	CONSTRUCT RIP–RAP WITH FILTER FABRIC PER DETAIL ON SHEET OP06.	EA	5
11.	CONSTRUCT CATCH BASIN TYPE "M" PER COP STD DET P1569–1.	EA	0
12.	INSTALL SURVEY MARKER PER MAG STD DET 120.	EA	9
13.	CONSTRUCT BUS SHELTER PAD LOCATION (BUS STOP) PER COP STD DET P1258.	EA	2
14.	CONSTRUCT MOUNTABLE CURB AND GUTTER, PER MAG STD DET 220–2, TYPE 'E'.	LF	359
15.	ADJUST WATER UTILITY TO GRADE, PER COP PAVING NOTE 14 ON SHT OP02 & MAG STD DETS 391–1 & 391–2.	EA	12
16.	ADJUST MANHOLE TO GRADE, PER MAG STD DET 422.	EA	2
17.	CONSTRUCT HANDICAP RAMP PER COP STD DETS P1238–1, MODIFIED RADIUS=35.00' AND DIRECTIONAL RAMPS PER COP STREET & TRANSPORTATION DEPT & PER COP STD 1232.	EA	2
18.	MILL EXISTING ASPHALT MAG SPECIFICATION SECTION 317 AND INSTALL 1.25" DEPTH ASPHALT–RUBBER ASPHALT CONCRETE OVERLAY PER SECTION 321 & 325. MICRO–SURFACE PER MAG SPECIFICATION SECTION 331.	SY	998
19.	CONSTRUCT HANDICAP RAMP PER COP STD DETS P1238–2, MODIFIED DIRECTIONAL RAMPS PER COP STREET & TRANSPORTATION DEPT & PER COP STD 1232.	EA	2
20.	INSTALL BARRICADES AS SHOWN PER COP STD DET P1106.	EA	40
21.	ADJUST RESPECTIVE UTILITY TO GRADE SEE COP PAVING NOTE 14 ON SHT OP02	EA	5
22.	INSTALL STREET LIGHT PER LIGHTING PLAN.	EA	12
23.	CONSTRUCT TRANSITION CURB AND GUTTER PER MAG STD DET 221.	EA	1
24.	INSTALL PAVING STONES PER DETAIL ON SHEET OP06.	SF	2,826

REMOVALS

1.	SAWCUT & REMOVE EXISTING AC PAVEMENT TO A CLEAN, VERTICAL EDGE AS SHOWN ON PLAN. MINIMUM WIDTH = 2'.	SY	13,731
2.	REMOVE EXISTING CONCRETE CURB (AND GUTTER IF APPLICABLE).	LF	798
3.	SAWCUT TO NEAREST JOINT AND REMOVE EXISTING CONCRETE/SIDEWALK.	SF	4,333
4.	EXISTING CURB TO REMAIN. PROTECT IN PLACE.	–	–
5.	EXISTING CONCRETE SIDEWALK TO REMAIN. PROTECT IN PLACE.	–	–
6.	REMOVE AND/OR SALVAGE EXISTING TREE. CONSULT WITH LANDSCAPE ARCHITECT.	EA	5
7.	REMOVE EXISTING SIGN. COORDINATE WITH CITY OF PHOENIX FOR SALVAGE/RE–USE.	EA	10
8.	EXISTING POWER POLE TO REMAIN. PROTECT IN PLACE.	–	–
9.	EXISTING FIRE HYDRANT TO BE REMOVED/RELOCATED. REFER TO UTILITY PLAN FOR MORE DETAILS.	EA	3
10.	EXISTING ELECTRIC CABINET TO BE REMOVED/RELOCATED. COORDINATE REMOVAL/RELOCATION WITH UTILITY COMPANY.	EA	1
11.	REMOVE EXISTING CONCRETE HEADWALL OR STORM DRAIN CATCH BASIN. REMOVE ATTACHED CONNECTOR PIPE.	EA	3
12.	EXISTING WATER METER TO BE REMOVED/RELOCATED. REFER TO UTILITY PLAN FOR MORE DETAILS.	EA	1
13.	EXISTING TRAFFIC SIGNAL EQUIPMENT TO BE REMOVED/RELOCATED. CONSULT WITH TRAFFIC SIGNAL PLANS FOR REMOVAL/RELOCATION.	EA	11
14.	EXISTING STREET LIGHT TO BE REMOVED/RELOCATED. REFER TO STREET LIGHT PLAN FOR MORE DETAILS.	EA	3
15.	EXISTING ELECTRICAL FEATURE – REFER TO UTILITY PLAN FOR FURTHER DETAILS.	–	–
16.	EXISTING MANHOLE TO REMAIN. PROTECT IN PLACE. REFER TO IMPROVEMENT PLANS FOR RIM ADJUSTMENTS.	EA	9
17.	EXISTING VALVE TO REMAIN. PROTECT IN PLACE. REFER TO IMPROVEMENT PLANS FOR RIM ADJUSTMENTS.	EA	15



RETENTION CALCULATIONS

Retention Calculations

RETENTION REQUIRED = (D/12* C * A) (100-yr, 2-hr) D=2.27 Inches

RETENTION REQUIRED = (D/12* C * A) (5-yr, 2-hr) D=1.22 Inches

C=.95

A= Area, SF

DRAINAGE AREA I.D.	AREA (Ac)	AREA (sf)	VOLUME REQUIRED (cf)	VOLUME PROVIDED (cf)	EXCESS/ SHORT (cf)	STORM EVENT	"AS-BUILT" VOLUME PROVIDED
1	1.05	45,697	8,212	8,263	51	100-YR, 2-HR	
2	1.08	46,993	4,539	4,539*	<--Laveen Park Place	5-YR, 2-HR	
3	1.52	66,138	6,388	6,388*		TO LACC	
4	1.43	62,215	11,181	11,184	3	100-YR, 2-HR	
5	0.42	18,176	1,755	1,755*		TO LACC	
6	0.44	19,231	1,857	1,857*		TO LACC	
Total	**5.93**	**258450**	**33932**	**29321**	**54**		

Retention Volume Calculations

CONIC FRUSTUM METHOD

RETENTION PROVIDED = h/3(B1+B2+ (B1*B2)**0.5)

RETENTION BASIN ID	ELEV.	AREA (SF)	DEPTH DIFF. (FT)	AVG VOLUME (CF)	CUMULATIVE VOLUME (CF)
TEMP #1	997.00	7,598			
	998.00	8,947	1.00	8,263	**8,263**
TEMP #4	998.00	9,843			
	999.00	12,581	1.00	11,184	**11,184**

DRY-UP CALCULATIONS

Baseline Road Improvements - 202 Freeway to 57th Avenue

CEC JOB: 182-001

PREPARED BY: JG

DATE: 11/15/2018

Dry-Up Calculations

CRITERIA USED: City of Phoenix

GIVEN: REQUIRED DRAIN TIME = 36 HRS

TEST RESULTS: DETERMINED PERC TIME = 80 (MIN/INCHES)

PERC RATE TEST = 0.0625 (FT²HR)/FT (safety factor applied)

ASSUMPTIONS: DRY WELL FLOW RATE = 0.1 CFS (safety factor applied)

SAFETY FACTOR = 2

DRYWELL CALCULATIONS

EQUATIONS:

Perc Time (hr) = Volume to Drain (ft3) x Saftey Factor / Permeable Area (ft2) x Perc Rate (ft/hr)

Volume Dis. Per Drywell = Drywell Q (cfs) x 3600 (sec/hr) x Time (hr)

Volume Dissipation per Dry 12960 Ft3/Drywell

RETENTION BASIN	VOL. (FT³)	PERMEABLE AREA (BOTTOM)	DRYWELL PERC RATE (CFS)	NATURAL PERC RATE SF APPLIED (FT²HR)/FT²	BASIN PERC TIME (HR)	DRY WELLS REQUIRED
TEMP #1	8,263	7,598	0.100	0.063	17.4	0
TEMP #4	11,184	9,843	0.100	0.063	18.2	0

SHEET INDEX

OP01	COVER SHEET
OP02	LEGEND AND NOTE SHEET
OP03	SURVEY CONTROL
OP04 – OP06	ROAD SECTIONS
OP07	ROADWAY DETAILS
OP08 – OP09	DEMOLITION PLAN
OP10 – OP15	BASELINE ROAD PLAN
OP16 – OP21	BASELINE ROAD PROFILE
OP22 – OP23	SIDEWALK GEOMETRICS
OP24	SCUPPER PROFILES

PROJECT DESCRIPTION

ROADWAY WIDENING IMPROVEMENTS FOR BASELINE ROAD BETWEEN 57TH AVENUE AND THE PROPOSED LOOP 202 FREEWAY. IMPROVEMENTS WITH THIS PLAN INCLUDE NEW PAVEMENT CONSISTING OF 3–TRAVEL LANES IN EACH DIRECTION, ASSOCIATED DRIVEWAYS, MEDIANS, TURN LANES, BUS STOPS, CURB, GUTTER, AND SIDEWALK.

UTILITY CONFLICTS

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.

SALT RIVER PROJECT (POWER)	UTILITY CONFLICTS DEPT.	3/23/18 DATE
SRVWUA (IRRIGATION)	UTILITY CONFLICTS DEPT.	3/23/18 DATE
CENTURY LINK (TELEPHONE)	UTILITY CONFLICTS DEPT.	3/23/18 DATE
COX COMMUNICATIONS (CABLE TV	UTILITY CONFLICTS DEPT.	3/23/18 DATE
SOUTHWEST GAS (GAS)	UTILITY CONFLICTS DEPT.	3/23/18 DATE
CITY OF PHOENIX (WATER)	UTILITY CONFLICTS DEPT.	3/23/18 DATE
CITY OF PHOENIX (SEWER)	UTILITY CONFLICTS DEPT.	3/23/18 DATE

ENGINEER

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
11811 N. TATUM BLVD., STE. 3057
PHOENIX, ARIZONA 85028
PH: 602–644–2179, FX: 602–760–2330
CONTACT: JASON GUERIN

OWNERS

59TH AND BASELINE LLC
1700 W. HORIZON RIDGE PKWY, STE. 101
HENDERSON, NV 89012

CITY OF PHOENIX
200 W. WASHIGNTON ST.
PHOENIX, AZ 85003

CROSSWALK LUTHERAN MINISTRIES INC
2610 W. BASELINE RD.
PHOENIX, AZ 85041, STE. 106

JAGUAR PREMIUM PROPERTIES LLP
30 RASHEE LN, BOX 10
TRAVERSE BAY MB
CANADA R0E 2A0

LAVEEN BASELINE LLC
1707 E. HIGHLAND AVENUE, STE. 100
PHOENIX, ARIZONA 85016

LINES BROTHERS LAND & CATTLE LLC
2415 S. RURAL ROAD
TEMPE, AZ 85282

SUNWEST FEDERAL CREDIT UNION
11839 N. 28TH DRIVE
PHOENIX, AZ 85029

BENCH MARK

ADOT ALUMINUM CAP ON NORTH SIDE OF CONCRETE BASE OF TRANSMISSION TOWER #25, SOUTH SIDE OF BASELINE ROAD AT 59TH AVENUE TO NORTH.
ELEVATION=1001.624 (CITY OF PHOENIX DATUM, NGVD29)

BASIS OF BEARING

THE NORTH LINE OF THE NORTHWEST QUARTER OF SECTION 5, TOWNSHIP 1 SOUTH, RANGE 2 EAST AS SHOWN IN BOOK 846, PAGE 5, RECORDS OF MARICOPA COUNTY, ARIZONA. SAID LINE BEARS NORTH 89°46'38" EAST.

FLOOD ZONE

ACCORDING TO THE FLOOD INSURANCE RATE MAP #04013C2195 L, DATED OCTOBER 16, 2013 THIS PROPERTY IS LOCATED IN FLOOD ZONE "X".

AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD.

ESTIMATED EARTHWORKS

ESTIMATED EARTHWORKS NUMBERS ARE RAW DATA

CUT = 2,745 CY
FILL = 6,317 CY
NET = 3,572 CY (FILL)

APN

104–80–003, 104–80–003G, 104–80–003H, 300–02–001G, 300–02–001L, 104–06–007, 300–02–001U, 300–02–923

AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE "RECORD DRAWING" MEASUREMENTS AS SHOWN HEREON WERE MADE UNDER MY SUPERVISION OR AS NOTED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED ENGINEER/ LAND SURVEYOR — DATE

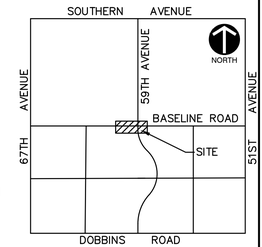
REGISTRATION NO.

APPROVED FOR:
CITY OF PHOENIX

PLANNING & DEVELOPMENT — DATE

CPPA#1806043
KIVA# 18-3011
SDEV# 1800624
Q.S.# 01-14 & 01-15

REGISTERED PROFESSIONAL ENGINEER (CIVIL) CERTIFICATE NO. 23980 JEFFREY S. ERICKSON Date Signed 11/16/18 ARIZONA, U.S.A. Expires 09/30/20



VICINITY MAP
N.T.S.

REVISION RECORD

NO	DATE	DESCRIPTION

Civil & Environmental Consultants, Inc.
11811 N. Tatum Blvd., Suite 3057 - Phoenix, AZ 85028
Ph: 602.760.2324 - 877.231.2324 - Fax: 602.760.2330
www.cecinc.com

BASELINE ROAD IMPROVEMENTS
LOOP 202 & 57TH AVENUE
PHOENIX, ARIZONA
CIVIL IMPROVEMENT PLANS

OFFSITE IMPROVEMENT PLANS
COVER SHEET

DATE: NOVEMBER 16, 2018 | DRAWN BY: JD
DWG SCALE: NONE | CHECKED BY: JG
PROJECT NO: 182-001
APPROVED BY:

DRAWING NO.: OP01
SHEET 1 OF 24

P:\2018\182-001\-CADD\dwg\CIVIL\Offsite Improvement\182001-OP01-OP-CS.dwg(OP01) LS:(11/16/2018 - eperrotta) - LP: 11/16/2018 10:09 AM

GRADING & DRAINAGE NOTES (CITY OF PHOENIX)

1. A GRADING PERMIT IS REQUIRED UNDER CHAPTER 32A OF THE PHOENIX CITY CODE.
2. WHEN HAUL PERMITS ARE REQUIRED, THEY MUST BE OBTAINED PRIOR TO OR CONCURRENTLY WITH THE GRADING AND DRAINAGE PERMIT.
3. EXCAVATING CONTRACTOR MUST GIVE LOCATION FOR WASTING EXCESS EXCAVATION AND A LETTER FROM OWNER GIVING PERMISSION FOR DUMPING PRIOR TO STARTING ON-SITE CONSTRUCTION. IF EXCESS EXCAVATION EXCEEDS 100 CUBIC YARDS, THE DISPOSAL SITE WILL ALSO REQUIRE A GRADING AND DRAINAGE PERMIT.
4. PLANNING & DEVELOPMENT DEPARTMENT FIELD INSPECTION GROUP SHALL BE NOTIFIED 48 HOURS BEFORE ANY ON-SITE AND/OR OFF-SITE CONSTRUCTION BEGINS, TELEPHONE (602) 262-7811.
5. STAKING FINISH FLOOR ELEVATIONS IS THE RESPONSIBILITY OF THE OWNER AND HIS ENGINEER. THE OWNER'S ENGINEER SHALL SUBMIT THREE SEALED COPIES OF THIS GRADING AND DRAINAGE PLAN DESIGNATED AS "RECORD DRAWING" (BEARING AN ORIGINAL SIGNATURE) PRIOR TO THE REQUEST FOR FINAL INSPECTION.
6. STAKING FINISH FLOOR ELEVATIONS IS THE RESPONSIBILITY OF THE OWNER AND HIS ENGINEER. THE OWNER'S ENGINEER SHALL SUBMIT THREE SEALED COPIES OF THIS GRADING AND DRAINAGE PLAN DESIGNATED AS "RECORD DRAWING" (BEARING AN ORIGINAL SIGNATURE) PRIOR TO THE REQUEST FOR FINAL INSPECTION.
7. A FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) ELEVATION CERTIFICATE BASED ON FINISHED CONSTRUCTION MUST BE REVIEWED AND APPROVED BY FLOODPLAIN MANAGEMENT FOR EACH NEW AND SUBSTANTIAL IMPROVEMENT STRUCTURE CONSTRUCTED IN A SPECIAL FLOOD HAZARD AREA (SFHA) PRIOR TO ISSUING A CERTIFICATE OF OCCUPANCY. A COPY OF THE ELEVATION CERTIFICATE MUST BE SUBMITTED TO THE GENERAL OR STRUCTURAL INSPECTOR.
8. PAD CERTIFICATIONS WILL BE REQUIRED ON ALL LOTS WITHIN THE SUBDIVISION AND SUBMITTED TO THE CIVIL/SITE INSPECTOR PRIOR TO ANY CONCRETE CONSTRUCTED IN THE RIGHT-OF-WAY. PAD CERTIFICATION CAN BE SUBMITTED TO THE CIVIL/SITE INSPECTOR BY EITHER SUBMITTING ONE APPROVED BLACK-LINE AS-BUILT GRADING AND DRAINAGE PLAN OR IN LETTER FORMAT SHOWING THE DESIGN AND AS-BUILT PAD ELEVATIONS AS SHOWN ON THE APPROVED GRADING AND DRAINAGE PLAN. IT IS REQUIRED THAT THE AS-BUILT PLAN AND LETTER BE SEALED BY A CIVIL ENGINEER OR LAND SURVEYOR REGISTERED IN THE STATE OF ARIZONA.
9. A SEPARATE PERMIT IS NECESSARY FOR ANY OFFSITE CONSTRUCTION.
10. AN APPROVED GRADING AND DRAINAGE PLAN SHALL BE ON THE JOB SITE AT ALL TIMES. DEVIATIONS FROM THE PLAN MUST BE PRECEDED BY AN APPROVED PLAN REVISION.
11. GRADING AND DRAINAGE PLAN APPROVAL INCLUDES THE CONSTRUCTION OF ALL SURFACE IMPROVEMENTS SHOWN ON THE APPROVED PLAN, INCLUDING, BUT NOT LIMITED TO, RETENTION AREAS, SEDIMENTATION BASINS, AND/OR OTHER DRAINAGE FACILITIES, DRAINAGE PATTERNS, WALLS, CURBS, ASPHALT PAVEMENT, AND BUILDING FLOOR ELEVATION.
12. GRADES SHOWN IN RETENTION BASINS ARE DESIGN FINISHED GRADES. SHOULD THE CONTRACTOR OR ANY SUBCONTRACTOR PLAN TO PLACE SPOIL DIRT FROM FOOTINGS, UTILITY TRENCHES, LANDSCAPING, SWIMMING POOLS, ETC. IN THE BASINS, THE BASINS SHOULD BE SUFFICIENTLY OVER-EXCAVATED DURING THE ROUGH GRADING OPERATION TO ALLOW FOR THE PLACEMENT OF THE FILL OR LANDSCAPING MATERIALS.
13. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL THE EXISTING UTILITY LINES WITHIN PROPOSED RETENTION BASIN AREAS. IF THE BASIN CANNOT BE CONSTRUCTED PER PLAN BECAUSE OF CONFLICTS, THE CONTRACTOR SHOULD DISCUSS MODIFICATION OF BASIN CONFIGURATION WITH THE CITY INSPECTOR TO DETERMINE IF A PLAN REVISION OR A FIELD CHANGE IS REQUIRED.
14. ALL DRAINAGE PROTECTIVE DEVICES SUCH AS SWALES, INTERCEPTOR DITCHES, PIPES, PROTECTIVE BERMS, BARRIER WALLS, CONCRETE CHANNELS, OR OTHER MEASURES DESIGNED TO PROTECT ADJACENT BUILDINGS OR PROPERTY FROM STORM RUNOFF MUST BE COMPLETED PRIOR TO BUILDING CONSTRUCTION.

PER SECTION 6.8.7 OF THE STORM WATER POLICIES AND STANDARDS, SIDE SLOPES OF STORM WATER STORAGE FACILITIES SHALL BE NO STEEPER THAN 5:1 FOR IRRIGATED GRASS AREAS AND 3:1 FOR LANDSCAPE AREAS. SLOPE STABILIZATION MEASURES ARE REQUIRED FOR ALL SLOPES GREATER THAN 5:1. THE SLOPE STABILIZATION MEASURES MUST BE READILY MAINTAINABLE USING COMMON MAINTENANCE EQUIPMENT AND BE DESIGNED WITH CONSIDERATION TO AESTHETICS. THE SLOPE STABILIZATION MEASURES SHALL BE CONSISTENT WITH COMMONLY USED ENGINEERING PRACTICES. UN-STABILIZED DECOMPOSED GRANITE IS NOT ALLOWED ON SLOPES GREATER THAN 5:1.

15. ALL RETAINING WALLS ARE TO BE REVIEWED, PERMITTED, AND INSPECTED BY THE BUILDING SAFETY BRANCH OF THE PLANNING & DEVELOPMENT DEPARTMENT. ALL RETAINING WALLS ARE TO BE IN ACCORDANCE WITH SECTION 703 OF THE ZONING ORDINANCE AND SECTION 32-32 OF THE SUBDIVISION ORDINANCE FOR SPECIFIC WALL HEIGHT REQUIREMENTS. USE PERMIT IS REQUIRED FOR ALL OVER-HEIGHT RETAINING WALLS.
16. ALL RAMPS MUST MEET 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN AND CITY OF PHOENIX SUPPLEMENT TO M.A.G. UNIFORM STANDARD SPECIFICATIONS AND DETAILS; 2% MAX CROSS SLOPES AND 12:1 MAX LONGITUDINAL SLOPES.
17. CERTIFICATE OF OCCUPANCY (C OF O) AND/OR FINAL ELECTRICAL CLEARANCE FOR ANY BUILDING IS DENIED UNTIL ALL GRADING AND DRAINAGE IMPROVEMENTS ARE COMPLETED.
18. EXISTING OR NEWLY DAMAGED AND/OR DISPLACED CONCRETE CURB, GUTTER, SIDEWALK, OR DRIVEWAY SLAB THAT IS WITHIN THE RIGHT-OF-WAY SHALL BE REPAIRED OR REPLACED, AS NOTED BY CITY INSPECTORS, BEFORE FINAL ACCEPTANCE OF THE WORK.
19. THE ENGINEERING DESIGN ON THESE PLANS IS ONLY APPROVED BY THE CITY IN SCOPE AND NOT IN DETAIL. CONSTRUCTION QUANTITIES ON THESE PLANS ARE NOT VERIFIED BY THE CITY. APPROVAL OF THESE PLANS ARE FOR PERMIT PURPOSES ONLY AND SHALL NOT PREVENT THE CITY FROM REQUIRING CORRECTION OF ERRORS IN THE PLANS WHERE SUCH ERRORS ARE SUBSEQUENTLY FOUND TO BE IN VIOLATION OF ANY LAW, ORDINANCE, HEALTH, SAFETY, OR OTHER DESIGN ISSUES.
20. THE CITY OF PHOENIX POLICE DEPARTMENT ENFORCES LAWS REGULATING THE OPERATION OF COMMERCIAL VEHICLES. THIS INCLUDES ENFORCEMENT OF FEDERAL, STATE, COUNTY AND LOCAL LAWS AND ORDINANCES. QUESTIONS REGARDING COMMERCIAL VEHICLE ENFORCEMENT MAY BE DIRECTED TO THE COMMERCIAL VEHICLE ENFORCEMENT SUPERVISOR AT (602) 495-7813 (TRAFFIC BUREAU SOUTH) OR (602) 495-6784 (TRAFFIC BUREAU NORTH).
21. PLAN APPROVAL IS VALID FOR 180 DAYS. PRIOR TO PLAN APPROVAL EXPIRATION, ALL ASSOCIATED PERMITS SHALL BE PURCHASED OR THE PLANS SHALL BE RESUBMITTED FOR EXTENSION OF PLAN APPROVAL. THE EXPIRATION, EXTENSION, AND REINSTATEMENT OF CIVIL ENGINEERING PLANS AND PERMITS SHALL FOLLOW THE SAME GUIDELINES AS THOSE INDICATED IN THE PHOENIX BUILDING CONSTRUCTION CODE ADMINISTRATIVE PROVISIONS SECTION 105.3 FOR BUILDING PERMITS.

SALT RIVER PROJECT (SRP) NOTES

1. CONTRACTOR SHALL CALL SRP FOR A PRE-CONSTRUCTION MEETING PRIOR TO ANY EXCAVATION AT (602) 236-6300.
2. CONTRACTOR WILL SUPPLY ALL TRENCHING AND CONDUIT IF IT IS REQUESTED BY COP PROJECT MANAGER.
3. CONTRACTOR WILL STAKE STREETLIGHTS PER CITY OF PHOENIX APPROVED STREETLIGHTING CONSTRUCTION DRAWINGS.
4. GRADE STAKE WILL BE SET WITHIN TWO (2) FEET OF J-BOX LOCATION.
5. CONTRACTOR WILL COORDINATE WITH SRP AND CITY OF PHOENIX FOR DE-ENERGIZING OF STREETLIGHT CONDUCTOR.
6. GROUND ROD WILL BE PROVIDED AND INSTALLED BY CONTRACTOR IN SRP J-BOX AT EACH STREETLIGHT LOCATION.
7. #6 BARE COPPER GROUND WIRE TO BE ATTACHED FROM GROUNDING LUG ON STREETLIGHT POLE TO GROUND ROD IN J-BOX.
8. IF THE CONTRACTOR INSTALLS THE POLE, THE BARE #6 COPPER GROUND WIRE SHALL BE CONNECTED FROM THE GROUND ROD IN THE SRP J-BOX TO THE GROUND CONNECTION IN THE POLE HAND-HOLE.
9. ALL TRENCHING AND CONDUIT TO BE INSPECTED BY SRP. DO NOT BACKFILL UNTIL INSPECTED.
10. SRP CONSTRUCTION PRINT MUST BE USED AS TRENCHING REFERENCE. TRENCHING VARIATIONS MUST HAVE WRITTEN SRP DESIGNER APPROVAL. FOLLOW DETAILS FOR CONSTRUCTION. VARIATIONS IN TRENCH ROUTE MAY RESULT IN A REDESIGN FEE PAYABLE BY CONTRACTOR.
11. TRENCHES SHOULD BE STRAIGHT, LEVEL AND FREE OF DEBRIS. ALL TRENCH DEPTHS MEASURED FROM FINAL GRADE TO TOP OF CONDUIT (PER SRP DESIGN) WITHIN ALL EASEMENTS AND RIGHT OF WAY. MAINTAIN MINIMUM 6" CLEARANCE FROM WATER LINES, 18" FROM ALL GAS LINES AND 12" CLEARANCE FROM OTHER UTILITIES.
12. USE DB120 PVC FOR ALL STRAIGHT CONDUIT, 36" RADIUS SCHEDULE 40 PVC SWEEPS FOR ALL ELBOWS. NO REDUCERS ARE ALLOWED IN CONDUIT SYSTEM, NO COUPLINGS OR BELL ENDS ARE ALLOWED AT EQUIPMENT LOCATIONS. ALL CONDUITS WITHIN ROAD RIGHT OF WAY OR PUE MUST BE RED.
13. RETAINING WALLS ARE REQUIRED ADJACENT TO EQUIPMENT WHERE THE GRADE SLOPE IS GREATER THAN 30" IN 12'.
14. ALL CONDUIT STUB OUTS ARE TO BE CAPPED AND MARKED WITH ELECTRONIC MARKER AND 7" RED FLAG MARKING RIBBON.
15. HARD CAPS ARE TO BE USED FOR ALL STUB OUTS BELOW GRADE.
16. A MANDREL INSPECTION IS REQUIRED WITH SRP INSPECTOR WITHIN 3 DAYS OF FINAL INSPECTION. CONTRACTOR MUST PROVIDE 2 REPRESENTATIVES, MINIMUM 125-CFM TRAILER MOUNTED COMPRESSOR AND ALL NECESSARY ATTACHMENTS.
17. THE CONTRACTOR IS RESPONSIBLE FOR THE INTEGRITY OF ALL CONDUITS UNTIL SRP HAS INSTALLED CONDUCTORS.
18. BACKFILL REQUIREMENTS FOR A TRENCH IN OR UNDER FUTURE PAVEMENT TO BE 1 PART SLURRY MIX IN ROAD RIGHT OF WAY AND IN DIRT TO BE ½ SLURRY MIX AND ½ SLURRY MIX MAXIMUM UNDER ALL SRP EQUIPMENT.
19. SEE DUCT BANK SPECIFICATIONS FOR ALL DUCT BANK ENCASEMENT REQUIREMENTS.

SRP CONFLICT GENERAL NOTES

1. CONTRACTOR TO PROTECT IN PLACE ALL EXISTING SRP POWER POLES, GROUNDS, GROUND RODS AND DOWN GUYS DURING CONSTRUCTION OF ROADWAY IMPROVEMENTS. ANY DAMAGES TO THE ABOVE ITEMS WHICH WILL REQUIRE SRP TO REPAIR WILL BE AT EXPENSE OF THE CONTRACTOR.
2. CONTRACTOR SHALL ENSURE FULL ACCESS FOR SRP EQUIPMENT AND CREWS ALLOWING FOR SETUP AND MAINTENANCE OF ALL SRP FACILITIES WITHIN THE PROJECT AREA THROUGHOUT THE DURATION OF CONSTRUCTION.
3. SRP FACILITIES THAT ARE NOT IN CONFLICT BUT MAY REQUIRE ANY POLE BRACING, ADJUSTMENT OR MANHOLES TO GRADE (REQUIRES PRESENCE OF SRP INSPECTOR), INSTALLATION OF WARNING DEVICES SUCH AS TATTLE TALES, TEMPORARY RELOCATIONS OF OVERHEAD AND REQUIRED OUTAGES (DUE TO ROADWAY IMPROVEMENTS) WILL BE AT THE COST OF THE CONTRACTOR.
4. IT IS THE CONTRACTORS RESPONSIBILITY TO MAINTAIN MINIMUM OSHA CLEARANCES FROM SRP OVERHEAD AND UNDERGROUND FACILITIES. NO EQUIPMENT, SPOILS PILES, ETC. SHALL BE PLACED BENEATH AND OR OVER SRP FACILITIES.
5. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL CONTACT SRP SAFETY SERVICES (602-236-8117) TO ARRANGE FOR A SAFETY MEETING REGARDING WORKING UNDER TRANSMISSION LINES.

PAVING NOTES (CITY OF PHOENIX)

1. COMPACTION SHALL COMPLY WITH M.A.G. SECTION 601.
2. CONSTRUCTION WITHIN THE RIGHT-OF-WAY SHALL CONFORM TO THE LATEST APPLICABLE MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) UNIFORM STANDARD SPECIFICATIONS AND DETAILS AND THE LATEST CITY OF PHOENIX SUPPLEMENT TO THE MAG UNIFORM STANDARD SPECIFICATIONS AND DETAILS.
3. THE ENGINEERING DESIGN ON THESE PLANS IS ONLY APPROVED BY THE CITY IN SCOPE AND NOT IN DETAIL. CONSTRUCTION QUANTITIES ON THESE PLANS ARE NOT VERIFIED BY THE CITY. APPROVAL OF THESE PLANS ARE FOR PERMIT PURPOSES ONLY AND SHALL NOT PREVENT THE CITY FROM REQUIRING CORRECTION OF ERRORS IN THE PLANS WHERE SUCH ERRORS ARE SUBSEQUENTLY FOUND TO BE IN VIOLATION OF ANY LAW, ORDINANCE, HEALTH, SAFETY, OR OTHER DESIGN ISSUES. IN ADDITION, THE PROPERTY OWNER MUST DEDICATE STREETS IN ACCORDANCE WITH MINIMUM RIGHT-OF-WAY STANDARDS MAP (ORDINANCE NO. 437, LATEST AMENDMENT).
4. PLAN APPROVAL IS VALID FOR 180 DAYS. PRIOR TO PLAN APPROVAL EXPIRATION, ALL ASSOCIATED PERMITS SHALL BE PURCHASED OR THE PLANS SHALL BE RESUBMITTED FOR EXTENSION OF PLAN APPROVAL. THE EXPIRATION, EXTENSION, AND REINSTATEMENT OF CIVIL ENGINEERING PLANS AND PERMITS SHALL FOLLOW THE SAME GUIDELINES AS THOSE INDICATED IN THE PHOENIX BUILDING CONSTRUCTION CODE ADMINISTRATIVE PROVISIONS SECTION 105.3 FOR BUILDING PERMITS.
5. THE CITY OF PHOENIX PLANNING AND DEVELOPMENT CIVIL/SITE INSPECTION GROUP, 602-262-7811 VOICE OR 602-534-5500 TTY, SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY CONSTRUCTION WORK WITHIN THE PUBLIC RIGHT-OF-WAY.
6. EXISTING OR NEWLY DAMAGED AND/OR DISPLACED CONCRETE CURB, GUTTER, SIDEWALK, OR DRIVEWAY SLAB THAT IS WITHIN THE RIGHT-OF-WAY SHALL BE REPAIRED OR REPLACED, AS NOTED BY CITY INSPECTORS, BEFORE FINAL ACCEPTANCE OF THE WORK.
7. ALL NEW OR RELOCATED UTILITIES SHALL BE PLACED UNDERGROUND.
8. THE ACTUAL POINT OF PAVEMENT MATCHING, AND/OR TERMINATION, SHALL BE DETERMINED IN THE FIELD BY THE PLANNING AND DEVELOPMENT DEPARTMENT CIVIL/SITE INSPECTOR.
9. AN APPROVED PAVING PLAN SHALL BE ON THE JOB SITE AT ALL TIMES. DEVIATIONS FROM THE PLAN MUST BE PRECEDED BY AN APPROVED PLAN REVISION.
10. OBSTRUCTIONS TO PROPOSED IMPROVEMENTS IN THE RIGHT-OF-WAY SHALL BE REMOVED OR RELOCATED BEFORE BEGINNING CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
11. ALL EXISTING CATCH BASINS MUST BE RE-LOCATED WHEN THEY ARE SHOWN IN A NEWLY PROPOSED DRIVEWAY.
12. CONSTRUCTION OF SURFACE IMPROVEMENTS SHALL NOT BEGIN UNTIL CONFLICTING UNDERGROUND UTILITY CONSTRUCTION IS COMPLETED AND SERVICE CONNECTIONS TO ALL PLATTED LOTS HAVE BEEN ADEQUATELY EXTENDED PAST THE RIGHT-OF-WAY.
13. THE PERMIT HOLDER SHALL ARRANGE FOR THE RELOCATION AND RELOCATION COSTS OF ALL UTILITIES, INCLUDING ANY STREET LIGHTS, AND SUBMIT A UTILITY RELOCATION SCHEDULE PRIOR TO THE ISSUANCE OF A CONSTRUCTION PERMIT. RELOCATION OF WATER METERS SHALL BE DONE BY THE WATER SERVICES DEPARTMENT AFTER PAYMENT OF PREVAILING FEES. RELOCATION OF CITY FIRE HYDRANTS REQUIRE A SEPARATE PLAN REVIEW AND PERMIT AT THE DEVELOPER'S EXPENSE.
14. ALL FRAMES, COVERS, VALVE BOXES, AND MANHOLE COVERS SHALL BE ADJUSTED TO FINISH GRADE PRIOR TO COMPLETION OF PAVING OR RELATED CONSTRUCTION. ADJUSTMENT OF EXISTING "TYPE A" OR "TYPE B" WATERLINE VALVE BOXES IN THE PARKWAY SHALL BE CONSIDERED INCIDENTAL TO PARKWAY GRADING. EXISTING "TYPE B" WATERLINE VALVE BOXES SHALL BE REPLACED WITH "TYPE A " BOXES PER COP STANDARD DETAIL P1391.
15. GRADING BETWEEN BACK OF CURB AND PROPERTY LINE SHALL BE LIMITED TO 4:1 SLOPE.
16. CERTIFICATE OF OCCUPANCY (C OF O) AND/OR FINAL ELECTRICAL CLEARANCE FOR ANY BUILDING IS DENIED UNTIL ALL OFFSITE IMPROVEMENTS ARE COMPLETED.
17. TREES AND SHRUBBERY IN THE RIGHT-OF-WAY THAT CONFLICT WITH PROPOSED IMPROVEMENTS SHALL NOT BE REMOVED WITHOUT APPROVAL OF THE CITY LANDSCAPE ARCHITECT. THE PERMIT HOLDER SHALL BE RESPONSIBLE FOR OBTAINING AUTHORIZATION TO REMOVE AND/OR RELOCATE SAID TREES OR SHRUBBERY BY CALLING THE PARKS & RECREATION DEPARTMENT PRIOR TO ANY RIGHT-OF-WAY PLANT RELOCATIONS AT 602-262-6862.
18. THE PLANNING AND DEVELOPMENT CIVIL/SITE INSPECTOR MUST CONTACT STREET TRANSPORTATION DEPARTMENT, TRAFFIC SERVICES DIVISION AT 602-495-0205 VOICE OR 602-534-5500 TTY TWO (2) WEEKS PRIOR TO COMPLETION OF PAVING WORK FOR SIGNING & STRIPING.
19. A PAVEMENT CUT SURCHARGE SHALL BE ASSESSED ON THIS PROJECT FOR ANY TRENCHING OR POTHOLING IN NEW ASPHALT PAVEMENT THAT IS LESS THAN 30 MONTHS OLD. SURCHARGE FEES ASSESSED ARE IN ADDITION TO THE REGULAR PERMIT FEES AND ARE OVER AND ABOVE ANY SPECIAL BACKFILL, COMPACTION, AND PAVEMENT REPLACEMENT STIPULATIONS THAT MAY BE IMPOSED AS A CONDITION OF PERMITTING. PAVEMENT CUT SURCHARGE FEES IS ASSESSED IN ACCORDANCE WITH SECTION 31-38 OF THE PHOENIX CITY CODE.

LEGEND OF EXISTING FEATURES

- FOUND ALUMINUM CAP FLUSH
- FOUND BRASS CAP FLUSH
- FOUND BRASS CAP IN HANDHOLE
- BOLLARD
- CATCH BASIN
- FOUND COTTON PICKER SPINDLE
- DOWN GUY
- DRY WELL
- ELECTRIC JUNCTION BOX
- ELECTRIC TRANSFORMER
- ELECTRIC METER
- ELECTRIC MANHOLE
- FIRE HYDRANT
- STORM DRAIN MANHOLE
- SEWER MANHOLE
- TELEPHONE MANHOLE
- WATER METER
- WATER MANHOLE
- WATER VALVE
- GAS VALVE
- IRONWOOD TREE
- IRRIGATION MANHOLE
- LIGHT POLE
- LIGHT POLE W/MAST
- DOUBLE LIGHT POLE W/MAST
- MESQUITE TREE
- GAS MARKER
- WATER MARKER
- PALO VERDE TREE
- PRICKLY PEAR
- SIGN
- TREE
- TRAFFIC SIGNAL
- TRAFFIC SIGNAL W/MAST
- TRAFFIC SIGNAL JUNCTION BOX
- UTILITY POLE
- SECTION LINE
- CENTER LINE
- RIGHT-OF-WAY TO REMAIN
- RIGHT-OF-WAY TO BE ADJUSTED
- CHAIN LINK FENCE
- WATER LINE
- SEWER LINE
- GAS BLUE STAKE LINE
- UNDERGROUND ELECTRIC LINE
- OVERHEAD ELECTRIC LINE
- STORM DRAIN LINE
- EXISTING PAVEMENT

LEGEND OF PROPOSED FEATURES

- ADJUSTED RIGHT-OF-WAY
- EASEMENT LINE
- SINGLE CURB
- COMMUNICATION LINE
- WATER LINE
- SANITARY SEWER LINE
- GAS LINE
- UNDERGROUND ELECTRIC
- ASPHALT PAVEMENT
- CONCRETE
- PAVEMENT MILLING
- LIGHT POST

REGISTERED PROFESSIONAL ENGINEER (CIVIL) CERTIFICATE NO. 23980 JEFFREY S. ERICKSON Date Signed 11/16/18 ARIZONA, U.S.A. Expires 09/30/20

REVISION RECORD		
NO	DATE	DESCRIPTION

Civil & Environmental Consultants, Inc.
11811 N. Tatum Blvd., Suite 3057 · Phoenix, AZ 85028
Ph: 602.760.2324 · 877.231.2324 · Fax: 602.760.2330
www.cecinc.com

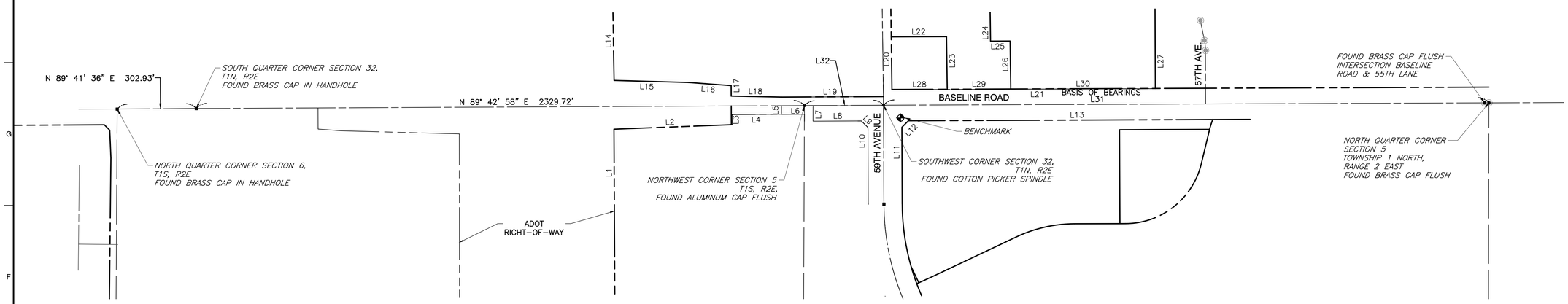
BASELINE ROAD IMPROVEMENTS
LOOP 202 & 57TH AVENUE
PHOENIX, ARIZONA
CIVIL IMPROVEMENT PLANS

OFFSITE IMPROVEMENT PLANS
LEGEND AND NOTE SHEET

DATE:	NOVEMBER 16, 2018	DRAWN BY:	JD
DWG SCALE:	NONE	CHECKED BY:	JG
PROJECT NO:	182-001		
APPROVED BY:			

DRAWING NO.: OP02

SHEET 2 OF 24



LINE TABLE		
LINE NO.	LENGTH	BEARING
L1	778.90'	N00° 17' 02"W
L2	449.98'	N87° 48' 20"E
L3	72.00'	N00° 17' 02"W
L4	192.45'	S89° 42' 58"W
L5	33.00'	N00° 10' 30"W
L6	121.10'	N89° 42' 58"E
L7	60.00'	S00° 14' 04"W
L8	185.29'	N89° 42' 58"E
L9	35.34'	S45° 15' 12"E
L10	294.45'	S00° 13' 22"E
L11	294.51'	S00° 13' 22"E
L12	35.36'	S44° 46' 38"W
L13	1165.28'	N89° 46' 38"E
L14	288.45'	N00° 56' 39"W
L15	284.92'	N88° 25' 51"W
L16	164.14'	N85° 48' 58"W
L17	40.00'	N00° 17' 02"W
L18	192.51'	N88° 47' 44"W
L19	390.63'	S89° 42' 58"W
L20	2575.47'	N00° 46' 34"W
L21	2286.64'	N89° 46' 38"E
L22	211.72'	N89° 46' 38"E
L23	201.72'	N00° 46' 34"W
L24	381.02'	N00° 46' 34"W
L25	75.00'	S89° 46' 34"W
L26	184.01'	N00° 46' 34"W
L27	344.01'	S00° 13' 26"E
L28	211.72'	N89° 46' 38"E
L29	243.28'	N89° 46' 38"E
L30	553.87'	N89° 46' 38"E
L31	2319.06'	N89° 46' 38"E
L32	302.81'	N89° 42' 58"E

BENCH MARK

ADOT ALUMINUM CAP ON NORTH SIDE OF CONCRETE BASE OF TRANSMISSION TOWER #25, SOUTH SIDE OF BASELINE ROAD AT 59TH AVENUE TO NORTH.
ELEVATION=1001.624 (CITY OF PHOENIX DATUM, NGVD29)

BASIS OF BEARING

THE NORTH LINE OF THE NORTHWEST QUARTER OF SECTION 5, TOWNSHIP 1 SOUTH, RANGE 2 EAST AS SHOWN IN BOOK 846, PAGE 5, RECORDS OF MARICOPA COUNTY, ARIZONA. SAID LINE BEARS NORTH 89°46'38" EAST.

NORTH

SCALE IN FEET
0 200 400

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In Maricopa County: (602) 263-1100

REGISTERED PROFESSIONAL ENGINEER (CIVIL)
CERTIFICATE NO. 23980
JEFFREY S. ERICKSON
Date Signed 11/16/18
ARIZONA, U.S.A.
Expires 09/30/20

REVISION RECORD

NO	DATE	DESCRIPTION

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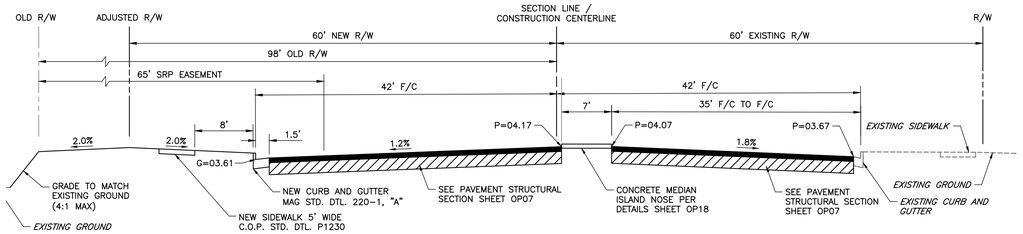
BASELINE ROAD IMPROVEMENTS
LOOP 202 & 57TH AVENUE
PHOENIX, ARIZONA
CIVIL IMPROVEMENT PLANS

OFFSITE IMPROVEMENT PLANS
SURVEY CONTROL

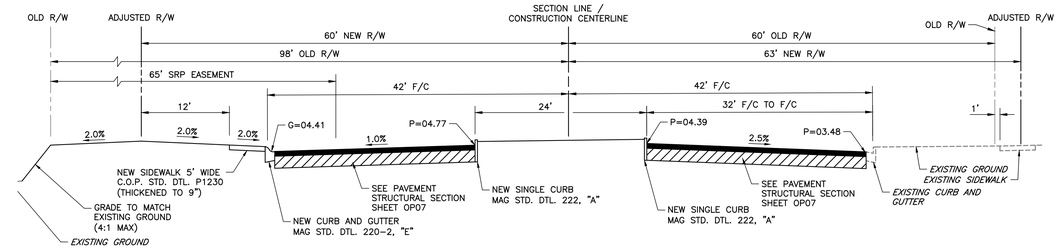
DATE: NOVEMBER 16, 2018
DRAWN BY: JD
DWG SCALE: NONE
CHECKED BY: JG
PROJECT NO: 182-001
APPROVED BY:

DRAWING NO.: OP03
SHEET 3 OF 24

\\SVR-PHOENIX\Projects\2018\182-001\-CADD\Dwg\CIVIL\Offsite Improvement\182001-CIVIL-Survey Control.dwg(OP03) LS:(10.8.2018 - khogsley) - LP: 11/16/2018 9:53 AM



TYPICAL SECTION A-A (STA 12+00.00)
(REFER TO SHEET OP15)



TYPICAL SECTION B-B (STA 14+00.00)
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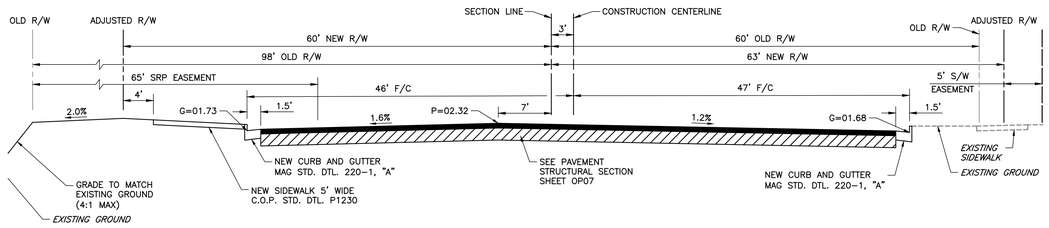

TYPICAL SECTION C-C (STA 16+50.00)
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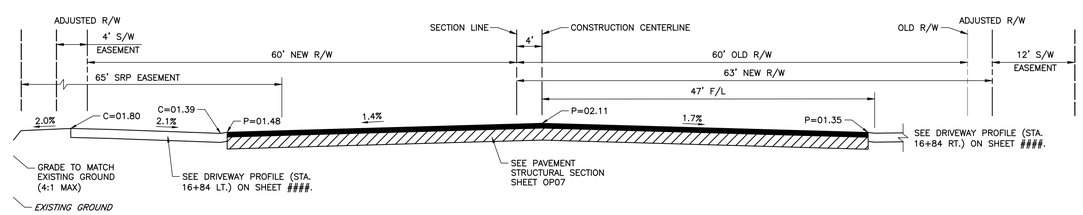

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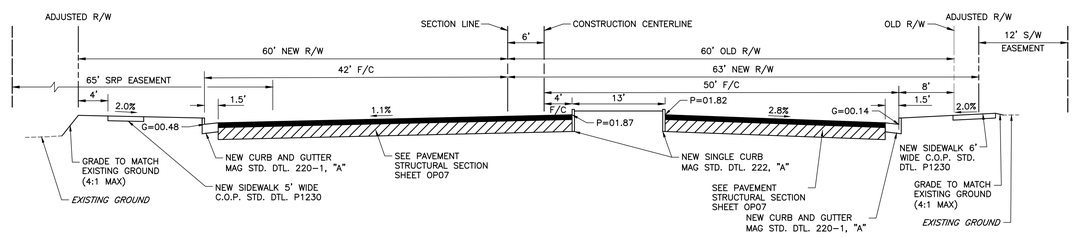
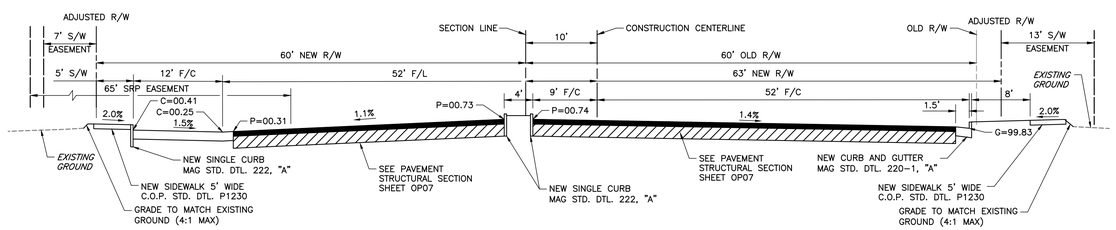


TYPICAL SECTION E-E (STA 18+00.00)
(REFER TO SHEET OP13)



TYPICAL SECTION F-F (STA 21+00.00)
(REFER TO SHEET OP12 & OP13)

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ARIZONA 811
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In Maricopa County: (602) 263-1100

REGISTERED PROFESSIONAL ENGINEER (CIVIL)
CERTIFICATE NO. 23980
JEFFREY S. ERICKSON
Date Signed 11/16/18
ARIZONA, U.S.A.
Expires 09/30/20

REVISION RECORD		
NO.	DATE	DESCRIPTION

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11811 N. Tatum Blvd., Suite 3057 - Phoenix, AZ 85028
Ph: 602.760.2324 - 877.231.2324 - Fax: 602.760.2330
www.cecinc.com

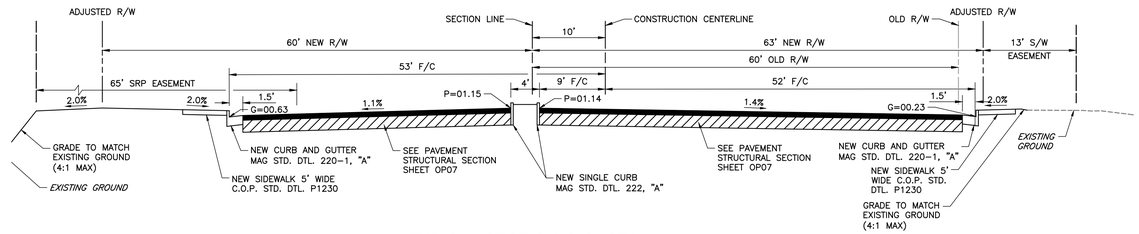
BASELINE ROAD IMPROVEMENTS
LOOP 202 & 57TH AVENUE
PHOENIX, ARIZONA
CIVIL IMPROVEMENT PLANS

OFFSITE IMPROVEMENT PLANS
ROAD SECTIONS

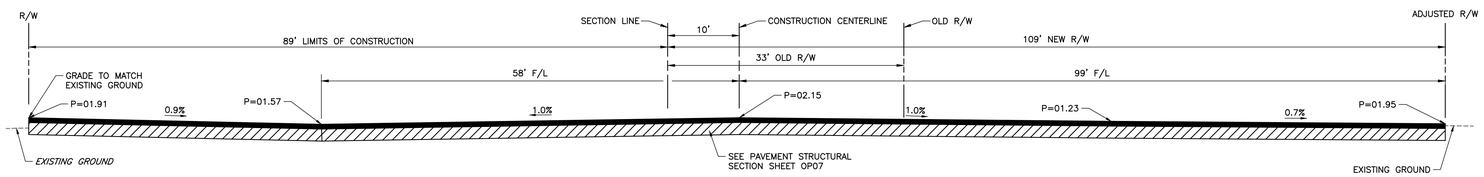
DATE:	NOVEMBER 16, 2018
DRAWN BY:	JD
DWG SCALE:	NONE
CHECKED BY:	JJG
PROJECT NO:	182-001
APPROVED BY:	

DRAWING NO.: **OP04**

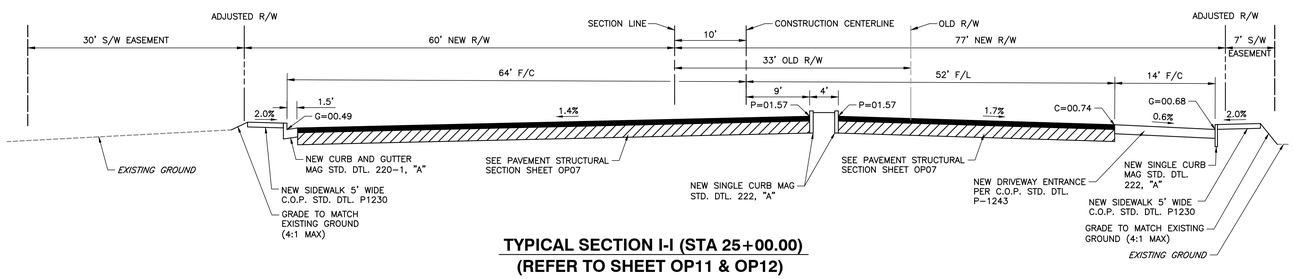
SHEET 4 OF 24



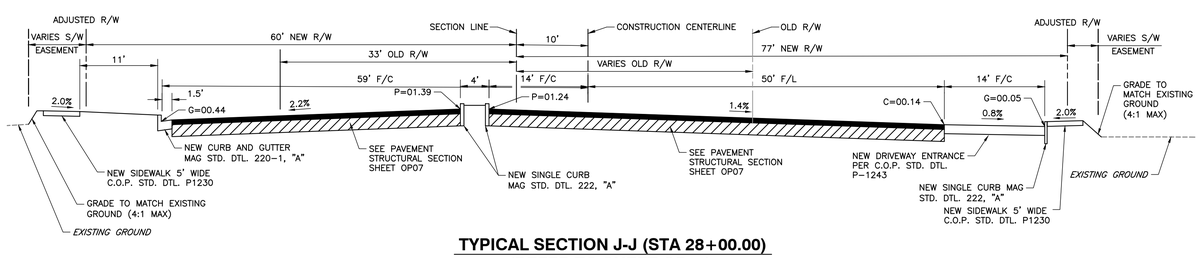
TYPICAL SECTION G-G (STA 22+00.00)
(REFER TO SHEET OP12)



TYPICAL SECTION H-H (STA 23+33.98)
(REFER TO SHEET OP12)



TYPICAL SECTION I-I (STA 25+00.00)
(REFER TO SHEET OP11 & OP12)



TYPICAL SECTION J-J (STA 28+00.00)
(REFER TO SHEET OP11)

Call at least two full working days before you begin excavation.
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In Maricopa County: (602) 263-1100

REGISTERED PROFESSIONAL ENGINEER (CIVIL) CERTIFICATE NO. 23980 JEFFREY S. ERICKSON Date Signed 11/16/18 ARIZONA, U.S.A. Expires 09/30/20

REVISION RECORD

NO	DATE	DESCRIPTION

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Ph: 602.760.2324 - 877.231.2324 - Fax: 602.760.2330
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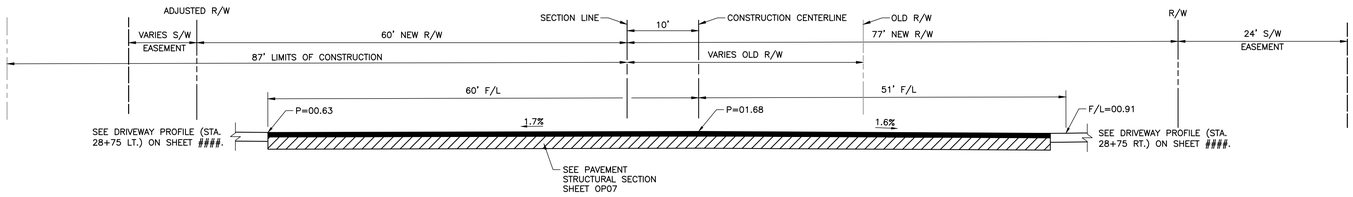
BASELINE ROAD IMPROVEMENTS
LOOP 202 & 57TH AVENUE
PHOENIX, ARIZONA
CIVIL IMPROVEMENT PLANS

OFFSITE IMPROVEMENT PLANS
ROAD SECTIONS

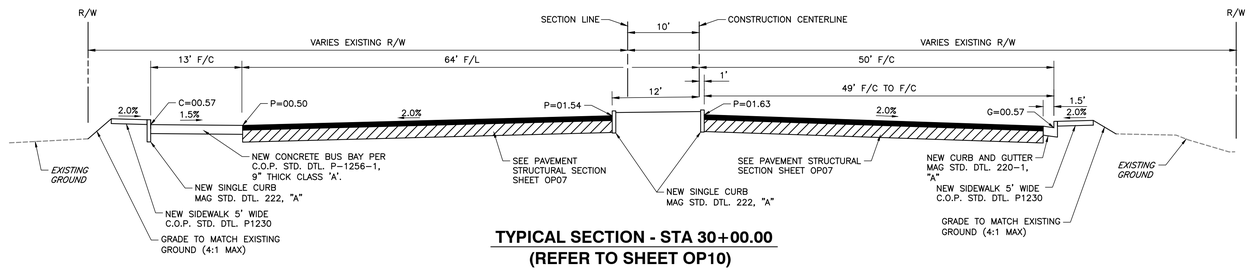
DATE:	NOVEMBER 16, 2018	DRAWN BY:	JD
DWG SCALE:	NONE	CHECKED BY:	JG
PROJECT NO:	182-001	APPROVED BY:	

DRAWING NO.: OP05

SHEET 5 OF 24



TYPICAL SECTION - STA 28+75.46
(REFER TO SHEET OP11)



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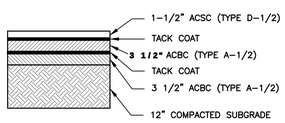
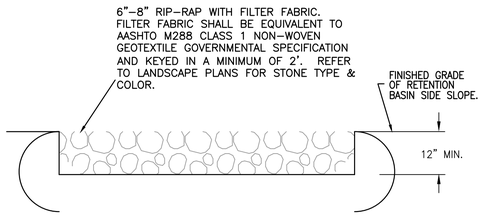
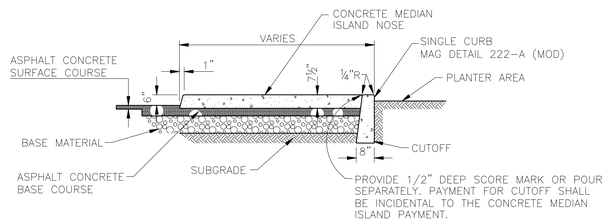
(REFER TO SHEET OP10)



ASPHALT PAVEMENT SECTION
NOT TO SCALE



RIP-RAP WITH FILTER FABRIC
NOT TO SCALE



CONCRETE MEDIAN ISLAND NOSE DETAIL
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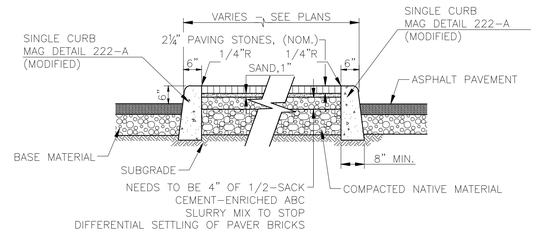

PAVING STONE DETAIL
NOT TO SCALE

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ARIZONA 811
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REGISTERED PROFESSIONAL ENGINEER (CIVIL)
CERTIFICATE NO. 23980
JEFFREY S. ERICKSON
Date Signed 11/16/18
ARIZONA, U.S.A.
Expires 09/30/20

REVISION RECORD

NO	DATE	DESCRIPTION

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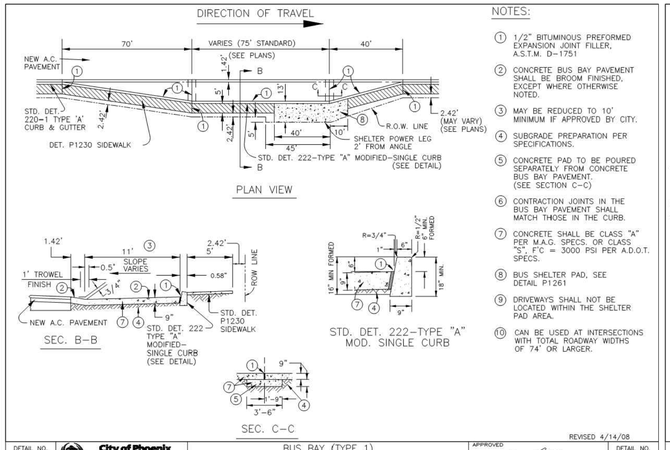
BASELINE ROAD IMPROVEMENTS
LOOP 202 & 57TH AVENUE
PHOENIX, ARIZONA
CIVIL IMPROVEMENT PLANS

OFFSITE IMPROVEMENT PLANS
ROAD SECTIONS

DATE: NOVEMBER 16, 2018 | DRAWN BY: JD
DWG SCALE: NONE | CHECKED BY: JJG
PROJECT NO: 182-001
APPROVED BY:

DRAWING NO.: **OP06**
SHEET 6 OF 24

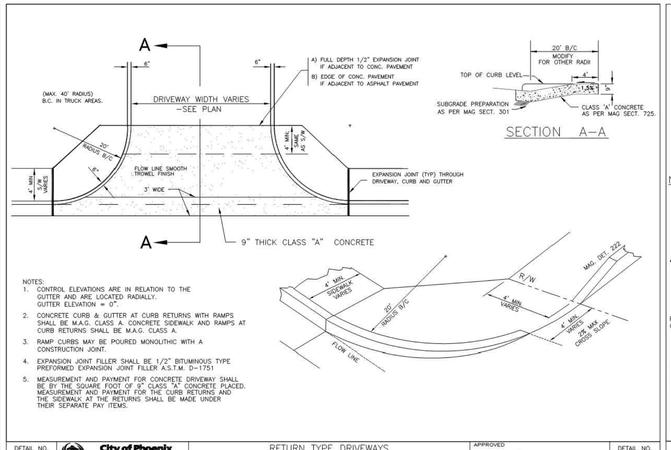
\\SVR-PHOENIX\Projects\2018\182-001-CAD\Dwg\CIVIL\Offsite Improvement\182001-OP01-Sections & Details.dwg(OP06) LS:(11/16/2018 - aparrotta) - LP: 11/16/2018 9:34 AM



NOTES:

1. 1/2" BITUMINOUS PREFORMED EXPANSION JOINT FILLER, A.S.T.M. D–1751
2. CONCRETE BUS BAY PAVEMENT SHALL BE BROOM FINISHED, EXCEPT WHERE OTHERWISE NOTED.
3. MAY BE REDUCED TO 10' MINIMUM IF APPROVED BY CITY.
4. SUBGRADE PREPARATION PER SPECIFICATIONS.
5. CONCRETE PAD TO BE POURED SEPARATELY FROM CONCRETE BUS BAY PAVEMENT. (SEE SECTION C–C)
6. CONTRACTION JOINTS IN THE BUS BAY PAVEMENT SHALL MATCH THOSE IN THE CURB.
7. CONCRETE SHALL BE CLASS "A" PER M.A.G. SPECS. OR CLASS "S", F'C = 3000 PSI PER A.D.O.T. SPECS.
8. BUS SHELTER PAD, SEE DETAIL P1261
9. DRIVEWAYS SHALL NOT BE LOCATED WITHIN THE SHELTER PAD AREA.
10. CAN BE USED AT INTERSECTIONS WITH TOTAL ROADWAY WIDTHS OF 74' OR LARGER.

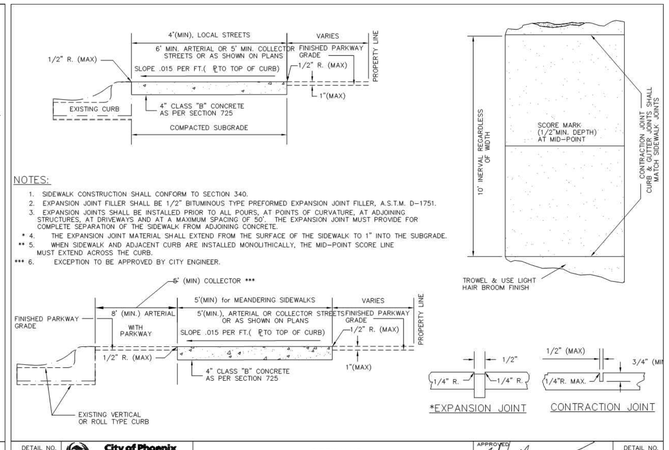
DETAIL NO. P1256–1 | City of Phoenix STANDARD DETAIL | BUS BAY (TYPE 1) | REVISED 4/14/08 | APPROVED ACTING CITY ENGINEER 7/31/08 DATE | DETAIL NO. P1256–1



NOTES:

1. CONTROL ELEVATIONS ARE IN RELATION TO THE GUTTER AND ARE LOCATED RADIALLY. GUTTER ELEVATION = 0".
2. CONCRETE CURB & GUTTER AT CURB RETURNS WITH RAMPS SHALL BE M.A.G. CLASS A. CONCRETE SIDEWALK AND RAMPS AT CURB RETURNS SHALL BE M.A.G. CLASS A.
3. RAMP CURBS MAY BE POURED MONOLITHIC WITH A CONSTRUCTION JOINT.
4. EXPANSION JOINT FILLER SHALL BE 1/2" BITUMINOUS TYPE PREFORMED EXPANSION JOINT FILLER A.S.T.M. D–1751
5. MEASUREMENT AND PAYMENT FOR CONCRETE DRIVEWAY SHALL BE BY THE SQUARE FOOT OF 9" CLASS "A" CONCRETE PLACED. MEASUREMENT AND PAYMENT FOR THE CURB RETURNS AND THE SIDEWALK AT THE RETURNS SHALL BE MADE UNDER THEIR SEPARATE PAY ITEMS.

DETAIL NO. P1243 | City of Phoenix STANDARD DETAIL | RETURN TYPE DRIVEWAYS WITH ATTACHED SIDEWALK | APPROVED CITY ENGINEER 7/19/04 DATE | DETAIL NO. P1243



NOTES:

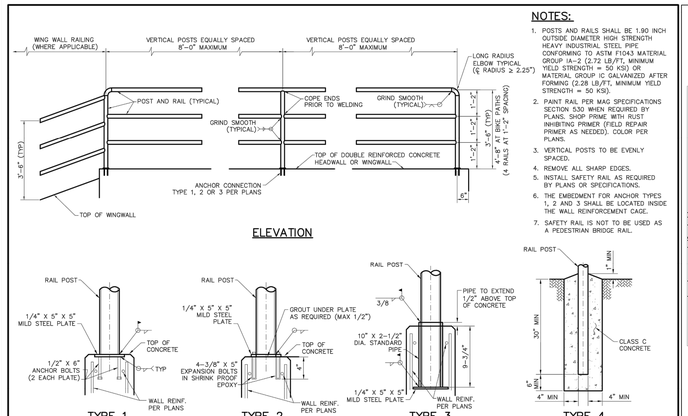
1. SIDEWALK CONSTRUCTION SHALL CONFORM TO SECTION 340.
2. EXPANSION JOINT FILLER SHALL BE 1/2" BITUMINOUS TYPE PREFORMED EXPANSION JOINT FILLER, A.S.T.M. D–1751.
3. EXPANSION JOINTS SHALL BE INSTALLED PRIOR TO ALL POURS, AT POINTS OF CURVATURE, AT ADJOINING STRUCTURES, AT DRIVEWAYS AND AT A MAXIMUM SPACING OF 50'. THE EXPANSION JOINT MUST PROVIDE FOR COMPLETE SEPARATION OF THE SIDEWALK FROM ADJOINING CONCRETE.

* 4. THE EXPANSION JOINT MATERIAL SHALL EXTEND FROM THE SURFACE OF THE SIDEWALK TO 1" INTO THE SUBGRADE.

** 5. WHEN SIDEWALK AND ADJACENT CURB ARE INSTALLED MONOLITHICALLY, THE MID–POINT SCORE LINE MUST EXTEND ACROSS THE CURB.

*** 6. EXCEPTION TO BE APPROVED BY CITY ENGINEER.

DETAIL NO. P1230 | City of Phoenix STANDARD DETAIL | SIDEWALKS | APPROVED CITY ENGINEER 12/10/2013 DATE | DETAIL NO. P1230

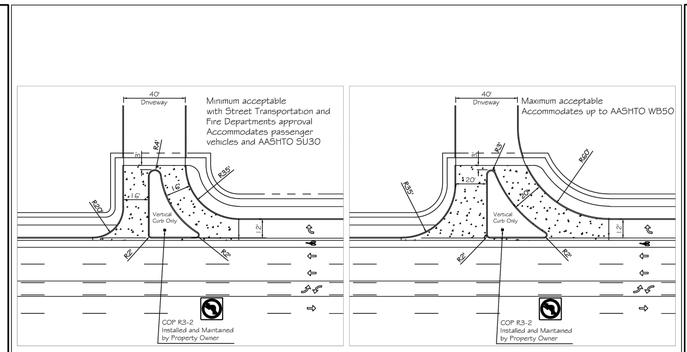


NOTES:

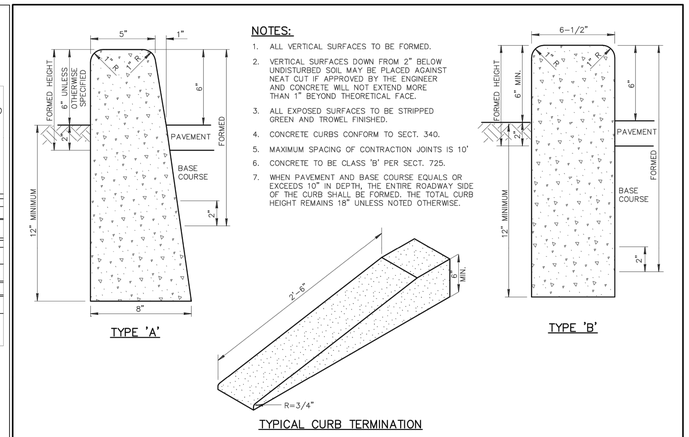
1. POSTS AND RAILS SHALL BE 1.90 INCH OUTSIDE DIAMETER HIGH STRENGTH HEAVY INDUSTRIAL STEEL PIPE CONFORMING TO ASTM F1043 MATERIAL GROUP IA–2 (2.72 LB/FT, MINIMUM YIELD STRENGTH = 50 KSI) OR MATERIAL GROUP IC GALVANIZED AFTER FORMING (2.28 LB/FT, MINIMUM YIELD STRENGTH = 50 KSI).
2. PAINT RAIL PER MAG SPECIFICATIONS SECTION 530 WHEN REQUIRED BY PLANS. SHOP PRIME WITH RUST INHIBITING PRIMER (FIELD REPAIR PRIMER AS NEEDED). COLOR PER PLANS.
3. VERTICAL POSTS TO BE EVENLY SPACED.
4. REMOVE ALL SHARP EDGES.
5. INSTALL SAFETY RAIL AS REQUIRED BY PLANS OR SPECIFICATIONS.
6. THE EMBEDMENT FOR ANCHOR TYPES 1, 2 AND 3 SHALL BE LOCATED INSIDE THE WALL REINFORCEMENT CAGE.
7. SAFETY RAIL IS NOT TO BE USED AS A PEDESTRIAN BRIDGE RAIL.

NOTE: SEE PLANS FOR ANCHORAGE DETAILS FOR ATTACHMENT TO SINGULARLY REINFORCED AND NON–REINFORCED WALLS.

DETAIL NO. 145 | MARICOPA ASSOCIATION of GOVERNMENTS STANDARD DETAIL ENGLISH | SAFETY RAIL | REVISED 01–01–2016 | DETAIL NO. 145



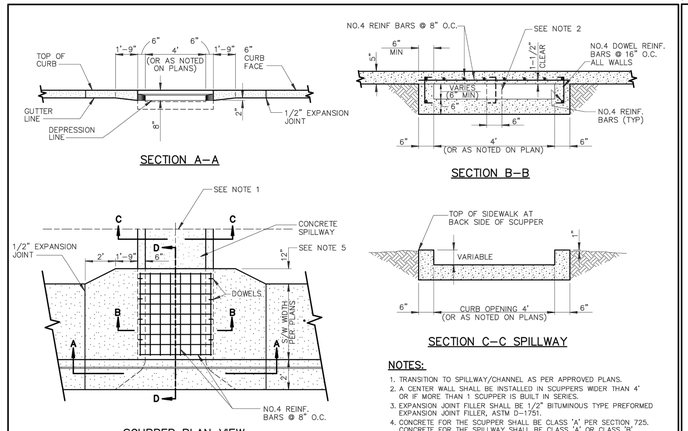
DETAIL NO. P1243–3 | City of Phoenix STANDARD DETAIL | LIMITED ACCESS DRIVEWAY WITH NO LT–IN AND WITH DECELERATION LANE | APPROVED CITY ENGINEER 07/01/2015 DATE | DETAIL NO. P1243–3



NOTES:

1. ALL VERTICAL SURFACES TO BE FORMED.
2. VERTICAL SURFACES DOWN FROM 2" BELOW UNDISTURBED SOIL MAY BE PLACED AGAINST NEAT CUT IF APPROVED BY THE ENGINEER AND CONCRETE WILL NOT EXTEND MORE THAN 1" BEYOND THEORETICAL FACE.
3. ALL EXPOSED SURFACES TO BE STRIPPED GREEN AND TROWEL FINISHED.
4. CONCRETE CURBS CONFORM TO SECT. 340.
5. MAXIMUM SPACING OF CONTRACTION JOINTS IS 10'
6. CONCRETE TO BE CLASS 'B' PER SECT. 725.
7. WHEN PAVEMENT AND BASE COURSE EQUALS OR EXCEEDS 10" IN DEPTH, THE ENTIRE ROADWAY SIDE OF THE CURB SHALL BE FORMED. THE TOTAL CURB HEIGHT REMAINS 18" UNLESS NOTED OTHERWISE.

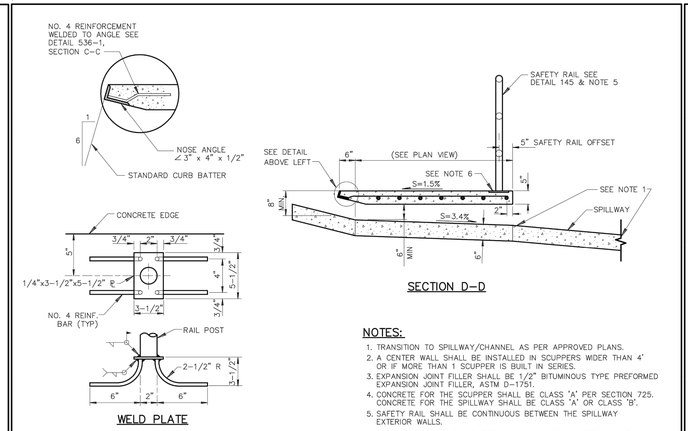
DETAIL NO. 222 | MARICOPA ASSOCIATION of GOVERNMENTS STANDARD DETAIL ENGLISH | SINGLE CURB – TYPES A, B AND TERMINATION | REVISED 01–01–2008 | DETAIL NO. 222



NOTES:

1. TRANSITION TO SPILLWAY/CHANNEL AS PER APPROVED PLANS.
2. A CENTER WALL SHALL BE INSTALLED IN SCUPPERS WIDER THAN 4' OR IF MORE THAN 1 SCUPPER IS BUILT IN SERIES.
3. EXPANSION JOINT FILLER SHALL BE 1/2" BITUMINOUS TYPE PREFORMED EXPANSION JOINT FILLER, ASTM D–1751.
4. CONCRETE FOR THE SCUPPER SHALL BE CLASS 'A' PER SECTION 725. CONCRETE FOR THE SPILLWAY SHALL BE CLASS 'A' OR CLASS 'B'.
5. 12" OFFSET DISTANCE SHALL BE INCREASED TO 2'–6" FOR DESIGNATED BICYCLE PATHS.

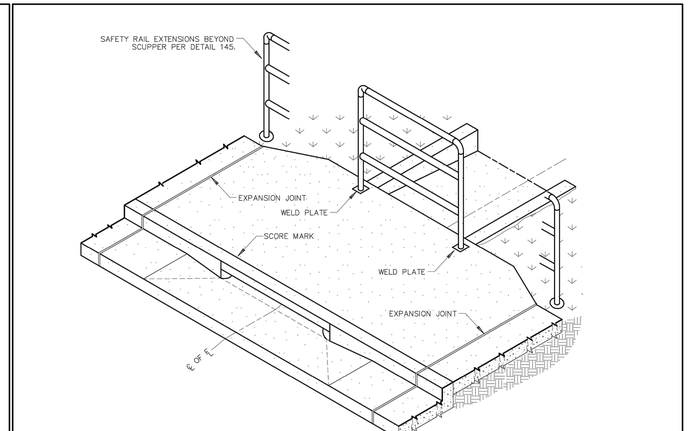
DETAIL NO. 206–1 | MARICOPA ASSOCIATION of GOVERNMENTS STANDARD DETAIL ENGLISH | CONCRETE SCUPPER | REVISED 01–01–2018 | DETAIL NO. 206–1



NOTES:

1. TRANSITION TO SPILLWAY/CHANNEL AS PER APPROVED PLANS.
2. A CENTER WALL SHALL BE INSTALLED IN SCUPPERS WIDER THAN 4' OR IF MORE THAN 1 SCUPPER IS BUILT IN SERIES.
3. EXPANSION JOINT FILLER SHALL BE 1/2" BITUMINOUS TYPE PREFORMED EXPANSION JOINT FILLER, ASTM D–1751.
4. CONCRETE FOR THE SCUPPER SHALL BE CLASS 'A' PER SECTION 725. CONCRETE FOR THE SPILLWAY SHALL BE CLASS 'A' OR CLASS 'B'.
5. SAFETY RAIL SHALL BE CONTINUOUS BETWEEN THE SPILLWAY EXTERIOR WALLS.
6. USE WELD PLATES FOR SAFETY RAIL ANCHORS LOCATED IN THE 5" THICK CONCRETE.

DETAIL NO. 206–2 | MARICOPA ASSOCIATION of GOVERNMENTS STANDARD DETAIL ENGLISH | CONCRETE SCUPPER | REVISED 01–01–2007 | DETAIL NO. 206–2



DETAIL NO. 206–3 | MARICOPA ASSOCIATION of GOVERNMENTS STANDARD DETAIL ENGLISH | CONCRETE SCUPPER | REVISED 01–01–2007 | DETAIL NO. 206–3

REGISTERED PROFESSIONAL ENGINEER (CIVIL) CERTIFICATE NO. 23980 JEFFREY S. ERICKSON Date Signed 11/16/18 ARIZONA, U.S.A. Expires 09/30/20

REVISION RECORD

NO	DATE	DESCRIPTION

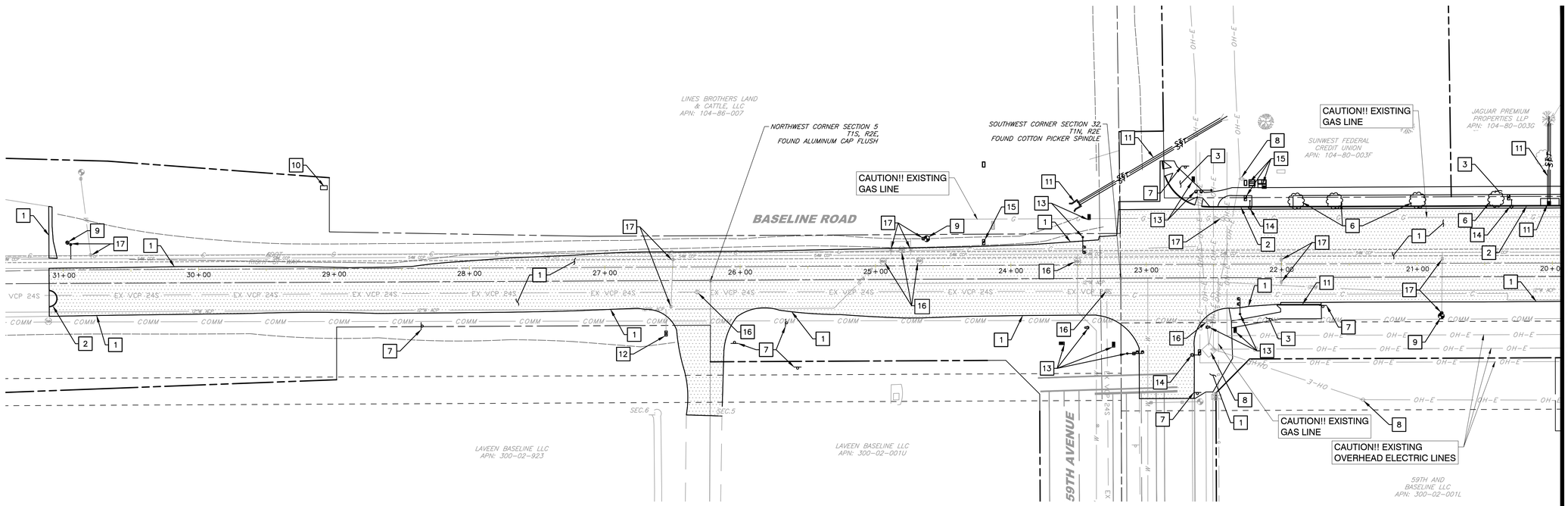
Civil & Environmental Consultants, Inc.
11811 N. Tatum Blvd., Suite 3057 - Phoenix, AZ 85028
Ph: 602.760.2324 - 877.231.2324 - Fax: 602.760.2330
www.cecinc.com

BASELINE ROAD IMPROVEMENTS
LOOP 202 & 57TH AVENUE
PHOENIX, ARIZONA
CIVIL IMPROVEMENT PLANS

OFFSITE IMPROVEMENT PLANS
ROADWAY DETAILS

DATE: NOVEMBER 16, 2018 | DRAWN BY: JD
DWG SCALE: NONE | CHECKED BY: JJG
PROJECT NO: 182-001
APPROVED BY:

DRAWING NO.: OP07
SHEET 7 OF 24



DEMOLITION NOTES

REMOVALS

NO.		UNIT	QTY.
1	SAWCUT & REMOVE EXISTING AC PAVEMENT TO A CLEAN, VERTICAL EDGE AS SHOWN ON PLAN. MINIMUM WIDTH = 2'.	SY	6,836
2	REMOVE EXISTING CONCRETE CURB (AND GUTTER IF APPLICABLE).	LF	307
3	SAWCUT TO NEAREST JOINT AND REMOVE EXISTING CONCRETE/SIDEWALK.	SF	2,344
6	REMOVE AND/OR SALVAGE EXISTING TREE. CONSULT WITH LANDSCAPE ARCHITECT.	EA	4
7	REMOVE EXISTING SIGN. COORDINATE WITH CITY OF PHOENIX FOR SALVAGE/RE-USE.	EA	7
8	EXISTING POWER POLE TO REMAIN. PROTECT IN PLACE.	EA	3
9	CONTRACTOR TO COORDINATE WITH THE CITY OF PHOENIX FOR REMOVAL/RELOCATION OF EXISTING FIRE HYDRANT. REFER TO UTILITY PLAN FOR MORE DETAIL.	EA	3
10	CONTRACTOR TO COORDINATE WITH SALT RIVER PROJECT (SRP) FOR REMOVAL/RELOCATION OF EXISTING ELECTRIC CABINET.	EA	1
11	REMOVE EXISTING CONCRETE HEADWALL OR STORM DRAIN CATCH BASIN. REMOVE ATTACHED CONNECTOR PIPE.	EA	3
12	CONTRACTOR TO COORDINATE WITH THE CITY OF PHOENIX FOR REMOVAL/RELOCATION OF EXISTING WATER METER. REFER TO UTILITY PLAN FOR RELOCATION.	EA	1
13	EXISTING TRAFFIC SIGNAL EQUIPMENT TO BE REMOVED/RELOCATED. REFER WITH TRAFFIC SIGNAL PLANS FOR RELOCATION.	EA	11
14	EXISTING STREET LIGHT TO BE REMOVED/RELOCATED. REFER TO STREET LIGHT PLANS FOR RELOCATION.	EA	3
15	EXISTING ELECTRICAL FEATURE – REFER TO UTILITY PLAN FOR FURTHER DETAILS.	–	–
16	EXISTING MANHOLE TO REMAIN. PROTECT IN PLACE. REFER TO IMPROVEMENT PLANS FOR RIM ADJUSTMENTS.	EA	7
17	EXISTING VALVE TO REMAIN. PROTECT IN PLACE. REFER TO IMPROVEMENT PLANS FOR RIM ADJUSTMENTS.	EA	12

NORTH

SCALE IN FEET
0 40 80

SPECIAL NOTES

1. THE STATION & OFFSETS BASED ON STATION 0+00 AT THE NORTH QUARTER CORNER OF SECTION 5, T.1S., R.2E. AT THE INTERSECTION OF 55TH LANE & BASELINE ROAD.
2. REFER TO SHEETS OP10 – OP15 FOR RIM ADJUSTMENTS.

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

REGISTERED PROFESSIONAL ENGINEER (CIVIL)
CERTIFICATE NO. 23980
JEFFREY S. ERICKSON
Date Signed 11/16/18
ARIZONA, U.S.A.
Expires 09/30/20

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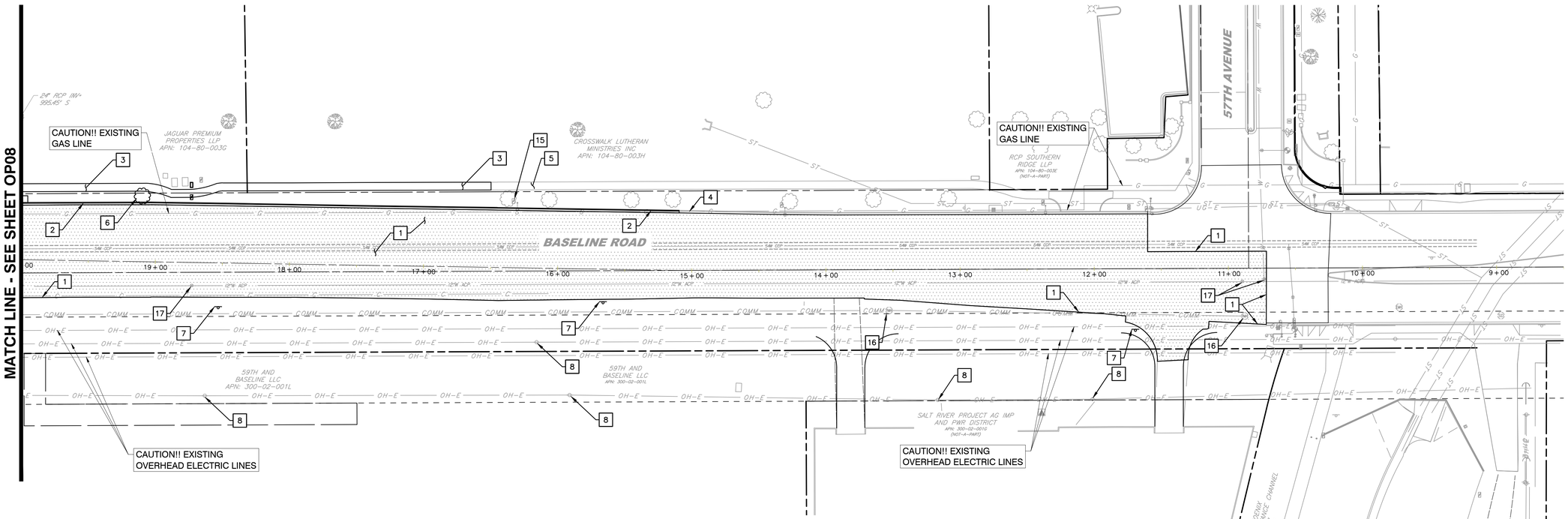
BASELINE ROAD IMPROVEMENTS
LOOP 202 & 57TH AVENUE
PHOENIX, ARIZONA
CIVIL IMPROVEMENT PLANS

OFFSITE IMPROVEMENT PLANS
DEMOLITION PLAN

DATE: NOVEMBER 16, 2018 | DRAWN BY: JD
DWG SCALE: NONE | CHECKED BY: JG
PROJECT NO: 182-001
APPROVED BY:

DRAWING NO.: OP08
SHEET 8 OF 24

\\SVR-PHXENV\Projects\2018\182-001\-CADD\Dwg\CIVIL\Offsite Improvement\182001-CIVIL-Demo.dwg[DEMO WEST] LS:(11/1/2018 - eperrotti) - LP: 11/16/2018 9:35 AM



DEMOLITION NOTES

REMOVALS

NO.		UNIT	QTY.
1	SAWCUT & REMOVE EXISTING AC PAVEMENT TO A CLEAN, VERTICAL EDGE AS SHOWN ON PLAN. MINIMUM WIDTH = 2'.	SY	6,895
2	REMOVE EXISTING CONCRETE CURB (AND GUTTER IF APPLICABLE).	LF	491
3	SAWCUT TO NEAREST JOINT AND REMOVE EXISTING CONCRETE/SIDEWALK.	SF	1,989
4	EXISTING CURB TO REMAIN. PROTECT IN PLACE.	LF	350
5	EXISTING CONCRETE SIDEWALK TO REMAIN. PROTECT IN PLACE.	SF	1,114
6	REMOVE AND/OR SALVAGE EXISTING TREE. CONSULT WITH LANDSCAPE ARCHITECT.	EA	1
7	REMOVE EXISTING SIGN. COORDINATE WITH CITY OF PHOENIX FOR SALVAGE/RE-USE.	EA	3
8	EXISTING POWER POLE TO REMAIN. PROTECT IN PLACE.	EA	5
15	EXISTING ELECTRICAL FEATURE – REFER TO UTILITY PLAN FOR FURTHER DETAILS.	EA	1
16	EXISTING MANHOLE TO REMAIN. PROTECT IN PLACE. REFER TO IMPROVEMENT PLANS FOR RIM ADJUSTMENTS.	EA	2
17	EXISTING VALVE TO REMAIN. PROTECT IN PLACE. REFER TO IMPROVEMENT PLANS FOR RIM ADJUSTMENTS.	EA	3

NORTH

SCALE IN FEET
0 40 80

SPECIAL NOTES

1. THE STATION & OFFSETS BASED ON STATION 0+00 AT THE NORTH QUARTER CORNER OF SECTION 5, T.1S., R.2E. AT THE INTERSECTION OF 55TH LANE & BASELINE ROAD.
2. REFER TO SHEETS OP10 – OP15 FOR RIM ADJUSTMENTS.

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REGISTERED PROFESSIONAL ENGINEER (CIVIL)
CERTIFICATE NO. Z39860
JEFFREY S. ERICKSON
Date Signed 11/16/18
ARIZONA, U.S.A.
Expires 09/30/20

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BASELINE ROAD IMPROVEMENTS
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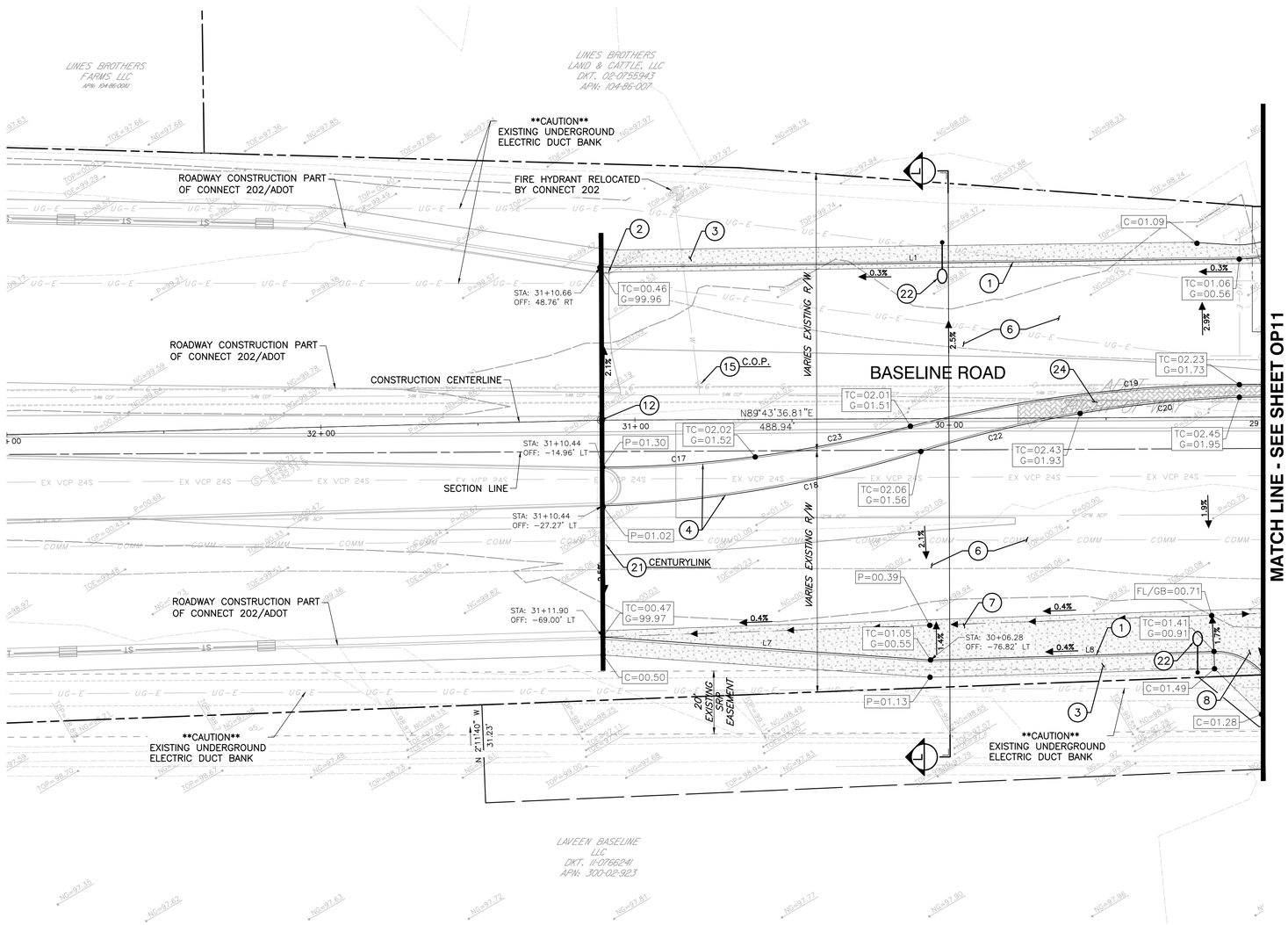
CIVIL IMPROVEMENT PLANS

OFFSITE IMPROVEMENT PLANS
DEMOLITION PLAN

DATE: NOVEMBER 16, 2018 | DRAWN BY: JD
DWG SCALE: NONE | CHECKED BY: JG
PROJECT NO: 182-001
APPROVED BY:

DRAWING NO.: OP09
SHEET 9 OF 24

\\SVR-PHOENIX\Projects\2018\182-001\-CADD\Dwg\CVD\1\Offsite Improvement\182001-CVD1-Demo.dwg[DEMO DET] LS(1/1/2018 - eperrotti) - LP: 11/16/2018 9:35 AM



CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C9	32.02	19.98	91.84
C17	49.09	374.34	7.51
C18	103.16	388.62	15.21
C19	105.83	420.39	14.42
C20	51.00	388.62	7.52
C22	52.16	388.62	7.69
C23	50.16	420.39	6.84

LINE TABLE		
LINE	LENGTH	DIRECTION
L1	198.45	N89°13'33.86"E
L7	104.54	S85°59'18.14"E
L8	90.29	N88°17'06.89"E

NEW ROAD CONSTRUCTION

NO.		UNIT	QTY.
1	CONSTRUCT CONCRETE CURB & GUTTER PER MAG STD. DET. 220, TYPE A.	LF	404
2	CONSTRUCT TRANSITION FROM MAG CURB TO ADOT CURB – 3' TYPICAL.	EA	1
3	CONSTRUCT CONCRETE SIDEWALK PER COP STD. DET. P1230.	SF	2,200
4	CONSTRUCT CONCRETE SINGLE CURB PER MAG STD. DTL. 222.	LF	430
6	INSTALL NEW PAVEMENT PER SECTION ON SHEET OP06.	SY	2,424
7	CONSTRUCT CONCRETE BUS BAY PAVEMENT, COP STD. DTL. P1256–1, 9" THICK, CLASS 'A'.	SF	1,877
12	INSTALL SURVEY MARKER PER MAG STD DET 120.	EA	1
15	ADJUST WATER UTILITY TO GRADE, PER COP PAVING NOTE 14 ON SHT OP02 & MAG STD DETS 391–1 & 391–2.	EA	1
21	ADJUST RESPECTIVE UTILITY TO GRADE SEE COP PAVING NOTE 14 ON SHT OP02	EA	1
22	INSTALL STREET LIGHT PER LIGHTING PLAN.	EA	2
24	INSTALL PAVING STONES PER DETAIL ON SHEET OP06.	SF	337

SPECIAL NOTES

1. STATION & OFFSETS BASED ON THE NORTH QUARTER CORNER OF SECTION 5. T1.S., R.2E., 16.89' EAST OF THE INTERSECTION OF 55TH LANE & BASELINE ROAD, WHERE STA=10+00 E.
2. SEE SHEET OP04 – OP06 FOR ROAD SECTIONS.
3. SEE SHEET OP07 FOR ROADWAY DETAILS.
4. SEE SHEET OP22 – OP23 FOR SIDEWALK GEOMETRICS.
5. SEE SHEET OP24 FOR SCUPPER PROFILES.
6. REFER TO ONSITE PLANS PREPARED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. FOR CONTINUATIONS AND PROPOSED GRADES.
7. PROPOSED STREET LIGHT BY OTHERS.
8. EXISTING IRRIGATION STRUCTURE TO BE REMOVED BY OTHERS.
9. CIVIL & ENVIRONMENTAL CONSULTANTS, INC./OWNER ARE NOT RESPONSIBLE FOR EXISTING PAVEMENT CONDITIONS OUTSIDE THE DELINEATED PAVED AREAS SHOWN ON THESE PLANS.

NORTH

SCALE IN FEET
0 20 40

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REGISTERED PROFESSIONAL ENGINEER (CIVIL)
CERTIFICATE NO. 23980
JEFFREY S. ERICKSON
Date Signed 11/16/18
ARIZONA, U.S.A.
Expires 09/30/20

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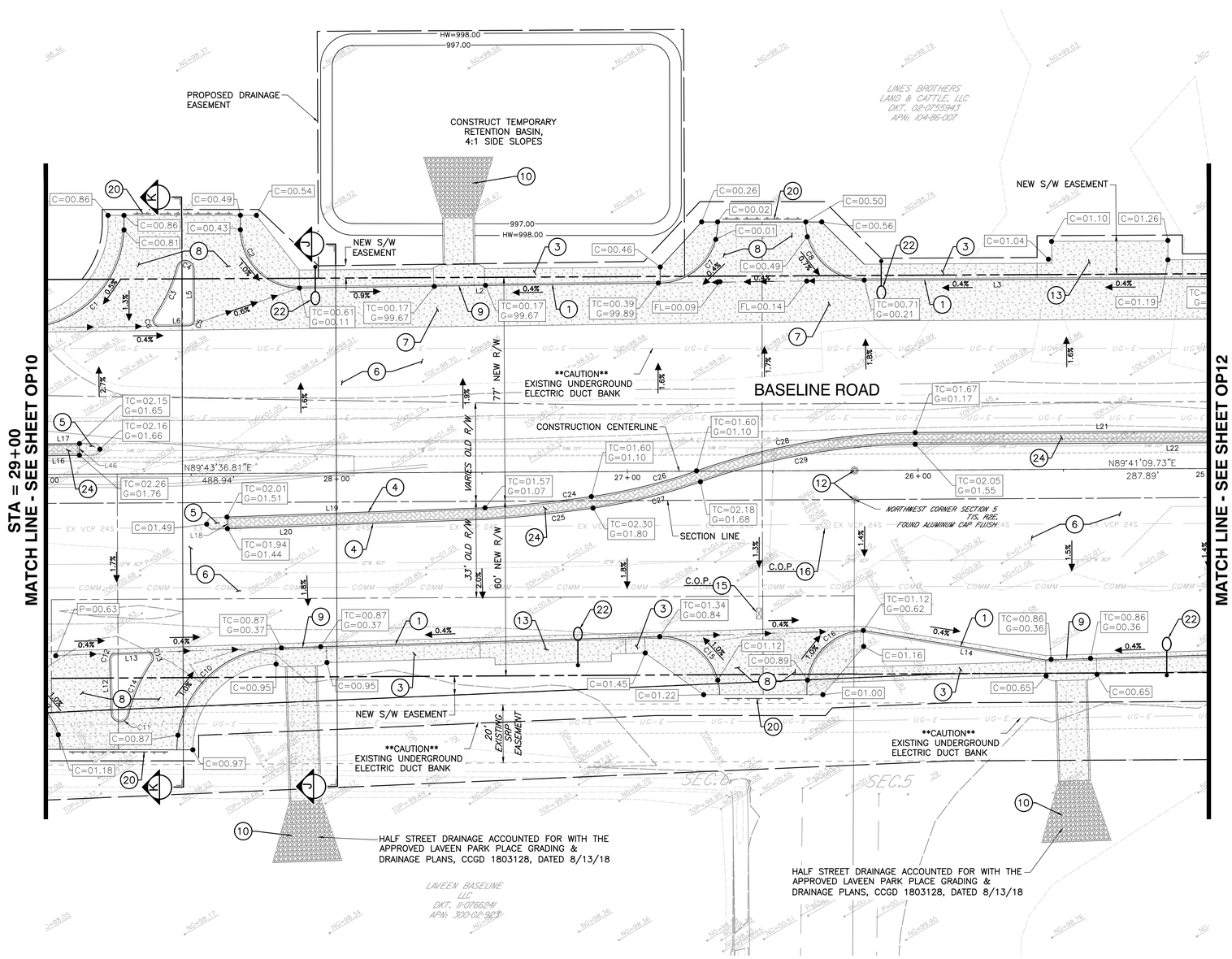
LOOP 202 & 57TH AVENUE
PHOENIX, ARIZONA
CIVIL IMPROVEMENT PLANS

OFFSITE IMPROVEMENT PLANS
BASELINE ROAD PLAN
STA. 33+00 - STA. 29+00

DATE:	NOVEMBER 16, 2018
DRAWN BY:	JD
DWG SCALE:	NONE
CHECKED BY:	JG
PROJECT NO:	182-001
APPROVED BY:	

DRAWING NO.: **OP10**

SHEET 10 OF 24



CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C1	53.26	35.00	87.19
C2	31.69	20.00	90.77
C3	19.05	55.00	19.85
C4	8.64	3.00	164.97
C5	3.12	2.00	89.50
C6	4.38	2.00	125.38
C7	31.15	20.00	89.23
C8	31.54	20.00	90.35
C10	53.93	35.00	88.29
C11	8.65	3.00	165.25
C12	3.13	2.00	89.78
C13	4.43	2.00	126.92
C14	20.30	53.00	21.95
C15	32.01	20.00	91.71
C16	30.82	20.00	88.29
C24	36.79	497.13	4.24
C25	37.15	501.13	4.25
C26	37.31	190.47	11.22
C27	38.09	194.47	11.22
C28	76.69	233.28	18.84
C29	75.34	228.81	18.87

LINE TABLE		
LINE	LENGTH	DIRECTION
L2	124.14	S89°13'33.86"W
L3	129.54	S89°42'58.20"W
L5	17.47	S00°16'23.19"E
L6	10.25	N89°13'33.86"E
L12	18.57	N01°42'53.11"W
L13	11.06	S88°03'57.45"W
L14	63.52	N80°49'30.62"W
L16	19.22	N89°13'36.97"E
L17	19.16	N89°13'33.86"E
L18	4.00	N02°02'56.91"W
L19	88.80	N87°57'03.09"E
L20	88.86	S87°57'03.09"W
L21	177.00	N89°42'58.20"E
L22	177.00	S89°42'32.54"W
L46	4.00	S00°46'26.14"E

NEW ROAD CONSTRUCTION

NO.		UNIT	QTY.
1	CONSTRUCT CONCRETE CURB & GUTTER PER MAG STD. DET. 220, TYPE A.	LF	719
3	CONSTRUCT CONCRETE SIDEWALK PER COP STD. DET. P1230.	SF	3,871
4	CONSTRUCT CONCRETE SINGLE CURB PER MAG STD. DTL. 222.	LF	686
5	CONSTRUCT CONCRETE MEDIAN NOSE PER DETAIL ON SHEET OP06.	SF	56
6	INSTALL NEW PAVEMENT PER SECTION ON SHEET OP06.	SY	4,673
7	CONSTRUCT CONCRETE BUS BAY PAVEMENT, COP STD. DTL. P1256-1, 9" THICK, CLASS 'A'.	SF	3,190
8	CONSTRUCT CONCRETE DRIVEWAY PER COP STD DET P1243-3.	EA	4
9	CONSTRUCT CONCRETE SCUPPER PER MAG STD DET 206-1. INSTALL SAFETY RAIL PER MAG STD DET 145.	EA	3
10	CONSTRUCT RIP-RAP WITH FILTER FABRIC PER DETAIL ON SHEET OP06	EA	3
12	INSTALL SURVEY MARKER PER MAG STD DET 120.	EA	2
13	CONSTRUCT BUS SHELTER PAD LOCATION (BUS STOP) PER COP STD DET P1258.	EA	2
15	ADJUST WATER UTILITY TO GRADE, PER COP PAVING NOTE 14 ON SHT OP02 & MAG STD DETS 391-1 & 391-2.	EA	1
16	ADJUST MANHOLE TO GRADE, PER MAG STD DET 422.	EA	1
20	INSTALL BARRICADES AS SHOWN PER COP STD DET P1106.	EA	18
22	INSTALL STREET LIGHT PER LIGHTING PLAN.	EA	4
24	INSTALL PAVING STONES PER DETAIL ON SHEET OP06.	SF	1,054

SPECIAL NOTES

1. STATION & OFFSETS BASED ON THE NORTH QUARTER CORNER OF SECTION 5. T1.S., R.2E., 16.89' EAST OF THE INTERSECTION OF 55TH LANE & BASELINE ROAD, WHERE STA=10+00 E.
2. SEE SHEET OP04 – OP06 FOR ROAD SECTIONS.
3. SEE SHEET OP07 FOR ROADWAY DETAILS.
4. SEE SHEET OP22 – OP23 FOR SIDEWALK GEOMETRICS.
5. SEE SHEET OP24 FOR SCUPPER PROFILES.
6. REFER TO ONSITE PLANS PREPARED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. FOR CONTINUATIONS AND PROPOSED GRADES.
7. PROPOSED STREET LIGHT BY OTHERS.
8. EXISTING IRRIGATION STRUCTURE TO BE REMOVED BY OTHERS.
9. CIVIL & ENVIRONMENTAL CONSULTANTS, INC./OWNER ARE NOT RESPONSIBLE FOR EXISTING PAVEMENT CONDITIONS OUTSIDE THE DELINEATED PAVED AREAS SHOWN ON THESE PLANS.

NORTH

SCALE IN FEET 0 20 40

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BASELINE ROAD IMPROVEMENTS
LOOP 202 & 57TH AVENUE
PHOENIX, ARIZONA
CIVIL IMPROVEMENT PLANS

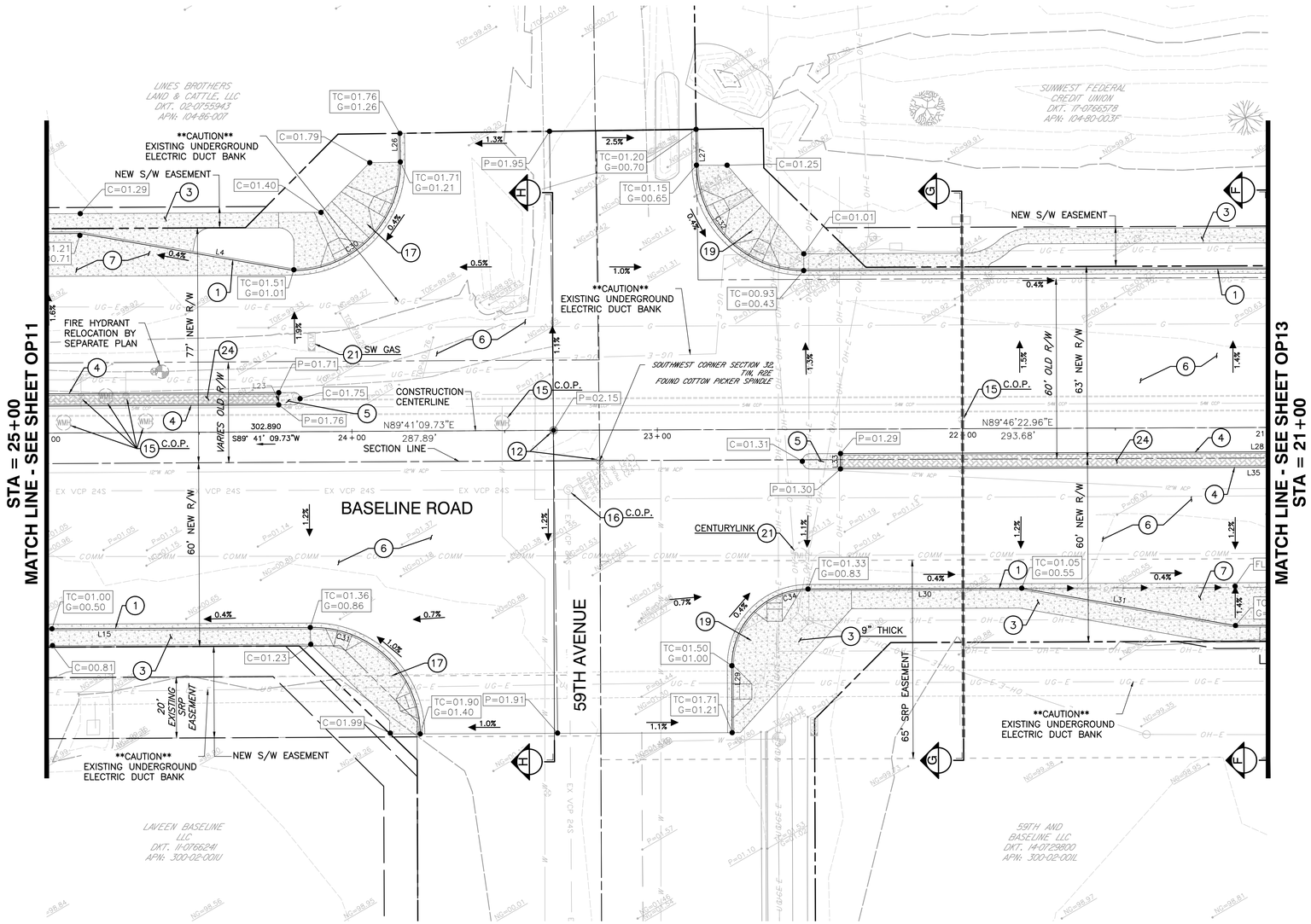
OFFSITE IMPROVEMENT PLANS
BASELINE ROAD PLAN
STA. 29+00 - STA. 25+00

DATE:	NOVEMBER 16, 2018
DRAWN BY:	JD
DWG SCALE:	NONE
CHECKED BY:	JG
PROJECT NO:	182-001
APPROVED BY:	

DRAWING NO.: OP11

SHEET 11 OF 24

P:\2018\182-0011-CADD\Dwg\CVD\Offsite Improvement\182001-CVD1-OP.dwg[29+00 - 25+00] LS(11/16/2018 - gamathly) - LP: 11/16/2018 10:16 AM



CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C30	55.28	35.00	90.49
C31	55.83	35.00	91.40
C32	54.64	35.00	89.45
C34	39.27	25.00	90.00

LINE TABLE		
LINE	LENGTH	DIRECTION
L4	71.05	N80°09'01.81"W
L15	84.61	S89°42'58.20"W
L23	3.99	S00°00'00.00"E
L26	9.47	S00°46'34.00"E
L27	11.75	S00°46'34.00"E
L29	21.96	S00°13'22.00"E
L30	70.00	S89°46'38.00"W
L31	71.06	N80°05'28.65"W
L33	5.00	N00°00'00.00"E
L35	270.14	S89°46'38.00"W

NEW ROAD CONSTRUCTION

NO.		UNIT	QTY.
1	CONSTRUCT CONCRETE CURB & GUTTER PER MAG STD. DET. 220, TYPE A.	LF	720
3	CONSTRUCT CONCRETE SIDEWALK PER COP STD. DET. P1230.	SF	2,561
4	CONSTRUCT CONCRETE SINGLE CURB PER MAG STD. DTL. 222.	LF	440
5	CONSTRUCT CONCRETE MEDIAN NOSE PER DETAIL ON SHEET OP06.	SF	75
6	INSTALL NEW PAVEMENT PER SECTION ON SHEET OP06.	SY	5,788
7	CONSTRUCT CONCRETE BUS BAY PAVEMENT, COP STD. DTL. P1256-1, 9" THICK, CLASS 'A'.	SF	1,389
12	INSTALL SURVEY MARKER PER MAG STD DET 120.	EA	2
15	ADJUST WATER UTILITY TO GRADE, PER COP PAVING NOTE 14 ON SHT OP02 & MAG STD DETS 391-1 & 391-2.	EA	7
16	ADJUST MANHOLE TO GRADE, PER MAG STD DET 422.	EA	1
17	CONSTRUCT HANDICAP RAMP PER COP STD DETS P1238-1, MODIFIED RADIUS=35.00' AND DIRECTIONAL RAMPS PER COP STREET & TRANSPORTATION DEPT & PER COP STD 1232.	EA	2
19	CONSTRUCT HANDICAP RAMP PER COP STD DETS P1238-2, MODIFIED DIRECTIONAL RAMPS PER COP STREET & TRANSPORTATION DEPT & PER COP STD 1232.	EA	2
21	ADJUST RESPECTIVE UTILITY TO GRADE SEE COP PAVING NOTE 14 ON SHT OP02	EA	2
24	INSTALL PAVING STONES PER DETAIL ON SHEET OP06.	SF	785

SPECIAL NOTES

1. STATION & OFFSETS BASED ON THE NORTH QUARTER CORNER OF SECTION 5. T1.S., R.2E., 16.89' EAST OF THE INTERSECTION OF 55TH LANE & BASELINE ROAD, WHERE STA=10+00 E.
2. SEE SHEET OP04 – OP06 FOR ROAD SECTIONS.
3. SEE SHEET OP07 FOR ROADWAY DETAILS.
4. SEE SHEET OP22 – OP23 FOR SIDEWALK GEOMETRICS.
5. SEE SHEET OP24 FOR SCUPPER PROFILES.
6. REFER TO ONSITE PLANS PREPARED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. FOR CONTINUATIONS AND PROPOSED GRADES.
7. PROPOSED STREET LIGHT BY OTHERS.
8. EXISTING IRRIGATION STRUCTURE TO BE REMOVED BY OTHERS.
9. CIVIL & ENVIRONMENTAL CONSULTANTS, INC./OWNER ARE NOT RESPONSIBLE FOR EXISTING PAVEMENT CONDITIONS OUTSIDE THE DELINEATED PAVED AREAS SHOWN ON THESE PLANS.

NORTH

SCALE IN FEET
0 20 40

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ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

REGISTERED PROFESSIONAL ENGINEER (CIVIL)
CERTIFICATE NO. 23980
JEFFREY S. ERICKSON
Date Signed 11/16/18
ARIZONA, U.S.A.
Expires 09/30/20

REVISION RECORD

NO	DATE	DESCRIPTION

Civil & Environmental Consultants, Inc.
11811 N. Tatum Blvd., Suite 3057 - Phoenix, AZ 85028
Ph: 602.760.2324 - 877.231.2324 - Fax: 602.760.2330
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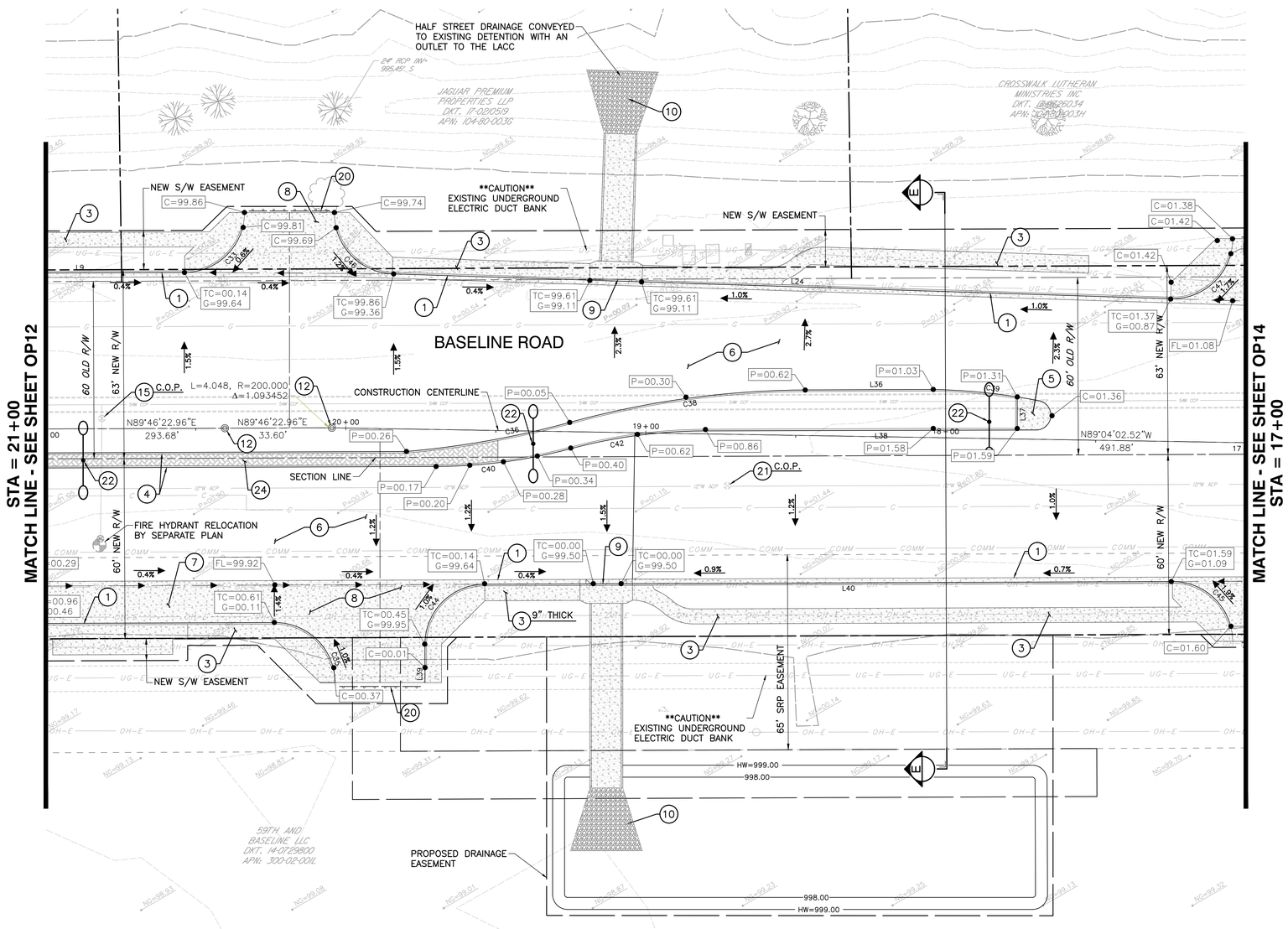
PHOENIX, ARIZONA
CIVIL IMPROVEMENT PLANS

OFFSITE IMPROVEMENT PLANS
BASELINE ROAD PLAN
STA. 25+00 - STA. 21+00

DATE:	NOVEMBER 16, 2018	DRAWN BY:	JD
DWG SCALE:	NONE	CHECKED BY:	JG
PROJECT NO:			182-001
APPROVED BY:			

DRAWING NO.: OP12
SHEET 12 OF 24



CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C33	26.28	20.00	75.30
C35	31.50	20.00	90.25
C36	55.38	303.09	10.47
C38	79.47	303.09	15.02
C39	28.13	206.85	7.79
C40	45.42	175.34	14.84
C42	45.42	175.34	14.84
C44	31.34	20.00	89.78
C45	26.38	20.00	75.56
C46	26.20	20.00	75.07
C47	27.03	20.00	77.42

LINE TABLE		
LINE	LENGTH	DIRECTION
L9	198.33	N89°46'38.00"E
L24	259.50	S88°09'59.86"E
L36	42.65	N89°46'38.00"E
L37	11.03	S00°00'00.00"E
L38	110.45	S89°50'49.00"W
L39	12.79	N00°00'00.00"E
L40	229.21	S89°46'38.00"W

NEW ROAD CONSTRUCTION

NO.		UNIT	QTY.
1	CONSTRUCT CONCRETE CURB & GUTTER PER MAG STD. DET. 220, TYPE A.	LF	821
3	CONSTRUCT CONCRETE SIDEWALK PER COP STD. DET. P1230.	SF	4,419
4	CONSTRUCT CONCRETE SINGLE CURB PER MAG STD. DTL. 222.	LF	688
5	CONSTRUCT CONCRETE MEDIAN NOSE PER DETAIL ON SHEET OP06.	SF	64
6	INSTALL NEW PAVEMENT PER SECTION ON SHEET OP06.	SY	4,028
7	CONSTRUCT CONCRETE BUS BAY PAVEMENT, COP STD. DTL. P1256-1, 9" THICK, CLASS 'A'.	SF	994
8	CONSTRUCT CONCRETE DRIVEWAY PER COP STD DET P1243-3.	EA	2
9	CONSTRUCT CONCRETE SCUPPER PER MAG STD DET 206-1. INSTALL SAFETY RAIL PER MAG STD DET 145.	EA	2
10	CONSTRUCT RIP-RAP WITH FILTER FABRIC PER DETAIL ON SHEET OP06	EA	2
12	INSTALL SURVEY MARKER PER MAG STD DET 120.	EA	2
15	ADJUST WATER UTILITY TO GRADE, PER COP PAVING NOTE 14 ON SHT OP02 & MAG STD DETS 391-1 & 391-2.	EA	1
20	INSTALL BARRICADES AS SHOWN PER COP STD DET P1106.	EA	8
22	INSTALL STREET LIGHT PER LIGHTING PLAN.	EA	3
24	INSTALL PAVING STONES PER DETAIL ON SHEET OP06.	SF	650

SPECIAL NOTES

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2. SEE SHEET OP04 – OP06 FOR ROAD SECTIONS.
3. SEE SHEET OP07 FOR ROADWAY DETAILS.
4. SEE SHEET OP22 – OP23 FOR SIDEWALK GEOMETRICS.
5. SEE SHEET OP24 FOR SCUPPER PROFILES.
6. REFER TO ONSITE PLANS PREPARED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. FOR CONTINUATIONS AND PROPOSED GRADES.
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8. EXISTING IRRIGATION STRUCTURE TO BE REMOVED BY OTHERS.
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NORTH

SCALE IN FEET 0 20 40

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REGISTERED PROFESSIONAL ENGINEER (CIVIL) CERTIFICATE NO. 23980 JEFFREY S. ERICKSON Date Signed 11/16/18 ARIZONA, U.S.A. Expires 09/30/20

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CIVIL IMPROVEMENT PLANS

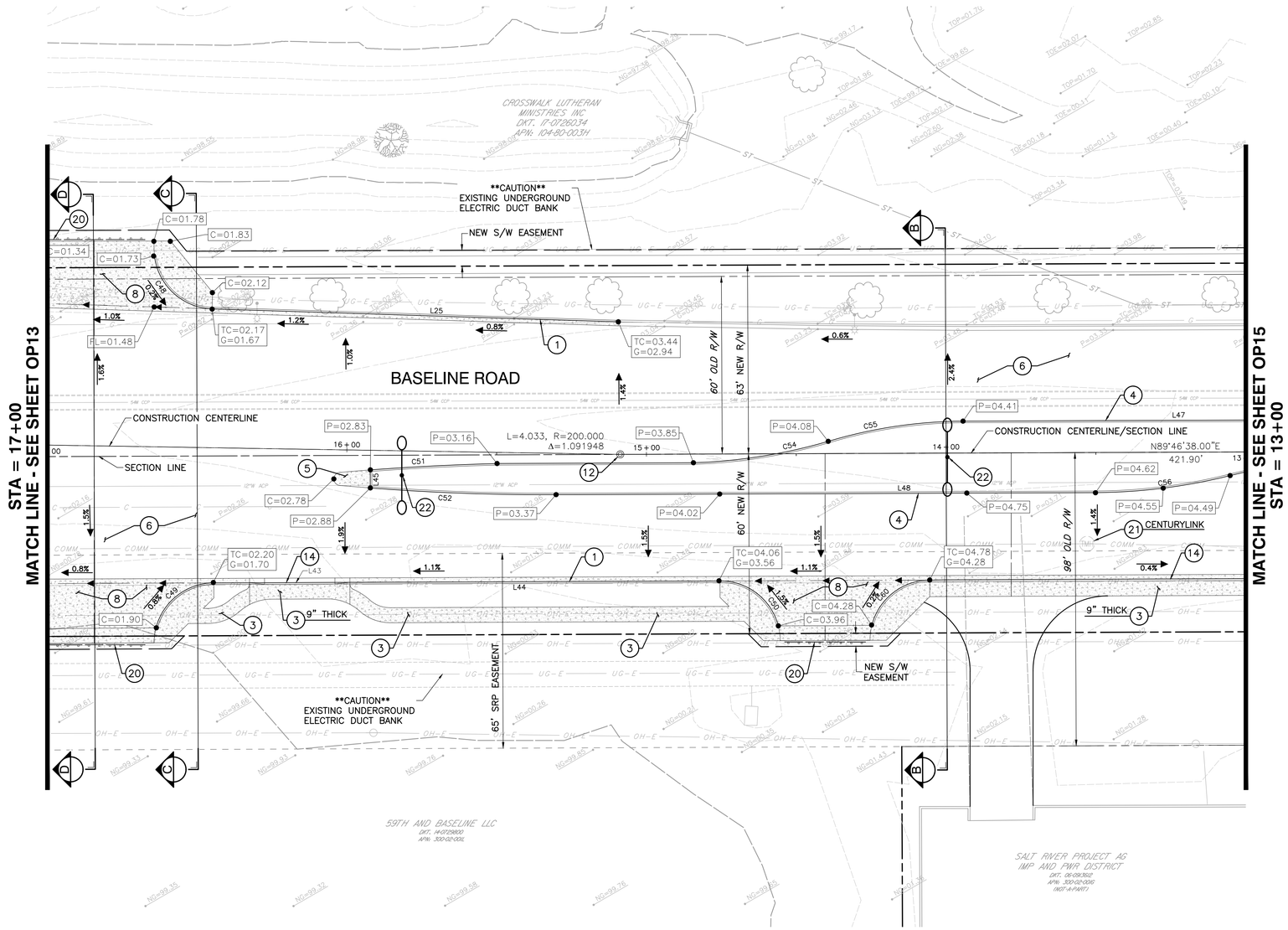
OFFSITE IMPROVEMENT PLANS
BASELINE ROAD PLAN
STA. 21+00 - STA. 17+00

DATE:	NOVEMBER 16, 2018	DRAWN BY:	JD
DWG SCALE:	NONE	CHECKED BY:	JG
PROJECT NO:			182-001
APPROVED BY:			

DRAWING NO.: OP13

SHEET 13 OF 24

P:\2018\182-001\-CADD\Dwg\CVD\Offsite Improvement\182001-CVD1-OP.dwg[21+00 - 17+00] LS:(11/16/2018 = eperrotto) - LP: 11/16/2018 10:18 AM



CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C48	28.40	20.00	81.37
C49	26.27	20.00	75.25
C50	26.44	20.00	75.76
C51	42.35	883.45	2.75
C52	62.05	759.55	4.68
C54	45.67	182.35	14.35
C55	45.66	160.11	16.34
C56	45.47	189.17	13.77
C60	26.36	20.00	75.52

LINE TABLE		
LINE	LENGTH	DIRECTION
L25	135.65	S88°09'59.86"E
L43	33.50	S89°46'38.00"W
L44	123.52	S89°46'38.00"W
L45	6.02	S00°04'02.71"E
L48	179.97	N89°46'38.05"E
L50	320.78	N89°46'38.00"E

NEW ROAD CONSTRUCTION

NO.		UNIT	QTY.
1	CONSTRUCT CONCRETE CURB & GUTTER PER MAG STD. DET. 220, TYPE A.	LF	520
3	CONSTRUCT CONCRETE SIDEWALK PER COP STD. DET. P1230.	SF	2,258
4	CONSTRUCT CONCRETE SINGLE CURB PER MAG STD. DTL. 222.	LF	684
5	CONSTRUCT CONCRETE MEDIAN NOSE PER DETAIL ON SHEET OP06.	SF	60
6	INSTALL NEW PAVEMENT PER SECTION ON SHEET OP06.	SY	3,127
8	CONSTRUCT CONCRETE DRIVEWAY PER COP STD. DTL. P1243-3.	EA	3
12	INSTALL SURVEY MARKER PER MAG STD DET 120.	EA	1
14	CONSTRUCT MOUNTABLE CURB AND GUTTER, PER MAG STD DET 220-2, TYPE "E".	LF	139
20	INSTALL BARRICADES AS SHOWN PER COP STD DET P1106.	EA	14
21	ADJUST RESPECTIVE UTILITY TO GRADE SEE COP PAVING NOTE 14 ON SHT OP02	EA	1
22	INSTALL STREET LIGHT PER LIGHTING PLAN.	EA	2

SPECIAL NOTES

1. STATION & OFFSETS BASED ON THE NORTH QUARTER CORNER OF SECTION 5. T1.S., R.2E., 16.89' EAST OF THE INTERSECTION OF 55TH LANE & BASELINE ROAD, WHERE STA=10+00 E.
2. SEE SHEET OP04 – OP06 FOR ROAD SECTIONS.
3. SEE SHEET OP07 FOR ROADWAY DETAILS.
4. SEE SHEET OP22 – OP23 FOR SIDEWALK GEOMETRICS.
5. SEE SHEET OP24 FOR SCUPPER PROFILES.
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NORTH

SCALE IN FEET
0 20 40

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In Maricopa County: (602) 263-1100

REGISTERED PROFESSIONAL ENGINEER (CIVIL) CERTIFICATE NO. 23980 JEFFREY S. ERICKSON Date Signed 11/16/18 ARIZONA, U.S.A. Expires 09/30/20

REVISION RECORD

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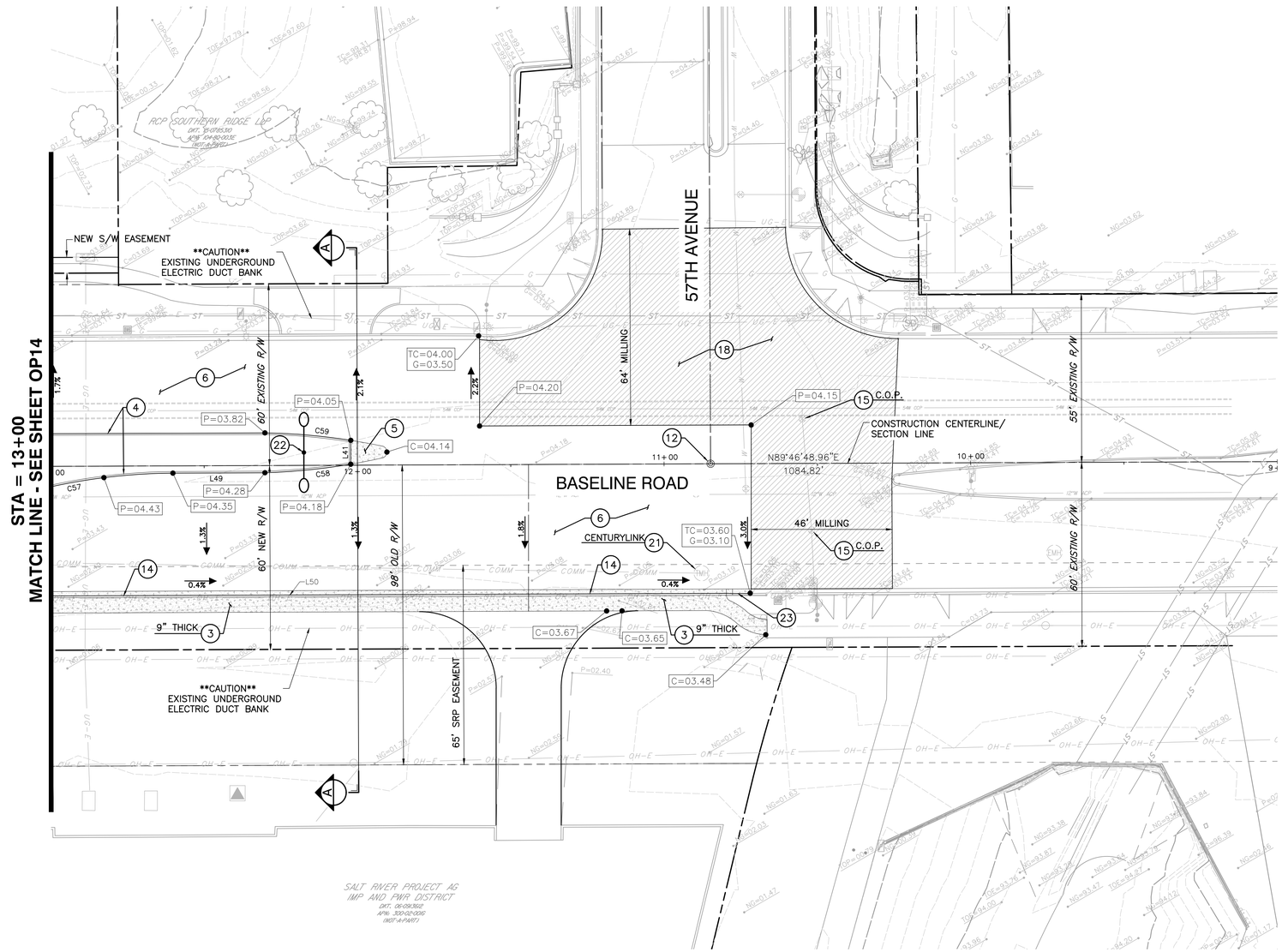
CIVIL IMPROVEMENT PLANS

OFFSITE IMPROVEMENT PLANS
BASELINE ROAD PLAN
STA. 17+00 - STA. 13+00

DATE:	NOVEMBER 16, 2018
DRAWN BY:	JD
DWG SCALE:	NONE
CHECKED BY:	JG
PROJECT NO:	192-001
APPROVED BY:	

DRAWING NO.: OP14

SHEET 14 OF 24



CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C57	22.90	189.17	6.94
C58	28.16	215.75	7.48
C59	28.13	194.61	8.28

LINE TABLE		
LINE	LENGTH	DIRECTION
L41	7.78	N00°00'00.00"E
L47	164.14	N89°46'38.00"E
L49	30.00	S89°46'38.00"W

NEW ROAD CONSTRUCTION

NO.		UNIT	QTY.
3	CONSTRUCT CONCRETE SIDEWALK PER COP STD. DET. P1230.	SF	1,181
4	CONSTRUCT CONCRETE SINGLE CURB PER MAG STD. DTL. 222.	LF	264
5	CONSTRUCT CONCRETE MEDIAN NOSE PER DETAIL ON SHEET OP06.	SF	64
6	INSTALL NEW PAVEMENT PER SECTION ON SHEET OP06.	SY	1,648
12	INSTALL SURVEY MARKER PER MAG STD DET 120.	EA	1
14	CONSTRUCT MOUNTABLE CURB AND GUTTER, PER MAG STD DET 220–2, TYPE "E".	LF	220
15	ADJUST WATER UTILITY TO GRADE, PER COP PAVING NOTE 14 ON SHT OP02 & MAG STD DETS 391–1 & 391–2.	EA	2
18	MILL EXISTING ASPHALT MAG SPECIFICATION SECTION 317 AND INSTALL 1.25" DEPTH ASPHALT–RUBBER ASPHALT CONCRETE OVERLAY PER SECTION 321 & 325. MICRO–SURFACE PER MAG SPECIFICATION SECTION 331.	SY	998
21	ADJUST RESPECTIVE UTILITY TO GRADE SEE COP PAVING NOTE 14 ON SHT OP02	EA	1
22	INSTALL STREET LIGHT PER LIGHTING PLAN.	EA	1
23	CONSTRUCT TRANSITION CURB AND GUTTER PER MAG STD DET 221.	EA	1

SPECIAL NOTES

1. STATION & OFFSETS BASED ON THE NORTH QUARTER CORNER OF SECTION 5. T1.S., R.2E., 16.89' EAST OF THE INTERSECTION OF 55TH LANE & BASELINE ROAD, WHERE STA=10+00 E.
2. SEE SHEET OP04 – OP06 FOR ROAD SECTIONS.
3. SEE SHEET OP07 FOR ROADWAY DETAILS.
4. SEE SHEET OP22 – OP23 FOR SIDEWALK GEOMETRICS.
5. SEE SHEET OP24 FOR SCUPPER PROFILES.
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NORTH

SCALE IN FEET
0 20 40

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CERTIFICATE NO. 23980
JEFFREY S. ERICKSON
Date Signed 11/16/18
ARIZONA, U.S.A.
Expires 09/30/20

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CIVIL IMPROVEMENT PLANS

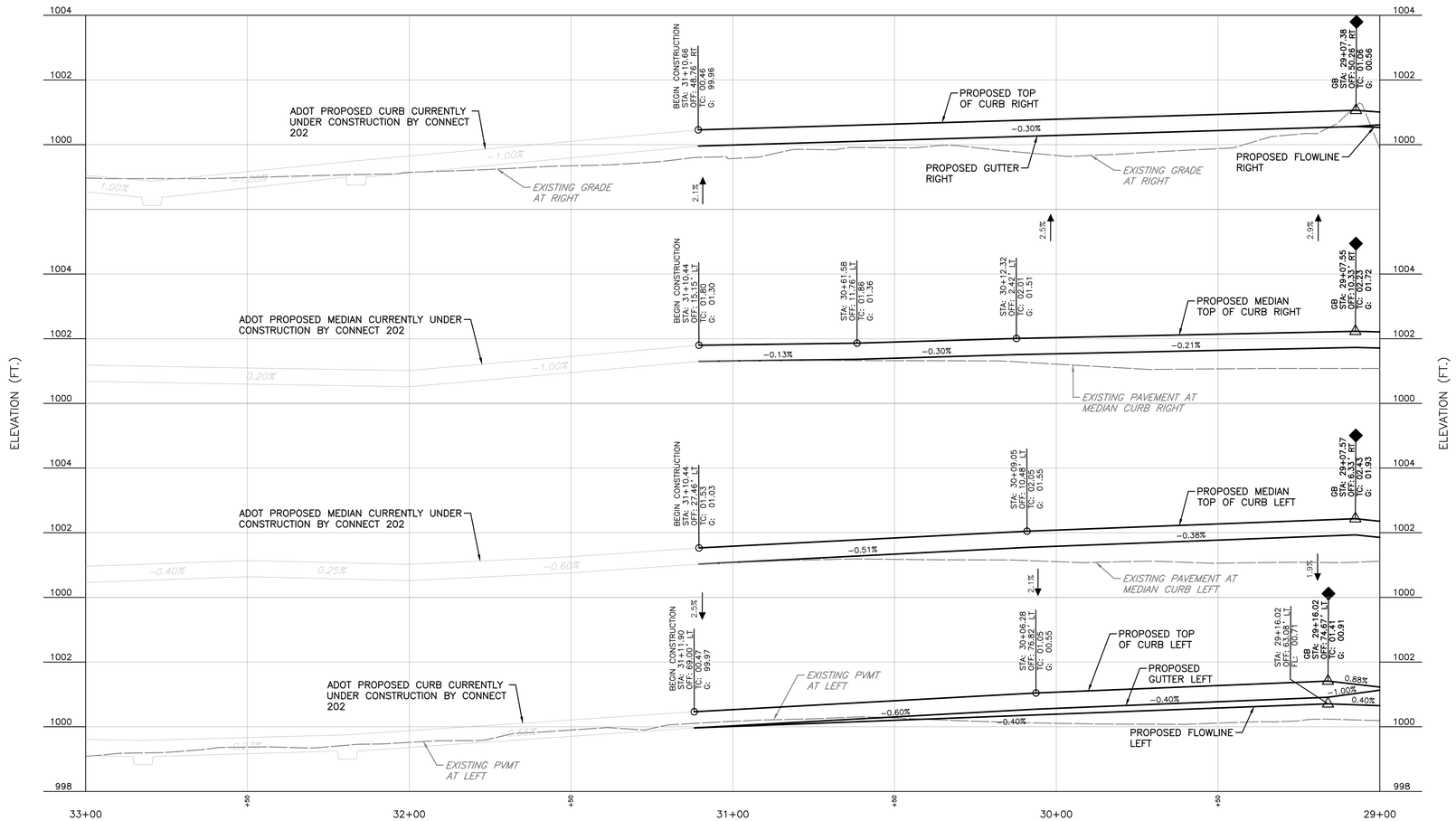
OFFSITE IMPROVEMENT PLANS
BASELINE ROAD PLAN
STA. 13+00 - END

DATE:	NOVEMBER 16, 2018
DRAWN BY:	JD
DWG SCALE:	NONE
CHECKED BY:	JG
PROJECT NO:	192-001
APPROVED BY:	

DRAWING NO.: OP15

SHEET 15 OF 24

\\SVR-PNDEN01\Projects\2018\192-001\CAD\Dwg\CV01\Offsite Improvement\192001-CV01-OP.dwg\13+00 - END\ LS:11/16/2018 - eperrotti\ - LP: 11/16/2018 9:58 AM



BASELINE ROAD PROFILE

SCALE H:1"=20'; V:1"=2'

VER SCALE IN FEET
0 2 4

HOR SCALE IN FEET
0 20 40

SPECIAL NOTES

1. STATION & OFFSETS BASED ON THE NORTH QUARTER CORNER OF SECTION 5. T1.S., R.2E., 16.89' EAST OF THE INTERSECTION OF 55TH LANE & BASELINE ROAD, WHERE STA=10+00 E.
2. SEE SHEET OP04 – OP06 FOR ROAD SECTIONS.
3. SEE SHEET OP07 FOR ROADWAY DETAILS.
4. SEE SHEET OP22 – OP23 FOR SIDEWALK GEOMETRICS.
5. SEE SHEET OP24 FOR CATCH BASIN PROFILES.
6. REFER TO ONSITE PLANS PREPARED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. FOR CONTINUATIONS AND PROPOSED GRADES.
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REGISTERED PROFESSIONAL ENGINEER (CIVIL)
CERTIFICATE NO. Z39860
JEFFREY S. ERICKSON
Date Signed 11/16/18
ARIZONA, U.S.A.
Expires 09/30/20

REVISION RECORD

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CIVIL IMPROVEMENT PLANS

OFFSITE IMPROVEMENT PLANS
BASELINE ROAD PROFILE
STA. 33+00 - STA. 29+00

DATE:	NOVEMBER 16, 2018
DRAWN BY:	JD
DWG SCALE:	NONE
CHECKED BY:	JG
PROJECT NO:	182-001
APPROVED BY:	

DRAWING NO.: OP16

SHEET 16 OF 24

\\ser-phoenix\projects\2018\182-001\-CADD\Dwg\CV01\Offsite Improvement\182001-CV01-OPPR.dwg[33+00 - 29+00] LS(11/16/2018 - eperrotto) - LP: 11/16/2018 10:03 AM

BASELINE ROAD PROFILE

SCALE H:1"=20'; V:1"=2'

VER SCALE IN FEET 0 2 4

HOR SCALE IN FEET 0 20 40

SPECIAL NOTES

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2. SEE SHEET OP04 – OP06 FOR ROAD SECTIONS.
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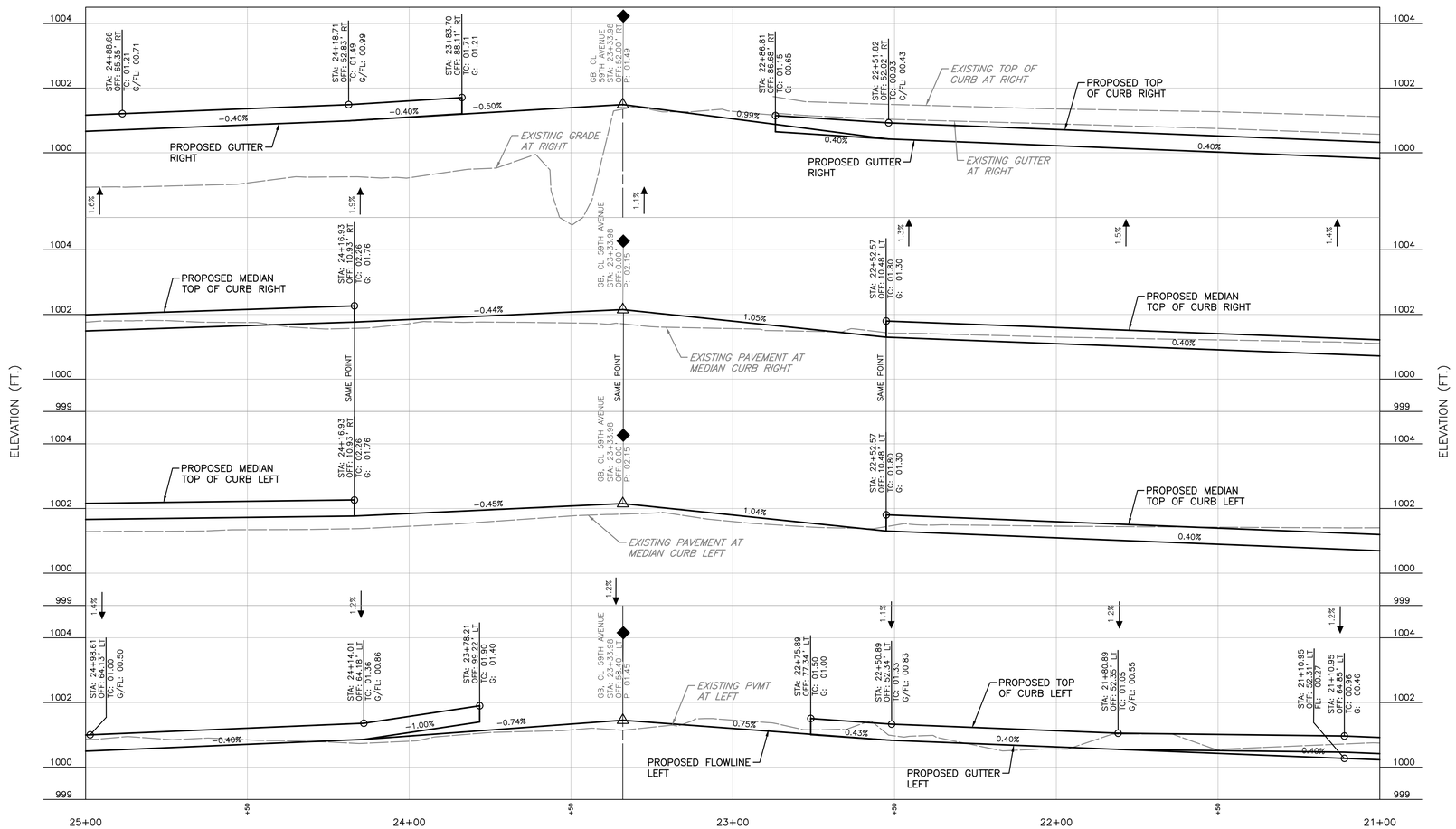
CIVIL IMPROVEMENT PLANS

OFFSITE IMPROVEMENT PLANS
BASELINE ROAD PROFILE
STA. 29+00 - STA. 25+00

DATE:	NOVEMBER 16, 2018	DRAWN BY:	JD
DWG SCALE:	NONE	CHECKED BY:	JG
PROJECT NO:	182-001		
APPROVED BY:			

DRAWING NO.: OP17

SHEET 17 OF 24



BASELINE ROAD PROFILE

SCALE H:1"=20'; V:1"=2'

VER SCALE IN FEET
0 2 4

HOR SCALE IN FEET
0 20 40

SPECIAL NOTES

1. STATION & OFFSETS BASED ON THE NORTH QUARTER CORNER OF SECTION 5. T1.S., R.2E., 16.89' EAST OF THE INTERSECTION OF 55TH LANE & BASELINE ROAD, WHERE STA=10+00 E.
2. SEE SHEET OP04 – OP06 FOR ROAD SECTIONS.
3. SEE SHEET OP07 FOR ROADWAY DETAILS.
4. SEE SHEET OP22 – OP23 FOR SIDEWALK GEOMETRICS.
5. SEE SHEET OP24 FOR CATCH BASIN PROFILES.
6. REFER TO ONSITE PLANS PREPARED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. FOR CONTINUATIONS AND PROPOSED GRADES.
7. CIVIL & ENVIRONMENTAL CONSULTANTS, INC./OWNER ARE NOT RESPONSIBLE FOR EXISTING PAVEMENT CONDITIONS OUTSIDE THE DELINEATED PAVED AREAS SHOWN ON THESE PLANS.

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

REGISTERED PROFESSIONAL ENGINEER (CIVIL)
CERTIFICATE NO. 23980
JEFFREY S. ERICKSON
Date Signed 11/16/18
ARIZONA, U.S.A.
Expires 09/30/20

REVISION RECORD

NO	DATE	DESCRIPTION

Civil & Environmental Consultants, Inc.
11811 N. Tatum Blvd., Suite 3057 - Phoenix, AZ 85028
Ph: 602.760.2324 - 877.231.2324 - Fax: 602.760.2330
www.cecinc.com

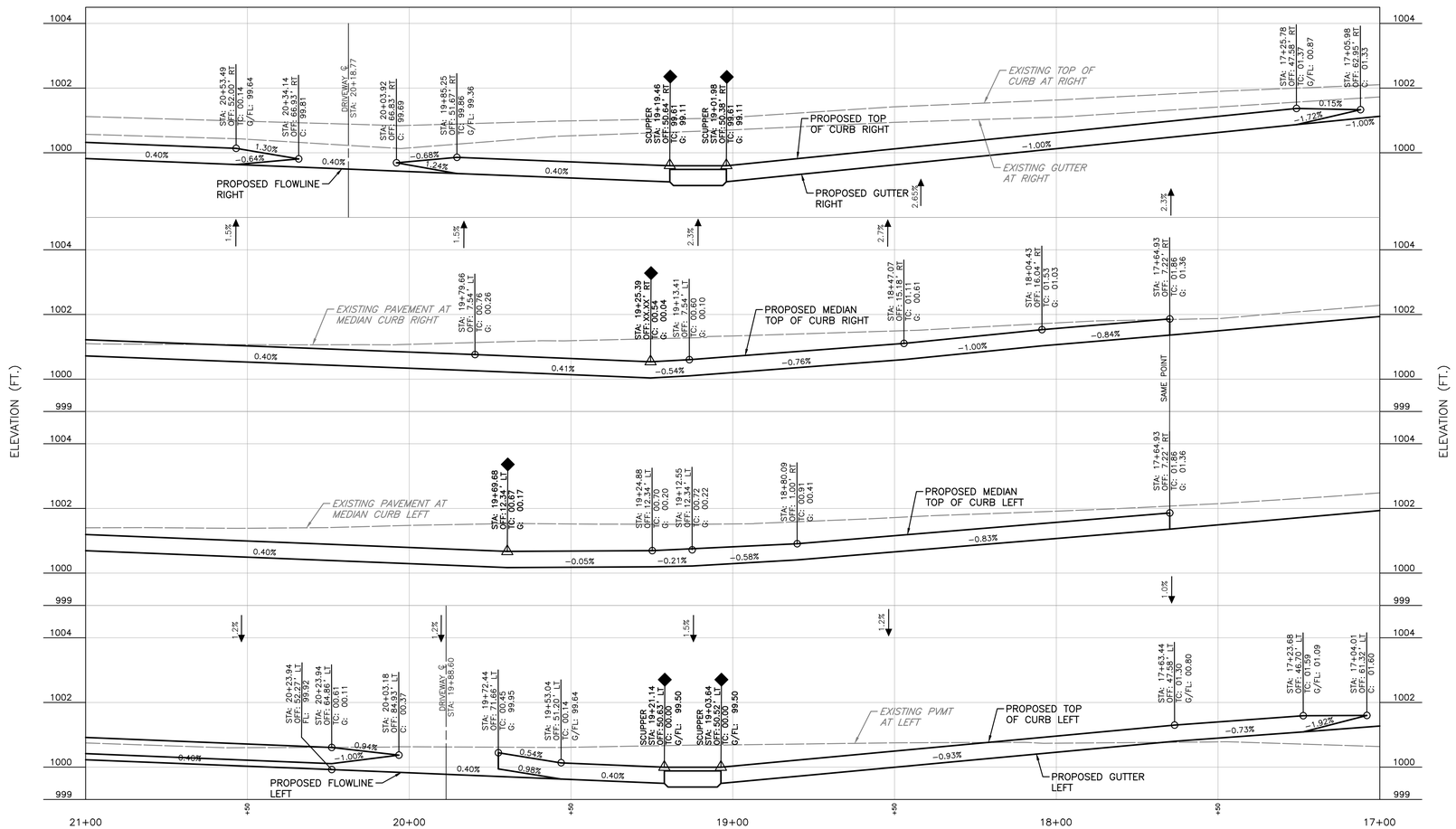
BASELINE ROAD IMPROVEMENTS
LOOP 202 & 57TH AVENUE
PHOENIX, ARIZONA
CIVIL IMPROVEMENT PLANS

OFFSITE IMPROVEMENT PLANS
BASELINE ROAD PROFILE
STA. 25+00 - STA. 21+00

DATE: NOVEMBER 16, 2018	DRAWN BY: JD
DWG SCALE: NONE	CHECKED BY: JG
PROJECT NO: 182-001	
APPROVED BY:	

DRAWING NO.: OP18

SHEET 18 OF 24



BASELINE ROAD PROFILE

SCALE H:1"=20'; V:1"=2'

VER SCALE IN FEET
0 2 4

HOR SCALE IN FEET
0 20 40

SPECIAL NOTES

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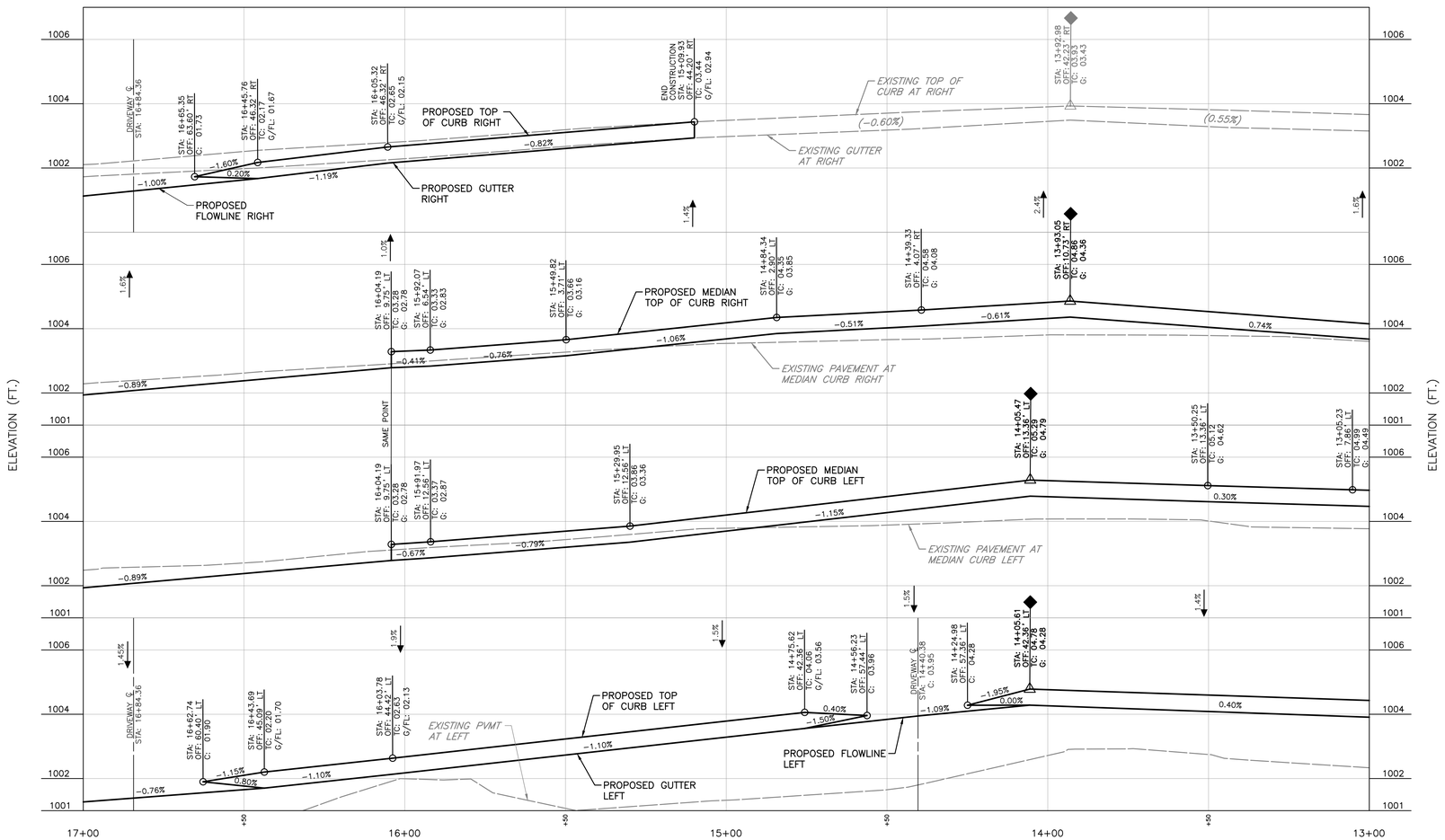
CIVIL IMPROVEMENT PLANS

OFFSITE IMPROVEMENT PLANS
BASELINE ROAD PROFILE
STA. 21+00 - STA. 17+00

DATE: NOVEMBER 16, 2018	DRAWN BY: JD
DWG SCALE: NONE	CHECKED BY: JG
PROJECT NO: 182-001	
APPROVED BY:	

DRAWING NO.: OP19

SHEET 19 OF 24



BASELINE ROAD PROFILE

SCALE H:1"=20'; V:1"=2'

VER SCALE IN FEET
0 2 4

HOR SCALE IN FEET
0 20 40

SPECIAL NOTES

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In Maricopa County: (602) 263-1100

REGISTERED PROFESSIONAL ENGINEER (CIVIL)
CERTIFICATE NO. Z39860
JEFFREY S. ERICKSON
Date Signed 11/16/18
ARIZONA, U.S.A.
Expires 09/30/20

REVISION RECORD

NO	DATE	DESCRIPTION

Civil & Environmental Consultants, Inc.
11811 N. Tatum Blvd., Suite 3057 - Phoenix, AZ 85028
Ph: 602.760.2324 - 877.231.2324 - Fax: 602.760.2330
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BASELINE ROAD IMPROVEMENTS
LOOP 202 & 57TH AVENUE
PHOENIX, ARIZONA
CIVIL IMPROVEMENT PLANS

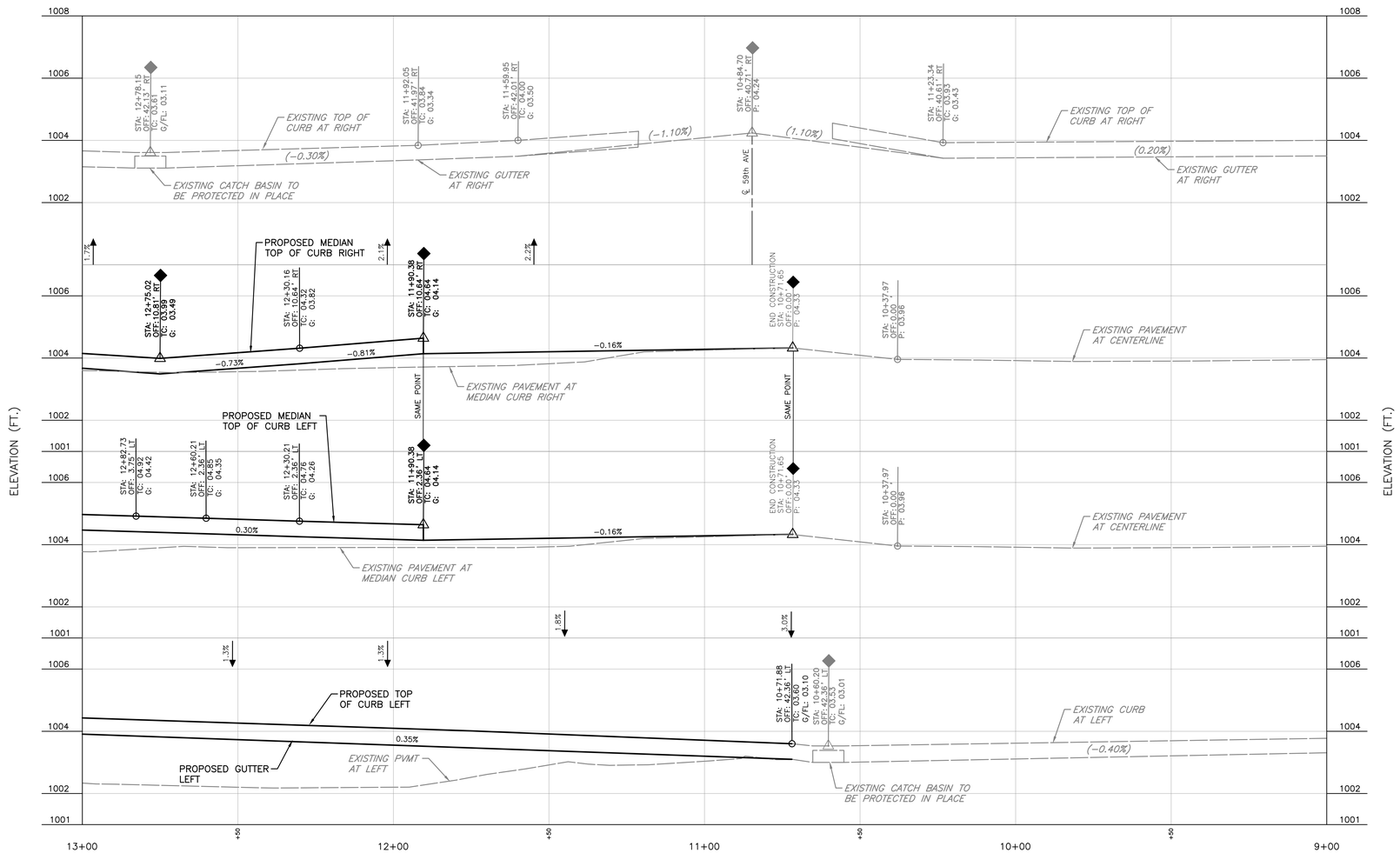
OFFSITE IMPROVEMENT PLANS
BASELINE ROAD PROFILE
STA. 17+00 - STA. 13+00

DATE:	NOVEMBER 16, 2018
DRAWN BY:	JD
DWG SCALE:	NONE
CHECKED BY:	JG
PROJECT NO:	182-001
APPROVED BY:	

DRAWING NO.: OP20

SHEET 20 OF 24

P:\2018\182-001\-CADD\Dwg\CV01\Offsite Improvement\182001-CV01-OPPP.dwg\17+00 - 13+00\JS\11/16/2018 - sperrotto - LP: 11/16/2018 10:33 AM



BASELINE ROAD PROFILE

SCALE H:1"=20'; V:1"=2'

VER SCALE IN FEET
0 2 4

HOR SCALE IN FEET
0 20 40

SPECIAL NOTES

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CERTIFICATE NO. 23980
JEFFREY S. ERICKSON
Date Signed 11/16/18
ARIZONA, U.S.A.
Expires 09/30/20

REVISION RECORD		
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PHOENIX, ARIZONA
CIVIL IMPROVEMENT PLANS

OFFSITE IMPROVEMENT PLANS
BASELINE ROAD PROFILE
STA. 13+00 - END

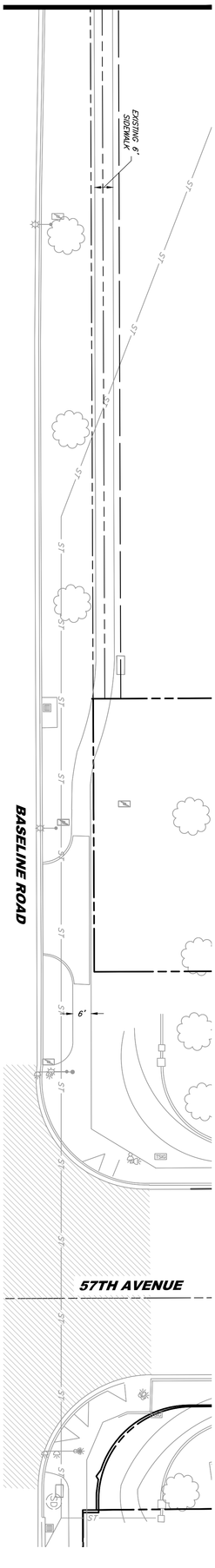
DATE:	NOVEMBER 16, 2018	DRAWN BY:	JD
DWG SCALE:	NONE	CHECKED BY:	JG
PROJECT NO:			182-001
APPROVED BY:			

DRAWING NO.: OP21

SHEET 21 OF 24

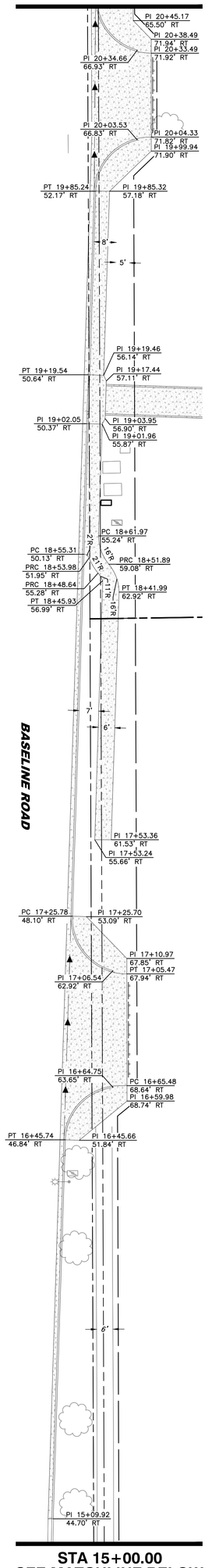
P:\2018\182-001\CADD\Dwg\CVD\Offsite Improvement\182001-CVD1-OPPR.dwg\13+00 - END\ LS:(11/16/2018 - gamatto) - LP: 11/16/2018 10:25 AM

STA 15+00.00
SEE MATCHLINE ABOVE



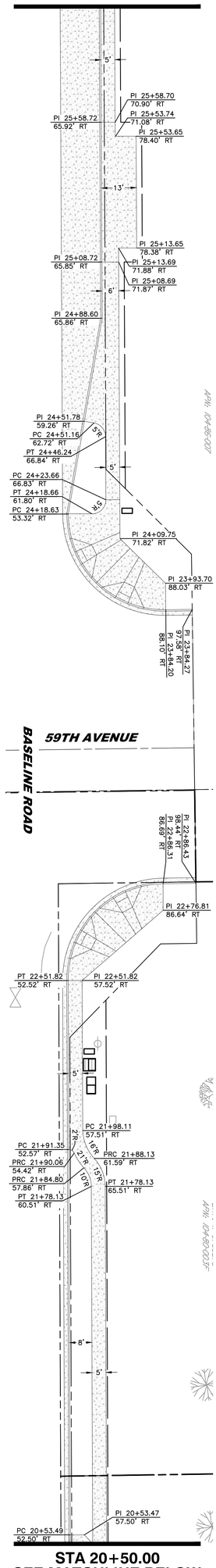
STA 15+00.00
SEE MATCHLINE BELOW

STA 20+50.00
SEE MATCHLINE ABOVE



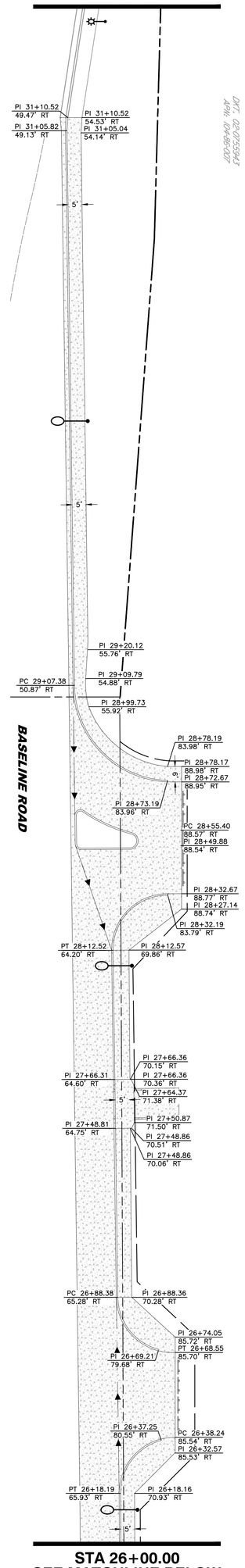
STA 20+50.00
SEE MATCHLINE BELOW

STA 26+00.00
SEE MATCHLINE ABOVE



STA 20+50.00
SEE MATCHLINE BELOW

STA 31+50



STA 26+00.00
SEE MATCHLINE BELOW

NORTH

SCALE IN FEET 0 20 240

Call at least two full working days before you begin excavation.
ARIZONA 811
Dial 8-1-1 or 1-800-782-5348
In Maricopa County (602) 263-1100

REGISTERED PROFESSIONAL ENGINEER (CIVIL) 23869 JEFFREY S. ERICKSON ARIZONA U.S.A. Expires 12/31/2019

DRAWING NO: OP22	OFFSITE IMPROVEMENT PLANS SIDEWALK GEOMETRICS		
SHEET 22 OF 24	DATE: NOVEMBER 16, 2018	DRAWN BY:	JD
	DWG SCALE: NONE	CHECKED BY:	JG
	PROJECT NO:		182-001
	APPROVED BY:		

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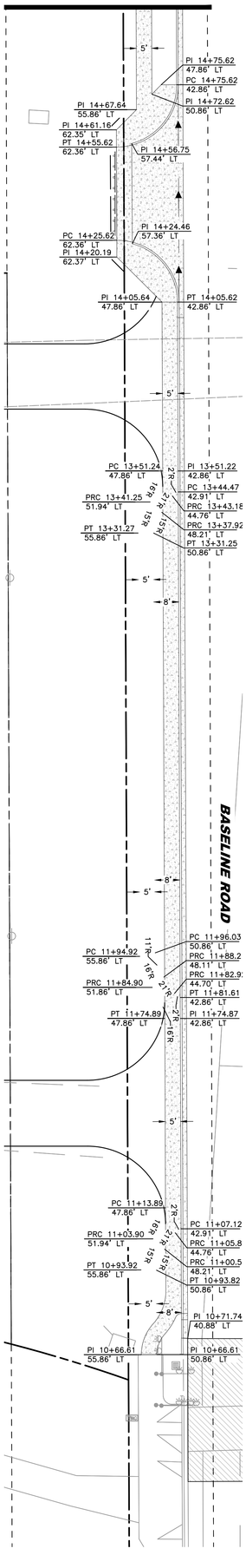
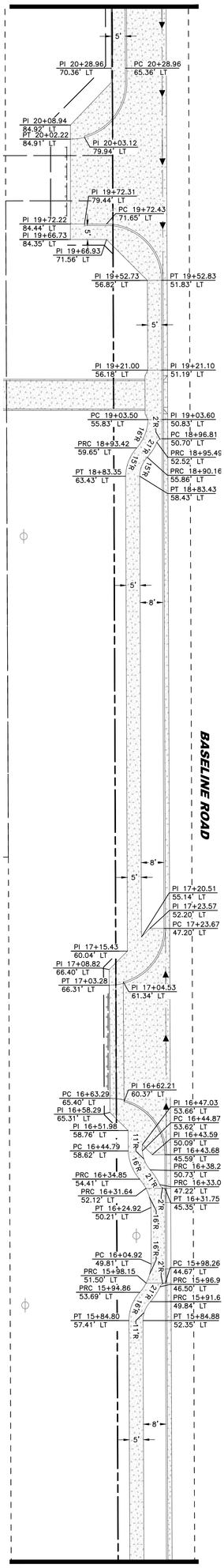
REVISION RECORD

NO	DATE	DESCRIPTION

STA 15+00.00
SEE MATCHLINE ABOVE

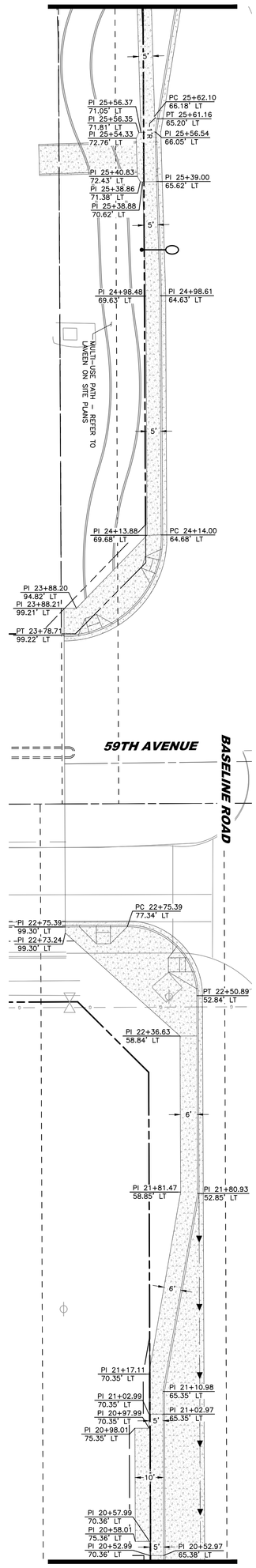


STA 20+50.00
SEE MATCHLINE ABOVE



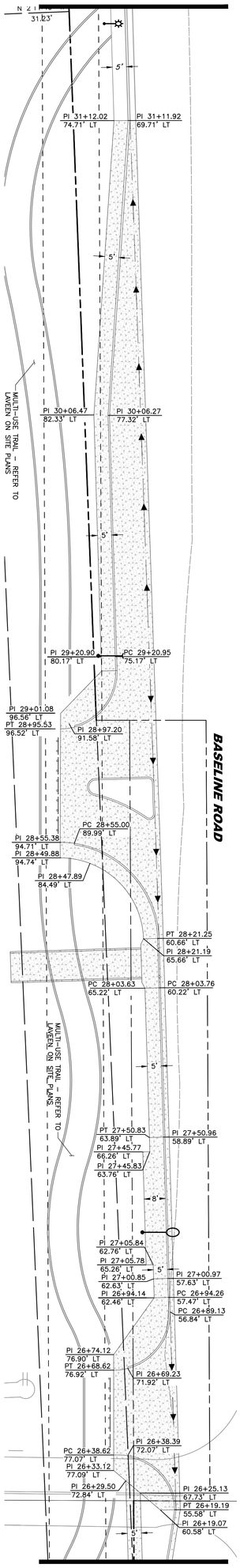
STA 15+00.00
SEE MATCHLINE BELOW

STA 26+00.00
SEE MATCHLINE ABOVE



STA 20+50.00
SEE MATCHLINE BELOW

STA 31+50



STA 26+00.00
SEE MATCHLINE BELOW

NORTH

SCALE IN FEET
0 20 240

Call at least two full working days before you begin excavation.
ARIZONA 811
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County (602) 263-1100

REGISTERED PROFESSIONAL ENGINEER (CIVIL)
23389
JEFFREY S. ERICKSON
ARIZONA U.S.A.
Expires 09/30/19

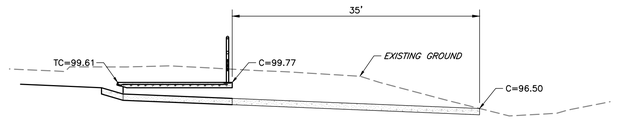
SHEET 23 OF 24	DRAWING NO: OP23
OFFSITE IMPROVEMENT PLANS SIDEWALK GEOMETRICS	
DATE: NOVEMBER 16, 2018	DRAWN BY: JD
DWG SCALE: NONE	CHECKED BY: JG
PROJECT NO: 182-001	
APPROVED BY:	

BASELINE ROAD IMPROVEMENTS
LOOP 202 & 57TH AVENUE
PHOENIX, ARIZONA
CIVIL IMPROVEMENT PLANS

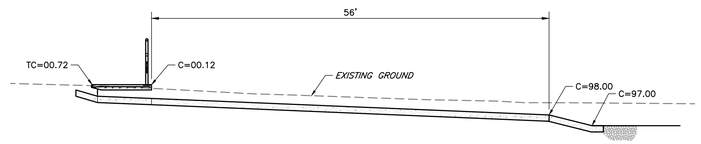
CEC
Civil & Environmental Consultants, Inc.
11811 N. Tatum Blvd., Suite 3057 - Phoenix, AZ 85028
Ph: 602.760.2324 · 877.231.2324 · Fax: 602.760.2330
www.cecinc.com

REVISION RECORD

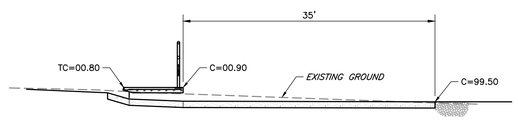
NO	DATE	DESCRIPTION



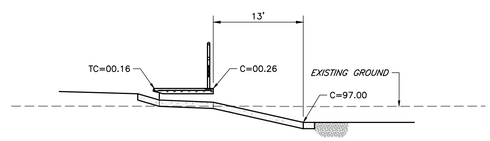
BASELINE ROAD - SCUPPER SECTION
STA 19+10.71 RT'



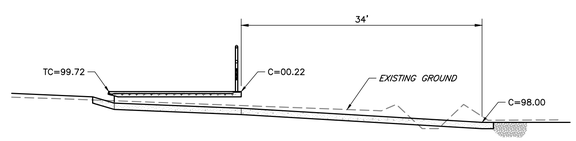
BASELINE ROAD - SCUPPER SECTION
STA 19+12.28 LT'



BASELINE ROAD - SCUPPER SECTION
STA 25+47.76 LT'



BASELINE ROAD - SCUPPER SECTION
STA 27+57.56 RT'



BASELINE ROAD - SCUPPER SECTION
STA 28+22.17 LT'

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Date Signed 11/16/18
ARIZONA, U.S.A.
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PHOENIX, ARIZONA
CIVIL IMPROVEMENT PLANS

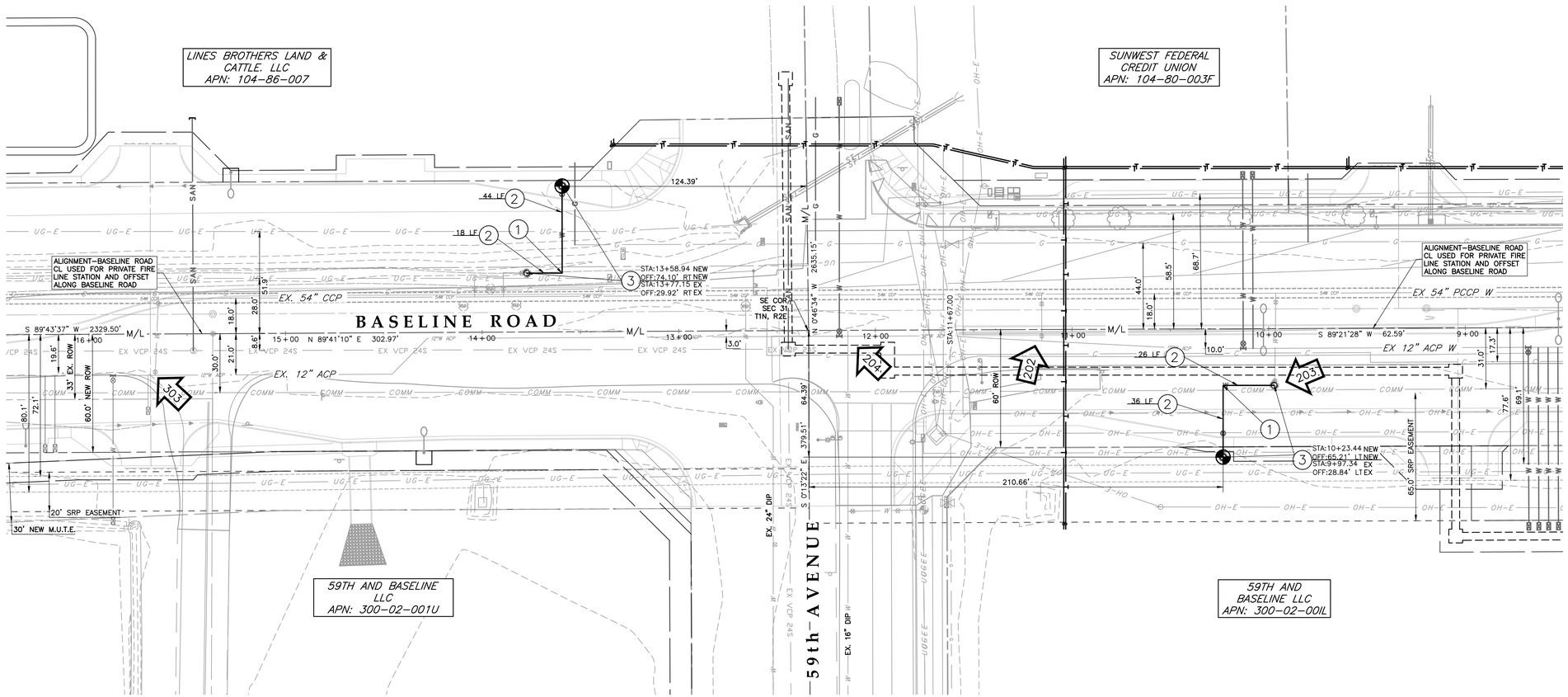
OFFSITE IMPROVEMENT PLANS
SCUPPER PROFILES

DATE:	NOVEMBER 16, 2018
DRAWN BY:	JD
DWG SCALE:	NONE
CHECKED BY:	JG
PROJECT NO:	182-001
APPROVED BY:	

DRAWING NO.: OP24

SHEET 24 OF 24

\\SVR-PHOENIX\Projects\2018\182-001\CADD\Dwg\CVD1\Offsite Improvement\182001-CVD1-Sections & Details.dwg[OP22] LS(11/16/2018 - eperrotto) - LP: 11/16/2018 10:05 AM



PUBLIC FIRE LINE QUANTITIES

DESCRIPTION	QUANTITY	UNIT
6" D.I.P. FIRE LINE	124	LF
6" 90° BEND	2	EA
RELOCATE FIRE HYDRANT	2	EA

PUBLIC FIRE LINE CONSTRUCTION NOTES

1. INSTALL A 6" 90° BEND WITH THRUST BLOCKING PER M.A.G. STD. DET. 380.
2. INSTALL 6" D.I.P., CLASS 350. REFER TO PLAN FOR LENGTH.
3. REMOVE AND RELOCATE EXISTING FIRE HYDRANT, VALVE, BOX AND COVER.

CITY OF PHOENIX PUBLIC FIRE HYDRANT PLAN NOTES:

1. ALL CONSTRUCTION SHALL BE PERFORMED IN COMPLIANCE WITH ALL APPLICABLE UNIFORM STANDARD DETAILS AND SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OF MARICOPA ASSOCIATION OF GOVERNMENTS (M.A.G.) AND THE PHOENIX SUPPLEMENTAL STANDARD DETAILS AND SPECIFICATIONS (NEWEST EDITION AND AS MODIFIED HEREON).
2. THE FOLLOWING M.A.G. DETAILS ARE SPECIFICALLY NOT APPROVED:
   - -390 CURB STOP WITH FLUSHING PIPE.
   - -390-1 VALVE BOX INSTALLATION.
3. PLANNING & DEVELOPMENT DEPARTMENT FIELD INSPECTION GROUP SHALL BE NOTIFIED 48-HOURS BEFORE ANY CONSTRUCTION BEGINS BY CALLING (602) 262-7811.
4. PAVEMENT REPLACEMENT THICKNESS AND TYPE ARE TO BE PER M.A.G. AND C.O.P. SUPPLEMENT TO M.A.G. SECTION 336 AND C.O.P. DETAIL P1200 - TYPE B. CURB AND GUTTER REPLACEMENT SHALL BE A MINIMUM OF ONE (1) FULL SECTION, PER M.A.G. STANDARD DETAIL 220. SIDEWALK REPLACEMENT SHALL BE A MINIMUM OF ONE (1) FULL PANEL PER C.O.P. DETAIL P1230. AT THE DISCRETION OF THE CITY OF PHOENIX PLANNING & DEVELOPMENT OFFSITE INSPECTOR, TUNNELING UNDER EXISTING CURB & GUTTER, IN CITY OF PHOENIX R.O.W., MAY BE ALLOWED. TUNNELING UNDER EXISTING SIDEWALK WILL NOT BE ALLOWED IN THE CITY OF PHOENIX R.O.W.
5. COMPACTION SHALL COMPLY WITH M.A.G. SECTION 601.
6. A PAVEMENT CUT SURCHARGE WILL BE ASSESSED FOR ALL NEWLY PAVED OR NEWLY OVERLAID PAVEMENT. IF FEES ARE ASSESSED, THEY ARE IN ADDITION TO THE REGULAR PERMIT FEES AND ARE OVER AND ABOVE ANY BACKFILL, COMPACTION, AND PAVEMENT REPLACEMENT STIPULATIONS THAT MAY BE IMPOSED AS A CONDITION OF PERMITTING.
7. PER THE CITY OF PHOENIX ORDINANCE G-4396, THIS PLAN IS FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX.
8. PLAN APPROVAL IS VALID FOR 180 DAYS. PRIOR TO PLAN APPROVAL EXPIRATION, ALL ASSOCIATED PERMITS SHALL BE PURCHASED OR THE PLANS SHALL BE RESUBMITTED FOR EXTENSION OF PLAN APPROVAL. THE EXPIRATION, EXTENSION, AND REINSTATEMENT OF CIVIL ENGINEERING PLANS AND PERMITS SHALL FOLLOW THE SAME GUIDELINES AS THOSE INDICATED IN THE PHOENIX BUILDING CONSTRUCTION CODE ADMINISTRATIVE PROVISIONS SECTION 105.3 FOR BUILDING PERMITS.

BENCHMARK

ADOT ALUMINUM CAP ON NORTH SIDE OF CONCRETE BASE OF TRANSMISSION TOWER #25, SOUTH SIDE OF BASELINE ROAD AT 59TH AVENUE TO NORTH

ELEVATION = 1001.624 (CITY OF PHOENIX, NGVD29)

BASIS OF BEARING

BASIS OF BEARING IS N00°14'04"E ALONG THE WEST LINE OF THE NORTHWEST QUARTER OF SECTION 5, TOWNSHIP 1 SOUTH, RANGE 2 EAST OF GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA.

UTILITY CONFLICT DISCLAIMER

I HEREBY CERTIFY THAT ALL UTILITY COMPANIES WITH FACILITIES IN THE AREA OF THE PROJECT HAVE BEEN CONTACTED AND THE DATA PROVIDED IS SHOWN ON THIS PLAN. I AGREE TO INDEMNIFY, DEFEND, SAVE AND HOLD HARMLESS THE CITY OF PHOENIX, IT'S OFFICERS, OFFICIALS, AGENTS, EMPLOYEES AND VOLUNTEERS FROM ANY AND ALL CLAIMS, DEMANDS, ACTIONS, LIABILITIES, DAMAGES, LOSSES, OR EXPENSES INCURRED FOR ANY UTILITY CONFLICTS THAT MAY ARISE.

	DATE CONTACTED
SOUTHWEST GAS	3/23/18
CENTURY LINK	3/23/18
SRP	3/23/18
SRVWUA-IRRIGATION	3/23/18
COX CABLE	3/23/18
CITY OF PHOENIX	4/6/18

AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE "RECORD DRAWING" MEASUREMENTS AS SHOWN HEREON WERE MADE UNDER MY SUPERVISION OR AS NOTED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED ENGINEER/ LAND SURVEYOR _____ DATE _____

REGISTRATION NO. _____

OWNERS

59TH AND BASELINE LLC
1700 W. HORIZON RIDGE PKWY, STE. 101
HENDERSON, NV 89012

CITY OF PHOENIX
200 W. WASHIGNTON ST.
PHOENIX, AZ 85003

CROSSWALK LUTHERAN MINISTRIES INC
2610 W. BASELINE RD.
PHOENIX, AZ 85041, STE. 106

JAGUAR PREMIUM PROPERTIES LLP
30 RASHEE LN, BOX 10
TRAVERSE BAY MB
CANADA R0E 2A0

LAVEEN BASELINE LLC
1707 E. HIGHLAND AVENUE, STE. 100
PHOENIX, ARIZONA 85016

LINES BROTHERS LAND & CATTLE LLC
2415 S. RURAL ROAD
TEMPE, AZ 85282

SUNWEST FEDERAL CREDIT UNION
11839 N. 28TH DRIVE
PHOENIX, AZ 85029

ENGINEER

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
11811 N. TATUM BLVD., STE. 3057
PHOENIX, ARIZONA 85028
PH: 602-644-2179
FX: 602-760-2330
CONTACT: JASON GUERIN

APPROVED FOR:

THE CITY OF PHOENIX

PLANNING & DEVELOPMENT DEPARTMENT _____ DATE _____

CPPA#1806043
KIVA# 18-3011
SDEV# 1800624
Q.S.# 01-14 & 01-15

NORTH
SCALE IN FEET
0 30 60

Call at least two full working days before you begin excavation. ARIZONA 811 Arizona Blue Stake, Inc.

REGISTERED PROFESSIONAL ENGINEER (CIVIL) CERTIFICATE NO. 23980 JEFFREY S. ERICKSON Date Signed 11/14/18 ARIZONA, U.S.A. Expires 09/30/20

REVISION RECORD

NO	DATE	DESCRIPTION

Civil & Environmental Consultants, Inc.
11811 N. Tatum Blvd., Suite 3057 - Phoenix, AZ 85028
Ph: 602.760.2324 · 877.231.2324 · Fax: 602.760.2330
www.cecinc.com

BASELINE ROAD IMPROVEMENTS
59TH AVE. AND BASELINE RD.
PHOENIX, ARIZONA
CIVIL IMPROVEMENT PLANS

FIRE HYDRANT RELOCATION

DATE:	NOVEMBER 14, 2018
DRAWN BY:	BB
DWG SCALE:	1"=30'
CHECKED BY:	JG
PROJECT NO:	182-001
APPROVED BY:	

DRAWING NO.: FH1

SHEET 1 OF 1

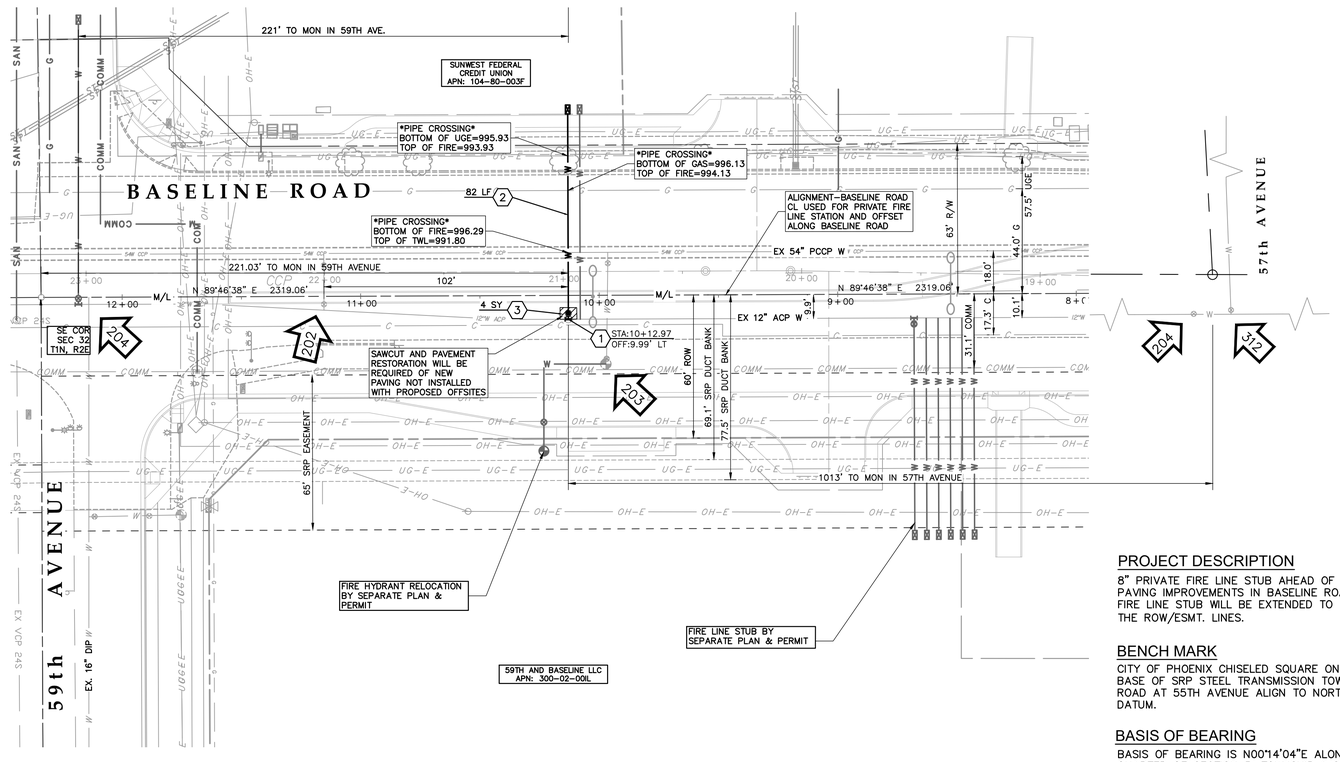
P:\2018\182-001\-CADD\Dwg\CVD1\Offsite Improvement\182001-CVD1-Fire Hydrant Relocation.dwg\FH1-03\ LS(1)\14/2018 - jguerin) - LP: 12/5/2018 11:53 AM

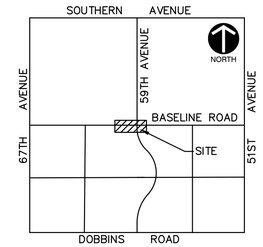
FIRE LINE NOTES (CITY OF PHOENIX)

1. ALL CONSTRUCTION IN CITY OF PHOENIX R.O.W. IS TO CONFORM TO M.A.G. SPECIFICATIONS AND DETAILS AND CITY OF PHOENIX SUPPLEMENT TO M.A.G. SPECIFICATIONS AND DETAILS, UNLESS MODIFIED ON THE PLANS.
2. PLANNING AND DEVELOPMENT DEPARTMENT'S CIVIL/SITE INSPECTION STAFF SHALL BE NOTIFIED 48 HOURS BEFORE ANY CONSTRUCTION BEGINS, TELEPHONE (602) 262–7811.
3. IT IS REQUIRED THAT A FORMAL WRITTEN REQUEST FOR A FIRE LINE TURN–ON BE RECEIVED BY CIVIL ENGINEERING OF THE PLANNING AND DEVELOPMENT DEPARTMENT FROM CITY OF PHOENIX FIRE PREVENTION UPON COMPLETION OF THE FIRE LINE WORK. THIS JOB IS NOT COMPLETE UNTIL THIS HAS BEEN DONE AND THE LINE TURNED ON BY THE WATER SERVICES DEPARTMENT.
4. THE FOLLOWING M.A.G. DETAILS ARE SPECIFICALLY NOT APPROVED:
   - 390 CURB STOP WITH FLUSHING PIPE
   - 391–1 VALVE BOX INSTALLATION
   - 346 FIRE LINE DETECTOR CHECK VAULT
5. 8"X2" TAPPED CAP WITH 2" CORP. STOP AT THE END OF OFFSITE WORK IS REQUIRED IF ONSITE WORK IS NOT CONCURRENT WITH OFFSITE CONSTRUCTION. THE TAPPED CAP MUST BE INSTALLED BEFORE THE BACKFLOW PREVENTION DEVICE.
6. FIRE LINE CONNECTION TO CITY MAINS SHALL BE USED FOR FIRE PROTECTION SYSTEM ONLY. NO METERED SERVICES CAN BE CONNECTED TO A FIRE LINE.
7. BACKFLOW PREVENTION DEVICES ARE REQUIRED ON ALL FIRE LINES. CONNECTIONS ARE TO BE IN ACCORDANCE WITH UNIVERSITY OF SOUTHERN CALIFORNIA – MANUAL OF CROSS–CONNECTION CONTROL. SEE BUILDING SAFETY FOR DETAILS. BACKFLOW DEVICES ARE TO BE SHOWN ON THE OFFSITE PLAN. FIRE LINES THAT ARE PROPOSED WITH BACKFLOW PREVENTION DEVICES SHALL BE REQUIRED TO PROVIDE A CERTIFICATE OF APPROVAL FROM THE UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS–CONNECTION CONTROL AND HYDRAULIC RESEARCH (USC – FCCCHR), PRIOR TO FIRE LINE PERMIT ISSUANCE, PER ARIZONA ADMINISTRATIVE CODE R18–4–115D.
8. BACKFLOW PREVENTION DEVICES SHALL NOT BE LOCATED IN DRIVEWAYS, VISIBILITY TRIANGLES, OR OTHER LOCATIONS WHERE ACCIDENTAL DAMAGE OR VISIBILITY OBSTRUCTION WOULD BE A LIKELY CONSEQUENCE.
9. BACKFLOW PREVENTION DEVICES SHALL BE INSTALLED OUTSIDE OF RIGHT–OF–WAY AT (OR NEAR) THE PROPERTY LINE (POINT OF SERVICE) AND SHALL BE FULLY ACCESSIBLE FOR THE PERIODIC TESTING, REPAIRS, AND REPLACEMENT. THERE SHALL BE AN UNOBSTRUCTED RADIUS OF NO LESS THAN THREE (3) FEET FROM THE OUTER PERIMETER OF THE BACKFLOW PREVENTION DEVICE PER THE 2006 PHOENIX FIRE CODE (INTERNATIONAL FIRE CODE) SECTION 901.10.
10. IN THE ABSENCE OF SPECIFIC PRESSURE DROP INFORMATION, THE DIAMETER OF THE INLET OR OUTLET OF ANY BACKFLOW PREVENTION DEVICE OR ITS CONNECTING PIPING SHALL NOT BE LESS THAN THE DIAMETER OF SUCH WATER DISTRIBUTION PIPING TO THE FIXTURES SERVED BY THE DEVICE, PER UPC 610.2. IF AVAILABLE, PRESSURE DROP INFORMATION SHALL BE PROVIDED WITH THE SUBMITTED PLANS.
11. LOOPED ONSITE FIRE LINE SYSTEMS SHALL BE PROVIDED A BACKFLOW PREVENTER AT EACH POINT OF CONNNECTION TO THE PUBLIC WATER SYSTEM, PER UPC 603.3.11.
12. ALL WORK MUST COMPLY WITH REQUIREMENTS OF THE CURRENT CITY OF PHOENIX TRAFFIC BARRICADE MANUAL.
13. PAVEMENT REPLACEMENT THICKNESS AND TYPE ARE TO BE PER M.A.G. SECTION 336 AND C.O.P. DETAIL P1200 –TYPE B. CURB AND GUTTER REPLACEMENT SHALL BE A MINIMUM OF ONE (1) FULL SECTION, PER M.A.G. STANDARD DETAIL 220. SIDEWALK REPLACEMENT SHALL BE A MINIMUM OF ONE (1) FULL PANEL PER C.O.P. DETAIL P1230. AT THE DISCRETION OF THE CITY OF PHOENIX PLANNING AND DEVELOPMENT OFFSITE INSPECTOR, TUNNELING UNDER EXISTING CURB AND GUTTER, IN CITY OF PHOENIX R.O.W., WILL BE ALLOWED. TUNNELING UNDER EXISTING SIDEWALK WILL NOT BE ALLOWED IN THE CITY OF PHOENIX R.O.W.
14. MINIMUM COVERAGE OVER THE TOP OF PIPE SHALL BE FOUR (4) FEET IF THE MAIN IS LOCATED IN A MAJOR STREET OR THE MAIN IS 12" OR LARGER. OTHERWISE, THREE (3) FEET OF COVER OVER THE TOP OF THE PIPE IS REQUIRED.
15. COMPACTION SHALL COMPLY WITH M.A.G. SEC. 601, 95% MINIMUM IN A PUBLIC STREET.
16. A PAVEMENT CUT SURCHARGE MAY BE ASSESSED ON THIS PROJECT FOR NEW PAVEMENT CUTS FOR TRENCHING IN NEW ASPHALT PAVEMENT.
17. APPROVAL OF THESE PLANS SHALL NOT PREVENT THE CITY FROM REQUIRING CORRECTION OF ERRORS IN THE PLANS WHERE SUCH ERRORS ARE SUBSEQUENTLY FOUND TO BE IN VIOLATION OF ANY LAW, ORDINANCE OR OTHER HEALTH/SAFETY ISSUE.
18. PLAN APPROVAL IS VALID FOR 180 DAYS. PRIOR TO PLAN APPROVAL EXPIRATION, ALL ASSOCIATED PERMITS SHALL BE PURCHASED OR THE PLANS SHALL BE RESUBMITTED FOR EXTENSION OF PLAN APPROVAL. THE EXPIRATION, EXTENSION, AND REINSTATEMENT OF CIVIL ENGINEERING PLANS AND PERMITS SHALL FOLLOW THE SAME GUIDELINES AS THOSE INDICATED IN THE PHOENIX BUILDING CONSTRUCTION CODE ADMINISTRATIVE PROVISIONS SECTION 105.3 FOR BUILDING PERMITS.

MANUFACTURES FOR FIRELINE MATERIAL

D.I.P. – PACIFIC STATES
C–900 – VYNEL TECH
VALVES – CLOW, MUELLER





VICINITY MAP
N.T.S.

PUBLIC FIRELINE CONSTRUCTION NOTES

1. INSTALL 12"X 8" T.S.V.B&C PER MAG STD DET. 340 AND C.O.P DET. P–1391 & MAG SPEC SECTION 630.4.2 (A) (1).
2. INSTALL 8" D.I.P PRESSURE CLASS 350 FIRELINE MIN. 48" COVER. LENGTH AS INDICATED ON PLAN. COMPACT IN ACCORDANCE WITH MAG. SPEC. 601.
3. SAWCUT, REMOVE & REPLACE EXISTING PAVEMENT, CURB & S/W. PAVEMENT REPLACEMENT THICKNESS AND TYPE TO BE PER MAG SEC. 336 AND C.O.P DETAIL P–1200–TYPE B. CURB & GUTTER REPLACEMENT SHALL BE A MINIMUM OF ONE (1) FULL SECTION. PER MAG STD DET. 220, TYPE A. SIDEWALK REPLACEMENT SHALL BE A MINIMUM OF ONE (1) FULL PANEL PER C.O.P DET. P1230. AT THE DISCRETION OF THE CITY OF PHOENIX PLANNING & DEVELOPMENT OFFSITE INSPECTOR, TUNNELING UNDER EXISTING CURB & GUTTER, IN THE CITY OF PHOENIX ROW, WILL BE ALLOWED. TUNNELING UNDER EXITING SIDEWALK WILL NOT BE ALLOWED IN THE CITY OF PHOENIX ROW.

NOTES:

1. CONTRACTOR SHALL VERIFY EXACT LOCATION AND DEPTH OF EXISTING WATER PRIOR TO CONSTRUCTION. CONTRACTOR TO ALSO VERIFY LOCATION OF EXISTING UTILITIES BY CONTACTING BLUE–STAKE PRIOR TO CONSTRUCTION.
2. PROPOSED 8" FIRE LINE & SMALLER TO BE INSTALLED WITH A MINIMUM 3'–0" OF COVER.
3. MAINTAIN 2'–0" MINIMUM VERTICAL CLEARANCE BETWEEN WATER AND SEWER LINES.
4. ONSITE FIRE LINE SHALL BE INSTALLED PER 2013 NFPA 24 AND 2012 IFC.
5. PLASTIC UNDERGROUND WATER PIPING SHALL HAVE A CONTINUOUS 18 GAUGE (OR LARGER) COPPER WIRE TRACER ATTACHED TO THE PLASTIC PIPING MATERIAL. A.R.S. SECTION 40–360.22.J
6. ASPHALT RESTORATION COVERED IN OFFSITE IMPROVEMENT PLANS, PAVING PERMIT CPPA # 1803132.

UTILITY CONFLICT DISCLAIMER

I HEREBY CERTIFY THAT ALL UTILITY COMPANIES WITH FACILITIES IN THE AREA OF THE PROJECT HAVE BEEN CONTACTED AND THE DATA PROVIDED IS SHOWN ON THIS PLAN. I AGREE TO INDEMNIFY, DEFEND, SAVE AND HOLD HARMLESS THE CITY OF PHOENIX, IT'S OFFICERS, OFFICIALS, AGENTS, EMPLOYEES AND VOLUNTEERS FROM ANY AND ALL CLAIMS, DEMANDS, ACTIONS, LIABILITIES, DAMAGES, LOSSES, OR EXPENSES INCURRED FOR ANY UTILITY CONFLICTS THAT MAY ARISE.

	DATE CONTACTED
SOUTHWEST GAS	3/23/18
CENTURY LINK	3/23/18
SRP	3/23/18
SRVWUA–IRRIGATION	3/23/18
COX CABLE	3/23/18
CITY OF PHOENIX	4/6/18

ESTIMATED QUANTITIES

THE QUANTITIES SHOWN HEREON ARE AN ESTIMATE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL QUANTITIES BEFORE BIDDING. PRESSURE RATED DUCTILE HAS NOT BEEN APPROVED FOR USE AND IS NOT TO BE CONSIDERED AS AN ALTERNATIVE.

PRIVATE FIRE LINE QUANTITIES

DESCRIPTION	QUANTITY	UNIT
8" D.I.P. FIRE LINE	82	LF
12"X8" T.S.V.B&C	1	EA
SAWCUT, REMOVE AND REPLACE EXISTING PAVEMENT	4	SY

APN
104–80–003F

ARCHITECT
BUTLER DESIGN GROUP
5017 E. WASHINGTON ST., STE. 107
PHOENIX, ARIZONA 85034
PH: 602–957–1800
FAX: 602–957–7722
CONTACT: CLAY CHIAPPINI

ENGINEER
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
11811 N. TATUM BLVD., STE. 3057
PHOENIX, ARIZONA 85028
PH: 602–644–2179
FX: 602–760–2330
CONTACT: JASON GUERIN

OWNER
SUNWEST FEDERAL CREDIT UNION
11839 N. 28TH DRIVE
PHOENIX, AZ 85029

PROJECT DESCRIPTION
8" PRIVATE FIRE LINE STUB AHEAD OF PAVING IMPROVEMENTS IN BASELINE ROAD. FIRE LINE STUB WILL BE EXTENDED TO THE ROW/ESMT. LINES.

BENCH MARK
CITY OF PHOENIX CHISELED SQUARE ON CENTER OF NORTH SIDE OF CONCRETE BASE OF SRP STEEL TRANSMISSION TOWER NO. 29. SOUTH SIDE OF BASELINE ROAD AT 55TH AVENUE ALIGN TO NORTH. ELEVATION=1007.397 CITY OF PHOENIX DATUM.

BASIS OF BEARING
BASIS OF BEARING IS N00°14'04"E ALONG THE WEST LINE OF THE NORTHWEST QUARTER OF SECTION 5, TOWNSHIP 1 SOUTH, RANGE 2 EAST OF GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA.

FLOOD ZONE
THE SUBJECT PROPERTY LIES WITHIN SHADED ZONE "X" WITH A DEFINITION OF: AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD. DESIGNATION DETERMINED BY FEMA FLOOD ZONE MAP 04013C2190M PANEL NUMBER 2190 OF 4425, EFFECTIVE DATE NOVEMBER 4, 2015 & FEMA FLOOD ZONE MAPS 04013C2195L, 04013C2665L, & 04013C22660L, PANEL NUMBERS 2195, 2655 & 2600 OF 4425, EFFECTIVE DATE OCTOBER 16, 2013.

APPROVED FOR:
THE CITY OF PHOENIX

PLANNING & DEVELOPMENT DEPARTMENT — DATE

AS-BUILT CERTIFICATION
I HEREBY CERTIFY THAT THE "RECORD DRAWING" MEASUREMENTS AS SHOWN HEREON WERE MADE UNDER MY SUPERVISION OR AS NOTED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED ENGINEER/ LAND SURVEYOR — DATE

REGISTRATION NO.

CPPA#1806043
KIVA# 18-3011
SDEV# 1800624
Q.S.# 01-14 & 01-15

NORTH
SCALE IN FEET
0 30 60

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

REGISTERED PROFESSIONAL ENGINEER (CIVIL) CERTIFICATE NO. 23980 JEFFREY S. ERICKSON ARIZONA, U.S.A. Date Signed 11/14/18 Exp'res 09/30/20

REVISION RECORD

NO	DATE	DESCRIPTION

Civil & Environmental Consultants, Inc.
11811 N. Tatum Blvd., Suite 3057 - Phoenix, AZ 85028
Ph: 602.760.2324 · 877.231.2324 · Fax: 602.760.2330
www.cecinc.com

BASELINE ROAD IMPROVEMENTS
59TH AVE. AND BASELINE RD.
PHOENIX, ARIZONA
CIVIL IMPROVEMENT PLANS

PRIVATE FIRE LINE PLAN

DATE:	NOVEMBER 14, 2018	DRAWN BY:	BB
DWG SCALE:	1"=30'	CHECKED BY:	JG
PROJECT NO:			182-001
APPROVED BY:			

DRAWING NO.: PFL1
SHEET 1 OF 1

FIRE LINE NOTES (CITY OF PHOENIX)

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   346 FIRE LINE DETECTOR CHECK VAULT

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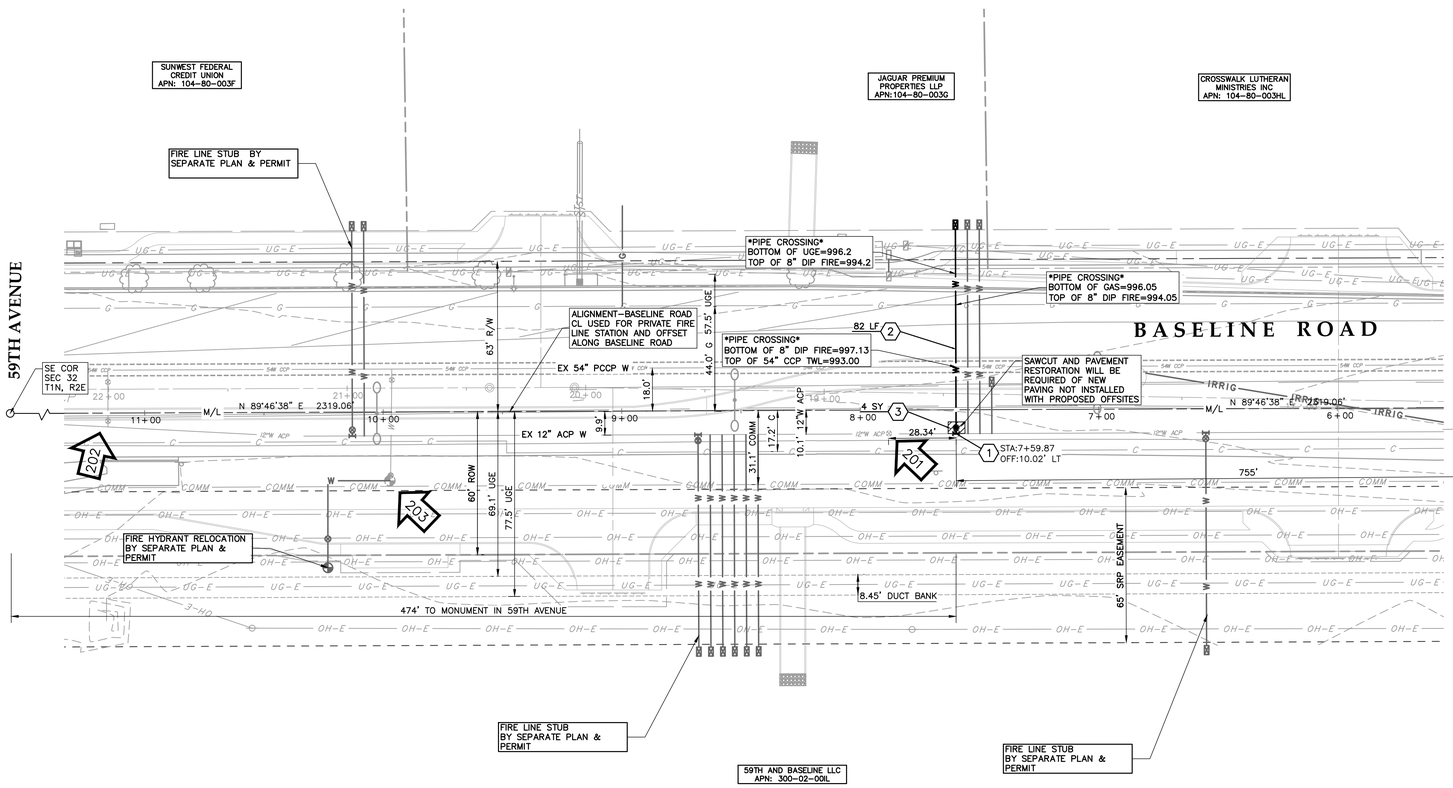
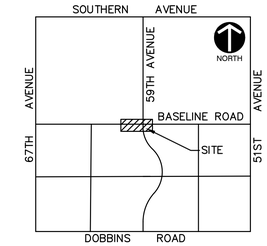
MANUFACTURES FOR FIRELINE MATERIAL

D.I.P. – PACIFIC STATES
C-900 – VYNEL TECH
VALVES – CLOW, MUELLER





VICINITY MAP
N.T.S.

PROJECT DESCRIPTION

8" PRIVATE FIRE LINE STUB AHEAD OF PAVING IMPROVEMENTS IN BASELINE ROAD. FIRE LINE STUB WILL BE EXTENDED TO THE ROW/ESMT. LINES.

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CITY OF PHOENIX CHISELED SQUARE ON CENTER OF NORTH SIDE OF CONCRETE BASE OF SRP STEEL TRANSMISSION TOWER NO. 29. SOUTH SIDE OF BASELINE ROAD AT 55TH AVENUE ALIGN TO NORTH. ELEVATION=1007.397 CITY OF PHOENIX DATUM.

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FLOOD ZONE

THE SUBJECT PROPERTY LIES WITHIN SHADED ZONE "X" WITH A DEFINITION OF: AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD. DESIGNATION DETERMINED BY FEMA FLOOD ZONE MAP 04013C2190M PANEL NUMBER 2190 OF 4425, EFFECTIVE DATE NOVEMBER 4, 2015 & FEMA FLOOD ZONE MAPS 04013C2195L, 04013C2665L, & 04013C22660L, PANEL NUMBERS 2195, 2655 & 2600 OF 4425, EFFECTIVE DATE OCTOBER 16, 2013.

APPROVED FOR:

THE CITY OF PHOENIX

PLANNING & DEVELOPMENT DEPARTMENT — DATE

AS-BUILT CERTIFICATION

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REGISTERED ENGINEER/ LAND SURVEYOR — DATE

REGISTRATION NO.

PUBLIC FIRELINE CONSTRUCTION NOTES

1. INSTALL 12"X 8" T.S.V.B&C PER MAG STD DET. 340 AND C.O.P DET. P-1391 & MAG SPEC SECTION 630.4.2 (A) (1).
2. INSTALL 8" D.I.P PRESSURE CLASS 350 FIRELINE MIN. 48" COVER. LENGTH AS INDICATED ON PLAN. COMPACT IN ACCORDANCE WITH MAG. SPEC. 601.
3. SAWCUT, REMOVE & REPLACE EXISTING PAVEMENT, CURB & S/W. PAVEMENT REPLACEMENT THICKNESS AND TYPE TO BE PER MAG SEC. 336 AND C.O.P DETAIL P-1200-TYPE B. CURB & GUTTER REPLACEMENT SHALL BE A MINIMUM OF ONE (1) FULL SECTION. PER MAG STD DET. 220, TYPE A. SIDEWALK REPLACEMENT SHALL BE A MINIMUM OF ONE (1) FULL PANEL PER C.O.P DET. P1230. AT THE DISCRETION OF THE CITY OF PHOENIX PLANNING & DEVELOPMENT OFFSITE INSPECTOR, TUNNELING UNDER EXISTING CURB & GUTTER, IN THE CITY OF PHOENIX ROW, WILL BE ALLOWED. TUNNELING UNDER EXITING SIDEWALK WILL NOT BE ALLOWED IN THE CITY OF PHOENIX ROW.

⬡ NOTES:

1. CONTRACTOR SHALL VERIFY EXACT LOCATION AND DEPTH OF EXISTING WATER PRIOR TO CONSTRUCTION. CONTRACTOR TO ALSO VERIFY LOCATION OF EXISTING UTILITIES BY CONTACTING BLUE-STAKE PRIOR TO CONSTRUCTION.
2. PROPOSED 8" FIRE LINE & SMALLER TO BE INSTALLED WITH A MINIMUM 3'-0" OF COVER.
3. MAINTAIN 2'-0" MINIMUM VERTICAL CLEARANCE BETWEEN WATER AND SEWER LINES.
4. ONSITE FIRE LINE SHALL BE INSTALLED PER 2013 NFPA 24 AND 2012 IFC.
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6. ASPHALT RESTORATION COVERED IN OFFSITE IMPROVEMENT PLANS, PAVING PERMIT CPPA # 1803132.

UTILITY CONFLICT DISCLAIMER

I HEREBY CERTIFY THAT ALL UTILITY COMPANIES WITH FACILITIES IN THE AREA OF THE PROJECT HAVE BEEN CONTACTED AND THE DATA PROVIDED IS SHOWN ON THIS PLAN. I AGREE TO INDEMNIFY, DEFEND, SAVE AND HOLD HARMLESS THE CITY OF PHOENIX, IT'S OFFICERS, OFFICIALS, AGENTS, EMPLOYEES AND VOLUNTEERS FROM ANY AND ALL CLAIMS, DEMANDS, ACTIONS, LIABILITIES, DAMAGES, LOSSES, OR EXPENSES INCURRED FOR ANY UTILITY CONFLICTS THAT MAY ARISE.

	DATE CONTACTED
SOUTHWEST GAS	3/23/18
CENTURY LINK	3/23/18
SRP	3/23/18
SRVWUA-IRRIGATION	3/23/18
COX CABLE	3/23/18
CITY OF PHOENIX	4/6/18

ESTIMATED QUANTITIES

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PRIVATE FIRE LINE QUANTITIES

DESCRIPTION	QUANTITY	UNIT
8" D.I.P. FIRE LINE	82	LF
12"X8" T.S.V.B&C	1	EA
SAWCUT, REMOVE AND REPLACE EXISTING PAVEMENT	4	SY

APN

104-80-003G

ARCHITECT

BUTLER DESIGN GROUP
5017 E. WASHINGTON ST., STE. 107
PHOENIX, ARIZONA 85034
PH: 602-957-1800
FAX: 602-957-7722
CONTACT: CLAY CHIAPPINI

ENGINEER

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
11811 N. TATUM BLVD., STE. 3057
PHOENIX, ARIZONA 85028
PH: 602-644-2179
FX: 602-760-2330
CONTACT: JASON GUERIN

OWNER

JAGUAR PREMIUM PROPERTIES LLP
30 RASHEE LN, BOX 10
TRAVERSE BAY MB
CANADA ROW 2AO

CPPA#1806043
KIVA# 18-3011
SDEV# 1800624
Q.S.# 01-14 & 01-15

NORTH
SCALE IN FEET
0 30 60

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

REGISTERED PROFESSIONAL ENGINEER (CIVIL)
CERTIFICATE NO. 23980
JEFFREY S. ERICKSON
Date Signed 11/14/18
ARIZONA, U.S.A.
Expires 09/30/20

REVISION RECORD

NO	DATE	DESCRIPTION

Civil & Environmental Consultants, Inc.
11811 N. Tatum Blvd., Suite 3057 - Phoenix, AZ 85028
Ph: 602.760.2324 · 877.231.2324 · Fax: 602.760.2330
www.cecinc.com

BASELINE ROAD IMPROVEMENTS
59TH AVE. AND BASELINE RD.
PHOENIX, ARIZONA
CIVIL IMPROVEMENT PLANS

PRIVATE FIRE LINE PLAN

DATE:	NOVEMBER 14, 2018	DRAWN BY:	BB
DWG SCALE:	1"=30'	CHECKED BY:	JG
PROJECT NO:			182-001
APPROVED BY:			

DRAWING NO.: PFL1
SHEET 1 OF 1

P:\2018\182-001\-CADD\Dwg\CV01\Office Improvement\182001-CV01-FIRE-LINE-PLANS\182-001-CV01-PF102-Fire-Line_Sheet ARCH36.dwg\PFL-03| LS:(11/14/2018 - jpeers) - LP: 11/14/2018 1:53 PM

FIRE LINE NOTES (CITY OF PHOENIX)

1. ALL CONSTRUCTION IN CITY OF PHOENIX R.O.W. IS TO CONFORM TO M.A.G. SPECIFICATIONS AND DETAILS AND CITY OF PHOENIX SUPPLEMENT TO M.A.G. SPECIFICATIONS AND DETAILS, UNLESS MODIFIED ON THE PLANS.
2. PLANNING AND DEVELOPMENT DEPARTMENT'S CIVIL/SITE INSPECTION STAFF SHALL BE NOTIFIED 48 HOURS BEFORE ANY CONSTRUCTION BEGINS, TELEPHONE (602) 262-7811.
3. IT IS REQUIRED THAT A FORMAL WRITTEN REQUEST FOR A FIRE LINE TURN-ON BE RECEIVED BY CIVIL ENGINEERING OF THE PLANNING AND DEVELOPMENT DEPARTMENT FROM CITY OF PHOENIX FIRE PREVENTION UPON COMPLETION OF THE FIRE LINE WORK. THIS JOB IS NOT COMPLETE UNTIL THIS HAS BEEN DONE AND THE LINE TURNED ON BY THE WATER SERVICES DEPARTMENT.
4. THE FOLLOWING M.A.G. DETAILS ARE SPECIFICALLY NOT APPROVED:
   - 390 CURB STOP WITH FLUSHING PIPE
   - 391-1 VALVE BOX INSTALLATION
   - 346 FIRE LINE DETECTOR CHECK VAULT
5. 8"X2" TAPPED CAP WITH 2" CORP. STOP AT THE END OF OFFSITE WORK IS REQUIRED IF ONSITE WORK IS NOT CONCURRENT WITH OFFSITE CONSTRUCTION. THE TAPPED CAP MUST BE INSTALLED BEFORE THE BACKFLOW PREVENTION DEVICE.
6. FIRE LINE CONNECTION TO CITY MAINS SHALL BE USED FOR FIRE PROTECTION SYSTEM ONLY. NO METERED SERVICES CAN BE CONNECTED TO A FIRE LINE.
7. BACKFLOW PREVENTION DEVICES ARE REQUIRED ON ALL FIRE LINES. CONNECTIONS ARE TO BE IN ACCORDANCE WITH UNIVERSITY OF SOUTHERN CALIFORNIA – MANUAL OF CROSS-CONNECTION CONTROL. SEE BUILDING SAFETY FOR DETAILS. BACKFLOW DEVICES ARE TO BE SHOWN ON THE OFFSITE PLAN. FIRE LINES THAT ARE PROPOSED WITH BACKFLOW PREVENTION DEVICES SHALL BE REQUIRED TO PROVIDE A CERTIFICATE OF APPROVAL FROM THE UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS-CONNECTION CONTROL AND HYDRAULIC RESEARCH (USC – FCCCHR), PRIOR TO FIRE LINE PERMIT ISSUANCE, PER ARIZONA ADMINISTRATIVE CODE R18-4-115D.
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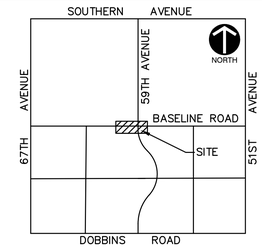
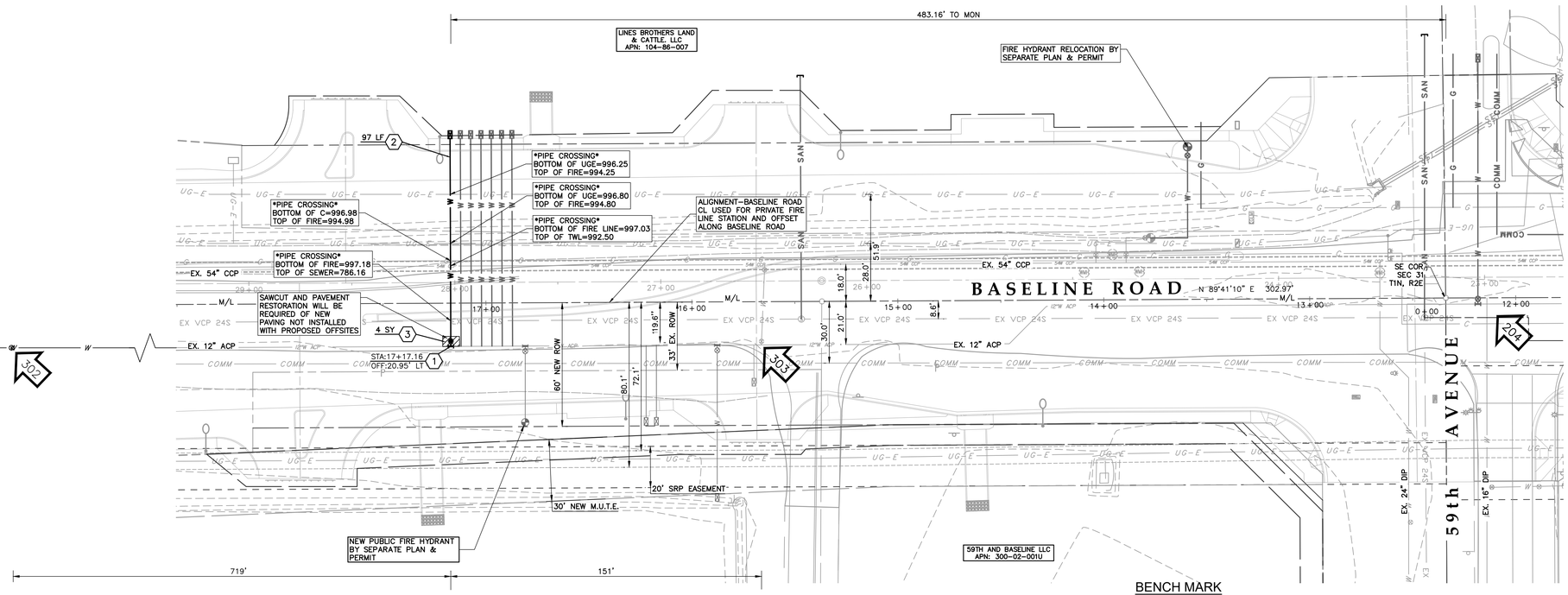
9. BACKFLOW PREVENTION DEVICES SHALL BE INSTALLED OUTSIDE OF RIGHT-OF-WAY AT (OR NEAR) THE PROPERTY LINE (POINT OF SERVICE) AND SHALL BE FULLY ACCESSIBLE FOR THE PERIODIC TESTING, REPAIRS, AND REPLACEMENT. THERE SHALL BE AN UNOBSTRUCTED RADIUS OF NO LESS THAN THREE (3) FEET FROM THE OUTER PERIMETER OF THE BACKFLOW PREVENTION DEVICE PER THE 2006 PHOENIX FIRE CODE (INTERNATIONAL FIRE CODE) SECTION 901.10.
10. IN THE ABSENCE OF SPECIFIC PRESSURE DROP INFORMATION, THE DIAMETER OF THE INLET OR OUTLET OF ANY BACKFLOW PREVENTION DEVICE OR ITS CONNECTING PIPING SHALL NOT BE LESS THAN THE DIAMETER OF SUCH WATER DISTRIBUTION PIPING TO THE FIXTURES SERVED BY THE DEVICE, PER UPC 610.2. IF AVAILABLE, PRESSURE DROP INFORMATION SHALL BE PROVIDED WITH THE SUBMITTED PLANS.
11. LOOPED ONSITE FIRE LINE SYSTEMS SHALL BE PROVIDED A BACKFLOW PREVENTER AT EACH POINT OF CONNNECTION TO THE PUBLIC WATER SYSTEM, PER UPC 603.3.11.
12. ALL WORK MUST COMPLY WITH REQUIREMENTS OF THE CURRENT CITY OF PHOENIX TRAFFIC BARRICADE MANUAL.
13. PAVEMENT REPLACEMENT THICKNESS AND TYPE ARE TO BE PER M.A.G. SECTION 336 AND C.O.P. DETAIL P1200 –TYPE B. CURB AND GUTTER REPLACEMENT SHALL BE A MINIMUM OF ONE (1) FULL SECTION, PER M.A.G. STANDARD DETAIL 220. SIDEWALK REPLACEMENT SHALL BE A MINIMUM OF ONE (1) FULL PANEL PER C.O.P. DETAIL P1230. AT THE DISCRETION OF THE CITY OF PHOENIX PLANNING AND DEVELOPMENT OFFSITE INSPECTOR, TUNNELING UNDER EXISTING CURB AND GUTTER, IN CITY OF PHOENIX R.O.W., WILL BE ALLOWED. TUNNELING UNDER EXISTING SIDEWALK WILL NOT BE ALLOWED IN THE CITY OF PHOENIX R.O.W.
14. MINIMUM COVERAGE OVER THE TOP OF PIPE SHALL BE FOUR (4) FEET IF THE MAIN IS LOCATED IN A MAJOR STREET OR THE MAIN IS 12" OR LARGER. OTHERWISE, THREE (3) FEET OF COVER OVER THE TOP OF THE PIPE IS REQUIRED.
15. COMPACTION SHALL COMPLY WITH M.A.G. SEC. 601, 95% MINIMUM IN A PUBLIC STREET.
16. A PAVEMENT CUT SURCHARGE MAY BE ASSESSED ON THIS PROJECT FOR NEW PAVEMENT CUTS FOR TRENCHING IN NEW ASPHALT PAVEMENT.
17. APPROVAL OF THESE PLANS SHALL NOT PREVENT THE CITY FROM REQUIRING CORRECTION OF ERRORS IN THE PLANS WHERE SUCH ERRORS ARE SUBSEQUENTLY FOUND TO BE IN VIOLATION OF ANY LAW, ORDINANCE OR OTHER HEALTH/SAFETY ISSUE.
18. PLAN APPROVAL IS VALID FOR 180 DAYS. PRIOR TO PLAN APPROVAL EXPIRATION, ALL ASSOCIATED PERMITS SHALL BE PURCHASED OR THE PLANS SHALL BE RESUBMITTED FOR EXTENSION OF PLAN APPROVAL. THE EXPIRATION, EXTENSION, AND REINSTATEMENT OF CIVIL ENGINEERING PLANS AND PERMITS SHALL FOLLOW THE SAME GUIDELINES AS THOSE INDICATED IN THE PHOENIX BUILDING CONSTRUCTION CODE ADMINISTRATIVE PROVISIONS SECTION 105.3 FOR BUILDING PERMITS.

MANUFACTURES FOR FIRELINE MATERIAL

D.I.P. – PACIFIC STATES
C-900 – VYNEL TECH
VALVES – CLOW, MUELLER



VICINITY MAP
N.T.S.



PUBLIC FIRELINE CONSTRUCTION NOTES

1. INSTALL 12"X 8" T.S.V.B&C PER MAG STD DET. 340 AND C.O.P DET. P-1391 & MAG SPEC SECTION 630.4.2 (A) (1).
2. INSTALL 8" D.I.P PRESSURE CLASS 350 FIRELINE MIN. 48" COVER. LENGTH AS INDICATED ON PLAN. COMPACT IN ACCORDANCE WITH MAG. SPEC. 601.
3. SAWCUT, REMOVE & REPLACE EXISTING PAVEMENT, CURB & S/W. PAVEMENT REPLACEMENT THICKNESS AND TYPE TO BE PER MAG SEC. 336 AND C.O.P DETAIL P-1200-TYPE B. CURB & GUTTER REPLACEMENT SHALL BE A MINIMUM OF ONE (1) FULL SECTION. PER MAG STD DET. 220, TYPE A. SIDEWALK REPLACEMENT SHALL BE A MINIMUM OF ONE (1) FULL PANEL PER C.O.P DET. P1230. AT THE DISCRETION OF THE CITY OF PHOENIX PLANNING & DEVELOPMENT OFFSITE INSPECTOR, TUNNELING UNDER EXISTING CURB & GUTTER, IN THE CITY OF PHOENIX ROW, WILL BE ALLOWED. TUNNELING UNDER EXITING SIDEWALK WILL NOT BE ALLOWED IN THE CITY OF PHOENIX ROW.

NOTES:

1. CONTRACTOR SHALL VERIFY EXACT LOCATION AND DEPTH OF EXISTING WATER PRIOR TO CONSTRUCTION. CONTRACTOR TO ALSO VERIFY LOCATION OF EXISTING UTILITIES BY CONTACTING BLUE-STAKE PRIOR TO CONSTRUCTION.
2. PROPOSED 8" FIRE LINE & SMALLER TO BE INSTALLED WITH A MINIMUM 3'-0" OF COVER.
3. MAINTAIN 2'-0" MINIMUM VERTICAL CLEARANCE BETWEEN WATER AND SEWER LINES.
4. ONSITE FIRE LINE SHALL BE INSTALLED PER 2013 NFPA 24 AND 2012 IFC.
5. PLASTIC UNDERGROUND WATER PIPING SHALL HAVE A CONTINUOUS 18 GAUGE (OR LARGER) COPPER WIRE TRACER ATTACHED TO THE PLASTIC PIPING MATERIAL. A.R.S. SECTION 40-360.22.J
6. ASPHALT RESTORATION COVERED IN OFFSITE IMPROVEMENT PLANS, PAVING PERMIT CPPA # 1803132.

UTILITY CONFLICT DISCLAIMER

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	DATE CONTACTED
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CENTURY LINK	3/23/18
SRP	3/23/18
SRVWUA-IRRIGATION	3/23/18
COX CABLE	3/23/18
CITY OF PHOENIX	4/6/18

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PRIVATE FIRE LINE QUANTITIES

DESCRIPTION	QUANTITY	UNIT
8" D.I.P. FIRE LINE	97	LF
12"X8" T.S.V.B&C	1	EA
SAWCUT, REMOVE AND REPLACE EXISTING PAVEMENT	4	SY

PROJECT DESCRIPTION

8" PRIVATE FIRE LINE STUB AHEAD OF PAVING IMPROVEMENTS IN BASELINE ROAD. FIRE LINE STUB WILL BE EXTENDED TO THE ROW/ESMT. LINES.

APN

104-86-007

ARCHITECT

BUTLER DESIGN GROUP
5017 E. WASHINGTON ST., STE. 107
PHOENIX, ARIZONA 85034
PH: 602-957-1800
FAX: 602-957-7722
CONTACT: CLAY CHIAPPINI

ENGINEER

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
11811 N. TATUM BLVD., STE. 3057
PHOENIX, ARIZONA 85028
PH: 602-644-2179
FX: 602-760-2330
CONTACT: JASON GUERIN

OWNER

LINES BROTHERS LAND & CATTLE LLC
2415 S. RURAL ROAD
TEMPE, AZ 85282

BENCH MARK

CITY OF PHOENIX CHISELED SQUARE ON CENTER OF NORTH SIDE OF CONCRETE BASE OF SRP STEEL TRANSMISSION TOWER NO. 29. SOUTH SIDE OF BASELINE ROAD AT 55TH AVENUE ALIGN TO NORTH. ELEVATION=1007.397 CITY OF PHOENIX DATUM.

BASIS OF BEARING

BASIS OF BEARING IS N00°14'04"E ALONG THE WEST LINE OF THE NORTHWEST QUARTER OF SECTION 5, TOWNSHIP 1 SOUTH, RANGE 2 EAST OF GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA.

FLOOD ZONE

THE SUBJECT PROPERTY LIES WITHIN SHADED ZONE "X" WITH A DEFINITION OF: AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD. DESIGNATION DETERMINED BY FEMA FLOOD ZONE MAP 04013C2190M PANEL NUMBER 2190 OF 4425, EFFECTIVE DATE NOVEMBER 4, 2015 & FEMA FLOOD ZONE MAPS 04013C2195L, 04013C2665L, & 04013C2260L, PANEL NUMBERS 2195, 2655 & 2600 OF 4425, EFFECTIVE DATE OCTOBER 16, 2013.

APPROVED FOR:

THE CITY OF PHOENIX

PLANNING & DEVELOPMENT DEPARTMENT — DATE

AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE "RECORD DRAWING" MEASUREMENTS AS SHOWN HEREON WERE MADE UNDER MY SUPERVISION OR AS NOTED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED ENGINEER/ LAND SURVEYOR — DATE

REGISTRATION NO.

CPPA#1806043
KIVA# 18-3011
SDEV# 1800624
Q.S.# 01-14 & 01-15

NORTH
SCALE IN FEET
0 30 60

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ARIZONA 811
Arizona Blue Stake, Inc.
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In Maricopa County: (602) 263-1100

REGISTERED PROFESSIONAL ENGINEER (CIVIL)
CERTIFICATE NO. 23980
JEFFREY S. ERICKSON
Date Signed 11/14/18
ARIZONA, U.S.A.
Expires 06/30/20

REVISION RECORD

NO	DATE	DESCRIPTION

Civil & Environmental Consultants, Inc.
11811 N. Tatum Blvd., Suite 3057 - Phoenix, AZ 85028
Ph: 602.760.2324 - 877.231.2324 - Fax: 602.760.2330
www.ceciinc.com

BASELINE ROAD IMPROVEMENTS
59TH AVE. AND BASELINE RD.
PHOENIX, ARIZONA
CIVIL IMPROVEMENT PLANS

PRIVATE FIRE LINE PLAN

DATE:	NOVEMBER 14, 2018
DRAWN BY:	BB
DWG SCALE:	1"=30'
CHECKED BY:	JG
PROJECT NO:	182-001
APPROVED BY:	

DRAWING NO.: PFL1
SHEET 1 OF 1

P:\2018\182-001\-CADD\Dwg\CIVIL\Offsite Improvement\182001-CIVIL-PRE-LINE-PLANS\182-001-CIVIL-PFL02-Pre-Line_Sheet LINES.dwg\PFL-02\ LS:(11/13/2018 - jguerin) - LP: 11/14/2018 1:59 PM

FIRE LINE NOTES (CITY OF PHOENIX)

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   - 346 FIRE LINE DETECTOR CHECK VAULT
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13. PAVEMENT REPLACEMENT THICKNESS AND TYPE ARE TO BE PER M.A.G. SECTION 336 AND C.O.P. DETAIL P1200 –TYPE B. CURB AND GUTTER REPLACEMENT SHALL BE A MINIMUM OF ONE (1) FULL SECTION, PER M.A.G. STANDARD DETAIL 220. SIDEWALK REPLACEMENT SHALL BE A MINIMUM OF ONE (1) FULL PANEL PER C.O.P. DETAIL P1230. AT THE DISCRETION OF THE CITY OF PHOENIX PLANNING AND DEVELOPMENT OFFSITE INSPECTOR, TUNNELING UNDER EXISTING CURB AND GUTTER, IN CITY OF PHOENIX R.O.W., WILL BE ALLOWED. TUNNELING UNDER EXISTING SIDEWALK WILL NOT BE ALLOWED IN THE CITY OF PHOENIX R.O.W.
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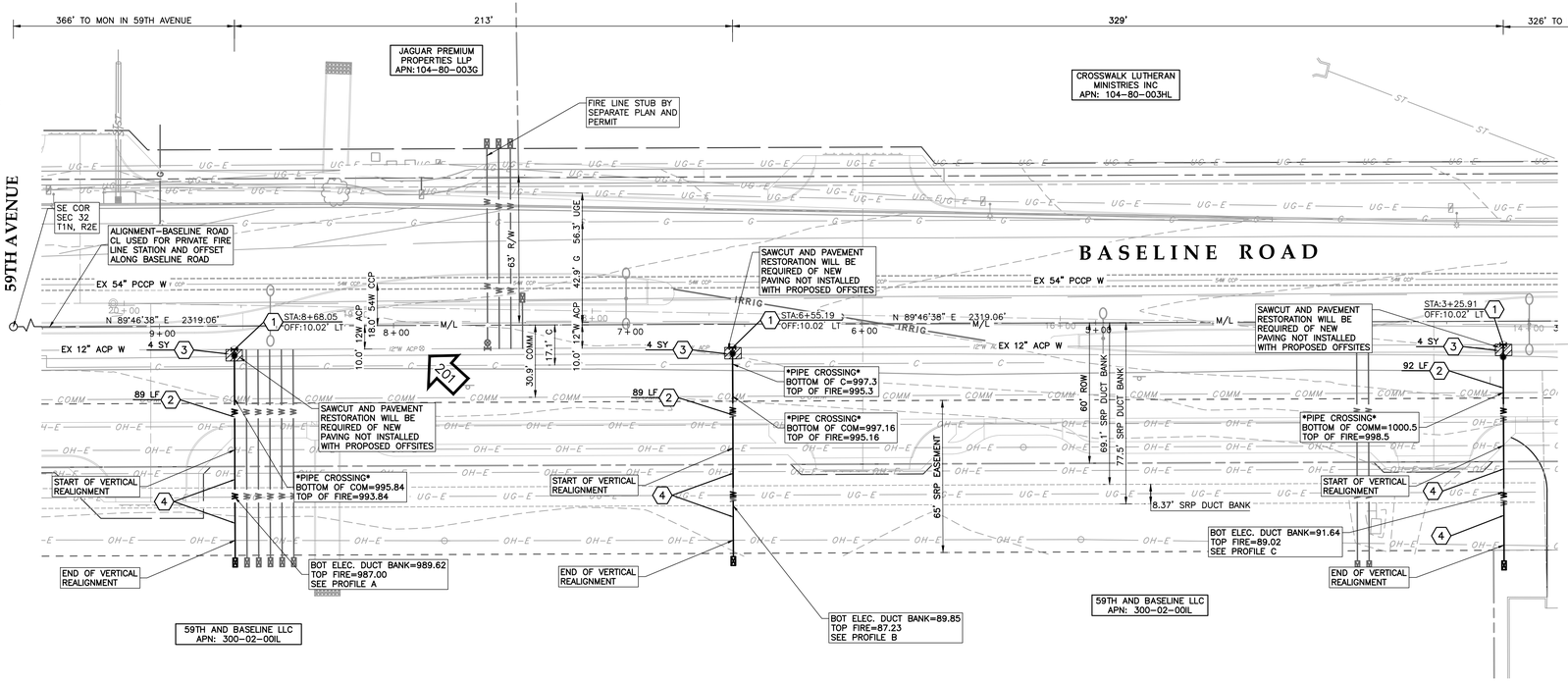
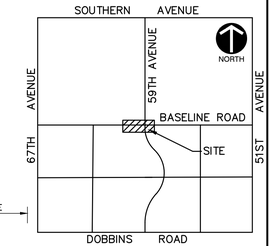
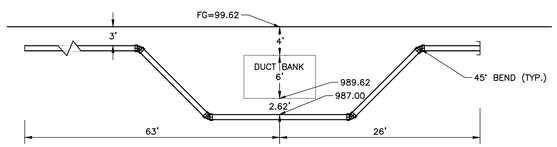
MANUFACTURES FOR FIRELINE MATERIAL

D.I.P. – PACIFIC STATES
C–900 – VYNEL TECH
VALVES – CLOW, MUELLER

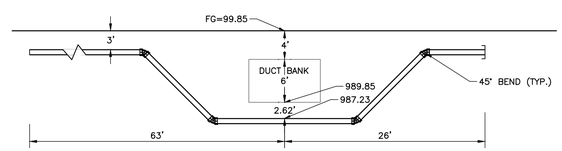




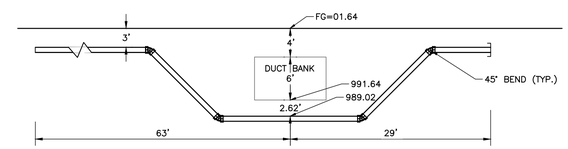
VICINITY MAP
N.T.S.



PROFILE A
1"=10'



PROFILE B
1"=10'



PROFILE C
1"=10'

PUBLIC FIRELINE CONSTRUCTION NOTES

1. INSTALL 12"X 8" T.S.V.B&C PER MAG STD DET. 340 AND C.O.P DET. P–1391 & MAG SPEC SECTION 630.4.2 (A) (1).
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3. SAWCUT, REMOVE & REPLACE EXISTING PAVEMENT, CURB & S/W. PAVEMENT REPLACEMENT THICKNESS AND TYPE TO BE PER MAG SEC. 336 AND C.O.P DETAIL P–1200–TYPE B.
   CURB & GUTTER REPLACEMENT SHALL BE A MINIMUM OF ONE (1) FULL SECTION. PER MAG STD DET. 220, TYPE A.
   SIDEWALK REPLACEMENT SHALL BE A MINIMUM OF ONE (1) FULL PANEL PER C.O.P DET. P1230. AT THE DISCRETION OF THE CITY OF PHOENIX PLANNING & DEVELOPMENT OFFSITE INSPECTOR, TUNNELING UNDER EXISTING CURB & GUTTER, IN THE CITY OF PHOENIX ROW, WILL BE ALLOWED. TUNNELING UNDER EXITING SIDEWALK WILL NOT BE ALLOWED IN THE CITY OF PHOENIX ROW.
4. INSTALL 8–INCH, 45° BEND WITH JOINT RESTRAINTS PER M.A.G. STD. DET. 303–1.

NOTES:

1. CONTRACTOR SHALL VERIFY EXACT LOCATION AND DEPTH OF EXISTING WATER PRIOR TO CONSTRUCTION. CONTRACTOR TO ALSO VERIFY LOCATION OF EXISTING UTILITIES BY CONTACTING BLUE–STAKE PRIOR TO CONSTRUCTION.
2. PROPOSED 8" FIRE LINE & SMALLER TO BE INSTALLED WITH A MINIMUM 3'–0" OF COVER.
3. MAINTAIN 2'–0" MINIMUM VERTICAL CLEARANCE BETWEEN WATER AND SEWER LINES.
4. ONSITE FIRE LINE SHALL BE INSTALLED PER 2013 NFPA 24 AND 2012 IFC.
5. PLASTIC UNDERGROUND WATER PIPING SHALL HAVE A CONTINUOUS 18 GAUGE (OR LARGER) COPPER WIRE TRACER ATTACHED TO THE PLASTIC PIPING MATERIAL. A.R.S. SECTION 40–360.22.J
6. ASPHALT RESTORATION COVERED IN OFFSITE IMPROVEMENT PLANS, PAVING PERMIT CPPA # 1803132.

UTILITY CONFLICT DISCLAIMER

I HEREBY CERTIFY THAT ALL UTILITY COMPANIES WITH FACILITIES IN THE AREA OF THE PROJECT HAVE BEEN CONTACTED AND THE DATA PROVIDED IS SHOWN ON THIS PLAN. I AGREE TO INDEMNIFY, DEFEND, SAVE AND HOLD HARMLESS THE CITY OF PHOENIX, IT'S OFFICERS, OFFICIALS, AGENTS, EMPLOYEES AND VOLUNTEERS FROM ANY AND ALL CLAIMS, DEMANDS, ACTIONS, LIABILITIES, DAMAGES, LOSSES, OR EXPENSES INCURRED FOR ANY UTILITY CONFLICTS THAT MAY ARISE.

	DATE CONTACTED
SOUTHWEST GAS	3/23/18
CENTURY LINK	3/23/18
SRP	3/23/18
SRVWUA–IRRIGATION	3/23/18
COX CABLE	3/23/18
CITY OF PHOENIX	4/6/18

ESTIMATED QUANTITIES

THE QUANTITIES SHOWN HEREON ARE AN ESTIMATE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL QUANTITIES BEFORE BIDDING. PRESSURE RATED DUCTILE HAS NOT BEEN APPROVED FOR USE AND IS NOT TO BE CONSIDERED AS AN ALTERNATIVE.

PRIVATE FIRE LINE QUANTITIES

DESCRIPTION	QUANTITY	UNIT
8" D.I.P. FIRE LINE	270	LF
12"X8" T.S.V.B&C	3	EA
SAWCUT, REMOVE AND REPLACE EXISTING PAVEMENT	12	SY

ARCHITECT

BUTLER DESIGN GROUP
5017 E. WASHINGTON ST., STE. 107
PHOENIX, ARIZONA 85034
PH: 602–957–1800
FAX: 602–957–7722
CONTACT: CLAY CHIAPPINI

ENGINEER

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
11811 N. TATUM BLVD., STE. 3057
PHOENIX, ARIZONA 85028
PH: 602–644–2179
FX: 602–760–2330
CONTACT: JASON GUERIN

PROJECT DESCRIPTION

8" PRIVATE FIRE LINE STUBS AHEAD OF PAVING IMPROVEMENTS IN BASELINE ROAD. FIRE LINE STUBS WILL BE EXTENDED TO THE ROW/ESMT. LINES.

OWNER

59TH AND BASELINE LLC
1700 W. HORIZON RIDGE PKWY, STE. 101
HENDERSON, NV 89012

APN

300–02–00IL

BENCH MARK

CITY OF PHOENIX CHISELED SQUARE ON CENTER OF NORTH SIDE OF CONCRETE BASE OF SRP STEEL TRANSMISSION TOWER NO. 29. SOUTH SIDE OF BASELINE ROAD AT 55TH AVENUE ALIGN TO NORTH. ELEVATION=1007.397 CITY OF PHOENIX DATUM.

BASIS OF BEARING

BASIS OF BEARING IS N00°14'04"E ALONG THE WEST LINE OF THE NORTHWEST QUARTER OF SECTION 5, TOWNSHIP 1 SOUTH, RANGE 2 EAST OF GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA.

FLOOD ZONE

THE SUBJECT PROPERTY LIES WITHIN SHADED ZONE "X" WITH A DEFINITION OF: AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD. DESIGNATION DETERMINED BY FEMA FLOOD ZONE MAP 04013C2190M PANEL NUMBER 2190 OF 4425, EFFECTIVE DATE NOVEMBER 4, 2015 & FEMA FLOOD ZONE MAPS 04013C2195L, 04013C2665L, & 04013C2266OL, PANEL NUMBERS 2195, 2655 & 2600 OF 4425, EFFECTIVE DATE OCTOBER 16, 2013.

APPROVED FOR:

THE CITY OF PHOENIX

PLANNING & DEVELOPMENT DEPARTMENT — DATE

AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE "RECORD DRAWING" MEASUREMENTS AS SHOWN HEREON WERE MADE UNDER MY SUPERVISION OR AS NOTED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED ENGINEER/ LAND SURVEYOR — DATE

REGISTRATION NO.

CPPA#1806043
KIVA# 18-3011
SDEV# 1800624
Q.S.# 01-14 & 01-15

NORTH
SCALE IN FEET
0 30 60

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

REGISTERED PROFESSIONAL ENGINEER (CIVIL)
CERTIFICATE NO. 23980
JEFFREY S. ERICKSON
ARIZONA, U.S.A.
Date Signed 11/14/18
Expires 09/30/20

NO	DATE	REVISION RECORD DESCRIPTION

Civil & Environmental Consultants, Inc.
11811 N. Tatum Blvd., Suite 3057 - Phoenix, AZ 85028
Ph: 602.760.2324 · 877.231.2324 · Fax: 602.760.2330
www.cecinc.com

BASELINE ROAD IMPROVEMENTS
59TH AVE. AND BASELINE RD.
PHOENIX, ARIZONA
CIVIL IMPROVEMENT PLANS

PRIVATE FIRE LINE PLAN

DATE:	NOVEMBER 14, 2018
DRAWN BY:	BB
DWG SCALE:	1"=30'
CHECKED BY:	JG
PROJECT NO:	182-001
APPROVED BY:	

DRAWING NO.: PFL1
SHEET 1 OF 1

P:\2018\182-0011-CAD\Dwg\CIVIL\Offsite Improvement\182001-CIVIL-FIRE-LINE-PLANS\182-001-CIVIL-PFL02-Fire-Line_Sheet59TH AND BASELINE.dwg\PFL-03\ LS:(1)\14\2018 - jgwenly - LP: 11/14/2018 3:03 PM

BASELINE ROAD OFFSITE IMPROVEMENT PLANS
LOOP 202 TO 57TH AVENUE

A PORTION OF THE WEST HALF OF SECTION 5 AND A PORTION OF THE EAST HALF OF SECTION 6, TOWNSHIP 1 SOUTH, RANGE 2 EAST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA

PUBLIC WATER MAIN EXTENSION PLAN

SPECIAL NOTES

1. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS IN ADVANCE FOR ANY STAKING OR RESTAKING REQUIRED.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN PERMITS REQUIRED AT HIS OWN EXPENSE.
3. THE CONTRACTOR WILL MAKE EXPLORATORY EXCAVATIONS & LOCATE EXIST. UNDERGROUND FACILITIES SUFFICIENTLY IN ADVANCE OF CONSTRUCTION TO PERMIT THE REVISION OF THESE PLANS IF NECESSARY DUE TO CONFLICT BETWEEN A FACILITY PROPOSED HEREIN & AN EXIST. FACILITY.
4. IT IS THE CONTRACTORS SOLE RESPONSIBILITY TO VERIFY THE PRESENCE & LOCATION OF ANY & ALL EXIST. OVERHEAD &/OR UNDERGROUND UTILITIES THAT MAY INTERFERE WITH THE CONSTRUCTION, WHETHER OR NOT SAID UTILITIES ARE SHOWN ON THE CONSTRUCTION PLANS FOR THIS PROJECT. CONTRACTOR SHALL ADEQUATELY PROTECT & MAINTAIN SUCH UTILITIES.
5. THE ENGINEER DOES NOT ASSUME ANY LIABILITY FOR ERRORS OF LINE &/OR GRADE ON ANY STAKING WHICH HAS BEEN DISTURBED IN ANY WAY, NOR DOES THE ENGINEER ASSUME ANY LIABILITY FOR ERRORS OF LINE &/OR GRADE ON ANY STAKING THAT HAS BEEN IN PLACE FOR A PERIOD OF 24 HOURS OR MORE WITHOUT THE COMMENCEMENT OF CONSTRUCTION FOR WHICH IT WAS SET.
6. THE CONTRACTOR SHALL NOTIFY THE DEVELOPER AND SURVEYOR BEFORE BACKFILLING WATER &/OR SEWER SERVICES IN ORDER THAT THE ENGINEER MAY VERIFY THE AS-BUILT LOCATION OF THE SERVICE.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING ALL STAKES & CONTROL, & SHALL TAKE STEPS NECESSARY TO INSURE THAT THE STAKES & CONTROL ARE NOT DISTURBED OR TAMPERED WITH. IF STAKES ARE DISTURBED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST INCURRED TO RESTAKE.
8. ANY QUESTIONS RELATIVE TO THE ACCURACY OF IMPROVEMENT INSTALLATION SHALL BE RAISED SUBSEQUENT TO COMPLETION OF THE WORK UNLESS ALL SURVEY STAKES ARE MAINTAINED INTACT. SHOULD SUCH STAKES NOT BE PRESENT & VERIFIED AS TO THEIR ORIGIN, NO CLAIM FOR ADDITIONAL COMPENSATION FOR CORRECTION SHALL BE PRESENTED TO ANY PARTY & SUCH WORK SHALL BE CORRECTED BY THE CONTRACTOR AT HIS OWN EXPENSE.
9. ALL FRAMES, COVERS, VALVE BOXES & MANHOLE COVERS SHALL BE ADJUSTED TO FINISH GRADE PRIOR TO COMPLETION OF PAVING OR RELATED CONSTRUCTION. ADJUSTMENT OF UTILITIES SHALL BE PER SRPMIC ECS STD. DET. 703 & 704.
10. CONSTRUCTION OF SURFACE IMPROVEMENTS SHALL NOT BEGIN UNTIL CONFLICTING UNDERGROUND UTILITY CONSTRUCTION IS COMPLETED & SERVICE CONNECTIONS TO ALL PLATTED LOTS HAVE BEEN ADEQUATELY EXTENDED.
11. ALL SIGNS REQUIRE SEPARATE APPROVALS AND PERMITS.
12. ALL STORM DRAIN JOINTS TO BE WATER TIGHT.

UTILITY CONFLICTS

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.

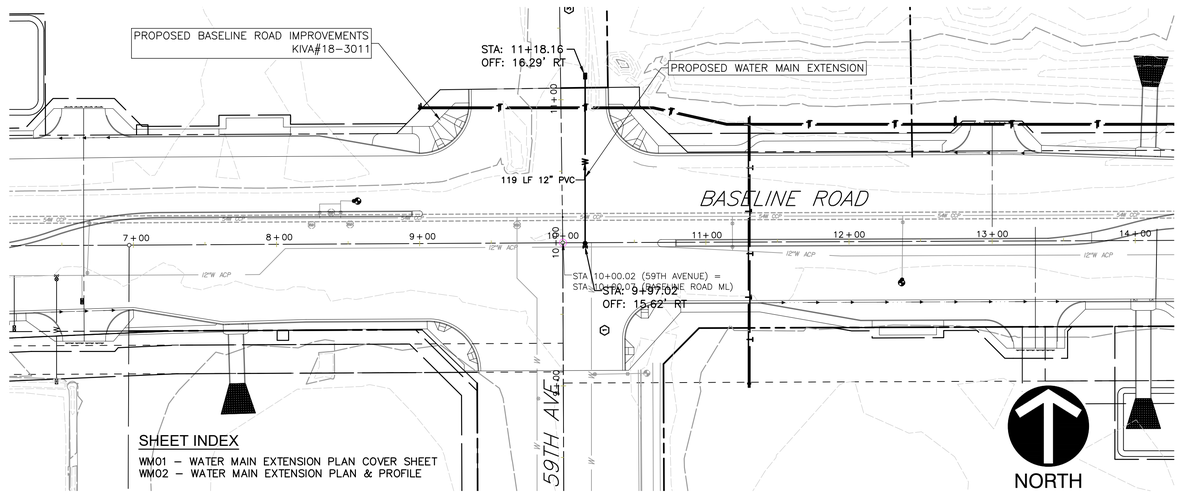
SALT RIVER PROJECT (POWER)	UTILITY CONFLICTS DEPT.	03/23/18
	UTILITY CONFLICTS DEPT.	DATE
SRVWUA (IRRIGATION)	UTILITY CONFLICTS DEPT.	03/23/18
	UTILITY CONFLICTS DEPT.	DATE
CENTURY LINK (TELEPHONE)	UTILITY CONFLICTS DEPT.	03/23/18
	UTILITY CONFLICTS DEPT.	DATE
COX COMMUNICATIONS (CABLE TV	UTILITY CONFLICTS DEPT.	03/23/18
	UTILITY CONFLICTS DEPT.	DATE
SOUTHWEST GAS (GAS)	ADAM SHOCHAT	05/07/18
	UTILITY CONFLICTS DEPT.	DATE
CITY OF PHOENIX (WATER)	WATER SERVICES DEPT.	03/23/18
	UTILITY CONFLICTS DEPT.	DATE
CITY OF PHOENIX (SEWER)	WATER SERVICES DEPT.	03/23/18
	UTILITY CONFLICTS DEPT.	DATE

LEGEND OF PROPOSED FEATURES

- PROPOSED TAPPING SLEEVE, VALVE & COVER
- PROPOSED CURB STOP
- WATER LINE

LEGEND OF EXISTING FEATURES

- FOUND ALUMINUM CAP FLUSH
- FOUND BRASS CAP FLUSH
- FOUND BRASS CAP IN HANDHOLE
- BOLLARD
- CATCH BASIN
- FOUND COTTON PICKER SPINDLE
- DOWN GUY
- DRY WELL
- ELECTRIC JUNCTION BOX
- ELECTRIC TRANSFORMER
- ELECTRIC METER
- ELECTRIC MANHOLE
- FIRE HYDRANT
- STORM DRAIN MANHOLE
- SEWER MANHOLE
- TELEPHONE MANHOLE
- WATER METER
- WATER MANHOLE
- WATER VALVE
- GAS VALVE
- IRONWOOD TREE
- IRRIGATION MANHOLE
- LIGHT POLE
- LIGHT POLE W/MAST
- DOUBLE LIGHT POLE W/MAST
- MESQUITE TREE
- GAS MARKER
- WATER MARKER
- PALO VERDE TREE
- PRICKLY PEAR
- SIGN
- TREE
- TRAFFIC SIGNAL
- TRAFFIC SIGNAL W/MAST
- TRAFFIC SIGNAL JUNCTION BOX
- UTILITY POLE
- SECTION LINE
- CENTER LINE
- RIGHT-OF-WAY TO REMAIN
- RIGHT-OF-WAY TO BE ADJUSTED
- CHAIN LINK FENCE
- WATER LINE
- SEWER LINE
- GAS BLUE STAKE LINE
- UNDERGROUND ELECTRIC LINE
- OVERHEAD ELECTRIC LINE
- STORM DRAIN LINE



SHEET INDEX

WM01 – WATER MAIN EXTENSION PLAN COVER SHEET
WM02 – WATER MAIN EXTENSION PLAN & PROFILE

CITY OF PHOENIX WATER MAIN NOTES

1. PLANNING & DEVELOPMENT DEPARTMENT'S CIVIL/SITE INSPECTION STAFF SHALL BE NOTIFIED 48 HOURS BEFORE ANY CONSTRUCTION BEGINS TELEPHONE 602-262-7811.
2. ALL WATER VALVE BOXES SHALL BE PER CITY OF PHOENIX SUPPLEMENT TO M.A.G. SPECIFICATIONS AND DETAILS P1391, TYPE A ONLY.
3. ALL CONSTRUCTION IN CITY OF PHOENIX RIGHT-OF-WAY, OR EASEMENT, IS TO CONFORM TO M.A.G. SPECIFICATIONS AND DETAILS AND CITY OF PHOENIX SUPPLEMENT TO M.A.G. SPECIFICATIONS AND DETAILS, UNLESS MODIFIED ON THE PLANS.
4. ALL DUCTILE IRON PIPE WATER MAIN VALVES, FITTINGS, AND BENDS SHALL BE RESTRAINED. RESTRAINED JOINT REQUIREMENTS AND APPROVED RESTRAINING SYSTEM ARE SHOWN IN CITY OF PHOENIX SUPPLEMENT TO M.A.G. SPECIFICATIONS, SECTION 750.3. THE LENGTH OF THE RESTRAINTS MUST BE PER M.A.G. STANDARD DETAIL 303-1 AND 303-2. THRUST BLOCKS ARE NOT ALLOWED TO BE USED IN LIEU OF APPROVED RESTRAINED JOINT SYSTEMS. THRUST BLOCKS CAN BE USED IN ADDITION TO THE APPROVED RESTRAINED JOINT SYSTEMS WHERE A SPECIFIC CITY OF PHOENIX SUPPLEMENT TO M.A.G. STANDARD DETAIL CALLS OUT FOR THRUST BLOCKING, SUCH AS CURRENT DETAILS, P1343, P1351, AND P1360 OR WHEN OTHERWISE APPROVED BY THE WATER SERVICES DEPARTMENT.
5. THE FOLLOWING M.A.G. DETAILS ARE SPECIFICALLY NOT APPROVED:

302-1	JOINT RESTRAINT WITH TIE RODS
302-2	JOINT RESTRAINT WITH TIE RODS – ANCHOR BLOCKS
321	STANDARD WATER METER VAULT
345-1	3", 4", AND 6" WATER METER
345-2	4" AND 6" WATER METER WITH ON-SITE FIRE HYDRANTS
370	VERTICAL REALIGNMENT OF WATER MAINS
381	ANCHOR BLOCKS FOR VERTICAL BENDS
390	CURB STOP WITH FLUSHING PIPE
391-1	VALVE BOX INSTALLATION

6. COMPACTION SHALL COMPLY WITH M.A.G. SECTION 601 & CITY OF PHOENIX SUPPLEMENTS.
7. NEW WATER LINES ARE TO BE BUILT IN ACCORDANCE WITH THE CITY OF PHOENIX 'STANDARD UTILITY LOCATIONS'.
8. THIS SET OF PLANS HAS BEEN INITIALLY REVIEWED BY THE CITY OF PHOENIX. SUCH REVIEW IS PART OF THE PROCESS THAT DEVELOPER(S)/CONTRACTOR(S) MUST GO THROUGH IN ORDER TO OBTAIN A CONSTRUCTION PERMIT. THE RESULTS OF SUCH INITIAL REVIEW SHALL NOT DICTATE THE CITY OF PHOENIX'S FINAL DETERMINATION AS TO THE ACCEPTABILITY OF THE PLANS, NOR SHALL IT PREVENT THE CITY OF PHOENIX FROM REQUIRING ERRORS AND OMISSIONS, AS FOUND ON PLANS, BE ADDRESSED BY DEVELOPER(S) /CONTRACTOR(S), WHERE SUCH ERRORS AND OMISSIONS CAUSE THE PLANS TO BE IN VIOLATION OF OR INADEQUATE UNDER APPLICABLE FEDERAL/STATE/COUNTY/LOCAL CODES, ORDINANCES, REGULATIONS, OR OTHER LAWS. THIS REVIEWED AND STAMPED SET OF PLANS MUST BE KEPT AT THE CONSTRUCTION SITE AT ALL TIMES.

WATER MAIN NOTES (CONTINUED)

9. PIPE DEFLECTION SHALL BE PER MANUFACTURERS' RECOMMENDATIONS.
10. ALL WORK MUST COMPLY WITH REQUIREMENTS OF THE CURRENT CITY OF PHOENIX "TRAFFIC BARRICADE MANUAL".
11. THE CONTRACTOR IS TO NOTIFY THE PUBLIC THAT WILL BE AFFECTED BY ANY SHUTDOWNS A MINIMUM OF 48 HOURS IN ADVANCE.
12. A SIX (6) FOOT MINIMUM HORIZONTAL SEPARATION FROM ANY UNDERGROUND UTILITY SHALL BE PROVIDED FOR SEWER MAINS, SEWER SERVICES, WATER MAINS, AND WATER SERVICES. THE MINIMUM HORIZONTAL SEPARATION IS MEASURED FROM OUTSIDE OF SEWER MAIN, SEWER SERVICE, WATER MAIN, OR WATER SERVICE TO OUTSIDE OF UNDERGROUND UTILITY.
13. A ONE (1) FOOT MINIMUM VERTICAL SEPARATION FROM ANY DRY UNDERGROUND UTILITY CROSSING SHALL BE PROVIDED FOR SEWER MAINS, SEWER SERVICES, WATER MAINS, AND WATER SERVICES. THE MINIMUM VERTICAL SEPARATION IS MEASURED FROM OUTSIDE OF SEWER MAIN, SEWER SERVICE, WATER MAIN, OR WATER SERVICE TO OUTSIDE OF DRY UNDERGROUND UTILITY.
14. A TWO (2) FOOT MINIMUM VERTICAL SEPARATION SHALL BE PROVIDED BETWEEN ANY SEWER MAIN AND STORM DRAIN CROSSING A WATER MAIN. THE MINIMUM VERTICAL SEPARATION IS MEASURED FROM OUTSIDE OF WATER MAIN TO OUTSIDE OF SEWER MAIN OR STORM DRAIN MAIN. SEE M.A.G. STANDARD DETAIL 404 FOR ADDITIONAL INFORMATION AND/OR PROVISIONS FOR CLEARANCE.
15. EXCEPTIONS OR DEVIATIONS FROM THE ABOVE MINIMUM CLEARANCES MUST BE APPROVED AND SHOWN ON THE APPROVED WATER AND SEWER PLANS. WHEN UTILITY CONFLICTS ARE FOUND DURING CONSTRUCTION, ALL CHANGES AND REVISIONS MUST BE PRECEDED BY AN APPROVED PLAN REVISION.
ANY AND ALL MORE STRINGENT REQUIREMENTS REQUIRED BY FEDERAL, STATE, COUNTY, OR LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
16. WATER SERVICES SHALL BE INSTALLED PERPENDICULAR TO THE WATER MAIN. WATER SERVICES AT THE END OF CUL-DE-SACS MAY VARY AS NECESSARY, BUT WILL BE APPROVED ON A CASE BY CASE BASIS.
17. ALL SERVICES SHALL RUN IN A STRAIGHT LINE FROM THE WATER MAIN TO THE METER BOX.
18. NEITHER WATER SERVICE METER BOX NOR ANY PORTION OF A WATER SERVICE SHALL BE INSTALLED UNDER AN EXISTING OR PROPOSED DRIVEWAY OR SIDEWALK RAMP.
19. CONCRETE OR ASPHALT DAMAGED DURING THE COURSE OF CONSTRUCTION SHALL BE REMOVED AND REPLACED IN KIND PRIOR TO FINAL INSPECTION.
20. RECORD DRAWING SUBMITTALS MUST COMPLY PER THE WATER SERVICES DEPARTMENT ENGINEERING POLICY P-68. A COPY OF THE POLICY CAN BE OBTAINED IN THE DEPARTMENT'S WEBSITE:
HTTP://PHOENIX.GOV/WATERSERVICES/DESIGN/ENGPOLICIES/INDEX.HTML
21. IN ACCORDANCE WITH AAC R-18-4-213, ALL MATERIALS ADDED AFTER JANUARY 1, 1993 WHICH MAY COME INTO CONTACT WITH DRINKING WATER SHALL CONFORM TO NATIONAL SANITATION FOUNDATION STANDARDS 60 AND 61.

PUBLIC QUANTITIES

12"x12" TAPPING SLEEVE, VALVE, BOX & COVER	1	EA
12" D.I.P. WATER LINE	116	LF
2" TAPPED CAP & 2" I.P. CORP	1	EA
VERTICAL REALIGNMENT	1	EA

WATER MAIN NOTES (CONTINUED)

22. PLACE THE FOLLOWING NOTE ON EACH SHEET OF THE PLANS:

PER CITY OF PHOENIX ORDINANCE G-4396, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED FOR THE CONSTRUCTION OF THE PUBLIC WORKS FACILITIES SHOWN HEREON. THE PROJECT OWNER, AND THE OWNER'S LENDERS, CONSULTANTS, CONTRACTORS AND SUBCONTRACTORS ARE PROHIBITED FROM DISCLOSING THE PLANS AND SPECIFICATIONS TO ANY PERSONS OTHER THAN THOSE WHO HAVE A NEED TO KNOW THE INFORMATION FOR THE PURPOSE OF THE PROJECT.

23. A PAVEMENT CUT SURCHARGE SHALL BE ASSESSED ON THIS PROJECT FOR ANY TRENCHING OR POTHOLING IN NEW ASPHALT PAVEMENT THAT IS LESS THAN 30 MONTHS OLD. SURCHARGE FEES ASSESSED ARE IN ADDITION TO THE REGULAR PERMIT FEES AND ARE OVER AND ABOVE ANY SPECIAL BACKFILL, COMPACTION, AND PAVEMENT REPLACEMENT STIPULATIONS THAT MAY BE IMPOSED AS A CONDITION OF PERMITTING. PAVEMENT CUT SURCHARGE FEES ARE ASSESSED IN ACCORDANCE WITH SECTION 31-38 OF THE PHOENIX CITY CODE.

23.1. PLAN APPROVAL IS VALID FOR 180 DAYS. PRIOR TO PLAN APPROVAL EXPIRATION, ALL ASSOCIATED PERMITS SHALL BE PURCHASED OR THE PLANS SHALL BE RESUBMITTED FOR EXTENSION OF PLAN APPROVAL. THE EXPIRATION, EXTENSION, AND REINSTATEMENT OF CIVIL ENGINEERING PLANS AND PERMITS SHALL FOLLOW THE SAME GUIDELINES AS THOSE INDICATED IN THE PHOENIX BUILDING CONSTRUCTION CODE ADMINISTRATIVE PROVISIONS SECTION 105.3 FOR BUILDING PERMITS.

CPPA#1806043
KIVA# 18-3011
SDEV# 1800624
Q.S.# 01-14 & 01-15

ENGINEER

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
11811 N. TATUM BLVD., STE. 3057
PHOENIX, ARIZONA 85028
PH: 602-644-2179
FX: 602-760-2330
CONTACT: JASON GUERIN

OWNERS

59TH AND BASELINE LLC
1700 W. HORIZON RIDGE PKWY, STE. 101
HENDERSON, NV 89012

CITY OF PHOENIX
200 W. WASHINGTON ST.
PHOENIX, AZ 85003

CROSSWALK LUTHERAN MINISTRIES INC
2610 W. BASELINE RD.
PHOENIX, AZ 85041, STE. 106

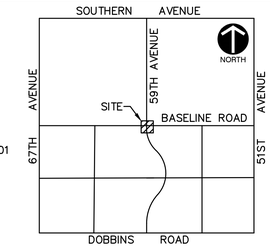
JAGUAR PREMIUM PROPERTIES LLP
30 RASHEE LN, BOX 10
TRAVERSE BAY MB
CANADA R0E 2A0

LAVEEN BASELINE LLC
1707 E. HIGHLAND AVENUE, STE. 100
PHOENIX, ARIZONA 85016

LINES BROTHERS LAND & CATTLE LLC
2415 S. RURAL ROAD
TEMPE, AZ 85282

SALT RIVER PROJECT AG IMP AND PWR DISTRICT
PO BOX 52025
PHOENIX, AZ 85072

SUNWEST FEDERAL CREDIT UNION
11839 N. 28TH DRIVE
PHOENIX, AZ 85029



VICINITY MAP
N.T.S.

BENCH MARK

ADOT ALUMINUM CAP ON NORTH SIDE OF CONCRETE BASE OF TRANSMISSION TOWER #25, SOUTH SIDE OF BASELINE ROAD AT 59TH AVENUE TO NORTH.
ELEVATION=1001.624 (CITY OF PHOENIX DATUM, NGVD29)

BASIS OF BEARING

THE NORTH LINE OF THE NORTHWEST QUARTER OF SECTION 5, TOWNSHIP 1 SOUTH, RANGE 2 EAST AS SHOWN IN BOOK 846, PAGE 5, RECORDS OF MARICOPA COUNTY, ARIZONA. SAID LINE BEARS NORTH 89°46'38" EAST.

FLOOD ZONE

ACCORDING TO THE FLOOD INSURANCE RATE MAP #04013C2195 L, DATED OCTOBER 16, 2013 THIS PROPERTY IS LOCATED IN FLOOD ZONE "X".

AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD.

APN

104-80-003, 104-80-003G, 104-80-003H, 300-02-001G, 300-02-001L, 104-06-007, 300-02-001U, 300-02-923

PROJECT DESCRIPTION

PUBLIC WATER MAIN EXTENSION IN CONJUNCTION WITH THE BASELINE ROAD IMPROVEMENT PLANS. A NEW 12" D.I.P. WATER LINE WILL BE EXTENDED NORTH WITHIN THE INTERSECTION OF 59TH AVENUE AND BASELINE ROAD FROM AN EXISTING 12" ACP WATER LINE RUNNING EAST/WEST WITHIN BASELINE ROAD.

AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE "RECORD DRAWING" MEASUREMENTS AS SHOWN HEREON WERE MADE UNDER MY SUPERVISION OR AS NOTED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED ENGINEER/ LAND SURVEYOR — DATE

REGISTRATION NO.

APPROVED FOR:
THE CITY OF PHOENIX

COUNTY HEALTH DELEGATE
PLANNING & DEVELOPMENT DEPARTMENT — DATE

REGISTERED PROFESSIONAL ENGINEER (CIVIL) CERTIFICATE NO. 23980 JEFFREY S. ERICKSON Date Signed 10/09/18 ARIZONA, U.S.A. Expires 09/30/20

REVISION RECORD

NO	DATE	DESCRIPTION

Civil & Environmental Consultants, Inc.
333 Baldwin Road · Pittsburgh, PA 15205
412-429-2324 · 800-365-2324
www.cecinc.com

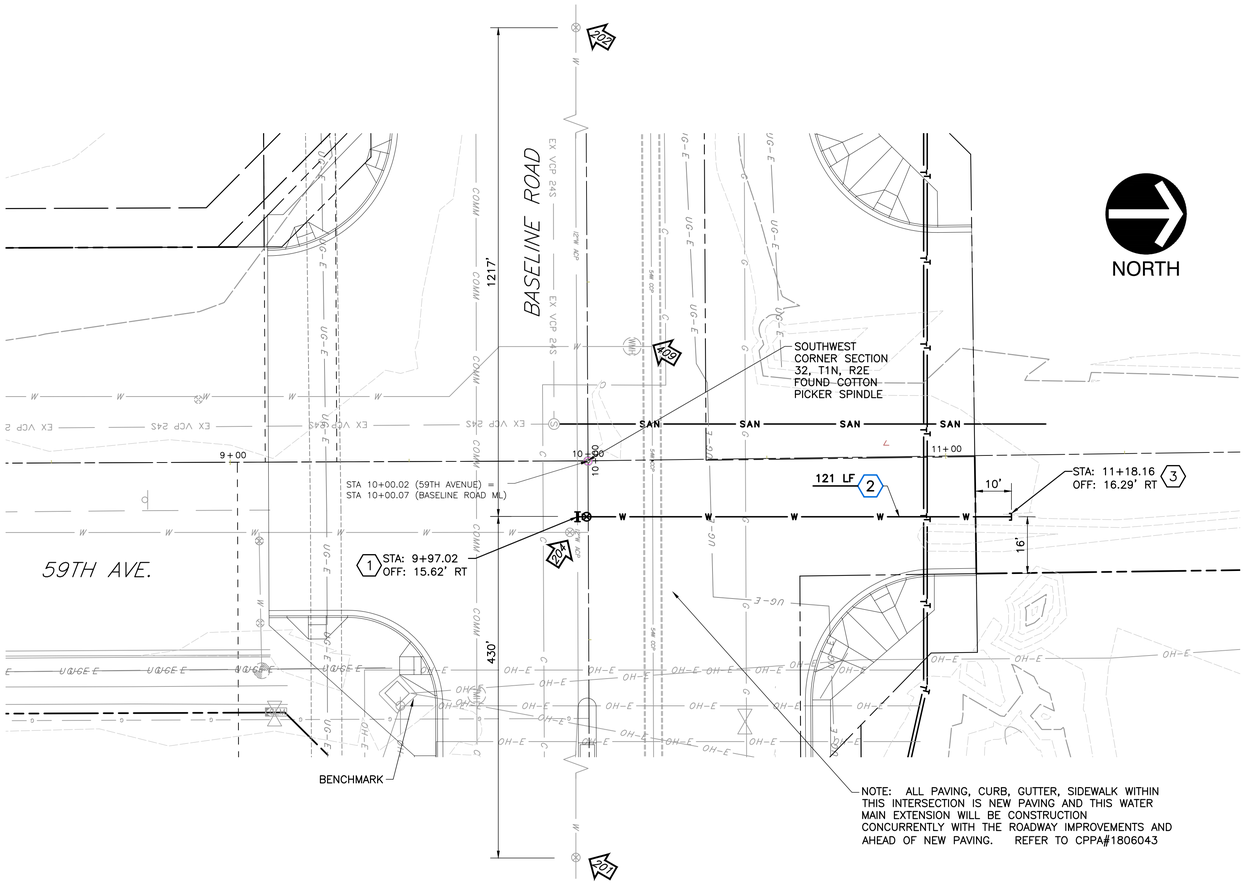
BASELINE ROAD IMPROVEMENTS
LOOP 202 & 57TH AVENUE
PHOENIX, ARIZONA
PUBLIC WATER MAIN EXTENSION

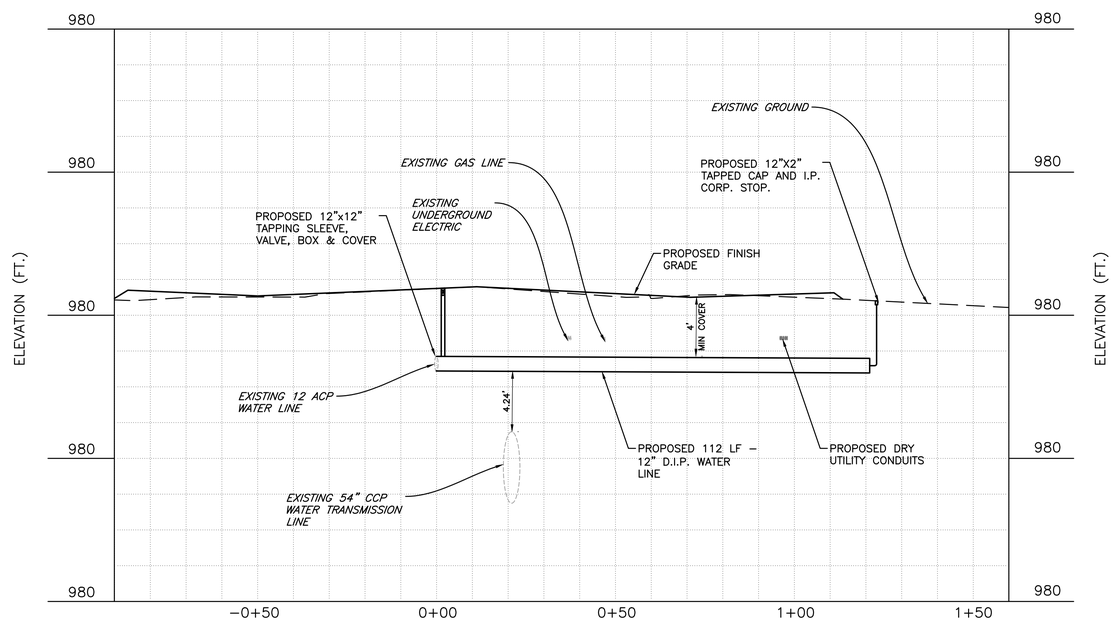
OFFSITE IMPROVEMENT PLANS
COVER SHEET

DATE:	OCT. 9, 2018	DRAWN BY:	CJG
DWG SCALE:	N.T.S.	CHECKED BY:	JSE
PROJECT NO:			182-001
APPROVED BY:			JSE

DRAWING NO.: WM01
SHEET 1 OF 2

P:\2018\182-0011-D400\Dwg\CD1\Offsite Improvement\Public Water Main Extension\182001_CD01_PublicWaterMainExtension.dwg\WM01 LS:(10/10/2018 - khopsky) - LP: 10/9/2018 11:53 AM





59TH AVENUE PROFILE

SCALE H:1"=20'; V:1"=5'

PUBLIC FIRE LINE CONSTRUCTION NOTES

1. INSTALL A 12"x12" TAPPING SLEEVE, VALVE, BOX & COVER PER MAG STD. DET. 340 AND CITY OF PHOENIX SUPPLEMENT DETAIL P1391 AND CONFORM TO MAG SPEC. 630.4.2(A)(1).
2. INSTALL 12" D.I.P. CLASS 50. POLYETHYLENE WRAP PER C.O.P. SUPPLEMENT TO MAG SPEC. SECTION 750.2 AND MAG SPECS. 610.6.2 AND 610.6.3.
3. INSTALL 12"x2" TAPPED CAP AND 2" I.P. CORP.

NOTE:

PER THE CITY OF PHOENIX ORDINANCE G-4396, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED FOR THE CONSTRUCTION OF PUBLIC WORKS FACILITIES SHOWN HERON. THE PROJECT OWNER, AND THE OWNER'S LENDERS, CONSULTANTS, CONTRACTORS AND SUBCONTRACTORS ARE PROHIBITED FROM DISCLOSING THE PLANS AND SPECIFICATIONS TO ANY PERSONS OTHER THAN THOSE WHO HAVE A NEED TO KNOW THE INFORMATION FOR THE PURPOSE OF THE PROJECT.

CPPA#1806043
KIVA# 18-3011
SDEV# 1800624
Q.S.# 01-14 & 01-15

REGISTERED PROFESSIONAL ENGINEER (CIVIL) CERTIFICATE NO. 23980 JEFFREY S. ERICKSON Date Signed 12/13/18 ARIZONA, U.S.A. Expires 09/30/20

REVISION RECORD

NO	DATE	DESCRIPTION

Civil & Environmental Consultants, Inc.
333 Baldwin Road · Pittsburgh, PA 15205
412-429-2324 · 800-365-2324
www.ceiinc.com

BASELINE ROAD IMPROVEMENTS
LOOP 202 & 57TH AVENUE
PHOENIX, ARIZONA
PUBLIC WATER MAIN EXTENSION

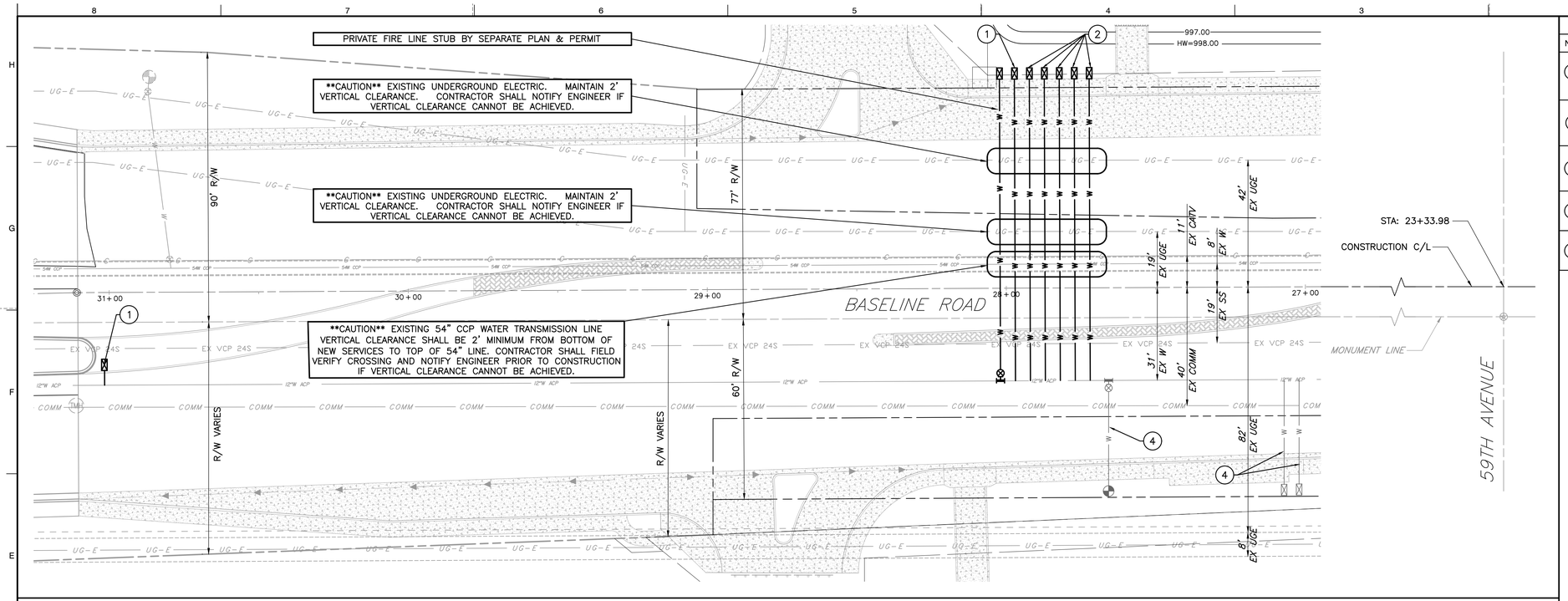
OFFSITE IMPROVEMENT PLANS
WATER MAIN PLAN & PROFILE

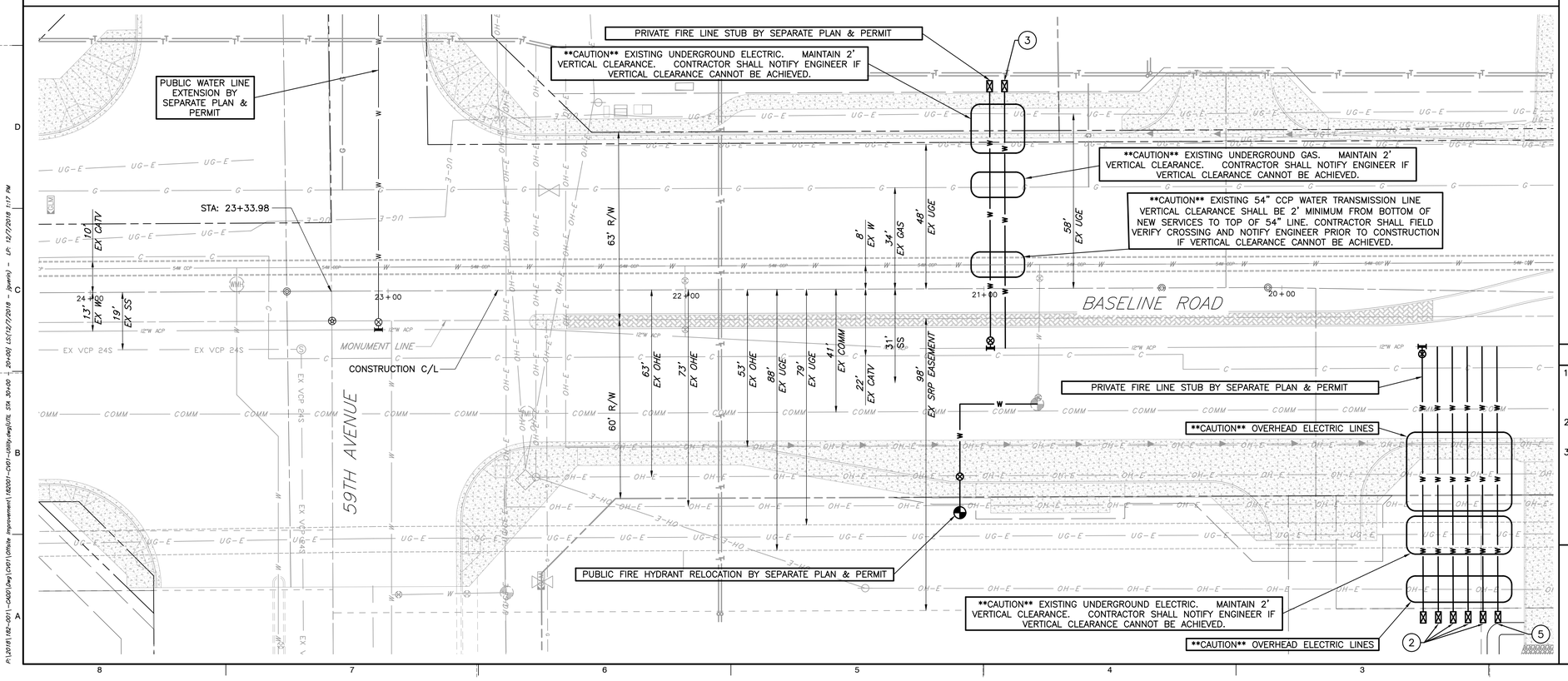
DATE:	DEC. 13, 2018
DRAWN BY:	CJG
DWG SCALE:	1"=20'
CHECKED BY:	JSE
PROJECT NO:	182-001
APPROVED BY:	JSE

DRAWING NO.: **WM02**

SHEET 2 OF 2

P:\2018\182-001\-CADD\Dwg\CIVIL\Offsite Improvement\Public Water Main Extension\182001_CIV01_PublicWaterMainExtension.dwg[WM02] LS:(12/5/2018 - jgaverly) - LP: 12/13/2018 6:13 PM





CONSTRUCTION NOTES

NO.	DESCRIPTION	UNIT	QTY.
1	INSTALL ¾" LANDSCAPE WATER SERVICE AND METER PER C.O.P. STD. DTL. P1342 & P1363 BY C.O.P. FORCES AFTER PAYMENT OF PREVAILING FEES.	EA	2
2	INSTALL 2" DOMESTIC WATER SERVICE AND METER BOX PER C.O.P. STD. DTL. P1342 BY C.O.P. FORCES AFTER PAYMENT OF PREVAILING FEES.	EA	9
3	INSTALL 1" DOMESTIC WATER SERVICE AND METER BOX PER C.O.P. STD. DTL. P1342 BY C.O.P. FORCES AFTER PAYMENT OF PREVAILING FEES.	EA	1
4	PROPOSED UTILITY TO BE INSTALLED WITH LAVEEN PARK PLACE DEVELOPMENT. (NOT A PART OF THIS PROJECT).	–	–
5	INSTALL 1" LANDSCAPE WATER SERVICE AND METER PER C.O.P. STD. DTL. P1342 & P1363 BY C.O.P. FORCES AFTER PAYMENT OF PREVAILING FEES.	EA	1

NORTH

SCALE IN FEET
0 20 40

SPECIAL NOTES

1. STATION & OFFSETS BASED ON THE NORTH QUARTER CORNER OF SECTION 5, T.1S., R.2E., 16.89' EAST OF THE INTERSECTION OF 55TH LANE & BASELINE ROAD, WHERE STA=10+00 E.
2. EXISTING IRRIGATION STRUCTURE TO BE REMOVED BY OTHERS.
3. "PER PHOENIX CITY CODE CHAPTER 2, SECTION 2–28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE FURNISHED FOR INSPECTION OR COPYING, EXCEPT AS SPECIALLY STATED IN THE CITY CODE, OR AS REQUIRED BY LAW"

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

REGISTERED PROFESSIONAL ENGINEER (CIVIL)
CERTIFICATE NO. 23980
JEFFREY S. ERICKSON
Date Signed 11/16/18
ARIZONA, U.S.A.
Expires 09/30/20

REVISION RECORD

NO	DATE	DESCRIPTION

Civil & Environmental Consultants, Inc.
11811 N. Tatum Blvd., Suite 3057 - Phoenix, AZ 85028
Ph: 602.760.2324 - 877.231.2324 - Fax: 602.760.2330
www.cecinc.com

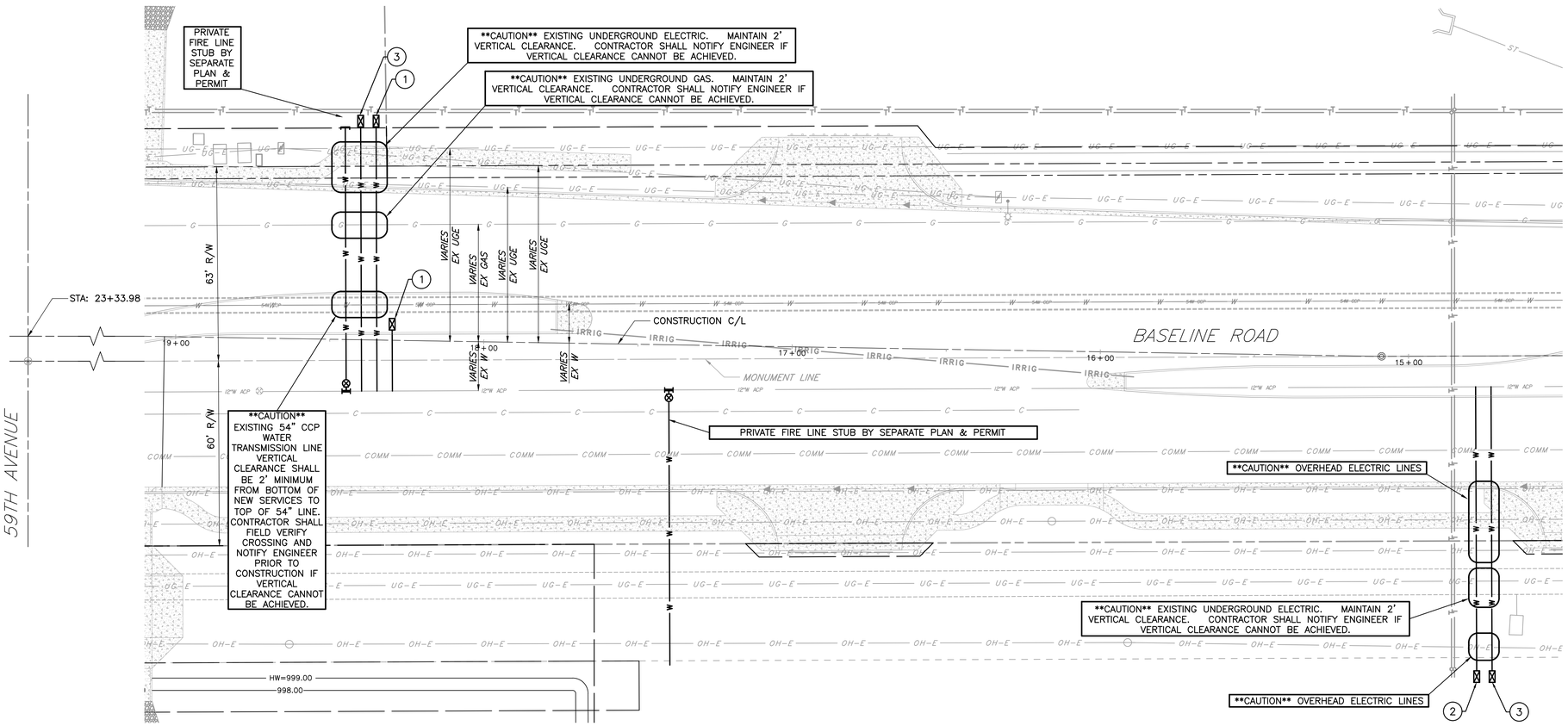
BASELINE ROAD IMPROVEMENTS
LOOP 202 & 57TH AVENUE
PHOENIX, ARIZONA
CIVIL IMPROVEMENT PLANS

OFFSITE IMPROVEMENT PLANS
UTILITY PLAN
STA 30+00 - 20+00

DATE:	NOVEMBER 16, 2018
DRAWN BY:	JD
DWG SCALE:	NONE
CHECKED BY:	JG
PROJECT NO:	182-001
APPROVED BY:	

DRAWING NO.: DW01

SHEET 1 OF 2



CONSTRUCTION NOTES

NO.	DESCRIPTION	UNIT	QTY.
1	INSTALL ¾" LANDSCAPE WATER SERVICE AND METER PER C.O.P. STD. DTL. P1342 & P1363 BY C.O.P. FORCES AFTER PAYMENT OF PREVAILING FEES.	EA	2
2	INSTALL 1" LANDSCAPE WATER SERVICE AND METER PER C.O.P. STD. DTL. P1342 & P1363 BY C.O.P. FORCES AFTER PAYMENT OF PREVAILING FEES.	EA	1
3	INSTALL 2" DOMESTIC WATER SERVICE AND METER BOX PER C.O.P. STD. DTL. P1342 BY C.O.P. FORCES AFTER PAYMENT OF PREVAILING FEES.	EA	2

NORTH

SCALE IN FEET
0 20 40

SPECIAL NOTES

1. STATION & OFFSETS BASED ON THE NORTH QUARTER CORNER OF SECTION 5, T.1S., R.2E., 16.89' EAST OF THE INTERSECTION OF 55TH LANE & BASELINE ROAD, WHERE STA=10+00 E.
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BASELINE ROAD IMPROVEMENTS
LOOP 202 & 57TH AVENUE
PHOENIX, ARIZONA
CIVIL IMPROVEMENT PLANS

OFFSITE IMPROVEMENT PLANS
UTILITY PLAN
STA 20+00 - 10+00

DATE:	NOVEMBER 16, 2018
DRAWN BY:	JD
DWG SCALE:	NONE
CHECKED BY:	JG
PROJECT NO:	182-001
APPROVED BY:	

DRAWING NO.: **DW02**

SHEET 2 OF 2

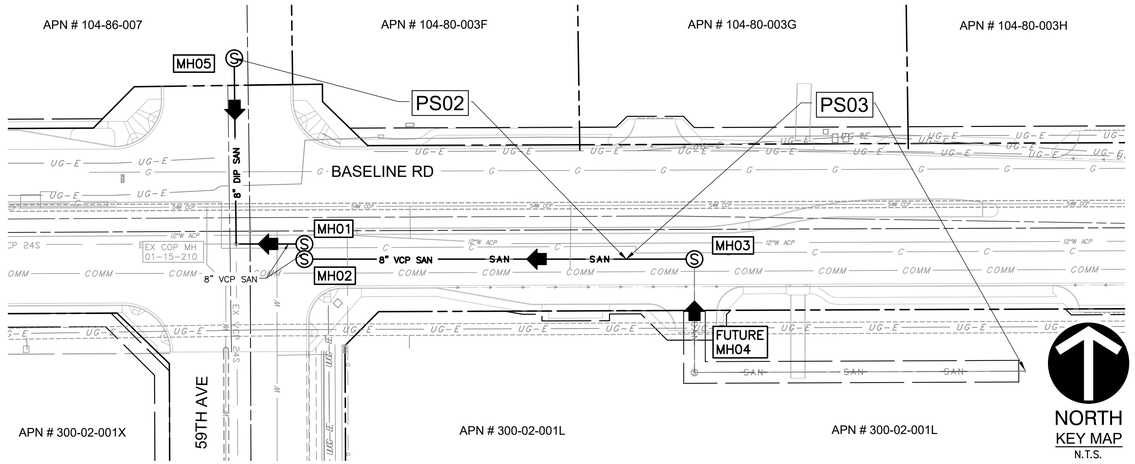
P:\2018\182-001 - CAGD\Dwg\CIVIL\Offsite Improvement\182001-CIVIL-Utility.dwg\UTIL STA 20+00 - 10+00\ 10+00\ SJY\12/13/2018 - jgwerly\ - LP: 12/13/2018 7:02 PM

BASELINE ROAD CONSORTIUM OFFSITE PUBLIC SEWER PLANS

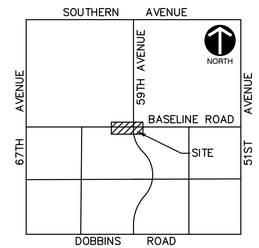
A PORTION OF THE WEST HALF OF SECTION 5 AND A PORTION OF THE EAST HALF OF SECTION 6, TOWNSHIP 1 SOUTH, RANGE 2 EAST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA

SEWER NOTES (CITY OF PHOENIX)

1. PLANNING & DEVELOPMENT DEPARTMENT'S CIVIL/SITE INSPECTION STAFF SHALL BE NOTIFIED 48 HOURS BEFORE ANY CONSTRUCTION BEGINS, TELEPHONE (602) 262–7811.
2. ANY SEWER MAIN 15 INCH IN SIZE OR 12 FEET IN DEPTH, OR GREATER, REQUIRES 5' MANHOLES.
3. ALL MANHOLES NEWLY CONSTRUCTED OR EXISTING THAT ARE WORKED IN FOR CONNECTIONS SHALL BE PAINTED WITH INSECTICIDE PAINT PER CITY OF PHOENIX SUPPLEMENT TO M.A.G. SECTION 627.
4. MANHOLES WITH 60" DIAMETER AND PIPES GREATER THAN 12" REQUIRE COATING PER C.O.P. SUPPLEMENT 626. ANY EXISTING MANHOLES WITH CORROSION COATING THAT ARE DISTURBED OR ADJUSTED TO NEW FINISH GRADES SHALL HAVE ANY DAMAGED COATING REPAIRED, INCLUDING ALL ADJUSTING RINGS.
5. THIS SET OF PLANS HAS BEEN INITIALLY REVIEWED BY THE CITY OF PHOENIX. SUCH REVIEW IS PART OF THE PROCESS THAT DEVELOPER(S)/CONTRACTOR(S) MUST GO THROUGH IN ORDER TO OBTAIN A CONSTRUCTION PERMIT. THE RESULTS OF SUCH INITIAL REVIEW, HOWEVER, SHALL NOT DICTATE THE CITY OF PHOENIX'S FINAL DETERMINATION AS TO THE ACCEPTABILITY OF THE PLANS, NOR SHALL IT PREVENT THE CITY OF PHOENIX FROM REQUIRING THAT ERRORS AND OMISSIONS, AS FOUND ON PLANS, BE ADDRESSED BY DEVELOPER(S)/CONTRACTOR(S), WHERE SUCH ERRORS AND OMISSIONS CAUSE THE PLANS TO BE IN VIOLATION OF OR INADEQUATE UNDER APPLICABLE FEDERAL/STATE/COUNTY/LOCAL CODES, ORDINANCES, REGULATIONS, OR OTHER LAWS. THIS REVIEWED AND STAMPED SET OF PLANS MUST BE KEPT AT THE CONSTRUCTIONS SITE AT ALL TIMES.
6. ALL CONSTRUCTION IN CITY OF PHOENIX RIGHT–OF–WAY, OR EASEMENT, IS TO CONFORM TO M.A.G. SPECIFICATIONS AND DETAILS AND CITY OF PHOENIX SUPPLEMENT TO M.A.G. SPECIFICATIONS AND DETAILS, UNLESS MODIFIED ON THE PLANS.
7. ALL SEWER MAINS MUST HAVE A T.V. INSPECTION BEFORE ACCEPTED AS COMPLETE (SEE CITY OF PHOENIX SUPPLEMENT TO M.A.G. SPECIFICATION SECTION 615.11(C).
8. TRAFFIC REGULATIONS: ALL WORK MUST COMPLY WITH REQUIREMENTS OF THE CURRENT CITY OF PHOENIX "TRAFFIC BARRICADE MANUAL."
9. THE FOLLOWING M.A.G. DETAILS ARE SPECIFICALLY NOT APPROVED:
   425 24" ALUMINUM FRAME AND COVER.
10. NEW MANHOLES ARE TO BE BUILT WITHOUT STEPS.
11. COMPACTION SHALL COMPLY WITH M.A.G. SECTION 601 & CITY OF PHOENIX SUPPLEMENTS.
12. NEW SEWER LINES ARE TO BE BUILT IN ACCORDANCE WITH CITY OF PHOENIX "STANDARD UTILITY LOCATIONS".
13. A SIX (6) FOOT MINIMUM HORIZONTAL SEPARATION FROM ANY UNDERGROUND UTILITY SHALL BE PROVIDED FOR SEWER MAINS, SEWER SERVICES, WATER MAINS, AND WATER SERVICES. THE MINIMUM HORIZONTAL SEPARATION IS MEASURED FROM OUTSIDE OF SEWER MAIN, SEWER SERVICE, WATER MAIN, OR WATER SERVICE TO OUTSIDE OF DRY UNDERGROUND UTILITY.
14. A ONE (1) FOOT MINIMUM VERTICAL SEPARATION FROM ANY UNDERGROUND UTILITY CROSSING SHALL BE PROVIDED FOR SEWER MAINS, SEWER SERVICES, WATER MAINS, AND WATER SERVICES. THE MINIMUM VERTICAL SEPARATION IS MEASURED FROM OUTSIDE OF SEWER MAIN, SEWER SERVICE, WATER MAIN, OR WATER SERVICE TO OUTSIDE OF DRY UNDERGROUND UTILITY.
15. A TWO (2) FOOT MINIMUM VERTICAL SEPARATION SHALL BE PROVIDED BETWEEN ANY SEWER MAINS OR STORM DRAIN MAIN CROSSING A WATER MAIN. THE MINIMUM VERTICAL SEPARATION IS MEASURED FROM OUTSIDE OF WATER MAIN TO OUTSIDE OF SEWER MAIN OR STORM DRAIN MAIN. SEE M.A.G. STANDARD DETAIL 404 FOR ADDITIONAL INFORMATION AND/OR PROVISIONS FOR CLEARANCE.
16. EXCEPTIONS OR DEVIATIONS FROM THE ABOVE MINIMUM CLEARANCES MUST BE APPROVED AND SHOWN ON THE APPROVED WATER AND SEWER PLANS. WHEN UTILITY CONFLICTS ARE FOUND DURING CONSTRUCTION, ALL CHANGES AND REVISIONS MUST BE PRECEDED BY AN APPROVED PLAN REVISION.
17. ANY AND ALL MORE STRINGENT SEPARATION REQUIREMENTS REQUIRED BY FEDERAL, STATE, COUNTY, OF LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
18. ANY SEWER LINES THAT ARE INSTALLED WITH LESS THAN .004 FT/FT SLOPE MUST BE INSTALLED USING A LASER.
19. WHEN D.I.P. SEWER PIPE IS USED, LINING IS REQUIRED PER CITY OF PHOENIX SUPPLEMENT TO M.A.G. SEC. 750.1.
20. CONCRETE OR ASPHALT DAMAGED DURING THE COURSE OF CONSTRUCTION SHALL BE REMOVED AND REPLACED IN KIND PRIOR TO FINAL INSPECTION.
21. RECORD DRAWING SUBMITTALS MUST COMPLY WITH WATER SERVICES DEPARTMENT ENGINEERING POLICY P–69. A COPY OF THE POLICY CAN BE OBTAINED IN THE DEPARTMENT'S WEBSITE:
    HTTP://PHOENIX.GOV/WATERSERVICES/DESIGN/ENGPOLICIES/INDEX.HTML
22. PER CITY OF PHOENIX CODE CHAPTER 2, SECTION 2–28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE FURNISHED FOR INSPECTION OR COPYING EXCEPT AS SPECIFICALLY STATED IN THE CITY CODE, OR AS REQUIRED BY LAW.



NORTH
KEY MAP
N.T.S.



VICINITY MAP
N.T.S.

ENGINEER

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
11811 N. TATUM BLVD., STE. 3057
PHOENIX, ARIZONA 85028
PH: 602–644–2179, FX: 602–760–2330
CONTACT: JASON GUERIN

OWNERS

59TH AND BASELINE LLC
1700 W. HORIZON RIDGE PKWY, STE. 101
HENDERSON, NV 89012

REPAYMENTS

THIS PUBLIC SEWER MAIN EXTENSION PROVIDES SEWER SERVICE TO PARCEL 300–02–001L WHICH IS SUBJECT TO SEWER LINE REPAYMENTS B117309. BENEFITING AREA=9.41 ACRES

PROJECT DESCRIPTION

BASELINE ROAD 8" PUBLIC SEWER MAIN EXTENSION.

APN

300–02–001L

ESTIMATED QUANTITIES

(QUANTITIES ARE FOR CITY REVIEW PURPOSE ONLY – CONTRACTOR IS RESPONSIBLE FOR VERIFYING OWN ESTIMATES)

DESCRIPTION	UNIT	QUANTITY
CONNECT TO EXIST. MANHOLE	EA	1
8" VCP SEWER LINE	LF	340
5' SEWER MANHOLE	EA	4
8" DIP SEWER LINE	LF	138

UTILITY CONFLICTS

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.

SALT RIVER PROJECT (POWER)	UTILITY CONFLICTS DEPT.	3/23/18 DATE
SRVWUA (IRRIGATION)	UTILITY CONFLICTS DEPT.	3/23/18 DATE
CENTURY LINK (TELEPHONE)	UTILITY CONFLICTS DEPT.	3/23/18 DATE
COX COMMUNICATIONS (CABLE TV)	UTILITY CONFLICTS DEPT.	3/23/18 DATE
SOUTHWEST GAS (GAS)	UTILITY CONFLICTS DEPT.	3/23/18 DATE
CITY OF PHOENIX (WATER)	UTILITY CONFLICTS DEPT.	3/23/18 DATE
CITY OF PHOENIX (SEWER)	UTILITY CONFLICTS DEPT.	3/23/18 DATE

BENCH MARK

ADOT ALUMINUM CAP ON NORTH SIDE OF CONCRETE BASE OF TRANSMISSION TOWER #25, SOUTH SIDE OF BASELINE ROAD AT 59TH AVENUE TO NORTH.
ELEVATION=1001.624 (CITY OF PHOENIX DATUM, NGVD29)

BASIS OF BEARING

THE NORTH LINE OF THE NORTHWEST QUARTER OF SECTION 5, TOWNSHIP 1 SOUTH, RANGE 2 EAST AS SHOWN IN BOOK 846, PAGE 5, RECORDS OF MARICOPA COUNTY, ARIZONA. SAID LINE BEARS NORTH 89°46'38" EAST.

SPECIAL NOTES

1. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS IN ADVANCE FOR ANY STAKING OR RESTAKING REQUIRED.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN PERMITS REQUIRED AT HIS OWN EXPENSE.
3. THE CONTRACTOR WILL MAKE EXPLORATORY EXCAVATIONS & LOCATE EXIST. UNDERGROUND FACILITIES SUFFICIENTLY IN ADVANCE OF CONSTRUCTION TO PERMIT THE REVISION OF THESE PLANS IF NECESSARY DUE TO CONFLICT BETWEEN A FACILITY PROPOSED HEREIN & AN EXIST. FACILITY.
4. IT IS THE CONTRACTORS SOLE RESPONSIBILITY TO VERIFY THE PRESENCE & LOCATION OF ANY & ALL EXIST. OVERHEAD &/OR UNDERGROUND UTILITIES THAT MAY INTERFERE WITH THE CONSTRUCTION, WHETHER OR NOT SAID UTILITIES ARE SHOWN ON THE CONSTRUCTION PLANS FOR THIS PROJECT. CONTRACTOR SHALL ADEQUATELY PROTECT & MAINTAIN SUCH UTILITIES.
5. THE ENGINEER DOES NOT ASSUME ANY LIABILITY FOR ERRORS OF LINE &/OR GRADE ON ANY STAKING WHICH HAS BEEN DISTURBED IN ANY WAY, NOR DOES THE ENGINEER ASSUME ANY LIABILITY FOR ERRORS OF LINE &/OR GRADE ON ANY STAKING THAT HAS BEEN IN PLACE FOR A PERIOD OF 24 HOURS OR MORE WITHOUT THE COMMENCEMENT OF CONSTRUCTION FOR WHICH IT WAS SET.
6. THE CONTRACTOR SHALL NOTIFY THE DEVELOPER'S AND SURVEYOR BEFORE BACKFILLING WATER &/OR SEWER SERVICES IN ORDER THAT THE ENGINEER MAY VERIFY THE AS–BUILT LOCATION OF THE SERVICE.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING ALL STAKES & CONTROL, & SHALL TAKE STEPS NECESSARY TO INSURE THAT THE STAKES & CONTROL ARE NOT DISTURBED OR TAMPERED WITH. IF STAKES ARE DISTURBED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST INCURRED TO RESTAKE.
8. ANY QUESTIONS RELATIVE TO THE ACCURACY OF IMPROVEMENT INSTALLATION SHALL BE RAISED SUBSEQUENT TO COMPLETION OF THE WORK UNLESS ALL SURVEY STAKES ARE MAINTAINED INTACT. SHOULD SUCH STAKES NOT BE PRESENT & VERIFIED AS TO THEIR ORIGIN, NO CLAIM FOR ADDITIONAL COMPENSATION FOR CORRECTION SHALL BE PRESENTED TO ANY PARTY & SUCH WORK SHALL BE CORRECTED BY THE CONTRACTOR AT HIS OWN EXPENSE.
9. ALL FRAMES, COVERS, VALVE BOXES & MANHOLE COVERS SHALL BE ADJUSTED TO FINISH GRADE PRIOR TO COMPLETION OF PAVING OR RELATED CONSTRUCTION. ADJUSTMENT OF UTILITIES SHALL BE PER SRPMIC ECS STD. DET. 703 & 704.
10. CONSTRUCTION OF SURFACE IMPROVEMENTS SHALL NOT BEGIN UNTIL CONFLICTING UNDERGROUND UTILITY CONSTRUCTION IS COMPLETED & SERVICE CONNECTIONS TO ALL PLATTED LOTS HAVE BEEN ADEQUATELY EXTENDED.
11. ALL SIGNS REQUIRE SEPARATE APPROVALS AND PERMITS.
12. ALL STORM DRAIN JOINTS TO BE WATER TIGHT.

SHEET INDEX

PS01 SEWER MAIN EXTENSION COVER SHEET
PS02 – PS03 SEWER MAIN PLAN

AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE "RECORD DRAWING" MEASUREMENTS AS SHOWN HEREON WERE MADE UNDER MY SUPERVISION OR AS NOTED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED ENGINEER _____ DATE _____

REGISTRATION NO. _____

APPROVED FOR: THE CITY OF PHOENIX

COUNTY HEALTH DELEGATE _____ DATE _____
PLANNING & DEVELOPMENT DEPARTMENT

WSPR# 1800035
DSAP# 18206
CCPH# 1807123
KIVA# 18-3011
SDEV# 1800624
Q.S.# 01-15

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CERTIFICATE NO. 23980
JEFFREY S. ERICKSON
Date Signed 11/19/18
ARIZONA, U.S.A.
Expires 09/30/20

REVISION RECORD

NO.	DATE	DESCRIPTION

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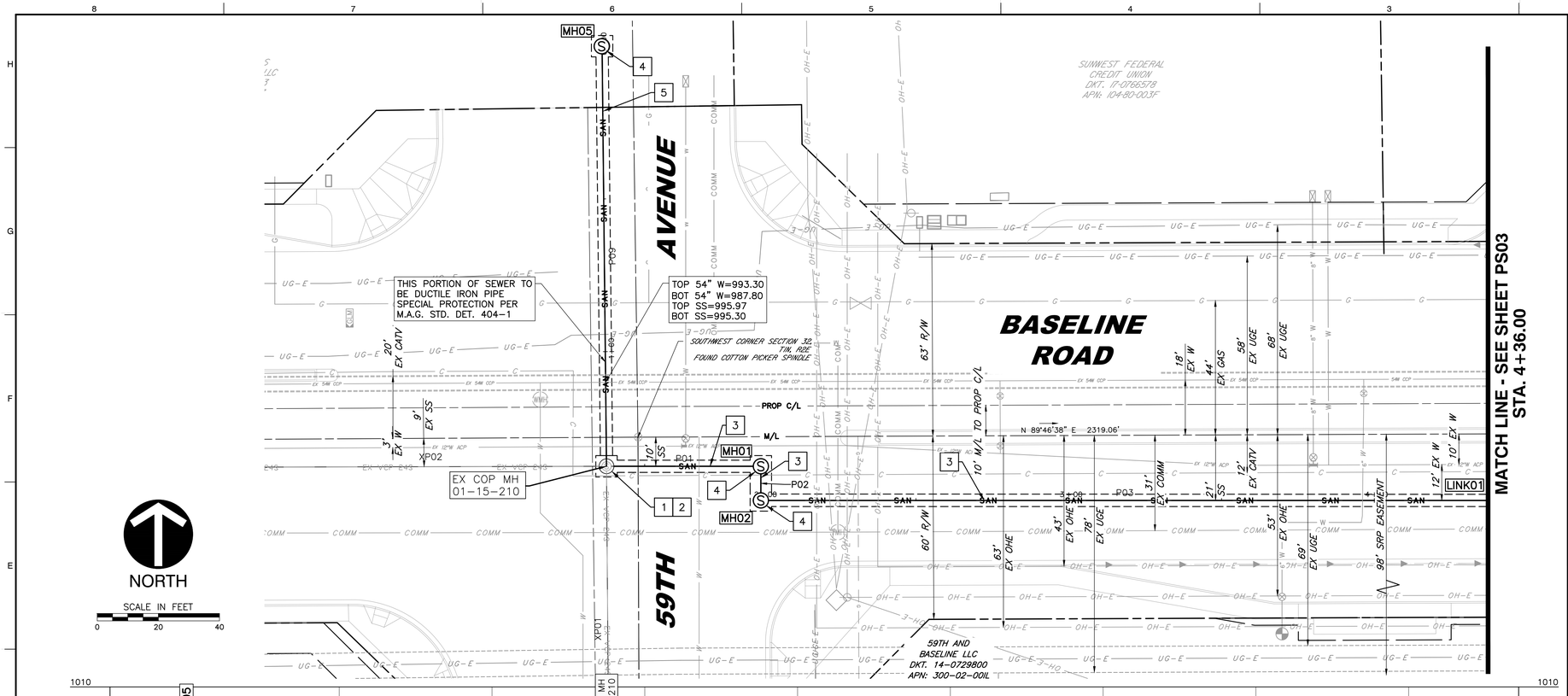
BASELINE ROAD CONSORTIUM
PUBLIC SEWER PLANS
LOOP 202 TO 57TH AVENUE
PHOENIX, ARIZONA
CIVIL IMPROVEMENT PLANS

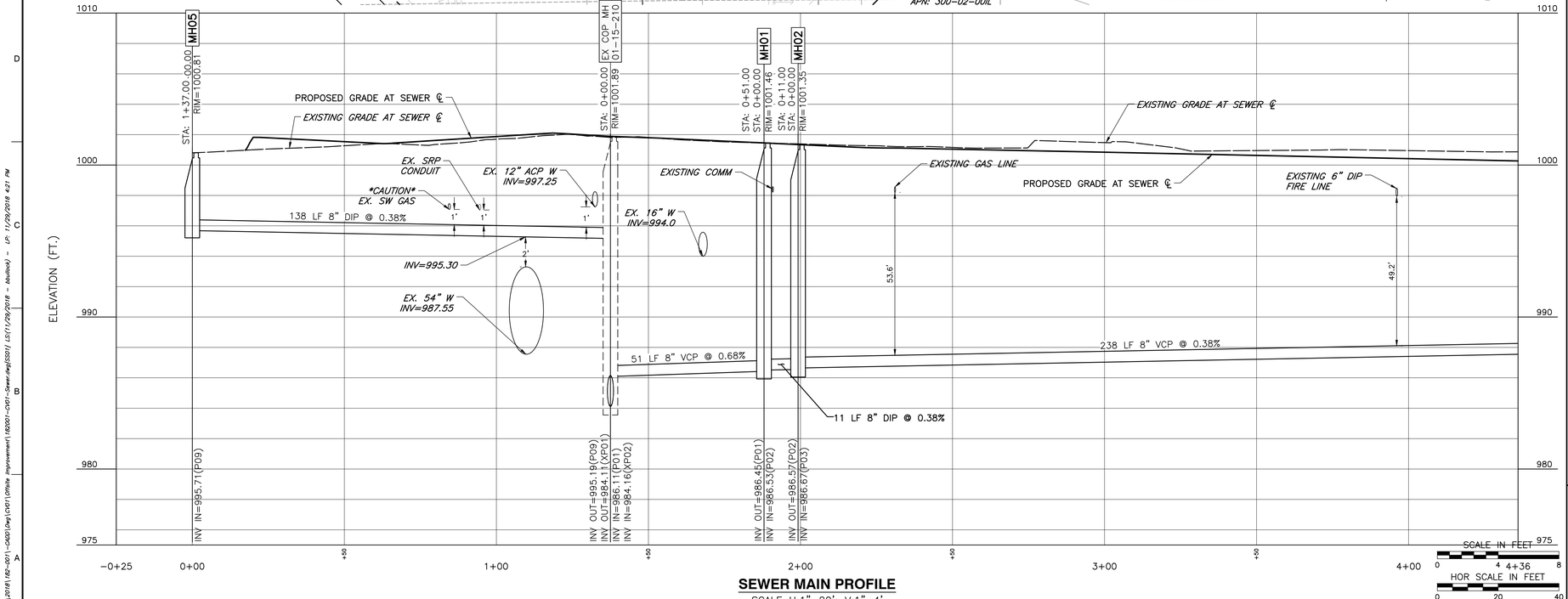
OFFSITE SEWER PLANS
PUBLIC SEWER MAIN EXTENSION
COVER SHEET

DATE:	NOVEMBER 26, 2018
DRAWN BY:	JG
DWG SCALE:	NONE
CHECKED BY:	JG
PROJECT NO.	182-001
APPROVED BY:	

DRAWING NO.: PS01
SHEET 1 OF 3

P:\2018\182-001\-CADD\Dwg\CIVIL\Offsite Improvement\182001-CV01-Sewer.dwg\COVER SHEET\ LS(11/29/2018 - bbullock) - LP: 11/29/2018 4:20 PM





SEWER MAIN PROFILE

SCALE H:1"=20'; V:1"=4'

CONSTRUCTION NOTES

NO.		UNIT	QTY.
1	CONTRACTOR SHALL BREAK INTO EXISTING SEWER MANHOLE AND INSTALL NEW SEWER PIPE. CONTRACTOR SHALL VERIFY IN THE FIELD EXISTING LOCATION AND INVERT PRIOR TO FURTHER TRENCHING. SHOULD EXISTING CONDITIONS AND PLANS DIFFER, CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY.	EA	1
2	EXISTING SEWER MANHOLE TO BE REHABILITATED PER C.O.P. SUPPLEMENTS TO M.A.G. SPEC 626.	EA	1
3	INSTALL 8" VCP SEWER PIPE. LENGTH & SLOPE PER PLANS.	LF	309
4	INSTALL 5' DIAMETER CONCRETE MANHOLE TYPE 'A' TOP PER M.A.G. STANDARD DETAIL 420-1 AND 420-2 WITH 30" FRAME AND COVER PER .O.P. STANDARD DETAIL P1424. CORROSION COATING PER C.O.P. SUPPLEMENT TO M.A.G. SPEC 626.	EA	3
5	INSTALL 8" DIP SEWER PIPE. LENGTH & SLOPE PER PLANS.	LF	138

PER CITY OF PHOENIX CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE FURNISHED FOR INSPECTION OR COPYING EXCEPT AS SPECIFICALLY STATED IN THE CITY CODE, OR AS REQUIRED BY LAW.

STRUCTURE TABLE

STRUCTURE NAME	RIM E.	INVERT IN	INVERT OUT	REMARKS
EX COP MH 01-15-210	1001.89	P01 = 986.11 XP02 = 984.16	P09 = 995.19 XP01 = 984.11	Eccentric Cylindrical Structure
MH01	1001.46	P02 = 986.53	P01 = 986.45	Eccentric Cylindrical Structure
MH02	1001.35	P03 = 986.67	P02 = 986.57	Eccentric Cylindrical Structure
MH05	1000.81	P09 = 995.71		Eccentric Cylindrical Structure

PIPE TABLE

PIPE NAME	SIZE (IN)	BEARING	LENGTH (FT)	SLOPE	MATERIAL
P01	8	N90°00'00"W	50.5	0.68%	VCP
P02	8	N00°00'00"E	11.2	0.38%	VCP
P03	8	N90°00'00"W	238.3	0.38%	VCP
P09	8	N00°36'01"W	137.5	-0.38%	VCP

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

REGISTERED PROFESSIONAL ENGINEER (CIVIL)
CERTIFICATE NO. 23980
JEFFREY S. ERICKSON
Date Signed 11/28/18
ARIZONA, U.S.A.
Expires 09/30/20

REVISION RECORD

NO.	DATE	DESCRIPTION

Civil & Environmental Consultants, Inc.
11811 N. Tatum Blvd., Suite 3057 · Phoenix, AZ 85028
Ph: 602.760.2324 · 877.231.2324 · Fax: 602.760.2330
www.cecinc.com

BASELINE ROAD CONSORTIUM PUBLIC SEWER PLANS LOOP 202 TO 57TH AVENUE PHOENIX, ARIZONA

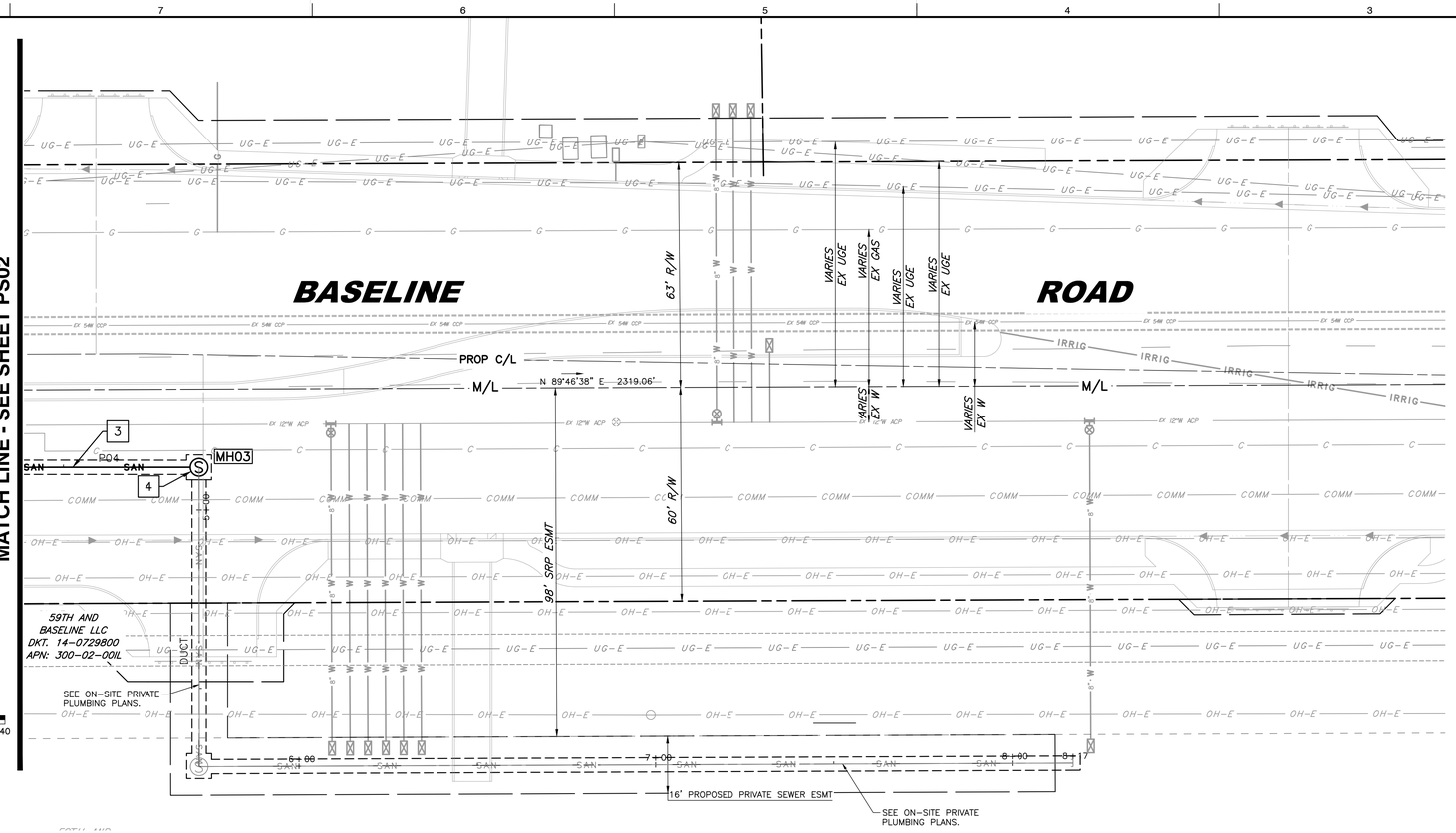
OFFSITE SEWER PLANS SEWER MAIN EXTENSION

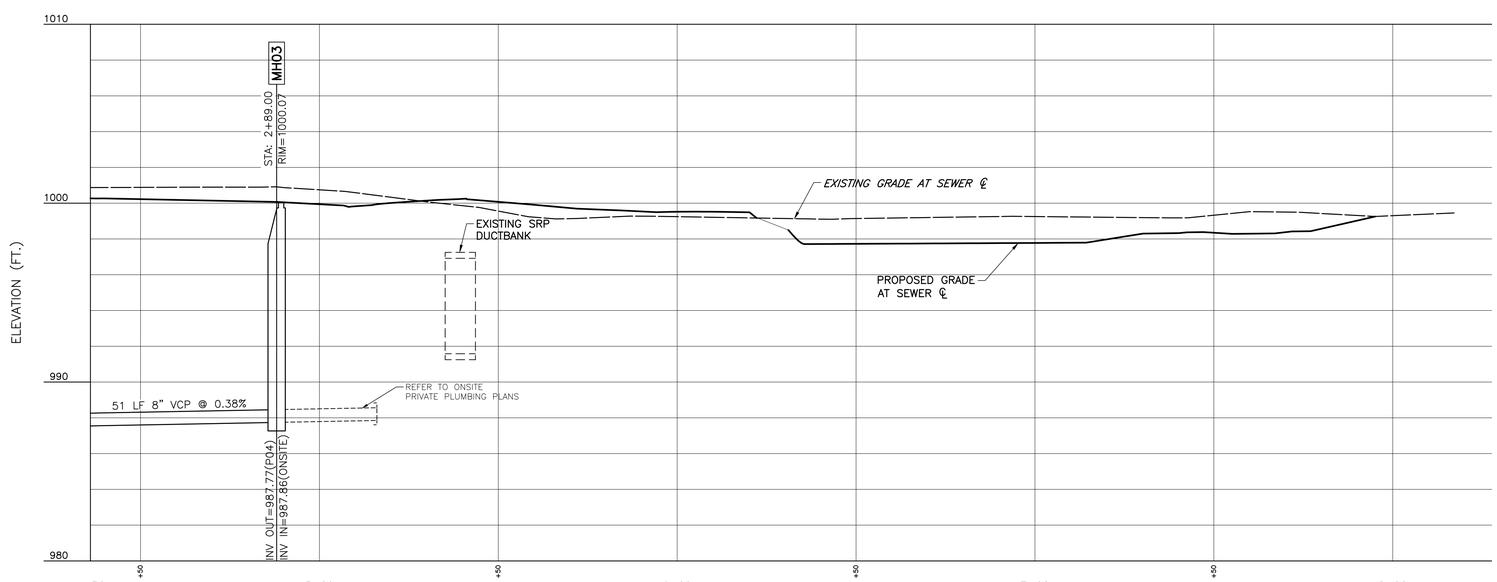
DATE:	NOVEMBER 26, 2018	DRAWN BY:	JG
DWG SCALE:	1"=20'	CHECKED BY:	JG
PROJECT NO:	182-001	APPROVED BY:	

DRAWING NO.: **PS02**

SHEET 2 OF 3

P:\2018\182-001\-CADD\Dwg\CVD1\Offsite Improvement\182001-CVD1-Sewer.dwg[SS01] LS(11/29/2018 - bbullock) - LP: 11/29/2018 4:21 PM





SEWER MAIN PROFILE
SCALE H:1"=20'; V:1"=4'

SCALE IN FEET
0 4 8
HOR SCALE IN FEET
0 20 40

CONSTRUCTION NOTES

NO.		UNIT	QTY.
3	INSTALL 8" VCP SDR-35 SEWER PIPE. LENGTH & SLOPE PER PLANS.	LF	51
4	INSTALL 5' DIAMETER CONCRETE MANHOLE TYPE 'A' TOP PER M.A.G. STANDARD DETAIL 420-1 AND 420-2 WITH 30" FRAME AND COVER PER C.O.P. STANDARD DETAIL P1424. CORROSION COATING PER C.O.P. SUPPLEMENT TO M.A.G. SPEC 626.	EA	1

PER CITY OF PHOENIX CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE FURNISHED FOR INSPECTION OR COPYING EXCEPT AS SPECIFICALLY STATED IN THE CITY CODE, OR AS REQUIRED BY LAW.

STRUCTURE TABLE

STRUCTURE NAME	RIM E.	INVERT IN	INVERT OUT	REMARKS
MH03	1000.07		P04 = 987.77	Eccentric Cylindrical Structure

PIPE TABLE

PIPE NAME	SIZE (IN)	BEARING	LENGTH (FT)	SLOPE	MATERIAL
P04	8	N90°00'00"W	50.5	0.38%	VCP

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

REGISTERED PROFESSIONAL ENGINEER (CIVIL)
CERTIFICATE NO. Z3980
JEFFREY S. ERICKSON
Date Signed 11/28/18
ARIZONA, U.S.A.
Expires 09/30/20

REVISION RECORD

NO.	DATE	DESCRIPTION

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BASELINE ROAD CONSORTIUM PUBLIC SEWER PLANS LOOP 202 TO 57TH AVENUE PHOENIX, ARIZONA

OFFSITE SEWER PLANS SEWER MAIN EXTENSION

DATE:	NOVEMBER 26, 2018
DRAWN BY:	JG
DWG SCALE:	1"=20'
CHECKED BY:	JG
PROJECT NO:	182-001
APPROVED BY:	

DRAWING NO.: **PS03**

SHEET 3 OF 3

P:\2018\182-001\-CADD\Dwg\CIVIL\Offsite Improvements\182001-CIV01-Sewer.dwg[SS02] LS(11/29/2018 - bbullock) - LP: 11/29/2018 4:22 PM

City of Phoenix
PLANNING & DEVELOPMENT DEPARTMENT

Civil/Landscape Submittal
Application

Submittal Type (check all that apply, but only one plan set per application):

- ☐ Grading
- ☐ Paving
- ☒ Water/Sewer
- ☐ Stormwater
- ☐ Fireline
- ☐ Landscape
- ☐ Inventory
- ☐ Salvage
- ☐ Slope Analysis
- ☐ Hillside
- ☐ 1st Review
- ☒ 2nd Review
- ☐ 3rd Review
- ☐ Revision
- ☐ Combo
- ☒ Other: S-512D

– STAFF USE ONLY –

Reviewer: _____
PR #: _____
Type: _____ Sheets: ____
Type: _____ Sheets: ____
Bin Number: _____

Project (Kiva) # 18-3011 **SDEV #** _____ **Date:** 10-12-2018

Project Name: Baseline Road Improvements

Project Address/Location: 59th Ave. and Baseline Road

Assessor Parcel Number(s) (APN): _____

Description of Work: S-512D

☐ Check if Primary Contact

Owner/Developer: _____
Address: _____
City: _____ State: _____ Zip: _____
Contact Person: _____
Email: _____ Phone # _____

☒ Check if Primary Contact

Architect/Engineer/Consultant: CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
Address: 11811 N. TATUM BLVD., SUITE 3057
City: PHOENIX State: AZ Zip: 85028
Contact Person: JASON GUERIN
Email: jguerin@cecinc.com Phone # 602-758-9426

STAFF USE ONLY

P&S Staff: _____ Date Received: _____

Fee Amount: $ _____ **Fee Code**: _____ ☐ Self-Certification

An applicant may receive a clarification from the city of its interpretation or application of a statute, ordinance, code or authorized substantive policy statement. To request clarification or to obtain further information on the application process and applicable review time frames, please call 602-262-7811 or visit our website at http://phoenix.gov/pdd/licensetimes.html. This publication can be made available in alternate formats (Braille, large print, or digital media) upon request. Contact Planning & Development at (602) 262-7811 voice or (602) 534-5500 TTY.

City of Phoenix - Water Services Dept / Planning & Development Dept
Gravity Wastewater "Drop Connection Tap" Manhole **Standard Detail S-512D**

PROJECT NAME: Baseline Road Improvements **LOCATION:** 59th Ave. and Baseline Rd

PROJ / KIVA / CCPR / CSPR/ WSPR #: KIVA #18-3011 WSPR# 1800034 CCPH# 1800351

Q.S.#: 01-14

59th Ave & Baseline
COP BENCHMARK: 1001.624 NGVD 29
GROSS ACREAGE: 151.7

MANHOLE INFO

DISTANCE TO NEAREST EXISTING DOWNSTREAM MANHOLE 588 **LF**

INDICATE EXISTING DOWNSTREAM MANHOLE NO. 302

☑ **EXISTING MANHOLE NO.** 303

☐ **INSTALL NEW MANHOLE**

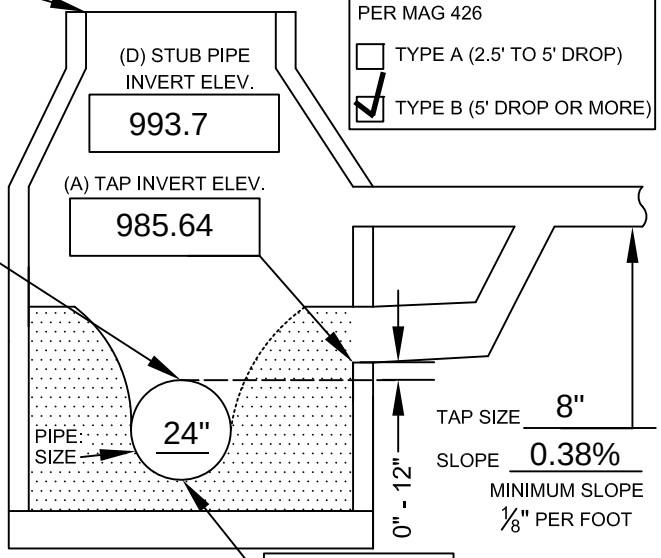
1001.49
(C) RIM ELEV.

DROP CONNECTION PER MAG 426
☐ TYPE A (2.5' TO 5' DROP)
☑ TYPE B (5' DROP OR MORE)

(D) STUB PIPE INVERT ELEV.
993.7

(B) MAIN CROWN ELEV.
985.64

(A) TAP INVERT ELEV.
985.64



TAP SIZE 8"
SLOPE 0.38%
MINIMUM SLOPE ⅛" PER FOOT

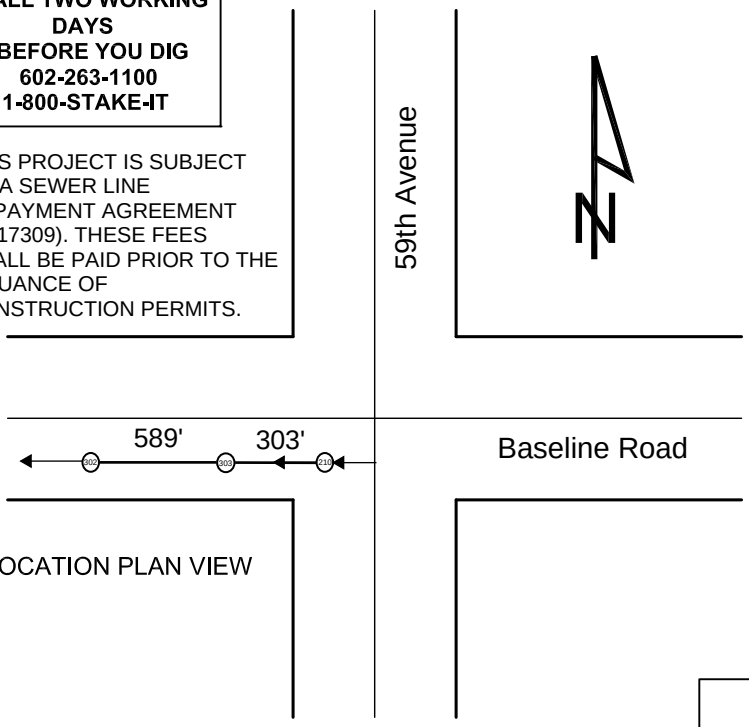
SECTION A - A
983.64
WASTEWATER MAIN INVERT ELEVATION

MATERIAL LIST IN ROW OR EASEMENT

PIPE (SIZE / TYPE) 8" D.I.P.	119	**LF**
PAVEMENT REPLACEMENT	136	**SY**
SIDEWALK	0	**SF**
CURB & GUTTER	0	**LF**

CALL TWO WORKING DAYS BEFORE YOU DIG
602-263-1100
1-800-STAKE-IT

THIS PROJECT IS SUBJECT TO A SEWER LINE REPAYMENT AGREEMENT (B117309). THESE FEES SHALL BE PAID PRIOR TO THE ISSUANCE OF CONSTRUCTION PERMITS.



LOCATION PLAN VIEW

RECORD DRAWING CERTIFICATION: I HEREBY CERTIFY THAT THE "RECORD DRAWING" MEASUREMENTS AS SHOWN HEREON WERE MADE UNDER MY SUPERVISION OR AS NOTED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED ENGINEER **DATE**

REGISTRATION #

ENGINEER: Jeff Erickson
CONTACT: Jason Guerin
ADDRESS: 11811 N. Tatum Blvd, Suite 3057 Phoenix, AZ. 85028
PHONE #: 602-760-2324

For City Use Only:

Approved By: **Date:**

Dept. Approval ☐ **P&D** ☐ **WSD**

Plan Reviewer

City of Phoenix - Water Services Dept / Planning & Development Dept
Gravity Wastewater "Drop Connection Tap" Manhole **Standard Detail S-512D**

PROJECT NAME: Baseline Road Improvements **LOCATION:** 59th Ave. and Baseline Rd

PROJ / KIVA / CCPR / CSPR / WSPR # 18-3011 WSPR# 1800034 CCPH# 1800351

S-512D CONSTRUCTION NOTES

ALL CONSTRUCTION SHALL BE PERFORMED IN COMPLIANCE WITH ALL APPLICABLE UNIFORM STANDARD DETAILS AND SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OF MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) AND THE CITY OF PHOENIX (COP) SUPPLEMENTAL(SUPPL) STANDARD (STD) DETAILS (DTL) AND SPECIFICATIONS.

VERIFY LOCATION OF CROSSING UTILITIES IN THE RIGHT OF WAY (ROW) / EASEMENT IN THE LOCATION PLAN VIEW.

THE NEW TAP SHALL BE VITRIFIED CLAY PIPE OR DUCTILE IRON PIPE WITH PROTECTO 401 CERAMIC EPOXY LINING WITH A MINIMUM REQURED SLOPE OF 1/8 INCH PER FOOT.

ALL ELEVATIONS SHOWN HERE ARE RELATIVE TO EACH OTHER.

INVERT OF THE PROPOSED WASTEWATER TAP SHALL BE EQUAL TO OR HIGHER THAN THE CROWN OF THE EXISTING MAIN. FOR EXISTING MANHOLES RECONSTRUCT BASE TO MATCH DETAIL.

THE INTERIOR OF ALL MANHOLES NEWLY CONSTRUCTED OR EXISTING SHALL BE PAINTED WITH INSECTICIDE PAINT PER COP SUPPL TO MAG SEC 627. PAINT SHALL BE APPLIED AFTER CORROSION COATING IS APPLIED, IF REQUIRED.

ALL MANHOLES ON PIPE 15-INCHES AND LARGER OR GREATER THAN 12 FT IN DEPTH, SHALL BE CORROSION COATED PER COP SUPPL TO MAG SEC 626. ANY COATING DAMAGE CAUSED BY TAPPING OPERATIONS TO EXISTING MANHOLES, CONTRACTOR SHALL REPAIR COATING PER THE MANUFACTURER'S INSTRUCTIONS AS INDICATED IN THE COP SUPPL.

TRAFFIC EGULATIONS SHALL BE PER CITY OF PHOENIX “TRAFFIC BARRICADE POLICY”.

COMPACTION SHALL COMPLY WITH MAG SPEC 601- 95% MINIMUM IN A PUBLIC STREET.

A PAVEMENT CUT SURCHARGE MAY BE ASSESSED TO PROJECTS TRENCHING IN NEWLY PAVED OR OVERLAID PAVEMENT.

PAVEMENT REPLACEMENT THICKNESS AND TYPE ARE TO BE PER MAG SEC. 336, COP STD. DTL P1200 - TYPE B. CURB AND GUTTER REPLACEMENT SHALL BE A MINIMUM OF ONE (1) FULL SECTION, PER MAG STD DTL 220. SIDEWALK REPLACEMENT SHALL BE A MINIMUM OF ONE (1) FULL PANEL PER COP DTL P1230. AT THE DISCRETION OF THE COP INSPECTOR, TUNNELING UNDER EXISTING CURB AND GUTTER, IN COP ROW, WILL BE ALLOWED. TUNNELING UNDER EXISTING SIDEWALK WILL NOT BE ALLOWED IN THE COP ROW.

PLAN APPROVAL IS VALID FOR 180 DAYS. PRIOR TO PLAN APPROVAL EXPIRATION, ALL ASSOCIATED PERMITS SHALL BE PURCHASED OR THE PLANS SHALL BE RESUBMITTED FOR EXTENSION OF PLAN APPROVAL. THE EXPIRATION, EXTENSION, AND REINSTATEMENT OF CIVIL ENGINEERING PLANS AND PERMITS SHALL FOLLOW THE SAME GUIDELINES AS THOSE INDICATED IN THE PHOENIX BUILDING CODE ADMINISTRATIVE PROVISIONS SECTION 105.3 FOR BUILDING PERMITS.

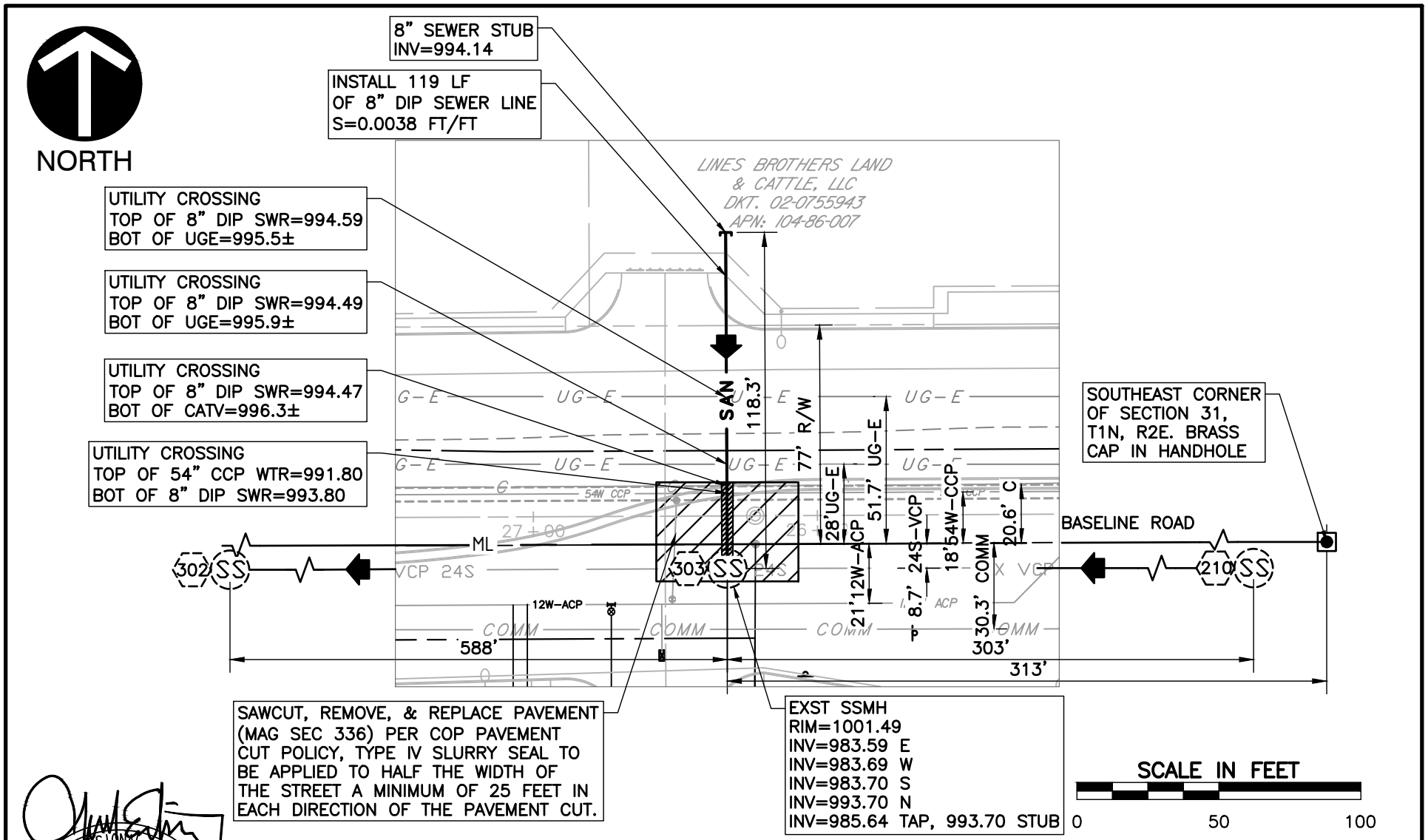
PER THE CITY OF PHOENIX ORDINANCE G-4396, THIS PLAN IS FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX.

THE FOLLOWING DISCLAIMER CAN ONLY BE USED FOR LOCAL OR RESIDENTIAL STREETS. FOR MAJOR AND COLLECTOR STREETS, UTILITY CONFLICT NOTICES SHALL BE PROVIDED:

I HEREBY CERTIFY THAT ALL UTILITY COMPANIES WITH FACILITIES IN THE AREA OF THIS PROJECT HAVE BEEN CONTACTED AND THE DATA PROVIDED IS SHOWN ON THIS PLAN. I AGREE TO INDEMNIFY, DEFEND, SAVE AND HOLD HARMLESS THE CITY OF PHOENIX, ITS OFFICERS, OFFICIALS, AGENTS, EMPLOYEES AND VOLUNTEERS FROM ANY AND ALL CLAIMS, DEMANDS, ACTIONS, LIABILITIES, DAMAGES, LOSSES, OR EXPENSES INCURRED FOR ANY UTILITY CONFLICTS THAT MAY ARISE.

_____

ENGINEER'S SIGNATURE, SEAL AND DATE



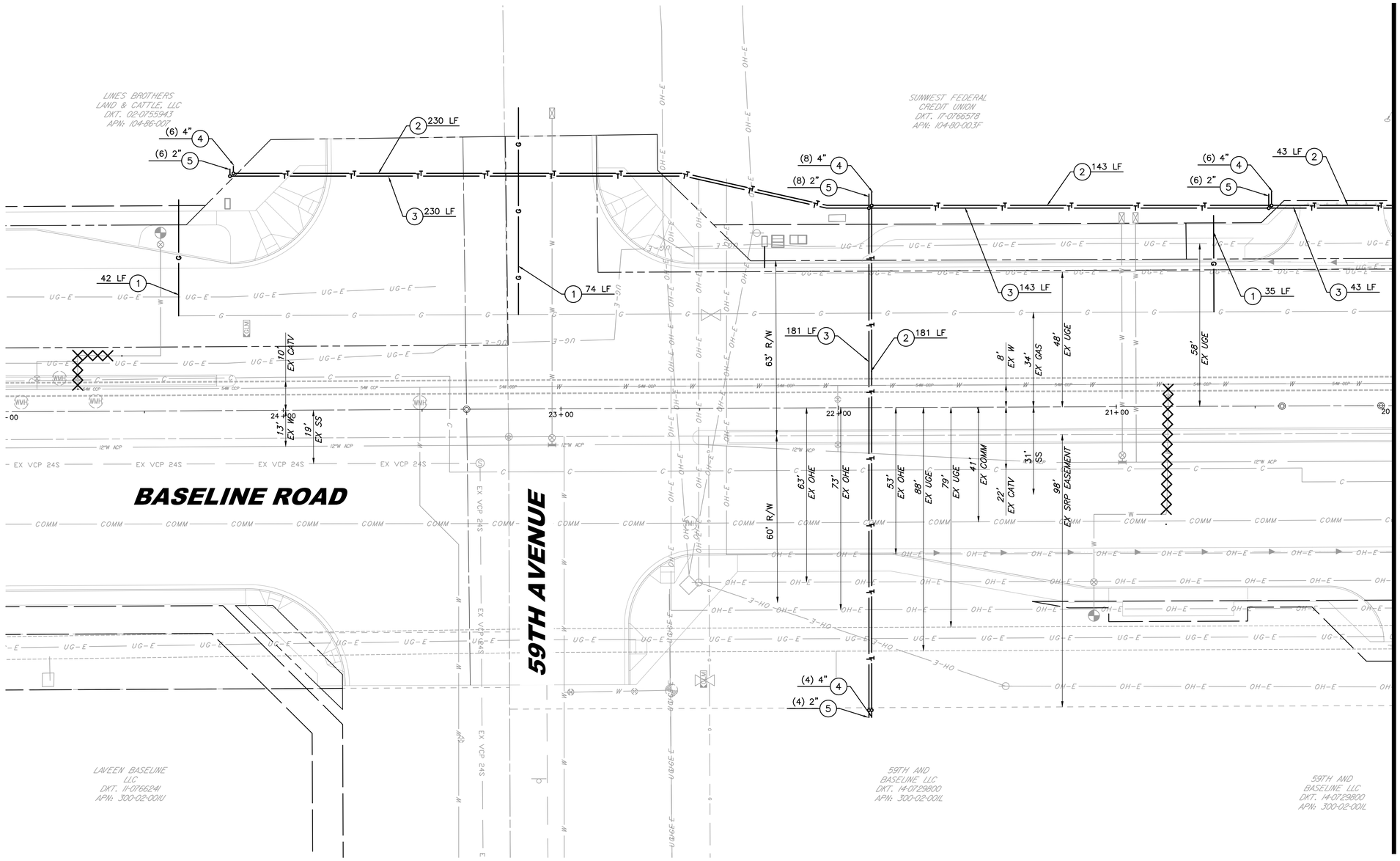
REGISTERED PROFESSIONAL ENGINEER (CIVIL)
CERTIFICATE NO. 23980
JEFFREY S. ERICKSON
Date Signed 11/13/18
ARIZONA, U.S.A.
Expires 09/30/20

Civil & Environmental Consultants, Inc.
11811 N. Tatum Blvd., Suite 3057 - Phoenix, AZ 85028
Ph: 602.760.2324 · 877.231.2324 · Fax: 602.760.2330
www.cecinc.com

BASELINE ROAD IMPROVEMENTS
KIVA#18-3011
Q.S.#01-14
WSPR#1800034

S-512D
TAP LOCATION SKETCH

DRAWN BY:	BB	CHECKED BY:	JG	APPROVED BY:	JE	FIGURE NO.:	3
DATE:	NOVEMBER 13, 2018	DWG SCALE:	1"=50'	PROJECT NO:	182-001		



CONSTRUCTION NOTES

NO.	DESCRIPTION	UNIT	QTY.
1	SOUTHWEST GAS SERVICE STUB. DONE BY SOUTHWEST GAS.	LF	151
2	(2) 4" CONDUITS FOR CENTURYLINK (JOINT TRENCH WITH COX WHERE POSSIBLE).	LF	597
3	(2) 2" CONDUITS FOR COX (JOINT TRENCH WITH CENTURYLINK WHERE POSSIBLE).	LF	597
4	STUB UP CONDUITS FOR CENTURYLINK PEDESTAL. SEE PLAN FOR NUMBER AND SIZE.	EA	24
5	STUB UP CONDUITS FOR COX. SEE PLAN FOR NUMBER AND SIZE.	EA	24

SPECIAL NOTES

1. STATION & OFFSETS BASED ON THE NORTH QUARTER CORNER OF SECTION 5, T.1S., R.2E., 16.89' EAST OF THE INTERSECTION OF 55TH LANE & BASELINE ROAD, WHERE STA=10+00 E.
2. EXISTING IRRIGATION STRUCTURE TO BE REMOVED BY OTHERS.
3. "PER PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE FURNISHED FOR INSPECTION OR COPYING, EXCEPT AS SPECIALLY STATED IN THE CITY CODE, OR AS REQUIRED BY LAW"

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ARIZONA 811
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Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

REGISTERED PROFESSIONAL ENGINEER (CIVIL)
CERTIFICATE NO. 23980
JEFFREY S. ERICKSON
Date Signed 11/16/18
ARIZONA, U.S.A.
Expires 09/30/20

REVISION RECORD

NO	DATE	DESCRIPTION

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11811 N. Tatum Blvd., Suite 3057 - Phoenix, AZ 85028
Ph: 602.760.2324 - 877.231.2324 - Fax: 602.760.2330
www.cecinc.com

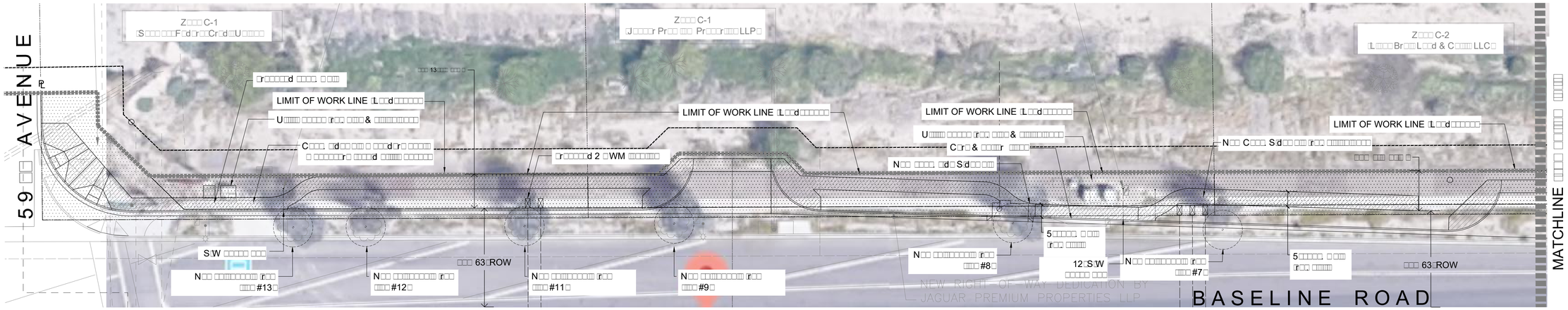
BASELINE ROAD IMPROVEMENTS
LOOP 202 & 57TH AVENUE
PHOENIX, ARIZONA
CIVIL IMPROVEMENT PLANS

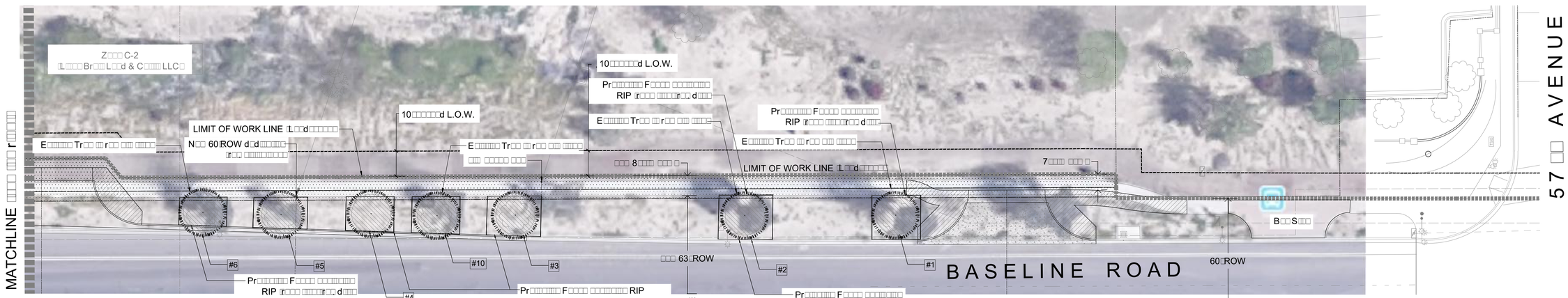
OFFSITE IMPROVEMENT PLANS
DRY UTILITY PLAN

DATE:	NOVEMBER 16, 2018
DRAWN BY:	JD
DWG SCALE:	NONE
CHECKED BY:	JG
PROJECT NO:	182-001
APPROVED BY:	

DRAWING NO.: DU1

SHEET 1 OF 2





Salvage Inventory Plan

SCALE: 1" □20□0"

CITY OF PHOENIX GENERAL INVENTORY □SALVAGE NOTES

1. T□□ C□□ □P□□□□□ G□□□□N□□□□ □□□ □□□ □□□□ □□□□□□□

GENERAL LANDSCAPE NOTES

NOT APPROVED BY CITY

1. THE LANDSCAPE ARCHITECT OR HIS REPRESENTATIVE RESERVE THE RIGHT TO REFUSE ANY PLANT AS UNACCEPTABLE. SEE SPECIFICATIONS
2. FOR CLARIFICATION OF DISCREPANCIES BETWEEN THE DRAWINGS AND THE SITE IT SHOULD BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO THE BEGINNING OF WORK.
3. THE LANDSCAPE ARCHITECT OR OWNER ARE TO APPROVE ANY AND ALL SUBSTITUTIONS.
4. PLANT COUNTS PROVIDED FOR CONTRACTOR S CONVENIENCE ONLY. PLANS TAKE PRECEDENCE.
5. DOUBLE STAKE ALL 15 GALLON 24" 36" AND 48" BOX TREES AS REQUIRED.
6. SPRINKLERS CONTRACTOR MUST GUARANTEE 100 COVERAGE IN ALL LANDSCAPE AREAS.
7. EXPOSED SOIL IN PLANTERS SHALL BE RAKED AND FREE FROM ROCKS ROOTS WEEDS ETC.
8. FINISHED GRADE IN GROUNDCOVER GRANITE AND LAWN AREAS SHALL BE 1" BELOW ADJACENT HEADER PAVING CURBING ETC.
9. PLANTS SHALL BE QUALITY MATERIAL HAVING A GROWTH HABIT WHICH IS NORMAL FOR THE SPECIES AND BE SOUND VIGOROUS HEALTHY AND FREE FROM INSECTS AND INJURY.
10. GROUNDCOVERS AND OR DECOMPOSED GRANITE SHALL EXTEND UNDER SHRUBS UNLESS NOTED.
11. AFTER ALL WORK IS COMPLETED THE CONTRACTOR SHALL REMOVE ALL MATERIALS NOT INCORPORATED IN THE SCOPE OF WORK FROM THE JOB SITE.
12. GRADING SHALL INCLUDE ALL EXCAVATION SETTLEMENT HANDLING IMPORT DISTRIBUTION TRANSPORTATION AND DISPOSAL NECESSARY TO BRING GROUND TO FINISHED GRADE AS SHOWN ON THE PLAN. ONCE GENERAL CONTRACTOR HAS PROVIDED FINISHED GRADE WITHIN 1 10 OF 1
13. ALL EARTHWORK IS TO BE DONE SO THAT WATER DRAINS AWAY FROM ALL STRUCTURES.
14. A PRE-EMERGENT HERBICIDE IS TO BE APPLIED TO ALL GRANITE AREAS AFTER THE GRANITE HAS BEEN LAID. INCLUDING RIP-RAP AREAS IN APPLICABLE.
15. ALL UNDERGROUND CONDUITS ARE TO BE LOCATED BEFORE DIGGING. IF DOUBT EXISTS CALL BLUE STAKE AT 602 263-1100.
16. ALL MATERIALS TO BE GUARANTEED FOR A PERIOD OF ONE 1 YEAR AFTER FINAL APPROVAL BY THE CITY AND WRITTEN APPROVAL FROM THE LANDSCAPE ARCHITECT.
17. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR ALL REQUIRED SLEEVING WHETHER SHOWN ON THE PLANS OR NOT.
18. LANDSCAPE ARCHITECTURE AND OWNER TO APPROVE PLACEMENT OF ALL TREES PRIOR TO INSTALLATION.
19. LANDSCAPE ARCHITECT TO APPROVE ALL MOUNDING AND GRADES PRIOR TO PLANTING.
20. SITE VERIFY ALL EXISTING CONDITIONS PRIOR TO BIDDING AND START OF CONSTRUCTION. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT IN WRITING IMMEDIATELY.
21. GENERAL CONTRACTOR IS TO PROVIDE A ROUGH GRADE FOR BERMS AND MOUNDS. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FINISHED GRADING AND BERMS PER LANDSCAPE ARCHITECTS DIRECTION.
22. GENERAL CONTRACTOR SHALL COORDINATE ALL MOUNDING AND BERMS WITH LANDSCAPE CONTRACTOR GRADING CONTRACTOR AND CIVIL PLANS.
23. CONTRACTOR TO PROVIDE MAINTENANCE FOR ONE FULL YEAR FROM FINAL ACCEPTANCE PROVIDED IN WRITING FROM THE LANDSCAPE ARCHITECT.
24. ALL TREES SHALL COMPLY WITH THE LATEST AMENDED EDITION OF THE ARIZONA NURSERY ASSOCIATION RECOMMENDED TREE SPECIFICATIONS.
25. TREES MUST BE PLACED A MINIMUM OF 5 FROM SIDEWALKS AND PUBLIC ACCESS WAYS. SHRUBS MUST BE AT MATURITY 3 FROM ALL SIDES OF A FIRE HYDRANT.
26. ALL SITE IMPROVEMENTS INCLUDING LANDSCAPE AND SITE CLEANUP MUST BE COMPLETED PRIOR TO CERTIFICATE OF OCCUPANCY FOR ANY BUILDING WITHIN A PHASE.
27. LANDSCAPE WILL BE REQUIRED ON THE BACK SIDE OF SCREEN WALLS WHEN ADJACENT PAVING AND OR PAD IS INSTALLED.
28. ALL LANDSCAPING SHALL BE MAINTAINED BY THE LAND OWNER OR LESSOR AFTER ACCEPTANCE.
29. ALL PLANT MATERIAL MUST BE MAINTAINED IN HEALTH AND VIGOR AND BE ALLOWED TO ATTAIN NATURAL SIZE AND SHAPE IN ACCORDANCE WITH THE ORIGINALLY APPROVED LANDSCAPE PLAN. SEE SECTION 1902 6 H
30. TREES SHRUBS VINES GROUNDCOVER AND TURF THAT HAVE TO BE REPLACED UNDER WARRANTEE TERMS SHALL BE GIVEN AN EXTENDED WARRANTEE BASED ON DATE OR REPLACEMENT.
31. PARKING LOT TREES MUST HAVE A MINIMUM CLEAR CANOPY DISTANCE OF 5 0".
32. SIGNS REQUIRE A SEPARATE SUBMITTAL
33. THERE SHALL BE NO OBSTRUCTION OF SITE SIGNAGE BY LANDSCAPE MATERIAL AND THAT SUCH MUST BE RELOCATED CORRECTLY BEFORE THE FIELD INSPECTION WILL BE ACCEPTED OR ISSUED A CERTIFICATE OF OCCUPANCY FOR THE PROJECT.
34. EDGE OR GRANITE CONSTRUCTION LIMIT LINE TO BE STRAIGHT UNIFORM AND CLEAN AT ALL FUTURE LANDSCAPE AREAS TYPICAL
35. NO OBSTRUCTION TO THE VIEW WITHIN THE SITE VISIBILITY AREA SHALL BE ERECTED CONSTRUCTED OR PARKED. ALL TREES WITHIN THE SITE VISIBILITY AREA WILL MAINTAIN A CANOPY HEIGHT 6 ABOVE THE CURB ELEVATION ALL SHRUBS IN THE SITE VISIBILITY AREA MAY NOT REACH A MATURE HEIGHT OVER 24".
36. ALL LANDSCAPE AREAS AND MATERIALS SHALL BE MAINTAINED IN A HEALTHY NEAT CLEAN AND WEED FREE CONDITION. THIS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR UNTIL ACCEPTANCE BY THE OWNER.

BIDDER NOTES:

NOT APPROVED BY CITY

1. ALL TREES MUST MEET OR EXCEED THE CALIPER WIDTH AND HEIGHT AT TIME OF PLANTING REGARDLESS OF LISTED BOX SIZE.
2. ALL TREES ARE TO BE TAGGED AND APPROVED AT THE NURSERY BY THE LANDSCAPE ARCHITECT A MIN. OF 6 SIX MONTHS PRIOR TO PLANTING.
3. ANY TREES MAY BE REJECTED BASED ON AESTHETIC QUALITY AND APPEARANCE REGARDLESS OF SIZE.
4. CONTRACTOR TO PROVIDE SAMPLE PHOTOS SPECIFICATIONS QUANTITIES AND LOCATION OF TREES TO LANDSCAPE ARCHITECT A MIN. OF 1 ONE WEEK PRIOR TO VISIT TO NURSERIES FOR SELECTION AND REVIEW.
5. LANDSCAPE CONTRACTOR TO PROVIDE ANY DEPOSITS OR RETAINERS NEEDED BY NURSERIES TO RETAIN TREES FOR A PERIOD OF 3 THREE MONTHS OR MORE.
6. ANY CONFLICTS BETWEEN THESE PLANS AND OTHER CONSULTANT S PLANS WILL BE BE SUBMITTED IN WRITTEN FORM TO THE LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION A WRITTEN RESPONSE WILL BE ISSUED BY THE LANDSCAPE ARCHITECT.
7. LANDSCAPE CONTRACTOR WILL COORDINATE WITH LANDSCAPE ARCHITECT TREE LOCATIONS PRIOR TO DIGGING DELIVERY AND PLANTING SCHEDULE SO THAT THE LANDSCAPE ARCHITECT IS ON-SITE DURING THE PLACEMENT.
8. A COPY OF THE IRRIGATION AS-BUILTS WILL BE PROVIDED TO THE LANDSCAPE ARCHITECT BEFORE FINAL ACCEPTANCE IS PROVIDED IN WRITING BEFORE THE WARRANTY & MAINTENANCE PERIOD STARTS.
9. ALL MOUNDING WILL BE REVIEWED AND APPROVED BY THE LA PRIOR TO PLANTING.
10. TREE DEPTHS & WIDTHS PER DETAILS ARE TO BE REVIEWED IN FIELD BY LA.
11. PRIOR TO STARTING THE 1 YR. MAINTENANCE PERIOD. LANDSCAPE CONTRACTOR TO PROVIDE IN WRITING AN IRRIGATION MAINTENANCE AND A FERTILIZATION SCHEDULE OUTLINING FULL MAINTENANCE PROGRAM.

TREE & SHRUB BACKFILL SOIL SPECS

N.A.B.C.

TREES AND SHRUBS BACKFILL OF SIXTY 60 PERCENT SAND AND TWENTY 20 PERCENT TWENTY 20 PERCENT NATIVE SOIL. PREPARED BACKFILL FOR TREE AND SHRUB PLANTING WILL BE THOROUGHLY MIXED ORGANIC MULCH MATERIAL AND

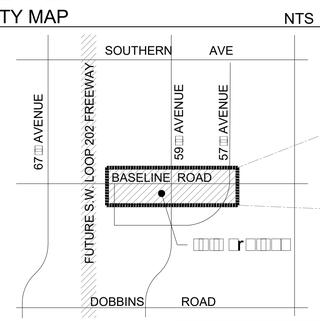
S N: N d S r NOT r d C. ONLY C P G r L d N r d r d r d C P

CITY OF PHOENIX GENERAL NOTES

1. THE CITY OF PHOENIX GENERAL NOTES ARE THE ONLY NOTES APPROVED ON THIS PLAN. ADDITIONAL GENERAL NOTES GENERATED BY THE SEALANT AND PLACED ON THE PLANS ARE NOT APPROVED AS PART OF THIS PLAN AND ARE NOTED AS SUCH ON THE PLANS.
2. THE DESIGN ON THESE PLANS ARE ONLY APPROVED BY THE CITY IN SCOPE NOT IN DETAIL. CONSTRUCTION QUANTITIES ON THESE PLANS ARE NOT VERIFIED BY THE CITY. APPROVAL OF THESE PLANS ARE FOR PERMIT PURPOSES ONLY AND SHALL NOT PREVENT THE CITY FROM REQUIRING CORRECTION OF ERRORS IN THE PLANS WHERE SUCH ERRORS ARE SUBSEQUENTLY FOUND TO BE IN VIOLATION OF ANY LAW ORDINANCE HEALTH SAFETY OR OTHER DESIGN ISSUES.
3. CONSTRUCTION WITHIN THE RIGHT-OF-WAY SHALL CONFORM TO THE LATEST APPLICABLE MARICOPA ASSOCIATION OF GOVERNMENTS MAG UNIFORM STANDARD SPECIFICATIONS AND DETAILS AND THE LATEST CITY OF PHOENIX SUPPLEMENT TO THE MAG UNIFORM STANDARD SPECIFICATIONS AND DETAILS.
4. FINAL BUILDING PERMIT CANNOT BE OBTAINED UNTIL BONDING OR APPROVED ASSURANCES ARE PROVIDED FOR THE LANDSCAPING WITHIN THE RIGHT-OF-WAY.
5. NO PLANT SUBSTITUTIONS TYPE SIZE OR QUANTITY OR DEVIATIONS FROM THE APPROVED LANDSCAPE OR IRRIGATION PLANS ARE ALLOWED WITHOUT PRIOR APPROVAL FROM THE CITY OF PHOENIX LANDSCAPE SECTION AT 602 262-7811.
6. ALL PLANT MATERIAL AND SPECIFICATIONS SHALL CONFORM TO THE ARIZONA NURSERYMAN ASSOCIATION STANDARDS.
7. ALL RIGHT-OF-WAY AND CITY REQUIRED PERIMETER RETENTION AND PARKING PLANT MATERIAL SHALL BE IN COMPLIANCE WITH THE DEPARTMENT OF WATER RESOURCES LOW WATER USE PLANT LIST ADWR
8. CONTACT THE PARKS & RECREATION DEPARTMENT FORESTRY SUPERVISOR AT 602 262-6862 TO VERIFY THE OWNERSHIP OF ANY PLANT MATERIAL IN THE PUBLIC R.O.W. PRIOR TO ANY PLANT RELOCATION OR REMOVALS. OBTAIN WRITTEN PERMISSION FROM THE PARKS AND REC DEPT PRIOR TO THE RELOCATION OR REMOVAL OF ANY CITY PLANT MATERIAL OR EQUIPMENT
9. CONTACT THE STREET TRANSPORTATION DEPARTMENT HORTICULTURIST AT 602 262-6284 PRIOR TO THE RELOCATION OR REMOVAL OF EXISTING PLANT MATERIAL IN THE A.D.O.T. R.O.W. THAT IS ON THE CITY S SIDE OF THE SOUND WALL. OBTAIN WRITTEN PERMISSION FROM THE STREET TRANSPORTATION DEPARTMENT PRIOR TO THE RELOCATION OR REMOVAL OF ANY PLANT MATERIAL OR EQUIPMENT.
10. ALL EXISTING TREES AND SHRUBS IN THE RIGHT-OF-WAY DESIGNATED TO REMAIN BUT DAMAGED OR DESTROYED WILL BE REPLACED WITH LIKE SIZE AND KIND BY THE CONTRACTOR.
11. THE PROPOSED IRRIGATION SYSTEM SHALL INCLUDE ANY MODIFICATIONS REQUIRED TO TIE THE EXISTING CITY OF PHOENIX IRRIGATION SYSTEM IN THE RIGHT-OF-WAY TO THE PROPOSED SYSTEM. ALL THROUGH IRRIGATION SYSTEMS IN THE RIGHT-OF-WAY SHALL BE MAINTAINED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CAPPING AND OR ABANDONING THE EXISTING IRRIGATION TO THE PLANT MATERIALS AND PROVIDING NEW IRRIGATION TO THE EXISTING PLANT MATERIAL IN THE RIGHT-OF WAY PER THE APPROVED PLAN.
12. WALLS ARE NOT APPROVED AS PART OF THE LANDSCAPE PLAN BUT ARE SHOWN FOR REFERENCE ONLY.
13. TREES ADJACENT TO P d SHOULD HAVE A MINIMUM CANOPY CLEARANCE OF SIX FT. EIGHT INCHES 6 8" PER SECTION 507 TAB A.II.A.3.1.10 OF THE CITY OF PHX ORDINANCE
14. P.V.C. PIPE AND LATERALS ARE REQUIRED. A MAX OF FIVE FEET 5 OF POLY TUBING OFF THE P.V.C. PIPE LATERAL IS ALLOWED. NO POLY TUBING LATERALS ALLOWED.
15. PLANT QUANTITIES AND CALIPER SIZES PER THE SPECIFIC ZONING REQUIREMENTS FOR THIS SITE PROVIDED IN THE LEGEND ON THE APPROVED PLANS ARE REQUIRED TO BE INSTALLED IN THE FIELD. ANY DEVIATIONS FROM THE PLAN WILL REQUIRE A REVISION TO THE APPVD PLAN. NOTE: MIN CALIPER SIZE IS A ZONING REQUIREMENT. IF THE MIN CALIPER CANNOT BE MET AT BOX SIZE SPECIFIED THE THE BOX SIZE MUST BE INCREASED TO MEET CALIPER REQUIREMENTS.
16. PLAN APPROVAL IS VALID FOR 180 DAYS. PRIOR TO PLAN APPROVAL EXPIRATION ALL ASSOCIATED PERMITS SHALL BE PURCHASED OR THE PLANS SHALL BE RESUBMITTED FOR EXTENSION OF PLAN APPROVAL. THE EXPIRATION EXTENSION AND REINSTATEMENT OF LANDSCAPE PLANS AND PERMITS SHALL FOLLOW THE SAME GUIDELINES AS THOSE INDICATED IN THE PHOENIX BUILDING CONSTRUCTION CODE ADMINISTRATIVE PROVISION SECTION 105.3 FOR BUILDING PERMITS.

VICINITY MAP

NTS



N O T E : THERE ARE NO OVERHEAD UTILITIES ON THIS PROJECT

PLANT SUBSTITUTION NOTE:

NOT APPROVED BY CITY

ALL PLANT MATERIAL SUBSTITUTION REQUESTS SHALL BE REVIEWED FOR APPROVAL BY LANDSCAPE ARCHITECT. ALL AGAVE SPECIES AVAILABILITY SHALL BE MADE IN WRITING TO THE LANDSCAPE ARCHITECT PRIOR TO START OF LANDSCAPE INSTALLATION. NO MIXING OF AGAVE SPECIES WILL BE ALLOWED. ALL TREES WITHIN VEHICULAR SIGHT DISTANCE / VISIBILITY CLEAR ZONES SHALL HAVE A VERTICAL CANOPY CLEARANCE / CLEAR TRUNK TO 6' ABOVE THE NEAREST CURB. ALL SHRUBS WITHIN VEHICULAR SIGHT DISTANCE / VISIBILITY CLEAR ZONES SHALL HAVE A MAXIMUM VERTICAL HEIGHT OF 24" ABOVE THE NEAREST CURB.

GRADING & MOUNDING NOTES:

NOT APPROVED BY CITY

1. LANDSCAPE ARCH TO APPROVE ALL MOUNDING AND GRADES PRIOR TO PLANTING.
2. GRADING SHALL INCLUDE ALL EXCAVATION, SETTLEMENT, HANDLING, IMPORT, DISTRIBUTION, TRANSPORTATION, AND DISPOSAL NECESSARY TO BRING GROUND TO FINISH GRADE AS SHOWN ON THE PLAN. (ONCE GENERAL CONTRACTOR HAS PROVIDED FINISH GRADE WITHIN 1/10 OF 1')
3. FINISHED GRADE IN GROUNDCOVER, GRANITE AREAS SHALL BE 1 1/2" BELOW ADJACENT HEADER, PAVING, CURBING, ETC. PRIOR TO BACKFILL AND COMPACTION.
4. GENERAL CONTRACTOR IS TO PROVIDE ALL ROUGH GRADES FOR BERMS AND MOUNDS. (ONLY IF NOTED "SEE CIVIL") THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FINISHED GRADING OF BERMS.
5. FISHED GRADE IN LANDSCAPE GRANITE AND LAWN AREAS SHALL BE 1" BELOW ADJACENT HEADER PAVING CURBING ETC.
6. GENERAL CONTRACTOR IS TO PROVIDE ALL ROUGH GRADES FOR BERMS AND MOUNDS. THE LC SHALL BE RESPONSIBLE FOR ALL FINISHED GRADING OF BERMS TO ESTABLISH VARIATIONS IN ELEVATIONS AND CONVEY A NATURAL AESTHETIC APPEARANCE.

IRRIGATION LEGEND:

Irr W r M r

r d d r r

- L d WM A 3/4" d d d LS WM 18 35.86
- L d WM B 1.5" d d d LS WM 19 26.53
- L d WM C 3/4" d d d LS WM 29 49.86
- L d WM D 3/4" d d d LS WM 18 29.85

TO BE CITY OF PHOENIX APPROVED

LEIT 4000 r S r C r

d TO BE CITY OF PHOENIX APPROVED

- CONTROLLER A r
- CONTROLLER B r
- CONTROLLER C r
- CONTROLLER D r

F 1.5" 825-YA R d r d Pr r B r Pr r
P r G rd S r r r dr r
TO BE CITY OF PHOENIX APPROVED

H r ICZ-101- Dr Z r C r K
TO BE CITY OF PHOENIX APPROVED

N Br r G V r S r T L r
TO BE CITY OF PHOENIX APPROVED

STATION NUMBER

VALVE SIZE

B r S-10-L S r O r E r r
S E r S r d r

B r M-10-L M r O r E r r
S E r S r d r

S 40 PVC L r L r T E r r
S P r P T r

S 40 2.5" M TO BE CITY OF PHOENIX APPROVED

A r Pr d r S F r E d C r

S 40 PVC S r
S P r S r S r d r

SLEEVING SCHEDULE:

C r r r r r r
r r r

M r S r	6"
Dr r r S r	2"
L r Fr r V r T R r r	3"
W r	2"

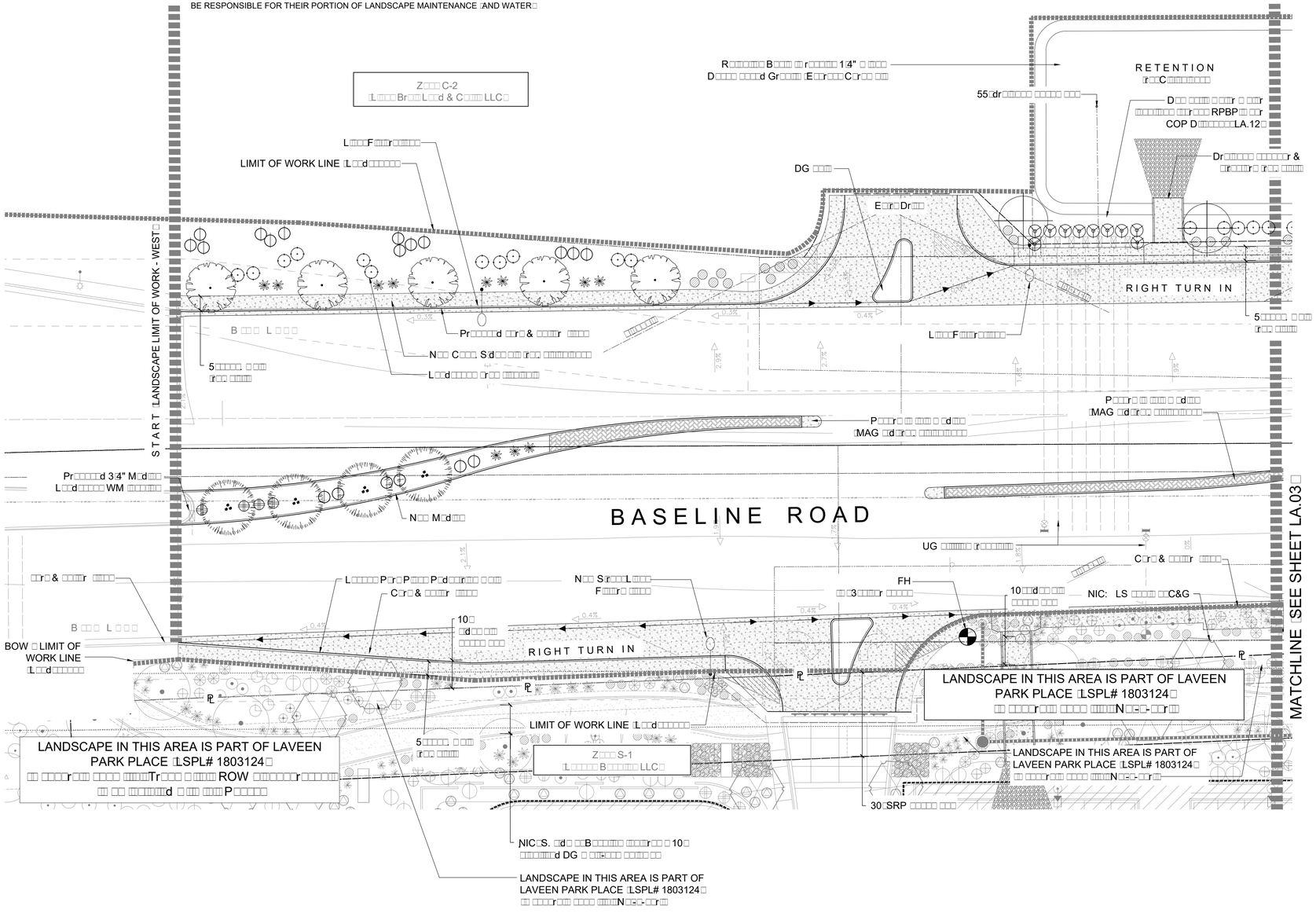
SLEEVING NOTE: ALL SLEEVING UNDER PAVEMENT SHALL BE INSTALLED PER AZ HOUSE BILL 2256 WITH A DETECTABLE UNDERGROUND DEVICE.

NOTE: P r C P **ALL PVC Pipe to be SCH40** .

NOTE: IRRIGATION PLANS ARE DIAGRAMMATIC IRRIGATION EQUIPMENT AND PIPE TO BE INSTALLED IN LANDSCAPE AREA. TREES AND SHRUBS TO BE VALVED INDEPENDENTLY OF EACHOTHER.

W r r r 65 r r d r r d r r r d d r r r r r r

N O T E : WITH THE EXCEPTION OF THE MEDIANS BY CITY OF PHX EACH OWNER WILL BE RESPONSIBLE FOR THEIR PORTION OF LANDSCAPE MAINTENANCE AND WATER



LANDSCAPE LEGEND

ALL TREES TO MEET OR EXCEED A.N.A. SPECIFICATIONS U.O.N. - UNLESS OTHERWISE NOTED

TREES	CALIPER H W
E C Tr	2" r 10 5
U C S d rd	2" r 10 12
C M B rd P r d	2" r 5 3 M
E G G E S d rd	2" r U.O.N. 10 5
Q S r L O	1" r 7 L 3
# EXISTING TREE r d r d r d - I S T d Tr NOTE: R	
# EXISTING TREE d # N d d	

SHRUBS ACCENTS VINES	SIZE
M L Regal Mist® Pink Muhly Grass	5 G
D d Gr H d B	5 G
H r "Y" Y Y	5 G
L C r C T S	5 G
N r d r "P P" P P O d r	5 G
H r G H r	5 G
C r r R d B rd P r d	5 G
B T r G T r G B	5 G
S d J	5 G
J r C r	5 G

GROUNDCOVERS	SIZE
L d Tr L P r & G d d 1 G	
D Gr 3 4" S r d E r "C r " 1 4" R B 2" S r L d Ar	

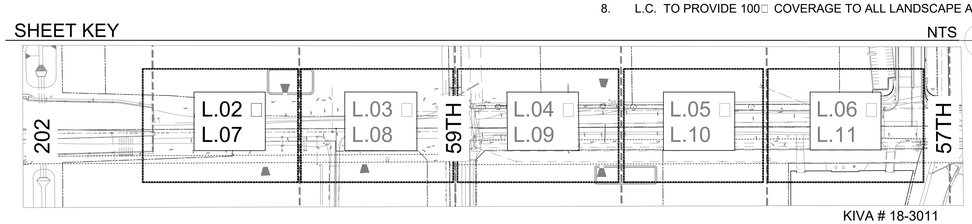
During bid it shall be the responsibility of the contractor to determine required quantities of plants, as no compensation will be made for error in plant quantities. Plant counts are for the convenience of the contractor only. Verify plant counts with plan. in case of discrepancy, plan shall govern.

EXISTING LANDSCAPE AND IRRIGATION NOTES

1. SITE VERIFY ALL EXISTING CONDITIONS PRIOR TO BIDDING. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE LANDSCAPE ARCHITECT IMMEDIATELY.
2. ALL PLANT MATERIAL DESIGNATED AS "EXISTING TO REMAIN" SHALL BE PROTECTED DURING ALL PHASES OF CONSTRUCTION. ANY TREE THAT DIES DUE TO LACK OF WATER LACK OF MAINTENANCE OR CARE NEGLECT OR VANDALISM SHALL BE REPLACED BY A LIKE TYPE TREE MIN 36" BOX AT NO ADDITIONAL COST TO OWNER. ALL SHRUBS AND GC SHALL BE REPLACE WITH 5 GAL. PLANTS.
3. LANDSCAPE AREAS DISTURBED BY NEW CONSTRUCTION SHALL BE REPAIRED WITH NEW DECOMPOSED GRANITE MATCHING EXISTING. BLEND ALL DISTURBED AREAS WITH UNDISTURBED SO THERE IS SMOOTH TRANSITION BETWEEN ALL EDGES. REPLACE ALL DISTURBED BROKEN OR DAMAGED HEADERS WITH MATCHING TYPE.
4. ALL NEW PLANT MATERIAL AND ANY ADJACENT PLANT MATERIAL SHALL HAVE UNINTERRUPTED WATERING DURING ALL PHASES OF CONSTRUCTION. THIS SHALL INCLUDE BUT NOT BE LIMITED TO HAND WATERING TEMPORARY ABOVE GROUND IRRIGATION EXISTING SYSTEM
5. ANY IRRIGATION OUTSIDE PROJECT LIMIT-OF-WORK THAT MIGHT BE "EXISTING" IS TO REMAIN AND BE PROTECTED REPAIR IF DAMAGED
6. PROVIDE NEW SCHEDULE 40 SLEEVES AT ALL NEW DRIVES.
7. SHRUBS IN LS AREAS ON SEPARATE VALVE FROM TREES.
8. L.C. TO PROVIDE 100 COVERAGE TO ALL LANDSCAPE AREAS.

SHEET KEY

NTS



KIVA # 18-3011
QS# 45-24
SDEV # 1800624
LSPL # 1806042
PAPP # T82848
PRLM #
ZONING: r C-1 & S-2

Landscape Plan

E Tr r r NEW L d E r E r d r

SCALE: 1" 20 0"

0 10 20 40

N

GENERAL BUILDING FOUNDATION IRRIG NOTES:

POSITIVE DRAINAGE NEEDS TO BE MAINTAINED FROM THE BUILDINGS EXTERIOR WALLS FOR A MINIMUM OF 10 NO IRRIGATED LANDSCAPE MATERIALS WITHIN THE FIRST 3 NEXT TO THE BUILDING FOUNDATION. WITHIN 3 5 OF THE BUILDING FOUNDATION ONLY LANDSCAPE MATERIALS THAT CAN BE IRRIGATED WITH A 1 GPH EMITTER ARE ALLOWED. ANY LANDSCAPE MATERIALS REQUIRING AN EMITTER GREATER THAN 1GPH INCLUDING TURF SHALL BE A MINIMUM OF 5 FROM THE OUTSIDE FACE OF THE BUILDING FOUNDATION. ALL IRRIGATION LINES OTHER THAN THOSE SUPPLYING INDIVIDUAL EMITTERS SHALL NOT BE PLACED WITHIN 5 OF THE BUILDING FOUNDATION.

N O T E : THERE ARE NO OVERHEAD UTILITIES ON THIS PROJECT

N O T E : THERE ARE NO FIRE LINE RPBP WITHIN THIS PROJECT LIMITS

CALL TWO WORKING DAYS BEFORE YOU DIG
602-263-1100
1-800-STAKE-IT
(OUTSIDE MARICOPA COUNTY)

LASKIN & ASSOCIATES, INC.
LANDSCAPE ARCHITECTS
67 East Weldon Ave
Suite 230
Phoenix, Arizona 85012
p (602) 840-7771
f (602) 840-8021
www.laskindesign.com

REGISTERED LANDSCAPE ARCHITECT
CERTIFICATE NO. 20088
HARDY A. LASKIN
12 5 18
Date Signed
ARIZONA, U.S.A.

B R d l r Pr d 202 57 C d
B
L Ar 85339

DRAWN

CHECKED

SHEET SCALE
1" 20

DATE
12.5.18

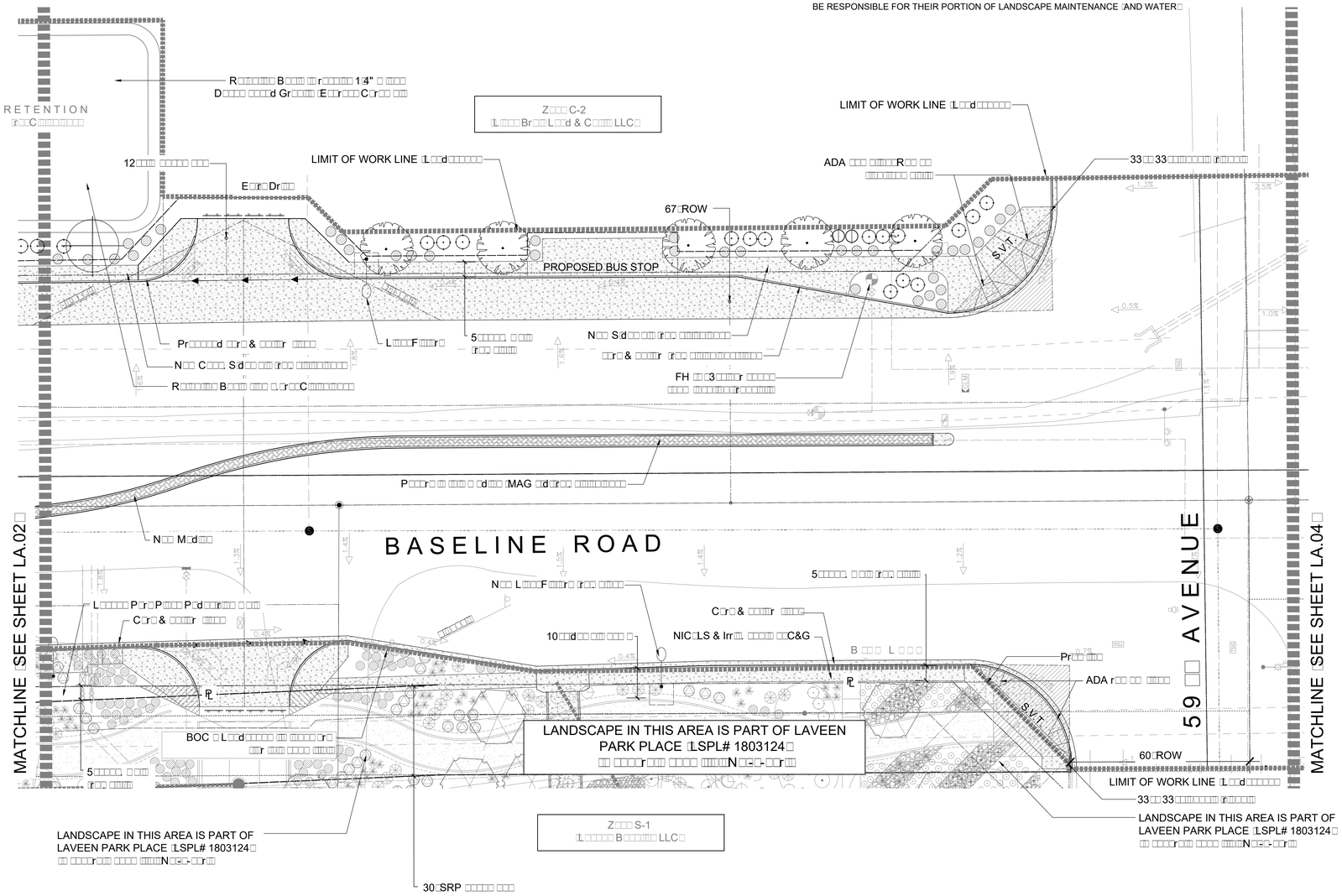
REVISIONS
3rd COP

SHEET NUMBER
LANDSCAPE PLAN

LA-02

2
of
14

N O T E : WITH THE EXCEPTION OF THE MEDIANS BY CITY OF PHX EACH OWNER WILL BE RESPONSIBLE FOR THEIR PORTION OF LANDSCAPE MAINTENANCE AND WATER



LANDSCAPE LEGEND

ALL TREES TO MEET OR EXCEED A.N.A. SPECIFICATIONS (U.O.N. - UNLESS OTHERWISE NOTED)

TREES	CALIPER H W
E C Tr	2" r 10 5
U C S d rd	2" r 10 12
C M B rd P d	2" r 5 3 M
E G G E S d rd	2" r U.O.N. 10 5
Q S r L O	1" r 7 3
# EXISTING TREE r d r d - I S T d Tr NOTE: R	
# EXISTING TREE d # N d d d	

SHRUBS ACCENTS VINES	SIZE
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D d Gr H d B	5 G
H r "Y" Y Y	5 G
L C r C T S	5 G
N r d r "P P" P P O d r	5 G
H r G H r	5 G
C r r R d B rd P d	5 G
B T r G T r G B	5 G
S d J	5 G
J r C r	5 G

GROUNDCOVERS	SIZE
L d Tr L P r & G d 1 G	
D d Gr 3/4" S r d E r "C r 1/4" R B 2" d r S L d Ar	

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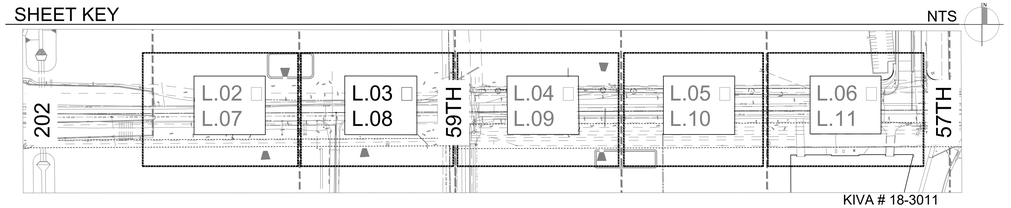
NTS



KIVA # 18-3011
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PAPP # T82848
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ZONING: r C-1 & S-2

Landscape Plan

SCALE: 1" 20 0"

0 10 20 40

N

E Tr r NEW L d E r NEW L d r 7

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REGISTERED LANDSCAPE ARCHITECT
CERTIFICATE NO. 20088
HARDY A. LASKIN
Date 12.5.18
Signature
ARIZONA, U.S.A.

B R d l r
B r r Pr d 202 57 C d
L Ar 85339

DRAWN

CHECKED

SHEET SCALE
1" 20

DATE
12.5.18

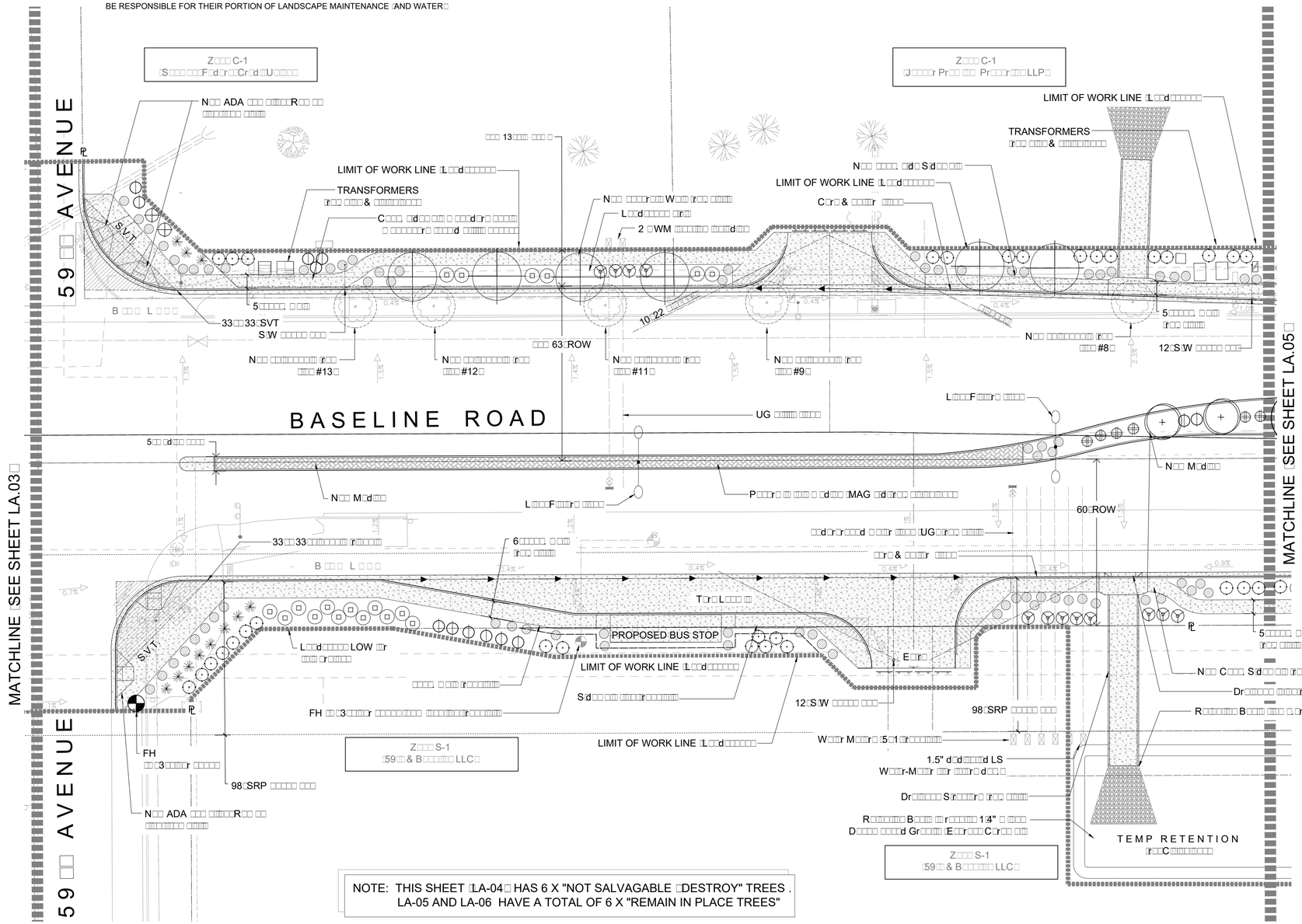
REVISIONS
3rd COP

SHEET NUMBER
LANDSCAPE PLAN

LA-03

3
of
14

N O T E : WITH THE EXCEPTION OF THE MEDIANS □BY CITY OF PHX□EACH OWNER WILL BE RESPONSIBLE FOR THEIR PORTION OF LANDSCAPE MAINTENANCE □AND WATER□



NOTE: THIS SHEET □LA-04□ HAS 6 X "NOT SALVAGABLE □DESTROY" TREES . LA-05 AND LA-06 HAVE A TOTAL OF 6 X "REMAIN IN PLACE TREES"

LANDSCAPE LEGEND

ALL TREES TO MEET OR EXCEED A.N.A. SPECIFICATIONS □U.O.N. - UNLESS OTHERWISE NOTED□

E□□□□□□□ □ □□□□□□□ C□□□□□□ Tr□□	2" □□□□r 10□□ □5□□
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# EXISTING TREE □□r□□ □□□ □□d □□ □r□□□□□d □□-□□□□ I□□□□□□S□□□□□ T□□□d Tr□□ □NOTE: □□□□□□□□ □r□□□ □□□□□□□□ □r□□□ □□ R□□ □□□	
# EXISTING TREE □□ □□d□□r□□□d □□□# □□□ □N□□□□□ □□ □□ □□□□□□d □d□□ □□□d□	

SHRUBS □ACCENTS □VINES	SIZE
M□□□□□□r□□□ □□□□□r□□ L□□□□□ Regal Mist® Pink Muhly Grass	5 G□□□□
D□□d□□□□□ □□□□□□□ Gr□□□ H□□□□d B□□□	5 G□□□□
H□□□□r□□□□ □□□□□r□ "Y□□□□" Y□□□□ Y□□□□	5 G□□□□
L□□□□□□□□□□ □□□□□□□□□□ □C□□ □rr□□□□ C□□ □□□□T□□□□ S□□□□	5 G□□□□
N□r□□□ □□□□d□r "P□□□□ P□□□" P□□□□ P□□□ O□□□□d□r	5 G□□□□
H□□□□r□□□□ □□□□□r□ G□□□□H□□□□r□□□□	5 G□□□□
C□□□□□□□□□ □□□□□rr□□ □ R□d B□rd □□P□r□d□□□	5 G□□□□
B□□□□□□□□□□□ □T□r□□ G□□□ □ T□r□□ G□□□ B□□□□□□□□□□□	5 G□□□□
S□□ □ □□d□□□ □□□□□□□□□ J□□□□□	5 G□□□□
J□□□□□□ □□□□r□□□□ C□□□□r□□□	5 G□□□□

GROUNDCOVERS	SIZE
L□□□□□ □ □□□□□d□□□□□ Tr□□□□ L□□□□□□ P□r□□□ & G□d □ □□□d□ 1 G□□□□	
D□□□□ □□□□d Gr□□□□ 3/4" S□r□□□□d E□□r□□□ "C□□ □□" □1/4"□ □□□ □R□□□□□□ B□□□□2" □ □□ □□□□□□□□ □□ □□□□d□□□□□ □r□□□ S□□□ □□□□ □□□ □□ L□□d□□□□□ Ar□□□□□	

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5. ANY IRRIGATION OUTSIDE PROJECT LIMIT-OF-WORK THAT MIGHT BE "EXISTING" IS TO REMAIN□AND BE PROTECTED □REPAIR IF DAMAGED□
6. PROVIDE NEW SCHEDULE 40 SLEEVES AT ALL NEW DRIVES.
7. SHRUBS IN LS AREAS ON SEPARATE VALVE FROM TREES.
8. L.C. TO PROVIDE 100□ COVERAGE TO ALL LANDSCAPE AREAS.

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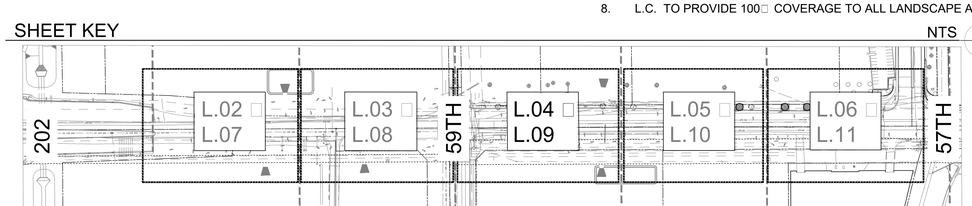
NTS



KIVA # 18-3011
QS# 45-24
SDEV # 1800624
LSPL # 1806042
PAPP # T82848
PRLM #
ZONING: □r□□□C-1 & S-2□

Landscape Plan

□□ E□□□□□□ Tr□□□ □□r□□ □□□ □□□□□□ □□□□□□□□□ □□□□□□ □r□□□□□□□□ □r□□□d □□□r □□□□□□□□□ □□NEW L□□d□□□□ □ □□r□□□ E□□□□□ □r□□□ □□□□□ □ □□□□□□d □□ □□□□□□ □□□ □□ □□□□ □□□r □□□□ □□□□□ □7□□□□

SCALE: 1" □20□0"

0 10 20 40

N

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N O T E : THERE ARE NO OVERHEAD UTILITIES ON THIS PROJECT

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1-800-STAKE-IT
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LASKIN & ASSOCIATES, INC.
LANDSCAPE ARCHITECTS
67 East Weldon Ave
Suite 230
Phoenix, Arizona 85012
p (602) 840-7771
f (602) 840-8021
www.laskindesign.com

REGISTERED LANDSCAPE ARCHITECT
CERTIFICATE NO. 20088
HARDY A. LASKIN
12-5-18
Date Signed
ARIZONA, U.S.A.

B□□□□□□ R□□d I□ r□□□□ □□□□
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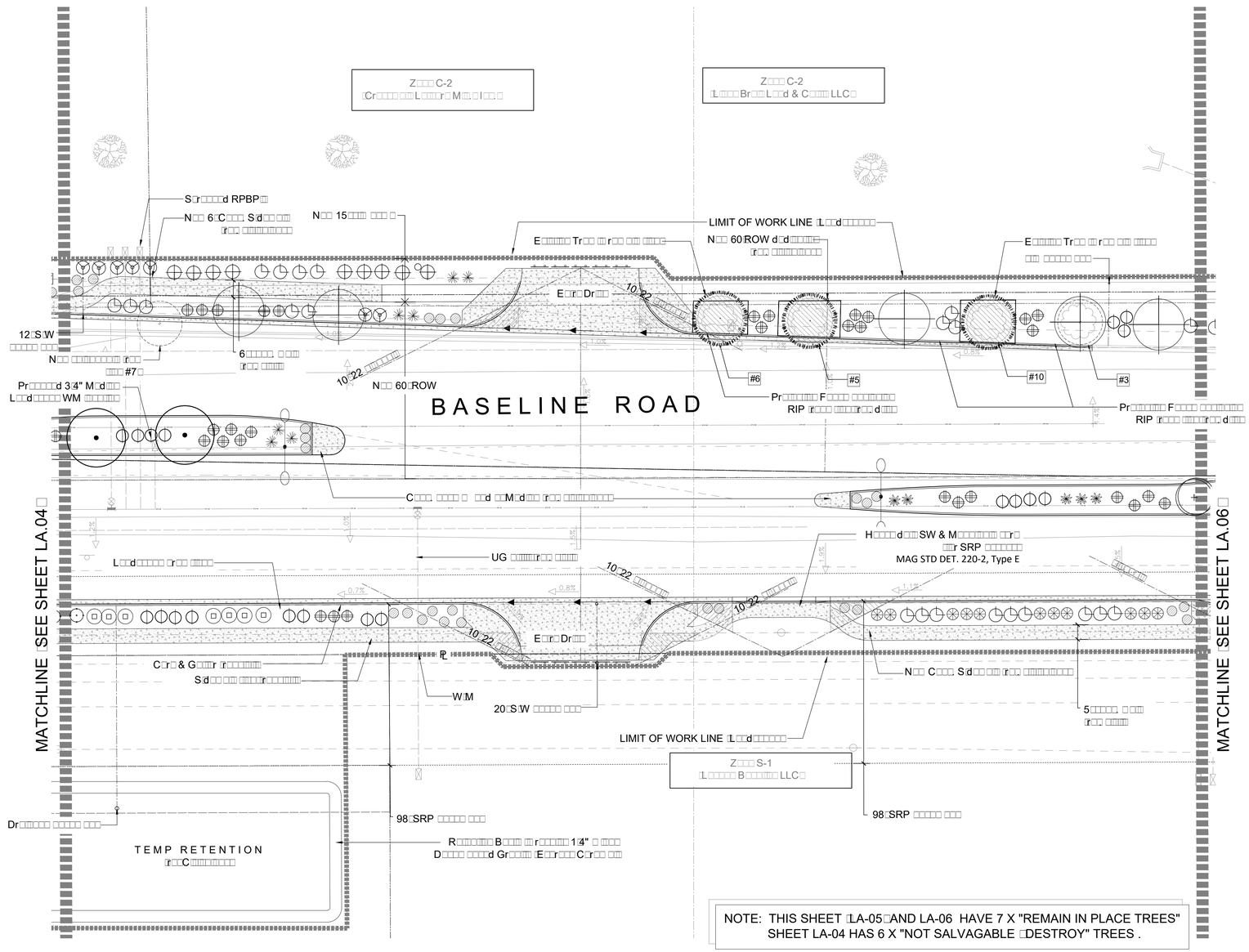
L□□□□□□Ar□□□□ 85339

DRAWN □□□
CHECKED □□□
SHEET SCALE 1"□20□
DATE 12.5.18
REVISIONS 3rd □□□□ □□□□COP

SHEET NUMBER
LANDSCAPE PLAN
LA-04
4 of 14



NOTE: THIS SHEET □LA-05□AND LA-06 HAVE 7 X "REMAIN IN PLACE TREES"
SHEET LA-04 HAS 6 X "NOT SALVAGABLE □DESTROY" TREES .

LANDSCAPE LEGEND

ALL TREES TO MEET OR EXCEED A.N.A. SPECIFICATIONS □U.O.N. - UNLESS OTHERWISE NOTED□

TREES	CALIPER □□ □□ H □W
E□□□□□□□ □ □r□□□□□□ C□□□□□□ Tr□□	2" □□□□r 10□□ □5□□
U□□ □□ □□r□□□□□ C□□□□□ □□□ S□□□d□rd	2" □□□□r 10□□ □12□□
C□□□□□□□ □ □□□□□□ M□□□□□ B□rd □□P□r□d□□□	2" □□□□r 5□□ □3□□ M□□□
E□□□□□□□ □□□□□□□ G□□□G□□ E□□ S□□□d□rd	2" □□□□r U.O.N. 10□□ □5□□
Q□□r□□□ □r□□□□□□ □H□r□□□□□ S□□□□r□ L□□□ O□□	1" □□□□r 7□□ □3□□

\# EXISTING TREE □□r□□ □□□ □□d □□ □r□□□□□d □□-□□□□
□□□□□□□S□□□□□ T□□□□d Tr□□
□NOTE: □□□□□□□□ □r□□□ □□□□□□□□□ □r□□□ □□ R□□ □□□□

\# EXISTING TREE □□ □□d □□r□□□d □□□# □□□
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SHRUBS □ACCENTS □VINES	SIZE
M□□□□□□r□□□ □□□□□r□□ L□□□□□ Regal Mist® Pink Muhly Grass	5 G□□□□
D□□d□□□□□ □□□□□□□ Gr□□□ H□□□□□d B□□□	5 G□□□□
H□□□□r□□□□ □□□□□r□ "Y□□□□" Y□□□□ Y□□□□	5 G□□□□
L□□□□□□□□□ □□□□□□□□□□ □C□□ □rr□□□□ C□□ □□□□T□□□□ S□□□	5 G□□□□
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H□□□□r□□□□ □□□□□r□ G□□□□H□□□□r□□□□	5 G□□□□
C□□□□□□□□ □□□□□rr□□ □ R□d B□rd □□P□r□d□□□	5 G□□□□
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S□□ □ □□d□□□ □□□□□□□□□ J□□□□□	5 G□□□□
J□□□□□□ □□□□r□□□□ C□□□□r□□□	5 G□□□□

GROUNDCOVERS	SIZE
L□□□□□ □ □□□□□d□□□□□ Tr□□□□□ L□□□□□□ P□r□□□ & G□□d □ □□□d□ 1 G□□□□	
D□□□□ □□□□d Gr□□□□ 3□4" S□r□□□□d E□□r□□□ "C□r□ □□" □1□4" □□□□ □□R□□□□□□□□ B□□□□□2" □ □□ □□□□□□□□□□ □□ □□□□□d□□□□□ □r□□□ S□□□ □□□□□ □□□ □□ L□□d□□□□□ Ar□□□□□□	

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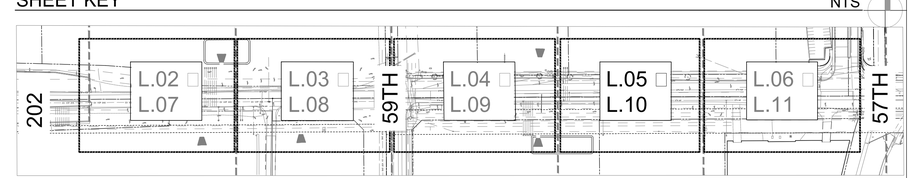
NTS



N O T E : THERE ARE NO OVERHEAD UTILITIES ON THIS PROJECT

N O T E : THERE ARE NO FIRE LINE RPBP WITHIN THIS PROJECT LIMITS

KIVA # 18-3011
QS# 45-24
SDEV # 1800624
LSPL # 1806042
PAPP # T82848
PRLM #
ZONING: □r□□□ □C-1 & S-2□

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1-800-STAKE-IT
(OUTSIDE MARICOPA COUNTY)

Landscape Plan

□□ E□□□□□□ Tr□□□ □□ r□□ □□□ □□□□□□□ □□□□□□□□□ □□□□□□ □r□□□□□□□□□ □r□□□d □□□r □□□□□□□□□ □□NEW L□□d□□□□□ □ □□□r□□□ E□□□□□□ r□□□ □□□□□ □ □□□□□□□d □□ □□□□□□ □□□ □□ □□□□□ □□□r □□□□ □□□□□□ □7□□□□□

SCALE: 1" □20□0"

LASKIN & ASSOCIATES, INC.
LANDSCAPE ARCHITECTS
67 East Weldon Ave
Suite 230
Phoenix, Arizona 85012
p (602) 840-7771
f (602) 840-8021
www.laskindesign.com

REGISTERED LANDSCAPE ARCHITECT CERTIFICATE NO. 20088 HARDY A. LASKIN Date Signed 12.5.18 ARIZONA, U.S.A.

B□□□□□□□ R□□d □r□□□□ □□□□
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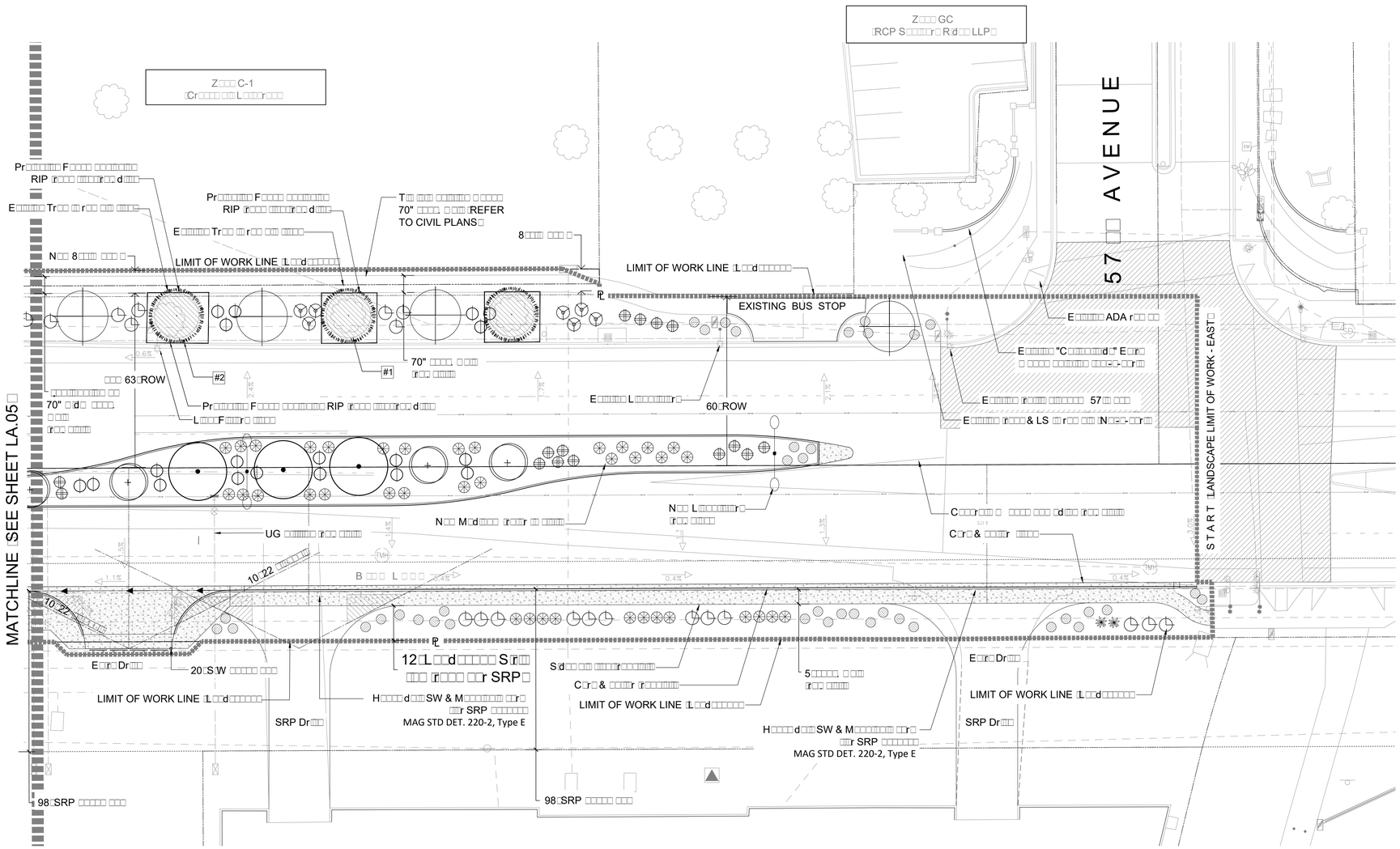
SHEET SCALE 1"□20□
DATE 12.5.18
REVISIONS 3rd □□□□ □□□□COP

SHEET NUMBER
LANDSCAPE PLAN
LA-05
5 of 14



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SHEET LA-04 HAS 6 X "NOT SALVAGABLE DESTROY" TREES .

LANDSCAPE LEGEND

ALL TREES TO MEET OR EXCEED A.N.A. SPECIFICATIONS U.O.N. - UNLESS OTHERWISE NOTED

TREES	CALIPER H W
E Tr C	2" r 10 5
U S d rd C	2" r 10 12
C d M B rd P r d	2" r 5 3 M
E S d rd G G E	2" r U.O.N. 10 5
Q H r S r L O	1" r 7 3
# EXISTING TREE r d d r d - I S T r d Tr NOTE: r R	
# EXISTING TREE d d #	
N d r d d d	

SHRUBS ACCENTS VINES	SIZE
M L Regal Mist® Pink Muhly Grass	5 G
D d Gr H d B	5 G
H r r "Y" Y Y	5 G
L C rr C T S	5 G
N r d r "P P" P P O d r	5 G
H r r G H r	5 G
C rr R d B rd P r d	5 G
B T r G T r G B	5 G
S d d J	5 G
J r C r	5 G

GROUNDCOVERS	SIZE
L d Tr L P r & G d d 1 G	
D d Gr 3/4" S r d E r "C r" 1/4" R B 2" r d d r r	
S L d Ar	

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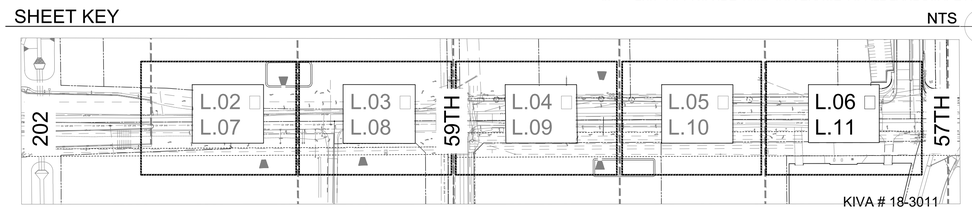

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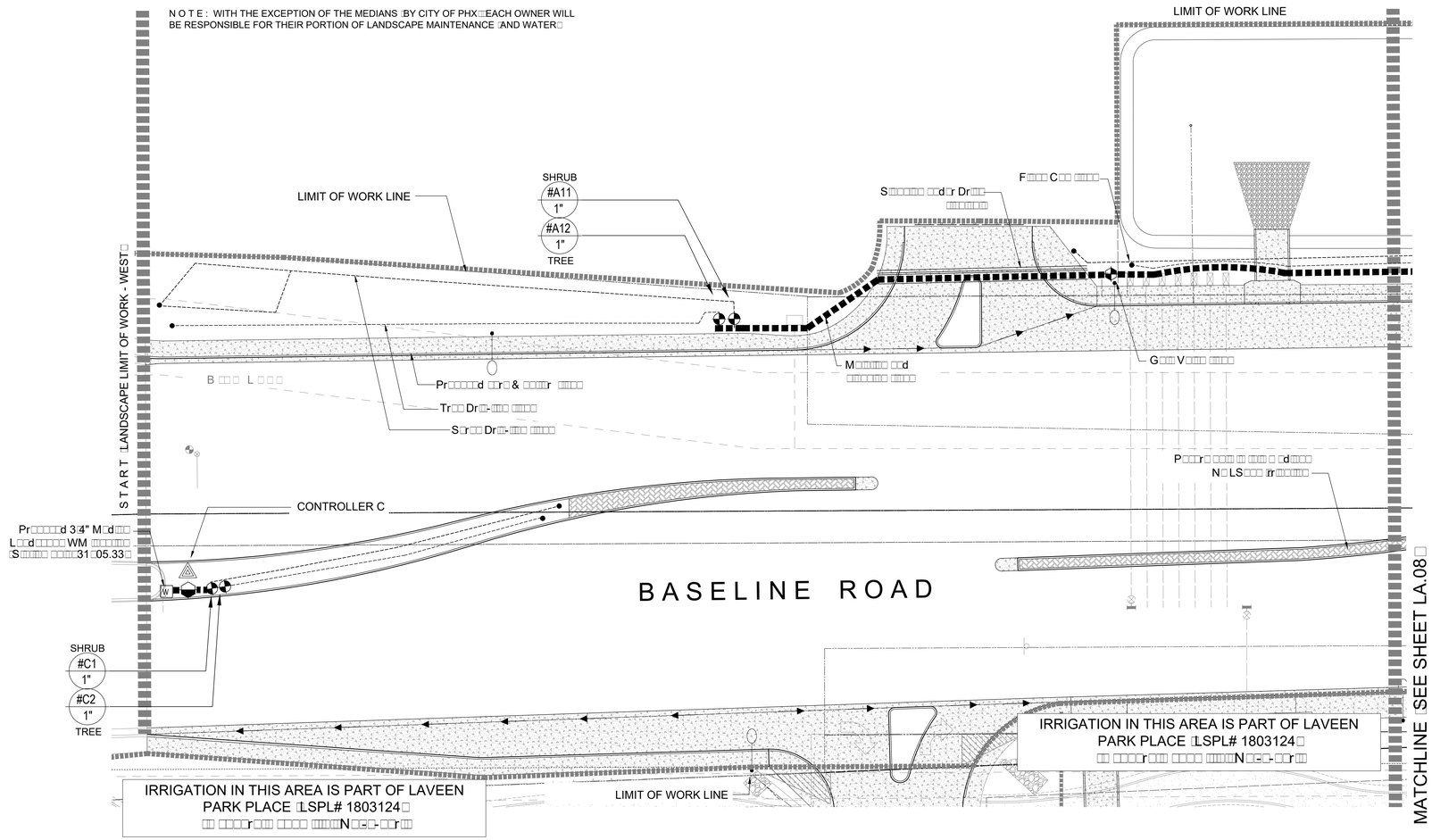
ZONING: r C-1 & S-2

Landscape Plan

SCALE: 1" 20'-0"

E Tr r NEW L d r E r d r r r r r r d r r r r r r



IRRIGATION LEGEND:

Irr W M r

r d r d LS WM

- L d WM A 3/4" d d d LS WM 18 35.86
- L d WM B 1.5" d d d LS WM 19 26.53
- L d WM C 3/4" d d d LS WM 29 49.86
- L d WM D 3/4" d d d LS WM 18 29.85

TO BE CITY OF PHOENIX APPROVED

LEIT 4000 r S r C r

d TO BE CITY OF PHOENIX APPROVED

- CONTROLLER A r
- CONTROLLER B r
- CONTROLLER C r
- CONTROLLER D r

F 1.5" 825-YA R d d Pr r B Pr r
P G rd S d dr
TO BE CITY OF PHOENIX APPROVED

H r ICZ-101- Dr Z C K
TO BE CITY OF PHOENIX APPROVED

N Br G V S T L
TO BE CITY OF PHOENIX APPROVED

STATION NUMBER

VALVE SIZE

B S-10-L S O E r
S E r S d

B M-10-L M O E r
S E r S d

S 40 PVC L r L T E r
S P r P T

S 40 2.5" M TO BE CITY OF PHOENIX APPROVED

A r r Pr d S F E d C

S 40 PVC S
S P r S S d

SLEEVING SCHEDULE:

C r r r r r r r r r r r r 40

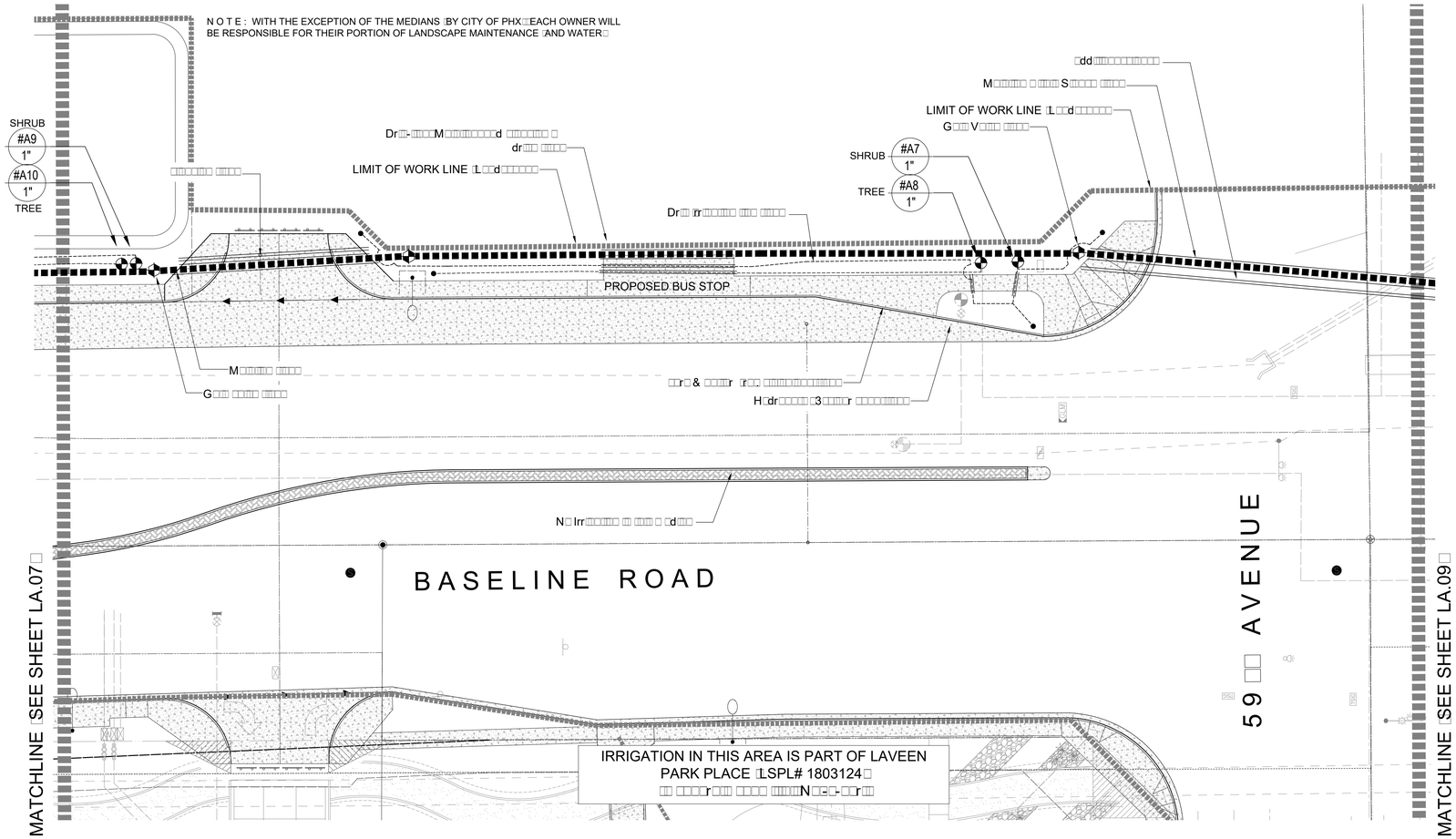
M S	6"
Dr L r S	2"
L r r Fr V T R r	3"
W	2"

SLEEVING NOTE: ALL SLEEVING UNDER PAVEMENT SHALL BE INSTALLED PER AZ HOUSE BILL 2256 WITH A DETECTABLE UNDERGROUND DEVICE.

NOTE: P r C P **ALL PVC Pipe to be SCH40** .

NOTE: IRRIGATION PLANS ARE DIAGRAMMATIC IRRIGATION EQUIPMENT AND PIPE TO BE INSTALLED IN LANDSCAPE AREA. TREES AND SHRUBS TO BE VALVED INDEPENDENTLY OF EACHOTHER.

W r r r r 65 r r r d r r d r r r d d r r r r r r r r r r r r



IRRIGATION LEGEND:

Irr W r M r

r d r r

- L d WM A 3/4" d d d LS WM 18 35.86
- L d WM B 1.5" d d d LS WM 19 26.53
- L d WM C 3/4" d d d LS WM 29 49.86
- L d WM D 3/4" d d d LS WM 18 29.85

TO BE CITY OF PHOENIX APPROVED

LEIT 4000 r S r C r

d TO BE CITY OF PHOENIX APPROVED

- CONTROLLER A r
- CONTROLLER B r
- CONTROLLER C r
- CONTROLLER D r

F 1.5" 825-YA R d d Pr r B Pr r

P G rd S dr

TO BE CITY OF PHOENIX APPROVED

H r ICZ-101- Dr Z C K

TO BE CITY OF PHOENIX APPROVED

N Br G V S T L

TO BE CITY OF PHOENIX APPROVED

STATION NUMBER

VALVE SIZE

B S-10-L S O E r S E r S d

B M-10-L M O E r S E r S d

S 40 PVC L r L T E r S P r P T

S 40 2.5" M TO BE CITY OF PHOENIX APPROVED

A r Pr d S F E d C

S 40 PVC S S P r S S d

SLEEVING SCHEDULE:

C r r r r r r r r r 40

M S	6"
Dr L r S	2"
L r Fr V T R r	3"
W	2"

SLEEVING NOTE: ALL SLEEVING UNDER PAVEMENT SHALL BE INSTALLED PER AZ HOUSE BILL 2256 WITH A DETECTABLE UNDERGROUND DEVICE.

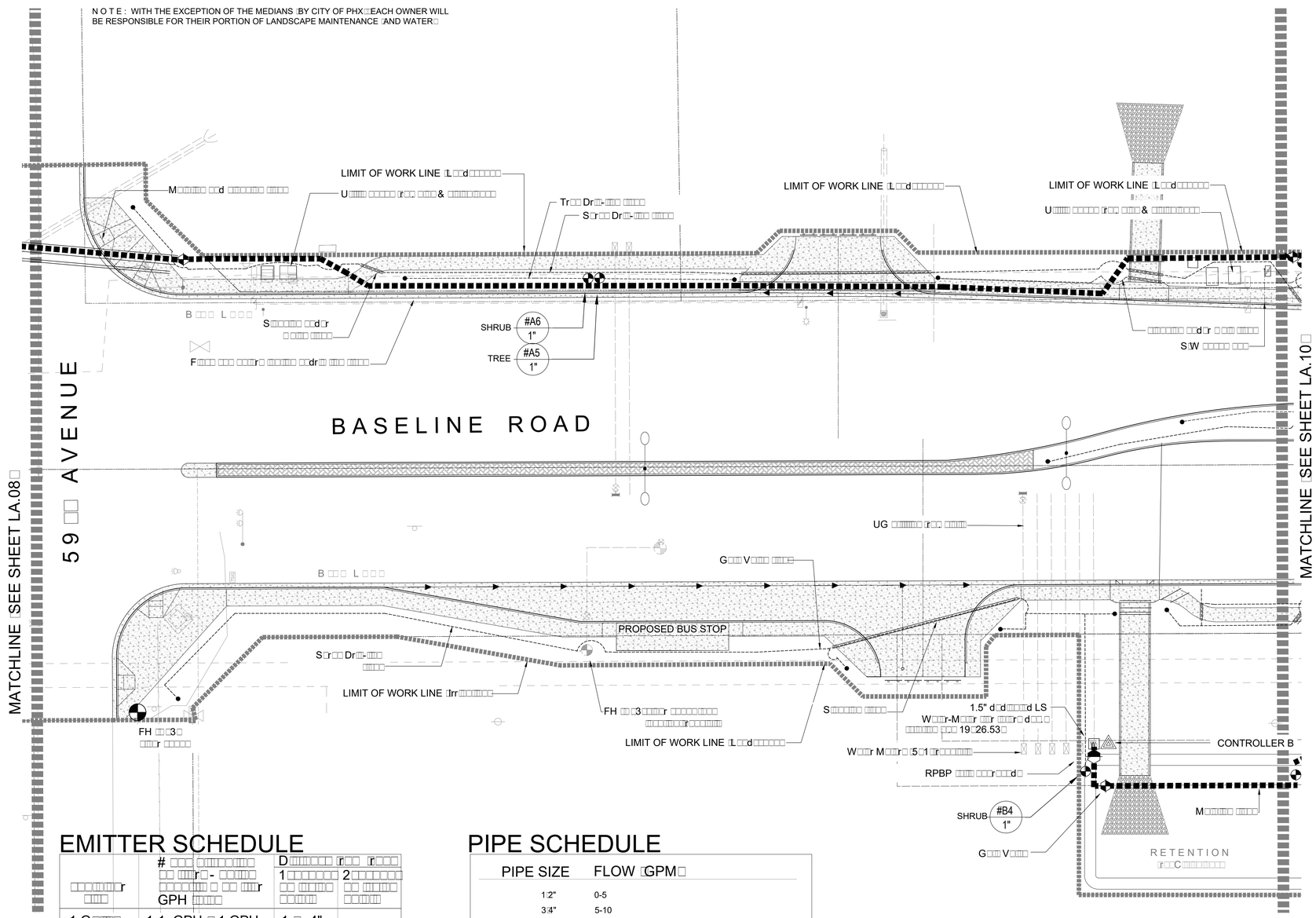
NOTE: P r C P **ALL PVC Pipe to be SCH40** .

NOTE: IRRIGATION PLANS ARE DIAGRAMMATIC IRRIGATION EQUIPMENT AND PIPE TO BE INSTALLED IN LANDSCAPE AREA. TREES AND SHRUBS TO BE VALVED INDEPENDENTLY OF EACHOTHER.

W r r r r 65 r r d r r d

IRRIGATION NOTES

NOTE: F r r r r r r & r r r r LC "LM r r r r r r r r r



IRRIGATION LEGEND:

Irr W r M r

r d r r

- L d WM A 3/4" d d d LS WM 18 35.86
- L d WM B 1.5" d d d LS WM 19 26.53
- L d WM C 3/4" d d d LS WM 29 49.86
- L d WM D 3/4" d d d LS WM 18 29.85

TO BE CITY OF PHOENIX APPROVED

LEIT 4000 r S r C r

d TO BE CITY OF PHOENIX APPROVED

- CONTROLLER A r
- CONTROLLER B r
- CONTROLLER C r
- CONTROLLER D r

F 1.5" 825-YA R d d Pr r B Pr r
P G rd S d r dr
TO BE CITY OF PHOENIX APPROVED

H r ICZ-101- Dr Z C K
TO BE CITY OF PHOENIX APPROVED

N Br G V S T L
TO BE CITY OF PHOENIX APPROVED

STATION NUMBER

VALVE SIZE

B S-10-L S O E r
S E r S d

B M-10-L M O E r
S E r S d

S 40 PVC L r L T E r
S P r P T

S 40 2.5" M TO BE CITY OF PHOENIX APPROVED

A r r Pr d S F E d C

S 40 PVC S
S P r S S d

SLEEVING SCHEDULE:

C r r r r 40

M S	6"
Dr L r S	2"
L r Fr V T R r	3"
W	2"

SLEEVING NOTE: ALL SLEEVING UNDER PAVEMENT SHALL BE INSTALLED PER AZ HOUSE BILL 2256 WITH A DETECTABLE UNDERGROUND DEVICE.

NOTE: P r C P **ALL PVC Pipe to be SCH40** .

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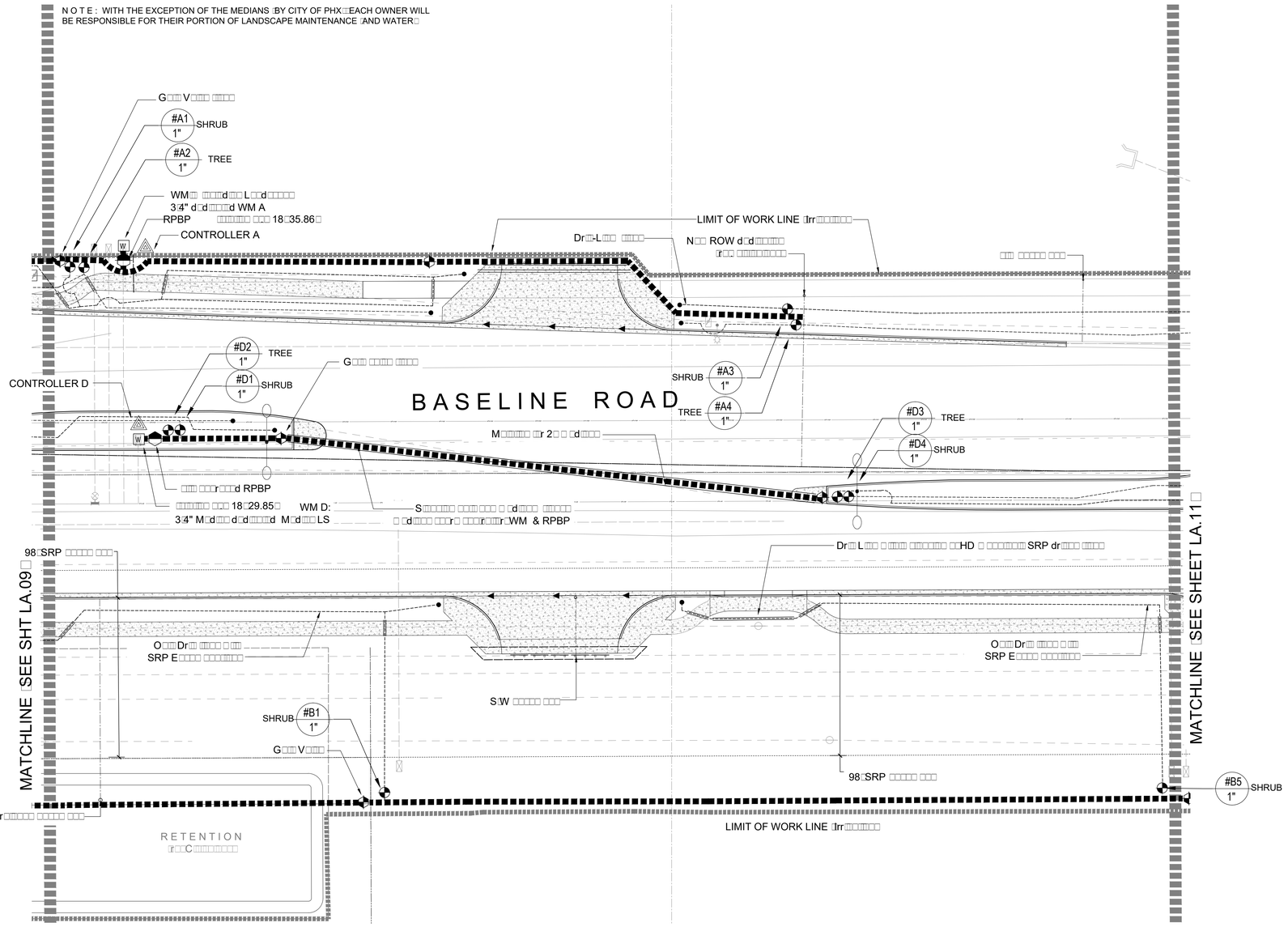
W r r r 65 r d r r d d r r d

IRRIGATION NOTES

NOTE: F r r r r r & r r r r r r LC " r r r r r r

N O T E : WITH THE EXCEPTION OF THE MEDIANS BY CITY OF PHX EACH OWNER WILL BE RESPONSIBLE FOR THEIR PORTION OF LANDSCAPE MAINTENANCE AND WATER



IRRIGATION LEGEND:

Irr W r M r

W A

- L d WM A 3/4" d d d LS WM 18 35.86
- L d WM B 1.5" d d d LS WM 19 26.53
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TO BE CITY OF PHOENIX APPROVED

A LEIT 4000 r S r C r

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N Br G V S T L
TO BE CITY OF PHOENIX APPROVED

STATION NUMBER

x" VALVE SIZE

B S-10-L S O E r
S E r S d

B M-10-L M O E r
S E r S d

S 40 PVC L r L T E r
S P r P T

S 40 2.5" M TO BE CITY OF PHOENIX APPROVED

A r Pr d S F E d C

S 40 PVC S
S P r S S d

SLEEVING SCHEDULE:

C r r r r 40

M S	6"
Dr L r S	2"
L r Fr V T R r	3"
W	2"

SLEEVING NOTE: ALL SLEEVING UNDER PAVEMENT SHALL BE INSTALLED PER AZ HOUSE BILL 2256 WITH A DETECTABLE UNDERGROUND DEVICE.

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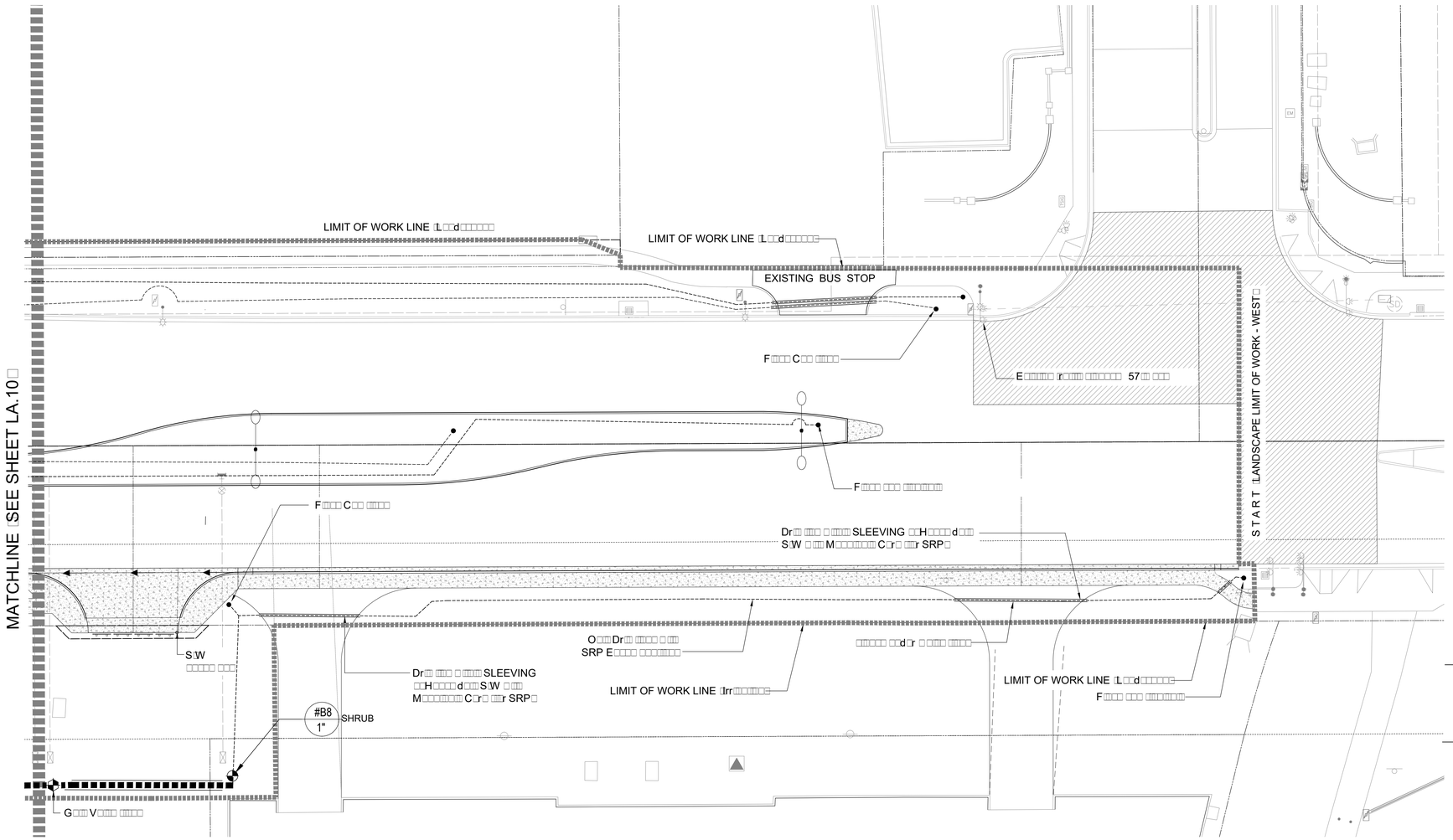
W r 65 r d d r d d d r r r r

IRRIGATION NOTES

NOTE: F r Irr & d LC "M" r

Tr r r r r



IRRIGATION LEGEND:

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- L d WM A 3/4" d d d LS WM 18 35.86
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B M-10-L M O E r
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S 40 PVC L r L T E r
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S 40 2.5" M TO BE CITY OF PHOENIX APPROVED

A r r Pr d S F E d C

S 40 PVC S
S P r S S d

SLEEVING SCHEDULE:

C r r r r r r r
40

M S	6"
Dr L r S	2"
L r Fr V T R r	3"
W	2"

SLEEVING NOTE: ALL SLEEVING UNDER PAVEMENT SHALL BE INSTALLED PER AZ HOUSE BILL 2256 WITH A DETECTABLE UNDERGROUND DEVICE.

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W r r 65 r d r r d

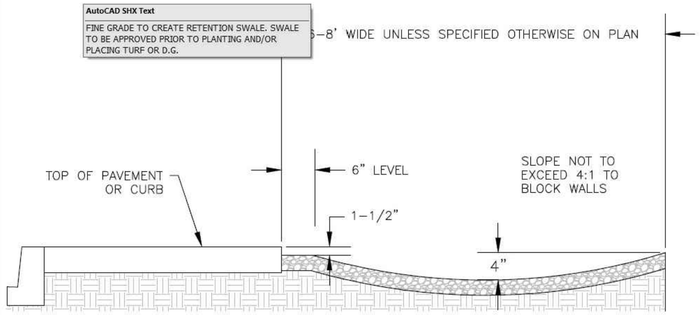
IRRIGATION NOTES

NOTE: F r r r r & r r r r r LC "" r r r r r r r

SWALE - BACK OF SIDEWALK

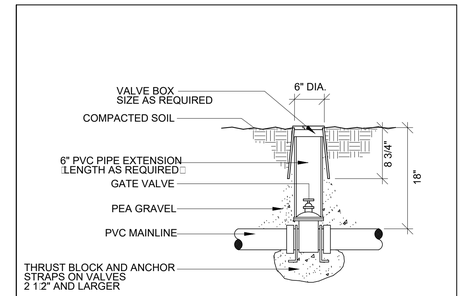
NTS

FINE GRADE TO CREATE RETENTION SWALE. SWALE TO BE APPROVED PRIOR TO PLANTING AND/OR PLACING TURF OR D.G.



AGRIFORM TABLET APPLICATION TABLE:

F□r □□□-□□□□ □□□□□□r .....1 □□□□□
F□r □□□-□□□□ □□□□□□r.....2 □□□□□□
F□r □□□□□-□□□□ □□□□□□r.....4 □□□□□□
F□r □□□□-□□r □□□□□ □r □□r □□□.....6 □□□□□□



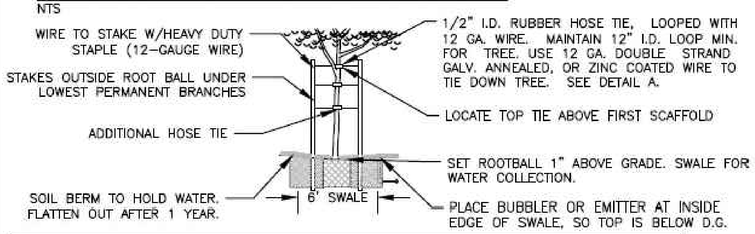
NOTE: SIZE GATE VALVE TO MAINLINE UNLESS NOTED

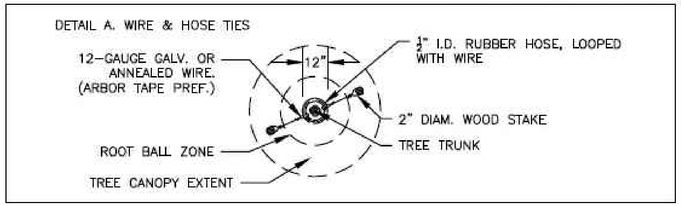
I9 GATE VALVE DETAIL

NTS

SINGLE-TRUNK TREE PLANTING & STAKING

NTS





PLANTING NOTES:
1. SIDES OF PLANTING PITS ARE TO BE LOOSENED OR RAKED BEFORE SETTING TREE IN PIT.
2. EXCAVATE DEPTH OF PLANTING PIT TO THE SAME DEPTH AS THE ROOTBALL.
3. THE WIDTH OF THE PLANTING PIT SHALL BE 2X THE WIDTH OF THE ROOTBALL
4. GENTLY LOOSEN ROOTS AROUND EXTERIOR OF ROOTBALL.
5. CENTER TREE IN PLANTING PIT.
6. INSPECT ROOT BALLS AT POINT OF PURCHASE TO AVOID PURCHASE OF ROOT BOUND MATERIALS
7. REMOVE ENTIRE CONTAINER FROM ALL PLANTS PRIOR TO PLANTING.
8. NEW TREES SHALL NOT BE PRUNED UNLESS DIRECTED BY OWNER.
9. FORM SWALE AROUND EACH TREE AS SHOWN FOR WATER COLLECTION.
10. REMOVE ALL NURSERY STAKES.

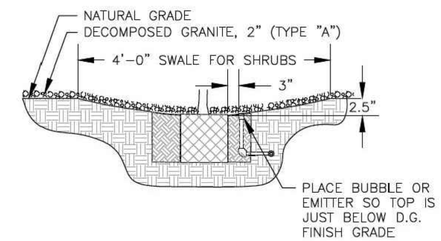
BACKFILL NOTES:
1. PROVIDE MULCH AMENDMENT WITH BACKFILL FOR NON–DESERT TREES.
2. BACKFILL MIX SHALL CONSIST OF 3 PARTS NATIVE SOIL TO 1 PART MULCH. PROVIDE 1 CUP GYPSUM IN BOTTOM OF PLANTING PIT
3. INCLUDE 16:20:0 AMMONIUM PHOSPHATE FERTILIZER IN PLANTING PIT FOR NON DESERT TREES. MIX INTO BACKFILL. DO NOT SPREAD ON TOP OF SOIL.

STAKING NOTES:
1. USE 2– 2" DIA. LODGE POLE STAKES– DOUGLAS FIR OR APPROVED HARDWOOD.
2. DRIVE STAKE MIN 12" INTO FIRM UNDISTURBED SOIL BELOW THE EXCAVATED DEPTH.
3. PLACE STAKES OUTSIDE THE ROOTBALL.
4. HEIGHT OF STAKE MAY VARY DEPENDING ON NEED FOR SUPPORT.
5. PLACE THE TOP TIE FOR MAXIMUM SUPPORT. THE BOTTOM TIE SHOULD BE APPROXIMATELY HALFWAY BETWEEN THE TOP TIE AND GROUND.
6. ALWAYS PLACE STAKE TO PREVENT DAMAGE TO TREE AND CAMBIUM.

MISC. NOTES:
1. REMOVE ALL PLASTIC TREE TIE TAPE, BAMBOO NURSERY STAKE, WIRE TIES, AND LABELS FROM TREES AFTER THEY HAVE BEEN APPROVED.
2. BACKFILL ANY HOLES LEFT IN ROOTBALL LEFT FROM NURSERY STAKES. BACKFILL SHALL BE CLEAN SOIL, NOT D.G.
3. SWALE SHALL BE A SMOOTH TRANSITION–NO ABRUPT GRADE CHANGES.
4. SWALE SHALL BE WATER TESTED FOR WATER HOLDING CAPACITY PRIOR TO PLACING D.G.
5. PROVIDE ADDITIONAL WIRE HOSE TIE WHEN THE TREE IS NOT RIGIDLY SUPPORTED BY THE TWO REQUIRED SUPPORTS.
6. 2–3" MULCH TOP LAYER, NOT AROUND BASE. 1" D.G. TOP LAYER ALSO SUITABLE.

SHRUB PLANTING

NTS

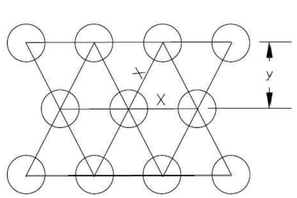


NOTES:
1. PLANT PITS SHALL NOT BE AUGER DUG. SIDES OF PIT SHALL BE RAKED TO LOOSEN PRIOR TO SETTING TREE IN PITS.
2. GENTLY LOOSEN ROOTS AROUND EXTERIOR OF ROOTBALL.
3. DO NOT PLANT ROOT BOUND PLANTS. NOTIFY LANDSCAPE ARCHITECT IMMEDIATELY TO VERIFY CONDITION OF PLANT IF ANY QUESTION.
4. REMOVE ENTIRE CONTAINER FROM ALL PLANTS PRIOR TO PLANTING.
5. DO NOT PRUNE NEW PLANTS WITHOUT LANDSCAPE ARCHITECT APPROVAL/DIRECTION.

PLANTING PIT TO BE 3X THE WIDTH OF THE ROOT BALL. CENTER SHRUB IN PLANTING PIT. DO NOT OVER–EXCAVATE FOR DEPTH OF PLANTING PIT TO AVOID SETTLING. FERTILIZER: 16:20:0 AMMONIUM PHOSPHATE FOR NON DESERT PLANTS. MIX INTO BACKFILL. DO NOT SPREAD ON TOP OF SOIL.

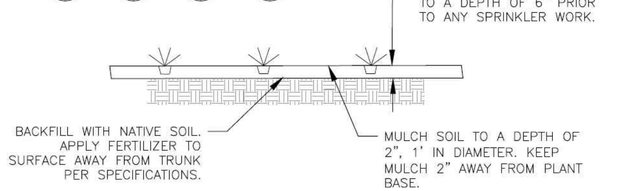
GROUNDCOVERS

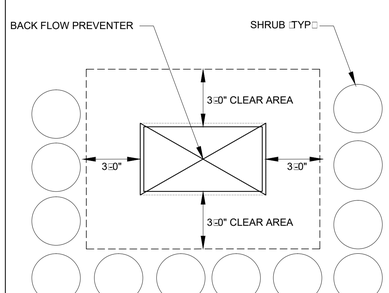
NTS



ALL GROUNDCOVERS TO BE PLANTED ON CENTER (SEE PLANT LEGEND) IN A TRIANGULAR PATTERN.

X = O.C. DIMENSION AS NOTED ON PLAN
Y = 0.86 OF DIMENSION "X"

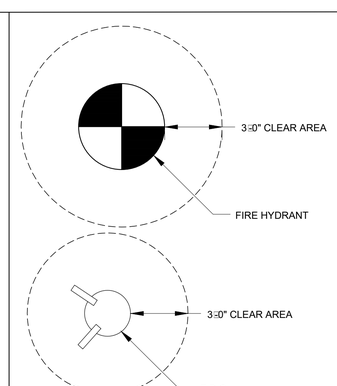




NOTE:
A 3□0" CLEARANCE WHERE NOTHING WILL BE PLANTED OR WILL GROW. □PFC 50B.5 & 912.2□

P3.1 C.O.P. BACKFLOW SCREENING DETAIL

NOT TO SCALE

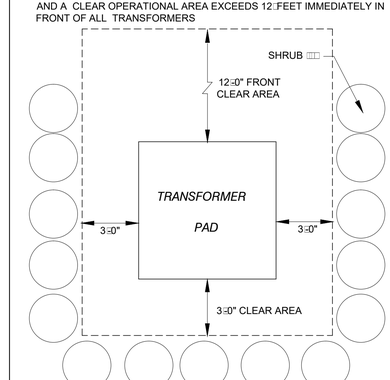


NOTE:
A 3□0" CLEARANCE WHERE NOTHING WILL BE PLANTED OR WILL GROW. □PFC 50B.5 & 912.2□

P3.2 C.O.P. FH (w/ 3' clear zone). SCREENING

NTS

A 3□0" CLEARANCE AROUND ALL EDGES OF ALL TRANSFORMER PADS AND A CLEAR OPERATIONAL AREA EXCEEDS 12□FEET IMMEDIATELY IN FRONT OF ALL TRANSFORMERS



P3.3 C.O.P TRANSFORMER SCREENING

NTS

KIVA # 18-3011
QS# 45-24
SDEV # 1800624
LSPL # 1806042
PAPP # T82848
PRLM #
ZONING: □r□□□C-1 & S-2□

CALL TWO WORKING DAYS BEFORE YOU DIG
602-263-1100
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(OUTSIDE MARICOPA COUNTY)

LASKIN & ASSOCIATES, INC.
LANDSCAPE ARCHITECTS
67 East Weldon Ave
Suite 230
Phoenix, Arizona 85012
p (602) 840-7771
f (602) 840-8021
www.laskindesign.com

REGISTERED LANDSCAPE ARCHITECT CERTIFICATE NO. 20088 HARDY A. LASKIN 12□5□18 Date Signed ARIZONA, U.S.A.

B□□□□□□ R□□d I□ r□□□□ □□□□
B□□□□□□□r□□ Pr□□□□d 202 □□ 57 □ □□ C□□□□□□d□
L□□□□□□Ar□□□ 85339

DRAWN □□□

CHECKED □□□

SHEET SCALE 1"□20□

DATE 12.5.18

REVISIONS 3rd □□□□ □□□COP

SHEET NUMBER

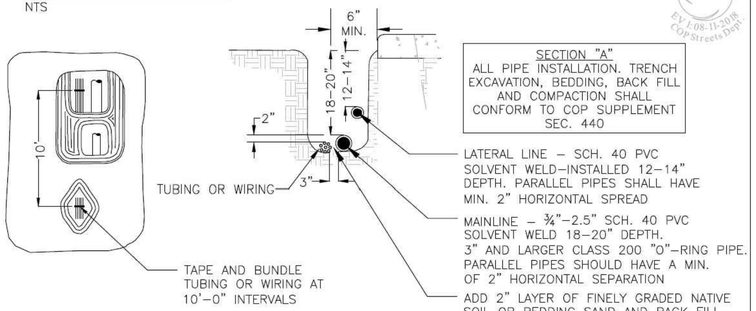
DETAILS

LA-12

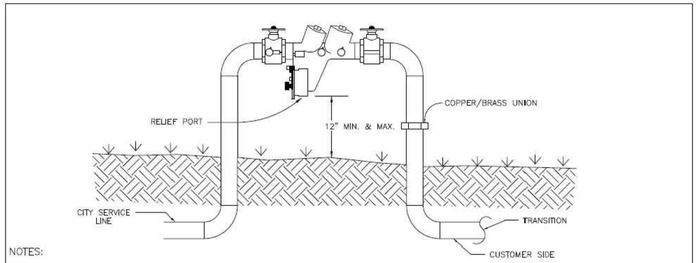
12 of 14

TRENCHING DETAIL

NTS



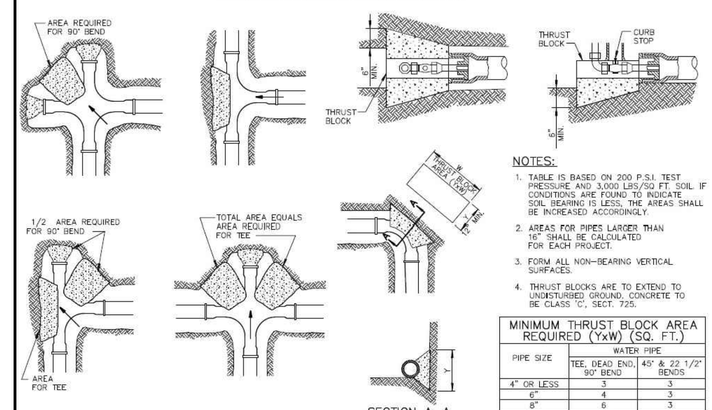
NOTES:
1. TOP OF WIRE BUNDLE SHOULD BE 2" BELOW TOP OF PIPE.
2. HORIZONTAL DISTANCE BETWEEN ALL PIPE MIN. 2"
3. ALL PIPING 3" AND LARGER SHALL HAVE 24"–26" OF COVER



NOTES:
1. ALL PIPE/FITTINGS TO BE TYPE "K" COPPER.
2. ASSEMBLY SHALL BE APPROVED BY U.S.C. FOUNDATION FOR CROSS–CONNECTION CONTROL AND HYDRAULIC RESEARCH.
3. INSTALL BACKFLOW PREVENTION ASSEMBLY WITH RELIEF PORT FACING TOWARD THE GROUND.
4. BACKFLOW PREVENTION ASSEMBLY MUST BE LEVEL AND INSTALLED A MINIMUM AND A MAXIMUM OF 12 INCHES FROM RELIEF PORT TO FINAL GRADE.
5. PAVER CONCRETE BLOCK UNDER RELIEF PORT, SET AT FINAL GRADE.
6. TEST COCKS, (4) SHALL BE FITTED WITH BRASS PLUGS AND INSTALLED WITH TEFLON TAPE.
7. SHUTOFF VALVES TO BE RESILIENT BALL TYPE WITH REMOVABLE HANDLES.
8. COMPRESSION TYPE FITTINGS ARE NOT ALLOWED.
9. INSTALL THE BACKFLOW PREVENTION ASSEMBLY IMMEDIATELY DOWNSTREAM OF THE CITY WATER METER.
10. A COPPER/BRASS UNION MUST BE INSTALLED IN THE MIDDLE OF THE DOWNSTREAM RISER.
11. CONTACT CITY OF PHOENIX DEVELOPMENT SERVICES DEPARTMENT, CROSS–CONNECTION CONTROL FOR A LIST OF APPROVED BACKFLOW PREVENTION ASSEMBLIES.
12. COPPER FITTINGS SHALL BE CONNECTED WITH LEAD–FREE SOLDER JOINT.
13. TRANSITION FROM "K" COPPER TO OTHER APPROVED PIPING MATERIAL SHALL BE IN THE HORIZONTAL PIPING A MINIMUM OF 12" BELOW GRADE.

DETAIL NO.			APPROVED	DETAIL NO.
P1354	City of Phoenix STANDARD DETAIL	REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY INSTALLATION – 2 1/2" AND UNDER	CITY ENGINEER 6/27/01 DATE	P1354

TYPICAL LOCATIONS OF THRUST BLOCKS



NOTES:
1. TABLE IS BASED ON 200 P.S.I. TEST PRESSURE AND 3,000 LBS/SQ.FT. SOIL. IF CONDITIONS ARE FOUND TO INDICATE SOIL BEARING IS LESS, THE AREAS SHALL BE INCREASED ACCORDINGLY.
2. AREAS FOR PIPES LARGER THAN 16" SHALL BE CALCULATED FOR EACH PROJECT.
3. FORM ALL NON–BEARING VERTICAL SURFACES.
4. THRUST BLOCKS ARE TO EXTEND TO UNDISTURBED GROUND. CONCRETE TO BE CLASS 'C', SECT. 725.

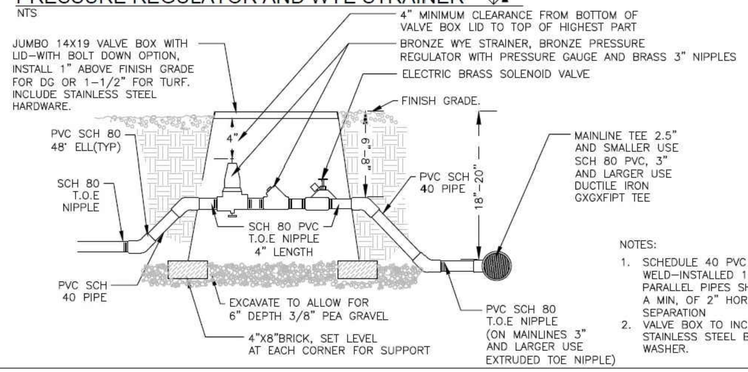
MINIMUM THRUST BLOCK AREA REQUIRED (YxW) (SQ. FT.)

PIPE SIZE	WATER PIPE	
	TEE, DEAD END, 90° BEND	45° & 22 1/2° BENDS
4" OR LESS	3	3
6"	4	3
8"	6	3
10"	10	5
12"	14	7
16"	24	12

DETAIL NO.			REVISED	DETAIL NO.
380	MARICOPA ASSOCIATION of GOVERNMENTS STANDARD DETAIL ENGLISH	THRUST BLOCKS FOR WATER LINES	01–01–1998	380

REMOTE CONTROL BRASS VALVE, PRESSURE REGULATOR AND WYE STRAINER

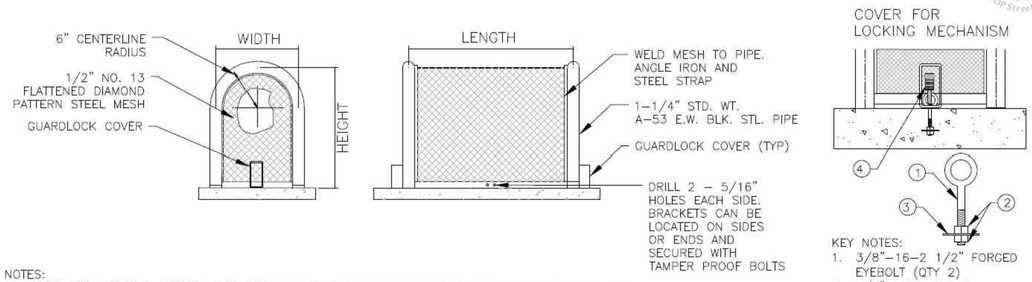
NTS



NOTES:
1. SCHEDULE 40 PVC SOLVENT WELD–INSTALLED 12–14" DEPTH PARALLEL PIPES SHOULD HAVE A MIN. OF 2" HORIZONTAL SEPARATION
2. VALVE BOX TO INCLUDE STAINLESS STEEL BOLT AND WASHER.

BACKFLOW SECURITY ENCLOSURE - LIFT OFF

NTS

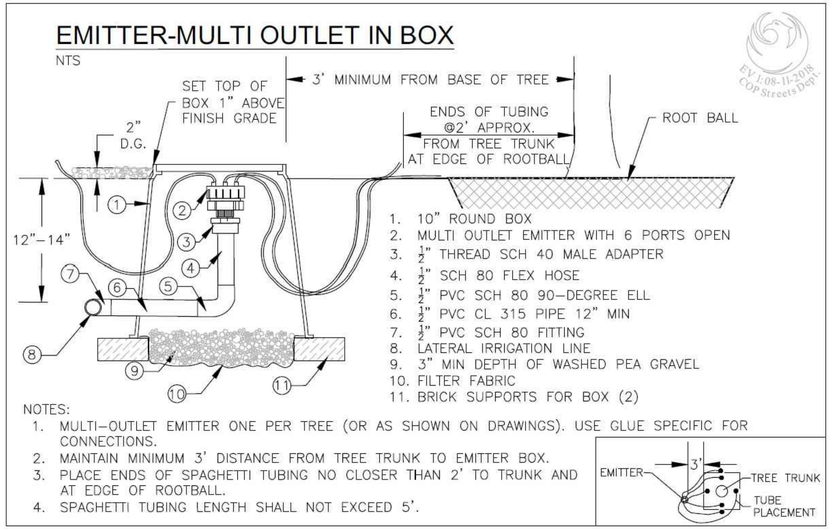


KEY NOTES:
1. 3/8"–16–2 1/2" FORGED EYEBOLT (QTY 2)
2. 3/8"–16 HEX NUT (QTY 4)
3. 3/8" X 1/2" FENDER WASHER (QTY 2)
4. PADLOCK BY OWNER

NOTES:
1. AFTER ALL WELDING, ENTIRE UNIT SHALL BE PROCESSED WITH IRON PHOSPHATE PRE–TREATMENT.
2. ELECTROSTATIC APPLICATION OF POWDERCOAT SHALL BE FUSION BONDED – PRS–B–4004–C (BEIGE) OR COLOR SELECTION TO BE APPROVED BY OWNER
3. ALL BOLTS SHALL BE ZINC PLATED & TAMPER PROOF
4. ALL WELDED AREAS SHALL BE A MINIMUM OF 1/4" WIDTH BEAD EVERY 4"
5. GS = POWDERCOATED STEEL GUARD SHACK

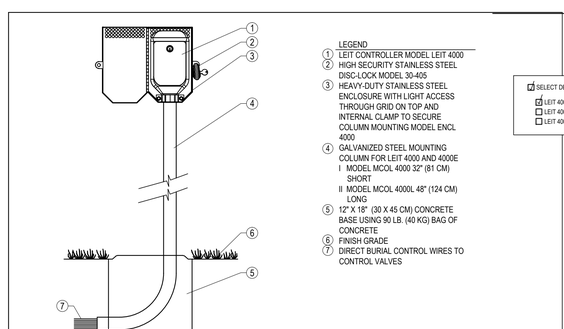
EMITTER-MULTI OUTLET IN BOX

NTS



1. 10" ROUND BOX
2. MULTI OUTLET EMITTER WITH 6 PORTS OPEN
3. ½" THREAD SCH 40 MALE ADAPTER
4. ½" SCH 80 FLEX HOSE
5. ½" PVC SCH 80 90–DEGREE ELL
6. ½" PVC CL 315 PIPE 12" MIN
7. ½" PVC SCH 80 FITTING
8. LATERAL IRRIGATION LINE
9. 3" MIN DEPTH OF WASHED PEA GRAVEL
10. FILTER FABRIC
11. BRICK SUPPORTS FOR BOX (2)

NOTES:
1. MULTI–OUTLET EMITTER ONE PER TREE (OR AS SHOWN ON DRAWINGS). USE GLUE SPECIFIC FOR CONNECTIONS.
2. MAINTAIN MINIMUM 3' DISTANCE FROM TREE TRUNK TO EMITTER BOX.
3. PLACE ENDS OF SPAGHETTI TUBING NO CLOSER THAN 2' TO TRUNK AND AT EDGE OF ROOTBALL.
4. SPAGHETTI TUBING LENGTH SHALL NOT EXCEED 5'.



LEGEND
1. LEIT CONTROLLER MODEL LEIT 4000
2. HIGH SECURITY STAINLESS STEEL DISC-LOCK MODEL 30-405
3. HEAVY-DUTY STAINLESS STEEL ENCLOSURE WITH LIGHT ACCESS THROUGH GRID ON TOP AND INTERNAL CLAMP TO SECURE COLUMN MOUNTING MODEL ENCL 4000
4. GALVANIZED STEEL MOUNTING COLUMN FOR LEIT 4000 AND 4000E
   I MODEL MCOL 4000 32" (81 CM) SHORT
   II MODEL MCOL 4000L 48" (124 CM) LONG
5. 12" X 18" (30 X 45 CM) CONCRETE BASE USING 90 LB. (40 KG) BAG OF CONCRETE
6. FINISH GRADE
7. DIRECT BURIAL CONTROL WIRES TO CONTROL VALVES

NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWING.
3. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.
4. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.
5. CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info AND ENTER REFERENCE NUMBER 923-032.

18 LEIT CONTROLLERS (w/ mount)
DETAIL CONTROLLER COLUMN MOUNTING WITH STAINLESS STEEL ENCLOSURE

SELECT DESIRED CONTROLLER:
- [x] LEIT 4004 (4 STATIONS WITH 4 PROGRAMS)
- [ ] LEIT 4006 (6 STATIONS WITH 4 PROGRAMS)
- [ ] LEIT 4008 (8 STATIONS WITH 4 PROGRAMS)

NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWING.
3. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.
4. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.
5. CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info AND ENTERREFERENCE NUMBER CDs - Baseline rd streetscape.

18 LEIT CONTROLLERS
LEIT 4000 SERIES CONTROLLERS

KIVA # 18-3011
QS# 45-24
SDEV # 1800624
LSPL # 1806042
PAPP # T82848
PRLM #
ZONING: □r□□ □C-1 & S-2□

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LANDSCAPE ARCHITECTS
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Suite 230
Phoenix, Arizona 85012
p (602) 840-7771
f (602) 840-8021
www.laskindesign.com

REGISTERED LANDSCAPE ARCHITECT CERTIFICATE NO. 20088 HARDY A. LASKIN 12.5.18 Date Signed ARIZONA, U.S.A.

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DRAWN □□□
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SHEET SCALE 1"□20□
DATE 12.5.18
REVISIONS 3rd □□□□ □□□COP

SHEET NUMBER
DETAILS
LA-13
13 of 14

LANDSCAPE SPECIFICATIONS Section 02800

PART 1 – GENERAL

1.01 WORK INCLUDED

A. The work included under these specifications shall consist of the furnishing of all labor, material, permits, tools, and equipment necessary for the complete installation of the landscaping materials as shown on the drawings and as described in the following specifications.

1.02 QUALITY ASSURANCE

A. For standard products, the manufacturer's analysis will be acceptable. For all other materials, analysis shall be by a recognized laboratory.

B. Analysis shall be made in accordance with the current methods of the Association of Official Agricultural Chemists.

C. Soils shall be analyzed for their composition and fertility in sustaining plant growth and health.

D. All plants furnished under this specification shall be from nursery grown stock, and they shall meet the ARIZONA NURSERY ASSOCIATION of the American Association of Nurserymen, Inc. requirements as to sizing, grading, and quality. Plant materials specified shall conform with the nomenclature of STANDARDIZED PLANT NAMES, Second Edition. The Landscape Architect reserves the right to refuse all plant material based on overall appearance and quality regardless of specifications.

E. Plants of the species specified shall be furnished in the variety, size, grade, and quality indicated. Specifications and planting plans shall be strictly adhered to and no changes or substitutions will be allowed prior to bidding without written permission of the Landscape Architect, Owner, or Owner's Representative.

F. By submitting a proposal and accepting award of the Contract, the Contractor acknowledges that he has investigated the supply of planting stock available and has obtained firm commitments from his suppliers assuring delivery of the specific plant materials as required for completion of the project.

G. All plant materials shall be grown in accordance with good horticulture practices and shall bear evidence of proper nursery care during growth under climate conditions similar to those in the locality of the project for at least two (2) years. They shall have been previously transplanted or root pruned according to standard nursery practice and inspected by State Control Agencies.

H. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched, and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root systems of container grown plants shall be sufficiently developed to hold the earth intact upon removal from the container.

I. Planting, sodding, and seeding shall be performed by personnel familiar with planting procedures and under the supervision of a qualified planting foreman.

1.03 SUBMITTALS

A. Submit a soil fertility test of the planting soil for approval by the Landscape Architect prior to delivery of soil to the project site. Test reports shall indicate the location of the source for soil.

B. Upon completion of the work, submit a schedule satisfactory to the Landscape Architect for the maintenance of all plant material.

PART 2 – PRODUCTS

2.01 SOD

A. Approved nursery grade cultivated grass sod; species and cultivar as indicated on the drawings with strong, fibrous root system; free from stones and burned or bare spots.

2.02 PLANTING SOIL FOR PLANT PITS AND BEDS

A. Fertile, friable, natural loam containing a liberal amount of humus, capable of sustaining vigorous plant growth. The pH value of the planting soil shall not be higher than 7.5 or lower than 5.5. It shall be free of any admixture of subsoil, stones, lumps, clods of hard earth, plants, or their roots, sticks, and other extraneous matter. Do not use planting soil for planting operations while in a frozen or muddy condition.

2.03 PEAT

A. Acceptable peat moss consisting of at least 73% organic content of natural occurrence. It shall be brown, clean, low in content of mineral and woody materials, mildly acid, and granulated or shredded.

2.04 FERTILIZER

A. Commercial Fertilizer: A complete fertilizer, conforming to FS O-F-241, Type I. Grade A, part of the elements of which are derived from organic sources containing the following percentages by weight:
10% nitrogen 5% nitrogen
10% phosphoric acid –or– 10% phosphoric acid
10% potash 5% potash

B. Organic Fertilizer: An organic activated fertilizer containing a minimum of five percent (5%) nitrogen, three percent (3%) phosphoric acid, and other basic elements by weight.

C. Deliver fertilizer mixed as specified in standard size bags, showing weights, analysis, and name of manufacturer. Store in weatherproof storage place in such manner that it will be kept dry and its effectiveness not impaired.

D. The Landscape Architect reserves the right to vary the percentages of the components of the fertilizers subject to the results of the soil fertility tests.

2.05 WATER

A. Shall be furnished by the General Contractor. The Contractor shall furnish all necessary hose, equipment, attachments, and accessories for the adequate irrigation of all planted areas as may be required to complete the work as specified.

2.06 PLANT MATERIAL

A. All old abrasions and cuts shall be completely calloused over. All shrubs shall be measured when their branches are in their normal position. Height and spread dimensions specified refer to the main body of the plant and not from branch or root tip to tip.

B. Shrubs shall be matched specimens from single block source.

C. Evergreen trees not fully branched from top to bottom will be rejected, and those with terminal leaders exceeding twelve (12") inches in length will also be rejected. During the spring planting seasons, any evergreen plant delivered with new growth in an advanced stage of candling out will be rejected.

D. Plants shall not be pruned before delivery. Trees which have damaged or crooked leaders, or multiple leaders, unless specified, will be rejected. Trees with bark abrasions, sunscalds, disfiguring knots, or fresh cuts of limbs over one and a quarter inches (1¼") which have not completely calloused will be rejected. Plants shall be freshly dug or container grown. Heeled in plants or plants from cold storage will not be accepted.

E. Plants shall be true to species and variety, and shall conform to measurements specified on the Drawings. Plants larger than specified may be used if approved by the Landscape Architect. Use of such plants shall not increase contract price. If larger plants are approved, the ball of earth shall be increased proportionally with the size of plant.

F. Substitutions of plant materials will not be permitted unless authorized in writing by the Landscape Architect. Proof must be submitted that use of nearest equivalent size of variety with corresponding adjustment of Contract Price. Such proof shall be substantiated and submitted in writing.

G. It shall be the responsibility of the Contractor to determine required quantities of plants, as no compensation will be made for error in plant quantities. If plant counts occur on plant legend, it is for the convenience of the contractor only. Verify plant counts with plan. In case of discrepancy, plan shall govern.

H. Each plant shall be properly identified with legible waterproof tags securely fastened. Tags shall remain on the plants until after final acceptance and then be promptly removed by the Contractor.

PART 3 – INSTALLATION

3.01 INSPECTION OF PLANT MATERIAL

A. Plants shall be subject to inspection and approval by Landscape Architect at place of growth and upon delivery. Written request for inspection of plant materials at place of growth shall be submitted to Landscape Architect at least ten (10) calendar days prior to delivery. This written request shall state place of growth and quantity of plants to be inspected. Landscape Architect reserves the right to waive inspection. Such approval shall not impair the right of inspection and rejection upon delivery at the project site or during the progress of the work for size and condition of balls or roots, diseases, insects, and latent defects or injuries. Rejected plants must be immediately removed from the project site.

B. Certificates of inspection of plant materials as may be required by Federal, State or other authorities to accompany shipments and be furnished to Owner upon completion of project.

3.02 DIGGING AND HANDLING

A. Digging shall be done the same season of planting and shall be done by hand as to not injure plants and to meet size requirements. No plant other than the required samples shall be dug or delivered to the site until the required inspections have been made and the plants or samples approved.

B. Dig balled and burlapped (BB) plants with firm, unbroken natural balls of earth, of sufficient diameter and depth to include the fibrous and feeding roots. No synthetic or mudded in balls will be accepted. No plants moved with a ball will be accepted if the ball is cracked or broken before or during planting operations.

C. Roots or ball of all plants shall be adequately protected at all times from excessive exposure to wind, sun, rain, hail, etc. Balled and burlapped plants that cannot be planted immediately on delivery shall be set on the ground and well protected with soil, wet moss or other acceptable material. Bare rooted plants shall be planted or heeled in immediately upon delivery.

D. All plant material shall be handled carefully to prevent injury to rootballs, trunks, or branches. Any plant suffering damage sufficient to impair its health and/or natural form will be rejected. No plant shall be bound with wire or rope at any time so as to damage the bark or break branches.

3.03 FERTILIZING SOD SUBSOIL

A. Apply fertilizer at a rate recommended by manufacturer. Apply after line grading and prior to compaction. Mix thoroughly into upper two (2") inches of topsoil.

B. Lightly water to aid the breakdown of fertilizer.

C. Apply fertilizer within forty–eight (48) hours.

3.04 LAYING SOD

A. Lay sod as soon passible after delivery to prevent deterioration.

B. Lay sod closely knit together with no open joints visible, and pieces not overlapped. Lay smooth and flush with adjoining grass areas. Finish grade to be one and a half inches (1½") below paving and top of surface curbs.

C. Immediately water sodded areas after installation. Water in sufficient amount to saturate sod and upper four inches (4") of soil.

D. After sod and soil has dried sufficiently to prevent damage, roll sodded areas to ensure good bond between sod and soil and to remove minor depressions and irregularities. Ensure rolling equipment weight not over 250 lbs. or less than 150 lbs.

3.05 TIME OF PLANTING

A. The contractor shall notify the Landscape Architect in writing when other divisions of the work have progressed sufficiently to commence landscape work, including placing of topsoil to finish grade. Thereafter, conduct planting operations under favorable weather conditions.

B. Any plant material installed during typical off seasons (hot summer months or freezing winter months) shall be done at the Contractor's own risk and the Contractor shall be held responsible for replacement of any plant material damaged due to these adverse conditions.

3.06 PLANTING OPERATIONS

A. General

1. The Contractor shall coordinate all aspects of the landscape operations with all aspects of the site construction. The work shall proceed as the indicated portions of the site become available, consistent with the seasonal limitations for landscape planting.
2. The Contractor shall be responsible for any damage to utilities construction, sitework construction, and underground sprinkler systems and shall bear the full cost to repair the damage. Accomplishment of repairs shall be equal to the original installation prior to damage. Any damage shall be immediately reported to the Landscape Architect and repairs shall be approved by him before it is buried.
3. Maintain all trench or grade stakes for work under other Sections until their removal is approved by the Landscape Architect.
4. The Contractor shall stake plant location, shrub pits, and other planting areas and secure the Landscape Architect's approval before starting excavation of same, making adjustments as necessary.
5. Unless otherwise directed by Landscape Architect, indication of plant on drawings is to be interpreted as including digging of hole, furnishing plant of specified size, work of planting, mulching, guying, staking, wrapping, and watering.

B. Plant Pits and Beds

1. Plant pits shall be excavated with vertical sides, large enough to allow twelve (12") inches of space around the ball in all directions. Adjust depth as necessary to permit a minimum of twelve (12") inches planting soil under the ball when the plant is set at the proper depth.
2. Planting pit backfill for all trees and shrubs shall be as follows:

1. 2/3 parts by volume on site soil.
2. 1/3 parts by volume forest mulch.
3. One pound 13–20–0 per cubic yard of mix.

3. Planting pits shall be backfilled with prepared backfill and be water settled to a grade sufficient that in the setting of plant, the finish grade level after settlement will be the same as that at which plants were grown. Agriform tablets to be used with each planting (six (6) for 36" box, three (3) for 15 gallon, two (2) for 5 gallon, and one (1) for 1 gallon).

C. Installations

1. Set plants in center of pits, plumb and straight and at such a level that after settlement the crown of the plant shall be two (2") inches below finish grade and forming a shallow trough directly over the ball of earth and slightly smaller that the pit to facilitate watering. Space all plants as shown.
2. Set balled and burlappped plants upon a well tamped layer of planting soil. Backfill around ball with planting soil in six to eight (6" – 8") inch lifts, each thoroughly tamped and puddled to top of pit. Avoid air pockets. Remove all ropes and wires from tops and sides of balls. No burlap shall be pulled out from under the balls.
3. Plants supplied in containers shall be installed immediately upon being removed from their containers. Removal of plants from containers shall be in a manner that will not disturb the root system or the soil in which they were planted. Under no conditions shall the plant be removed from the containers by pulling on the main stem or plant growth. No plants shall be installed with their containers remaining attached, except as noted on the drawings.
4. Before installing bare root plants, planting soil shall be placed and compacted to a depth of twelve (12") inches in the bottom of the plant pit. The plants shall be installed with their roots evenly distributed and spread in their natural position, with the planting soil being carefully placed and compacted around the roots so as to leave no air space.

D. Pruning, Wrapping, Mulching, Staking, and Spraying

1. Pruning
a. Plants shall not be pruned prior to delivery unless Landscape Architect gives written permission.
Pruning will occur only at time of planting and according to standard horticultural practice and at the direction of the Landscape Architect. Amount of pruning shall be limited and is not to exceed thirty–three (33%) percent of total plant as necessary to remove dead or injured twigs and branches and to compensate for root loss resulting from transplanting. Do not cut leaders.
b. Remove all dead wood, suckers, and broken or badly bruised branches.
c. Pruning shall be done with clean, sharp tools according to standard horticultural practices. Cuts shall be made flush leaving no splits.
d. Cuts over ½" inch diameter shall be painted over with approved tree paint. Paint shall cover all exposed cambium as well as other exposed living tissue. Injured cambium and bruises and scars shall be tracked back to living tissue and removed. Smooth and shave wounds so as not to retain water. Treat wound with paint.
2. Staking and Guying
a. Stake or guy all trees per detail. Trees which blow down, sway excessively, or are otherwise injured because of improper bracing shall be replaced at Contractor's expense.
3. Spraying
a. All groundcover and non–lawn areas shall be treated with pre–emergent.
4. Decomposed Granite
a. Prior to placing, the area shall be totally free of weeds using chemical control. Apply a pre–emergence control (Surflan or prior approved equivalent) according to manufacturer's recommendations. The decomposed granite shall be evenly distributed at the designated areas to a depth of two (2") inches. After placing and grading, lightly water to remove fine materials from the surface and water settle or roll to an extent satisfactory to the Landscape Architect. Apply second application of pre–emergence control according to manufacturer's recommendations.
b. Decomposed granite shall match size and color on plans, shall be free from lumps or balls of clay and shall not contain calcareous coating, caliche, organic matter or deleterious substances. Color and source of decomposed granite shall be approved by the Landscape Architect. All material shall be from a single production source and shall present a uniform appearance. Material containing clumps which will not disintegrate with a shovel blow shall be rejected.
5. Workmanship – Decomposed Granite
a. Install rock to a depth as indicated on the plans (typically two (2") inches thick).

6. Workmanship – Berms
a. Earth berms (mounding) shall take the form indicated on the plans. The Landscape Architect shall inspect and approve all finished grades prior to any planting.
7. Cleaning Up
a. Keep all areas of this project in a clean, neat, and orderly condition at all times. Trash burning and disposal shall not be done on the site. Prior to acceptance put all areas of the work in a finished condition acceptable to the Landscape Architect.

3.07 OBSTRUCTIONS BELOW GROUND

A. In the event that rock or underground construction work or obstructions are encountered in the excavation of plant pits, alternate locations may be selected by the Landscape Architect. Where locations cannot be changed, remove the obstructions (but not new construction work) to a depth of not less than six (6") inches below the required pit depth.

B. Proper drainage of plant pits is necessary. Bring subsoil conditions permitting the retention of water in planting pits for more than twenty–four (24) hours to the attention of the Landscape Architect, the changes required will not increase the contract price.

C. The Contractor is responsible for any damage to underground utilities resulting from landscape operations and bear the full cost to repair the damage. Accomplishments of repairs shall be equal to the original installation prior to damage. Report damage immediately to Landscape Architect who shall approve repairs before they are buried.

3.08 MAINTENANCE

A. Protect and maintain plant material (trees, shrubs, groundcover, lawn, and vines) immediately after planting. Maintenance to be provided for one (1) year from acceptance by the Landscape Architect. At the end of one (1) year the Landscape Architect may extend the maintenance period if during that period the maintenance is not acceptable. Maintenance includes watering, weeding, cultivation, mulching, tightening, and repairing of guys, removal of dead material, resetting plants to proper grade or upright positions and restoration of the planting saucer and other construction work until acceptance.

B. Sod
1. Maintain sodded areas immediately after placement and for a one (1) year period. After acceptance maintenance includes weekly mowing and as necessary irrigation adjustment.
2. During the one (1) year maintenance, coordinate maintenance mowing of new sod with Owner's maintenance personnel.
3. Water sod when required and in sufficient quantities to prevent grass and underlying soil from drying out.
4. Roll and sand sod when required to remove minor depressions or irregularities.
5. Control growth of weeds in sod. When using herbicides, apply in accordance with manufacturer's instructions. Remedy damage resulting from negligent or improper use of herbicides.
6. Immediately repair or replace any sodded areas which show deterioration or bare spots.
7. Protect sodded areas with warning signs during maintenance period.

3.09 INSPECTION FOR ACCEPTANCE

A. Inspection of the landscaping work to determine completion of contract work, exclusive of plants, will be made by the Landscape Architect at the conclusion of the maintenance period.

B. Acceptance: After inspection, the Contractor will be notified in writing by the Landscape Architect of all work of this Section, exclusive of the possible replacement of plants subject to reinspection and guarantee, or if there are and deficiencies of the requirements for completion of the work.

C. Upon acceptance made by the Landscape Architect, the Contractor's maintenance and warranty will run simultaneously.

3.10 PLANT GUARANTEE AND REPLACEMENT/FINAL ACCEPTANCE

A. The guarantee is for a period of one (1) year from date of acceptance by the Landscape Architect. The guarantee is for all new plant material, lawns, transplants, and existing plant material.

B. At the end of the guarantee period, the Landscape Architect shall reinspect all guaranteed work for Final Acceptance upon written request of Contractor. Request shall be received at least ten (10) calendar days before anticipated date for final inspection. Upon final inspection and reinspection of replacements or repairs necessary in judgment of Landscape Architect at that time, Landscape Architect shall certify in writing to Owner as to Final Acceptance of plantings. Contractor shall replace, without cost to Owner, as soon as weather conditions permit, and within specified planting period, all dead plants and all plants not in vigorous, thriving conditions as determined by Landscape Architect at the end of guarantee period. Plants shall be free of dead or dying branches and branch tips, and shall bear foliage of normal density, size, and color. Replacements shall closely match adjacent specimens of some species and shall be equal in size to previously planted specimens, including increased growth since planting Replacement shall be subject to all requirements of this Specification. If replacement plant material is not acceptable at end of two month period following replacement, Owner may elect subsequent replacement or credit for each item. Owner will retain sufficient amount from Contractor's payment to cover estimated cost of possible replacements at time of initial inspection for acceptance, including materials and labor. Contractor shall receive final payment only after all replacements have been made and approved.

C. Portions of lawns and/or plantings may be accepted in part upon Landscape Architect's approval.

PART 4 – MISCELLANEOUS AND GENERAL NOTES

4.01 FINISH GRADING AND GRADING

A. The General Contractor to provide Landscape Contractor finish grade within + 0.1 of a foot as shown on the civil grading plan and landscape plan.

B. All mounding, berms, and finish grading to be approved by the Landscape Architect prior to planting or irrigation work.

4.02 GENERAL NOTES

A. The Landscape Contractor at his own expense shall procure all permits, certificates, and licenses required of him by law for the execution of this work. He shall comply with all state, county, and local laws, ordinances, rules, or regulations relating to the performance of this work. All deductions or additions will be made through a change order issued by the Architect. Changes made without a change order are not considered part of the contract and payment cannot be guaranteed.
B. The Contractor shall visit and inspect site to thoroughly inform himself of all existing conditions. Any discrepancies between existing conditions and those shown on drawings should immediately be brought to the attention of the Landscape Architect.

IRRIGATION SPECIFICATIONS SECTION 02900

PART 1 – GENERAL

1.01 WORK INCLUDED

A. The work included under these specifications shall consist of the furnishing of all labor, materials, permits, tools, and equipment necessary for the complete installation of a sprinkler irrigation system in accordance with the following specifications and accompanying drawings.

B. It is the intent of these drawings and specifications to form a guide for a complete installation, and although some items may not be specifically noted, but are reasonably necessary for a complete installation, they shall be furnished under this contract. Sprinklers shall be located and spaced so that adequate overlapping of the spray will provide uniform head to head (100%) coverage. The system shall efficiently and evenly irrigate all areas, and shall be complete in every respect, ready for operation by the Owner.

C. It is the responsibility of the Irrigation Contractor to provide 100% coverage to all landscape areas.

1.02 CONTRACTOR'S QUALIFICATIONS

A. Installers shall be licensed irrigation contractors with experience in the installation of automatic underground lawn sprinkling systems. All work shall be performed in a professional workmanlike manner by mechanics skilled in the trade.

B. The Contractor shall be responsible for any damage to any work covered by these specifications, under his care and custody, until final acceptance of his work.

C. The Contractor shall obtain all permits from, pay required fees to, and arrange any necessary inspections by any government agency having jurisdiction over the work.

1.03 VERIFICATION OF DRAWINGS AND SPECIFICATIONS

A. It shall be the Contractor's responsibility to carefully examine the drawings and specifications, and to visit the site in order to check existing conditions prior to bidding. Any conflict or errors shall be immediately brought to the attention of the Landscape Architect for interpretation or instructions. Otherwise, any changes necessary to meet existing conditions, shall be made at the Contractor's expense.

B. It is the Irrigation Contractor's responsibility to verify water pressure, water source, and size in the field prior to construction. Should a discrepancy exist between design pressure and the field pressure the Landscape Architect shall be notified immediately.

1.04 WORKING CONDITIONS

A. The Contractor shall confine his operations to the areas allotted to him by the Owner, for his work and for material and equipment storage.

B. The Contractor shall continuously maintain a competent superintendent, satisfactory to the Owner, on the work during progress, with authority to act for the Contractor in all matters pertaining to the work.

C. The Contractor shall not assign nor sublet any portion of this work without written approval by the Owner.

D. The Contractor shall be responsible for staking out the system from the drawings, using the property lines and building dimensions as a guide.

E. The Contractor shall coordinate his work with that of the other trades, so as to avoid any conflict, and carry the installations to a rapid completion without any unnecessary delays.

PART 2 – PRODUCTS

2.01 PIPING

A. All pressure main piping, on the supply side of the zone valves, shall be class 200 PVC with integrally formed bell–tite joint couplers. All fittings shall be solvent welded, schedule 40 PVC.

B. All lateral piping, on the discharge side of the zone valves, two (2") inches and under, shall be class 200 PVC. Fittings shall be schedule 40 PVC material.

C. All plastic to metal shall be made with PVC schedule 40 male adaptors or PVC schedule 80 nipples. Joint compound for such connections shall be Permatex Type II Teflon tape or a prior approved equivalent.
D. Where pipes are installed under roads, drives, parking areas or walks, schedule 40 PVC sleeves shall be provided for the lines. In planting areas, where cultivation might damage shallow plastic piping, protective sleeves must be provided, unless copper tubing is installed. Risers in flower beds and shrubbery shall be schedule 80 PVC.

2.02 SPRINKLER HEADS

A. Emitter heads shall be on PVC laterals, or prior approved equivalent.

2.03 AUTOMATIC CONTROLLER

A. Unit features shall include mechanical time control design, adjustable time setting up to 60 minutes per station, 24–hour clock, 14–day calendar, and automatic rapid advance. Unit shall be UL listed and shall operate on 120 volt, 1 phase, 60 Hertz power. General Contractor to bring power to controller. Irrigation Contractor to hardwire to controller, see detail.

2.04 QUICKCOUPLING VALVES

A. Furnish and install where shown on the drawings quick–coupler with swivel and hose bib, 3/4" size, or prior approved equivalent. They shall be mounted on one (1") inch copper swing joint risers, and the tops shall be set flush with the top of the planters. Furnish and deliver to the Owner double–lug coupler key complete with one (1") inch hose swivel for connecting to the above valves. Also furnish two (2) locktop cover key.

2.05 ELECTRICAL CONTROL CABLE

A. All electrical control and ground wire shall be irrigation control cable of size as required. All wiring to be used for connecting the automatic remote control valve to the automatic controllers shall be Type "UF" 600 volt, stranded or solid copper, single conductor core with PVC insulation and bear UL approval for direct underground burial feeder cable.

B. All control or "hot" wires shall be on one color (red) and all common or "ground" wires shall be or another color (white).

C. Verification of wire types and installation procedures shall be checked to conform to local codes.

D. All electric control cable shall be of size as determined by the equipment manufacturer and shall be installed in the piping trenches wherever possible and in the manner recommended by the manufacturer, leaving slack in the wire. Expansion joints in the wire may be provided at 200–foot intervals by making five or six (5 or 6) turns of the wire around a piece of ½" inch pipe. where it is necessary to run wire in a separate trench, the wire shall have a minimum cover of twelve (12") inches.

PART 3 – INSTALLATION

3.01 PROTECTION OF UTILITIES, IRRIGATION SYSTEM, ETC.

A. The Contractor shall verify the location of all utilities and mark location of utilities, irrigation piping and underground obstructions. The contractor shall be responsible for the cost of repairing buried conduit, cables or pipeline damaged during the installation of the irrigation system.

B. The Contractor shall clearly mark and maintain markers showing locations of irrigation system wiring and piping installed in order that other contractors may avoid damaging this work.

C. The Contractor shall take necessary precautions to protect site conditions and plant materials which are to remain. Should damage be incurred. Contractor shall repair damage to its original condition or furnish and install equal replacement at his expense.

D. The Contractor shall coordinate with the Landscape Architect to provide irrigation to existing materials.

3.02 EXCAVATION

A. The Contractor shall do all necessary excavation for the proper installation of his work. Mechanical trenchers used on the site shall be of an approved type to cut smooth–bottom trenches on uniform slopes. Trenches shall be no wider than necessary to lay the pipe, except where necessary to make joints. Over excavating shall be backfilled and carefully tamped to provide a smooth and firm bearing surface for laying the pipe. When necessary, Contractor must provide barricades and lights for public protection. Minimum depth of cover shall be at least eighteen (18") inches for the main piping, and at least twelve (12") inches for the lateral branch lines.

3.03 PIPE INSTALLATION

A. All pipe lines shall be installed in the locations and of the sizes indicated, and of the materials specified Parallel piping may be installed in the same trench. Piping shall be laid accurately to the line and grade required, with full uniform bearing on the trench bottom. No piping shall be laid on the soft fill or other unstable material. No direct contact, with other piping or structures, will be permitted at crossing. Interior of piping shall be kept clear of foreign matter before installation, and shall be kept clean by means of plugged or capped ends after lowering into the trench. The supply main lines shall be flushed out and tested for leads, with control valves in place, before backfilling of the joints. All lateral piping sections shall be flushed out before sprinkler heads are attached. All pipe shall be installed in strict accordance with recommendations of the manufacturer. This shall apply to thrust blocking, handling, storage, depth of cover, expansion allowance, testing, etc.

B. Under existing drives or sidewalks, the Contractor shall either saw cut concrete and replace it to the former condition or install the pipe by boring or jacking under the area.

3.04 BACKFILLING
A. As soon as the work has been installed, inspected and accepted, all excavations and trenches shall be filled and water settled with fine earth materials, free from clods, rocks, or other unsuitable substances. Trenches must be left flush with adjacent finished grade after compacting to the original density of the soil. Flooding of trenches will be permitted downstream of zone valves. Care shall be taken to place any previously tilled and fertilized soil in the top portion of the trench, and subsoil will not be allowed in the top six (6") inches of the backfill.

3.05 SPRINKLER HEADS

A. Sprinklers shall be set plumb and level with the turf at locations shown on the drawings. In lawn areas where grass has not been established, the heads shall be installed in temporary risers at least three inches (3") above the grade. After the turf is established, the Contractor shall, within ten (10) days after notification, lower the heads to their permanent positions flush with the finished grade. This elevation is critical and Contractor shall exercise care to set them exactly at grade – never below.

3.06 AUTOMATIC VALVES

A. Each sprinkler zone shall be operated by automatic electric valves in the sizes indicated on the drawings. Each valve shall be provided with a built–in pressure regulator capable of holding a steady downstream pressure, regardless of fluctuations in the main supply pressure. The valves shall be installed where shown and supplied with a tag on which the valve zone number shall be plainly marked.

B. All valves to be in valve boxes.

C. Each valve shall be housed in an Ametex valve box, or prior approved equivalent. Place valve boxes in an orderly fashion. In the lawn place valve boxes in such a manner that mowing and weeding can easily be performed.

3.07 WATER SUPPLY

A. Connection shall be made to the sprinkler outside the building as shown on the drawings.

B. Water meter to be supplied by others.

3.08 ELECTRICAL WORK

A. The Electrical Contractor will provide a single source of electrical power for the irrigation system as shown on the drawings. The Underground Sprinkler System Contractor shall furnish and install complete and properly operating all the required electrical work for the lawn irrigation system. This shall include all power and control wiring along with switches, safety switches, relays, transformers, fuses, conduit, wiring devices, etc., required for a properly operating system.

B. All electrical work shall be done in accordance with the National Electrical Code and local ordinances.

C. All wire connections, at remote control valves (either direct buried or in control boxes) and at all wire splices, shall be left with sufficient "slack" so that in case of repair the valve bonnet or splice may be brought to the surface without disconnecting the wires.

D. Each remote control valve or group of remote control valves, which are to be connected to one station of a controller, shall have wire sizes as shown in the wiring diagrams on the drawings or as specified. All remote control valves, which are to be connected to the same controller, shall be connected to a common ground wire to size as shown on the drawings or as specified. Each individual controller shall have a separate common ground wire system entirely independent of the common ground wire system of all other controllers. Only those remote control valves which are being controlled by on specific controller shall be connected to that controller's common ground wire system.

3.09 TESTING

A. After all supports, anchors, and thrust blocks are in place, the line shall be tested at a pressure of 150 psi 30 minutes. Should any leaks be found, they shall be repaired and the line retested until satisfactory. Zone lines shall be tested at 80 psi in like manner. After testing, the system shall be thoroughly flushed out before the heads may be installed. Upon completion, an operating test shall be performed to visually check the coverage of the system. Any heads, which do not function according to the manufacturer's data shall be replaced with sprinklers that do or the installation shall be otherwise corrected to provide satisfactory performance. Final adjustment of the sprinkler heads and automatic equipment will be done by the Contractor upon completion of the installation to the satisfaction of the Landscape Architect. Minor adjustement from then on shall be made by the Owner's Maintenance Staff.

3.10 DRAWINGS OF RECORD

A. The Contractor shall provide and keep up to date a complete "as–built" record set of mylar sepias which shall be corrected to show any changes from the original drawings. These record drawings shall show location of all control lines, valves, valve boxes, main lines, flush caps, controllers, and any substitutions as well as any deviation in piping or location of buried valves, etc. with accurate dimensions indicated.

B. After completion of the sprinkler installation, the Contractor shall deliver to the Owner three (3) prints of the correct and completed "as–built" set of drawings, along with three (3) bound instruction folders covering the equipment installed. Contractor shall present the above information as a condition precedent to the completion payment.

3.11 GUARANTEE

A. Within ten (10) days after the Contractor's notification that the sprinkler installation is complete, the Landscape Architect will inspect the system and, if necessary, submit a "punch list" to the Contractor. Acceptance by the Landscape Architect of these corrections will signify final acceptance by the Owner.

B. The entire sprinkler system shall be guaranteed for a period of one (1) year from this final acceptance date. The Contractor shall promptly replace, without cost to the Owner, any defective materials or faulty workmanship which may develop within this guarantee period, including restoration of any property damaged during repairs. He shall also be responsible for damages resulting from leaks which may occur in the piping system installed by him, and he shall repair, at his expense, all damage so caused, in a manner satisfactory to the Owner. However the Contractor shall not be held liable for damages occasioned by strikes, fire, weather, violence or theft, acts of God, acts of other contractors, or any other cause beyond the control of the Contractor.

C. It will be the Owner's responsibility to maintain the system in working order during the guarantee period, performing necessary minor maintenance, keeping grass from obstructing the sprinkler heads, protecting against vandalism and preventing damage during the landscape maintenance operation.

D. The Contractor shall service the system at the Owner's request during the guarantee period, and shall be paid for work performed which is not covered by the guarantee, in accordance with a predetermined schedule of fees.

KIVA # 18-3011
QS# 45-24
SDEV # 1800624
LSPL # 1806042
PAPP # T82848
PRLM #
ZONING: C-1 & S-2

CALL TWO WORKING DAYS BEFORE YOU DIG
602-263-1100
1-800-STAKE-IT
(ENTERIS MARICOPA COUNTY)

LASKIN & ASSOCIATES, INC.
LANDSCAPE ARCHITECTS
67 East Weldon Ave
Suite 230
Phoenix, Arizona 85012
p (602) 840-7771
f (602) 840-8021
www.laskindesign.com

REGISTERED LANDSCAPE ARCHITECT
CERTIFICATE NO. 20088
HARDY A. LASKIN
12-5-18
Date Signed
ARIZONA, U.S.A.

B[redacted] R[redacted]d l[redacted]r[redacted]
B[redacted]r Pr[redacted]d 202 [redacted] 57 [redacted] C[redacted]d
L[redacted] Ar[redacted] 85339

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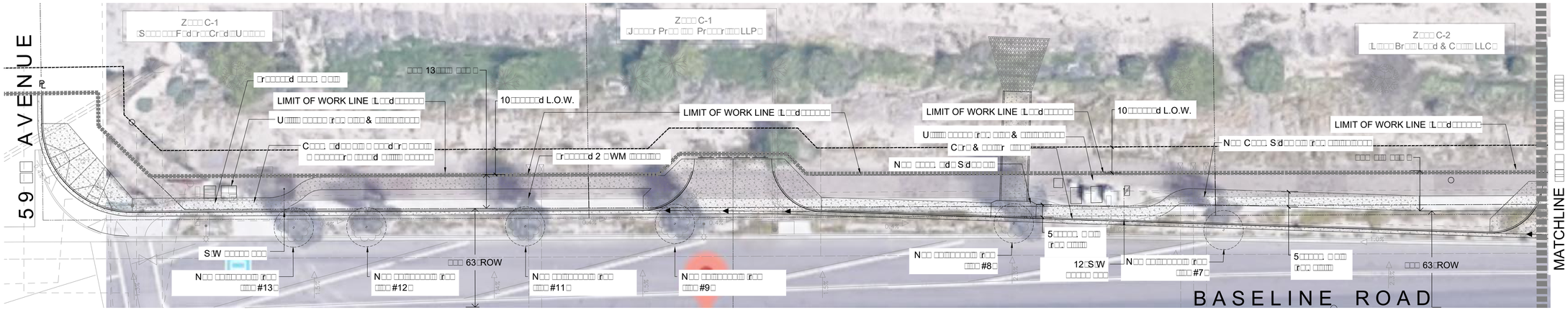
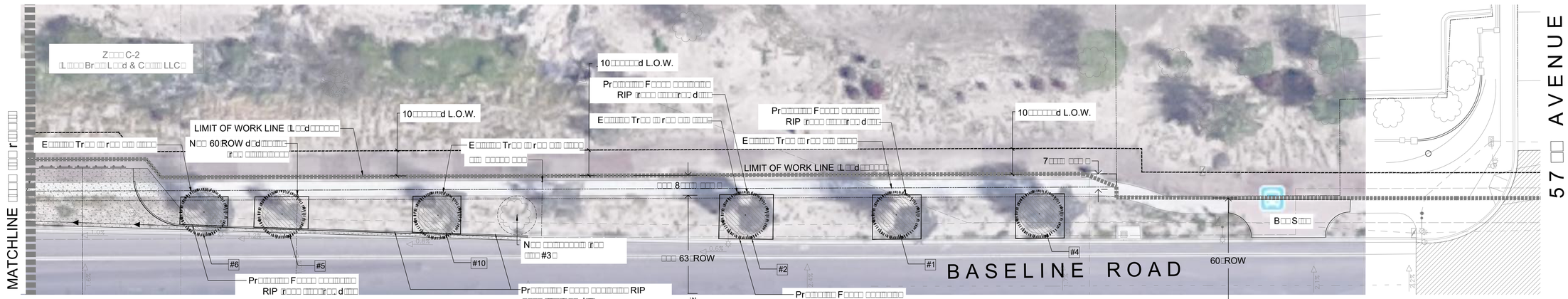
SHEET NUMBER
SPECIFICATIONS
LA-14
14 of 14





Salvage Inventory Plan

SCALE: 1" 20'-0"

NOTE: THERE ARE NO OVERHEAD UTILITIES ON THIS PROJECT

CITY OF PHOENIX GENERAL INVENTORY SALVAGE NOTES

1. T C P G N A Add d d d

CITY OF PHOENIX STREET LIGHTING
BASELINE ROAD
W BASELINE RD & S 59TH AVE

Registered Professional Engineer (Electrical) Certificate No. 46691 ADAM M. BOWERS Date Signed 11-30-18 ARIZONA U.S.A. Expires 9-30-19

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.			

WRIGHT engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DR • CHANDLER, AZ 85225
PHONE 480.497.5829
FAX 480.497.5807
www.wrightengineering.us
WRIGHT PROJECT # 18202

DR: NBG | DES: NBG | CK: AMB | DATE: 09/2018

STREET LIGHT LAYOUT: W BASELINE RD & S 59TH AVE

KIVA#: 18-3011

CCPR OR CSPR#:

STREET LIGHTING GENERAL NOTES

THE FOLLOWING INFORMATION IS PROVIDED TO EMPHASIZE CRITICAL WORK AND IS INTENDED TO SUPPLEMENT THE SPECIFICATIONS.

1. THE CONTRACTOR SHALL COMPLY WITH STATE AND CITY STATUTES AND ORDINANCES.
2. PRIOR TO SUBMITTAL, THE STREET LIGHT DESIGNER SHALL EXAMINE ALL GENERAL CONSTRUCTION DRAWINGS AND VISIT THE CONSTRUCTION SITE TO BECOME FAMILIAR WITH EXISTING CONDITIONS UNDER WHICH HE WILL OPERATE AND WHICH WILL IN ANY WAY AFFECT THE WORK UNDER THE CONTRACT.
3. THE STREET LIGHT DESIGNER SHOULD VERIFY DIMENSIONS AT THE SITE AND IMMEDIATELY REPORT DIFFERENCES TO THE DEVELOPER'S CONSTRUCTION MANAGER AND NOT PROCEED WITH WORK UNTIL THE CONSTRUCTION MANAGER RENDERS A DECISION.
4. THE ELECTRICAL CONTRACTOR SHALL COMPLY WITH ALL LICENSING REQUIREMENTS SET FORTH BY THE STATE REGISTRAR OF CONTRACTORS OFFICE TO PERFORM WORK RELATING TO STREET LIGHT INSTALLATION IN CITY OF PHOENIX RIGHT-OF-WAY.
5. ONE DRY UTILITY PERMIT FOR EACH CITY OF PHOENIX STREET LIGHT PROJECT SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
6. LIGHT POLES SHALL BE INSTALLED PLUMB, BE ADJUSTED TO PROVIDE PROPER ALIGNMENT TO THE ROADWAY BEING LIGHTED AND BE PROPERLY GROUNDED WHEN THE INSTALLATION IS COMPLETED.
7. STREET LIGHTS ARE INSPECTED BY THE CITY OF PHOENIX STREETLIGHTING INSPECTOR. WHEN ACCEPTED AND ENERGIZED THE CONTRACTOR WILL INSTALL POLE NUMBERS PRIOR TO INSPECTION.
8. LUMINAIRES SHALL BE INSTALLED LEVEL AND INCLUDE A LAMP AND PHOTOCELL. THE LUMINAIRES SHALL BE FREE OF DUST, DIRT OR ANYTHING THAT WOULD IMPAIR THE OUTPUT OF THE LIGHT.
9. LUMINAIRES FURNISHED WITH MULTI-TAP DRIVERS SHALL BE REWIRED OR RECONNECTED TO MATCH THE VOLTAGE SUPPLIED BY THE ELECTRIC UTILITY COMPANY.
10. POLE SHALL BE SET PLUMB IN TWO DIRECTIONS, NINETY (90) DEGREES APART.
11. SURPLUS EXCAVATION SHALL BE DISPOSED OF BY THE CONTRACTOR.
12. WIRING SHALL BE INSTALLED PER SERVING UTILITY COMPANY STANDARDS. CONDUIT SHALL BE INSTALLED AT THE DEPTH SPECIFIED ON THEIR PLANS.
13. CONDUIT MUST BE LISTED AND LABELED AND SUITABLE FOR UNDERGROUND USE.
14. CONNECTIONS SHALL BE PER SERVING UTILITY COMPANY STANDARDS. EACH POLE SHALL HAVE A 8' X 5/8" COPPER CLAD GROUND ROD DRIVEN BENEATH PULL BOX. A #6 BARE COPPER LEAD FROM THE GROUND ROD IN PULL BOX TO LANDING LUG IN STREET LIGHT POLE HAND HOLE IS REQUIRED.
15. EXCAVATION FOR PULL BOXES AND MATERIAL SPECIFICATIONS SHALL BE PER SERVING UTILITY COMPANY STANDARDS.
16. TRENCH SHALL BE INSTALLED PER SERVING UTILITY COMPANY STANDARDS. THE USE OF A COMMON ELECTRIC UTILITY COMPANY TRENCH IS PERMITTED.
17. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY COMPANY FOR COORDINATION OF THE TRENCHING AND THE INSTALLATION OF CONDUIT.
18. IT IS THE CONTRACTOR'S RESPONSIBILITY TO RESTORE ALL PROPERTY, LANDSCAPING, PAVING AND DRIVEWAYS THAT ARE DISTURBED DURING STREET LIGHT CONSTRUCTION TO THEIR ORIGINAL CONDITION IN CONFORMANCE WITH MAG SPECIFICATION SECTION 107.9.
19. IF A FIXTURE SHOULD FAIL, IT SHALL BE IMMEDIATELY REPLACED. THE DEVELOPER SHALL BE RESPONSIBLE FOR FURNISHING ALL PERSONNEL AND EQUIPMENT NECESSARY TO SUCCESSFULLY REPAIR THE FIXTURE.
20. THE CONTRACTOR SHALL GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE ENGINEERING MANAGER, AGAINST IMPERFECT WORKMANSHIP, FAILURE, MALFUNCTION OF MATERIALS AND/OR EQUIPMENT DUE TO FAULTY OR IMPERFECT WORKMANSHIP.
21. THIS GUARANTEE IS TO BE IN WRITING TO THE CITY AT THE TIME OF ISSUING FINAL ACCEPTANCE. MATERIALS AND WORKMANSHIP FOUND TO BE DEFECTIVE WITHIN THE WARRANTY PERIOD SHALL BE REPLACED WITHOUT COST TO THE CITY.

SALT RIVER PROJECT (SRP) NOTES

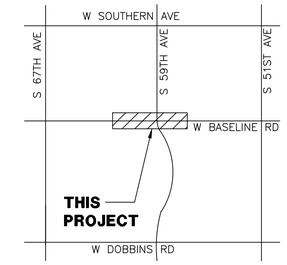
1. CONTRACTOR SHALL CALL SRP FOR A PRE-CONSTRUCTION MEETING PRIOR TO ANY EXCAVATION AT (602) 236-6300.
2. CONTRACTOR WILL SUPPLY ALL TRENCHING AND CONDUIT IF REQUESTED BY THE COP PROJECT MANAGER.
3. CONTRACTOR WILL STAKE STREET LIGHTS PER CITY OF PHOENIX APPROVED STREET LIGHT CONSTRUCTION DRAWINGS.
4. GRADE STAKE WILL BE SET WITHIN TWO (2) FEET OF J-BOX LOCATION.
5. CONTRACTOR WILL COORDINATE WITH SRP AND CITY OF PHOENIX FOR DE-ENERGIZING OF STREETLIGHT CONDUCTOR.
6. GROUND ROD WILL BE PROVIDED AND INSTALLED BY CONTRACTOR IN SRP J-BOX AT EACH STREETLIGHT LOCATION.
7. #6 BARE COPPER GROUND WIRE TO BE ATTACHED FROM GROUNDING LUG ON STREETLIGHT POLE TO GROUND ROD IN J-BOX.
8. IF THE CONTRACTOR INSTALLS THE POLE, THE BARE #6 COPPER GROUND WIRE SHALL BE CONNECTED FROM THE GROUND ROD IN THE SRP J-BOX TO THE GROUND CONNECTION IN THE POLE HAND-HOLE.
9. ALL TRENCHING AND CONDUIT TO BE INSPECTED BY SRP. DO NOT BACKFILL UNTIL INSPECTED.
10. SRP CONSTRUCTION PRINT MUST BE USED AS A TRENCHING REFERENCE. TRENCHING VARIATIONS MUST HAVE WRITTEN SRP DESIGNER APPROVAL. FOLLOW DETAILS FOR CONSTRUCTION. VARIATIONS IN TRENCH ROUTE MAY RESULT IN A REDESIGN FEE PAYABLE BY CONTRACTOR.
11. TRENCHES SHOULD BE STRAIGHT, LEVEL AND FREE OF DEBRIS. ALL TRENCH DEPTHS MEASURED FROM FINAL GRADE TOP OF CONDUIT (PER SRP DESIGN) WITHIN ALL EASEMENTS AND RIGHT OF WAY. MAINTAIN MINIMUM 6" CLEARANCE FROM WATER LINES, 19" FROM ALL GAS LINES AND 12" CLEARANCE FORM OTHER UTILITIES.
12. USE DB120 PVC FOR ALL STRAIGHT CONDUIT, 36" RADIUS SCHEDULE 40 PVC SWEEPS FOR ALL ELBOWS. NO REDUCERS ARE ALLOWED IN CONDUIT SYSTEM, NO COUPLINGS OR BELL ENDS ARE ALLOWED AT EQUIPMENT LOCATIONS. ALL CONDUITS WITHIN ROAD RIGHT OF WAY OR P.U.E. MUST BE RED.
13. RETAINING WALLS ARE REQUIRED ADJACENT TO EQUIPMENT WHERE THE GRADE SLOPE IS GREATER THAN 30" IN 12'.
14. ALL CONDUIT STUB OUTS ARE TO BE CAPPED AND MARKED WITH ELECTRONIC MARKER AND 7" RED FLAG MARKING RIBBON.
15. HARD CAPS ARE TO BE USED FOR ALL STUB OUTS BELOW GRADE.
16. A MANDREL INSPECTION IS REQUIRED WITH SRP INSPECTOR WITHIN 3 DAYS OF FINAL INSPECTION. CONTRACTOR MUST PROVIDE 2 REPRESENTATIVES, MINIMUM 125-CFM TRAILER MOUNTED COMPRESSOR AND ALL NECESSARY ATTACHMENTS.
17. THE CONTRACTOR IS RESPONSIBLE FOR THE INTEGRITY OF ALL CONDUITS UNTIL SRP HAS INSTALLED CONDUCTORS.
18. BACKFILL REQUIREMENTS FOR A TRENCH IN OR UNDER FUTURE PAVEMENT TO BE 1 PART SLURRY MIX IN ROAD RIGHT OF WAY AND IN DIRT TO BE 1/2 SLURRY MIX AND 1/2 SLURRY MIX MAXIMUM UNDER ALL SRP EQUIPMENT.
19. SEE DUCT BANK SPECIFICATIONS FOR ALL DUCT BANK ENCASEMENT REQUIREMENTS.

DEVELOPER

59TH AND BASELINE LLC
1700 W. HORIZON PKWY, STE. 101
HENDERSON, NV 89012

ELECTRICAL ENGINEER

WRIGHT ENGINEERING CORPORATION
165 EAST CHILTON DRIVE
CHANDLER, AZ 85225
PHONE: (480) 497-5829
FAX: (480) 497-5807
CONTACT: ADAM BOWERS, PE



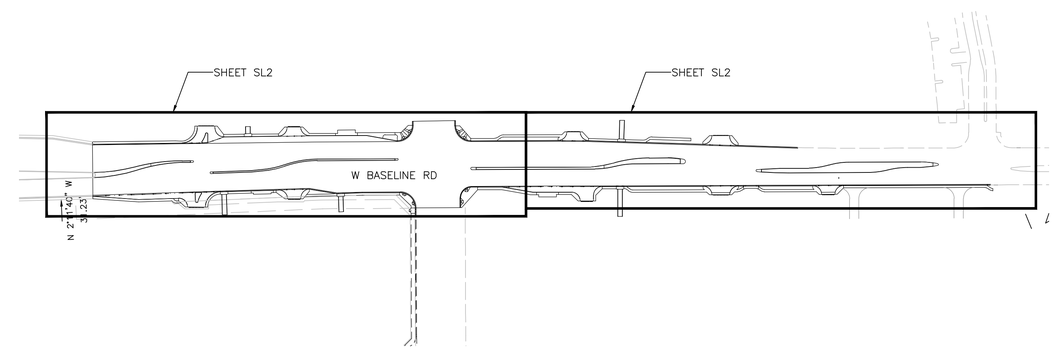
VICINITY MAP

N.T.S.

NORTH

SHEET INDEX

STREET LIGHT COVER SHEET	SL1
STREET LIGHT PLAN	SL2
STREET LIGHT DETAILS	SL3



GRAY ROADWAY LED STREETLIGHT POLE AND LUMINAIRE SPECIFICATIONS

ITEM NUMBER	TYPE OF STREET	QUANTITY	MOUNTING HEIGHT	POLE LENGTH	MAST ARM	APPROVED POLE & ARM MANUFACTURERS	LUMEN	TYPE	WATTAGE	VOLTAGE	LUMINAIRE STYLE	APPROVED LUMINAIRE MANUFACTURERS
1	ARTERIAL	6	32'-11"	38'-6"	20"x6'	CEM-TEC VALMONT SOUTHWEST FABRICATION, LLC	9,250	LED	97 W	120/240 AS POWER CO. REQUIRES	COBRAHEAD	GENERAL ELECTRIC ERL1010C327A GRAY R
2	ARTERIAL	5	32'-11"	38'-6"	DOUBLE 20"x6'	CEM-TEC VALMONT SOUTHWEST FABRICATION, LLC	(2) 9,250	LED	(2) 97 W	120/240 AS POWER CO. REQUIRES	COBRAHEAD	GENERAL ELECTRIC ERL1010C327A GRAY R

ARIZONA BLUE STAKE
CALL TWO WORKING DAYS BEFORE YOU DIG
Dial 811 or
602-263-1100
1-800-STAKE-IT
(OUTSIDE MARICOPA COUNTY)

SDEV #

"PER CITY OF PHOENIX ORDINANCE G-4396, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

STREET LIGHT COVER SHEET

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

BASELINE ROAD & S 59TH AVE
BASELINE ROAD
STREET LIGHTS

KIVA #: 18-3011			FILE NO:	
DR: NBG	DES: NBG	CK: AMB	SHEET NO:	TOTAL SHEETS
SCALE: AS SHOWN		QS. #: 01-14 & 01-15	SL1	4

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.			

Registered Professional Engineer (Electrical) Certificate No. 46691 ADAM W. BOWERS Date Signed 11-30-18 Expires 9-30-19

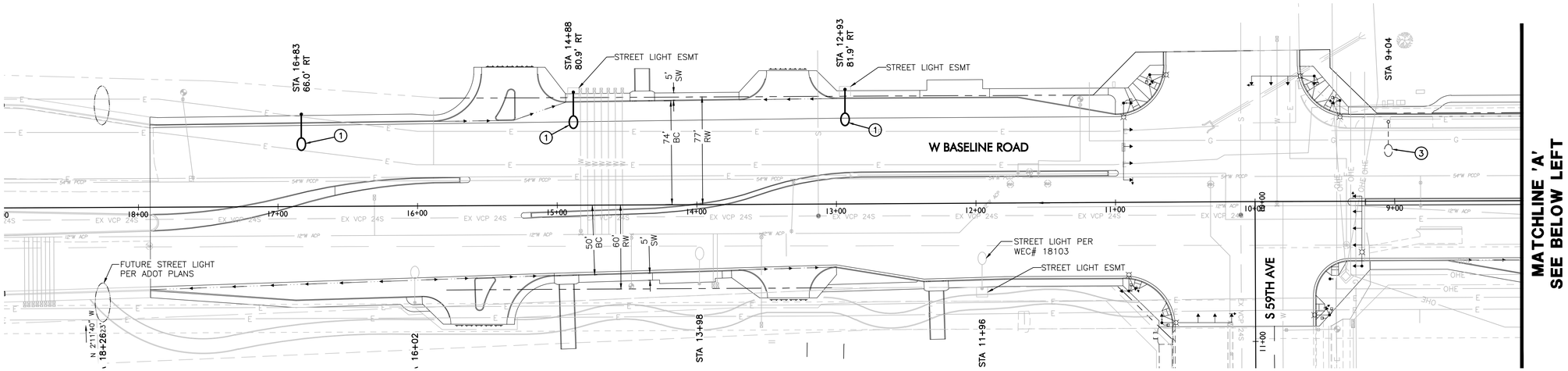
WRIGHT engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DR • CHANDLER, AZ 85225
PHONE 480.497.5829
FAX 480.497.5807
www.wrightengineering.us
WRIGHT PROJECT # 18202

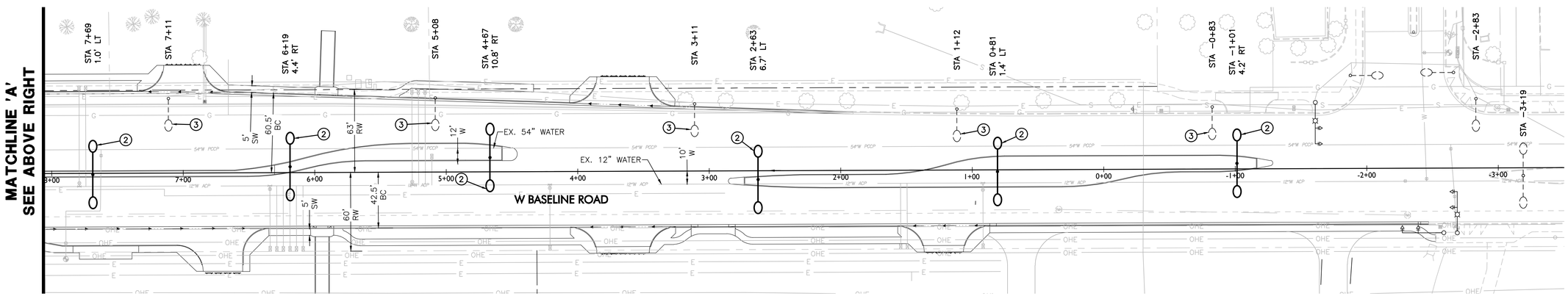
DR: NBG	DES: NBG	CK: AMB	DATE: 09/2018

STREET LIGHT LAYOUT: W BASELINE RD & S 59TH AVE

KIVA#: 18-3011

CCPR OR CSPR#:





LEGEND

- 97W LED (9,250 LUMEN) COBRAHEAD LUMINAIRE ON A SINGLE ARM POLE WITH A 32'–11" MOUNTING HEIGHT
- 97W LED (9,250 LUMEN) COBRAHEAD LUMINAIRE ON A DOUBLE ARM POLE WITH A 32'–11" MOUNTING HEIGHT
- FUTURE STREET LIGHT
- FIRE HYDRANT
- EXISTING TRAFFIC SIGNAL WITH LUMINAIRE
- EXISTING TRAFFIC SIGNAL WITH NO LUMINAIRE
- STREET LIGHT PER WEC# 18103 – LAVEEN PARK PLACE

STREETLIGHT NOTES

1. INSTALL ONE 97W LED (9,250 LUMEN) LIGHT FIXTURE, PER DETAIL LT1 (CL63) WITH PHOTOELECTRIC CONTROL ON A 38'–6" POLE WITH A 20"X6' MAST ARM PER DETAIL 8040 (1944.38X) AND SPECIFICATIONS. POLE SHALL BE CENTERED PER OFFSET SHOWN ON PLANS. INSTALL (2) #12 THHN/THWN FROM LUMINAIRE TO FUSE HOLDER IN POLE PER DETAIL WG1. INSTALL SRP PULL BOX, PER DETAIL JB1, ADJACENT POLE WITH 1" FLEX CONDUIT TO POLE PER SRP SPECIFICATIONS AND REQUIREMENTS. ALL WIRING, FUSING, AND GROUNDING PER DETAIL WG1 AND SPECIFICATIONS.
2. INSTALL TWO 97W LED (9,250 LUMEN) LIGHT FIXTURES, PER DETAIL LT1 (CL63) WITH PHOTOELECTRIC CONTROL ON A 38'–6" POLE WITH DOUBLE 20"X6' MAST ARMS PER DETAIL 8040 (1944.38X) AND SPECIFICATIONS. POLE SHALL BE CENTERED PER OFFSET SHOWN ON PLANS. INSTALL (2) #12 THHN/THWN FROM LUMINAIRE TO FUSE HOLDER IN POLE PER DETAIL WG1. INSTALL SRP PULL BOX, PER DETAIL JB1, ADJACENT POLE WITH 1" FLEX CONDUIT TO POLE PER SRP SPECIFICATIONS AND REQUIREMENTS. ALL WIRING, FUSING, AND GROUNDING PER DETAIL WG1 AND SPECIFICATIONS.
3. REMOVE EXISTING STREET LIGHT POLE, MAST ARM, LUMINAIRE, AND DISPOSE OF PROPERLY.

NORTH

GRAPHIC SCALE

40 20 0 20 40 80

1 INCH = 40 FEET

"PER CITY OF PHOENIX ORDINANCE G-4396, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

STREET LIGHT PLAN

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

BASELINE ROAD & S 59TH AVE
BASELINE ROAD
STREET LIGHTS

ARIZONA BLUE STAKE
CALL TWO WORKING DAYS BEFORE YOU DIG
Dial 811 or
602-263-1100
1-800-STAKE-IT
(OUTSIDE MARICOPA COUNTY)

KIVA #: 18-3011			FILE NO:	
DR: NBG	DES: NBG	CK: AMB	SHEET NO:	TOTAL SHEETS
SCALE: AS SHOWN		QS. #:01-14 & 01-15	SL2	4

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.			

Registered Professional Engineer (Electrical) Certificate No. 46691 ADAM M. BOWERS Date Signed 11-30-18 Expires 9-30-19

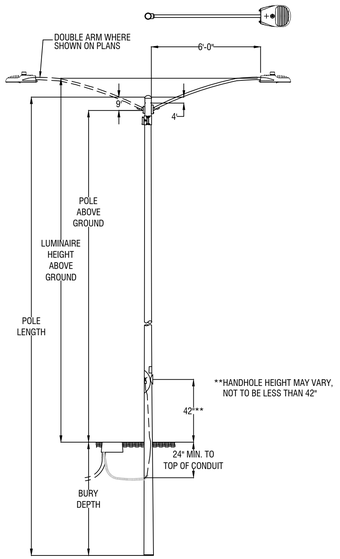
WRIGHT engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DR • CHANDLER, AZ 85225
PHONE 480.497.5829
FAX 480.497.5807
www.wrightengineering.us
WRIGHT PROJECT # 18202

DR: NBG | DES: NBG | CK: AMB | DATE: 09/2018

STREET LIGHT LAYOUT: W BASELINE RD & S 59TH AVE

KIVA#: 18-3011

CCPR OR CSPR#:



1944.__
- 19 = 10' - 0" POLE SNG SIMPLEX
- 30 = 30' - 6" POLE SNG SIMPLEX
- 38 = 38' - 6" POLE SNG SIMPLEX
- 38X = 38' - 6" POLE DBL SIMPLEX
- ** SEE SPEC. NOTE

CONSTRUCTION NOTES:

1 ADJUST PHOTO EYE TO FACE NORTH

2 A GROUND ROD IS PROVIDED WITH THE JUNCTION BOX. WHERE A GROUND ROD CANNOT BE DRIVEN ALTERNATE GROUND SHALL BE USED. SEE 2449 THRU 2460 FOR APPROVED ALTERNATES.

3 THE 40'-6" SELF-SUPPORTING STEEL POLE AND ONE OF THE 38'-0", HAVE TWO, MANUFACTURED INSTALLED SIMPLEX FITINGS 180 APART FOR DOUBLE ARMS, SEE CHART.

4 APN 33701054 IS A POLE BAND ADAPTOR WITH A SIMPLEX FITTING. ADAPTOR IS REQUIRED FOR THE SECOND ARM IN DOUBLE ARM APPLICATIONS ON EXISTING POLES IN THE FIELD WITHOUT TWO SIMPLEX FITTINGS. SEE 8198 FOR AVAILABLE SIZES.

5 POLES THAT HAVE MORE THAN ONE LUMINAIRE REQUIRE A SEPARATE CIRCUIT WITH FUSING FROM THE J-BOX TO EACH LUMINAIRE.

ENGINEERING NOTES:

A THE LIGHT CODE PROVIDES TWO SAME WATTAGE LUMINAIRES WHEN DOUBLE ARM ARE SPECIFIED.

B SEE SPEC 8130 - 8131 FOR IN-LINE FUSE FOR UNDERGROUND FEEDS.

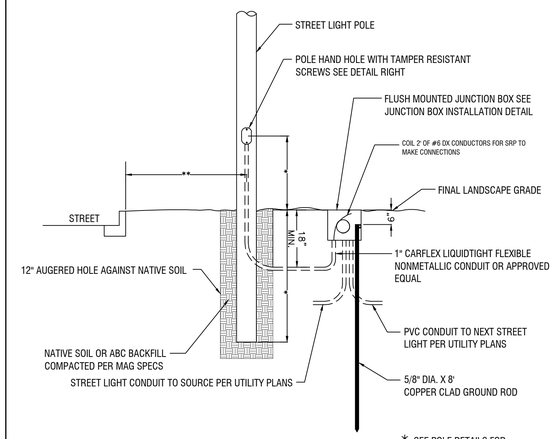
C SEE 8100 THRU 8107 FOR OVERHEAD ATTACHMENTS.

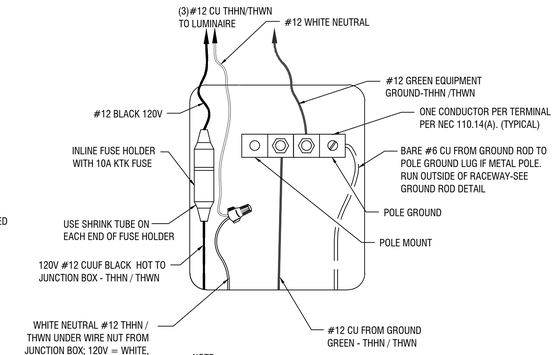
POLE TYPE	POLE CODE	POLE LENGTH	BURY DEPTH	POLE ABOVE GROUND	POLE BUTT DIAMETER			LUMINAIRE HEIGHT ABOVE GROUND ON ARM		
					STEP	TAPER	WEIGHT	20' X 6'	3' X 8'	8' X 8'
LOCAL	1944.30	30' - 6"	5' - 6"	25' - 0"	5-9/16"	7-5/16"	460	25' - 11"	27' - 3"	-
COLLECTOR	1944.38	38' - 6"	6' - 6"	32' - 0"	6-5/8"	9-3/4"	640	32' - 11"	34' - 3"	39' - 3"
ARTERIAL	1944.38X	38' - 6"	6' - 6"	32' - 0"	6-5/8"	9-3/4"	640	32' - 11"	34' - 3"	39' - 3"

**FOR NON-STANDARD POLES, CONTACT THE STREET TRANSPORTATION STREETLIGHTING SECTION FOR INFORMATION.

LIGHTS
ROADWAY LUMINAIRE ON
20"X6', 3'X8' OR 8'X8' MAST ARMS ON
19'-0", 30'-0", 38'-0" OR 40'-6" STEEL POLES

8040





NOTE:
1. EACH HOT LEG SHALL HAVE AN INLINE FUSE HOLDER EX. 240 VOLTS NO NEUTRAL NEEDED INSIDE 240 VOLT POLE.
2. LEAVE AT LEAST 6" OF FREE CONDUCTOR IN HAND HOLE PER NEC 300.14 AND LEAVE AT LEAST 2' OF CONDUCTOR IN PULL BOX PER APS.

CITY OF PHOENIX
REVISED 4/2014

STREET LIGHT STANDARD STREET LIGHT WIRING AND GROUNDING DETAIL FOR SRP SERVICE AREA

DETAIL NO. WG1

ELECTRICAL REQUIREMENTS FOR NEW POLE INSTALLATION

1. JUNCTION BOXES SHALL MEET UTILITY COMPANY STANDARDS.
2. CONDUIT, CONDUCTORS, AND FUSE HOLDERS SHALL BE LISTED AND LABELED FOR USE IN A WET LOCATION WHEN USED IN A JUNCTION BOX. NEC300.5(B), 310.8(C)
3. IN-LINE FUSE HOLDER USED IN HAND HOLE OR SERVICE DROP SHALL BE CONSIDERED AS DISCONNECTING MEANS. FUSE HOLDERS TO BE RATED AT 22,000 AIC MINIMUM. NEC 240.40
4. ELECTRICAL CONNECTIONS-CONDUCTORS OF DISSIMILAR METALS SHALL NOT BE INTERMIXED IN A TERMINAL OR SPLICING CONNECTOR WHERE PHYSICAL CONTACT OCCURS BETWEEN DISSIMILAR CONDUCTORS, (COPPER, ALUMINUM) UNLESS THE DEVICE IS IDENTIFIED FOR THE PURPOSE AND CONDITIONS OF USE. NEC 110.14
5. ELECTRICAL CONNECTIONS OR SPLICES IN AN UNDERGROUND INSTALLATION SHALL BE APPROVED FOR WET LOCATIONS. (NEC 300.5)
6. NON-CURRENT CARRYING CONDUCTIVE MATERIALS ENCLOSING ELECTRICAL CONDUCTORS OR EQUIPMENT, OR FORMING PART OF SUCH EQUIPMENT, SHALL BE CONNECTED TO EARTH IN A MANNER THAT WILL LIMIT THE VOLTAGE IMPOSED BY LIGHTNING OR UNINTENTIONAL VOLTAGE DUE TO SHORT CIRCUITS AND LIMIT THE VOLTAGE TO GROUND ON THESE MATERIALS. NEC 250.4(B) (GROUND RODS)
7. AN EQUIPMENT GROUNDING CONDUCTOR SHALL BE INSTALLED FROM THE GROUND LUG IN THE HAND-HOLE TO THE LUMINAIRE WITH THE CURRENT CARRYING CONDUCTORS. NEC 410.30(B)(3).
8. CONNECTION TO THE GROUND ROD AND THE GROUNDING ELECTRODE SHALL BE LISTED AND LABELED FOR USE. NEC 250.8
9. CONNECT #6 BARE COPPER WIRE FROM THE GROUND ROD ADJACENT TO THE POLE OR IN JUNCTION BOX TO THE GROUND LUG IN THE POLE.

20 YEAR PHOTOCELL REQUIREMENTS

APN# 00073241
CONTROL PHOTO MULTI BR-20 CONTROL, PHOTO-ELECTRIC, BROWN, 20 YEAR FAIL OFF, 120/208/240/277 MULTI-VOLT, SILICON, SOLID STATE, 2.40 TO 3.60 FC ON 1.2 TO 2.4 FC OFF, 60 HERTZ, 320 JOULE MOV, INVERSE ON/OFF RATIO .6:1 +/- .1, FAIL OFF, THREE PIN NEMA TWISTLOCK, 20 YEAR LIFE, 8483-SIDE SELC, MODEL #8483F2TMABR

LIGHT CODE	COLOR	APN	TYPE	WATTS	VOLTS	INITIAL LUMENS	PHOTOMETRIC CURVE
RL50	DARK BRONZE	00128252	LED	31	120/208/240/277	3,800	ERL1_04B327-120-277V.IES
RL52		00126804		39	120/208/240/277	4,700	ERL1_05C327-120-277V.IES
RL53		00126805		71	120/208/240/277	7,600	ERL1_08C327-120-277V.IES
RL54		00126806		97	120/280/240/277	9,250	ERL1_10C327-120-277V.IES
RL56		00128365		149	120/280/240/277	18,200	ERL2_19C330-120-277V.IES

GE Evolve II Dark Bronze Shoebox LED Fixtures

WATTS	LUMENS	DESCRIPTION	APN	MODEL#
31W	3,800	**SCALABLE ROADWAY GE LED DKBZ Pedestrian** LUMINAIRE 31WATT, 2700K, 3,800 LUMEN, ROADWAY, LED, TERMINAL BOARD, 10KV SURGE PROTECTION, 90 DEGREE CUTOFF, DARK BRONZE, MULTIVOLT 120/208/240/277 DRIVER, IES NARROW ASYMMETRIC MEDIUM, ANSI C136.41 7 PIN TWISTLOCK PHOTO CONTROL RECEPTACLE, CSA OR UL CERTIFIED, ANSI C136.15 WATTAGE LABEL.	128251	ERL1004B327A DKBZ R
39W	4,700	**SCALABLE ROADWAY GE LED DKBZ Local Street** LUMINAIRE 39WATT, 2700K, 4,700 LUMEN, ROADWAY, LED, TERMINAL BOARD, 10KV SURGE PROTECTION, 90 DEGREE CUTOFF, DARK BRONZE, MULTIVOLT 120/208/240/277 DRIVER, IES NARROW ASYMMETRIC MEDIUM, ANSI C136.41 7 PIN TWISTLOCK PHOTO CONTROL RECEPTACLE, CSA OR UL CERTIFIED, ANSI C136.15 WATTAGE LABEL.	126804	ERL1005C327A DKBZ R
71W	7,600	**SCALABLE ROADWAY GE LED DKBZ Collector Street** LUMINAIRE 71WATT, 2700K, 7,600 LUMEN, ROADWAY, LED, TERMINAL BOARD, 10KV SURGE PROTECTION, 90 DEGREE CUTOFF, DARK BRONZE, MULTIVOLT 120/208/240/277 DRIVER, IES NARROW ASYMMETRIC MEDIUM, ANSI C136.41 7 PIN TWISTLOCK PHOTO CONTROL RECEPTACLE, CSA OR UL CERTIFIED, ANSI C136.15 WATTAGE LABEL.	126805	ERL1008C327A DKBZ R
97W	9,250	**SCALABLE ROADWAY GE LED DKBZ Major Roadway** LUMINAIRE 97WATT, 2700K, 9,250 LUMEN, ROADWAY, LED, TERMINAL BOARD, 10KV SURGE PROTECTION, 90 DEGREE CUTOFF, DARK BRONZE, MULTIVOLT 120/208/240/277 DRIVER, IES NARROW ASYMMETRIC MEDIUM, ANSI C136.41 7 PIN TWISTLOCK PHOTO CONTROL RECEPTACLE, CSA OR UL CERTIFIED, ANSI C136.15 WATTAGE LABEL.	126806	ERL1010C327A DKBZ R
149W	18,200	**SCALABLE ROADWAY GE LED DKBZ Special Major Roadway** LUMINAIRE 149WATT, 3000K, 18,200 LUMEN, ROADWAY, LED, TERMINAL BOARD, 10KV SURGE PROTECTION, 90 DEGREE CUTOFF, DARK BRONZE, MULTIVOLT 120/208/240/277 DRIVER, IES NARROW ASYMMETRIC MEDIUM, ANSI C136.41 7 PIN TWISTLOCK PHOTO CONTROL RECEPTACLE, CSA OR UL CERTIFIED, ANSI C136.15 WATTAGE LABEL.	128365	ERL2019C330A DKBZ R

CITY OF PHOENIX
REVISED 12/2013

LUMINAIRE AND PHOTOCELL DETAIL

DETAIL NO. LT1

CONSTRUCTION NOTES:

1 ADJUST PHOTO EYE TO FACE NORTH

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3 THE 40'-6" SELF-SUPPORTING STEEL POLE AND ONE OF THE 38'-0", HAVE TWO, MANUFACTURED INSTALLED SIMPLEX FITINGS 180 APART FOR DOUBLE ARMS,SEE CHART.

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ENGINEERING NOTES:

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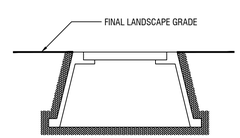
B SEE SPEC 8130 - 8131 FOR IN-LINE FUSE FOR UNDERGROUND FEEDS.

C SEE 8100 THRU 8107 FOR OVERHEAD ATTACHMENTS.

DESCRIPTION
15" X 21" X 12" JUNCTION BOX WITH 3/8" CAPTIVE PENTA HEAD BOLTS

WORD "ELECTRIC" ON COVER

BOX TO BE POLYMER CONCRETE MATERIAL WITH POLYMER CONCRETE BOLT DOWN (NON-CONDUCTIVE COVER).



FLUSH MOUNTED-BOLT ON COMPOSOLITE LID

SRP APPROVED SUPPLIERS	PART NUMBER
STRONGWELL	PC1118B513 BOX PC1118C504-17/UH0390AA COVER WITH ELECTRIC
ARMORCAST PRODUCTS	6001429A
CDR SYSTEMS	PA40-1015-12
CARSON & ASSOCIATES	HLW111B-12 BOX HLW111B-PO LID

CITY OF PHOENIX
REVISED 4/2014

STREET LIGHT STANDARD JUNCTION BOX INSTALLATION DETAIL FOR SRP SERVICE AREA

DETAIL NO. JB1

"PER CITY OF PHOENIX ORDINANCE G-4396, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

STREET LIGHT DETAILS

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

BASELINE ROAD & S 59TH AVE
BASELINE ROAD
STREET LIGHTS

ARIZONA BLUE STAKE
CALL TWO WORKING DAYS BEFORE YOU DIG
Dial 811 or
602-263-1100
1-800-STAKE-IT
(OUTSIDE MARICOPA COUNTY)

KIVA #: 18-3011			FILE NO:	
DR: NBG	DES: NBG	CK: AMB	SHEET NO:	TOTAL SHEETS
SCALE: AS SHOWN		QS. #:01-14 & 01-15	SL3	4

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.			

Registered Professional Engineer (Electrical) Certificate No. 46691 ADAM M. BOWERS Date Signed 11-30-18 Expires 9-30-19

WRIGHT engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DR • CHANDLER, AZ 85225
PHONE 480.497.5829
FAX 480.497.5807
www.wrightengineering.us
WRIGHT PROJECT # 18202

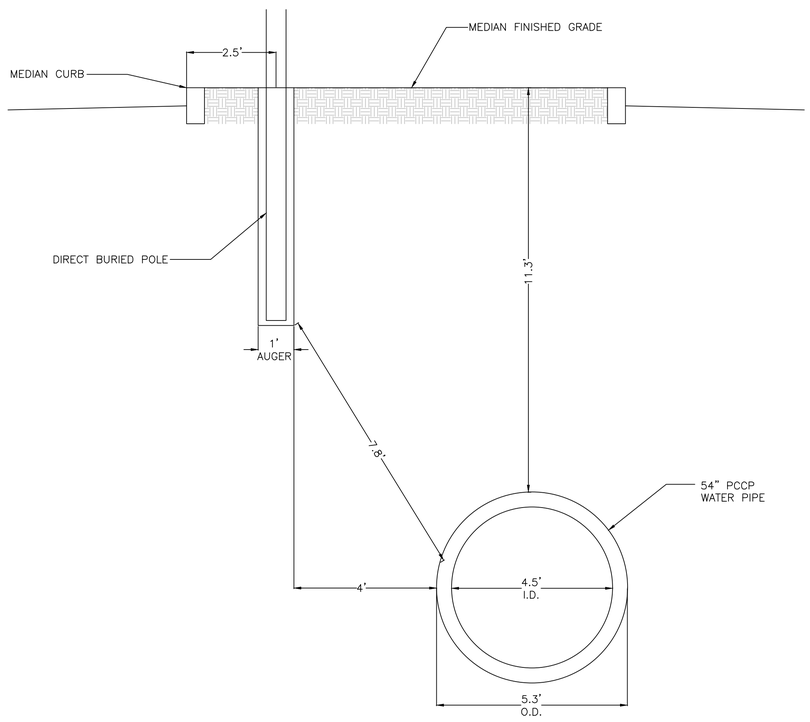
DR: NBG | DES: NBG | CK: AMB | DATE: 09/2018

STREET LIGHT LAYOUT: W BASELINE RD & S 59TH AVE

KIVA#: 18-3011

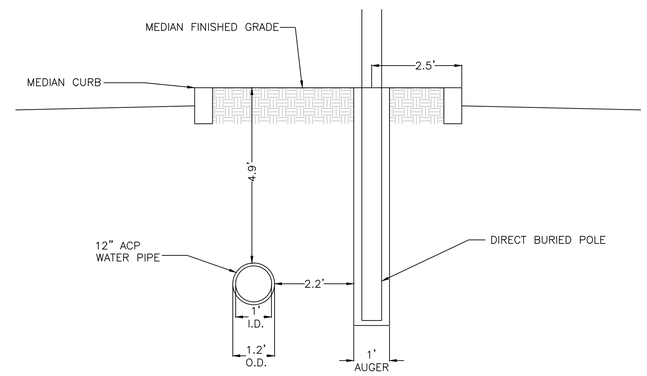
CCPR OR CSPR#:

LOOKING WEST
STA 17+86



WATER LINE CLEARANCE

LOOKING WEST
STA 15+82



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STREET TRANSPORTATION DEPARTMENT

BASELINE ROAD & S 59TH AVE
BASELINE ROAD
STREET LIGHTS

KIVA #: 18-3011			FILE NO:	
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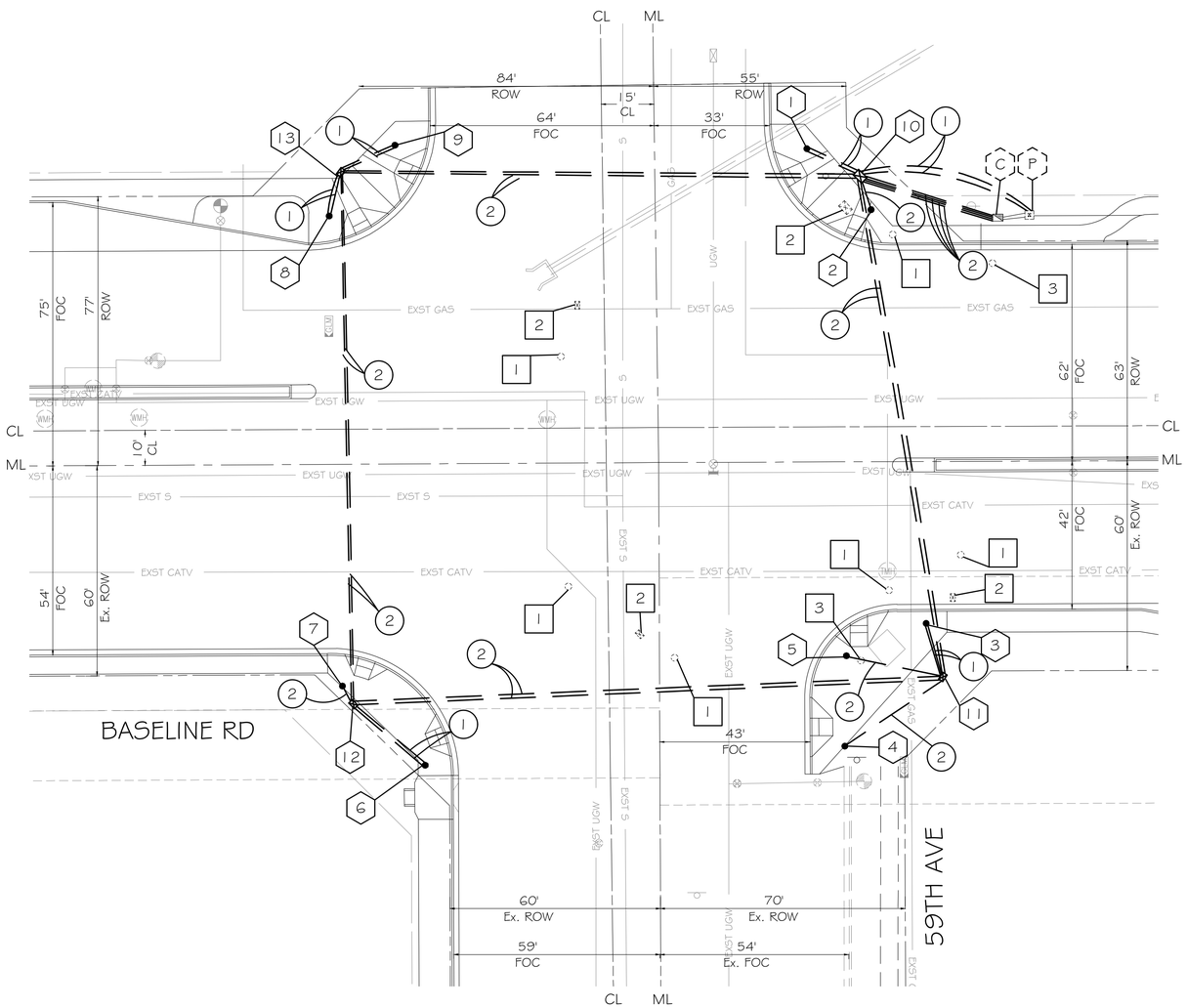

1. GENERAL NOTES:

1.1 The contractor shall notify the City Of Phoenix Traffic Signal Shop (602-262-6733) a minimum of fourteen (14) calendar days prior to beginning any traffic signal work. Submittals of all equipment shall be furnished to the Signal Shop and approved prior to the ordering of any traffic signal equipment. The contractor shall verify that they have the most current set of drawings prior to start and ordering of any equipment.

1.2 Foundation elevations must be within 1/4" of finished sidewalk grade.

1.3 The Contractor shall layout of all ADA ramps, junction boxes and foundation locations for approval by the traffic signal representative. All ADA ramps shall be layed out in white marking paint to determine best traffic signal pole locations.

1.4 A minimum of four (4) feet of clearance is required between all traffic signal poles and the back edge of sidewalk pedestrian ramps.

1.5 Traffic Signal Plan approval is valid for 365 calendar days from date sealed. If signal construction has not begun prior to the 365 days elapsing, the signal plans must be re-submitted for approval or an extension granted by the Deputy Director Traffic Services or an authorized representative to ensure that existing traffic signal equipment locations and standard detail references are current.

1.6 The contractor shall have a competent supervisor capable of reading and thoroughly understanding the plans and specifications and thoroughly experienced in the construction of traffic signals assigned to the project. The Contractor's supervisor or lead shall possess a current International Municipal Signal Association (IMSA) Level II Traffic Signal Electrician Certification and must be on site during any traffic signal construction activities. The Contractor shall have a complete set of construction drawings including current City of Phoenix standards and Traffic Signal Details on site at all times during signal & lighting systems construction.

2. CONTRACTOR NOTE FOR CITY OF PHOENIX TRAFFIC SIGNAL POLES

2.1 The contractor shall provide and install four (4) City of Phoenix Type SQ foundations, four (4) City of Phoenix Type LM foundations, and one (1) City of Phoenix Type LM foundations all with anchor cages, nuts bolts per C.O.P. Street Transportation drawing # 10164.

3. WORK TO BE PERFORMED BY THE CONTRACTOR

The contractor shall provide the traffic signal equipment as indicated in note 2.1 The contractor is to provide all underground work including, but not limited to:

3.1
- All demolition work, unless otherwise noted
- All trenching
- All foundations (pole, controller and power service pedestal)
- All pole anchor cages, nuts and bolts required for pole foundations installed by the contractor in addition to those specified in note 2.1
- All junction boxes with 18" of sump
- All conduit runs
- Provide and install the power service pedestal
- Provide and install conduit runs from PSP to Utility Company feed

3.2 All underground conduits shall be schedule 40 rigid polyvinyl chloride (PVC) installed 24 inches to 30 inches below finished grade with the exception of loop lead-in conduits, which shall be schedule 40 rigid PVC installed in accordance with the latest City of Phoenix Standard Detail Sheet. All conduits shall be installed in straight lines (unless approved by the Signal Shop Inspector) junction box to junction box or junction box to signal equipment foundation with one 90 degree sweep on each end as specified in the plans. All conduits entering junction boxes shall be vertical. Conduits in all foundations shall be located as close as possible to center of the foundation and vertical with foundation below the bottom of the cover. All conduit ends except those in the controller cabinet foundation will be provided with a "bell end" fitting of appropriate size.

3.3 Removal of existing streetlights:

The contractor shall:
- Request de-energization of all streetlights listed for removal,
- Provide complete removal of streetlight pole, mast arm and luminaire
- Properly dispose of all streetlight material

4. WORK TO BE PERFORMED BY CITY OF PHOENIX SIGNAL CREWS

The City of Phoenix traffic signal crews will provide and install all above ground traffic signal equipment including:

- All poles and mast arms
- All signal heads
- All pedestrian heads
- All APS push buttons
- All controllers
- All LED luminaires
- All illuminated street signs
- All signal wiring
- All loop and non-invasive detectors
- All pole grouting
- All cameras
- All radios

Registered Professional Engineer (Electrical) Certificate No. 46691 ADAM M. BOWERS Date Signed 11-27-18 Expires 9-30-19

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.			

WRIGHT engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DR • CHANDLER, AZ 85225
PHONE 480.497.5829
FAX 480.497.5807
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WRIGHT PROJECT # 18202

Existing FOUNDATION SCHEDULE

NO.	TYPE	FROM CL OF 59TH AVE	FROM CL OF BASELINE RD
P	PSP	122.0 ft. East	60.4 ft. North
C	CONT	113.0 ft. East	59.7 ft. North

NOTE: Distance is perpendicular to roadway CENTER LINE

PROPOSED FOUNDATION SCHEDULE

NO.	TYPE	FROM CL OF 59TH AVE	FROM CL OF BASELINE RD
1	SQ	58.6 ft. East	79.7 ft. North
2	LM	76.7 ft. East	62.1 ft. North
3	SQ	90.9 ft. East	56.3 ft. South
4	LM	67.1 ft. East	91.4 ft. South
5	A	67.9 ft. East	65.5 ft. South
6	SQ	53.0 ft. West	96.3 ft. South
7	LM	76.4 ft. West	73.4 ft. South
8	SQ	78.3 ft. West	61.1 ft. North
9	LM	59.2 ft. West	81.2 ft. North

NOTE: Distance is perpendicular to roadway CENTER LINE

PROPOSED JUNCTION BOX SCHEDULE

NO.	TYPE	FROM CL OF 59TH AVE	FROM CL OF BASELINE RD
10	7	73.7 ft. East	71.7 ft. North
11	5	95.5 ft. East	71.1 ft. South
12	5	73.3 ft. West	78.7 ft. South
13	5	74.8 ft. West	73.6 ft. North

NOTE: Distance is perpendicular to roadway CENTER LINE

INSTALL

1 thru 9 See Foundation Schedule

10 thru 13 See Junction Box Schedule

1 2" Schedule 40 PVC with #10 copper pull wire bent over lip of stubout

2 2½" Schedule 40 PVC with detectable mule tape

REMOVE

1 Traffic Signal Foundation - 6

2 Junction Box - 4

3 Street Light - 2

Two working days before you dig CALL FOR THE BLUE STAKES (602) 263-1100 Blue Stake Center CALL COLLECT

"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

TRAFFIC SIGNAL PLANS

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

APPROVED BY:

TRAFFIC SIGNAL ENGINEER

DATE:

STREET TRANSPORTATION TRAFFIC SERVICES DEPUTY DIRECTOR

DATE:

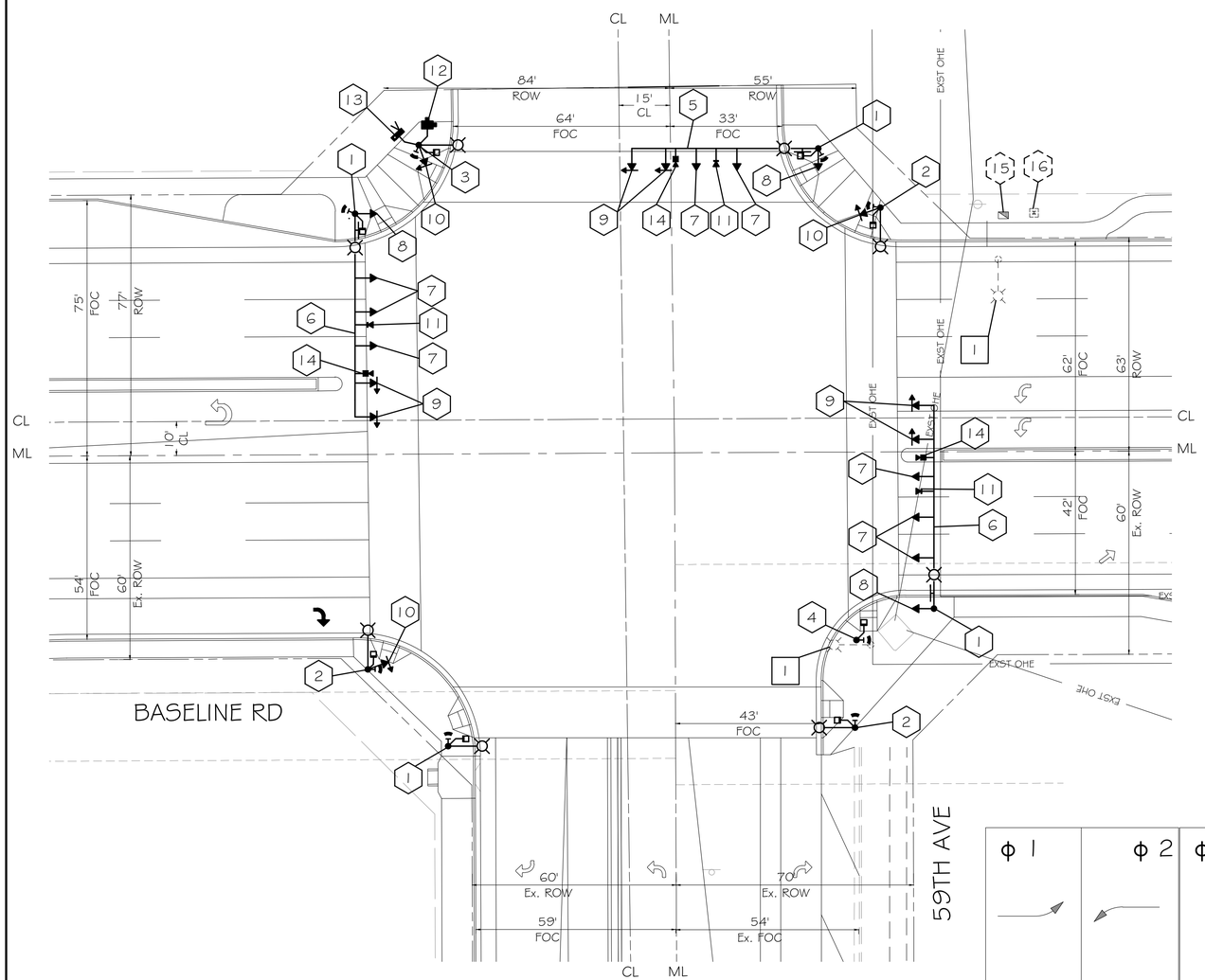
N

W BASELINE RD & S 59TH AVE
FOUNDATION

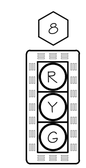
KIVA#: 13-3011	CPST: 1806044		FILE NO: 10824	
DR: WTB	DES: WTB	CK: AMB	SHEET NO:	TOTAL SHEETS
DATE: AUG 2018	DATE: AUG 2018	DATE: AUG 2018		
SCALE: 1" = 20'		QS. #: -----	1	3

SIGNAL PLAN: BASELINE RD & 59TH AVE

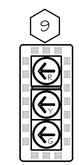
KIVA#: 18-3011 CPST: 1806044 FILE #: 10824



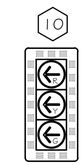
Type "F1" with Plumbizer
3 Section 12" Vehicle Signal Head
Mounted on Signal Mast Arm



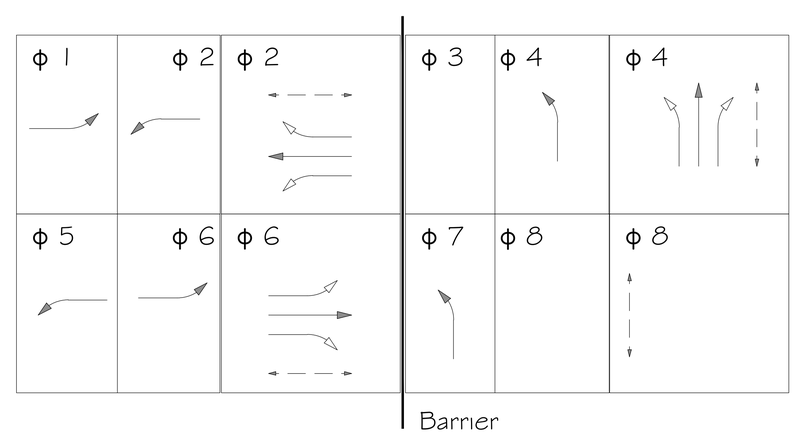
Type "F"
3 Section 12" Vehicle Signal Head
Mounted on Signal Pole



Type "R1" with Plumbizer
3 Section 12" Signal Head
with Left Arrows
Mounted on Signal Mast Arm



Type "R"
3 Section 12" Vehicle Signal Head
with Left Arrows
Mounted on Signal Pole



Pedestrian Phase — Protected Phase — Permitted Phase

N

Registered Professional Engineer (Electrical)
Certificate No. 46691
ADAM M. BOWERS
Date Signed 11-27-18
Expires 9-30-19

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.			

WRIGHT engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DR • CHANDLER, AZ 85225
PHONE 480.497.5829
FAX 480.497.5807
www.wrightengineering.us
WRIGHT PROJECT # 18202

INSTALL

1. Traffic Signal Pole Type "SQ"- 4 New
2. Traffic Signal Pole Type LM With 5' Riser - 3 New
3. Traffic Signal Pole Type LM With 20' Riser - 1 New
4. Traffic Signal Pole Type A - 1 New
5. 55' Signal Mast Arm - 1 New
6. 60' Signal Mast Arm - 2 New
7. Type F1 12" Signal Head - 8 New (Mast Arm Mount with Plumbizer)
8. Type F 12" Signal Head - 3 New (Pole Mount)
9. Type R1 3 Section 12" Signal Head - 6 New (Mast Arm Mount with Plumbizer)
10. Type R 3 Section 12" Signal Head - 3 New (Pole Mount)
11. Emergency Vehicle Preemption - 3 New
12. CCTV Camera - 1 New
13. Wireless Radio - 1 New
14. Video Detection Camera - 3 New
15. 8 Phase Controller Cabinet - 1 Existing
16. Power Service Pedestal - 1 Existing

Luminaire
- LED - 8 New

Signs at Signal
- Illuminated Street Sign - 4 Relocated
- Pedestrian Head - 8 New
- APS Pedestrian Push Button - 8 New

Note:
Adjust all signal head placement as shown on plan.

REMOVE

1. See Street Light Plans for Street Light Removal

Two working days before you dig
CALL FOR THE BLUE STAKES
(602) 263-1100
Blue Stake Center
CALL COLLECT

"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

TRAFFIC SIGNAL PLANS

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

APPROVED BY:

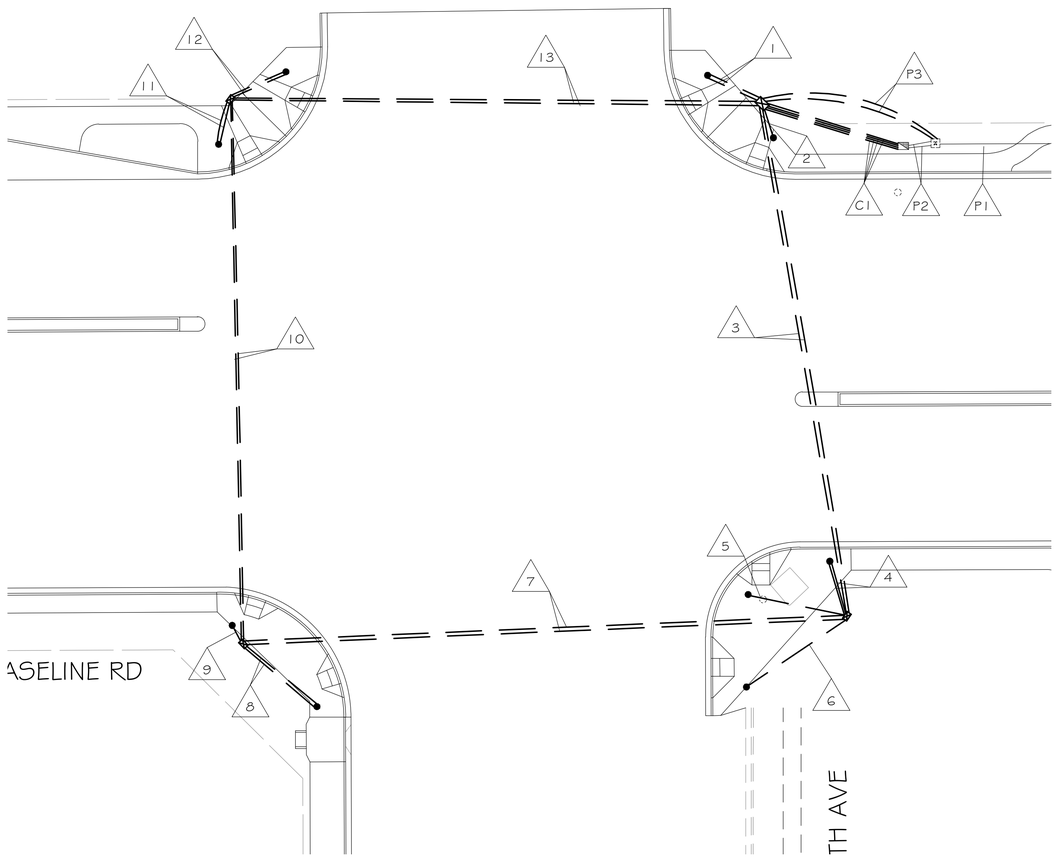
TRAFFIC SIGNAL ENGINEER
DATE:

STREET TRANSPORTATION TRAFFIC SERVICES DEPUTY DIRECTOR
DATE:

W BASELINE RD & S 59TH AVE
EQUIPMENT

KIVA#: 13-3011	CPST: 1806044		FILE NO: 10824	
DR: WTB	DES: WTB	CK: AMB	SHEET NO:	TOTAL SHEETS
DATE: DEC 2017	DATE:	DATE:		
SCALE: 1" = 20'		QS. #: -----	2	3

SIGNAL PLAN: BASELINE RD & 59TH AVE
KIVA#: 18-3011
CPST: 1806044
FILE #: 10824



C1 Controller to J-Box (40 lf*)

CONDUIT 1	CONDUIT 2	CONDUIT 3	CONDUIT 4
#10 Bare Copper #10 White THHN 5C IMSA Cable 42C IMSA Cable	#10 Bare Copper	#10 Bare Copper	#10 Bare Copper

P1 Power Service Pedestal to J-Box (25 lf*)

CONDUIT 1
Existing

P2 PSP to controller (25 lf*)

CONDUIT 1
#10 Bare Copper 5C IMSA Cable 20C IMSA Cable

P3 PSP to stub out (25 lf*)

CONDUIT 1
#10 Bare Copper 5C IMSA Cable 20C IMSA Cable

1 J-Box to Mast Arm Pole (20 lf*)

CONDUIT 1	CONDUIT 2
#10 Bare Copper 5C IMSA Cable 20C IMSA Cable	#10 Bare Copper

2 J-Box to A Pole (20 lf*)

CONDUIT 1
#10 Bare Copper #10 White THHN 5C IMSA Cable 20C IMSA Cable

3 J-Box to J-Box (150 lf*)

CONDUIT 1	CONDUIT 2
#10 Bare Copper #10 White THHN 5C IMSA Cable 42C IMSA Cable	#10 Bare Copper

4 J-Box to Mast Arm Pole (20 lf*)

CONDUIT 1
#10 Bare Copper #10 White THHN 5C IMSA Cable 20C IMSA Cable

5 J-Box to Ped Pole (20 lf*)

CONDUIT 1
#10 Bare Copper #10 White THHN 5C IMSA Cable 20C IMSA Cable

6 J-Box to LM Pole (20 lf*)

CONDUIT 1
#10 Bare Copper #10 White THHN 5C IMSA Cable 20C IMSA Cable

7 J-Box to J-Box (150 lf*)

CONDUIT 1	CONDUIT 2
#10 Bare Copper #10 White THHN 5C IMSA Cable 42C IMSA Cable	#10 Bare Copper

8 J-Box to Mast Arm Pole (20 lf*)

CONDUIT 1
#10 Bare Copper #10 White THHN 5C IMSA Cable 20C IMSA Cable

9 J-Box to LM Pole (20 lf*)

CONDUIT 1
#10 Bare Copper 5C IMSA Cable 20C IMSA Cable

10 J-Box to J-Box (150 lf*)

CONDUIT 1	CONDUIT 2
#10 Bare Copper #10 White THHN 5C IMSA Cable 42C IMSA Cable	#10 Bare Copper

11 J-Box to Mast Arm Pole (20 lf*)

CONDUIT 1
#10 Bare Copper #10 White THHN 5C IMSA Cable 20C IMSA Cable

12 J-Box to A Pole (20 lf*)

CONDUIT 1
#10 Bare Copper #10 White THHN 5C IMSA Cable 20C IMSA Cable

13 J-Box to J-Box (150 lf*)

CONDUIT 1	CONDUIT 2
#10 Bare Copper #10 White THHN 5C IMSA Cable 42C IMSA Cable	#10 Bare Copper

WIRING DIAGRAM NOTES

New Wire

Existing Wire

N

Registered Professional Engineer (Electrical) Certificate No. 46691 ADAM M. BOWERS Date Signed 11-27-18 Expires 9-30-19

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.			

WRIGHT engineering corporation
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PHONE 480.497.5829
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WRIGHT PROJECT # 18202

SIGNAL PLAN: BASELINE RD & 59TH AVE

KIVA#: 18-3011 CPST: 1806044 FILE #: 10824

Two working days before you dig CALL FOR THE BLUE STAKES (602) 263-1100 Blue Stake Center CALL COLLECT

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TRAFFIC SIGNAL PLANS

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

APPROVED BY:

TRAFFIC SIGNAL ENGINEER

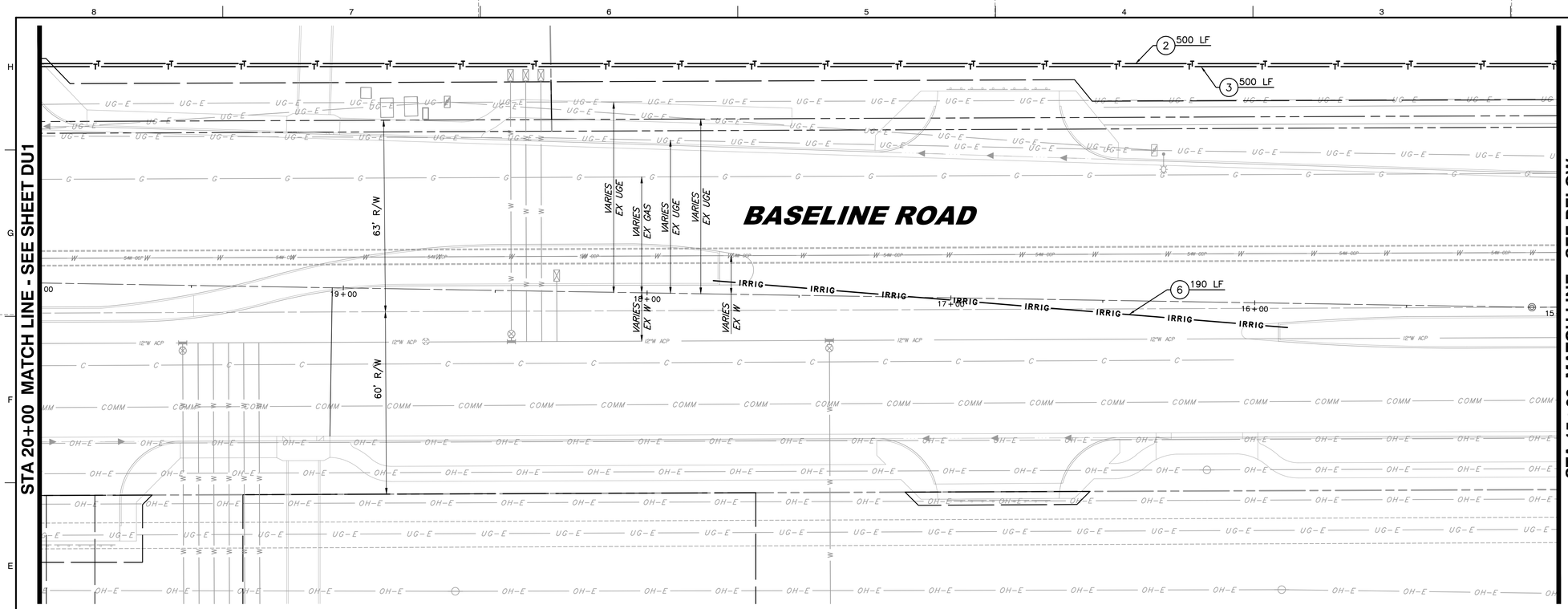
DATE:

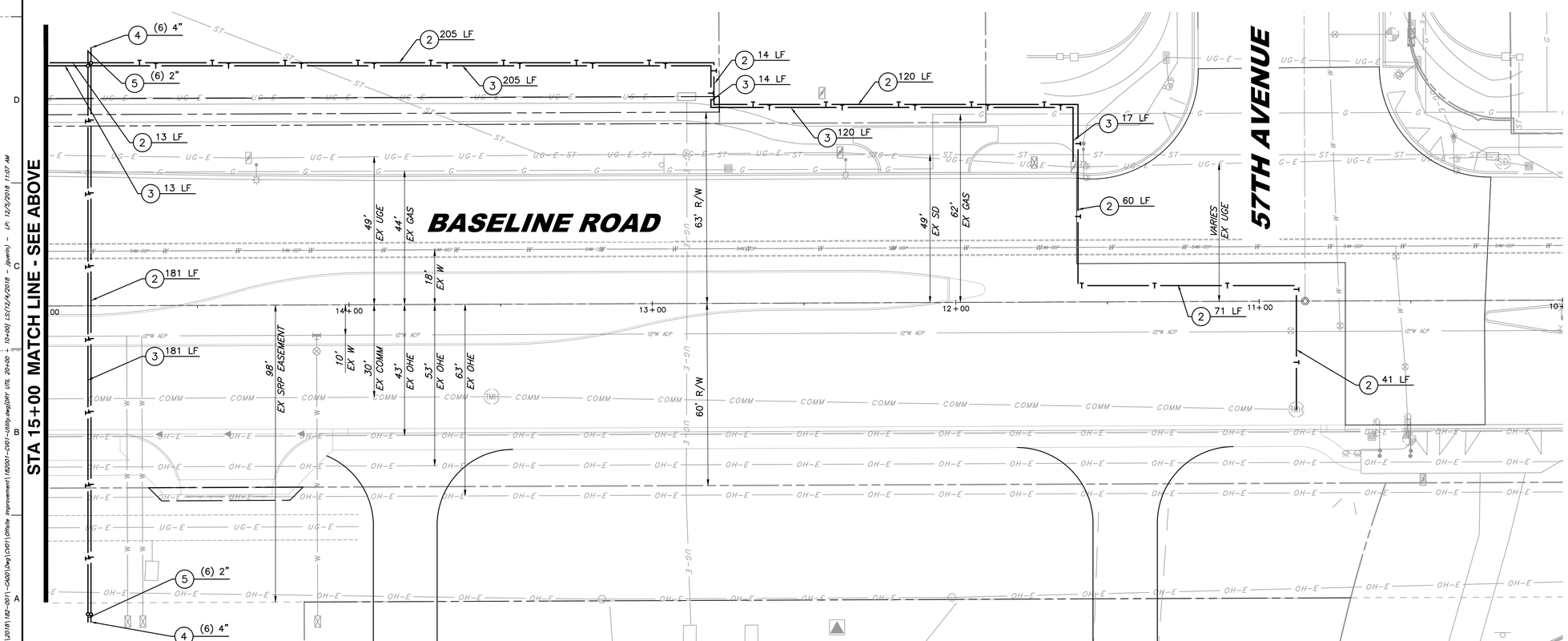
STREET TRANSPORTATION TRAFFIC SERVICES DEPUTY DIRECTOR

DATE:

W BASELINE RD & S 59TH AVE
WIRING

KIVA#: 13-3011	CPST: 1806044	FILE NO: 10824	
DR: WTB	DES: WTB	CK: AMB	SHEET NO: 3 / TOTAL SHEETS 3
DATE: DEC 2017	DATE:	DATE:	
SCALE: 1" = 20'		QS. #: -----	





CONSTRUCTION NOTES

NO.	DESCRIPTION	UNIT	QTY.
1	SOUTHWEST GAS SERVICE STUB. DONE BY SOUTHWEST GAS.	LF	0
2	(2) 4" CONDUITS FOR CENTURYLINK (JOINT TRENCH WITH COX WHERE POSSIBLE).	LF	1205
3	(2) 2" CONDUITS FOR COX (JOINT TRENCH WITH CENTURYLINK WHERE POSSIBLE).	LF	1050
4	STUB UP CONDUITS FOR CENTURYLINK PEDESTAL. SEE PLAN FOR NUMBER AND SIZE.	EA	12
5	STUB UP CONDUITS FOR COX. SEE PLAN FOR NUMBER AND SIZE.	EA	12
6	(2) 4" PVC SLEEVES FOR UNDERGROUND IRRIGATION.	LF	190

REVISION RECORD

NO	DATE	DESCRIPTION

NORTH

SCALE IN FEET
0 20 40

SPECIAL NOTES

1. STATION & OFFSETS BASED ON THE NORTH QUARTER CORNER OF SECTION 5, T.1S., R.2E., 16.89' EAST OF THE INTERSECTION OF 55TH LANE & BASELINE ROAD, WHERE STA=10+00 E.
2. EXISTING IRRIGATION STRUCTURE TO BE REMOVED BY OTHERS.
3. "PER PHOENIX CITY CODE CHAPTER 2, SECTION 2–28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE FURNISHED FOR INSPECTION OR COPYING, EXCEPT AS SPECIALLY STATED IN THE CITY CODE, OR AS REQUIRED BY LAW"

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

REGISTERED PROFESSIONAL ENGINEER (CIVIL)
CERTIFICATE NO. 23980
JEFFREY S. ERICKSON
Date Signed 11/07/18
ARIZONA, U.S.A.
Expires 09/30/20

Civil & Environmental Consultants, Inc.
11811 N. Tatum Blvd., Suite 3057 · Phoenix, AZ 85028
Ph: 602.760.2324 · 877.231.2324 · Fax: 602.760.2330
www.cecinc.com

BASELINE ROAD IMPROVEMENTS
LOOP 202 & 57TH AVENUE
PHOENIX, ARIZONA
CIVIL IMPROVEMENT PLANS

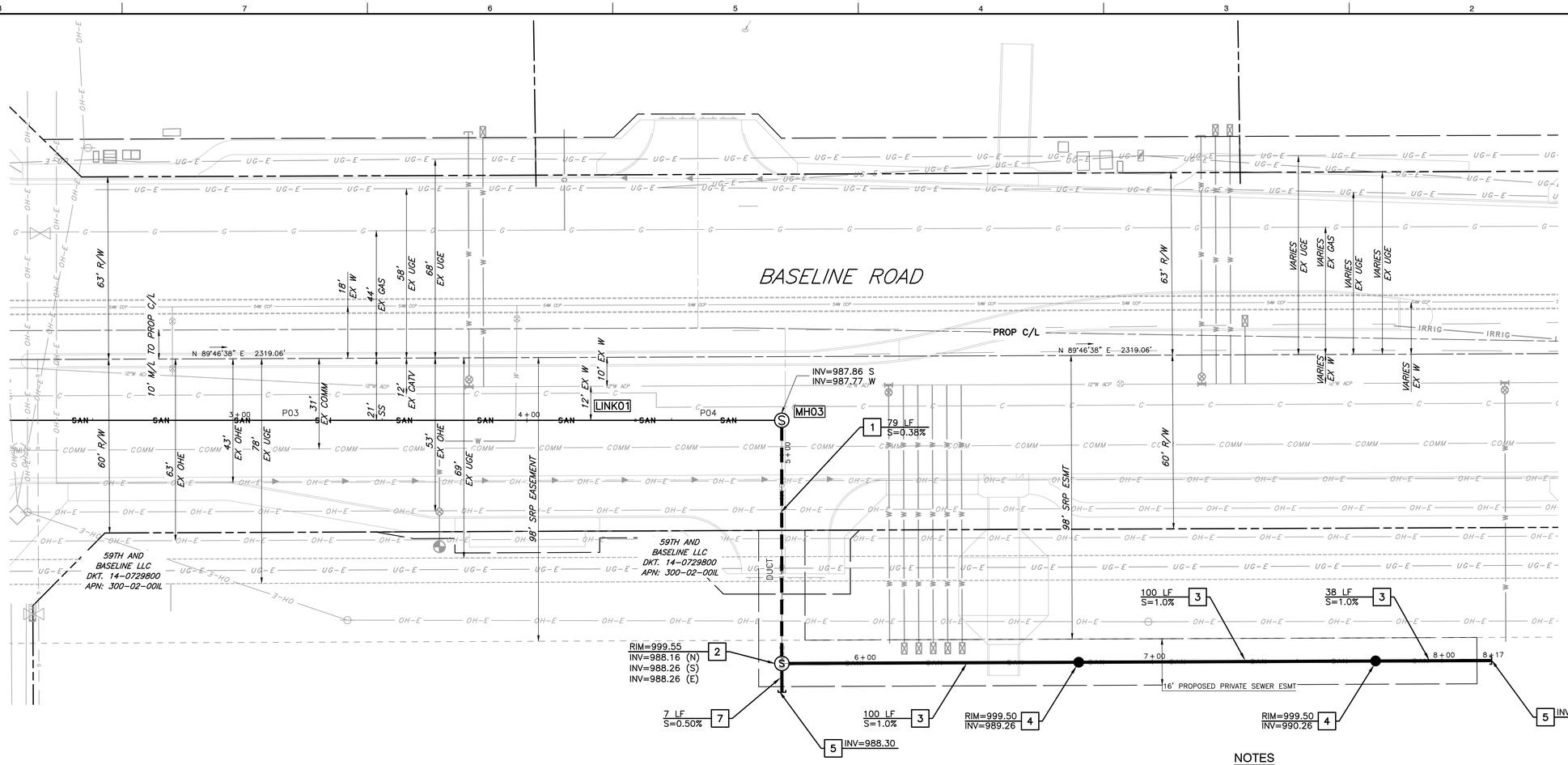
OFFSITE IMPROVEMENT PLANS
DRY UTILITY PLAN

DATE:	NOVEMBER 16, 2018
DRAWN BY:	JD
DWG SCALE:	NONE
CHECKED BY:	JG
PROJECT NO:	182-001
APPROVED BY:	

DRAWING NO.: **DU2**

SHEET 2 OF 2

P:\2018\182-0011-CAD\Dwg\CVD\Offsite Improvement\182001-CV01-UtilityLayg(DRY UTIL 20+00 - 10+00) LS:12/4/2018 - jpwells - LP: 12/5/2018 11:07 AM



NOTES

1. PER CITY OF PHOENIX ORDINANCE G-4396, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED FOR THE CONSTRUCTION OF THE PUBLIC WORKS FACILITIES SHOWN HEREON. THE PROJECT OWNER, AND THE OWNER'S LENDERS, CONSULTANTS, CONTRACTORS AND SUBCONTRACTORS ARE PROHIBITED FROM DISCLOSING THE PLANS AND SPECIFICATIONS TO ANY PERSONS OTHER THAN THOSE WHO HAVE A NEED TO KNOW THE INFORMATION FOR THE PURPOSE OF THE PROJECT.
2. A PAVEMENT CUT SURCHARGE SHALL BE ASSESSED ON THIS PROJECT FOR ANY TRENCHING OR POTHOLING IN NEW ASPHALT PAVEMENT THAT IS LESS THAN 30 MONTHS OLD. SURCHARGE FEES ASSESSED ARE IN ADDITION TO THE REGULAR PERMIT FEES AND ARE OVER AND ABOVE ANY SPECIAL BACKFILL, COMPACTION, AND PAVEMENT REPLACEMENT STIPULATIONS THAT MAY BE IMPOSED AS A CONDITION OF PERMITTING. PAVEMENT CUT SURCHARGE FEES IS ASSESSED IN ACCORDANCE WITH SECTION 31-38 OF THE PHOENIX CITY CODE.
3. PLAN APPROVAL IS VALID FOR 180 DAYS. PRIOR TO PLAN APPROVAL EXPIRATION, ALL ASSOCIATED PERMITS SHALL BE PURCHASED OR THE PLANS SHALL BE RESUBMITTED FOR EXTENSION OF PLAN APPROVAL. THE EXPIRATION, EXTENSION, AND REINSTATEMENT OF CIVIL ENGINEERING PLANS AND PERMITS SHALL FOLLOW THE SAME GUIDELINES AS THOSE INDICATED IN THE PHOENIX BUILDING CONSTRUCTION CODE ADMINISTRATIVE PROVISIONS SECTIONS 105.3 FOR BUILDING PERMITS.

CONSTRUCTION NOTES

NO.		UNIT	QTY.
1	PRIVATE SEWER STUB VIA S512. 8" VCP SEWER SLINE. LENGTH AND SLOPE PER PLAN.	LF	79
2	CONSTRUCT 5-FOOT DIAMETER SEWER MANHOLE PER C.O.P. STD. DET. P-1430 AND MAG STD. DET. 422. COVER PER MAG STD. DET. 424.	EA	1
3	INSTALL 6-INCH PVC SDR-35 PRIVATE SEWER LINE. LENGTH AND SLOPE AS SHOWN ON PLANS.	LF	238
4	INSTALL SEWER CLEANOUT PER MAG STD. DET. 441. RIM AND INVERT PER PLAN.	EA	2
5	INSTALL SEWER STUB PER MAG STD. DET. 427.	EA	2
6	INSTALL 8-INCH PVC SDR-35 PRIVATE SEWER LINE. LENGTH AND SLOPE AS SHOWN ON PLANS.	LF	7

PIPE TABLE

PIPE NAME	SIZE (IN)	BEARING	LENGTH (FT)	SLOPE	MATERIAL

SPECIAL NOTES

NORTH

SCALE IN FEET
0 40 80

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
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REVISION RECORD

NO.	DATE	DESCRIPTION

Civil & Environmental Consultants, Inc.
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Ph: 602.760.2324 · 877.231.2324 · Fax: 602.760.2330
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BASELINE ROAD IMPROVEMENTS
LOOP 202 TO 57TH AVENUE
PHOENIX, ARIZONA
CIVIL IMPROVEMENT PLANS

OFFSITE IMPROVEMENT PLANS
PRIVATE SEWER PLAN

DATE: DECEMBER 13 2018 | DRAWN BY: JG
DWG SCALE: 1"=20' | CHECKED BY: JG
PROJECT NO: 182-001
APPROVED BY:

DRAWING NO.: PSP01
SHEET 1 OF 1

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