

An aerial photograph of the Phoenix, Arizona skyline at sunset. The city's skyscrapers are silhouetted against a vibrant orange and pink sky. In the background, the rugged, reddish-brown mountains of the Sonoran Desert are visible. The foreground shows a dense urban area with residential buildings and greenery.

INFRASTRUCTURE ASSESSMENT STUDY

SONORAN OASIS TECH PARK

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PROJECT OVERVIEW & NARRATIVE

PURPOSE & INTENT

The purpose of this report is to evaluate the conceptual infrastructure improvements needed to serve the subject property known as the Sonoran Oasis Tech Park, comprising approximately 5,244 acres of State Land. This report has been created to support a pending land sale under Application No. 53-123709 with the Arizona State Land Department (the “ASLD”).

The applicant, Biscuit Flats Dev LLC, has applied to purchase approximately 2,508 gross acres of land within the municipal limits of the City of Phoenix, Maricopa County, Arizona (the “Auction Parcel”). The Auction Parcel is located within an approximately 5,180-acre area (the “Planning Parcel”) which includes the TSMC property and a 1,491-acre area to be retained by ASLD (the “Retained Parcel”). The “Site” is defined as the area subject to this Infrastructure Assessment Report (the “Study”) and includes the Auction Parcel, Retained Parcel, TSMC-owned property and right-of-way area extending to the centerline of all perimeter and on-site roadways.

The Study assesses anticipated infrastructure associated with arterial roadways, water, wastewater, drainage and power improvements to serve the Auction Parcel and a conceptual land use plan proposed for the Planning Parcel. The Study is conceptual and supports informed assumptions about the alignments and sizing of future infrastructure but is not intended to be used as a final design document. If the purchase of the Auction Parcel occurs, it is the responsibility of the awarded bidder to determine final improvement and project requirements necessary to develop the property.

KEY RISKS AND CONSIDERATIONS

Based upon the existing conditions of the Auction and Retained Parcels, the overall scale of the required infrastructure improvements and the potential for unknown issues that may arise through the development of the Site, several risks should be considered in addition to the information provided in the Study:

Very little, if any, downstream sewer capacity currently exists to serve the Auction Property, Retained Property or any other properties in the region. Any such existing capacity is inadequate to serve the uses contemplated and zoned for the Auction Property until a large new wastewater treatment and reclamation facility is constructed and fully operational. As a result, the Participation Agreement requires the winning bidder to make sure that new wastewater treatment and reclamation facilities are constructed: no matter the cost that will not be determined until after the auction has already occurred; and no matter the source of funds for such facilities. The Study outlines conceptual wastewater treatment solutions based upon current technology, but significant uncertainty and risks exist related to the ultimate magnitude, cost, timing and funding sources for such facilities needed to provide sufficient sewer capacity to adequately develop the Auction Property. As outlined in the Study, current estimates (in today’s dollars) for the development of these facilities

is generally \$40-65 per gallon of daily capacity including required Indirect Potable Reuse facilities, assuming reasonable economies of scale, which could aggregate over \$1.25 billion over the project's life depending on the overall development assumptions. The primary location of the initial wastewater treatment facility is the North Gateway Water Reclamation Facility ("NGWRF").

- The hydro-geologic surveys of land anticipated to be used for future Indirect Potable Reuse (IPR) facilities have not yet been completed by the City of Phoenix. The exact location, acreage and retention capacity of the land will depend upon the geologic conditions identified in these surveys and could thus impact the ultimate design and cost of IPR infrastructure. Further, the land required for the IPR facilities is not expected to be located within the Auction or Retained Property. As such, estimated land acquisition costs are included in the IPR budget presented herein, however the land cost could be higher or lower than currently estimated based upon market conditions.

- Arizona Public Service ("APS") reports that there is insufficient existing power infrastructure to serve the uses contemplated and zoned for the Auction Property. APS is still evaluating possible solutions to bring sufficient power to the Auction Property, but it is not possible to confirm the cost and timing of these solutions. The further buildout of the Avery substation and the creation of additional substations is generally expected by APS to be a cost of the winning bidder and not subject to reimbursement from APS. Costs for these substations has been estimated by APS on a rough order of magnitude basis, but the aggregate cost of these facilities over the project's life may be hundreds of millions of dollars.

- APS has not confirmed the availability or cost of power that will be required for operation of the NGWRF. The current NGWRF cost estimate does not include any assumptions for power cost, though it will likely require up to 20MW upon full build-out.

- APS has indicated that power commitment letters for data center uses requiring over 25 MWs of power are unlikely to be approved for the next +/- 10 years due to data centers' disproportionately large power needs and the very large pipeline of data centers that APS has already committed to across the Valley. Eliminating data center uses further constrains the potential third-party buyer pool interested in acquiring improved land in North Phoenix.

- Arizona Department of Transportation ("ADOT") has not approved the proposed interchange spacing and design assumptions along SR-74 outlined in the Study. The final design and funding for the improvements along SR-74 that will support access and egress from the Site must undergo review and approval of ADOT, Maricopa Association of Government ("MAG"), the City of Phoenix and potentially other jurisdictions. At a minimum, the Site will require the proposed SR-74 and interchange improvements to be fully functional in order to serve the future development of the Site.

- The City of Phoenix believes it is currently well positioned to provide sufficient water to serve the demand of its growing population, however, potential water supply deficiency risks exist as water levels in the Colorado River and related reservoirs fall and groundwater supplies diminish. Significant investments at the State and Federal levels continue to advance active planning efforts for conservation, distribution, and augmentation to

address future water needs, but uncertain climate change and political impacts pose future risk that are difficult to quantify today.

SUMMARY AND KEY CONCLUSIONS

Based upon the existing conditions of the Auction and Retained Parcels and the potential future development of the Site assumed in the Conceptual Land Use Plan, the Study outlines the associated infrastructure required to support this use. The cost of the design, permitting and construction of these improvements will be the responsibility of the winning bidder. The table below summarizes these costs, which are more specifically defined in Appendix B.

Infrastructure Cost Summary

| Full Build-Out Infrastructure Backbone Items | Engineer's Estimate of Cost through Full Buildout | | |
|--|---|------------------------|------------------------|
| | Auction Property | Retained Property | Total |
| Wastewater (including North Gateway Water Reclamation Facility)* | \$685,190,923 | \$568,947,796 | \$1,254,138,720 |
| Water | \$19,832,690 | \$7,903,282 | \$27,735,971 |
| Indirect Potable Reuse** | \$670,709,899 | \$563,360,980 | \$1,234,070,878 |
| Backbone Arterial Streets | \$91,031,702 | \$54,655,543 | \$145,687,245 |
| Backbone Stormwater Drainage | \$21,144,738 | \$14,690,195 | \$35,834,932 |
| APS Substations and Power Distribution | \$304,800,000 | TBD | \$304,800,000 |
| Total Estimated Full-Buildout Infrastructure Costs | \$1,792,709,952 | \$1,209,557,795 | \$3,002,267,747 |

*The total estimated cost of Wastewater is inclusive of infrastructure costs and the NGWRF Onsite MBR Facility costs. The allocated cost for the Auction Property, based on a 100% allocation of the infrastructure costs and a 53.3% allocation of the MBR Onsite Facility costs. The Auction Property's 53.3% allocation is based on the estimated 9.7MGD ADD of sewer demand for the Auction Property relative to the 18.2MGD ADD of sewer demand projected for the Auction Property and Retained Property combined.

**The allocated cost for the Auction Property, based on a 53.3% allocation of the Indirect Potable Reuse costs.

Each of the estimates of cost provided in the Study are based on preliminary assumptions that include both the Hard and Soft costs as well as Contingency allowances. The winning bidder will be required to refine and adjust the infrastructure evaluations post-auction in order to meet the actual demand and municipal requirements for each specific development plan.

SITE LOCATION & DESCRIPTION

The Planning Parcel is located on vacant land north of the Loop 303 Freeway between Interstate 17 on the east and the City of Phoenix city limits on the west in Maricopa County, Arizona. The entirety of the property is located within the jurisdictional limits of the City of Phoenix (the "City").

The Auction Parcel is located on the eastern two-thirds of the property. Extending from Interstate 17 to the centerline of the Deadman Wash. The Auction Parcel is comprised of approximately 2,508 acres to include all or portions of Sections 7, 8, 9, 10, 11, 14, 15, 17 and 18 (T5N, R2E). Refer to Figure 1: Vicinity Map for site location and depiction of the Planning Parcel and Auction Parcel.

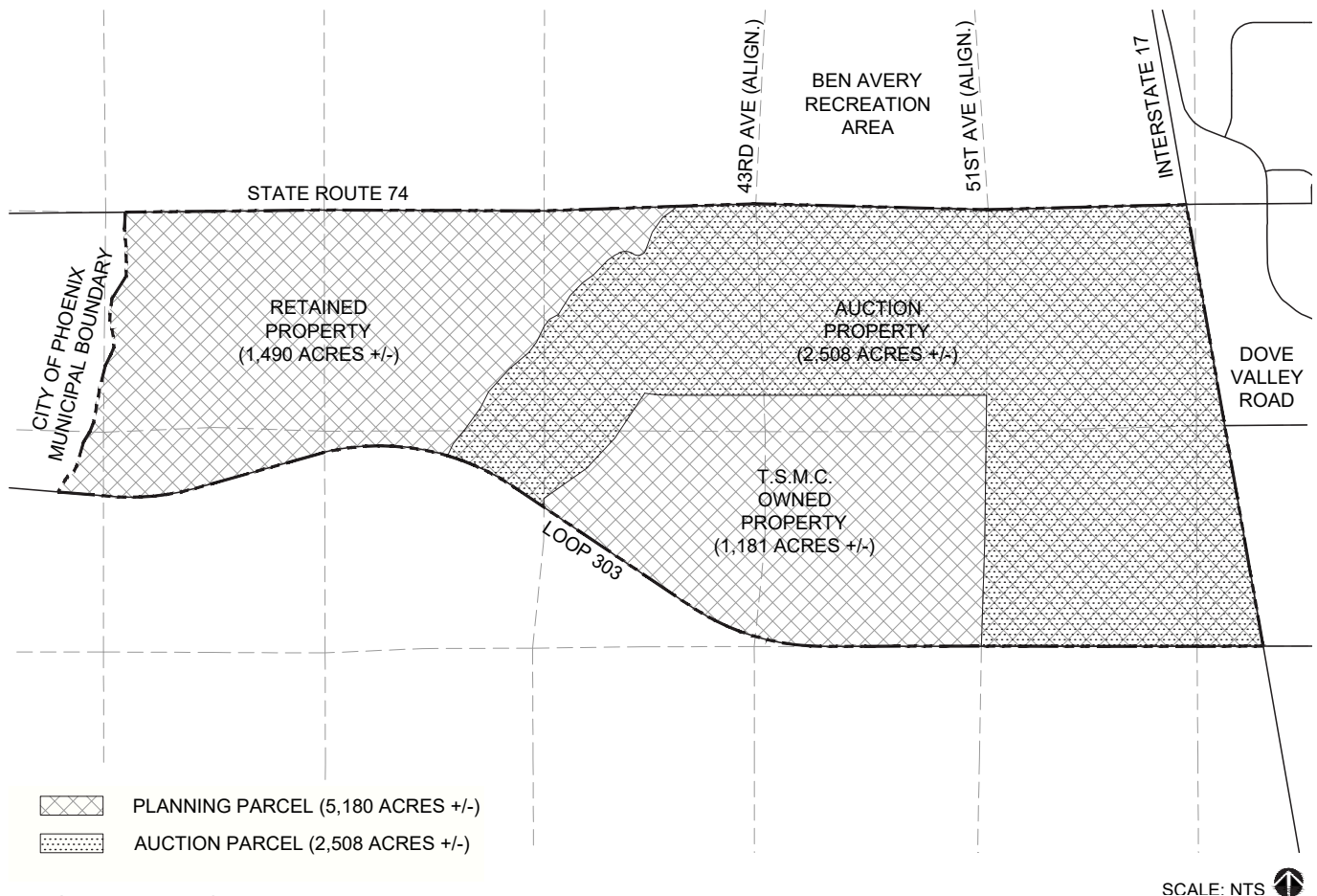
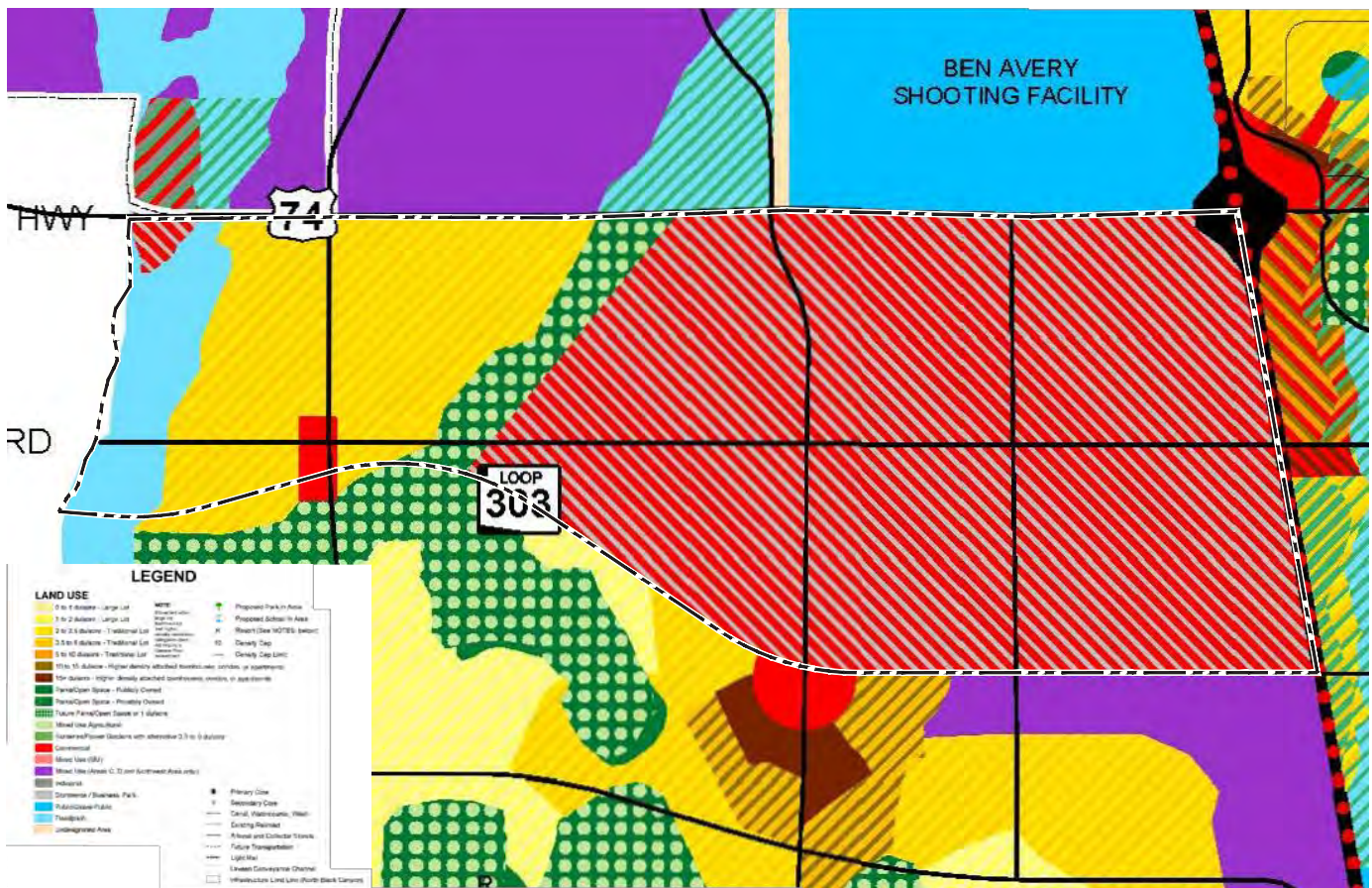


FIGURE 1: VICINITY MAP

EXISTING ZONING & LAND USE

The Auction Property was the subject of a Re-Zoning and General Plan amendment process in 2020 (reference cases GPA-NG-1-20-1 & Z-37-20-1. The current General Plan land use designation on the property is Mixed Use (Commercial/Commerce Park) to promote the development of employment and supporting uses.

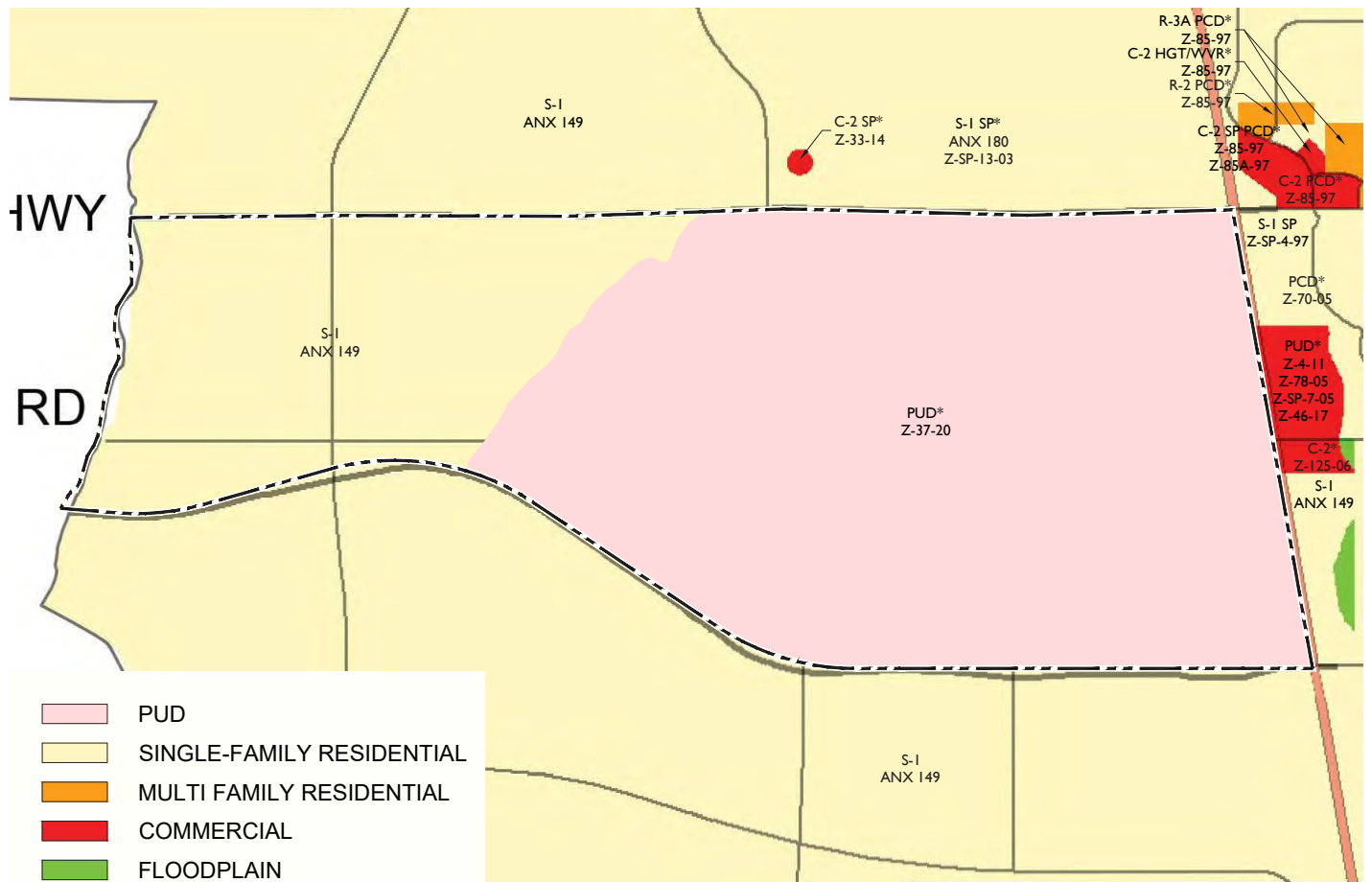
The zoning on the property is Planned Unit Development (PUD) with permitted uses that include employment, manufacturing, multi-family residential and commercial. A maximum dwelling unit cap of 8,960 units has been specified within the PUD, but all residential use must be located within specified sections of the Freeway Mixed Use area.



SOURCE: CITY OF PHOENIX GENERAL PLAN LAND USE MAP 3/8/2022

SCALE: NTS

FIGURE 2: EXISTING GENERAL PLAN LAND-USE PLAN



SOURCE: CITY OF PHOENIX GENERALIZED ZONING MAP NOVEMBER 2017

SCALE: NTS

FIGURE 3: EXISTING ZONING MAP

EXISTING SITE CONDITIONS

ALTA SURVEY

An ALTA/NSPS Land Title Survey was prepared by WOODPATEL, dated December 8, 2022. The survey identifies the Auction Parcel boundary and schedule “B” items on and adjacent to the subject property. Refer to Appendix D for the ALTA/NSPS Land Title Survey and Special Report.

EXISTING CONDITIONS

The Auction Parcel is anticipated to be a Planned Unit Development (PUD) located in the City of Phoenix. An existing easement for the Arizona Department of Transportation (ADOT) exists along SR-74 on the north boundary of the subject property. An existing ADOT easement exists along I-17 on the east boundary and SR-303 on the south boundary of the subject property. A 10-foot AT&T and Qwest Corporation easement runs directly adjacent to the west side of the I-17 ADOT easement in the northeast corner of the subject property. An 80-foot City of Phoenix easement for an underground water transmission main bisects the subject property on a north-south alignment, along with a 30-foot Arizona Public Service (APS) easement for an overhead transmission line. APS also has two 130-foot to 150-foot easements on the subject property for an overhead electrical transmission line and sub transmission line. The first runs north/south directly adjacent to the Avery Substation prior to turning west north of the Avery Substation and running east/west across the subject property. The second runs east/west across the subject property south of the first easement. North of Avery Substation, a 660-foot-wide APS easement exists. East of Deadman Wash in the western area of the subject property, APS has multiple 10-foot easements for one overhead electrical distribution line within the subject property. A Special Land Use Permit exists in the north central area of the subject property and in the southeast corner of the retained property, granted to Apiary Sites by the Arizona State Land Department and having a term ending January 14, 2025. Linde Gas Plant is located near the southwest corner of the subject property and SR-303, within the TSMC property.

Multiple right-of-way dedications, easements, uses, and right-of-entries exist on the subject property with various expiration dates and lease durations. Refer to Appendix D for the ALTA/NSPS Land Title Survey.

PHASE ONE ENVIRONMENTAL SITE ASSESSMENT

A Phase One ESA has been conducted by Consor Engineers, LLC. for the Auction Parcel and is being provided to the Arizona State Land Department as a separate report.

CULTURAL RESOURCES

A Class III Archaeological Study has been conducted by EPG, LLC. for the Auction Parcel and is being provided to the Arizona State Land Department as a separate report.

CONCEPTUAL LAND PLAN

KEY CONSIDERATIONS & APPROACH

The large-scale investment by TSMC in the development of their semiconductor manufacturing campus has focused the planned uses of the Auction Parcel towards supporting this facility and becoming a component of a larger employment and manufacturing center within the City of Phoenix.

The 2020 zoning of the Property put in place an entitlement that supports a broad spectrum of non-residential uses, while simultaneously recognizing the mixed-use potential of the adjacent Interstate 17 Freeway Corridor. Regional freeways and the arterial roadway network (existing and planned) will provide the Site with a significant advantage for supporting efficient vehicular ingress and egress to the Property.

To maximize the development potential of the Property, floodplain mitigation and storm water channelization will be necessary. The Property does contain several high voltage power line corridors that will require setbacks and compatible land use consideration.

PLANNING PARCEL LAND USE PLAN

Large scale employment objectives for this property, coupled with current and future growth projections for the North Phoenix area provide a basis for considering the range and mix of land uses identified. The following land use descriptions summarize the land use intent for the property originally envisioned with the zoning.

TECHNOLOGY PARK DISTRICT:

The Technology Park District is generally located in the northern and western portions of the PUD area and is comprised of approximately 1,190-acres of planned employment and commerce park uses that may support the Technology Campus (TSMC Property) and that may also stand alone with separate and distinct uses. A Commercial service uses may also be located within this District as well, but no residential development is permitted.

FREEWAY MIXED-USE DISTRICT:

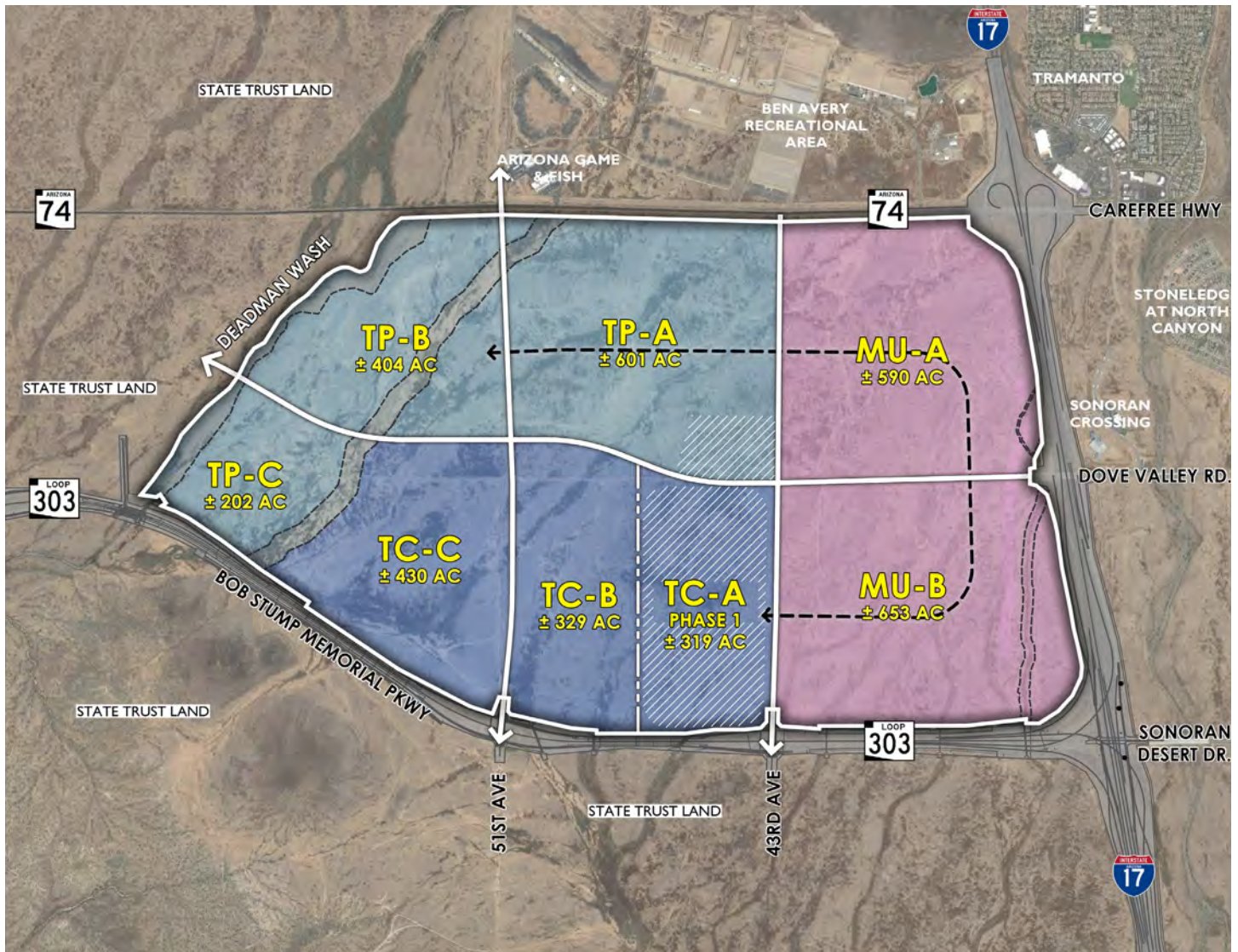
The Freeway Mixed Use District is approximately 1,318-acres in size and is located east of 43rd Avenue, adjacent to the I-17 freeway corridor. Uses within this district may include additional employment uses, regional commercial, office, hospitality and multi-family development types. These uses are expected to be complementary and supportive to the Technology Campus (TSMC Property) and Technology Park District uses and may benefit from their location at the confluence of two major freeway corridors. The Freeway Mixed Use Land Use District consists of three Development Units: MU-A, MU-B , and MU-C (see Figure 9: Development Unit Plan). Certain uses are permitted within MU-A and MU-B and another set of uses is permitted within MU-C. The uses permitted within the various Development Units are identified below.

REFER TO FIGURE 4: APPROVED P.U.D. DEVELOPMENT UNIT PLAN EXHIBIT

AUCTION PARCEL LAND-USE

Land uses for the Auction Parcel have been illustrated on the accompanying Development Plan exhibit and describes a conceptual configuration of parcels that each may host a blend various allowed land use types. The Development Plan area generally includes an area of land bounded by State Route 87 on the north, Interstate 17 on the east, Loop 303 and the TSMC property to the south, and the centerline of the Deadman Wash along the west perimeter. This contiguous area comprises approximately 2,508 acres located generally along the east and northeast portions of the Study Area with a broad diversity of land use types and intensities permitted by the approved PUD zoning.

REFER TO FIGURE 5: DEVELOPMENT PLAN AND FIGURE 6: MASTER PLAN LAND USE ALLOCATIONS TABLE



SOURCE: NORTH PHOENIX 3500 P.U.D. 2020

FIGURE 4: APPROVED P.U.D. DEVELOPMENT UNIT PLAN

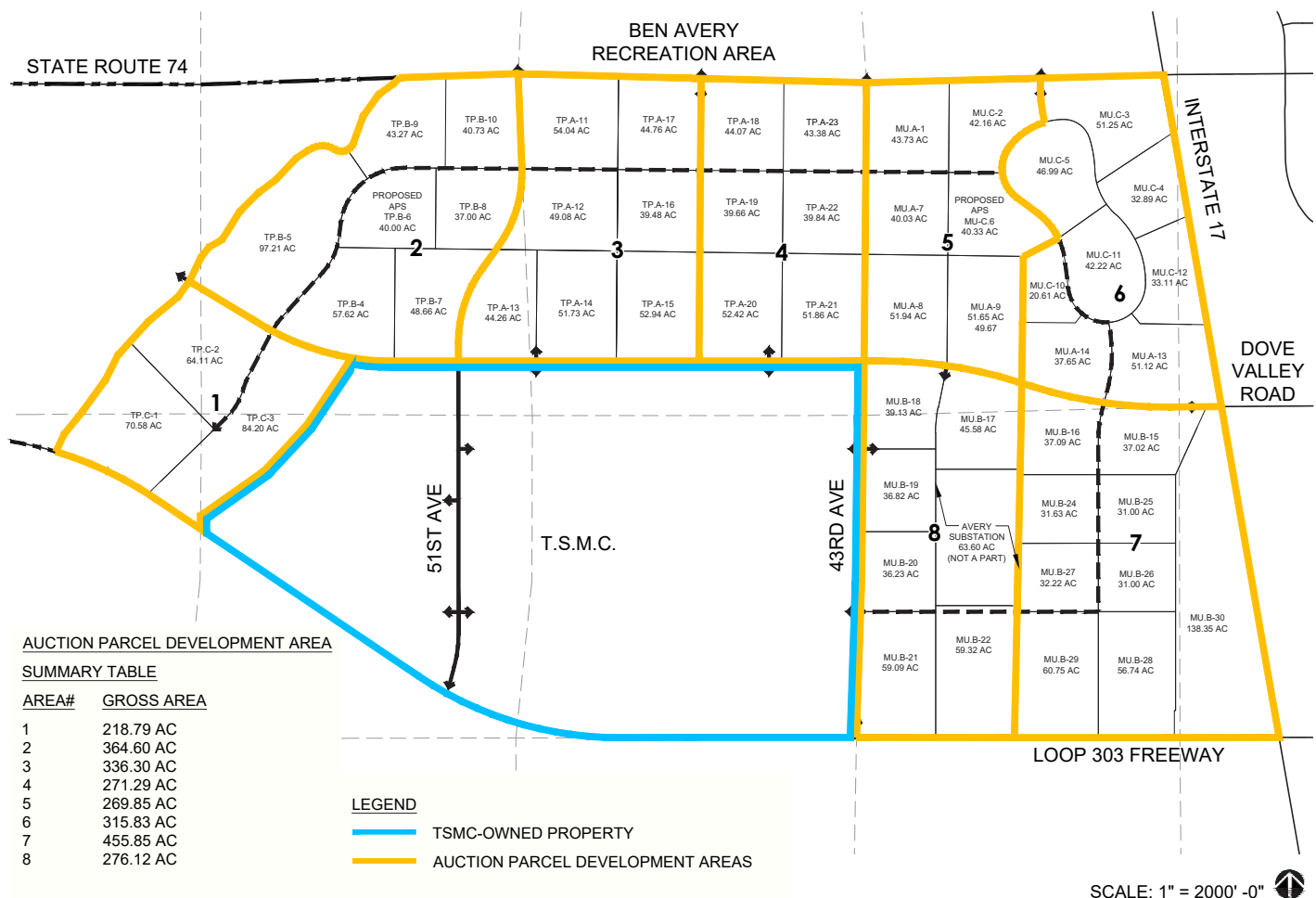


FIGURE 5: DEVELOPMENT PLAN

POST AUCTION DEVELOPMENT PROCESS

The Property carries a zoning entitlement for employment, manufacturing, commercial and multi-family residential as part of a 2020 approved (PUD) rezoning of the subject property. All required Post-Auction development processes are subject to the City of Phoenix or other applicable regulatory agencies. Below is a list of future development processes that shall follow the property auction. This list shall serve as a general guide for the forthcoming development of the property but should not be considered a comprehensive list of all required processes and approvals.

- Preparation/Approval of Development Unit Master Plans
- Preparation/Approval of Functional Segment Master Plans
- Approval of Preliminary Site Plans
- Impact Fee Credit Analysis
- Approval of Final Site Plans

FIGURE 6: MASTER PLAN LAND USE ALLOCATIONS TABLE

| MASTER DEVELOPMENT DISTRICT | DEVELOPMENT UNIT | AREA | GROSS AREA (ACRES) | NET AREA (ACRES) | DEVELOPABLE AREA (AC) | INDUSTRIAL - MAJOR USER (SF) | INDUSTRIAL (SF) | EST. OFFICE SQ.FT. | EST. RETAIL SQ.FT. | EST. MULTI-FAMILY UNITS | EST. MULTI-FAMILY DENSITY | HOTEL (Rooms) |
|-----------------------------|--------------------|--------|--------------------|------------------|-----------------------|------------------------------|-----------------|--------------------|--------------------|-------------------------|---------------------------|---------------|
| TECH PARK | TP-A | | 607.6 | | | | | | | | | |
| | TP.A-11 | Area 3 | 54.04 | 48.09 | 38.13 | 223,077 | 223,077 | 292,308 | | | | |
| | TP.A-12 | Area 3 | 49.08 | 46.86 | 46.86 | 223,077 | 223,077 | 292,308 | | | | |
| | TP.A-13 | Area 3 | 44.26 | 39.13 | 36.16 | 223,077 | 223,077 | 292,308 | | | | |
| | TP.A-14 | Area 3 | 51.73 | 49.59 | 45.19 | 223,077 | 223,077 | 292,308 | | | | |
| | TP.A-15 | Area 3 | 52.94 | 50.82 | 46.28 | 223,077 | 223,077 | 292,308 | | | | |
| | TP.A-16 | Area 3 | 39.48 | 39.48 | 39.48 | 223,077 | 223,077 | 292,308 | | | | |
| | TP.A-17 | Area 3 | 44.76 | 41.73 | 37.29 | 223,077 | 223,077 | 292,308 | | | | |
| | TP.A-18 | Area 4 | 44.07 | 41.03 | 36.82 | 223,077 | 223,077 | 292,308 | | | | |
| | TP.A-19 | Area 4 | 39.66 | 39.66 | 39.66 | 223,077 | 223,077 | 292,308 | | | | |
| | TP.A-20 | Area 4 | 52.42 | 50.18 | 45.63 | 223,077 | 223,077 | 292,308 | | | | |
| | TP.A-21 | Area 4 | 51.86 | 46.99 | 42.71 | 223,077 | 223,077 | 292,308 | | | | |
| | TP.A-22 | Area 4 | 39.84 | 37.73 | 37.73 | 223,077 | 223,077 | 292,308 | | | | |
| | TP.A-23 | Area 4 | 43.38 | 38.23 | 34.23 | 223,077 | 223,077 | 292,308 | | | | |
| | | | 607.5 | 569.5 | 526.2 | 2,900,000 | 2,900,000 | 3,800,000 | | - | | |
| | TP-B | | 364.6 | | | | | | | | | |
| | TP.B-4 | Area 2 | 57.62 | 57.62 | 54.40 | 216,667 | 216,667 | 283,333 | | | | |
| | TP.B-5 | Area 2 | 97.21 | 94.75 | 65.27 | 216,667 | 216,667 | 283,333 | | | | |
| | TP.B-6 (APS***) | Area 2 | 40.00 | 40.00 | 40.00 | | | | | | | |
| | TP.B-7 | Area 2 | 48.66 | 43.92 | 36.69 | 216,667 | 216,667 | 283,333 | | | | |
| | TP.B-8 | Area 2 | 37.00 | 34.77 | 34.77 | 216,667 | 216,667 | 283,333 | | | | |
| | TP.B-9 | Area 2 | 43.27 | 41.52 | 28.68 | 216,667 | 216,667 | 283,333 | | | | |
| | TP.B-10 | Area 2 | 40.73 | 35.80 | 28.30 | 216,667 | 216,667 | 283,333 | | | | |
| | | | 364.5 | 348.4 | 288.1 | 1,300,000 | 1,300,000 | 1,700,000 | | - | | |
| | TP-C | | | | | | | | | | | |
| | TP.C-1 | Area 1 | 70.58 | 57.14 | 40.42 | 40.42 | 291,667 | 383,333 | | | | |
| | TP.C-2 | Area 1 | 64.11 | 61.62 | 45.11 | 45.11 | 291,667 | 383,333 | | | | |
| | TP.C-3 | Area 1 | 84.20 | 76.81 | 71.72 | 71.72 | 291,667 | 383,333 | | | | |
| | | | 218.89 | 195.6 | 157.3 | 875,000 | 875,000 | 1,150,000 | | - | | |
| | Tech Park Subtotal | | 1,191 | 1,113 | 972 | 5,075,000 | 5,075,000 | 6,650,000 | - | - | | |

FIGURE 6 (CONT): MASTER PLAN LAND USE ALLOCATIONS TABLE

| MASTER DEVELOPMENT DISTRICT | DEVELOPMENT UNIT | AREA | GROSS AREA (ACRES) | NET AREA (ACRES) | DEVELOPABLE AREA (AC) | INDUSTRIAL - MAJOR USER (SF) | INDUSTRIAL (SF) | EST. OFFICE SQ.FT. | EST. RETAIL SQ.FT. | EST. MULTI-FAMILY UNITS | EST. MULTI-FAMILY DENSITY | HOTEL (Rooms) |
|---|---------------------|--------|------------------------------|------------------|-----------------------|------------------------------|-----------------|--------------------|--------------------|-------------------------|---------------------------|---------------|
| FREEWAY MIXED MU-A | | | | | | | | | | | | |
| | MU.A-1 | Area 5 | 43.73 | 38.57 | 34.51 | 0 | - | 500,000 | 300,000 | - | 0.0 Du/Ac | 320 |
| | MU.A-7 | Area 5 | 40.03 | 37.91 | 37.91 | 0 | 600,000 | 250,000 | 100,000 | - | 0.0 Du/Ac | |
| | MU.A-8 | Area 5 | 51.94 | 47.09 | 42.78 | 0 | 600,000 | 300,000 | 100,000 | - | 0.0 Du/Ac | |
| | MU.A-9 | Area 5 | 51.65 | 49.67 | 45.54 | 0 | 200,000 | 450,000 | 100,000 | - | 0.0 Du/Ac | |
| | MU.A-13 | Area 6 | 51.12 | 37.19 | 37.19 | 0 | - | 100,000 | 300,000 | 1,064 | 20.8 Du/Ac | |
| | MU.A-14 | Area 6 | 37.65 | 35.46 | 32.29 | 0 | - | 100,000 | 300,000 | 1,000 | 26.6 Du/Ac | |
| | | | 276.1 | 245.9 | 230.2 | - | 1,400,000 | 1,700,000 | 1,200,000 | 2,064 | | 320 |
| MU-B | | | | | | | | | | | | |
| | MU.B-15 | Area 7 | 37.02 | 33.06 | 32.55 | - | | 250,000 | 10,000 | 500 | 13.5 Du/Ac | 248 |
| | MU.B-16 | Area 7 | 37.09 | 34.94 | 30.86 | - | | 250,000 | 10,000 | 500 | 13.5 Du/Ac | |
| | MU.B-17 | Area 8 | 45.58 | 43.59 | 43.59 | - | 200,000 | 450,000 | - | - | 0.0 Du/Ac | |
| | MU.B-18 | Area 8 | 39.13 | 34.75 | 34.75 | - | 250,000 | 350,000 | - | - | 0.0 Du/Ac | |
| | MU.B-19 | Area 8 | 36.82 | 34.61 | 34.61 | - | 250,000 | 350,000 | - | - | 0.0 Du/Ac | |
| | MU.B-20 | Area 8 | 36.23 | 34.15 | 31.22 | - | 100,000 | 350,000 | - | - | 0.0 Du/Ac | |
| | MU.B-21 | Area 8 | 59.09 | 47.51 | 44.21 | - | - | 550,000 | 15,000 | - | 0.0 Du/Ac | |
| | MU.B-22 | Area 8 | 59.32 | 51.25 | 46.75 | - | - | 550,000 | - | - | 0.0 Du/Ac | |
| | MU.B-23 (APS) | Area 8 | Not Part of Auction Property | | | - | - | - | - | - | 0.0 Du/Ac | |
| | MU.B-24 | Area 7 | 31.63 | 31.63 | 28.37 | - | - | - | - | 800 | 25.3 Du/Ac | |
| | MU.B-25 | Area 7 | 31.00 | 31.00 | 30.18 | - | - | - | - | 700 | 22.6 Du/Ac | |
| | MU.B-26 | Area 7 | 31.00 | 31.00 | 30.01 | - | - | - | - | 700 | 22.6 Du/Ac | |
| | MU.B-27 | Area 7 | 32.22 | 32.22 | 28.96 | - | - | - | - | 800 | 24.8 Du/Ac | |
| | MU.B-28 | Area 7 | 56.74 | 46.62 | 41.75 | - | - | 100,000 | - | 600 | 10.6 Du/Ac | |
| | MU.B-29 | Area 7 | 60.75 | 51.69 | 44.10 | - | - | 100,000 | - | 600 | 9.9 Du/Ac | |
| | MU.B-30 | Area 7 | 138.35 | 78.39 | 69.05 | - | - | - | - | 898 | 6.5 Du/Ac | |
| | | | 732.0 | 616.4 | 571.0 | - | 2,600,000 | 3,300,000 | 2,300,000 | 6,098 | | |
| MU-C | | | | | | | | | | | | |
| | MU.C-2 | Area 5 | 42.16 | 38.81 | 35.01 | | 142,857 | 171,429 | 128,571 | | 0.0 Du/Ac | 248 |
| | MU.C-3 | Area 6 | 51.25 | 31.90 | 30.42 | - | 142,857 | 171,429 | 128,571 | | 0.0 Du/Ac | |
| | MU.C-4 | Area 6 | 32.89 | 26.86 | 26.86 | - | 142,857 | 171,429 | 128,571 | | 0.0 Du/Ac | |
| | MU.C-5 | Area 6 | 46.99 | 46.99 | 46.99 | - | 142,857 | 171,429 | 128,571 | | 0.0 Du/Ac | |
| | MU.C-6 (APS***) | Area 5 | 40.33 | 40.33 | 40.33 | - | | | | - | 0.0 Du/Ac | |
| | MU.C-10 | Area 6 | 20.61 | 20.61 | 17.09 | - | 142,857 | 171,429 | 128,571 | 399 | 19.4 Du/Ac | |
| | MU.C-11 | Area 6 | 42.22 | 42.22 | 42.22 | - | 142,857 | 171,429 | 128,571 | 400 | 9.5 Du/Ac | |
| | MU.C-12 | Area 6 | 33.11 | 25.23 | 20.23 | - | 142,857 | 171,429 | 128,571 | - | 0.0 Du/Ac | |
| | | | 309.6 | 273.0 | | - | 1,000,000 | 1,200,000 | 900,000 | 799 | | 248 |
| | Freeway MU Subtotal | | 1,317.7 | 1,135.3 | 801.2 | - | 5,000,000 | 6,200,000 | 4,400,000 | 8,961 | | 568 |
| GRAND TOTAL | | | 2,509 | 2,249 | 1,773 | 5,075,000 | 10,075,000 | 12,850,000 | 4,400,000 | 8,961 | | |
| * Net Area is an approximation based on gross acres net of street right of way, drainage improvements, open space. Area calculations are approximate. | | | | | | | | | | | | |
| **Developable Area excludes right-of-way, APS easements, water/wastewater easements and drainage corridors. Area calculations are approximate. | | | | | | | | | | | | |
| ***Proposed APS Substation Area - Actual land area and location to be determined post-auction | | | | | | | | | | | | |
| NOTE: All land use allocations are in conformance with densities/intens | | | | | | | | | | | | |

WASTEWATER INFRASTRUCTURE ASSESSMENT

EXISTING INFRASTRUCTURE

The City of Phoenix is the wastewater service provider for the Auction Parcel. Existing on-site infrastructure consists of gravity sewer systems in 43rd Avenue, 51st Avenue, and the north side of SR-303, of varying pipe diameters (18-inch to 54-inch) flowing south and west to existing Lift Station 77, located at the northwest corner of SR-303 and 51st Avenue. From there, wastewater is pumped through the existing dual 24-inch force main that discharges to a junction structure east of I-17 in Sonoran Desert Drive. This junction structure connects to an existing 30-inch gravity sewer that discharges at Lift Station 66. Refer to **Appendix A - Wastewater Exhibit A – Phase 1 Scenario and Wastewater Exhibit B – Full Build-out Scenario** for all existing infrastructure.

KEY ASSUMPTIONS AND BASIS OF ANALYSIS

The wastewater collection system design is based on the mix of uses and densities assumed in the Conceptual Land Use Plan and WOODPATEL's understanding of the 2021 City of Phoenix Design Standards Manual for Water and Wastewater Systems, City-accepted population-based criteria, input from end user on FAB wastewater flow, regionally accepted design standards, and Title 18, Chapter 9 of the Arizona Administrative Code. Key assumptions are as follows:

1. Developable area in Tech Park is split in equal portions between three land uses: Industrial Major-User, Industrial, and Office.
2. Industrial Major-User Demand assumption in Tech Park assumes one-third (1/3) of the Tech Park's developable acreage will be fabrication plants totaling 4.7 MGD with no additional peaking factor
3. The Retained Property assumes 8.5 MGD wastewater demand.

DESIGN CRITERIA AND PROJECT DEMANDS

The proposed total average daily demand (ADD) for the Auction Parcel and Retained Property is 8.4 MGD and 8.5 MGD, respectively. The total ADD of the Tech Campus is 17.2 MGD. Refer to the Conceptual Master Wastewater Report for North Phoenix 3,500 PUD for complete design criteria and demand calculations.

PROPOSED CONCEPTUAL INFRASTRUCTURE

The proposed public wastewater collection system is made up of gravity sewer pipes varying in sizes from 8-inch to 42-inch diameter, and force main pipe ranging from 18-inch to 24-inch diameter. The proposed wastewater system will be presented in two phases, consisting of Phase 1 and Full Build-out. Phase 1 is work will be required to be completed as stipulated in the Participation Agreement, and consists of the wastewater infrastructure associated with the development directly adjacent to the major arterial roadways of 43rd Avenue, 51st Avenue, and Dove Valley Road, and their downstream connections to the

planned North Gateway Water Reclamation Facility (NGWRF). Full build-out consists of the Phase 1 infrastructure, the wastewater infrastructure associated with the minor arterial or secondary roadway system within the Auction Parcel, and the Retained Property backbone wastewater infrastructure. Refer to **Appendix A - Wastewater Exhibit A – Phase 1 Scenario, Wastewater Exhibit B – Full Build-out Scenario and Wastewater Exhibit C - Master Development Land Use Demand Summary table** for proposed conceptual infrastructure sizes and locations.

The proposed wastewater collection system for full build-out will outfall in three (3) locations. The first outfall location will be near the intersection of the New River and SR-303 crossing at a proposed lift station ultimately outfalling to 51st Avenue junction structure. The second outfall location will be near the intersection of 51st Avenue and SR-303, which will ultimately convey wastewater flows to the planned NGWRF. The final outfall will be near the intersection of 43rd Avenue and the SR-303, which will ultimately convey wastewater flows to the planned NGWRF.

Per AECOM Technical Services, Inc.'s North Gateway Water Reclamation Facility General Concept Report the current wastewater capacity downstream from the North Phoenix 3,500 PUD can support 8MGD of average flow. This capacity is currently committed to the TSMC Phase 1 and Phase 2 Fabrication Facilities, therefore in order to support further development of the Auction and Retained properties, the NGWRF must be constructed. Per **Appendix A - Wastewater Exhibit A – Phase 1 Scenario, Wastewater Exhibit B – Full Build-out Scenario and Table 1 - Master Development Land Use Waste Water Demand Summary**, the conceptual NGWRF is proposed to be designed and constructed in phases to accommodate the growth of the North Phoenix 3,500 PUD as well as future land development. The North Phoenix 3,500 Development phasing is based on a 4-phase build-out with wastewater flow projections for each phase along with the Retained Property immediately west of the North Phoenix 3,500 Development. Retained Property flows are expected to occur in Phases 2, 3, and Build-out. Based on an AAD flow forecast over the build out period, the NGWRF initial capacity is recommended to be 8.0 MGD. The NGWRF 8.0 MGD capacity would support Phase 1 flows. In future phases, the NGWRF capacity would be increased as development in each subsequent phase is built out along with any other additional properties in the surrounding area. Ultimately, NGWRF build out capacity is forecasted to reach approximately 27.0 MGD. Refer to **Appendix G - North Gateway Water Reclamation Facility General Concept Report** for complete report.

CONCEPTUAL LEVEL OPINION OF PROBABLE COST

Refer to **Appendix B – Conceptual Engineer's Opinion of Probable Cost** for conceptual level opinion of probable cost exhibits prepared for phase 1 and full build-out. Actual infrastructure items and quantities shown in this report are subject to further engineering, review, and approval by the City of Phoenix.

WATER INFRASTRUCTURE ASSESSMENT

EXISTING INFRASTRUCTURE

The City of Phoenix is the water service provider for the Auction Parcel. The Auction Parcel is located within two (2) pressure zones as defined by the City of Phoenix: Zone 6B located on north/east portion of the Auction Parcel, and Zone 5ED located on the south/west portion of the Auction Parcel. Existing off-site infrastructure adjacent to the Auction Parcel includes the following: a 78-inch water transmission main running east/west along SR-74 that originates at the Lake Pleasant Water Treatment Plant northwest of the Auction Parcel, a PRV Station located by the SR-74 and 51st Avenue intersection, a 12-inch water main running east/west along Carefree Highway east of I-17, a 36-inch water main running east/west along the north side of SR-303 and Sonoran Desert Drive, and a 12-inch water main running east/west along Dove Valley Road east of I-17. Existing on-site infrastructure consists of water mains of varying pipe diameters (16-inch to 54-inch) within 51st Avenue, 43rd Avenue, and Dove Valley Road. Refer to **Appendix A - Water Exhibit C – Phase 1 Scenario** and **Water Exhibit D – Full Build-out Scenario** for all existing infrastructure.

KEY ASSUMPTIONS AND BASIS OF ANALYSIS

Water design criteria are based on the mix of uses and densities assumed in the Conceptual Land Use Plan and WOODPATEL's understanding of the 2021 City of Phoenix Design Standards Manual for Water and Wastewater Systems, City-accepted population-based criteria, input from end user on semiconductor chip fabrication (FAB) demand consumption, and regionally accepted design standards. Key assumptions are as follows:

1. Developable area in Tech Park is split in equal portions between three land uses: Industrial Major-User, Industrial, and Office.
2. Industrial Major-User Demand assumption in Tech Park assumes one-third (1/3) of the Tech Park's developable acreage will be Fabrication Plants totaling 6.5 MGD with no additional peaking factor.
3. The Retained Property assumes 10.0 MGD water demand.

DESIGN CRITERIA AND PROJECT DEMANDS

The proposed total ADD for the Auction Parcel and Retained Property is 12.9 MGD and 10.0 MGD, respectively. The total ADD of the Tech Campus is 25.7 MGD. Refer to the Conceptual Master Water Report for North Phoenix 3,500 PUD for complete design criteria and demand calculations.

PROPOSED CONCEPTUAL INFRASTRUCTURE

The proposed water system is presented in two phases, consisting of Phase 1 and Full-build out. Phase 1 is work to be completed in the first five (5) years of development, and consists of the water infrastructure associated with the development directly adjacent to the major arterial roadways of 43rd Avenue, 51st Avenue, and Dove Valley Road. Full build-out consists of the Phase 1 infrastructure, the water infrastructure associated with the minor arterial or secondary roadway system within the Auction Parcel, and the Retained Property backbone water infrastructure. Refer to **Appendix A - Exhibit C – Phase 1 Scenario, Water Exhibit D – Full Build-out Scenario** and **Table 2 - Master Development Land Use Water Demand Summary** for proposed conceptual infrastructure sizes and locations.

The proposed Phase 1 public water distribution system includes 12-inch and 16-inch ductile-iron water pipes that will connect to the existing water distribution system at six (6) locations:

1. One (1) 16-inch to 16-inch waterline connection at the intersection of 51st Avenue and Dove Valley Road.
2. One (1) 54-inch to 16-inch waterline connection south of the intersection of 51st Avenue and SR-74.
3. One (1) 16-inch to 78-inch waterline connection near the intersection of 51st Avenue and SR-74.
4. One (1) 16-inch to 78-inch waterline connection west of I-17 in SR-74.
5. One (1) 16-inch to 12-inch waterline connection east of I-17 in Carefree Highway.
6. One (1) 12-inch to 12-inch waterline connection east of I-17 in Dove Valley Road.

The proposed full build-out public water distribution system includes all Phase 1 infrastructure plus 12-inch, 16-inch, and 20-inch ductile-iron water pipes that will connect to the existing water distribution system at two (2) additional locations:

1. One (1) 20-inch to 54-inch waterline connection near the intersection of 51st Avenue and SR-74.
2. One (1) 12-inch to 16-inch waterline connection near the intersection of 43rd Avenue and the proposed minor arterial roadway, south of Dove Valley Road.

CONCEPTUAL LEVEL OPINION OF PROBABLE COST

Refer to **Appendix B – Conceptual Engineer’s Opinion of Probable Cost** for conceptual level opinion of probable cost exhibits prepared for phase 1 and full build-out. Actual infrastructure items and quantities shown in this report are subject to further engineering, review, and approval by the City of Phoenix.

INDIRECT POTABLE REUSE INFRASTRUCTURE ASSESSMENT

EXISTING INFRASTRUCTURE

It is WOODPATEL's understanding that no existing infrastructure for Indirect Potable Reuse (IPR) and/or reclaimed water is present on the Auction Parcel.

KEY ASSUMPTIONS AND BASIS OF ANALYSIS

Indirect Potable Reuse system design will be based on Arizona Department of Environmental Quality (ADEQ) water quality standards. ADEQ is currently in the process of revising the Arizona Administrative Code (AAC) to allow for expansion of potable reuse for facilities subject to the Safe Drinking Water Act and for pilot, demonstration, or educational facilities. Potable reuse, direct and indirect, is currently allowed under ADEQ's rules in AAC 18.9.7, additional regulatory specificity is needed to ease water suppliers' ability to engage in potable reuse.

It is expected an Indirect Potable Reuse system is to be utilized to treat a combination of domestic wastewater and TSMC pre-treated flows prior to groundwater aquifer recharge. Refer to **Appendix G - North Gateway Water Reclamation Facility Concept Report** for further details and complete report.

DESIGN CRITERIA AND PROJECT DEMANDS

The proposed total average daily demand (ADD) for Indirect Potable Reuse for the Auction Parcel and Retained Property is 8.4 MGD and 8.5 MGD, respectively. Once ADEQ has developed and adopted IPR regulations, those standards should be adhered to for design criteria.

PROPOSED CONCEPTUAL INFRASTRUCTURE

The proposed IPR system is presented in two (2) phases. It is anticipated that with Phase 1, IPR facilities would be built in conjunction with the North Gateway Water Reclamation Facility (NGWRF). Additionally, dual 24-inch ductile iron pipes to deliver the potable reuse water from NGWRF back through the Auction Parcel along 51st Avenue, running north across the intersection of 51st Avenue and SR-74 and stubbing out for future connection to the proposed 78-inch IPR Site further north. An additional 24-inch ductile iron pipe is anticipated to also parallel the dual IPR pipes within 51st Avenue, beginning within the TSMC property adjacent to 51st Avenue and stubbing out at the same location as the dual 24-inch pipe run north of 51st Avenue. At full build-out it is expected that the triple 24-inch ductile iron pipes would then have been connected from the 51st Avenue and SR-74 intersection stub out location to approximately one mile north to the constructed and operational 78-Inch IPR Site. Refer to **Appendix A - IPR Exhibit E –Phase 1 Scenario** and **Exhibit F –Full Build-out Scenario**.

CONCEPTUAL LEVEL OPINION OF PROBABLE COST

Refer to **Appendix B – Conceptual Engineer’s Opinion of Probable Cost** for conceptual level opinion of probable cost exhibits prepared for phase 1 and full build-out. Actual infrastructure items and quantities shown in this report are subject to further engineering, review, and approval by the City of Phoenix..

STREET INFRASTRUCTURE ASSESSMENT

EXISTING INFRASTRUCTURE

The Auction Parcel is located in the far northern section of the City of Phoenix, and is bounded by several major highways:

- State Route 303 Loop (SR-303) on the south. SR-303L is currently under construction to widen to a 6-lane freeway section with full interchanges at 51st Avenue and 43rd Avenue
- SR-74 (Carefree Highway) on the north. SR-74 is a 2-lane highway along most of the parcel, widening to add left turn lanes at existing intersections, and widening to a 5-lane section at the Interstate 17 interchange.
- Interstate 17 to the east. I-17 is a 6-lane freeway plus HOV lanes and auxiliary lanes at the Dove Valley Road interchange and SR-74 interchange. The Arizona Department of Transportation (ADOT) is currently in the planning stages of constructing a system interchange at the SR-303L/I-17 Interchange.

The Western boundary of the parcel is marked by Deadman Wash for the Auction property and New River for the Retained property.

The existing roadways in the interior of the parcel have undergone extensive changes over the past 2 years, as the TSMC site has constructed several arterial roadways to provide access to their site.

- Dove Valley Road is an east-west arterial street constructed as a 6-lane urban roadway with sidewalks from I-17 west to the main entrance to the TSMC site. The roadway has been constructed as a half-section arterial from this location to approximately 1000’ west of the proposed 51st Avenue alignment.
- 43rd Avenue has been constructed as a 6-lane arterial to serve the eastern side of the TSMC property from the SR-303L to Dove Valley Road.
- 51st Avenue has been constructed as a 6-lane arterial from the SR-303L approximately 1000’ north. It is anticipated the remainder of this roadway will be constructed to a 6-lane arterial to the Dove Valley Road intersection as part of the TSMC development.
- North of Dove Valley Road, the existing north-south roadways have been used as access to construction sites in the TSMC parcel, but have not been reconstructed to their ultimate configuration.their ultimate configuration.

KEY ASSUMPTIONS AND BASIS OF ANALYSIS

The proposed street infrastructure has been developed using City of Phoenix Street Planning and Design Guidelines and the Arizona Department of Transportation Roadway Design Guidelines. Dove Valley Road, 51st Avenue and 43rd Avenue will be designed as Major Arterials, as defined by the City of Phoenix. These will be 6-lane curbed roadways, with 5' sidewalks on both sides and left- and right-turn lanes at intersections. It is anticipated that each of the arterial intersections will be signalized as the development occurs. Because SR-74 (Carefree Highway) is a state roadway, it will be designed as a 6-lane controlled access urban highway. Collector roadways serving individual properties within the development will be serviced by roadways designed in accordance with City of Phoenix Major Collector or Collector typical sections.

The existing TSMC development has constructed portions of these roadways, and those sections will not be considered as part of the Auction Parcel's street infrastructure requirements.

- 43rd Avenue from SR 303L to Dove Valley Road
- 51st Avenue from SR 303L to Dove Valley Road
- Dove Valley Road, ½ Section from 1000' west of 51st Avenue to TSMC entrance
- Dove Valley Road, full Section from TSMC Entrance to I-17 Interchange

SR-74 is currently a 2-lane highway and is expected to be widened to provide the proposed 6-lane highway section.

PROPOSED CONCEPTUAL INFRASTRUCTURE

As described in the previous sections, the proposed roadways will be developed in accordance with City of Phoenix or Arizona DOT standard sections. The proposed roadway sections and plan views for the roadways are shown in the conceptual plans included in the appendix to this report.

Phase 1 Roadway Construction was estimated to include:

- 43rd Avenue – Major Arterial (City of Phoenix Cross-section “A”)
 - From Dove Valley Road to Carefree Highway (SR-74)
- 51st Avenue – Major Arterial (City of Phoenix Cross-section “A”)
 - Full Street Construction from Dove Valley Road to Carefree Highway (SR-74)
- Dove Valley Road (Collector C) – Major Arterial (City of Phoenix Cross-section “A”)
 - Full Street Construction from western limits to 1000' west of 51st Avenue
 - ½ Street Construction from 51st Avenue to existing 6-lane section

- Carefree Highway (SR-74) – Major Arterial (AZDOT Controlled Access Urban Highway Fig 306.4B)
 - Widening of existing lanes to 3-lane eastbound roadway
 - ½ Street Construction from west of 51st Avenue to project limits
- Traffic Signals at the following locations:
 - Carefree Highway (SR-74) at 43rd Avenue
 - Carefree Highway (SR-74) at 51st Avenue
 - Dove Valley Road at 51st Avenue

Full Build Out Construction was estimated to include:

- Phase 1 Roadway Construction Items
- Collector Roadway A (City of Phoenix Cross-section “E” – Collector)
 - Project Limits to 51st Avenue
- Collector Roadway A (City of Phoenix Cross-section “D” – Major Collector)
 - 51st Avenue to Collector E
- Collector Roadway B (City of Phoenix Cross-section “D” – Major Collector)
- Collector Roadway D (City of Phoenix Cross-section “D” – Major Collector)
- Collector Roadway E (City of Phoenix Cross-section “D” – Major Collector)
- Traffic Signals at the following locations:
 - 51st Avenue at Collector Road A
 - 43rd Avenue at Collector Road A
 - 43rd Avenue at Collector Road D
 - Dove Valley Road at Collector Road A
 - Collector Road B at Collector Road D

CONCEPTUAL LEVEL OPINION OF PROBABLE COST

Refer to **Appendix B – Conceptual Engineer’s Opinion of Probable Cost** for conceptual level opinion of probable cost exhibits prepared for phase 1 and full build-out. Actual infrastructure items and quantities shown in this report are subject to further engineering, review, and approval by the City of Phoenix.

DRAINAGE INFRASTRUCTURE ASSESSMENT

EXISTING INFRASTRUCTURE AND SITE CONDITIONS

There are three (3) distinct watersheds (New River, Deadman Wash and Biscuit Flats) that contribute to the following significant washes that impact the Planning Parcel: New River, Deadman Wash, Deadman Wash Tributary 1, Tributary 2, Tributary 2A, and Biscuit Flats CAP Wash East, Cap Wash West, and Upper Buchannon Wash.

As shown on Drainage Exhibit A – Existing Condition Drainage Map, the existing drainage infrastructure along SR-74 starts with a double barrel 48-inch pipe culvert at the I-17 Traffic Interchange (TI). There are several small pipe culvert crossings (four (4) 28-inch x 20-inch pipes) along with one (1) 48-inch pipe culvert where the Deadman Wash intersects SR-74. Where New River intersects SR-74, there exists two (2) bridges each with an approximate 380-ft width span. There is also one (1) 60-inch pipe located approximately a half-mile east of the New River bridge crossing.

Along I-17 there is a double barrel 24" culvert along the I-17 TI southbound on-ramp and one triple barrel 10-ft x 5-ft box culvert crossing north of the Dove Valley TI (at I-17 Station 1180+50 as-built plans).

Along SR-303 there are two (2) bridges, one approximate 375-ft wide span for Deadman Wash and one approximate 830-ft wide span for New River. In addition, there are sixteen (16) culvert crossings along the highway. Six (6) are 36-inch and 48-inch pipe culvert crossings, eight (8) are box culvert crossings varying between 10-ft x 6-ft to 10-ft x 12-ft RCBCs, and there are two (2) super-box culvert crossings. The Final Drainage Report SR-303 Lake Pleasant Parkway to I-17 (2008) Table 18 has been included for the specific roadway stationing of each culvert crossing along the SR-303 (Appendix C). There are also concrete channels along the north side of SR-303 as necessary to collect the upstream runoff and convey the flow to the SR-303 culvert crossings.

The Taiwan Semiconductor Manufacturing Company (TSMC) has begun development on the land located between 43rd Avenue and 51st Avenue, from Dove Valley Road to SR-303. This development included a drainage conveyance corridor located north of Dove Valley Road that intercepted flow from Deadman Wash Tributary 2A and conveyed the runoff to the west where it combined with Deadman Wash Tributary 2. The combined runoff then continued south to SR-303 Deadman Wash Tributary 2 concrete channel where it flows west until it reaches the Deadman Wash SR-303 bridge crossing.

In conjunction with the TSMC development, the City of Phoenix is completing the Dove Valley Road infrastructure from I-17 to 51st Avenue and includes 51st Avenue and 43rd Avenue from SR-303 to Dove Valley Road. Starting at I-17, Dove Valley has three box culvert drainage crossings, one (1) triple barrel 8-ft x 6-ft at the Dove Valley TI, and two (2) 6-ft x 6-ft RCBCs between 43rd Avenue and I-17. In addition, along the east side of 43rd Avenue a channel was constructed to convey the runoff from the land to the east, to a double barrel 10-ft x 6-ft RCBC located north of the 43rd Avenue TI with the SR-303.

This runoff contributes to the Upper Buchannon Wash. A concrete channel on TSMC will then convey the flow from the 43rd Avenue box culvert to the downstream box culvert crossing along SR-303.

As seen on Drainage Exhibit A, there are several Federal Emergency Management Agency (FEMA) effective Special Flood Hazard Areas (SFHAs) that exist throughout the Planning Parcel. The specifics of these effective FEMA SFHA will be addressed within the Floodplain section below. Previous drainage studies have also established several existing floodplains that cross the Planning Parcel. All the FEMA SFHAs and existing 100-year floodplains that cross the property are produced by offsite flows generated from watersheds to the north. As is reflected from the broad shallow floodplains produced by these offsite flows, the onsite washes are poorly defined, as distinct low flow washes are isolated typically to the major wash corridors: New River, Wash D and Deadman Wash. Most of the Planning Parcel is composed of upland areas that rarely exhibit any distinct washes. Only at the southern boundary of the Planning Parcel does the local onsite watersheds typically produce enough runoff to begin developing distinct washes, as noted by the SFHAs of the Upper Buchannon Wash, Deadman Wash Tributary 1, and CAP Wash West. The CAP Wash East is unique in that the upstream runoff is concentrated as it passes under I-17 and then again under Dove Valley Road, via box culverts. As a result, the wash is quite distinct as it crosses the property until it reaches a box culvert crossing along SR-303. There are also remnants of a few cattle stock ponds scattered throughout the Planning Parcel.

As the rainfall runoff reaches the SR-303, there are a series of concrete interceptor channels that parallel the highway to manage the flow to the appropriate SR-303 drainage crossings. In addition, the SR-303 New River bridge and Deadman Wash bridge include levees, spur dikes and abutment protection measures at the wash crossings.

KEY ASSUMPTIONS AND BASIS OF ANALYSIS

The Auction Parcel has previous hydrology models that determined existing peak flows. The following assumptions and previous studies have been used in preparation of the analysis results presented:

- The ASLD Part 1, Task B and Part 2 Task A Conceptual Drainage Plan for South Biscuit Flats (SBF) (WOODPATEL 2008) utilizing the Upper New River Flood Insurance Study (FIS), the Upper New River Area Drainage Master Plan (ADMP) and the Adobe Dam Desert Hills ADMP, updated the precipitation to NOAA Atlas 14 and determined comparison peak discharges for the main wash corridors along SR-74 and concentration points of interest. Where applicable, these updated discharges were utilized to determine the approximate design and cost for Auction Parcel channel drainage improvements.

- The Conceptual Master Drainage Report (MDR) for North Phoenix 3,500 PUD (WOODPATEL 2020) updated the SBF Conceptual Drainage Plan hydrology for a Post-Development Condition on the 3,500 acres of land between Deadman Wash and I-17. The drainage report analyzed the Deadman Wash and completed the floodway between SR-74 and SR-303. In addition, the report prepared a post-development floodway encroachment analysis which was used to approximate the design and cost for the Auction Parcel's post-development floodplain encroachment conditions.
- The Auction Parcel will be subject to the City of Phoenix Planning & Development regulations and standards including the Stormwater Policies and Standards manual.
- It is the responsibility of the successful bidder to work with the City of Phoenix and FEMA to re-route and/or re-map any existing SFHAs Zone AE and/or Zone A floodplains impacting the Auction Parcel. This includes the existing effective FEMA SFHAs that are impacted by the proposed Deadman Wash bank protection and both SR-74 channel drainage improvements and/or any additional post-development that may occur within the FEMA SFHAs that exist throughout the Auction Parcel.
- Dove Valley Road Deadman Wash Tributary 2 and New River roadway drainage crossings may be required in the future and were considered beyond the scope of development at this time.

PROPOSED CONCEPTUAL INFRASTRUCTURE

The Auction Parcel's planning incorporates the existing upstream and onsite drainage flow patterns, the historical runoff outfall locations, and the existing drainage infrastructure of the SR 303 and the TSMC development. As development occurs, existing drainage impacting the Planning Parcel from north of SR-74 will be routed around the property along the north property line, to the two major wash corridors of New River and Deadman Wash. It is anticipated that development will be subject to 100-year, 2-hour retention and stormwater storage basin freeboard requirements as outlined within the City of Phoenix drainage regulations..

There are three significant channel/wash drainage improvements relevant to the Planning Parcel's development: two SR-74 conveyance channels and the Deadman Wash bank protection

1. State Route 74 Earthen Channel to Deadman Wash – As detailed on Drainage Exhibit B – State Route 74 Deadman Wash Channel Drainage Design Map, the channel will start at the I-17 TI with SR-74 by accepting the runoff from the interchange and conveying it west. The conveyance corridor then collects the runoff from the Deadman Wash Tributary 2A and Tributary 2 as they cross over SR-74 at-grade. The channel will then continue west until it combines with Deadman Wash.
2. State Route 74 Earthen Channel to New River – As detailed on Drainage Exhibit C – State Route 74 New River Channel Drainage Design Map, the channel begins west of Deadman Wash and starts by collecting Deadman Wash Tributary 1 as it crosses SR-74 at-grade. The channel continues west collecting flow from Wash D and local upstream watersheds which also cross over SR-74. The channel then combines with New River.

Within both conveyance corridors, the preliminary channel designs were placed outside of the SR-74 ADOT easement and were considered trapezoidal with 4:1 side slopes and a varying bottom width that varied dependent on the intercepted peak flows. It is anticipated that channel improvements will include landscape rock, turf/re-vegetation as necessary for a channel adjacent to and/or within a City of Phoenix scenic corridor. In addition, the preliminary channel design included grade control structures to maintain the required channel longitudinal slopes, and these were designed with gabion mattress erosion protection.

3. Deadman Wash Bank Protection – As detailed on Drainage Exhibit D, the Deadman Wash crosses at-grade over SR-74 and continues southwest until passing under the SR-303 Deadman Wash bridge. In a fully developed condition, encroachment into the FEMA Deadman Wash SFHA floodplain fringe up to the floodway was assumed to occur to recapture the significant land area adjacent to the floodway. The preliminary bank protection design considered gabion mattress erosion protection at a 1.5:1 side slope with gabion box at the top of the protection (as shown on Drainage Exhibit D). A preliminary Arizona Department of Water Resources (ADWR) Level I scour analysis was performed and determined that the necessary bank protection toe-down depth of eleven (11) feet was required for an encroachment into Deadman Wash. As development progresses and geotechnical information is obtained for the Deadman Wash, a more detailed scour analysis should be performed to potentially reduce the scour depth results.

CONCEPTUAL LEVEL OPINION OF PROBABLE COST

A conceptual-level Engineer's Opinion of Probable Cost (EOPC) was determined to support the development of the Planning Parcel. The drainage improvements are presented in two phases, consisting of Phase 1 and Full Build-out. Phase 1 is work to be completed in the first five (5) years of development, and consists of the SR-74 Earthen Channel to Deadman Wash. Refer to Drainage Exhibit E – Phase 1 Drainage Improvements Map. Full build-out consists of Phase 1 improvements, Deadman Wash Bank Protection drainage improvements, and the SR-74 Earthen Channel to New River.

The SR-74 Deadman Wash Channel is approximately 12,000 linear feet and included preliminary roadway box culvert drainage crossings for 51st Avenue and 43rd Avenue, nine (9) grade control structures and upstream offsite wash inflow erosion protection. The SR-74 New River Channel is approximately 8,500 linear feet and included two (2) grade control structures and upstream offsite wash inflow erosion protection. The Deadman Wash Bank Protection will start at the northern most point of development at SR-74 and continue south an approximate distance of 7,500 linear feet until reaching the SR-303 bridge crossing. The encroachment design included an assumed approximate fill condition of 100 linear feet adjacent to the bank protection.

Refer to **Appendix B – Conceptual Engineer's Opinion of Probable Cost** for conceptual level opinion of probable cost exhibits prepared for phase 1 and full build-out. Actual infrastructure items and quantities shown in this report are subject to further engineering, review, and approval by the City of Phoenix.

SECTION 404 & FLOODPLAIN

FLOODPLAIN

As shown on Drainage Exhibit F – FEMA FIRM, per the FEMA Flood Insurance Rate Maps (FIRMs) Number 04013C0840L and Number 04013C0845L (dated October 16, 2013), there are several FEMA effective SFHAs that impact the Planning Parcel. FEMA SFHAs Zone AEs exist for New River and Deadman Wash. FEMA SFHAs Zone As exist for Deadman Wash Tributaries 1, 2 and 2A, Upper Buchannon Wash, CAP Wash West and CAP Wash East. The remainder of the Planning Parcel is located within a FEMA “Other Flood Areas” Zone X (Shaded). The FIRM defines the Zone “AE”, Zone “A” and Zone “X” (shaded) as:

- Zone “AE” is defined by FEMA and per the FIRM Panel as follows:
“Special Flood Hazard Areas: Base flood elevations determined.”
- Zone “A” is defined by FEMA and per the FIRM Panel as follows:
“Special flood Hazard Areas: No base flood elevations determined.”
- Zone “X” (shaded) is defined by FEMA and per the FIRM Panel as follows:
“Areas of 500-year flood; areas of 100-year flood with average depths of less than one foot or with drainage areas less than one square mile; and areas protected by levees from 100-year flood.”

The TSMC property has obtained an approved FEMA Conditional Letters of Map Revisions (CLOMR). The CLOMR contained an Annotated FIRM Exhibit (Appendix C) that detailed the anticipated revised FEMA SFHAs because of proposed TSMC Dove Valley Channel conveyance system. Once the channel infrastructure is complete, a FEMA Letter of Map Revision (LOMR) will be completed that will make the revised FEMA SFHAs effective.

JURISDICTIONAL WASHES/SECTION 404 IMPACT

The U.S. Army Corps of Engineers (USACOE) Section 404 Wash Jurisdictional Determinations (JDs) on the Planning Parcel and the proposed SR-74 Channels and Deadman Wash Bank Protection drainage improvements are shown on Drainage Exhibit G - Section 404 Washes. An investigation of the existing USACOE Section 404 Wash Jurisdictional Determinations/ Delineations for the Planning Parcel has been detailed within the following studies and/or permits:

South Biscuit Flats Jurisdictional Delineation (November 2012) ASLD Contract No. EPS080057-20

This study included jurisdictional wash investigations for Deadman Wash (where it was outside of the original designated Arizona Preserve Initiative (API) area), Deadman Wash Tributary 2 & 2A, CAP Wash East, CAP Wash West, Upper Buchannon Wash and twelve (12) other unnamed potential washes throughout the PUD. This study also addressed the Pepe Tank, Escondido Tank and Gibson Tank potential impoundment/wetland ponds.

The study concluded that the non-API Deadman Wash was delineated as a jurisdictional wash. In addition, CAP Wash East was delineated as a jurisdictional wash. The only other location within the PUD that was designated as jurisdictional was Pepe Tank; however, there was no clarification as to whether this was considered an impoundment or wetland area.

TSMC Navigable Waters Protection Rules (NWPR) Approved Jurisdictional Determination (AJD) File No.: SPL-2020-00723

Throughout the TSMC property, it was determined that several washes displayed Section 404 Ordinary High Water Marks (OHWMs). However, these wash designations were sporadic, intermittent, and discontinuous. Currently, most of the washes that were subject to potential Section 404 Wash jurisdiction have been mass graded, with the remaining to be mass graded in the future. Also, the construction of the Dove Valley Channel, located north of Dove Valley Road, graded the Pepe Tank area to adequately control the offsite runoff before entering the downstream drainage corridor.

North Phoenix 3500 Draft Jurisdictional Delineation (March 2022)

Draft JD study maps were provided by ASLD, updating the Section 404 jurisdictional investigations for the same PUD limits and wash areas as within the November 2012 study (excluding the TSMC property). The updates included the additional jurisdictional wash delineations throughout all of Deadman Wash between SR-303 and SR-74; and maintained the CAP Wash East as a jurisdictional determination. As it pertains to the PUD, there were no other washes or tanks (potential impoundment areas) located on the property that were considered jurisdictional

SR-74 Channel Impacts to Deadman Wash Jurisdictional Delineation

As detailed on Drainage Exhibit C – State Route 74 New River Channel Drainage Design Map, the proposed SR-74 Channel turns from an east-west direction to a north-south direction as the drainage corridor releases the runoff into Deadman Wash. At this point, the proposed channel crosses a draft designated Section 404 Wash JD. A preliminary calculation for this permanent disturbance is approximately 0.2 acres. A pipe culvert will be required within the southern bank of the SR-74 channel to pass some of the low flows within the channel into the downstream designated 404 Wash JD or additional disturbance of the wash will need to be considered as permanent impact.

Deadman Wash Bank Protection

The proposed PUD development includes a potential encroachment to the FEMA SFHA floodway of Deadman Wash. This will require the PUD to install bank protection to prevent wash lateral migration into the property. As part of the preliminary recommendations along Deadman Wash, a 50-foot setback from the floodway line was included to account for potential development necessities that could include such items as: freeboard and/or open space requirements, maintenance access requirements, and/or room for any bank improvements. As such, the currently considered encroachment does not impact the draft designated Deadman Wash 404 Wash JDs.

There are additional probable locations that 404 Wash JDs will still need to be disturbed. For example, additional permanent impacts would appear necessary along CAP Wash East to provide access to the land east of the wash. If a Nationwide Permit (NWP) is the preferred path of USACOE permitting, then there is an additional 0.3 acres of 404 Wash JD that can still be permanently impacted throughout the PUD.

It is the responsibility of the successful bidder to work with the USACOE on the Section 404 permitting to determine if Waters of the United States (WOTUS) impact the property.

DRY UTILITIES

UTILITY PROVIDERS

The following utility providers have been identified as having infrastructure and/or service areas in or near the Auction Parcel:

Electric: Arizona Public Service (APS)

Gas: Southwest Gas

Communications: Cox, CenturyLink

Two (2) high-voltage APS transmission lines run across the Auction Parcel in designated APS easements. The Avery Substation (operated by APS) is also located in the southeast area of the site. Underground communication lines run from the center of the site, near the north 150' APS easement intersection with the proposed 51st Avenue alignment, north to SR-74. No easements were found for the underground communication lines according to the ALTA survey. A gas line runs in the northeast corner of the site near the SR-74/I-17 interchange. It is the responsibility of the successful bidder to identify and coordinate with all dry utility companies.

For informational purposes only. Nothing herein should be construed as creating any type of agreement or relationship between APS and any bidder. Additionally, nothing herein constitutes or should be construed as an offer of service, a right to receive service, or a guarantee, reservation, commitment, or offer to guarantee, reserve or commit, to service, capacity, infrastructure configuration, project timing or schedule, or pricing.

The following analysis performed 08/2023 is subject to change. Additional growth in the overall North Phoenix area and/or system modifications may occur outside of this study that would necessitate a reevaluation of the study area. The purpose for this study is to make general estimations for how the transmission and distribution system may potentially be built out to serve load in the area. Initial capacity is intended to begin at 8MW and ramp to full buildout over time. Considerations for an ultimate buildout of 900MW were considered, however resource availability would need to be evaluated as specific customers request service from APS over the next few years of development. Further, any large users exceeding 25 MW would require evaluation on a case by case basis through the APS large load interconnection process. Nothing contained herein should

be construed as a guarantee, commitment, reservation, or offer to guaranty, commit to, or reserve the capacity stated herein or the availability of the same. The successful bidder would be responsible to fund APS for all initial costs to design and construct these improvements, with final cost responsibility determined following project kick-off.

Currently no power is immediately available for distribution within the Auction Property. Based on the variety of uses and development area outlined in the conceptual Auction Property Land Use Plan, it is anticipated that approximately 912 MW of demand load may be required upon full build-out of the Auction Property. The summary below outlines an example of the scope and timing of improvements that APS would require in order to deliver the capacity needed by potential users.

Approximately 8 MW of 12kV distribution capacity is anticipated to be available east of I-17 near Dove Valley Rd from Pioneer Source A. For this source of power to serve to the Auction Property, the feeder would need to be extended across I-17. Existing ducts currently exist that cross I-17 at Dove Valley Rd (minor trenching required east of I-17). Conduit exists on the west side of I-17 along Dove Valley Rd heading towards 51st Ave. Trench and conduit installation would be needed to route cable north and south of Dove Valley Rd. Newly dedicated Public Utility Easement (PUE) corridors would be needed to serve Phase 1 users. Associated trench and conduit costs are not included in the ROM estimate provided. Estimate for Pioneer Source A accounts for 33,500ft linear distance of 6-1100 cable.

Additionally, Pioneer Substation Source B is anticipated to be able to provide approximately 10 MW of distribution level 12kV power. This source will require new equipment in the substation. The source is estimated to be extended approximately 11,500ft from the substation to the Auction Property by installing 6-1100A cable. The route will likely utilize the same distribution PUE corridors as the Pioneer Source A. APS anticipates it would take approximately 24 months from the date the Successful bidder formally applies for service in order to deliver this 18 MW to users within the Auction Property.

The existing Avery Substation, which is located within the Auction Property, is estimated to be capable of being built out to serve 100MW of 12kV distribution capacity that may be utilized by future development. In order for this power to become accessible, new substation equipment will be required to step voltage down from 230kV to 69kV, high voltage breakers and switchyards will have to be constructed within the Avery Substation boundary to step-down the voltage from 230kV to 69kV distribution level. This power will be tied to Gateway, Pioneer and Pyramid Peak 69kV lines. The 69kV power will also be stepped-down to 12kV via new substation equipment and then stubbed out of the Avery Substation footprint for connection to future distribution lines (ROM cost not accounted for in estimate). Additional Public Utility Easement corridors and infrastructure would also be required to distribute this power to users (ROM cost not accounted for in estimate), including an expansion of the existing APS transmission easement to the south and west and a new transmission easement heading north from Avery substation to the Dove Valley Road alignment and then east on Dove Valley Road to the east side of I-17. APS anticipates it would take approximately 4 years from the date the successful bidder formally applies for this service from Avery Substation in order to have the new 69kV and

12kV power available.

A rough order of magnitude estimated cost of \$40M-\$60M was preliminarily developed based on the Pioneer (18MW) and Avery (100MW) examples above. The estimate does not include costs for trenching, conduit, cable installation, etc. to extend the distribution system feeders from Avery Substation. Actual infrastructure items, quantities, and associated costs shown in this report are subject to further engineering, review, and approval by APS and the City of Phoenix.

Future power service will require an additional substation to be constructed within the NE section of the Auction Property, potentially within the Mixed Use zone once user requirements are determined. Additional transmission corridors and lines will be required for this additional substation depending on the substation location. This substation may be able to supply an additional 100 MW of capacity. The added scope of work will require a third 230kV/69kV transformer at Avery Substation and additional transformers at the NE substation to step-down the 69kV power to 12kV. Distribution feeders would need to be stubbed out of the new NE Substation footprint for connection to future distribution lines (ROM cost not accounted for in estimate). APS anticipates it would take approximately 4 years from the date the Successful bidder formally applies for this service in order to have the new 69kV and 12kV power available.

An additional 100MW substation located in the NW section of the Auction Property, potentially within the Tech Park zone, may also be required depending on user demand. This substation will take power from 69kV lines in this area and step down from 69kV to 12kV for distribution. Distribution feeders would need to be stubbed out of the new NW Substation footprint for connection to future distribution lines (ROM cost not accounted for in estimate). APS anticipates it would take approximately 4 years from the date the Successful bidder formally applies for this service in order to have the new 69kV and 12kV power available.

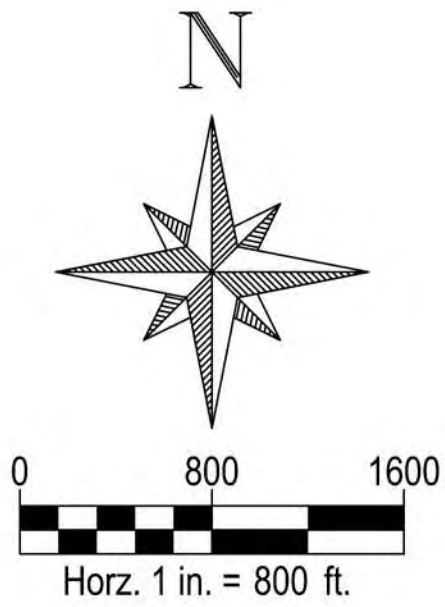
A second major substation which receives 500/230kV transmission lines similar in scale to the Avery Substation, preliminarily designated by APS as TS22, will need to be constructed within the Northwest section of the Tech Park. This substation will be capable of delivering power at 230kV to large power users within the Auction Property and will also step-down the power to 69kV and 12kV as needed for distribution-level users in this section of the Auction Property. Estimate does not account for distribution feeders being extended from TS22 substation. Approximately 320 MW of total capacity can be supported through Pioneer, Avery, the NE substation and TS22. Additional 69/12kV substations can be planned along 69kV corridors, if needed for additional load for users <25 MW. Given the potential for larger users at the transmission level, additional transmission capacity could be required. APS could prepare for this by planning for a future 500kV and 230kV corridor heading north from TS22 to bring power from off-site and support 900+ MW at the Auction Property in addition to other loads. The successful bidder and APS would execute an agreement to determine responsibility for the costs to design and construct these improvements.

A rough order of magnitude estimate of \$240M-\$300M was preliminarily developed to serve a potential 800MW of additional load. These examples include building two potential 69kV/12kV substation (in NE and NW area), as well as building out TS22 in preparation of serving customer load. The estimate does not include costs for trenching, conduit, cable installation, etc. to extend the distribution system feeders from the potential substations mentioned above. Actual infrastructure items, quantities, and associated costs shown in this report are subject to further engineering, review, and approval by APS and the City of Phoenix.

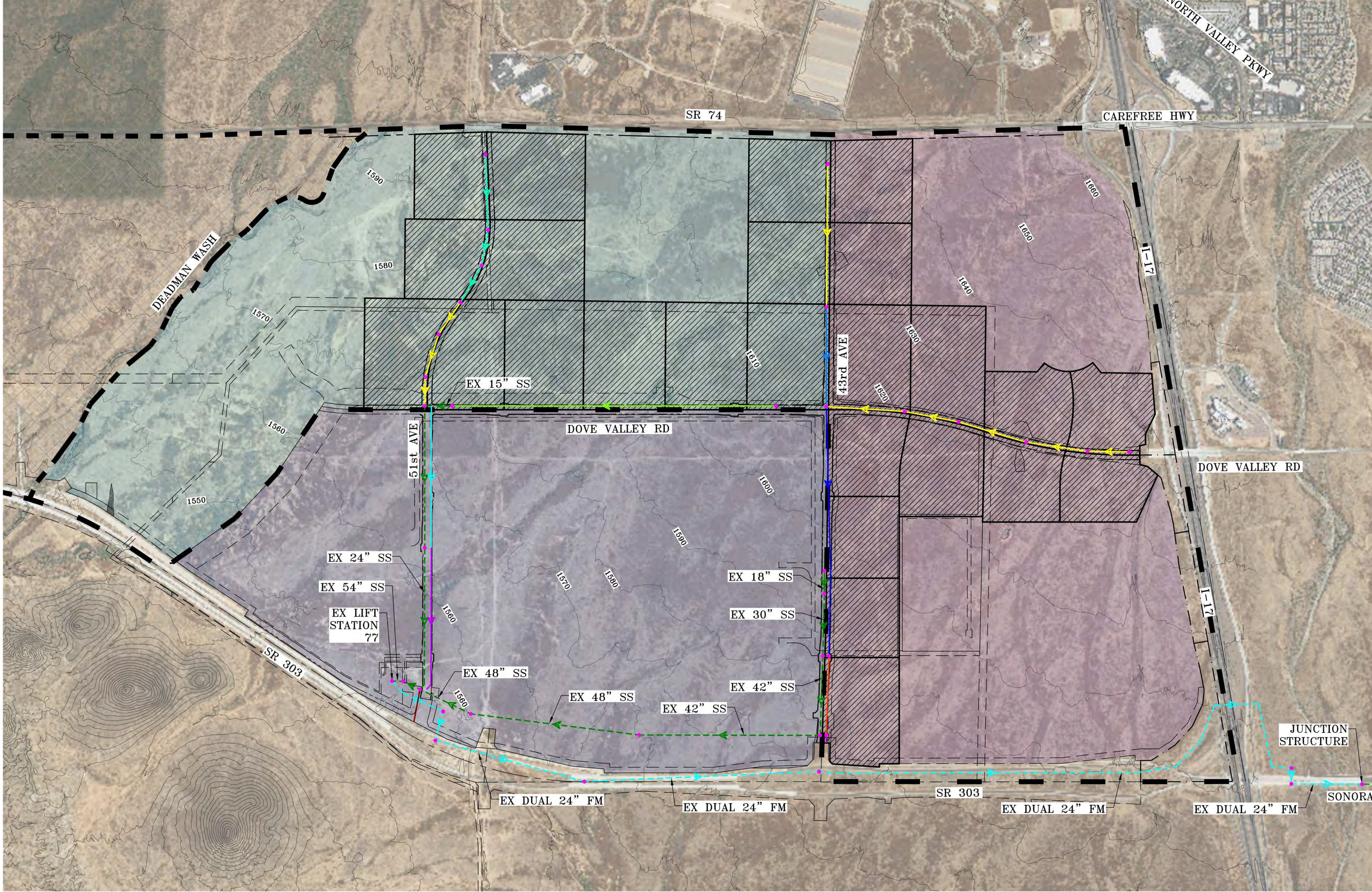
APPENDIX A:
INFRASTRUCTURE EXHIBITS

| ITEM DESCRIPTION | QTY | UNIT |
|---------------------------|-------|------|
| 8" VCP Sewer Line | 2,489 | LF |
| 10" VCP Sewer Line | 5,229 | LF |
| 12" VCP Sewer Line | 9,090 | LF |
| 15" VCP Sewer Line | 2,293 | LF |
| 18" VCP Sewer Line | 1,608 | LF |
| 21" VCP Sewer Line | 4,028 | LF |
| 24" VCP Sewer Line | 1,280 | LF |
| 27" VCP Sewer Line | 2,436 | LF |
| 42" VCP Sewer Line | 536 | LF |
| 5' Diameter Sewer Manhole | 72 | EA |
| LS77 Upgrades | 1 | LS |

PROVIDED QUANTITIES DO NOT
INCLUDE EXISTING INFRASTRUCTURE



| LEGEND | |
|------------------------|----------------|
| PUBLIC SEWER | PLANNED |
| 8-INCHES | |
| 10-INCHES | |
| 12-INCHES | |
| 15-INCHES | |
| 18-INCHES | |
| 21-INCHES | |
| 24-INCHES | |
| 27-INCHES | |
| 42-INCHES | |
| EXISTING PIPE | |
| EXISTING FORCE MAIN | |
| PROPERTY BOUNDARY | |
| RETAINED PROPERTY | |
| EXISTING CONTOUR | |
| TECH CAMPUS AREA | |
| FREEWAY MIXED USE AREA | |
| TECH PARK AREA | |
| PLANNED PHASE 1 AREA | |



NOTES:
PLANNED INFRASTRUCTURE AND BOUNDARIES ARE
CONCEPTUAL AND SUBJECT TO CHANGE.
INFRASTRUCTURE IS SIZED TO ACCOMMODATE THE
ASSUMED TECH CAMPUS LAND USE. ACTUAL
INFRASTRUCTURE REQUIREMENTS ARE SUBJECT TO
FURTHER ENGINEERING, REVIEW, AND APPROVAL BY
THE CITY OF PHOENIX. PHASE 1 INFRASTRUCTURE IS
SIZED TO ACCOMMODATE THE FULL BUILD-OUT.

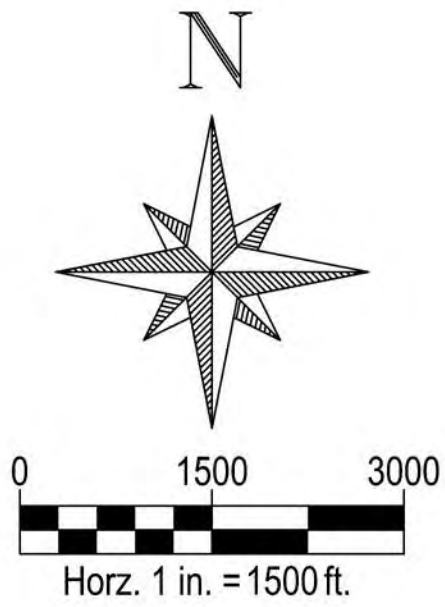
NOT
FOR
CONSTRUCTION
OR RECORDING



| NORTH PHOENIX 3,500 PUD | | | |
|--|------------|--------|-----------|
| APPENDIX A - EXHIBIT A PHASE 1 ON-SITE INFRASTRUCTURE MAP WASTEWATER EXHIBIT | | | |
| DATE | 07/17/2023 | SCALE | 1" = 800' |
| JOB NO. | 205159 | DESIGN | EB |
| | | DRAWN | LR |
| SHEET 1 OF 5 | | | |
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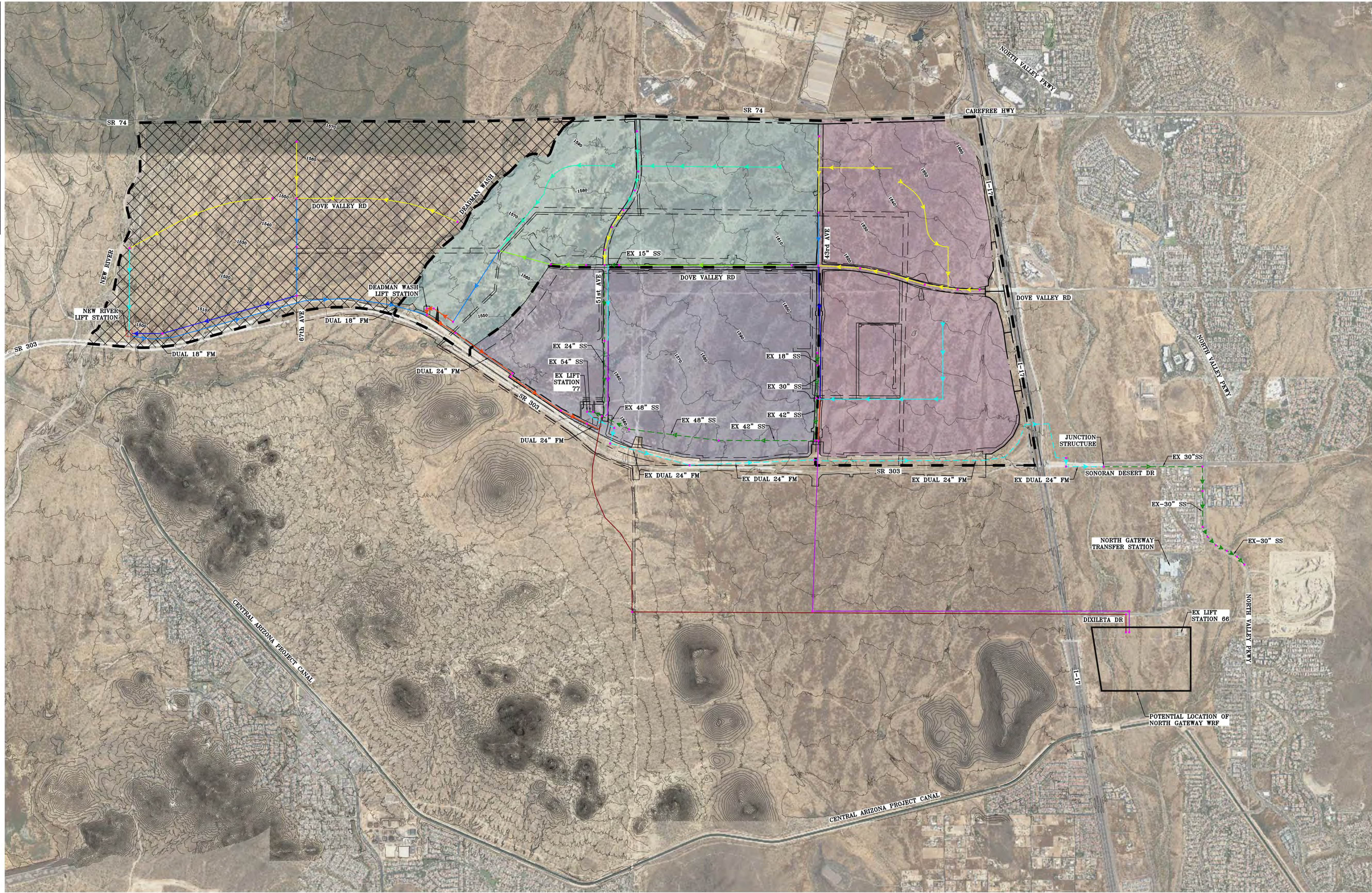
| ITEM DESCRIPTION | QTY | UNIT |
|---|--------|------|
| 8" VCP Sewer Line | 11,591 | LF |
| 10" VCP Sewer Line | 7,925 | LF |
| 12" VCP Sewer Line | 15,255 | LF |
| 15" VCP Sewer Line | 8,455 | LF |
| 18" VCP Sewer Line | 5,652 | LF |
| 21" VCP Sewer Line | 4,027 | LF |
| 24" VCP Sewer Line | 2,202 | LF |
| 27" VCP Sewer Line | 17,724 | LF |
| 42" VCP Sewer Line | 21,831 | LF |
| 5' Diameter Sewer Manhole | 237 | EA |
| Jack & Bore (Loop 303) | 2 | EA |
| Jack & Bore (I-17) | 2 | EA |
| North Gateway WRF | 1 | LS |
| LS77 Upgrades | 1 | LS |
| Deadman Wash Lift Station | 1 | EA |
| Deadman Wash Force Main Discharge Structure | 1 | EA |
| 24" DIP Force Main Line | 13,194 | LF |

PROVIDED QUANTITIES DO NOT INCLUDE EXISTING INFRASTRUCTURE OR PLANNED INFRASTRUCTURE WITHIN RETAINED PROPERTY



| LEGEND | |
|------------------------|--|
| PUBLIC SEWER | PLANNED |
| 8-INCHES | — |
| 10-INCHES | — |
| 12-INCHES | — |
| 15-INCHES | — |
| 18-INCHES | — |
| 21-INCHES | — |
| 24-INCHES | — |
| 27-INCHES | — |
| 42-INCHES | — |
| EXISTING PIPE | — |
| EXISTING FORCE MAIN | — |
| PROPERTY BOUNDARY | --- |
| RETAINED PROPERTY | [hatched box] |
| EXISTING CONTOUR | --- |
| TECH CAMPUS AREA | |
| FREEWAY MIXED USE AREA | |
| TECH PARK AREA | |

NOTES:
PLANNED INFRASTRUCTURE AND BOUNDARIES ARE CONCEPTUAL AND SUBJECT TO CHANGE.
INFRASTRUCTURE IS SIZED TO ACCOMMODATE THE ASSUMED TECH CAMPUS LAND USE. ACTUAL INFRASTRUCTURE REQUIREMENTS ARE SUBJECT TO FURTHER ENGINEERING, REVIEW, AND APPROVAL BY THE CITY OF PHOENIX.



NOT
FOR
CONSTRUCTION
OR RECORDING



NORTH PHOENIX 3,500 PUD

APPENDIX A - EXHIBIT B
AP MASTER BACKBONE INFRASTRUCTURE PLAN
WASTEWATER EXHIBIT

| | | | | | |
|---------|------------|--------|------------|-------|--------|
| DATE | 07/17/2023 | SCALE | 1" = 1500' | SHEET | 1 OF 5 |
| JOB NO. | 205159 | DESIGN | EB | DRAWN | LR |

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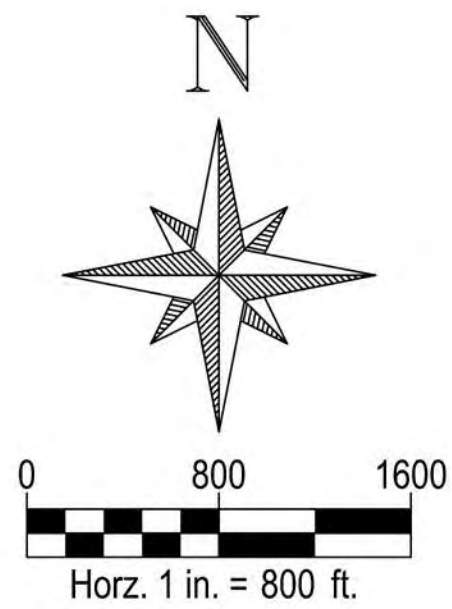
TABLE 1
FULL BUILDOUT DEVELOPMENT LAND USE
WASTEWATER DEMAND SUMMARY

Project North Phoenix 3,500 PUD
Location Phoenix AZ
Project Number 205159
Project Engineer Lucas Roney
References City of Phoenix Design Standards Manual for Water and Wastewater Systems (2021)
Arizona Administrative Code, Title 18, Chapter 9

| Sub-areas | | | Land Use | | | | | | Wastewater Demand |
|---|------------------------------------|------------------------|--|-------------------------------|---------------------------|-------------|-------------------|---------------|------------------------|
| Tech Campus | Area (AC) | Percentage of District | Industrial-Major User (SF) | Industrial (SF) | Office (SF) | Retail (SF) | Multi-family (DU) | Hotel (Rooms) | ADD (gpd) ² |
| TC-A | 428 | 29.5% | 3,500,000 | | | | | | 8,000,000 |
| TC-B | 412 | 30.5% | 3,000,000 | | 1,000,000 | | | | 8,090,000 |
| TC-C | 430 | 40.0% | 4,500,000 | | | | | | 1,125,000 |
| Subtotal | 1,270 | 100% | 11,000,000 | 0 | 1,000,000 | 0 | 0 | 0 | 17,215,000 |
| Tech Park | Developable Area (AC) ¹ | Percentage of District | Industrial-Major User (SF) FAR = 0.38 | Industrial (SF) FAR = 0.38 | Office (SF) FAR = 0.50 | Retail (SF) | Multi-family (DU) | Hotel (Rooms) | ADD (gpd) ³ |
| TP-A | 526 | 57.3% | 2,900,000 | 2,900,000 | 3,800,000 | | | | 3,187,000 |
| TP-B | 234 | 25.5% | 1,300,000 | 1,300,000 | 1,700,000 | | | | 1,418,000 |
| TP-C | 158 | 17.2% | 875,000 | 875,000 | 1,150,000 | | | | 947,250 |
| Subtotal | 918 | 100% | 5,075,000 | 5,075,000 | 6,650,000 | 0 | 0 | 0 | 5,552,250 |
| Freeway Mixed Use | Area (AC) | Percentage of District | Industrial-Major User (SF) ⁴ | Industrial (SF) ⁴ | Office (SF) ⁴ | Retail (SF) | Multi-family (DU) | Hotel (Rooms) | ADD (gpd) |
| MU-A | 264 | 19.8% | | 1,400,000 | 1,700,000 | 1,200,000 | 2,064 | 320 | 732,520 |
| MU-B | 697 | 53.7% | | 2,600,000 | 3,300,000 | 2,300,000 | 6,098 | 631 | 1,791,790 |
| MU-C | 279 | 26.5% | | 1,000,000 | 1,200,000 | 900,000 | 799 | 248 | 406,520 |
| Subtotal | 1,240 | 100% | 0 | 5,000,000 | 6,200,000 | 4,400,000 | 8,961 | 1,199 | 2,930,830 |
| Total | | | 16,075,000 | 10,075,000 | 13,850,000 | 4,400,000 | 8,961 | 1,199 | 25,698,080 |
| Note 1: Developable area in Tech Park is split in equal portions between three land uses: Industrial-Major User, Industrial, and Office. | | | | | | | | | |
| Note 2: Industrial-Major User Demand assumption in Tech Campus TC-A and TC-B accounts for 4.0 MGD per FAB with no additional peaking factor. Tech Campus TC-A is planned to have 2 FAB's and TC-B is planned to have 2 FAB's. | | | | | | | | | |
| Note 3: Industrial-Major User Demand in Tech Park assumes 1/3 of the Tech Park's developable acreage will be Fabrication Plants totaling 4.7 MGD with no additional peaking factor. | | | | | | | | | |
| Note 4: No FAR was used to determine building area due to the unknown division of land use areas in the Freeway Mixed Use zone. | | | | | | | | | |

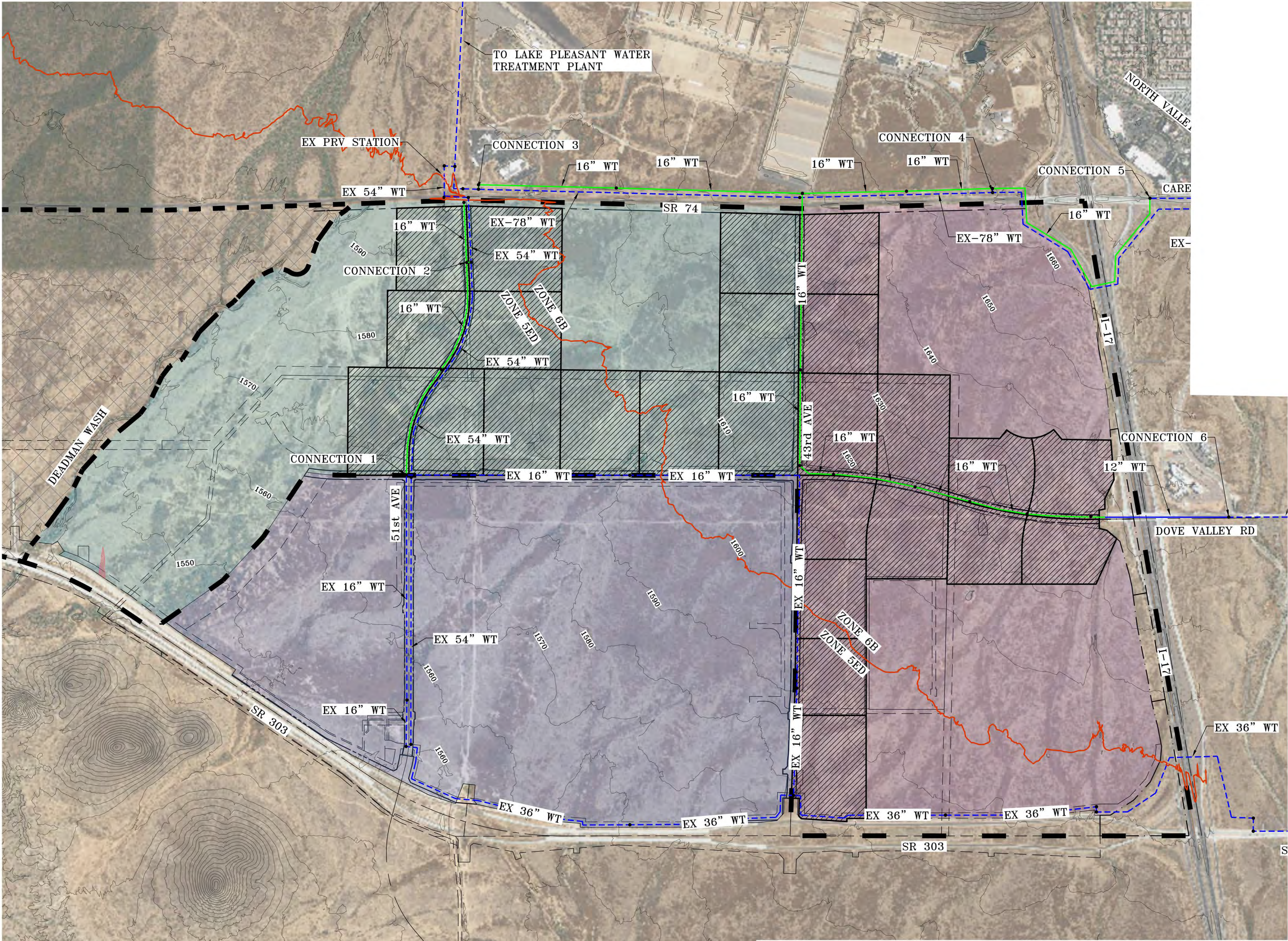
| ITEM DESCRIPTION | QTY | UNIT |
|------------------------|--------|------|
| 12" DIP Water Line | 2,060 | LF |
| 16" DIP Water Line | 27,843 | LF |
| 12" Valve, Box & Cover | 1 | EA |
| 16" Valve, Box & Cover | 20 | EA |
| Fire Hydrant | 100 | EA |
| Jack & Bore (I-17) | 2 | EA |

PROVIDED QUANTITIES DO NOT
INCLUDE EXISTING INFRASTRUCTURE



| LEGEND | | |
|---------------------------------|---------|----------|
| PUBLIC WATER | PLANNED | EXISTING |
| PIPE | | |
| PROPERTY BOUNDARY | | |
| RETAINED PROPERTY | | |
| EXISTING CONTOUR | | |
| WATER PRESSURE ZONE LINE | | |
| PRESSURE REDUCING VALVE STATION | | |
| TECH CAMPUS AREA | | |
| FREEWAY MIXED USE AREA | | |
| TECH PARK AREA | | |
| PLANNED PHASE I AREA | | |

NOTES:
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OR RECORDING**



NORTH PHOENIX 3,500 PUD

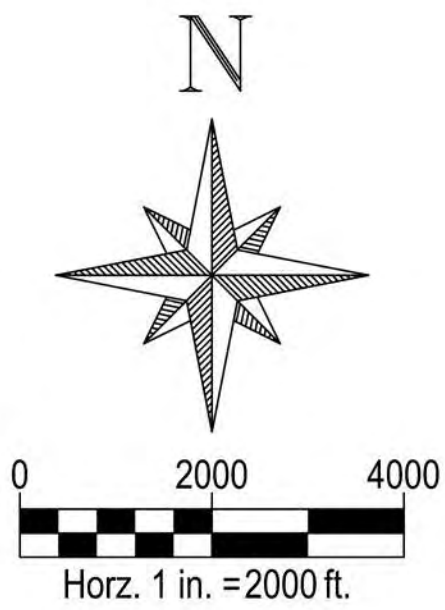
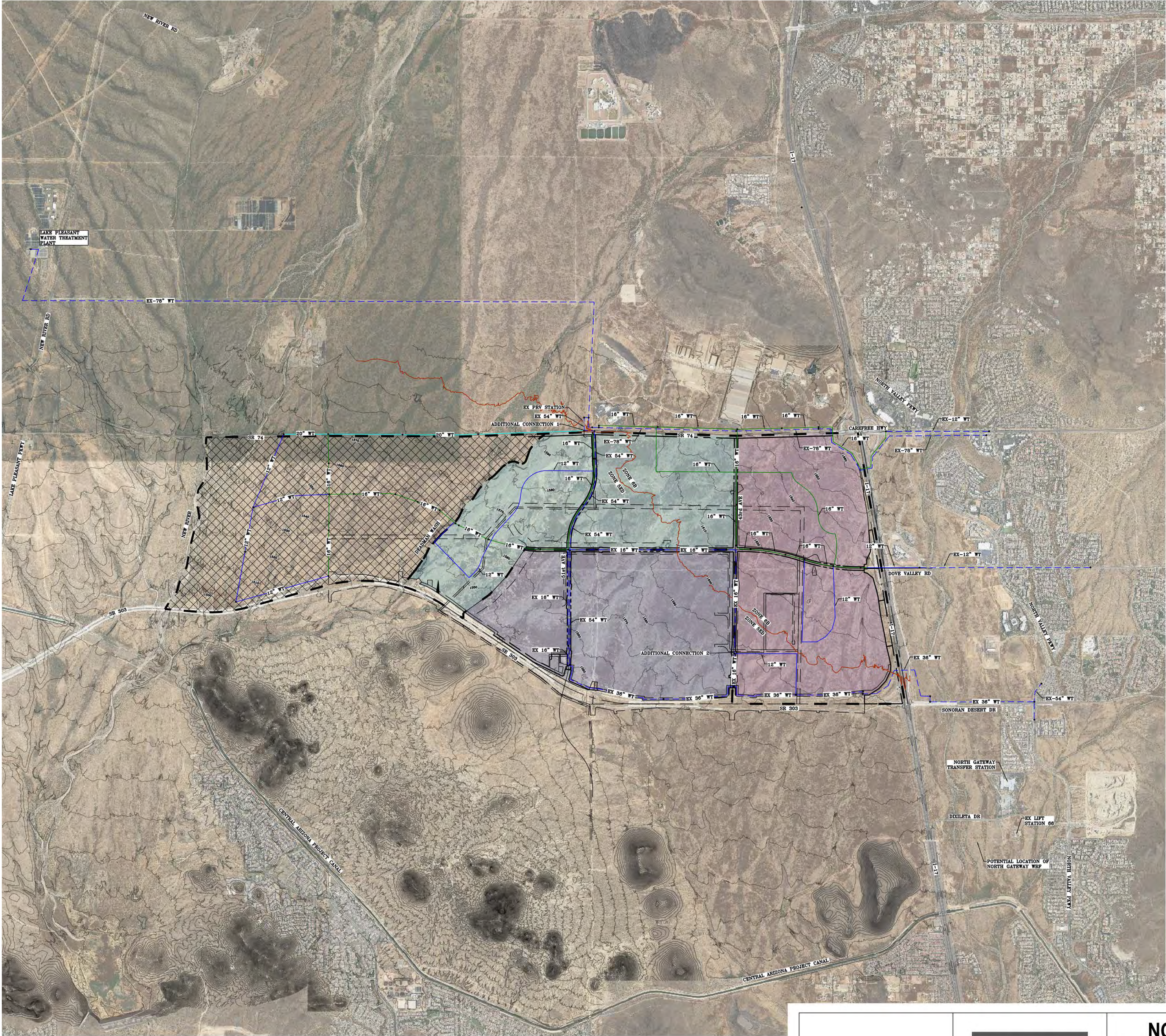
APPENDIX A - EXHIBIT C
PHASE 1 ON-SITE INFRASTRUCTURE MAP
WATER EXHIBIT

| | | | | | |
|---------|------------|--------|-----------|-------|--------|
| DATE | 07/17/2023 | SCALE | 1" = 800' | SHEET | 2 OF 5 |
| JOB NO. | 205159 | DESIGN | EB | DRAWN | LR |

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| ITEM DESCRIPTION | QTY | UNIT |
|--|--------|------|
| 12" DIP Water Line | 21,343 | LF |
| 16" DIP Water Line | 42,734 | LF |
| 12" Valve, Box & Cover | 20 | EA |
| 16" Valve, Box & Cover | 34 | EA |
| Fire Hydrant | 253 | EA |
| Jack & Bore (I-17) | 2 | EA |
| Interconnect/Outlet to 54" Trans. Main | 2 | EA |

PROVIDED QUANTITIES DO NOT INCLUDE EXISTING INFRASTRUCTURE OR PLANNED INFRASTRUCTURE WITHIN RETAINED PROPERTY



| LEGEND | | |
|---------------------------------|---------|----------|
| PUBLIC WATER | PLANNED | EXISTING |
| PIPE | | |
| PROPERTY BOUNDARY | | |
| RETAINED PROPERTY | | |
| EXISTING CONTOUR | | |
| WATER PRESSURE ZONE LINE | | |
| PRESSURE REDUCING VALVE STATION | | |
| TECH CAMPUS AREA | | |
| FREEWAY MIXED USE AREA | | |
| TECH PARK AREA | | |

NOTES:
PLANNED INFRASTRUCTURE AND BOUNDARIES ARE CONCEPTUAL AND SUBJECT TO CHANGE.
INFRASTRUCTURE IS SIZED TO ACCOMMODATE THE ASSUMED TECH CAMPUS LAND USE. ACTUAL INFRASTRUCTURE REQUIREMENTS ARE SUBJECT TO FURTHER ENGINEERING, REVIEW, AND APPROVAL BY THE CITY OF PHOENIX.

NOT
FOR
CONSTRUCTION
OR RECORDING



NORTH PHOENIX 3,500 PUD

APPENDIX A - EXHIBIT D
AP MASTER BACKBONE INFRASTRUCTURE PLAN
WATER EXHIBIT

| | | | | | |
|---------|------------|--------|------------|-------|--------|
| DATE | 07/17/2023 | SCALE | 1" = 2000' | SHEET | 2 OF 5 |
| JOB NO. | 205159 | DESIGN | EB | DRAWN | LR |

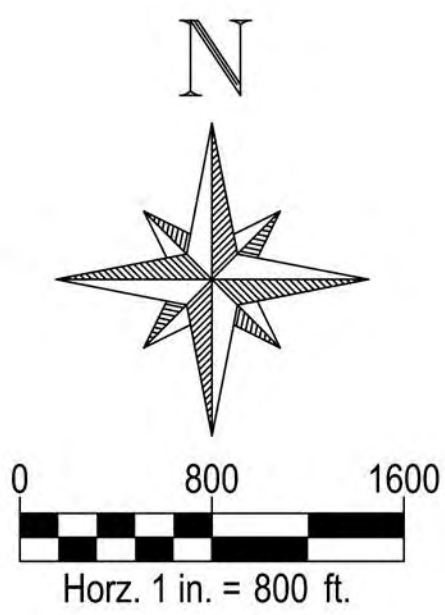
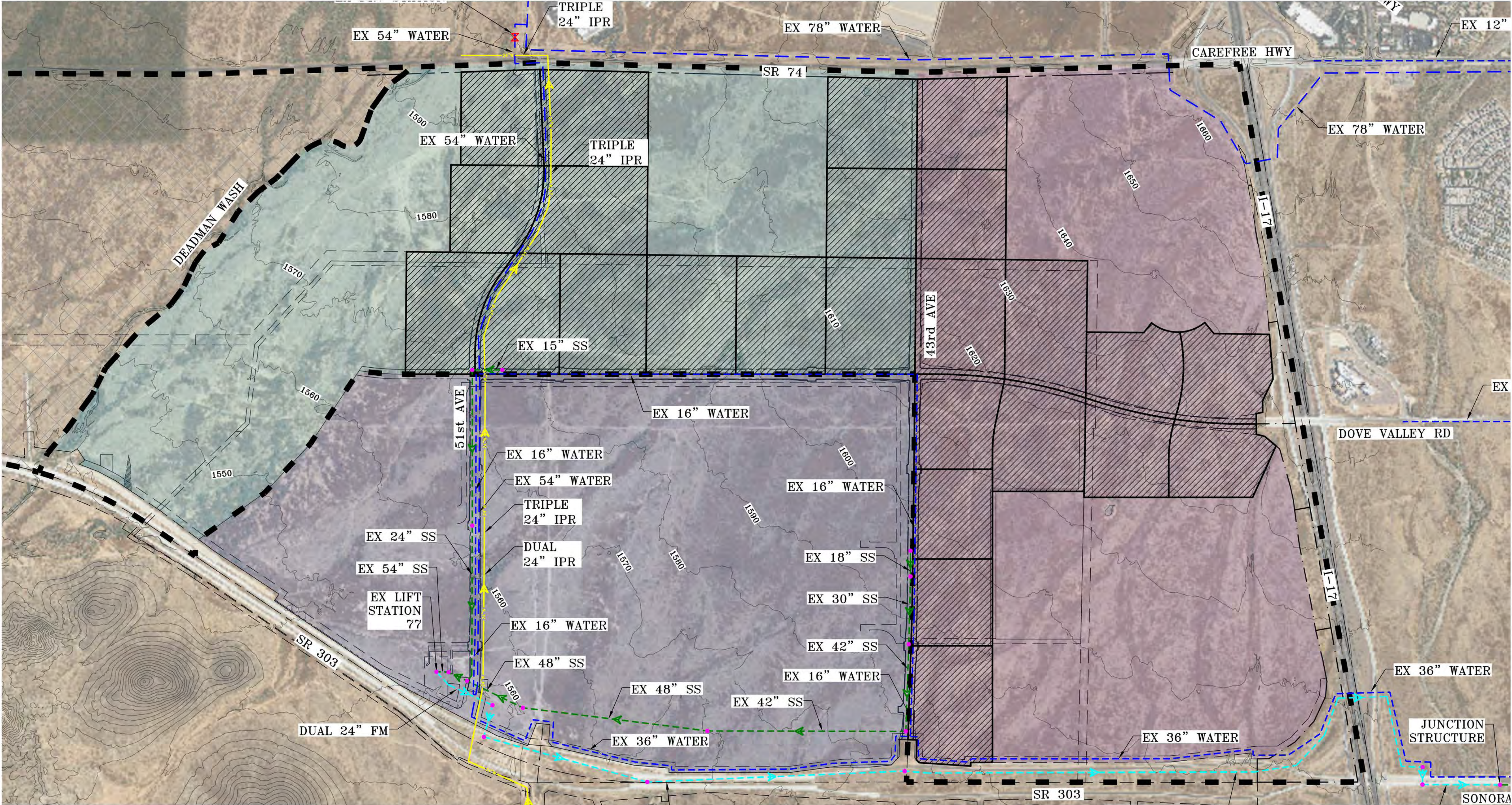
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| | |
|-------------------------|---|
| Project | North Phoenix 3,500 PUD |
| Location | Phoenix AZ |
| Project Number | 205159 |
| Project Engineer | Lucas Roney |
| References | City of Phoenix Design Standards Manual for Water and Wastewater Systems (2021) Arizona Administrative Code, Title 18, Chapter 9 |

| Sub-areas | | | Land Use | | | | | | | | Water Demand |
|---|------------------------------------|------------------------|--|-------------------|-------------------------------|---------------------------|-------------|-------------------|---------------|--------------------------|------------------------|
| Tech Campus | Area (AC) | Percentage of District | Industrial-Major User (SF) | Fabrication Plant | Industrial (SF) | Office (SF) | Retail (SF) | Multi-family (DU) | Hotel (Rooms) | General Landscaping (AC) | ADD (gpd) ² |
| TC-A | 428 | 29.5% | 3,500,000 | Yes | | | | | | 46 | 11,200,412 |
| TC-B | 412 | 30.5% | 3,000,000 | Yes | | 1,000,000 | | | | 47 | 11,321,908 |
| TC-C | 430 | 40.0% | 4,500,000 | No | | | | | | 62 | 3,196,350 |
| Subtotal | 1,270 | 100% | 11,000,000 | | 0 | 1,000,000 | 0 | 0 | 0 | 155 | 25,718,670 |
| | | | | | | | | | | | |
| Tech Park | Developable Area (AC) ¹ | Percentage of District | Industrial-Major User (SF) FAR = 0.38 | Fabrication Plant | Industrial (SF) FAR = 0.38 | Office (SF) FAR = 0.50 | Retail (SF) | Multi-family (DU) | Hotel (Rooms) | General Landscaping (AC) | ADD (gpd) ³ |
| TP-A | 526 | 57.3% | 2,900,000 | Yes | 2,900,000 | 3,800,000 | | | | 79 | 4,670,727 |
| TP-B | 234 | 25.5% | 1,300,000 | Yes | 1,300,000 | 1,700,000 | | | | 35 | 2,133,324 |
| TP-C | 158 | 17.2% | 875,000 | Yes | 875,000 | 1,150,000 | | | | 24 | 1,392,881 |
| Subtotal | 918 | 100% | 5,075,000 | | 5,075,000 | 6,650,000 | 0 | 0 | 0 | 138 | 8,196,931 |
| | | | | | | | | | | | |
| Freeway Mixed Use | Area (AC) | Percentage of District | Industrial-Major User (SF) ⁴ | Fabrication Plant | Industrial (SF) ⁴ | Office (SF) ⁴ | Retail (SF) | Multi-family (DU) | Hotel (Rooms) | General Landscaping (AC) | ADD (gpd) |
| MU-A | 264 | 19.8% | | N/A | 1,400,000 | 1,700,000 | 1,200,000 | 2,064 | 320 | 32 | 1,134,802 |
| MU-B | 697 | 53.7% | | N/A | 2,600,000 | 3,300,000 | 2,300,000 | 6,098 | 631 | 86 | 2,801,547 |
| MU-C | 279 | 26.5% | | N/A | 1,000,000 | 1,200,000 | 900,000 | 799 | 248 | 42 | 742,228 |
| Subtotal | 1,240 | 100% | 0 | | 5,000,000 | 6,200,000 | 4,400,000 | 8,961 | 1,199 | 160 | 4,678,577 |
| | | | | | | | | | | | |
| Total | | | 16,075,000 | | 10,075,000 | 13,850,000 | 4,400,000 | 8,961 | 1,199 | 453 | 38,594,179 |
| | | | | | | | | | | | |
| Note 1: Developable area in Tech Park is split in equal portions between three land uses: Industrial-Major User, Industrial, and Office. | | | | | | | | | | | |
| Note 2: Industrial-Major User Demand assumption in Tech Campus TC-A and TC-B accounts for 5.5 MGD per Fabrication Plant with no additional peaking factor. Tech Campus TC-A is planned to have 2 Fabrication Plants and TC-B is planned to have 2 Fabrication Plants. | | | | | | | | | | | |
| Note 3: Industrial-Major User Demand assumption in Tech Park assumes 1/3 of the Tech Park's developable acreage will be Fabrication Plants totaling 6.5 MGD with no additional peaking factor. | | | | | | | | | | | |
| Note 4: No FAR was used to determine building area due to the unknown division of land use areas in the Freeway Mixed Use zone. | | | | | | | | | | | |

| ITEM DESCRIPTION | QTY | UNIT |
|---|--------|------|
| 24" DIP Indirect Potable Reuse Water Line | 27,690 | LF |

PROVIDED QUANTITIES DO NOT
INCLUDE EXISTING INFRASTRUCTURE



| LEGEND | |
|---------------------------------|----------------|
| <u>PUBLIC SEWER</u> | <u>PLANNED</u> |
| EXISTING SEWER MAIN | --- |
| EXISTING WATER MAIN | --- |
| EXISTING FORCE MAIN | --- |
| INDIRECT POTABLE REUSE MAIN | --- |
| PRESSURE REDUCING VALVE STATION | ⊠ |
| PROPERTY BOUNDARY | - - - |
| RETAINED PROPERTY | - - - |
| EXISTING CONTOUR | - - - |
| TECH CAMPUS AREA | |
| FREEWAY MIXED USE AREA | |
| TECH PARK AREA | |
| PLANNED PHASE I AREA | |

NOTES:
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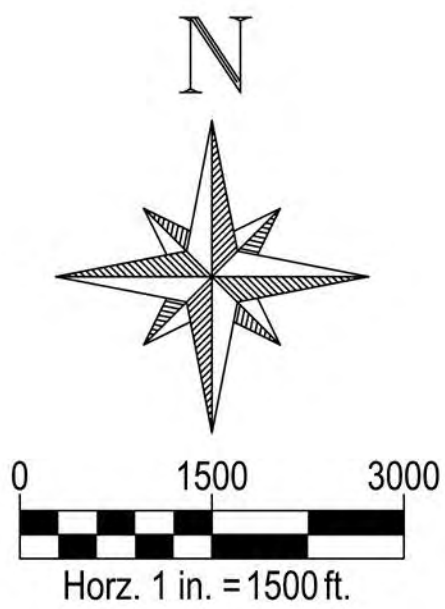
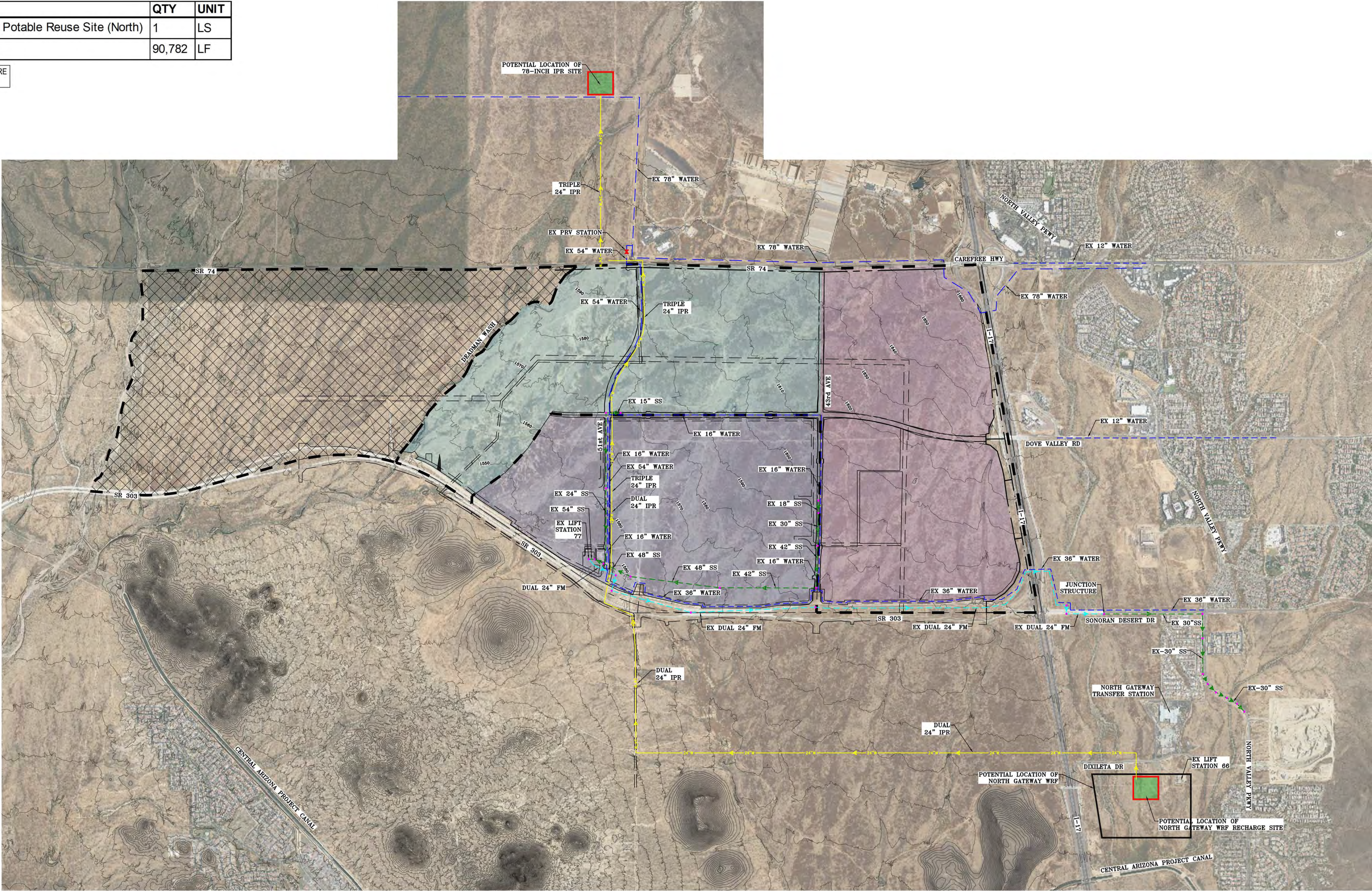
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CONSTRUCTION
OR RECORDING



| NORTH PHOENIX 3,500 PUD | | | |
|--|------------|--------|-----------|
| APPENDIX A - EXHIBIT E PHASE 1 ON-SITE INFRASTRUCTURE MAP INDIRECT POTABLE REUSE | | | |
| DATE | 07/17/2023 | SCALE | 1" = 800' |
| JOB NO. | 205159 | DESIGN | EB |
| | | DRAWN | LR |
| SHEET 3 OF 5 | | | |
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| ITEM DESCRIPTION | QTY | UNIT |
|---|--------|------|
| NGWRF Recharge Site and 78-Inch Indirect Potable Reuse Site (North) | 1 | LS |
| 24" DIP Indirect Reuse Potable Water Line | 90,782 | LF |

PROVIDED QUANTITIES DO NOT INCLUDE EXISTING INFRASTRUCTURE OR PLANNED INFRASTRUCTURE WITHIN RETAINED PROPERTY



| LEGEND | |
|---------------------------------|----------------|
| <u>PUBLIC SEWER</u> | <u>PLANNED</u> |
| EXISTING SEWER MAIN | --- |
| EXISTING WATER MAIN | --- |
| EXISTING FORCE MAIN | --- |
| INDIRECT POTABLE REUSE MAIN | --- |
| PRESSURE REDUCING VALVE STATION | ⊠ |
| PROPERTY BOUNDARY | - - - |
| RETAINED PROPERTY | ⊠ |
| EXISTING CONTOUR | --- |
| TECH CAMPUS AREA | ■ |
| FREEWAY MIXED USE AREA | ■ |
| TECH PARK AREA | ■ |
| RECHARGE SITE | ■ |

NOTES:
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NORTH PHOENIX 3,500 PUD

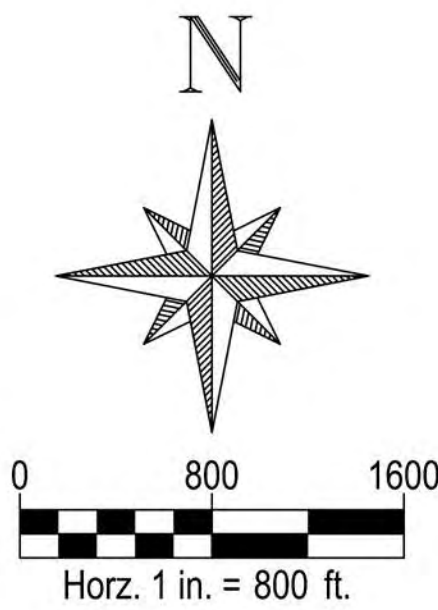
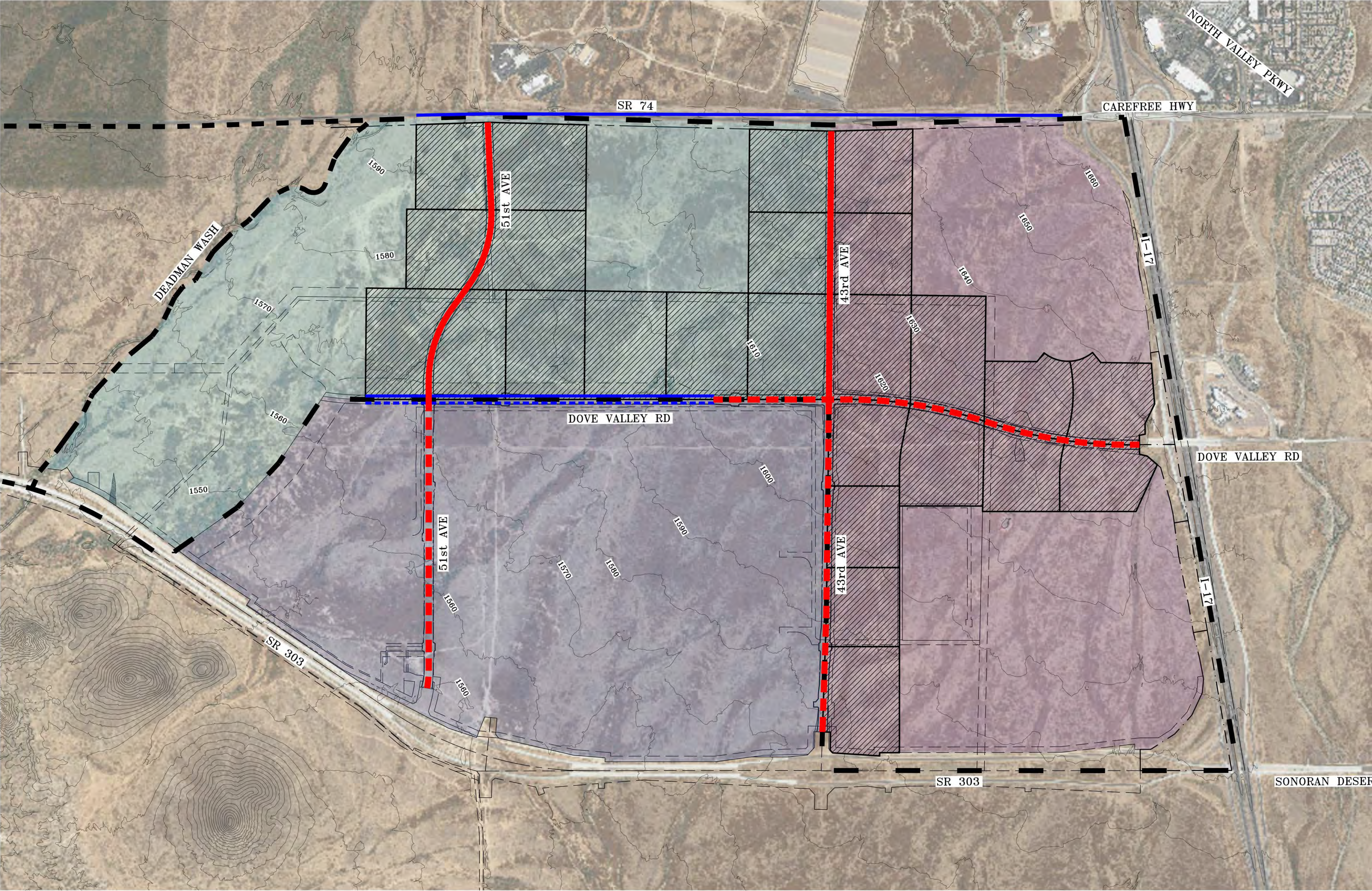
APPENDIX A - EXHIBIT F
AP MASTER BACKBONE INFRASTRUCTURE PLAN
INDIRECT POTABLE REUSE

| | | | | | |
|---------|------------|--------|------------|-------|--------|
| DATE | 07/17/2023 | SCALE | 1" = 1500' | SHEET | 3 OF 5 |
| JOB NO. | 205159 | DESIGN | EB | DRAWN | LR |

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| ITEM DESCRIPTION | QTY | UNIT |
|--|--------|------|
| 43rd Ave (Full Street Imp.) | 4,355 | LF |
| 51st Ave (Full Street Imp.) | 4,830 | LF |
| Dove Valley Rd (Half Street Imp.) | 5,646 | LF |
| SR-74 (Half Street Imp.) Plus Widening | 11,280 | LF |
| Traffic Signal | 2 | EA |

PROVIDED QUANTITIES DO NOT
INCLUDE EXISTING INFRASTRUCTURE



| LEGEND | | |
|--------------------------------|----------------|-----------------|
| <u>PROPOSED STREETS</u> | <u>PLANNED</u> | <u>EXISTING</u> |
| PROPERTY BOUNDARY | --- | --- |
| RETAINED PROPERTY | --- | --- |
| ARTERIAL ROADWAY - FULL STREET | --- | --- |
| ARTERIAL ROADWAY - HALF STREET | --- | --- |
| EXISTING CONTOUR | --- | --- |
| TECH CAMPUS AREA | --- | --- |
| FREEWAY MIXED USE AREA | --- | --- |
| TECH PARK AREA | --- | --- |
| PLANNED PHASE 1 AREA | --- | --- |

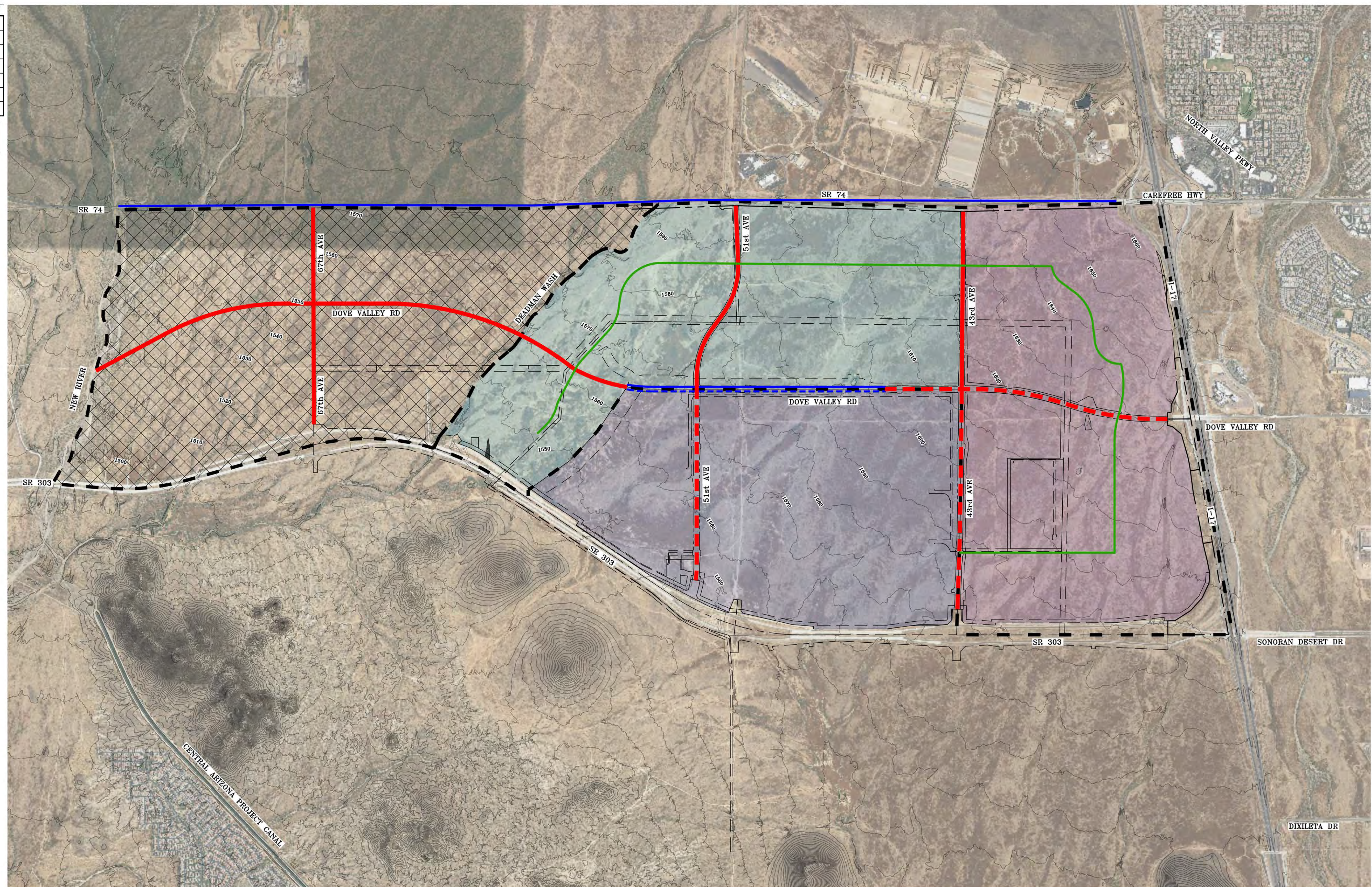
NOTES:
STATE ROUTE 74 IS TO BE BUILT TO ADOT STANDARDS. ALL OTHER STREETS ARE TO BE BUILT TO CITY OF PHOENIX STANDARDS. STREET INFRASTRUCTURE INCLUDES CONCRETE, ASPHALT, STORM DRAIN, SIGNING, STRIPING, LANDSCAPING, AND LIGHTING. PLANNED INFRASTRUCTURE AND BOUNDARIES ARE CONCEPTUAL AND SUBJECT TO CHANGE. INFRASTRUCTURE IS SIZED TO ACCOMMODATE THE ASSUMED TECH CAMPUS LAND USE. ACTUAL INFRASTRUCTURE REQUIREMENTS ARE SUBJECT TO FURTHER ENGINEERING, REVIEW, AND APPROVAL BY THE CITY OF PHOENIX OR ADOT. PHASE 1 INFRASTRUCTURE IS SIZED TO ACCOMMODATE THE FULL BUILD-OUT.

NOT
FOR
CONSTRUCTION
OR RECORDING



| NORTH PHOENIX 3,500 PUD | | | |
|---|------------|--------|-----------|
| APPENDIX A - EXHIBIT G PHASE 1 ON-SITE INFRASTRUCTURE MAP STREETS EXHIBIT | | | |
| DATE | 07/17/2023 | SCALE | 1" = 800' |
| JOB NO. | 205159 | DESIGN | EB |
| | | DRAWN | LR |
| SHEET 4 OF 5 | | | |
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| ITEM DESCRIPTION | QTY | UNIT |
|---|--------|------|
| 43rd Ave (Full Street Imp.) | 4,300 | LF |
| 51st Ave (Full Street Imp.) | 4,775 | LF |
| Dove Valley Rd (Full Street Imp.) | 2,892 | LF |
| Dove Valley Rd (Half Street Imp.) | 6,330 | LF |
| SR-74 (Half Street Imp.) Plus Widening | 11,280 | LF |
| Secondary Road (Minor Arterial, Full Street Imp.) | 26,544 | LF |
| Traffic Signal | 7 | EA |



LEGEND

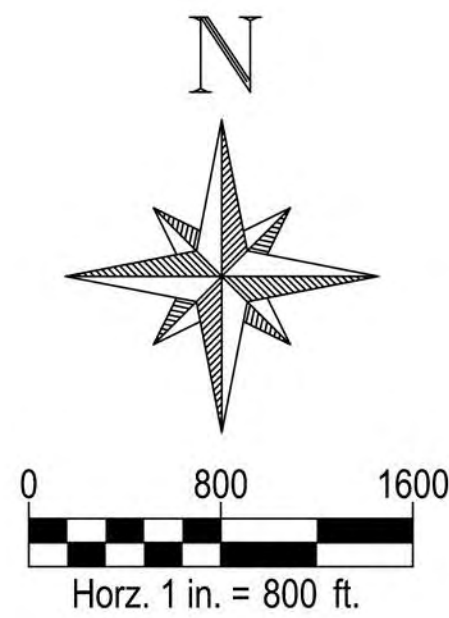
NOTES:

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OR RECORDING**

NORTH PHOENIX 3,500 PUD

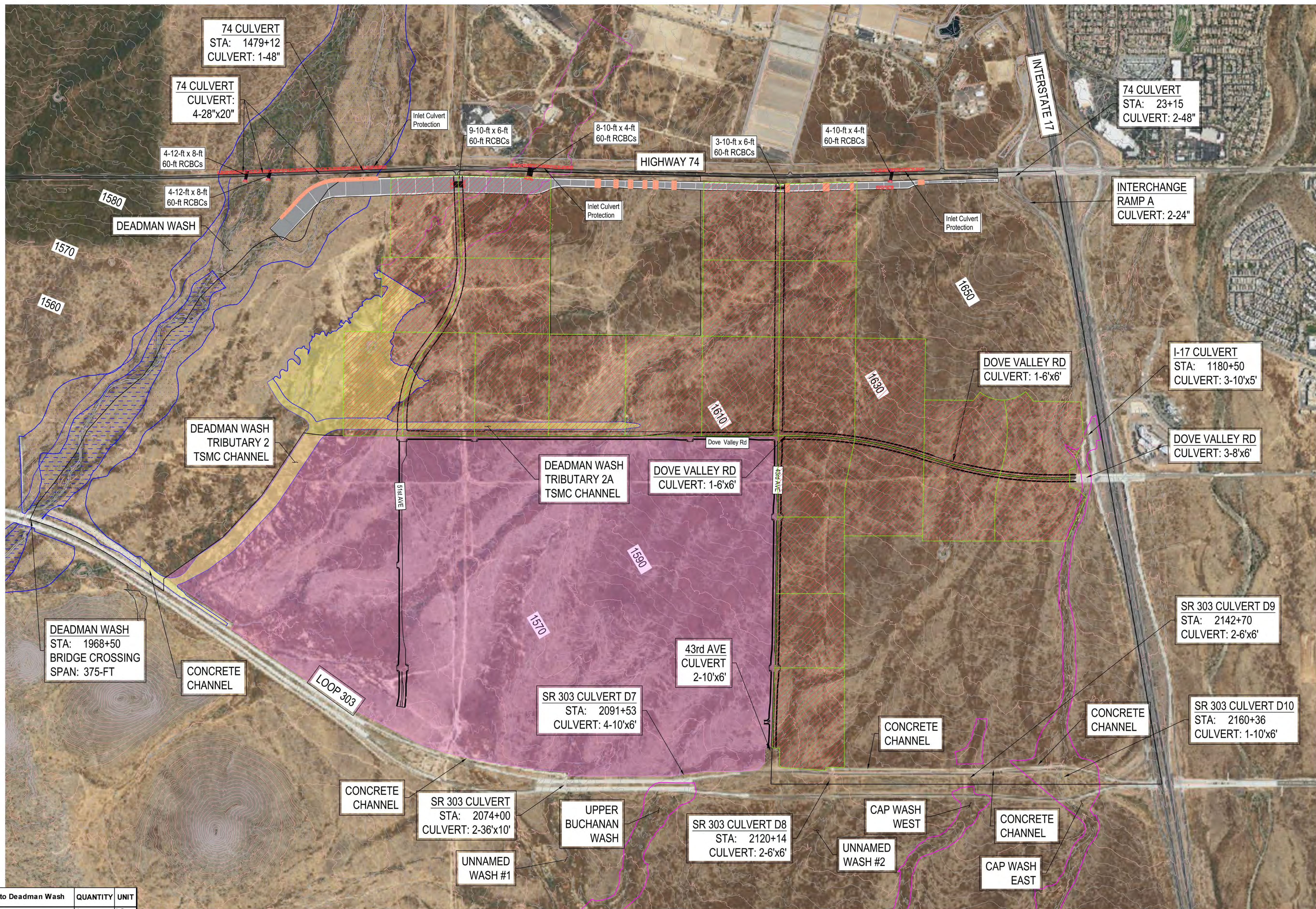
| | | | | | |
|---------|------------|--------|------------|-------|--------|
| DATE | 07/17/2023 | SCALE | 1" = 1200' | SHEET | 4 OF 5 |
| JOB NO. | 205159 | DESIGN | EB | DRAWN | LR |

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LEGEND

- PROPERTY BOUNDARY
- PLANNED PHASE 1 AREA
- TSMC CLOMR FEMA SFHA ZONE AE FLOODPLAIN
- FEMA SFHA ZONE A FLOODPLAIN
- EXISTING FLOODPLAIN
- FEMA SFHA ZONE AE FLOODPLAIN & FLOODWAY
- FEMA SFHA ZONE AE FLOODPLAIN
- TSMC DEVELOPMENT
- 10' CONTOUR
- 2' CONTOUR
- SR 74 CHANNEL
- ROCK RIPRAP
- GABION MATTRESS
- CULVERT
- HEADWALL
- RIPRAP



| ITEM DESCRIPTION - State Route 74 Earthen Channel to Deadman Wash | QUANTITY | UNIT |
|---|----------|------|
| MOBILIZATION | 1 | LS |
| TRAFFIC CONTROL | 1 | LS |
| CLEARING & GRUBBING - INVENTORY SALVAGE | 57 | AC |
| CHANNEL EXCAVATION | 488,430 | CY |
| BOX CULVERTS AT 43RD & 51ST AVE (12-10'x6'x155') | 1,992 | CY |
| BOX CULVERTS ALONG SR 74 (8-12'x8'x85') | 1,040 | CY |
| BOX CULVERTS ALONG SR 74 (12-10'x4'x85') | 1,080 | CY |
| CULVERT HANDRAIL | 254 | LF |
| DEADMAN WASH PROTECTION - 9" RENO MATTRESS PLUS | 2,330 | CY |
| CHANNEL TIE-IN | 1,600 | CY |
| GRADE CONTROLS - RENO MATTRESS PLUS | 2,600 | CY |
| CULVERT APRON RIPRAP (12-INCH D50) | 2,100 | CY |
| GUARD RAIL FENCING ALONG SR 74 | 11,750 | LF |
| CHAIN LINK FENCE ALONG FUTURE DEVELOPMENT | 10,900 | LF |
| CULVERT INLET CHANNEL PROTECTION - RIPRAP (8-INCH D50) | 14,500 | CY |

PROVIDED QUANTITIES DO NOT
INCLUDE EXISTING INFRASTRUCTURE

NOTES:

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THE CITY OF PHOENIX. PHASE 1 INFRASTRUCTURE IS
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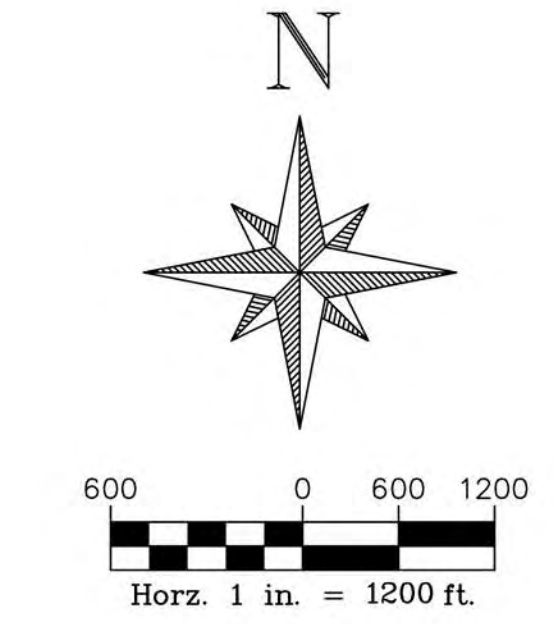
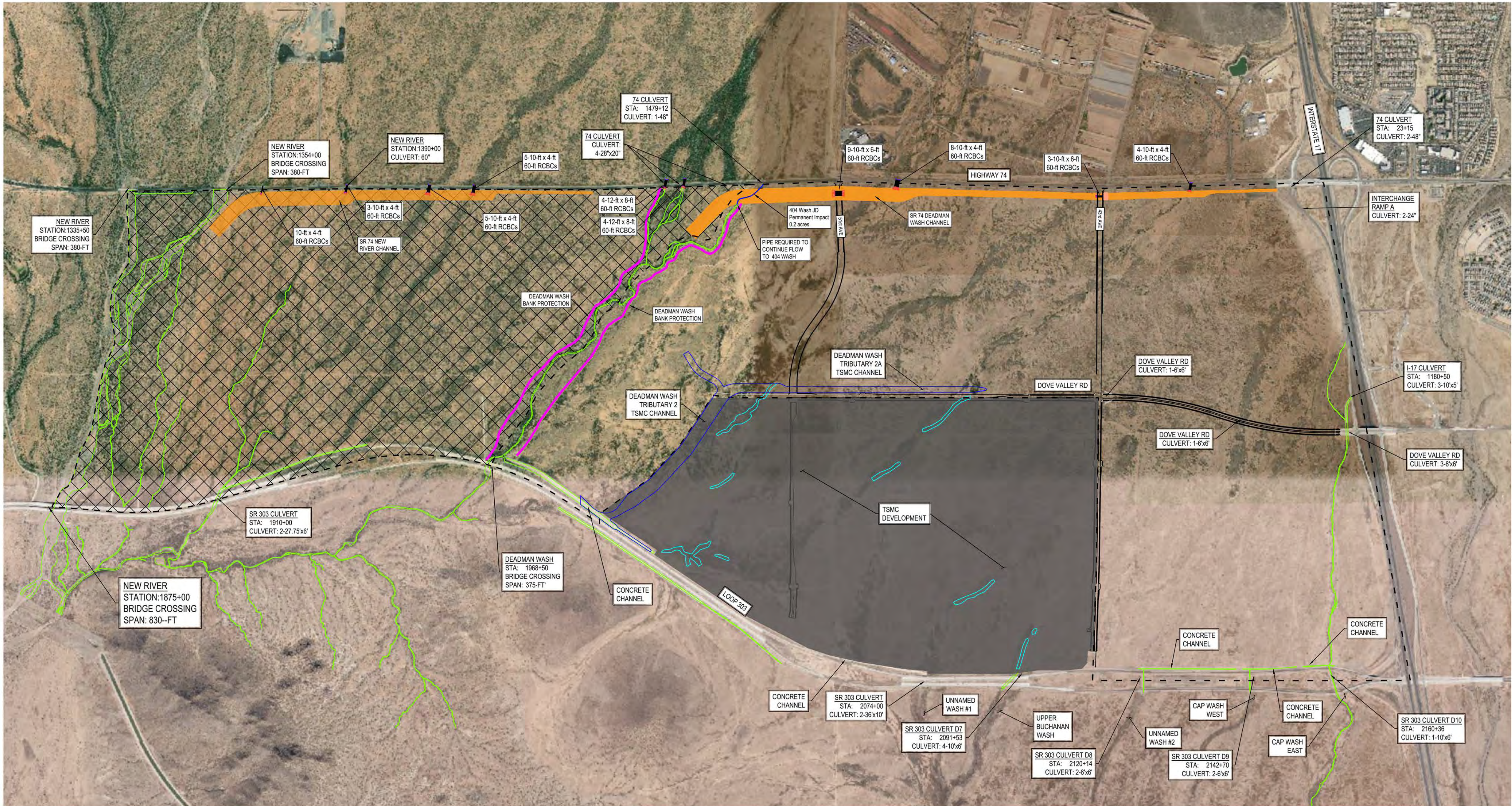
WOOD
PATEL

NORTH PHOENIX 3,500 PUD

APPENDIX A - EXHIBIT I
PHASE 1 ON-SITE INFRASTRUCTURE MAP
DRAINAGE EXHIBIT

| | | | | | |
|---------|------------|--------|-----------|-------|--------|
| DATE | 07/11/2023 | SCALE | 1" = 800' | SHEET | 5 OF 5 |
| JOB NO. | 205159 | DESIGN | JCD | DRAWN | JCD |

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| LEGEND | |
|--------|---------------------------------|
| | PROPERTY BOUNDARY |
| | RETAINED PROPERTY |
| | DRAFT PERMANENT 404 WASH IMPACT |
| | DRAFT SECTION 404 WASHES |
| | TSMC NWPR OHWMs |
| | TSMC PROPERTY |
| | CULVERT |
| | HEADWALL |
| | RIPRAP |

| ITEM DESCRIPTION - State Route 74 Earthen Channel to Deadman Wash | QUANTITY | UNIT |
|---|----------|------|
| MOBILIZATION | 1 | LS |
| TRAFFIC CONTROL | 1 | LS |
| CLEARING & GRUBBING - INVENTORY SALVAGE | 57 | AC |
| CHANNEL EXCAVATION | 488,430 | CY |
| BOX CULVERTS AT 43RD & 51ST AVE (12-10x6x155') | 1,992 | CY |
| BOX CULVERTS ALONG SR 74 (12-10x4x85') | 1,080 | CY |
| CULVERT HANDRAIL | 254 | LF |
| DEADMAN WASH PROTECTION - 9" RENO MATTRESS PLUS | 2,330 | CY |
| CHANNEL TIE-IN AT 1.5' THICK | 1,600 | CY |
| GRADE CONTROLS - RENO MATTRESS PLUS | 2,600 | CY |
| CULVERT APRON RIPRAP (12-INCH D50) | 2,100 | CY |
| GUARD RAIL FENCING ALONG SR 74 | 11,750 | LF |
| CHAIN LINK FENCE ALONG FUTURE DEVELOPMENT | 10,900 | LF |
| CULVERT INLET CHANNEL PROTECTION - RIPRAP (8-INCH D50) | 14,500 | CY |
| | | |
| ITEM DESCRIPTION - Deadman Wash Bank Protection | QUANTITY | UNIT |
| MOBILIZATION | 1 | LS |
| CLEARING & GRUBBING - INVENTORY SALVAGE | 17 | AC |
| ENCROACHMENT FILL | 56,000 | CY |
| CHAIN LINK FENCE ALONG FUTURE DEVELOPMENT | 7,500 | LF |
| BANK PROTECTION - RENO MATTRESS PLUS - 9" TH | 7,135 | CY |
| BANK PROTECTION - GABION BOX (3'X3'X1.5') | 1,250 | CY |

PROVIDED QUANTITIES DO NOT INCLUDE EXISTING INFRASTRUCTURE OR PLANNED INFRASTRUCTURE WITHIN RETAINED PROPERTY

NOTES:
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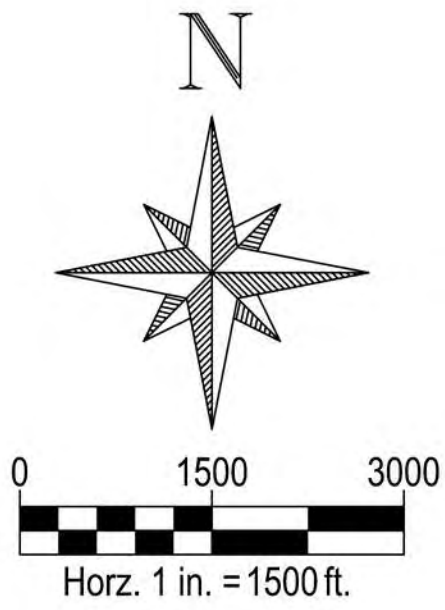
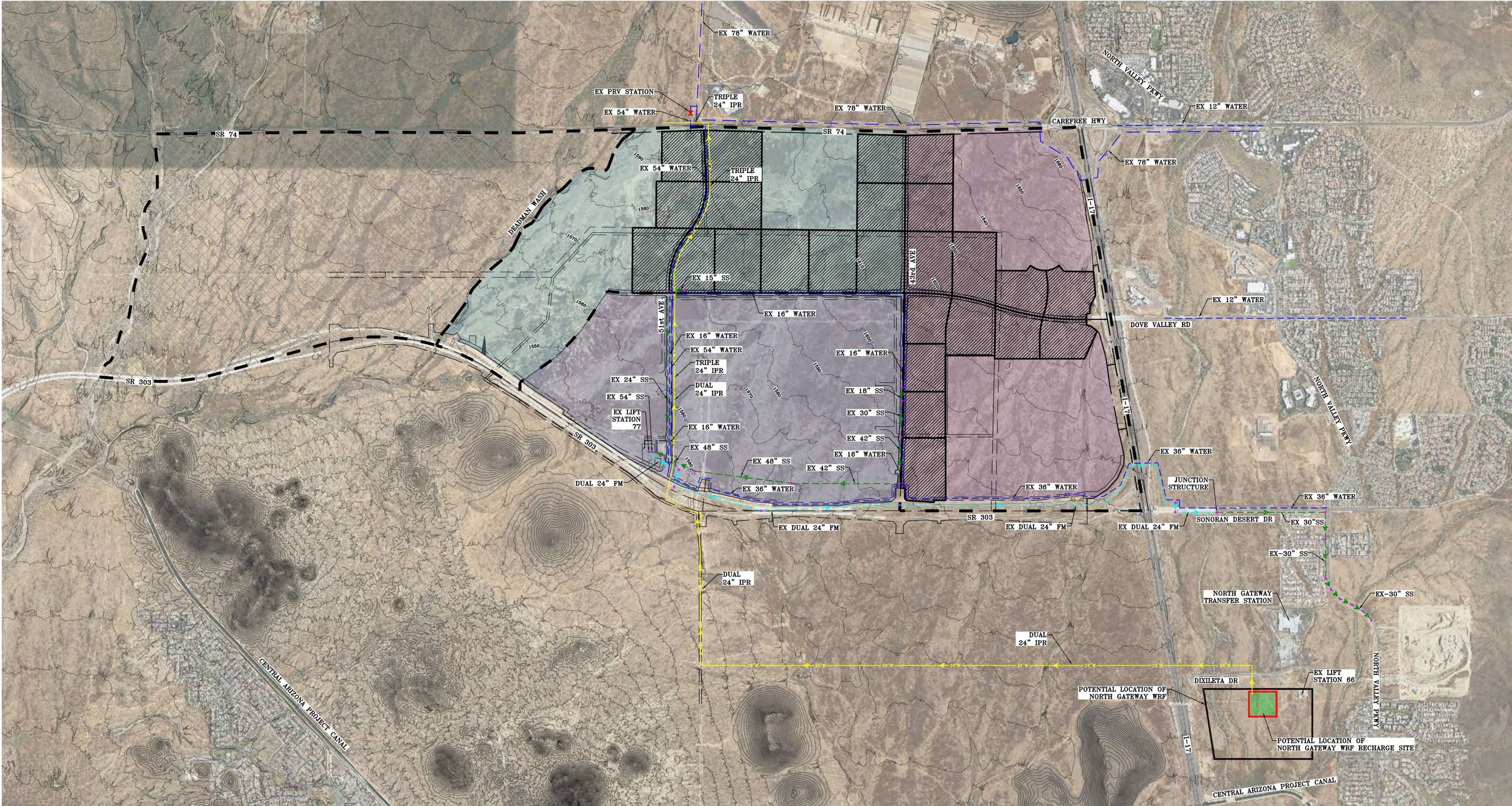
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CONSTRUCTION
OR RECORDING



| NORTH PHOENIX 3,500 PUD | | | |
|---|------------|--------|------------|
| APPENDIX A - EXHIBIT J AP MASTER BACKBONE INFRASTRUCTURE PLAN DRAINAGE EXHIBIT | | | |
| DATE | 07/11/2023 | SCALE | 1" = 1200' |
| JOB NO. | 215237 | DESIGN | JCD |
| SHEET | 5 OF 5 | DRAWN | JCD |
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| ITEM DESCRIPTION | QTY | UNIT |
|---|--------|------|
| North Gateway WRF Recharge Site (8MGD) | 1 | LS |
| 24" DIP Indirect Potable Reuse Water Line | 47,966 | LF |

PROVIDED QUANTITIES DO NOT
INCLUDE EXISTING INFRASTRUCTURE



| LEGEND | |
|---------------------------------|----------------|
| <u>PUBLIC SEWER</u> | <u>PLANNED</u> |
| EXISTING SEWER MAIN | --- |
| EXISTING WATER MAIN | --- |
| EXISTING FORCE MAIN | --- |
| INDIRECT POTABLE REUSE MAIN | --- |
| PRESSURE REDUCING VALVE STATION | ✕ |
| PROPERTY BOUNDARY | - - - |
| RETAINED PROPERTY | - - - |
| EXISTING CONTOUR | --- |
| TECH CAMPUS AREA | |
| FREEWAY MIXED USE AREA | |
| TECH PARK AREA | |
| PHASE 1 BOUNDARY | |

NOTES:
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FOR
CONSTRUCTION
OR RECORDING



NORTH PHOENIX 3,500 PUD

APPENDIX A - EXHIBIT L
PHASE 1 OFF-SITE INFRASTRUCTURE MAP
INDIRECT POTABLE REUSE

| | | | | | |
|---------|------------|--------|------------|-------|--------|
| DATE | 07/17/2023 | SCALE | 1" = 1500' | SHEET | 2 OF 2 |
| JOB NO. | 205159 | DESIGN | EB | DRAWN | LR |

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APPENDIX B:
**INFRASTRUCTURE CONCEPTUAL ENGINEER'S OPINION OF
PROBABLE COST**

Project North Phoenix 3,500 Conceptual Engineer's Opinion of Probable Cost
Project Number 205159
Project Engineer Lucas Roney
Date 6/12/2023
Improvement Phase 1 Backbone Wastewater Infrastructure

| ITEM DESCRIPTION | QTY | UNIT | UNIT COST | TOTAL |
|---------------------------|--------|------|------------------|----------------------|
| 8" VCP Sewer Line | 2,489 | LF | \$62.00 | \$154,318 |
| 10" VCP Sewer Line | 5,229 | LF | \$77.00 | \$402,633 |
| 12" VCP Sewer Line | 9,090 | LF | \$93.00 | \$845,370 |
| 15" VCP Sewer Line | 2,293 | LF | \$123.00 | \$282,039 |
| 18" VCP Sewer Line | 1,608 | LF | \$148.00 | \$237,984 |
| 21" VCP Sewer Line | 4,028 | LF | \$175.00 | \$704,900 |
| 24" VCP Sewer Line | 1,280 | LF | \$200.00 | \$256,000 |
| 27" VCP Sewer Line | 17,724 | LF | \$230.00 | \$4,076,520 |
| 42" VCP Sewer Line | 21,831 | LF | \$350.00 | \$7,640,850 |
| 5' Diameter Sewer Manhole | 164 | EA | \$10,000.00 | \$1,640,000 |
| Jack & Bore (Loop 303) | 2 | EA | \$750,000.00 | \$1,500,000 |
| Jack & Bore (I-17) | 2 | EA | \$750,000.00 | \$1,500,000 |
| North Gateway WRF | 1 | LS | \$172,740,000.00 | \$172,740,000 |
| LS77 Upgrades | 1 | LS | \$6,000,000.00 | \$6,000,000 |
| | | | Subtotal | \$197,980,614 |

| | | | | |
|---|----|----|-----------------|----------------------|
| Contingency | -- | -- | 30.00% | \$59,394,184 |
| Construction Surveying | -- | -- | 2.00% | \$3,959,612 |
| Mobilization / De-Mobilization | -- | -- | 1.00% | \$1,979,806 |
| Post Design Services | -- | -- | 1.00% | \$1,979,806 |
| Preliminary Design | -- | -- | 3.00% | \$5,939,418 |
| Final Design | -- | -- | 6.00% | \$11,878,837 |
| Plan Review | -- | -- | 2.00% | \$3,959,612 |
| Agency Permit | -- | -- | 2.00% | \$3,959,612 |
| Tax Rate (65% of 9.6%) | -- | -- | 6.20% | \$12,274,798 |
| | | | Subtotal | \$105,325,685 |
| Total Cost Wastewater Infrastructure | | | | \$303,306,300 |

Wastewater Notes:

- 1) Unit costs are in place estimates including trenching and all appurtenances.
- 2) Manhole spacing for the main sewer lines was assumed to be 400 feet.
- 3) Actual infrastructure items and quantities shown are subject to further engineering, review, and approval by the City of Phoenix.

Project North Phoenix 3,500 Conceptual Engineer's Opinion of Probable Cost
Project Number 205159
Project Engineer Lucas Roney
Date 8/18/2023
Improvement Full Build-out Backbone Wastewater Infrastructure

| ITEM DESCRIPTION | AUCTION PROPERTY QTY | RETAINED PROPERTY QTY | TOTAL QTY | UNIT | UNIT COST | AUCTION PROPERTY TOTAL | RETAINED PROPERTY TOTAL | GRAND TOTAL |
|---|-------------------------|--------------------------|--------------|------|------------------|---------------------------|----------------------------|----------------------|
| 8" VCP Sewer Line | 11,591 | 0 | 11,591 | LF | \$62.00 | \$718,642 | \$0 | \$718,642 |
| 10" VCP Sewer Line | 7,925 | 0 | 7,925 | LF | \$77.00 | \$610,225 | \$0 | \$610,225 |
| 12" VCP Sewer Line | 15,255 | 11,358 | 26,613 | LF | \$93.00 | \$1,418,715 | \$1,056,294 | \$2,475,009 |
| 15" VCP Sewer Line | 8,455 | 2,503 | 10,958 | LF | \$123.00 | \$1,039,965 | \$307,869 | \$1,347,834 |
| 18" VCP Sewer Line | 4,178 | 2,950 | 7,128 | LF | \$148.00 | \$618,344 | \$436,600 | \$1,054,944 |
| 21" VCP Sewer Line | 4,027 | 5,144 | 9,171 | LF | \$175.00 | \$704,725 | \$900,200 | \$1,604,925 |
| 24" VCP Sewer Line | 2,202 | 0 | 2,202 | LF | \$200.00 | \$440,400 | \$0 | \$440,400 |
| 27" VCP Sewer Line | 17,724 | 0 | 17,724 | LF | \$230.00 | \$4,076,520 | \$0 | \$4,076,520 |
| 42" VCP Sewer Line | 21,831 | 0 | 21,831 | LF | \$350.00 | \$7,640,850 | \$0 | \$7,640,850 |
| 5' Diameter Sewer Manhole | 237 | 55 | 292 | EA | \$10,000.00 | \$2,370,000 | \$550,000 | \$2,920,000 |
| Jack & Bore (Loop 303) | 2 | 0 | 2 | EA | \$750,000.00 | \$1,500,000 | \$0 | \$1,500,000 |
| Jack & Bore (I-17) | 2 | 0 | 2 | EA | \$750,000.00 | \$1,500,000 | \$0 | \$1,500,000 |
| North Gateway WRF | 1 (\$408,975,375) | 1 (\$358,380,483) | 1 | LS | \$767,355,858.00 | \$408,975,375 | \$358,380,483 | \$767,355,858 |
| LS77 Upgrades | 1 | 0 | 1 | LS | \$6,000,000.00 | \$6,000,000 | \$0 | \$6,000,000 |
| Deadman Wash Lift Station | 1 | 0 | 1 | EA | \$6,000,000.00 | \$6,000,000 | \$0 | \$6,000,000 |
| Deadman Wash Force Main Discharge Structure | 1 | 0 | 1 | EA | \$1,000,000.00 | \$1,000,000 | \$0 | \$1,000,000 |
| New River Lift Station | 0 | 1 | 1 | EA | \$6,000,000.00 | \$0 | \$6,000,000 | \$6,000,000 |
| New River Force Main Discharge Structure | 0 | 1 | 1 | EA | \$1,000,000.00 | \$0 | \$1,000,000 | \$1,000,000 |
| 18" DIP Force Main Line | 0 | 18,296 | 18,296 | LF | \$150.00 | \$0 | \$2,744,400 | \$2,744,400 |
| 24" DIP Force Main Line | 13,194 | 0 | 13,194 | LF | \$200.00 | \$2,638,800 | \$0 | \$2,638,800 |
| Subtotal | | | | | | \$447,252,561 | \$371,375,846 | \$818,628,407 |

| | | | | | | | | |
|---|--|--|----|----|--------|----------------------|----------------------|------------------------|
| Contingency | | | -- | -- | 30.00% | \$134,175,768 | \$111,412,754 | \$245,588,522 |
| Construction Surveying | | | -- | -- | 2.00% | \$8,945,051 | \$7,427,517 | \$16,372,568 |
| Mobilization / De-Mobilization | | | -- | -- | 1.00% | \$4,472,526 | \$3,713,758 | \$8,186,284 |
| Post Design Services | | | -- | -- | 1.00% | \$4,472,526 | \$3,713,758 | \$8,186,284 |
| Preliminary Design | | | -- | -- | 3.00% | \$13,417,577 | \$11,141,275 | \$24,558,852 |
| Final Design | | | -- | -- | 6.00% | \$26,835,154 | \$22,282,551 | \$49,117,704 |
| Plan Review | | | -- | -- | 2.00% | \$8,945,051 | \$7,427,517 | \$16,372,568 |
| Agency Permit | | | -- | -- | 2.00% | \$8,945,051 | \$7,427,517 | \$16,372,568 |
| Tax Rate (65% of 9.6%) | | | -- | -- | 6.20% | \$27,729,659 | \$23,025,302 | \$50,754,961 |
| Subtotal | | | | | | \$237,938,363 | \$197,571,949 | \$435,510,311 |
| Total Cost Wastewater Infrastructure | | | | | | \$685,191,000 | \$568,947,800 | \$1,254,138,800 |

Wastewater Notes:

- 1) Unit costs are in place estimates including trenching and all appurtenances.
- 2) Manhole spacing for the main sewer lines was assumed to be 400 feet.
- 3) Actual infrastructure items and quantities shown are subject to further engineering, review, and approval by the City of Phoenix.

Project North Phoenix 3,500 Conceptual Engineer's Opinion of Probable Cost
Project Number 205159
Project Engineer Lucas Roney
Date 8/17/2023
Improvement Phase 1 Backbone Water Infrastructure

| ITEM DESCRIPTION | QTY | UNIT | UNIT COST | TOTAL |
|------------------------|--------|------|-----------------|--------------------|
| 12" DIP Water Line | 2,060 | LF | \$90.00 | \$185,400 |
| 16" DIP Water Line | 27,843 | LF | \$125.00 | \$3,480,375 |
| 12" Valve, Box & Cover | 1 | EA | \$3,000.00 | \$3,000 |
| 16" Valve, Box & Cover | 20 | EA | \$10,000.00 | \$200,000 |
| Fire Hydrant | 100 | EA | \$11,000.00 | \$1,100,000 |
| Jack & Bore (I-17) | 2 | EA | \$750,000.00 | \$1,500,000 |
| | | | Subtotal | \$6,468,775 |

| | | | | |
|--|----|----|-----------------|--------------------|
| Contingency | -- | -- | 30.00% | \$1,940,633 |
| Construction Surveying | -- | -- | 2.00% | \$129,376 |
| Mobilization / De-Mobilization | -- | -- | 1.00% | \$64,688 |
| Post Design Services | -- | -- | 1.00% | \$64,688 |
| Preliminary Design | -- | -- | 3.00% | \$194,063 |
| Final Design | -- | -- | 6.00% | \$388,127 |
| Plan Review | -- | -- | 2.00% | \$129,376 |
| Agency Permit | -- | -- | 2.00% | \$129,376 |
| Tax Rate (65% of 9.6%) | -- | -- | 6.20% | \$401,064 |
| | | | Subtotal | \$3,441,391 |
| Total Cost Water Infrastructure | | | | \$9,910,200 |

Water Notes:

- 1) Unit costs are in place estimates including trenching and all appurtenances.
- 2) Line valve spacing assumed per COP Design Standards Manual for Water and Wastewater Systems 2017
- 3) Fire Hydrant spacing assumes 300 feet on all waterlines.
- 4) Actual infrastructure items and quantities shown are subject to further engineering, review, and approval by the City of Phoenix.

Project North Phoenix 3,500 Conceptual Engineer's Opinion of Probable Cost
Project Number 205159
Project Engineer Lucas Roney
Date 8/18/2023
Improvement Full Build-out Backbone Water Infrastructure

| ITEM DESCRIPTION | AUCTION PROPERTY QTY | RETAINED PROPERTY QTY | TOTAL QTY | UNIT | UNIT COST | AUCTION PROPERTY TOTAL | RETAINED PROPERTY TOTAL | GRAND TOTAL |
|--|-------------------------|--------------------------|--------------|------|--------------|---------------------------|----------------------------|---------------------|
| 12" DIP Water Line | 21,343 | 13,608 | 34,951 | LF | \$90.00 | \$1,920,870 | \$1,224,720 | \$3,145,590 |
| 16" DIP Water Line | 42,734 | 10,748 | 53,482 | LF | \$125.00 | \$5,341,750 | \$1,343,500 | \$6,685,250 |
| 20" DIP Water Line | 0 | 11,708 | 11,708 | LF | \$135.00 | \$0 | \$1,580,580 | \$1,580,580 |
| 12" Valve, Box & Cover | 20 | 5 | 25 | EA | \$3,000.00 | \$60,000 | \$15,000 | \$75,000 |
| 16" Valve, Box & Cover | 34 | 4 | 38 | EA | \$10,000.00 | \$340,000 | \$40,000 | \$380,000 |
| 20" Valve, Box & Cover | 0 | 4 | 4 | EA | \$16,000.00 | \$0 | \$64,000 | \$64,000 |
| Fire Hydrant | 253 | 81 | 334 | EA | \$11,000.00 | \$2,783,000 | \$891,000 | \$3,674,000 |
| Jack & Bore (I-17) | 2 | 0 | 2 | EA | \$750,000.00 | \$1,500,000 | \$0 | \$1,500,000 |
| Interconnect/Outlet to 54" Trans. Main | 2 | 0 | 2 | EA | \$500,000.00 | \$1,000,000 | \$0 | \$1,000,000 |
| Subtotal | | | | | | \$12,945,620 | \$5,158,800 | \$18,104,420 |

| | | | | | | | | |
|--|----|----|----|----|--------|---------------------|--------------------|---------------------|
| Contingency | -- | -- | -- | -- | 30.00% | \$3,883,686 | \$1,547,640 | \$5,431,326 |
| Construction Surveying | -- | -- | -- | -- | 2.00% | \$258,912 | \$103,176 | \$362,088 |
| Mobilization / De-Mobilization | -- | -- | -- | -- | 1.00% | \$129,456 | \$51,588 | \$181,044 |
| Post Design Services | -- | -- | -- | -- | 1.00% | \$129,456 | \$51,588 | \$181,044 |
| Preliminary Design | -- | -- | -- | -- | 3.00% | \$388,369 | \$154,764 | \$543,133 |
| Final Design | -- | -- | -- | -- | 6.00% | \$776,737 | \$309,528 | \$1,086,265 |
| Plan Review | -- | -- | -- | -- | 2.00% | \$258,912 | \$103,176 | \$362,088 |
| Agency Permit | -- | -- | -- | -- | 2.00% | \$258,912 | \$103,176 | \$362,088 |
| Tax Rate (65% of 9.6%) | -- | -- | -- | -- | 6.20% | \$802,628 | \$319,846 | \$1,122,474 |
| Subtotal | | | | | | \$6,887,068 | \$2,744,482 | \$9,631,550 |
| Total Cost Water Infrastructure | | | | | | \$19,832,700 | \$7,903,300 | \$27,736,000 |

Water Notes:

- 1) Unit costs are in place estimates including trenching and all appurtenances.
- 2) Line valve spacing assumed per COP Design Standards Manual for Water and Wastewater Systems 2017
- 3) Fire Hydrant spacing assumes 300 feet on all waterlines.
- 4) Actual infrastructure items and quantities shown are subject to further engineering, review, and approval by the City of Phoenix.

Project North Phoenix 3,500 Conceptual Engineer's Opinion of Probable Cost
Project Number 205159
Project Engineer Lucas Roney
Date 6/12/2023
Improvement Phase 1 Indirect Potable Reuse Infrastructure

| ITEM DESCRIPTION | QTY | UNIT | UNIT COST | TOTAL |
|---|--------|------|------------------|----------------------|
| North Gateway WRF Recharge Site (8MGD) | 1 | LS | \$165,660,000.00 | \$165,660,000 |
| 24" DIP Indirect Potable Reuse Water Line | 75,656 | LF | \$200.00 | \$15,131,200 |
| | | | Subtotal | \$180,791,200 |

| | | | | |
|---|----|----|-----------------|----------------------|
| Contingency | -- | -- | 30.00% | \$54,237,360 |
| Construction Surveying | -- | -- | 2.00% | \$3,615,824 |
| Mobilization / De-Mobilization | -- | -- | 1.00% | \$1,807,912 |
| Post Design Services | -- | -- | 1.00% | \$1,807,912 |
| Preliminary Design | -- | -- | 3.00% | \$5,423,736 |
| Final Design | -- | -- | 6.00% | \$10,847,472 |
| Plan Review | -- | -- | 2.00% | \$3,615,824 |
| Agency Permit | -- | -- | 2.00% | \$3,615,824 |
| Tax Rate (65% of 9.6%) | -- | -- | 6.20% | \$11,209,054 |
| | | | Subtotal | \$96,180,918 |
| Total Cost Indirect Potable Reuse Infrastructure | | | | \$276,972,200 |

Indirect Potable Reuse Notes:

- 1) Unit costs are in place estimates including trenching and all appurtenances.
- 2) Actual infrastructure items and quantities shown are subject to further engineering, review, and approval by the City of Phoenix.

Project North Phoenix 3,500 Conceptual Engineer's Opinion of Probable Cost
Project Number 205159
Project Engineer Lucas Roney
Date 8/18/2023
Improvement Full Build-out Indirect Potable Reuse Infrastructure

| ITEM DESCRIPTION | AUCTION PROPERTY QTY | RETAINED PROPERTY QTY | TOTAL QTY | UNIT | UNIT COST | AUCTION PROPERTY TOTAL | RETAINED PROPERTY TOTAL | GRAND TOTAL |
|--|-------------------------|--------------------------|--------------|------|------------------|---------------------------|----------------------------|----------------------|
| NGWRF Recharge Site and 78-Inch IPR Site (North) | 1 (\$419,643,795) | 1 (\$367,729,099) | 1 | LS | \$787,372,894.00 | \$419,643,795 | \$367,729,099 | \$787,372,894 |
| 24" DIP Indirect Reuse Potable Water Line | 90,782 | 0 | 90,782 | LF | \$200.00 | \$18,156,400 | \$0 | \$18,156,400 |
| Subtotal | | | | | | \$437,800,195 | \$367,729,099 | \$805,529,294 |

| | | | | | | | | |
|---|----|----|----|----|--------|----------------------|----------------------|------------------------|
| Contingency | -- | -- | -- | -- | 30.00% | \$131,340,059 | \$110,318,730 | \$241,658,788 |
| Construction Surveying | -- | -- | -- | -- | 2.00% | \$8,756,004 | \$7,354,582 | \$16,110,586 |
| Mobilization / De-Mobilization | -- | -- | -- | -- | 1.00% | \$4,378,002 | \$3,677,291 | \$8,055,293 |
| Post Design Services | -- | -- | -- | -- | 1.00% | \$4,378,002 | \$3,677,291 | \$8,055,293 |
| Preliminary Design | -- | -- | -- | -- | 3.00% | \$13,134,006 | \$11,031,873 | \$24,165,879 |
| Final Design | -- | -- | -- | -- | 6.00% | \$26,268,012 | \$22,063,746 | \$48,331,758 |
| Plan Review | -- | -- | -- | -- | 2.00% | \$8,756,004 | \$7,354,582 | \$16,110,586 |
| Agency Permit | -- | -- | -- | -- | 2.00% | \$8,756,004 | \$7,354,582 | \$16,110,586 |
| Tax Rate (65% of 9.6%) | -- | -- | -- | -- | 6.20% | \$27,143,612 | \$22,799,204 | \$49,942,816 |
| Subtotal | | | | | | \$232,909,705 | \$195,631,881 | \$428,541,585 |
| Total Cost Indirect Potable Reuse Infrastructure | | | | | | \$670,709,900 | \$563,361,000 | \$1,234,070,900 |

Indirect Potable Reuse Notes:

- 1) Unit costs are in place estimates including trenching and all appurtenances.
- 2) Actual infrastructure items and quantities shown are subject to further engineering, review, and approval by the City of Phoenix.

Project North Phoenix 3,500 Conceptual Engineer's Opinion of Probable Cost
Project Number 205159
Project Engineer Lucas Roney
Date 8/18/2023
Improvement Phase 1 Backbone Arterial Street Infrastructure

| ITEM DESCRIPTION | QTY | UNIT | UNIT COST | TOTAL |
|--|--------|------|-----------------|---------------------|
| 43rd Ave (Full Street Imp.) | 4,355 | LF | \$1,333.00 | \$5,805,215 |
| 51st Ave (Full Street Imp.) | 4,830 | LF | \$1,333.00 | \$6,438,390 |
| Dove Valley Rd (Half Street Imp.) | 5,646 | LF | \$800.00 | \$4,516,800 |
| SR-74 (Half Street Imp.) Plus Widening | 11,280 | LF | \$1,000.00 | \$11,280,000 |
| Traffic Signal | 2 | EA | \$500,000.00 | \$1,000,000 |
| | | | Subtotal | \$29,040,405 |

| | | | | |
|--|----|----|-----------------|---------------------|
| Contingency | -- | -- | 30.00% | \$8,712,122 |
| Construction Surveying | -- | -- | 2.00% | \$580,808 |
| Mobilization / De-Mobilization | -- | -- | 1.00% | \$290,404 |
| Post Design Services | -- | -- | 1.00% | \$290,404 |
| Preliminary Design | -- | -- | 3.00% | \$871,212 |
| Final Design | -- | -- | 6.00% | \$1,742,424 |
| Plan Review | -- | -- | 2.00% | \$580,808 |
| Agency Permit | -- | -- | 2.00% | \$580,808 |
| Tax Rate (65% of 9.6%) | -- | -- | 6.20% | \$1,800,505 |
| | | | Subtotal | \$15,449,495 |
| Total Cost Arterial Street Infrastructure | | | | \$44,490,000 |

Street Notes:

- 1) Actual infrastructure items and quantities shown are subject to further engineering, review, and approval by the City of Phoenix.
- 2) Full Street Unit Costs account for full street section with assumptions for concrete, asphalt, storm drain, signing, striping, landscaping, and lighting, as needed. Half Street Unit Cost is assumed to be half of the Full Street Unit Cost.
- 3) Major Arterials (43rd Avenue, 51st Avenue, 67th Avenue, Dove Valley Road) are based on City of Phoenix Standard Street Section "A", Figure 2.1 from the City's Street Planning and Design Guidelines
- 4) SR-74 (Carefree Highway) estimate includes new half-street construction plus widening of existing lanes to provide ADOT Standard Section for Controlled Access Urban Highway (Fig 306.4B)

Project North Phoenix 3,500 Conceptual Engineer's Opinion of Probable Cost
Project Number 205159
Project Engineer Lucas Roney
Date 8/18/2023
Improvement Full Build-out Backbone Arterial Street Infrastructure

| ITEM DESCRIPTION | AUCTION PROPERTY QTY | RETAINED PROPERTY QTY | TOTAL QTY | UNIT | UNIT COST | AUCTION PROPERTY TOTAL | RETAINED PROPERTY TOTAL | GRAND TOTAL |
|---|-------------------------|--------------------------|--------------|------|--------------|---------------------------|----------------------------|---------------------|
| 43rd Ave (Full Street Imp.) | 4,300 | 0 | 4,300 | LF | \$1,333.00 | \$5,731,900 | \$0 | \$5,731,900 |
| 51st Ave (Full Street Imp.) | 4,775 | 0 | 4,775 | LF | \$1,333.00 | \$6,365,075 | \$0 | \$6,365,075 |
| 67th Ave (Full Street Imp.) | 0 | 5,296 | 5,296 | LF | \$1,333.00 | \$0 | \$7,059,568 | \$7,059,568 |
| Dove Valley Rd (Full Street Imp.) | 2,892 | 10,878 | 13,770 | LF | \$1,333.00 | \$3,855,036 | \$14,500,374 | \$18,355,410 |
| Dove Valley Rd (Half Street Imp.) | 6,330 | 0 | 6,330 | LF | \$800.00 | \$5,064,000 | \$0 | \$5,064,000 |
| SR-74 (Half Street Imp.) Plus Widening | 11,280 | 13,116 | 24,396 | LF | \$1,000.00 | \$11,280,000 | \$13,116,000 | \$24,396,000 |
| Secondary Road (Minor Arterial, Full Street Imp.) | 26,544 | 0 | 26,544 | LF | \$890.00 | \$23,624,160 | \$0 | \$23,624,160 |
| Traffic Signal | 7 | 2 | 9 | EA | \$500,000.00 | \$3,500,000 | \$1,000,000 | \$4,500,000 |
| Subtotal | | | | | | \$59,420,171 | \$35,675,942 | \$95,096,113 |

| | | | | | | | | |
|--|----|----|----|----|--------|---------------------|---------------------|----------------------|
| Contingency | -- | -- | -- | -- | 30.00% | \$17,826,051.30 | \$10,702,783 | \$28,528,834 |
| Construction Surveying | -- | -- | -- | -- | 2.00% | \$1,188,403.42 | \$713,519 | \$1,901,922 |
| Mobilization / De-Mobilization | -- | -- | -- | -- | 1.00% | \$594,201.71 | \$356,759 | \$950,961 |
| Post Design Services | -- | -- | -- | -- | 1.00% | \$594,201.71 | \$356,759 | \$950,961 |
| Preliminary Design | -- | -- | -- | -- | 3.00% | \$1,782,605.13 | \$1,070,278 | \$2,852,883 |
| Final Design | -- | -- | -- | -- | 6.00% | \$3,565,210.26 | \$2,140,557 | \$5,705,767 |
| Plan Review | -- | -- | -- | -- | 2.00% | \$1,188,403.42 | \$713,519 | \$1,901,922 |
| Agency Permit | -- | -- | -- | -- | 2.00% | \$1,188,403.42 | \$713,519 | \$1,901,922 |
| Tax Rate (65% of 9.6%) | -- | -- | -- | -- | 6.20% | \$3,684,050.60 | \$2,211,908 | \$5,895,959 |
| Subtotal | | | | | | \$31,611,531 | \$18,979,601 | \$50,591,131 |
| Total Cost Arterial Street Infrastructure | | | | | | \$91,031,800 | \$54,655,600 | \$145,687,300 |

Street Notes:

- 1) Actual infrastructure items and quantities shown are subject to further engineering, review, and approval by the City of Phoenix.
- 2) Full Street Unit Costs account for full street section with assumptions for concrete, asphalt, storm drain, signing, striping, landscaping, and lighting, as needed. Half Street Unit Cost is assumed to be half of the Full Street Unit Cost.
- 3) Major Arterials (43rd Avenue, 51st Avenue, 67th Avenue, Dove Valley Road) are based on City of Phoenix Standard Street Section "A", Figure 2.1 from the City's Street Planning and Design Guidelines
- 4) SR-74 (Carefree Highway) estimate includes new half-street construction plus widening of existing lanes to provide ADOT Standard Section for Controlled Access Urban Highway (Fig 306.4B)
- 5) Major Collector cost based on City of Phoenix Standard Street Section "D", Figure 2.5 from the City's Street Planning and Design Guidelines

Project North Phoenix 3,500 Conceptual Engineer's Opinion of Probable Cost
Project Number 205159
Project Engineer Joe Daconta
Date 8/18/2023
Improvement Phase 1 Backbone Drainage Infrastructure

| ITEM DESCRIPTION - | QUANTITY | UNIT | UNIT COST | TOTAL |
|--|----------|------|-----------------|---------------------|
| State Route 74 Earthen Channel to Deadman Wash | | | | |
| MOBILIZATION | 1 | LS | \$180,000.00 | \$180,000 |
| TRAFFIC CONTROL | 1 | LS | \$50,000.00 | \$50,000 |
| CLEARING & GRUBBING - INVENTORY SALVAGE | 57 | AC | \$2,000.00 | \$114,800 |
| CHANNEL EXCAVATION | 488,430 | CY | \$7.00 | \$3,419,010 |
| BOX CULVERTS AT 43RD & 51ST AVE (12-10'x6'x155') | 1,992 | CY | \$500.00 | \$996,000 |
| BOX CULVERTS ALONG SR 74 (8-12'x8'x85') | 1,040 | CY | \$500.00 | \$520,000 |
| BOX CULVERTS ALONG SR 74 (12-10'x4'x85') | 1,080 | CY | \$500.00 | \$540,000 |
| CULVERT HANDRAIL | 254 | LF | \$47.00 | \$11,938 |
| DEADMAN WASH PROTECTION - 9" RENO MATTRESS PLUS | 2,330 | CY | \$300.00 | \$699,000 |
| CHANNEL TIE-IN | 1,600 | CY | \$150.00 | \$240,000 |
| GRADE CONTROLS - RENO MATTRESS PLUS | 2,600 | CY | \$300.00 | \$780,000 |
| CULVERT APRON RIPRAP (12-INCH D50) | 2,100 | CY | \$200.00 | \$420,000 |
| GUARD RAIL FENCING ALONG SR 74 | 11,750 | LF | \$51.00 | \$599,250 |
| CHAIN LINK FENCE ALONG FUTURE DEVELOPMENT | 10,900 | LF | \$21.50 | \$234,350 |
| CULVERT INLET CHANNEL PROTECTION - RIPRAP (8-INCH D50) | 14,500 | CY | \$150.00 | \$2,175,000 |
| | | | SUBTOTAL | \$10,979,348 |
| CONTINGENCY | -- | -- | 30.00% | \$3,293,804 |
| CONSTRUCTION SURVEYING | -- | -- | 2.00% | \$219,587 |
| MOBILIZATION/DE-MOBILIZATION | -- | -- | 1.00% | \$109,793 |
| POST DESIGN SERVICES | -- | -- | 1.00% | \$109,793 |
| PRELIMINARY DESIGN | -- | -- | 3.00% | \$329,380 |
| FINAL DESIGN | -- | -- | 6.00% | \$658,761 |
| PLAN REVIEW | -- | -- | 2.00% | \$219,587 |
| AGENCY PERMIT | -- | -- | 2.00% | \$219,587 |
| TAX RATE (65% OF 9.6%) | -- | -- | 6.20% | \$680,720 |
| | | | SUBTOTAL | \$5,841,013 |
| TOTAL COST DRAINAGE INFRASTRUCTURE | | | | \$16,820,361 |

Drainage Notes:

1. This Conceptual Engineer's Opinion of Probable Cost is not considered a cost to complete estimate.
2. This Conceptual Engineer's Opinion of Probable Cost is done without the benefit of final construction documents and is only considered a conceptual estimate.
3. Channel Excavation is considered an adjacent flip to channel and does not consider haul.
4. Dove Valley Road Deadman Wash and New River drainage crossings will be required in the future and have not been included within this estimate.
5. Import required to fill the FEMA Deadman Wash Tributary 1 and Tributary 2 SFHAs is not part of the cost estimate.

Project North Phoenix 3,500 Conceptual Engineer's Opinion of Probable Cost
Project Number 205159
Project Engineer Joe Daconta
Date 8/18/2023
Improvement Full Build-out Backbone Drainage Infrastructure

| ITEM DESCRIPTION - | AUCTION PROPERTY QTY | RETAINED PROPERTY QTY | TOTAL QUANTITY | UNIT | UNIT COST | AUCTION PROPERTY TOTAL | RETAINED PROPERTY TOTAL | GRAND TOTAL |
|--|----------------------------|-----------------------------|-------------------|------|--------------------------|------------------------------|-------------------------------|---------------------|
| State Route 74 Earthen Channel to Deadman Wash | | | | | | | | |
| MOBILIZATION | 1 | 0 | 1 | LS | \$180,000.00 | \$180,000 | \$0 | \$180,000 |
| TRAFFIC CONTROL | 1 | 0 | 1 | LS | \$50,000.00 | \$50,000 | \$0 | \$50,000 |
| CLEARING & GRUBBING - INVENTORY SALVAGE | 57 | 0 | 57 | AC | \$2,000.00 | \$114,800 | \$0 | \$114,800 |
| CHANNEL EXCAVATION | 488,430 | 0 | 488,430 | CY | \$7.00 | \$3,419,010 | \$0 | \$3,419,010 |
| BOX CULVERTS AT 43RD & 51ST AVE (12-10'x6'x155') | 1,992 | 0 | 1,992 | CY | \$500.00 | \$996,000 | \$0 | \$996,000 |
| BOX CULVERTS ALONG SR 74 (8-12'x8'x85') | 1,040 | 0 | 1,040 | CY | \$500.00 | \$520,000 | \$0 | \$520,000 |
| BOX CULVERTS ALONG SR 74 (12-10'x4'x85') | 1,080 | 0 | 1,080 | CY | \$500.00 | \$540,000 | \$0 | \$540,000 |
| CULVERT HANDRAIL | 254 | 0 | 254 | LF | \$47.00 | \$11,938 | \$0 | \$11,938 |
| DEADMAN WASH PROTECTION - 9" RENO MATTRESS PLUS | 2,330 | 0 | 2,330 | CY | \$300.00 | \$699,000 | \$0 | \$699,000 |
| CHANNEL TIE-IN AT 1.5' THICK | 1,600 | 0 | 1,600 | CY | \$150.00 | \$240,000 | \$0 | \$240,000 |
| GRADE CONTROLS - RENO MATTRESS PLUS | 2,600 | 0 | 2,600 | CY | \$300.00 | \$780,000 | \$0 | \$780,000 |
| CULVERT APRON RIPRAP (12-INCH D50) | 2,100 | 0 | 2,100 | CY | \$200.00 | \$420,000 | \$0 | \$420,000 |
| GUARD RAIL FENCING ALONG SR 74 | 11,750 | 0 | 11,750 | LF | \$51.00 | \$599,250 | \$0 | \$599,250 |
| CHAIN LINK FENCE ALONG FUTURE DEVELOPMENT | 10,900 | 0 | 10,900 | LF | \$21.50 | \$234,350 | \$0 | \$234,350 |
| CULVERT INLET CHANNEL PROTECTION - RIPRAP (8-INCH D50) | 14,500 | 0 | 14,500 | CY | \$150.00 | \$2,175,000 | \$0 | \$2,175,000 |
| | | | | | SUBTOTAL | \$10,979,348 | \$0 | \$10,979,348 |
| State Route 74 Earthen Channel to New River | | | | | | | | |
| MOBILIZATION | 0 | 1 | 1 | LS | \$140,000.00 | \$0 | \$140,000 | \$140,000 |
| TRAFFIC CONTROL | 0 | 1 | 1 | LS | \$50,000.00 | \$0 | \$50,000 | \$50,000 |
| CLEARING & GRUBBING - INVENTORY SALVAGE | 0 | 40 | 40 | AC | \$2,000.00 | \$0 | \$80,000 | \$80,000 |
| CHANNEL EXCAVATION | 0 | 320,000 | 320,000 | CY | \$7.00 | \$0 | \$2,240,000 | \$2,240,000 |
| BOX CULVERTS ALONG SR 74 (14-10'x4'x85') | 0 | 1,280 | 1,280 | CY | \$500.00 | \$0 | \$640,000 | \$640,000 |
| NEW RIVER WASH PROTECTION - 9" RENO MATTRESS PLUS | 0 | 500 | 500 | CY | \$300.00 | \$0 | \$150,000 | \$150,000 |
| CHANNEL TIE-IN AT 1.5' THICK | 0 | 1,600 | 1,600 | CY | \$150.00 | \$0 | \$240,000 | \$240,000 |
| GRADE CONTROLS - RENO MATTRESS PLUS | 0 | 1,400 | 1,400 | CY | \$300.00 | \$0 | \$420,000 | \$420,000 |
| BEND AND CULVERT APRON RIPRAP (12-INCH D50) | 0 | 2,600 | 2,600 | CY | \$200.00 | \$0 | \$520,000 | \$520,000 |
| GUARD RAIL FENCING ALONG SR 74 | 0 | 7,300 | 7,300 | LF | \$51.00 | \$0 | \$372,300 | \$372,300 |
| CHAIN LINK FENCE ALONG FUTURE DEVELOPMENT | 0 | 8,400 | 8,400 | LF | \$21.50 | \$0 | \$180,600 | \$180,600 |
| CULVERT INLET CHANNEL PROTECTION - RIPRAP (8-INCH D50) | 0 | 11,550 | 11,550 | CY | \$150.00 | \$0 | \$1,732,500 | \$1,732,500 |
| | | | | | SUBTOTAL | \$0 | \$6,765,400 | \$6,765,400 |
| Deadman Wash Bank Protection | | | | | | | | |
| MOBILIZATION | 1 | 1 | 2 | LS | \$140,000.00 | \$140,000 | \$140,000 | \$280,000 |
| CLEARING & GRUBBING - INVENTORY SALVAGE | 17 | 17 | 34 | AC | \$2,000.00 | \$34,000 | \$34,000 | \$68,000 |
| ENCROACHMENT FILL | 56,000 | 56,000 | 112,000 | CY | \$7.00 | \$392,000 | \$392,000 | \$784,000 |
| CHAIN LINK FENCE ALONG FUTURE DEVELOPMENT | 7,500 | 7,500 | 15,000 | LF | \$21.50 | \$161,250 | \$161,250 | \$322,500 |
| BANK PROTECTION - RENO MATTRESS PLUS - 9" TH | 7,135 | 7,135 | 14,270 | CY | \$250.00 | \$1,783,750 | \$1,783,750 | \$3,567,500 |
| BANK PROTECTION - GABION BOX (3'X3'X1.5') | 1,250 | 1,250 | 2,500 | CY | \$250.00 | \$312,500 | \$312,500 | \$625,000 |
| | | | | | SUBTOTAL | \$2,823,500 | \$2,823,500 | \$5,647,000 |
| | | | | | COMBINED SUBTOTAL | \$13,802,848 | \$9,588,900 | \$23,391,748 |
| CONTINGENCY | -- | -- | -- | -- | 30.00% | \$4,140,854 | \$2,876,670 | \$7,017,524 |
| CONSTRUCTION SURVEYING | -- | -- | -- | -- | 2.00% | \$276,057 | \$191,778 | \$467,835 |
| MOBILIZATION/DE-MOBILIZATION | -- | -- | -- | -- | 1.00% | \$138,028 | \$95,889 | \$233,917 |
| POST DESIGN SERVICES | -- | -- | -- | -- | 1.00% | \$138,028 | \$95,889 | \$233,917 |
| PRELIMINARY DESIGN | -- | -- | -- | -- | 3.00% | \$414,085 | \$287,667 | \$701,752 |
| FINAL DESIGN | -- | -- | -- | -- | 6.00% | \$828,171 | \$575,334 | \$1,403,505 |
| PLAN REVIEW | -- | -- | -- | -- | 2.00% | \$276,057 | \$191,778 | \$467,835 |
| AGENCY PERMIT | -- | -- | -- | -- | 2.00% | \$276,057 | \$191,778 | \$467,835 |
| TAX RATE (65% OF 9.6%) | -- | -- | -- | -- | 6.20% | \$855,777 | \$594,512 | \$1,450,288 |
| | | | | | SUBTOTAL | \$7,343,115 | \$5,101,295 | \$12,444,410 |
| TOTAL COST DRAINAGE INFRASTRUCTURE | | | | | | \$21,145,963 | \$14,690,195 | \$35,836,158 |

Drainage Notes:

1. This Conceptual Engineer's Opinion of Probable Cost is not considered a cost to complete estimate.
2. This Conceptual Engineer's Opinion of Probable Cost is done without the benefit of final construction documents and is only considered an estimate.
3. Channel Excavation is considered an adjacent flip to channel and does not consider haul.
4. Encroachment Fill considers 100-ft adjacent to Bank Protection, at an average depth of 2 feet.
5. FEMA confirmation will be necessary to determine actual Encroachment fill limits in order to be considered a non-levee fill condition.
6. An ADWR Level 1 analysis determined required bank protection scour depth. As development progresses a more detailed scour analysis should be performed.
7. Dove Valley Road Deadman Wash & New River drainage crossings will be required in the future and have not been included within this estimate.
8. Import required to fill the FEMA Deadman Wash Tributary 1 and Tributary 2 SFHAs is not part of the cost estimate.
9. The SR74 Channel to New River is based on normal depth calculations and assumes a 5.5-ft depth for excavation approximations.
10. SR74 culvert roadway improvements consider a 85 foot roadway width.

APPENDIX C:
DRAINAGE SUPPORTING DOCUMENTATION

FINAL DRAINAGE REPORT
SR 303L LAKE PLEASANT PARKWAY TO I-17 (2008) TABLE 18

Project: 110977

November 2008

**Final Drainage Report for
SR 303L
TRACS No. 303 MA 130 H7157 01C**

Lake Pleasant Parkway to I-17

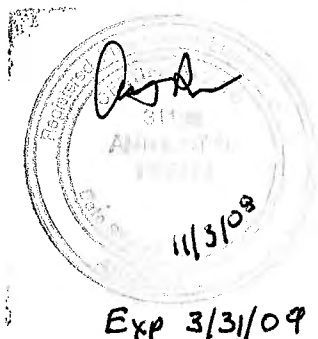
Arizona Department of Transportation

Contract No. 07-14



Submitted to

**Arizona Department of Transportation
Phoenix, Arizona**



Prepared by

Baker

Michael Baker Jr., Inc.
Phoenix, Arizona

In association with:
J2 Design, Inc.

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| APPENDIX D | OFF-SITE HYDROLOGY <ul style="list-style-type: none">• Off-site Drainage Sub-Basin Boundary Map• 50-yr HEC-1 Input for SR 303 and Segment 4• 50-yr HEC-1 Output for SR 303 and Segment 4• 100-yr HEC-1 Input for SR 303 and Segment 4• 100-yr HEC-1 Output for SR 303 and Segment 4 |
| APPENDIX E | OFF-SITE HYDRAULIC STRUCTURES <ul style="list-style-type: none">• New River Bridge Scour Calculations• Deadman Wash Bridge Scour Calculations• Hydraulic Calculations for New River Bridges Crossing• Hydraulic Calculations for Deadman Wash Bridges Crossing• HEC-RAS Outputs for Collector Channels• Cross Culvert Analyses (SR 303L)• Cross Culvert Analyses (Frontage Roads)• Cross Culvert Analyses (Segment4) |
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Table 18: Summary of Box Culverts, Pipe Culverts & Super-Box Culverts

| Roadway CL | Culvert ID | Station | No. of Boxes | Culvert Size (ft x ft) | Length (ft) | Skew (°) | Skew (L/R) | Design Flow Q50 (cfs) | Max. Flow Q100 (cfs) | U/S Invert Elev (ft) | D/S Invert Elev (ft) | 50y HW Elev (ft) | HW/D Ratio |
|------------|------------|------------|--------------|------------------------|-------------|----------|------------|-----------------------|----------------------|----------------------|----------------------|------------------|------------|
| 303L | 1 | 1824+81.79 | 1 | 8' x 6' RCB | 318' | 0 | - | 106 | 115 | 1477 | 1476 | 1480.18 | 0.53 |
| 303L | 2 | 1856+06.80 | 1 | 10' x 12' RCB | 452' | 36 | Right | 447 | 524 | 1482.75 | 1480.00 | 1488.81 | 0.505 |
| 303L | 3 | 2091+53.44 | 4 | 10' x 6' RCB | 355' | 45 | Right | 579 | 662 | 1559.3 | 1559 | 1562.87 | 0.595 |
| 303L | 4 | 2120+14.02 | 2 | 10' x 6' RCB | 440' | 0 | - | 265 | 302 | 1576.45 | 1576.00 | 1580.06 | 0.75 |
| 303L | 5 | 2142+70.77 | 2 | 8' x 6' RCB | 438' | 0 | - | 183 | 209 | 1583.78 | 1583.26 | 1587.19 | 0.57 |
| 303L | 6 | 2159+89.13 | 2 | 10' x 6' RCB | 602' | 7 | Left | 587 | 683 | 1584.32 | 1581.05 | 1589.38 | 0.84 |
| 303L | 178 | 1833+83.95 | 1 | 48" CMP | 487' | 45 | Right | 45 | 52 | 1481.95 | 1476.6 | 1482.87 | 0.193 |
| 303L | 207 | 1879+57.00 | 1 | 36" CMP | 337' | 0 | - | 50.62 | 54.17 | 1493.58 | 1488.56 | 1498.86 | 1.76 |
| 303L | 216 | 1889+51.52 | 1 | 36" CMP | 326' | 5 | Left | 48.65 | 52.67 | 1490.33 | 1489.23 | 1498.86 | 2.84 |
| 303L | 218 | 1893+80.70 | 1 | 36" CMP | 337' | 35 | Right | 44.06 | 48.16 | 1494.03 | 1490.50 | 1498.86 | 1.61 |
| 303L | SB1 | 1909+35.39 | 2 | 27.75' x 6' Super-Box | 266' | 0 | - | 1,797 | 2,064 | 1495.05 | 1495.00 | 1500.59 | 0.923 |
| 303L | SB2 | 2073+70.50 | 2 | 36' x 10' Super-Box | 200' | 0 | - | 829 | 948 | 1551.2 | 1551.07 | 1553.94 | 0.274 |
| Seg 4 | BE1 | 41+27.00 | 1 | 6' x 6' | 281' | 42 | Right | 447 | 524 | 1484.4 | 1482.75 | 1490.46 | 1.01 |
| Seg 4 | 1 | 130+12.50 | 2 | 12' x 6' | 402' | 45 | Right | 924 | 1,097 | 1531.4 | 1531.0 | 1537.48 | 0.718 |
| Seg 4 | 74 | 117+23.50 | 1 | 48" CMP | 278' | 41 | Right | 51 | 60 | 1535.90 | 1529.00 | 1539.05 | 0.788 |
| Seg 4 | 205 | 24+83.00 | 1 | 36" CMP | 765' | 45 | Left | 50 | 51 | 1498.9 | 1490.7 | 1539.05 | 0.788 |

TSMC FEMA CLOMR ANNOTATED FIRM EXHIBIT



**CONDITIONAL LETTER OF MAP REVISION
TECHNICAL SUPPORT DATA NOTEBOOK
FOR TSMC AZ
DEADMAN WASH TRIBUTARY 2 & TRIBUTARY 2A**

May 19, 2021
WP# 205159.10

Prepared for: **CTCI Corporation**
TSMC Arizona Corporation
2510 West Dunlap Avenue
Phoenix, Arizona 85021

Submitted to: **LOMC Clearinghouse**
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Phoenix, Arizona 85003
Phone: 602.262.4026

Prepared by: **Wood, Patel & Associates, Inc.**
2051 West Northern Avenue, Suite 100
Phoenix, Arizona 85021
602.335.8500



EXPIRES 3-31-24



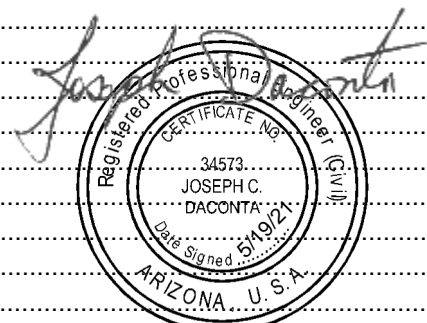
EXPIRES 6/30/2023

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Appendix B Hydrology Supporting Data
- Existing & Post-Project DDMSW Data
 - Existing Condition 100-Year, 24-hour & 6-hour HEC-1 Output
 - Post-Project Condition 100-Year , 24-hour & 6-hour HEC1 Output
- Appendix C Hydraulics Supporting Data
- Duplicative Effective 100-Year HEC-RAS Model
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- Appendix D ESA & USACOE Supporting Data
Appendix E Survey Documentation



EXPIRES 6/30/2023



EXPIRES 3-31-24

EXHIBITS

| | |
|-----------|---|
| Exhibit A | Effective FEMA FIRM |
| Exhibit B | Existing Conditions Soils Map |
| Exhibit C | Existing Conditions HEC-1 Schematic Map |
| Exhibit D | Proposed Conditions Soils Map |
| Exhibit E | Proposed Conditions HEC-1 Schematic Map |
| Exhibit F | Land Use Map |
| Exhibit G | Post-Project Conditions Study Work Map: 1"=200' |
| Exhibit H | Proposed Channel & Mass Grading Plans |
| Exhibit I | Annotated FIRM Panel |
| Exhibit J | Digital Zip of Electronic Files |
| Exhibit K | Operation & Maintenance Plan |

ELECTRONIC DELIVERABLES

- Read Me.txt File
- Aerial Image
- Existing Condition 100-Year, 6-hour & 24-hour HEC-1 files
- Post-Project Condition 100-Year, 6-hour & 24-hour HEC-1 files
- FEMA Effective ADOT LOMR FIS 100-Year HEC-RAS Model
- Duplicative Effective 100-Year HEC-RAS Model
- Corrected Effective 100-Year HEC-RAS Model
- Post-Project Conditions 100-Year HEC-RAS Model
- Exhibit G - Post-Project Conditions Study Work Map Drawing File
- Exhibit H – Proposed Channel & Mass Grading Plans Drawing Files
- Exhibit I - Annotated FIRM Panel Drawing File
- Topographic Drawing File (205159-Existing Topo Map.dwg)
- Digital Line Work Files in GIS Format
 - Chnl_Cntrl.Ln.shp
 - FP.shp
 - FW.shp
 - X_section.shp

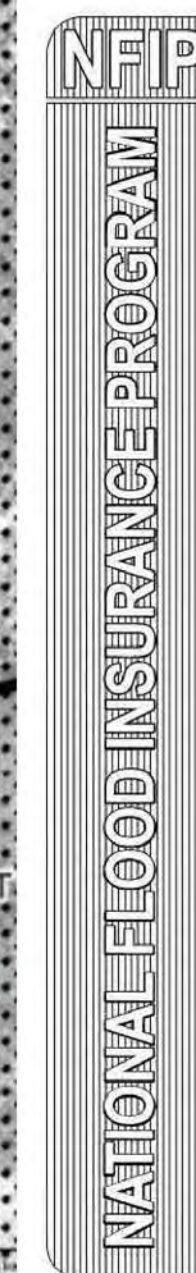


EXPIRES 6/30/2023



EXPIRES 3-31-24

EXHIBIT I – ANNOTATED FIRM PANEL



PANEL 0840L

FIRM

FLOOD INSURANCE RATE MAP

MARICOPA COUNTY, ARIZONA

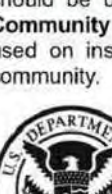
AND INCORPORATED AREAS

PANEL 840 OF 4425
 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

| CONTAINS: | | | |
|------------------|--------|-------|--------|
| COMMUNITY | NUMBER | PANEL | SUFFIX |
| PEORIA, CITY OF | 040050 | 0840 | L |
| PHOENIX, CITY OF | 040051 | 0840 | L |

REVISED TO
REFLECT LOMR
EFFECTIVE
DATE:
MARCH 7, 2014

Notice to User: The **Map Number** shown above should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.



MAP NUMBER
04013C0840L

MAP REVISED
OCTOBER 16, 2013

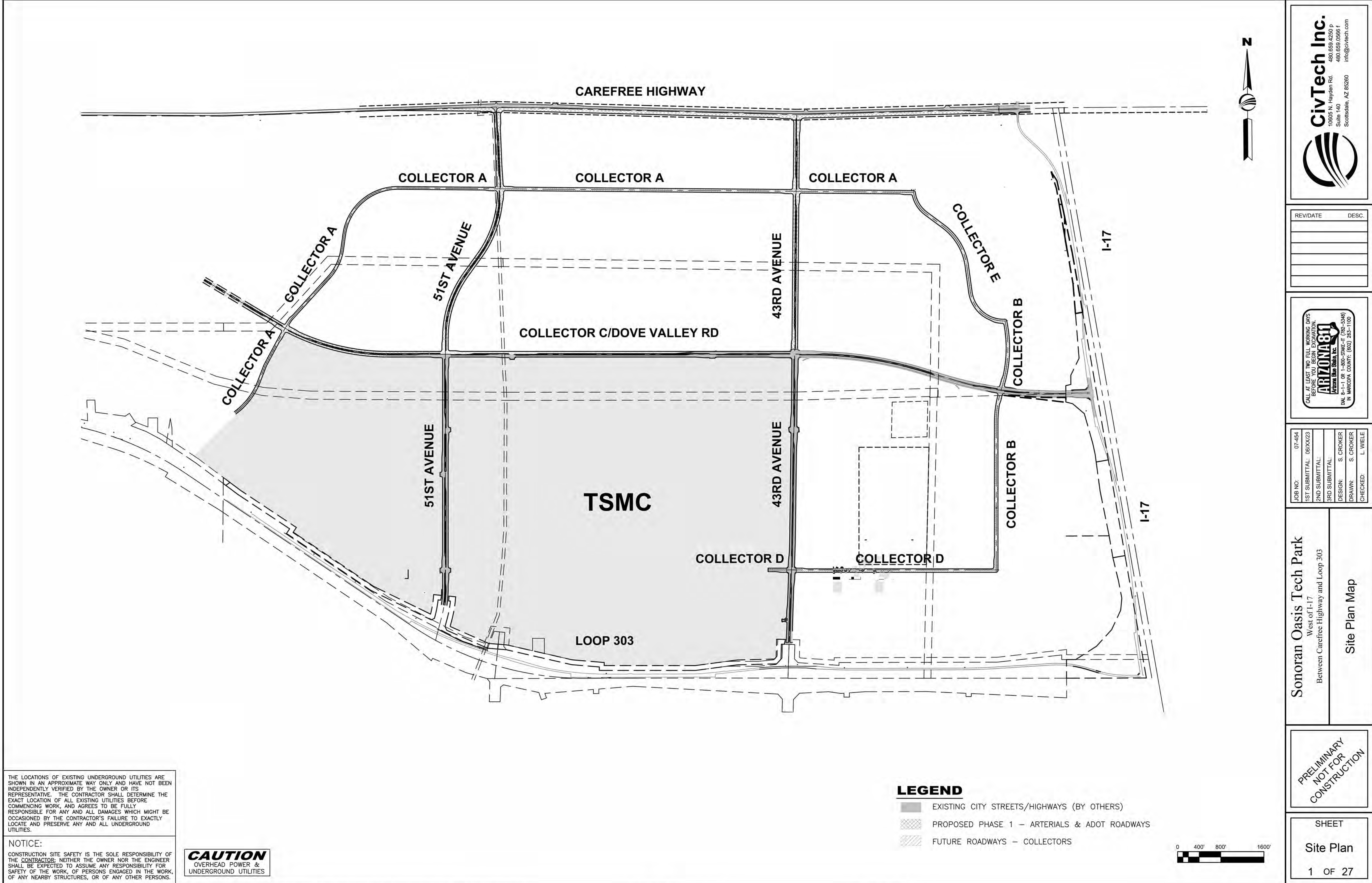
Federal Emergency Management Agency

Expires 6/30/2023

**WOOD
PATEL**

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|---|-----------|--------|-----------|--------------|
| <h1 style="text-align: center;">TSMC AZ</h1> | | | | |
| <h2 style="text-align: center;">EXHIBIT I</h2> <h3 style="text-align: center;">ANNOTATED FEMA FIRM</h3> | | | | |
| DATE | 2/6/2021 | SCALE | 1" = 600' | SHEET 1 OF 1 |
| JOB NO. | 205159.10 | DESIGN | JCD | DRAWN JCD |
| Z:\2020\205159.10\Project Support\Reports\CLOMR-LOMR\Exhibits\5159.10-Exh I-Annotated FEMA FIRM.dwg | | | | |

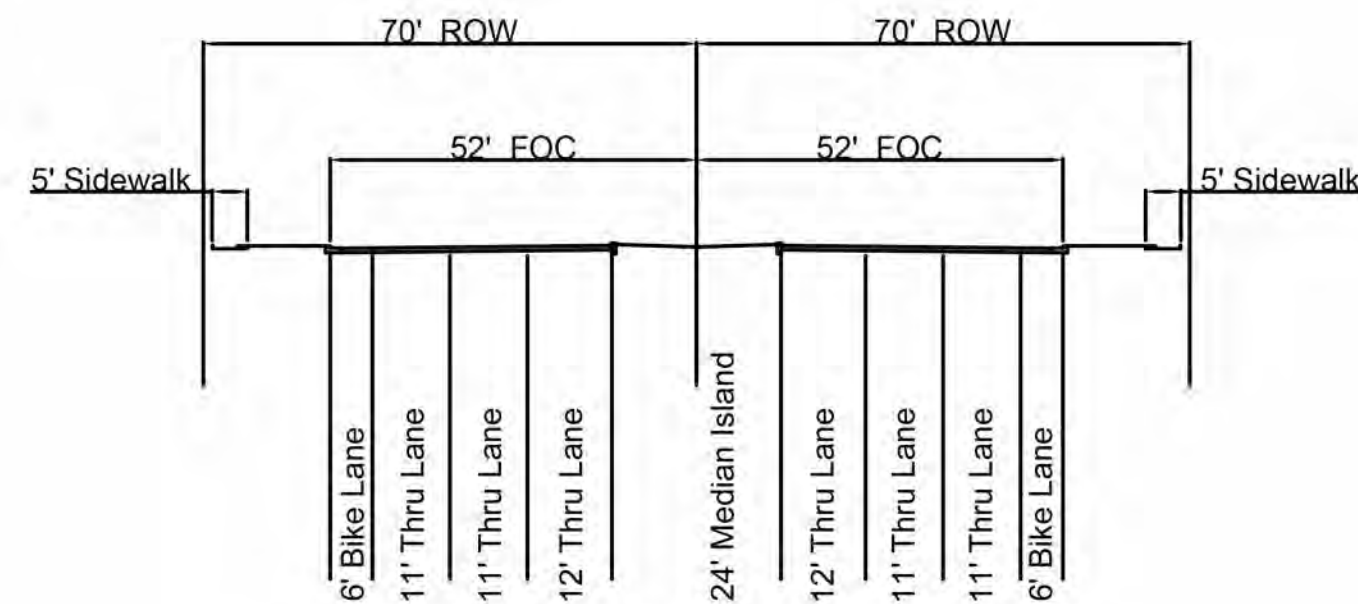
APPENDIX D:
GENERAL SUPPORTING DOCUMENTATION



THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

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CAUTION
OVERHEAD POWER &
UNDERGROUND UTILITIES



CROSS SECTION A-A

City of Phoenix Street Planning and Design Guidelines

Figure 2.1

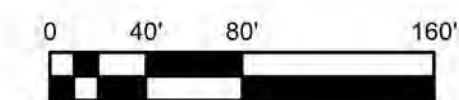
Cross-section "A" - Major Arterial

NOTES

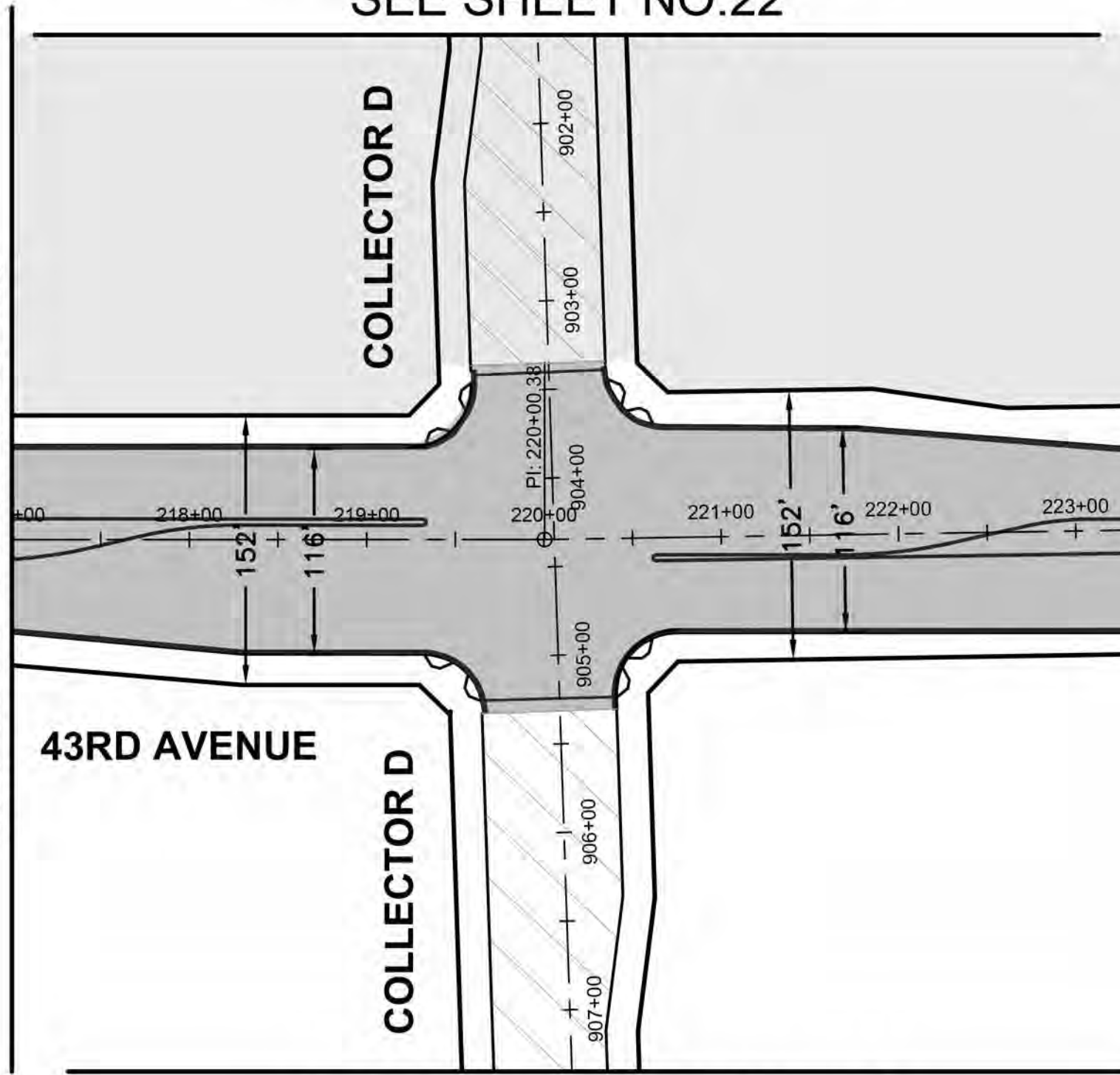
All proposed intersections shall have right turn lanes that provide 150' of storage with a 75' taper.

LEGEND

- ROW RIGHT OF WAY
- FOC FACE OF CURB
- EXISTING CITY STREETS/HIGHWAYS (BY OTHERS)
- PROPOSED PHASE 1 - ARTERIALS & ADOT ROADWAYS
- FUTURE ROADWAYS - COLLECTORS



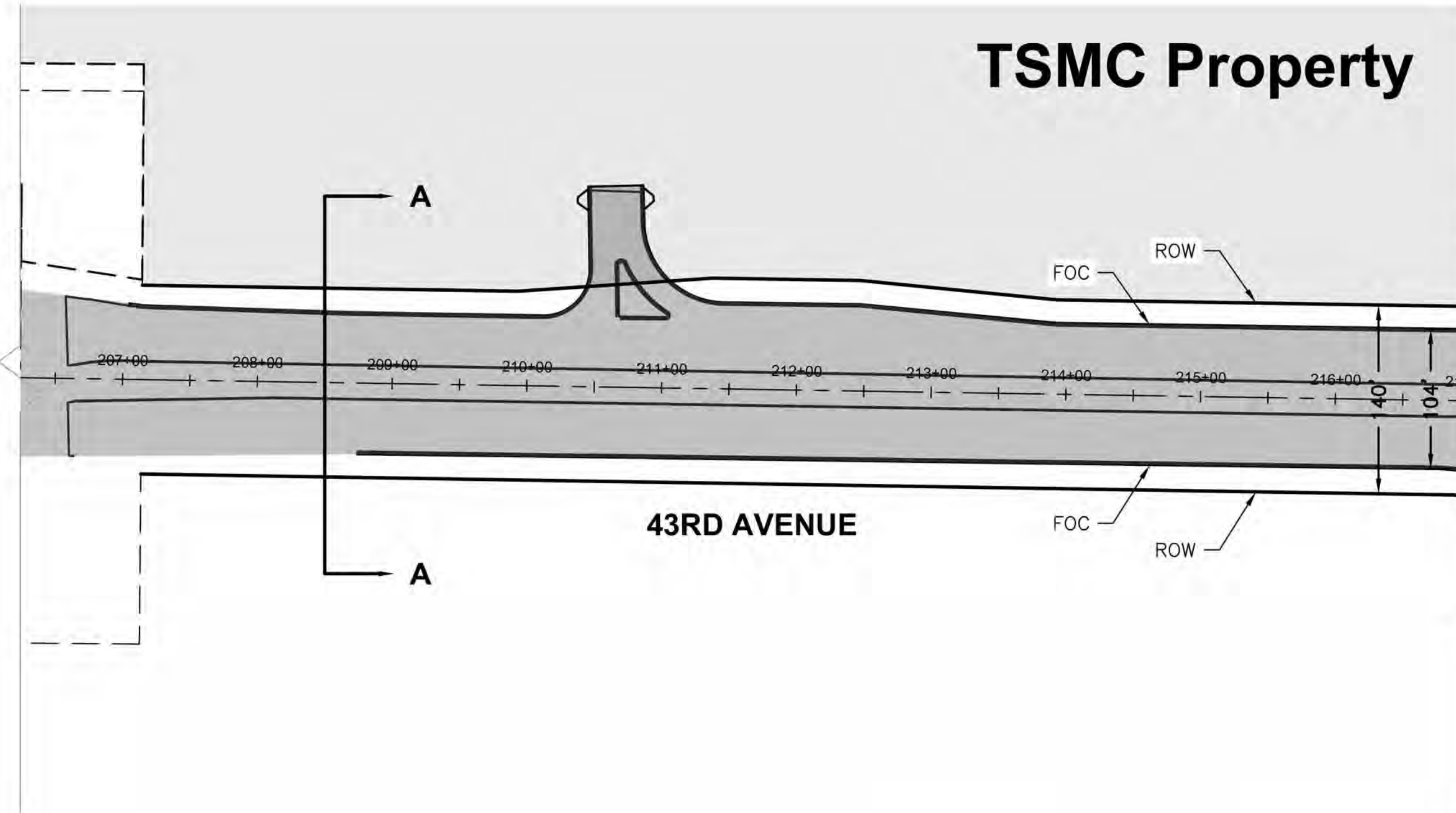
SEE ABOVE RIGHT
MATCH LINE STA 217+00



MATCH LINE STA 901+50
SEE SHEET NO.22

MATCH LINE STA 907+50
SEE SHEET NO. 22

LOOP 303



TSMC Property

43RD AVENUE

TSMC Property

43RD AVENUE

MATCH LINE STA 217+00
SEE BELOW LEFT

MATCH LINE STA 237+00
SEE SHEET NO. 5



| REV/DATE | DESC. |
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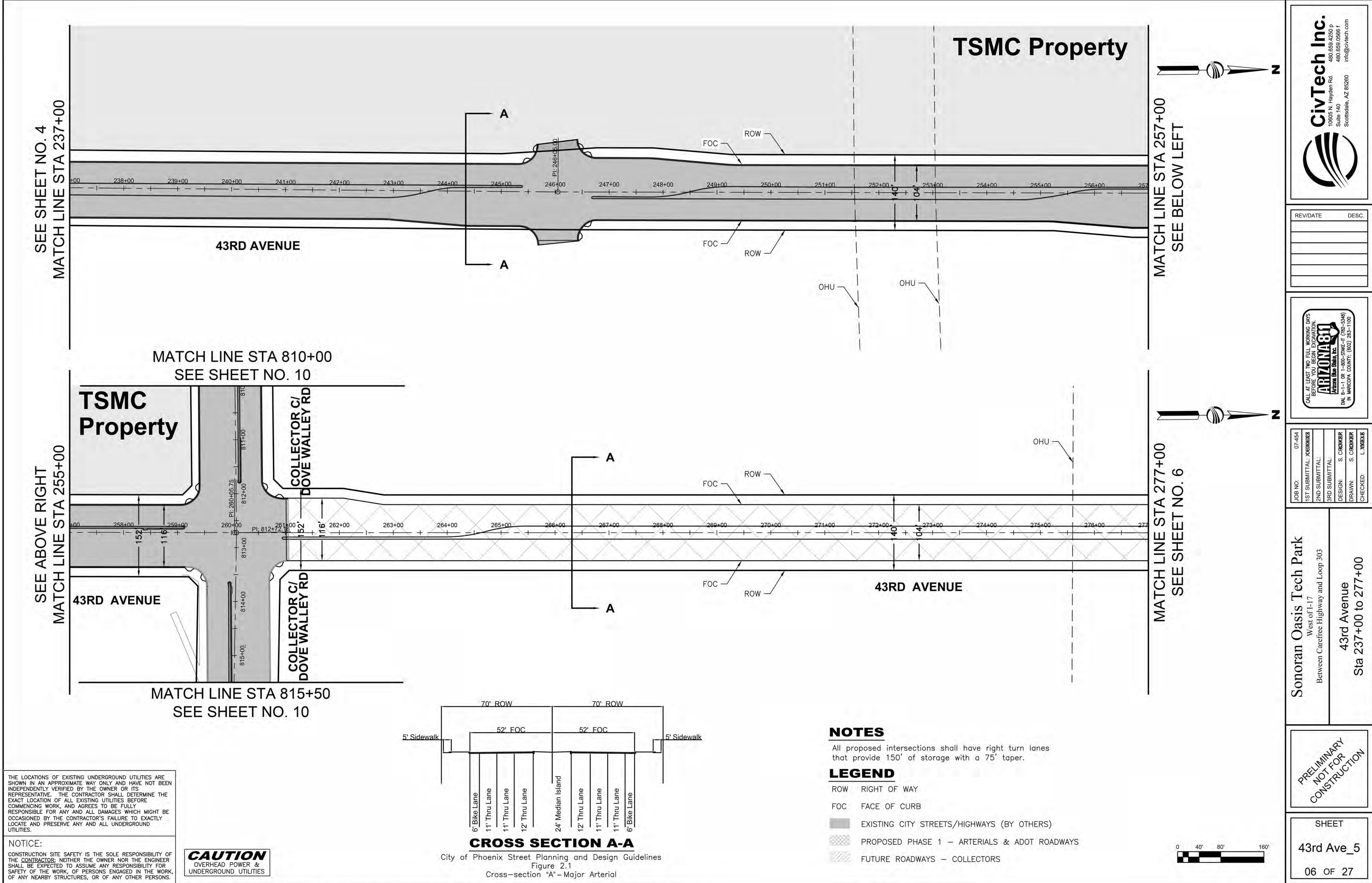


| | |
|---------------|------------|
| JOB NO. | 07-454 |
| 1ST SUBMITTAL | XXX/XX/XX |
| 2ND SUBMITTAL | |
| 3RD SUBMITTAL | |
| DESIGN | S. CROOKER |
| DRAWN | S. CROOKER |
| CHECKED | L. YORRKE |

Sonoran Oasis Tech Park
West of I-17
Between Carefree Highway and Loop 303
43rd Avenue
Sta 200+00 to 237+00

**PRELIMINARY
NOT FOR
CONSTRUCTION**

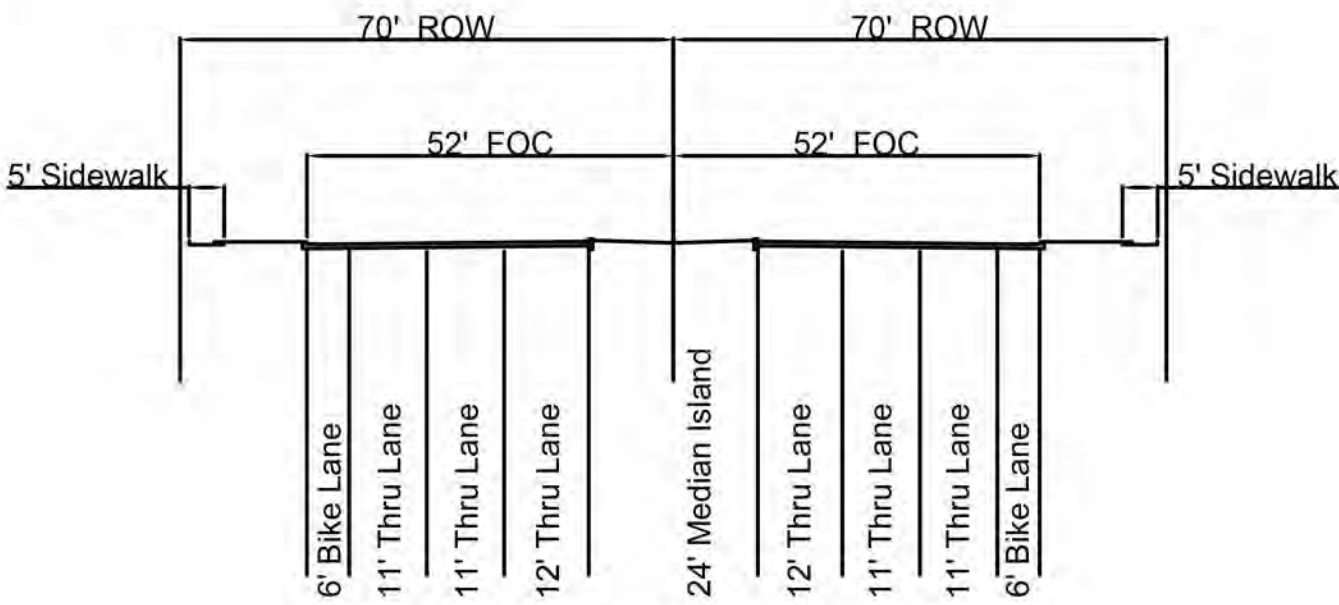
SHEET
43rd Ave_4
05 OF 27



THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

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CAUTION
OVERHEAD POWER &
UNDERGROUND UTILITIES



CROSS SECTION A-A

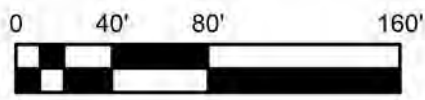
City of Phoenix Street Planning and Design Guidelines
Figure 2.1
Cross-section "A" - Major Arterial

NOTES

All proposed intersections shall have right turn lanes that provide 150' of storage with a 75' taper.

LEGEND

- ROW RIGHT OF WAY
- FOC FACE OF CURB
- EXISTING CITY STREETS/HIGHWAYS (BY OTHERS)
- PROPOSED PHASE 1 - ARTERIALS & ADOT ROADWAYS
- FUTURE ROADWAYS - COLLECTORS



CivTech Inc.
10605 N. Hayden Rd.
Suite 140
Scottsdale, AZ 85260
480.659.4250 p
480.659.0566 f
info@civtech.com

| RE/DATE | DESC. |
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CALL AT LEAST TWO FULL WORKING DAYS BEFORE YOU BEGIN EXCAVATION.
ARIZONA 811
Arizona Statewide, Inc.
DIAL 8-1-1 OR 1-800-STATE-IT (782-5348)
IN MARICOPA COUNTY: (602) 263-1100

| | |
|---------------|-----------|
| JOB NO. | 07-454 |
| 1ST SUBMITTAL | XX/XX/XX |
| 2ND SUBMITTAL | |
| 3RD SUBMITTAL | |
| DESIGN | S. CROKER |
| DRAWN | S. CROKER |
| CHECKED | L. YORRKE |

Sonoran Oasis Tech Park
West of I-17
Between Carefree Highway and Loop 303

43rd Avenue
Sta 237+00 to 277+00

PRELIMINARY
NOT FOR
CONSTRUCTION

SHEET

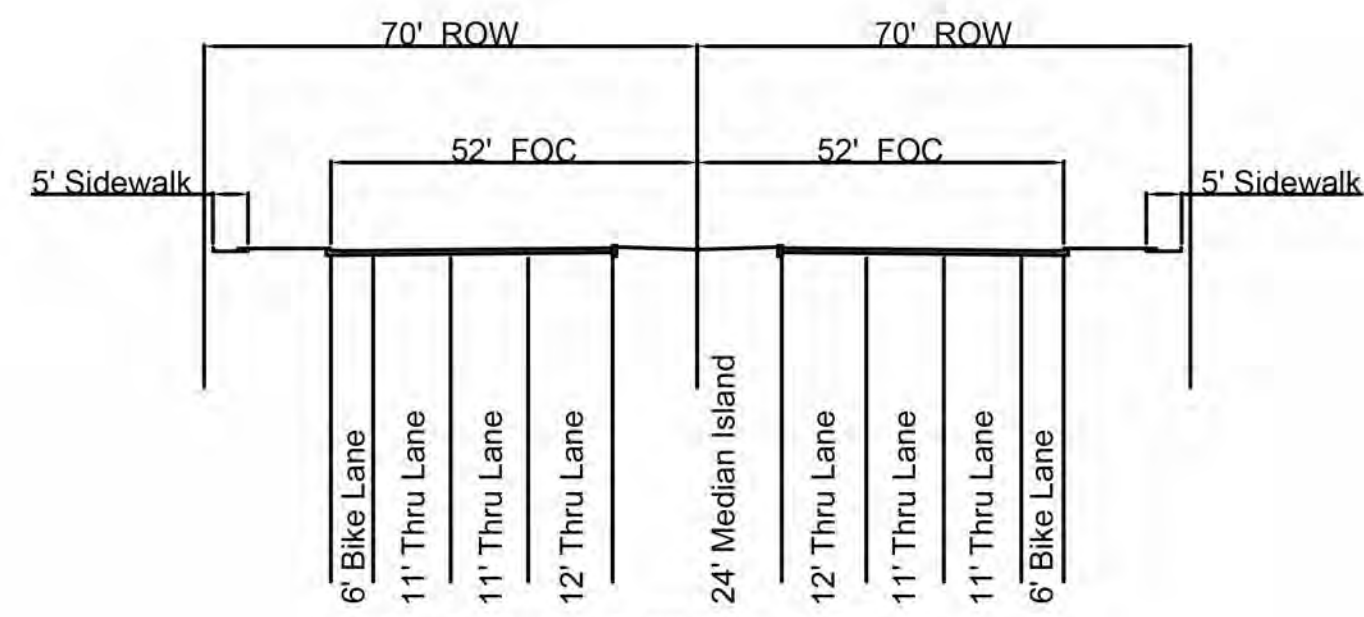
43rd Ave_5

06 OF 27

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

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CAUTION
OVERHEAD POWER &
UNDERGROUND UTILITIES



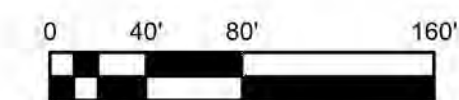
CROSS SECTION A-A
City of Phoenix Street Planning and Design Guidelines
Figure 2.1
Cross-section "A" - Major Arterial

NOTES

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LEGEND

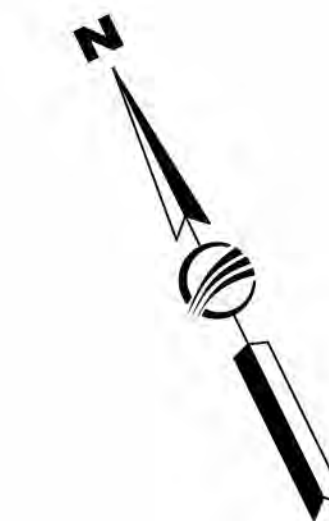
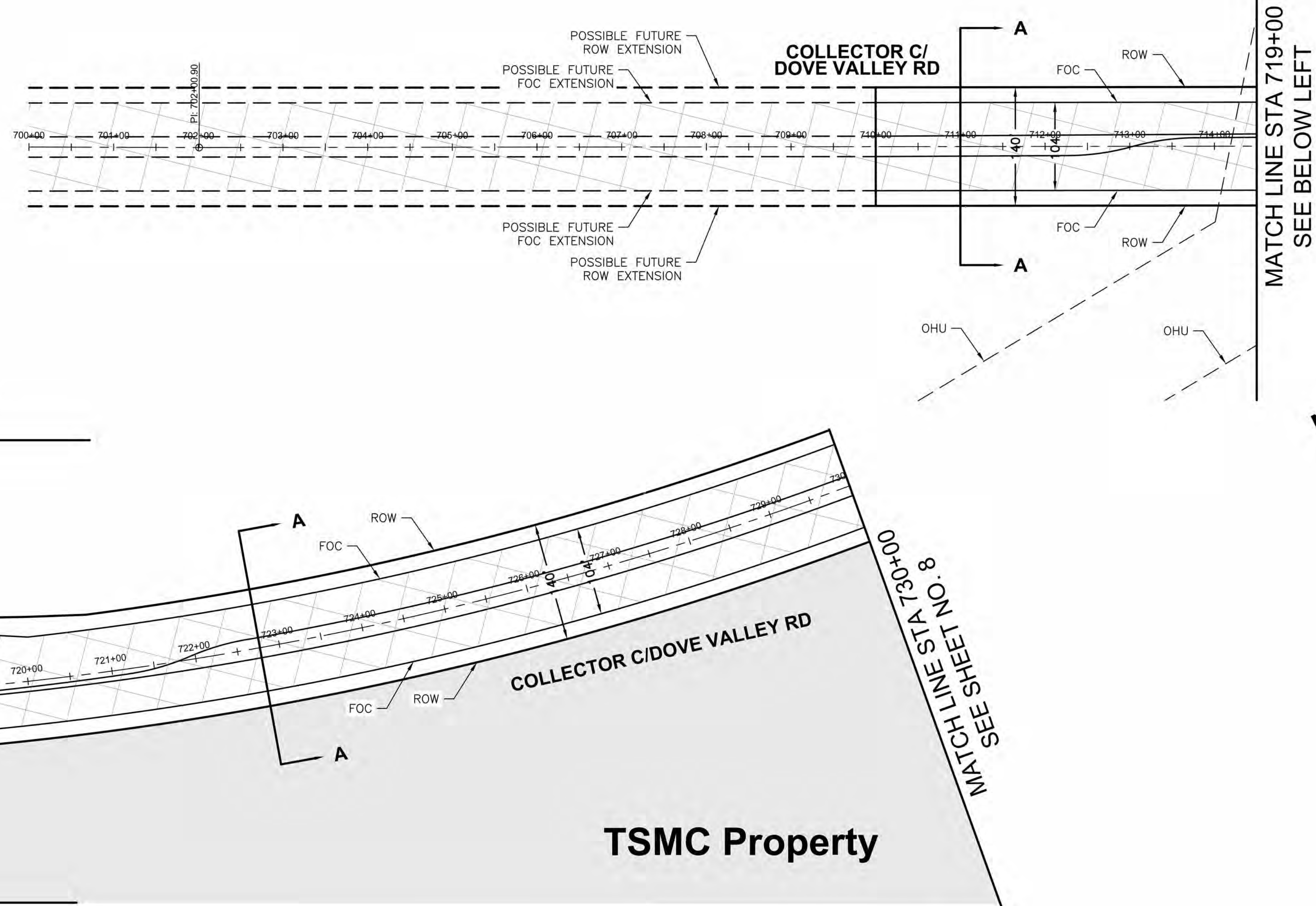
- ROW RIGHT OF WAY
FOC FACE OF CURB
EXISTING CITY STREETS/HIGHWAYS (BY OTHERS)
PROPOSED PHASE 1 - ARTERIALS & ADOT ROADWAYS
FUTURE ROADWAYS - COLLECTORS



MATCH LINE STA 421+50
SEE SHEET NO. 12

SEE ABOVE RIGHT
MATCH LINE STA 719+00

MATCH LINE STA 416+00
SEE SHEET NO. 12



| RE/DATE | DESC. |
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|---------------|------------|
| JOB NO. | 07-454 |
| 1ST SUBMITTAL | XXX/XX/XX |
| 2ND SUBMITTAL | |
| 3RD SUBMITTAL | |
| DESIGN | S. CROCKER |
| DRAWN | S. CROCKER |
| CHECKED | L. YORRKE |

Sonoran Oasis Tech Park
West of I-17
Between Carefree Highway and Loop 303

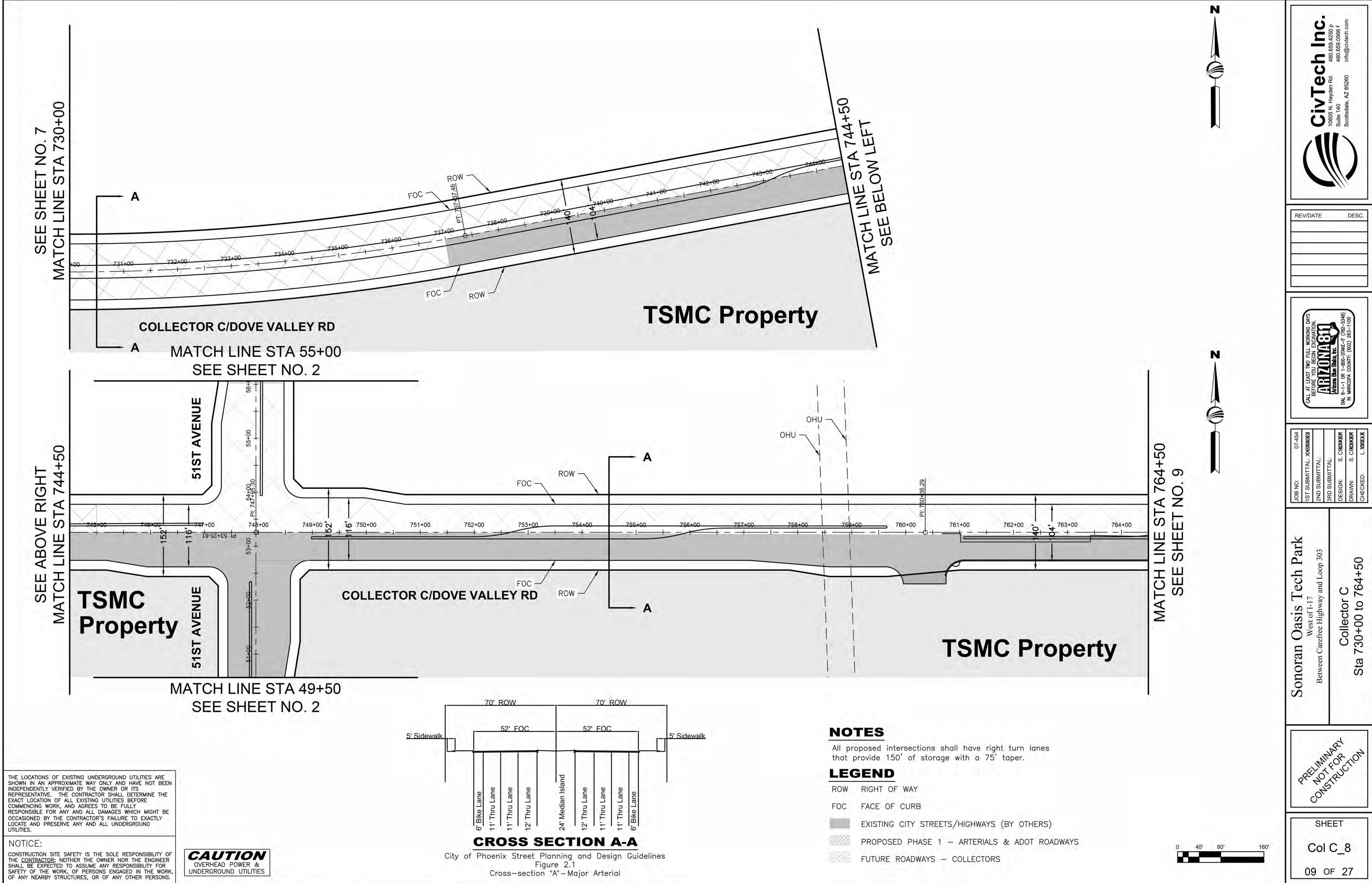
Collector C
Sta 700+00 to 730+00

PRELIMINARY
NOT FOR
CONSTRUCTION

SHEET

Col C_7

08 OF 27



THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

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CAUTION
OVERHEAD POWER &
UNDERGROUND UTILITIES

CROSS SECTION A-A

City of Phoenix Street Planning and Design Guidelines
Figure 2.1
Cross-section "A" - Major Arterial

NOTES

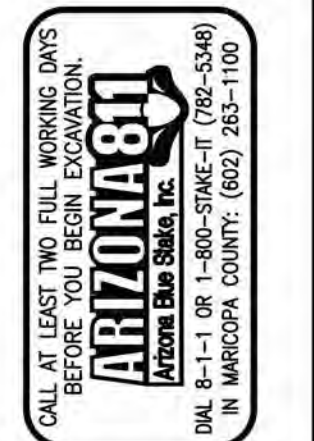
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LEGEND

- ROW RIGHT OF WAY
- FOC FACE OF CURB
- EXISTING CITY STREETS/HIGHWAYS (BY OTHERS)
- PROPOSED PHASE 1 - ARTERIALS & ADOT ROADWAYS
- FUTURE ROADWAYS - COLLECTORS



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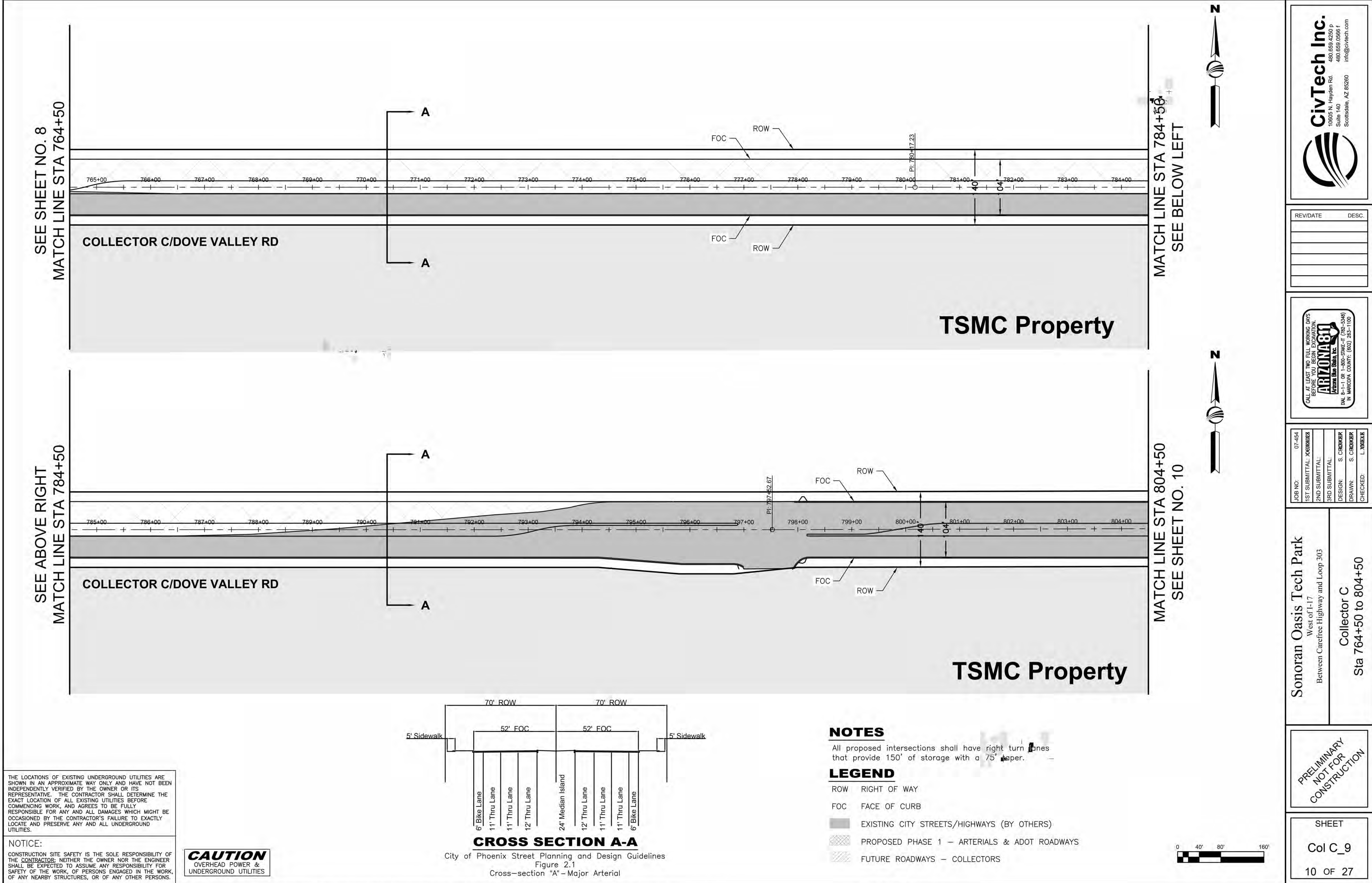


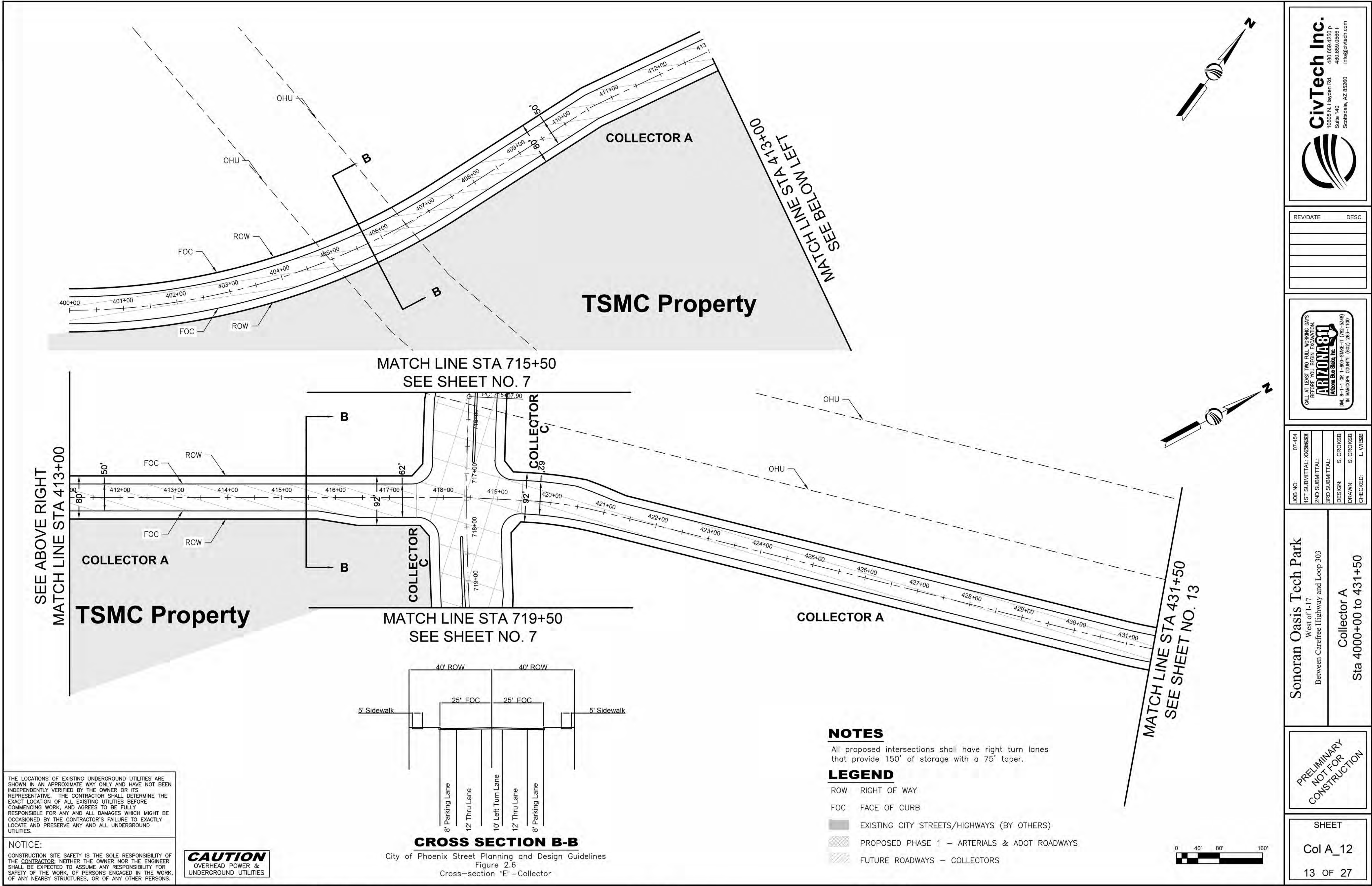
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| JOB NO. | 07-454 |
| 1ST SUBMITTAL | XXX/XX/XX |
| 2ND SUBMITTAL | |
| 3RD SUBMITTAL | |
| DESIGN | S. CROKER |
| DRAWN | S. CROKER |
| CHECKED | L. YORRKE |

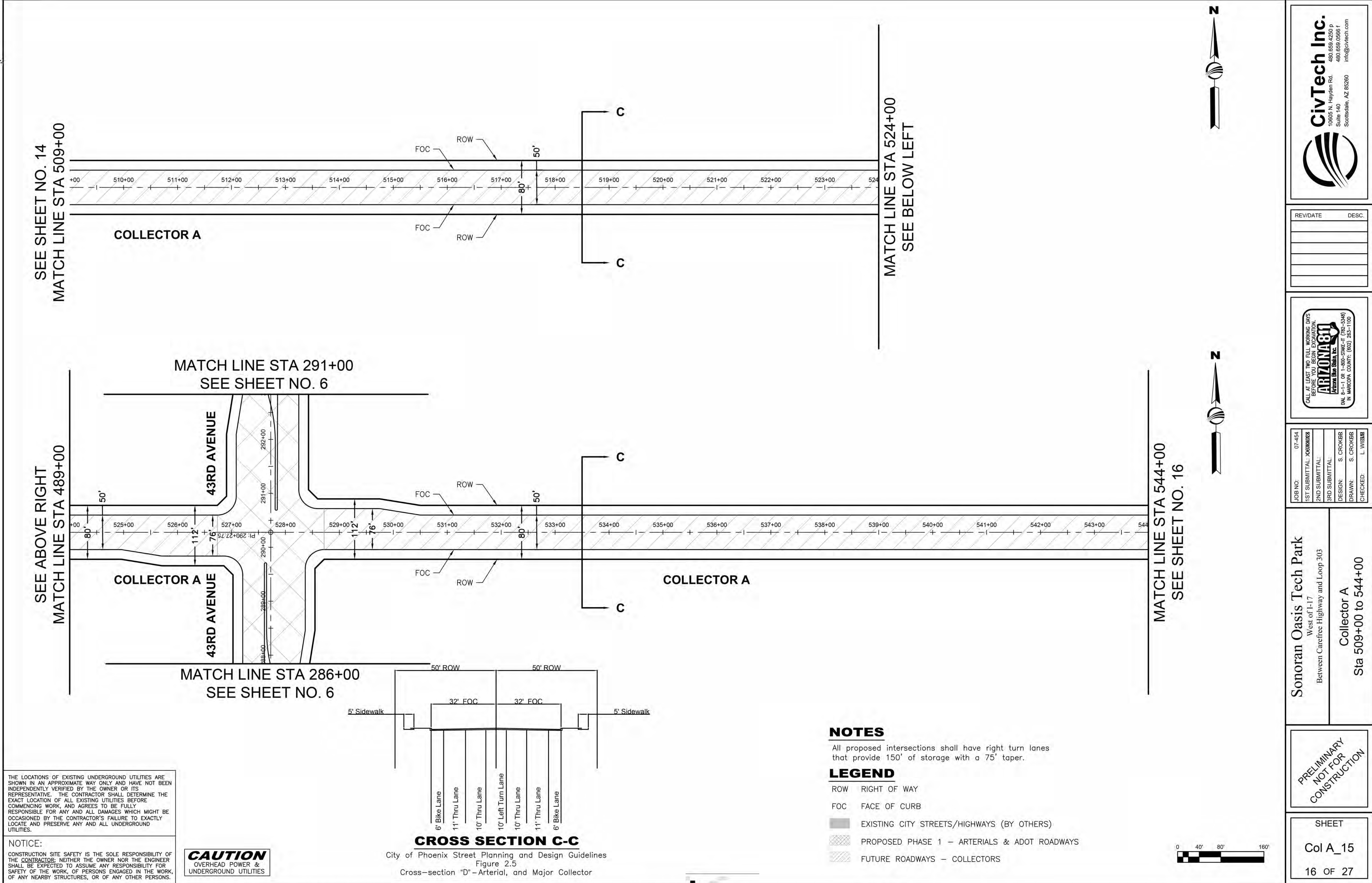
Sonoran Oasis Tech Park
West of I-17
Between Carefree Highway and Loop 303
Collector C
Sta 730+00 to 764+50

PRELIMINARY
NOT FOR
CONSTRUCTION

SHEET
Col C_8
09 OF 27







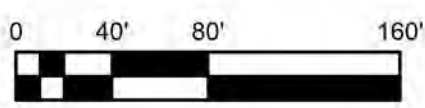
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CAUTION
OVERHEAD POWER &
UNDERGROUND UTILITIES

CROSS SECTION C-C
City of Phoenix Street Planning and Design Guidelines
Figure 2.5
Cross-section "D" - Arterial, and Major Collector

- NOTES**
All proposed intersections shall have right turn lanes that provide 150' of storage with a 75' taper.
- LEGEND**
- ROW RIGHT OF WAY
 - FOC FACE OF CURB
 - EXISTING CITY STREETS/HIGHWAYS (BY OTHERS)
 - PROPOSED PHASE 1 - ARTERIALS & ADOT ROADWAYS
 - FUTURE ROADWAYS - COLLECTORS



CivTech Inc.
10605 N. Hayden Rd., Suite 140
Scottsdale, AZ 85260
480.659.4250 p
480.659.0566 f
info@civtech.com

| REV | DATE | DESC. |
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CALL AT LEAST TWO FULL WORKING DAYS BEFORE YOU BEGIN EXCAVATION.
ARIZONA 811
Arizona Statewide One-Call System
DIAL 8-1-1 OR 1-800-STATE-IT (782-7348)
IN MARICOPA COUNTY: (602) 263-1100

| JOB NO. | 07-454 |
|---------------|-----------|
| 1ST SUBMITTAL | XX/XX/XX |
| 2ND SUBMITTAL | |
| 3RD SUBMITTAL | |
| DESIGN | S. CROKER |
| DRAWN | S. CROKER |
| CHECKED | L. WIENKE |

Sonoran Oasis Tech Park
West of I-17
Between Carefree Highway and Loop 303

Collector A
Sta 509+00 to 544+00

PRELIMINARY
NOT FOR
CONSTRUCTION

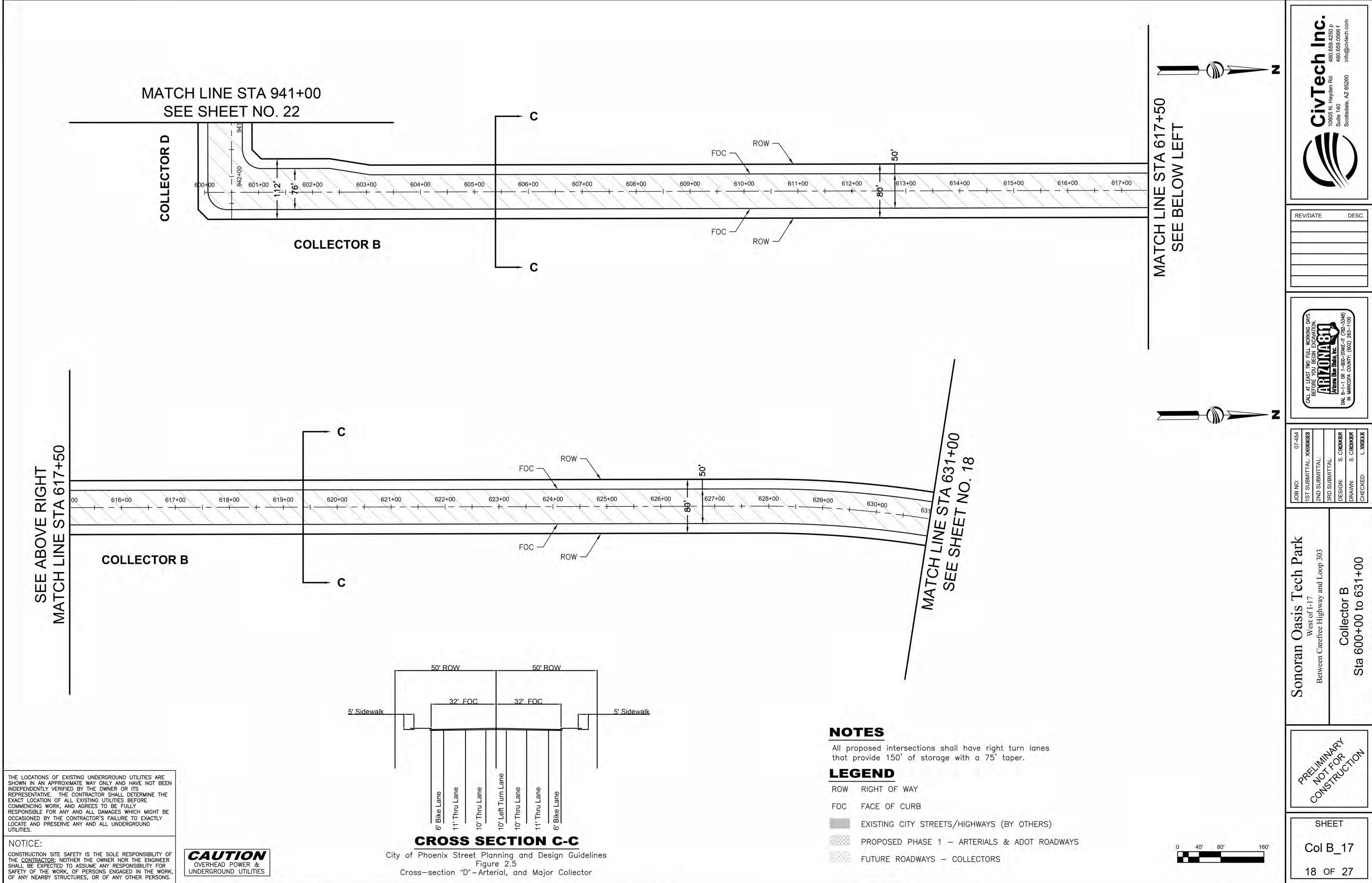
SHEET
Col A_15
16 OF 27



Cross-section "D" – Arterial, and Major Collector

 FUTURE ROADWAYS – COLLECTORS

Stephanie Croker



CivTech Inc.
10605 N. Hayden Rd.
Suite 140
Scottsdale, AZ 85260
480.659.4250 p
480.659.0566 f
info@civtech.com

| RE/DATE | DESC. |
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ARIZONA 811
Arizona Statewide
IN MARICOPA COUNTY: (602) 263-1100

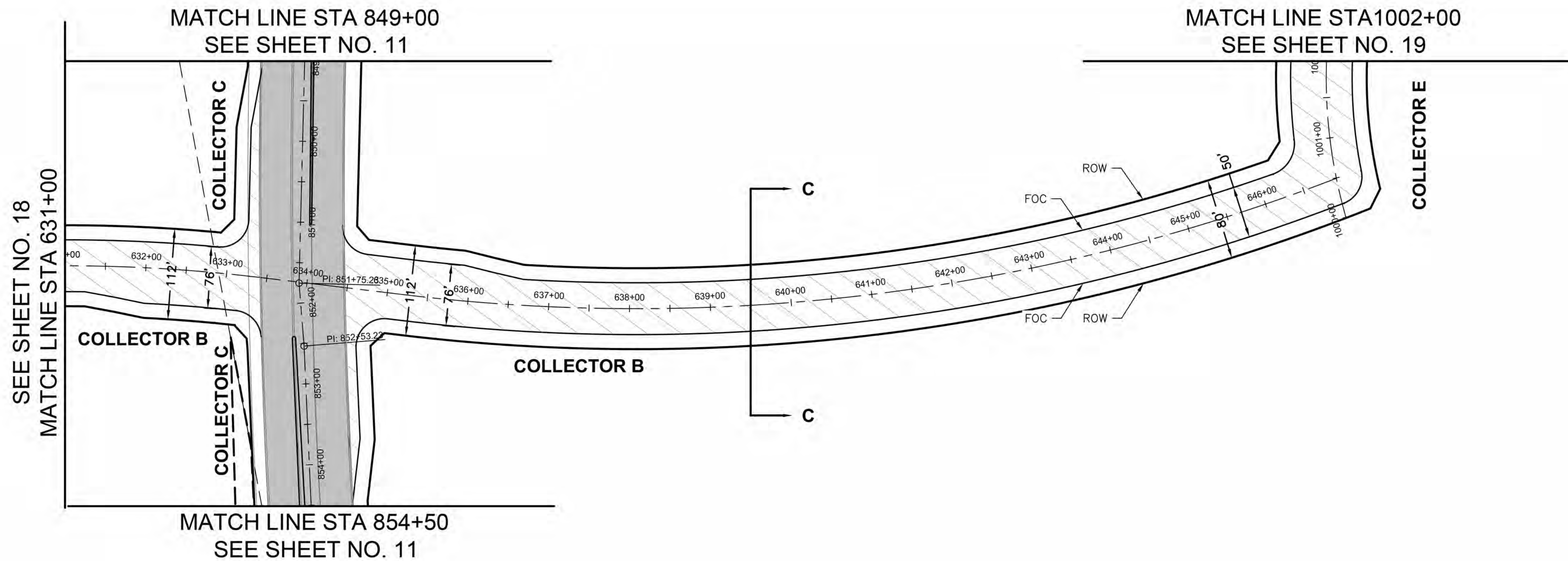
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|---------------|-----------|
| JOB NO. | 07-454 |
| 1ST SUBMITTAL | XX/XX/XX |
| 2ND SUBMITTAL | |
| 3RD SUBMITTAL | |
| DESIGN | S. CROKER |
| DRAWN | S. CROKER |
| CHECKED | L. YORRKE |

Sonoran Oasis Tech Park
West of I-17
Between Carefree Highway and Loop 303

Collector B
Sta 600+00 to 631+00

**PRELIMINARY
NOT FOR
CONSTRUCTION**

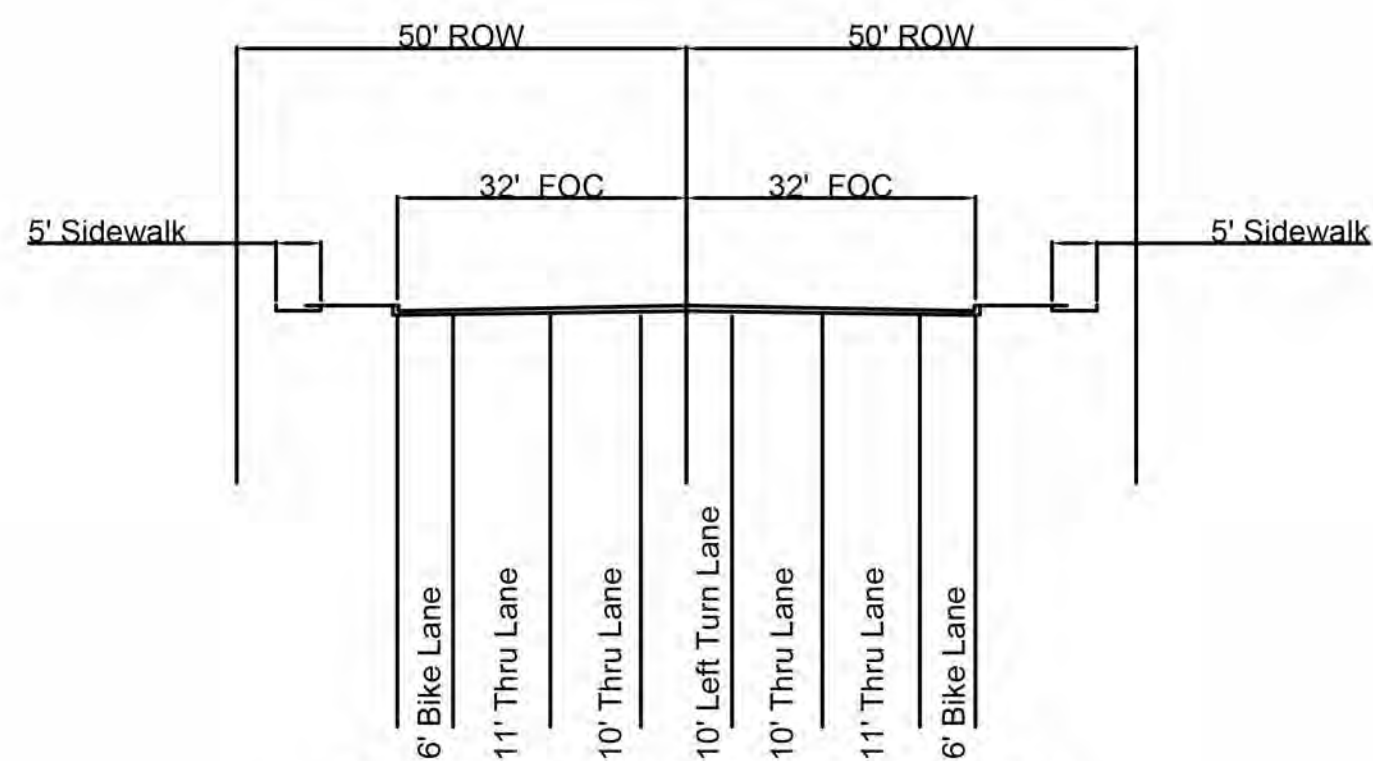
SHEET
Col B_17
18 OF 27



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CAUTION
OVERHEAD POWER &
UNDERGROUND UTILITIES



CROSS SECTION C-C

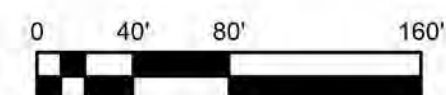
City of Phoenix Street Planning and Design Guidelines
Figure 2.5
Cross-section "D" - Arterial, and Major Collector

NOTES

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LEGEND

- ROW RIGHT OF WAY
- FOC FACE OF CURB
- EXISTING CITY STREETS/HIGHWAYS (BY OTHERS)
- PROPOSED PHASE 1 - ARTERIALS & ADOT ROADWAYS
- FUTURE ROADWAYS - COLLECTORS



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| JOB NO. | 07-454 |
| 1ST SUBMITTAL | XX/XX/XX |
| 2ND SUBMITTAL | |
| 3RD SUBMITTAL | |
| DESIGN | S. CROKER |
| DRAWN | S. CROKER |
| CHECKED | L. POEHL |

Sonoran Oasis Tech Park
West of I-17
Between Carefree Highway and Loop 303

Collector B
Sta 631+00 to 647+00

PRELIMINARY
NOT FOR
CONSTRUCTION

SHEET

Col B_18

19 OF 27

Plan view of a proposed road intersection. The diagram shows the intersection of Collector B (vertical) and Collector E (horizontal). The proposed road alignment is shown with stationing from 1000+00 to 1006+00. Key features include:

- Collector B:** Labeled vertically on the left side of the intersection.
- Collector E:** Labeled horizontally below the intersection.
- Proposed Road Alignment:** Shown with stationing from 1000+00 to 1006+00. The alignment is defined by a centerline and a right-of-way (ROW) line.
- Intersection Details:**
 - The intersection is marked with a centerline and a right-of-way (ROW) line.
 - Stationing markers are provided at 1000+00, 1001+00, 1002+00, 1003+00, 1004+00, 1005+00, and 1006+00.
 - Key dimensions are indicated: 112' (width of Collector B), 76' (width of Collector E), 80' (width of proposed road), and .50' (offset).
 - Labels for "ROW" (Right of Way) and "FOC" (Focus of Curve) are present.
- Match Line:** A diagonal line at the bottom right indicates the match line at station 1006+00, with the text "MATCH LINE STA 1006+00 SEE BELOW LEFT".

Plan view of Collector E. The road is shown with stationing from +00 to 1016+00. The FOC (Focus of Curvature) and ROW (Right of Way) are indicated. A crossing labeled 'C' is shown. The road is labeled 'COLLECTOR E'.

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CROSS SECTION C-C

NOTES

LEGEND

PRELIMINARY
NOT FOR
CONSTRUCTION

SHEET
Col E_19
20 OF 27



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10605 N. Hayden Rd.
Suite 140
Scottsdale, AZ 85260
480.659.4250 p
480.659.0566 f
info@civtech.com

| REV/DATE | DESC. |
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BEFORE YOU BEGIN EXCAVATION.

ARIZONA 811
Arizona Blue Stakes, Inc.

DIAL 8-1-1 OR 1-800-STAKE-IT (782-5348)
IN MARICOPA COUNTY: (602) 263-1100

| | |
|----------------|-------------|
| 1ST SUBMITTAL: | X06XXXXX |
| 2ND SUBMITTAL: | |
| 3RD SUBMITTAL: | |
| DESIGN: | S. CRONKIER |
| DRAWN: | S. CRONKIER |
| CHECKED: | L. XXXXXE |

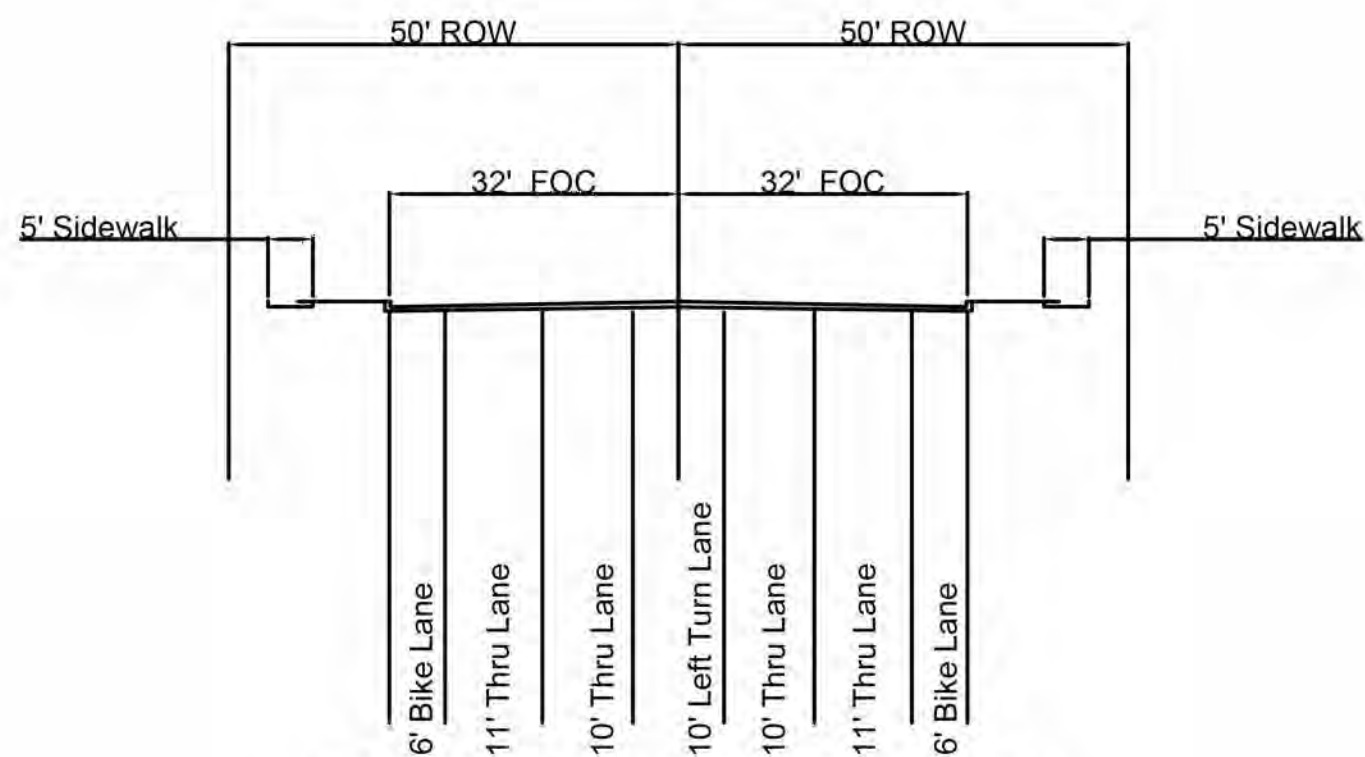
West of I-17
Between Carefree Highway and Loop 303

Collector E
Sta 1000+00 to 1027+00

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CAUTION
OVERHEAD POWER &
UNDERGROUND UTILITIES



CROSS SECTION C-C

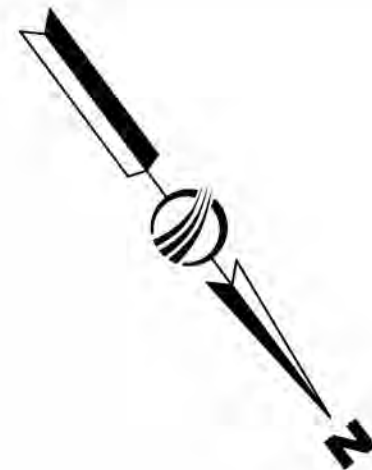
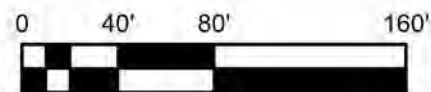
City of Phoenix Street Planning and Design Guidelines
Figure 2.5
Cross-section "D" - Arterial, and Major Collector

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LEGEND

- ROW RIGHT OF WAY
- FOC FACE OF CURB
- EXISTING CITY STREETS/HIGHWAYS (BY OTHERS)
- PROPOSED PHASE 1 - ARTERIALS & ADOT ROADWAYS
- FUTURE ROADWAYS - COLLECTORS



SEE SHEET NO. 19
MATCH LINE STA 1027+00

COLLECTOR E

COLLECTOR A

MATCH LINE STA 544+00
SEE SHEET NO. 16

Sonoran Oasis Tech Park

West of I-17
Between Carefree Highway and Loop 303

Collector E

Sta 1027+00 to 1032+51

PRELIMINARY
NOT FOR
CONSTRUCTION

SHEET

Col E_20

21 OF 27



| RE/DATE | DESC. |
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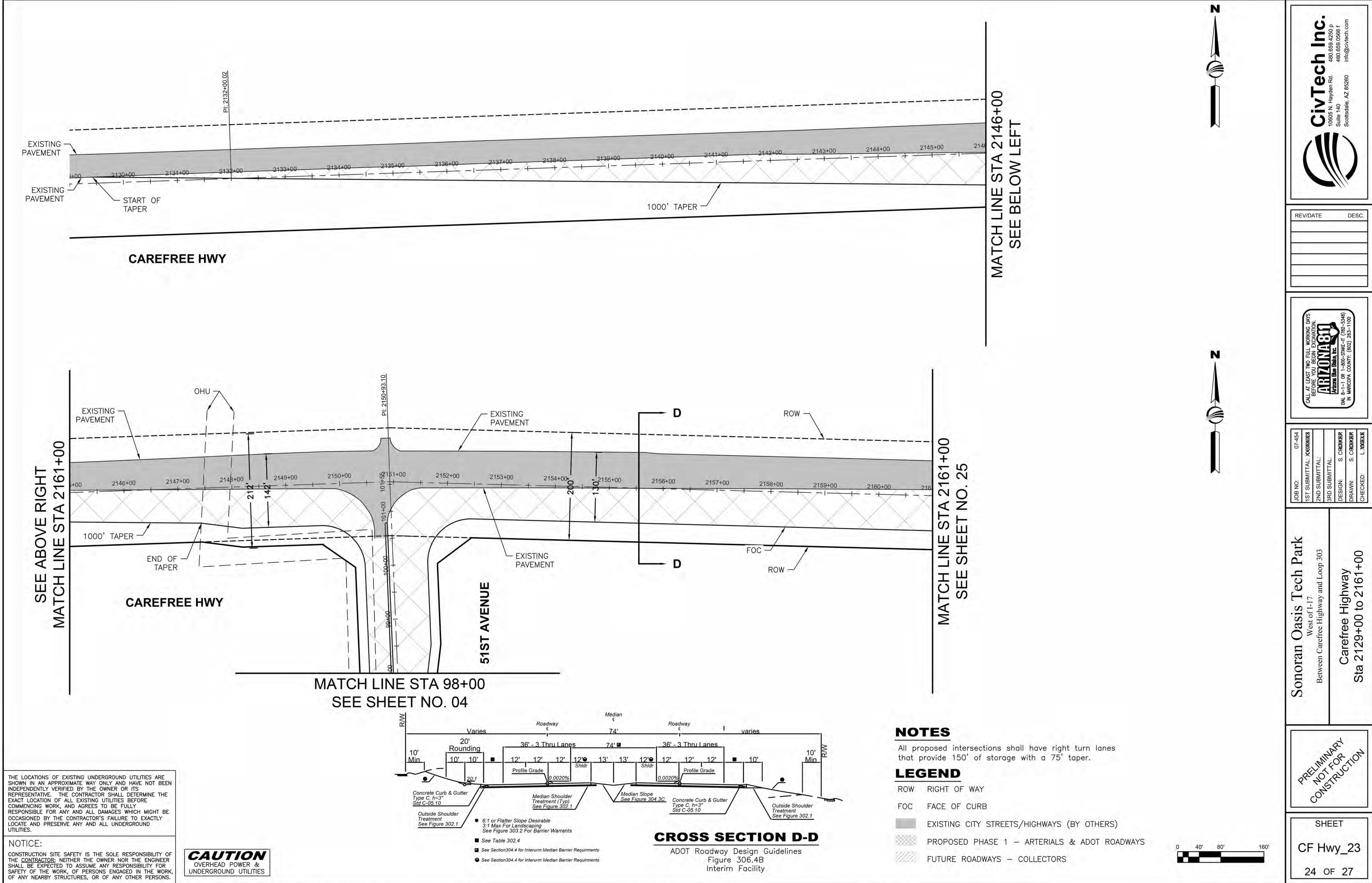


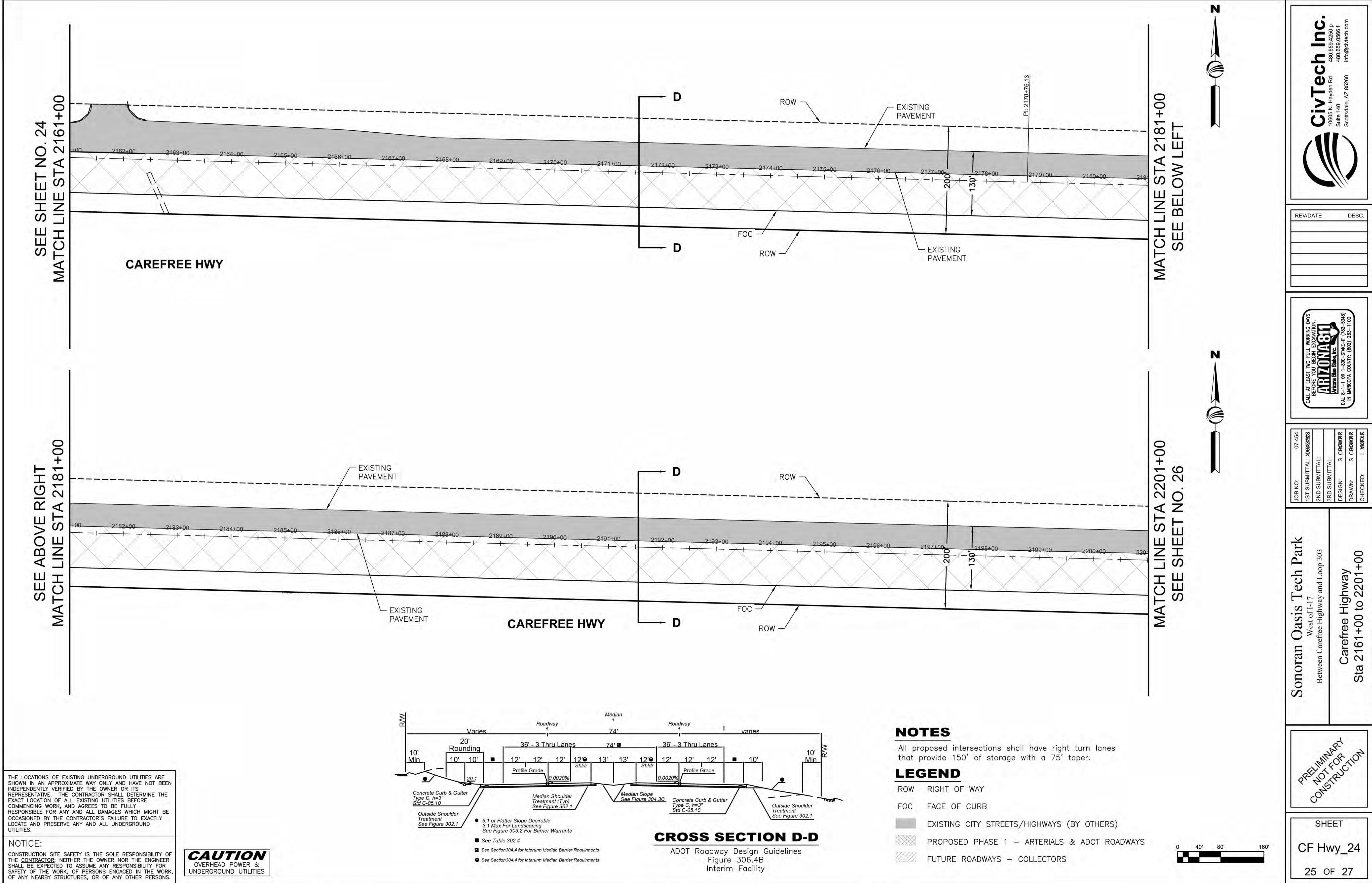
| | |
|---------------|------------|
| JOB NO. | 07-454 |
| 1ST SUBMITTAL | XX/XX/XX |
| 2ND SUBMITTAL | |
| 3RD SUBMITTAL | |
| DESIGN | S. CROCKER |
| DRAWN | S. CROCKER |
| CHECKED | L. POMEYRE |



Cross-section "D"—Arterial, and Major Collector

Stephanie Croker

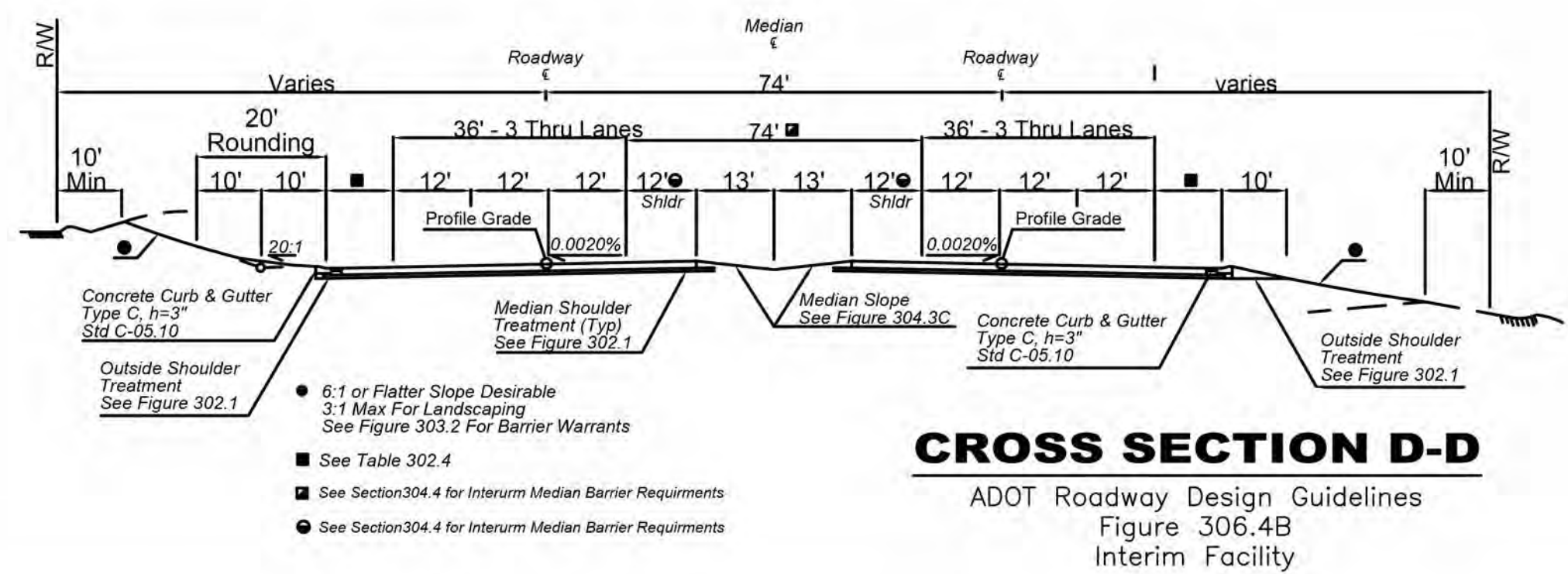




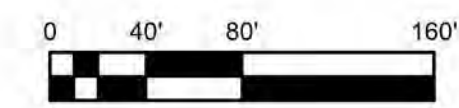
THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NOTICE:
CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR; NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

CAUTION
OVERHEAD POWER &
UNDERGROUND UTILITIES



- NOTES**
All proposed intersections shall have right turn lanes that provide 150' of storage with a 75' taper.
- LEGEND**
ROW RIGHT OF WAY
FOC FACE OF CURB
EXISTING CITY STREETS/HIGHWAYS (BY OTHERS)
PROPOSED PHASE 1 - ARTERIALS & ADOT ROADWAYS
FUTURE ROADWAYS - COLLECTORS



CivTech Inc.
10605 N. Hayden Rd.
Suite 140
Scottsdale, AZ 85260
480.659.4250 p
480.659.0566 f
info@civtech.com

| RE/DATE | DESC. |
|---------|-------|
| | |
| | |
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| | |

CALL AT LEAST TWO FULL WORKING DAYS BEFORE YOU BEGIN EXCAVATION.
ARIZONA 811
Arizona Statewide, Inc.
DIAL 8-1-1 OR 1-800-STATE-IT (782-5348)
IN MARICOPA COUNTY: (602) 263-1100

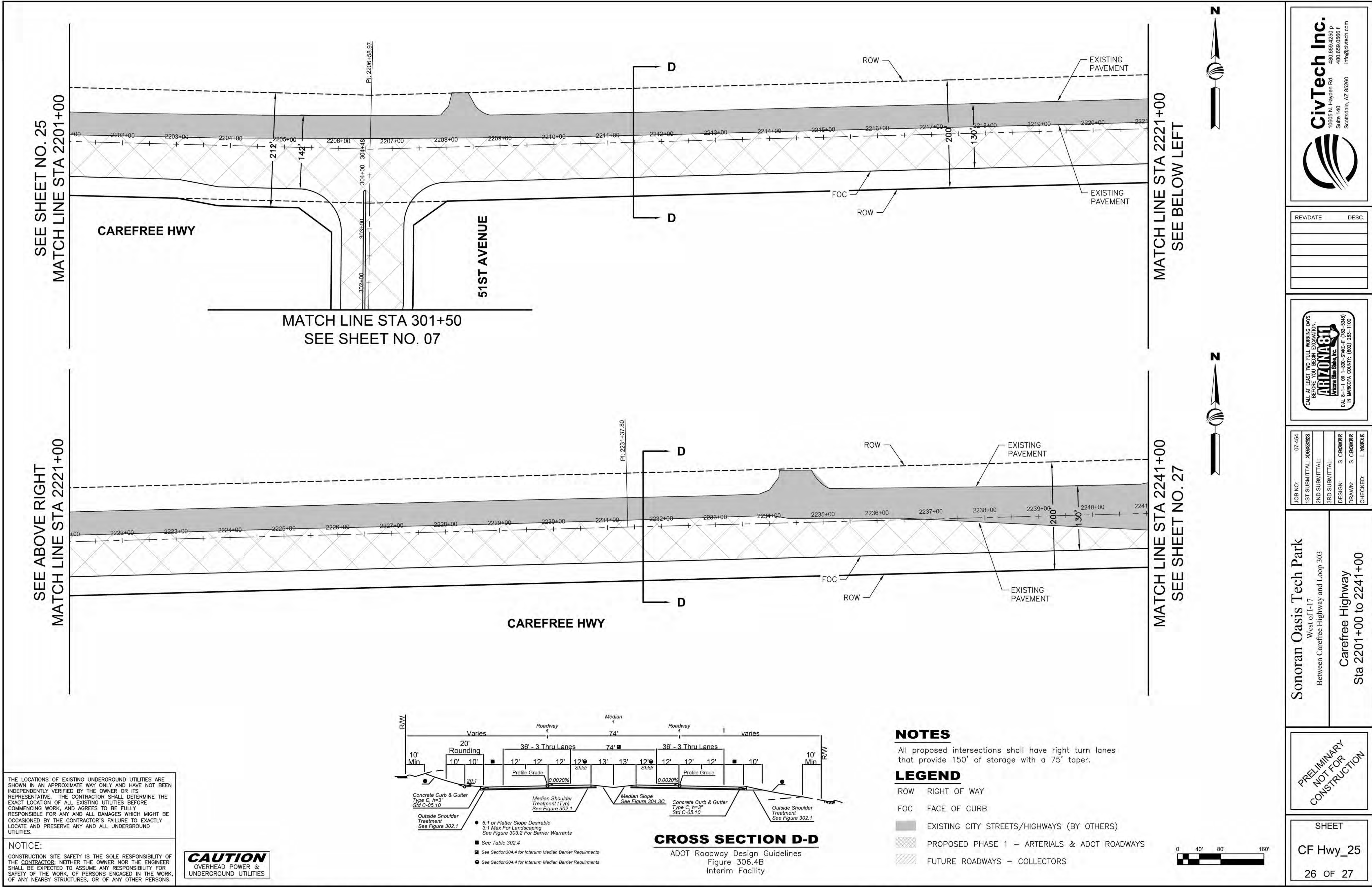
| | |
|---------------|-----------|
| JOB NO. | 07-454 |
| 1ST SUBMITTAL | XX/XX/XX |
| 2ND SUBMITTAL | |
| 3RD SUBMITTAL | |
| DESIGN | S. CROKER |
| DRAWN | S. CROKER |
| CHECKED | L. YORRKE |

Sonoran Oasis Tech Park
West of I-17
Between Carefree Highway and Loop 303

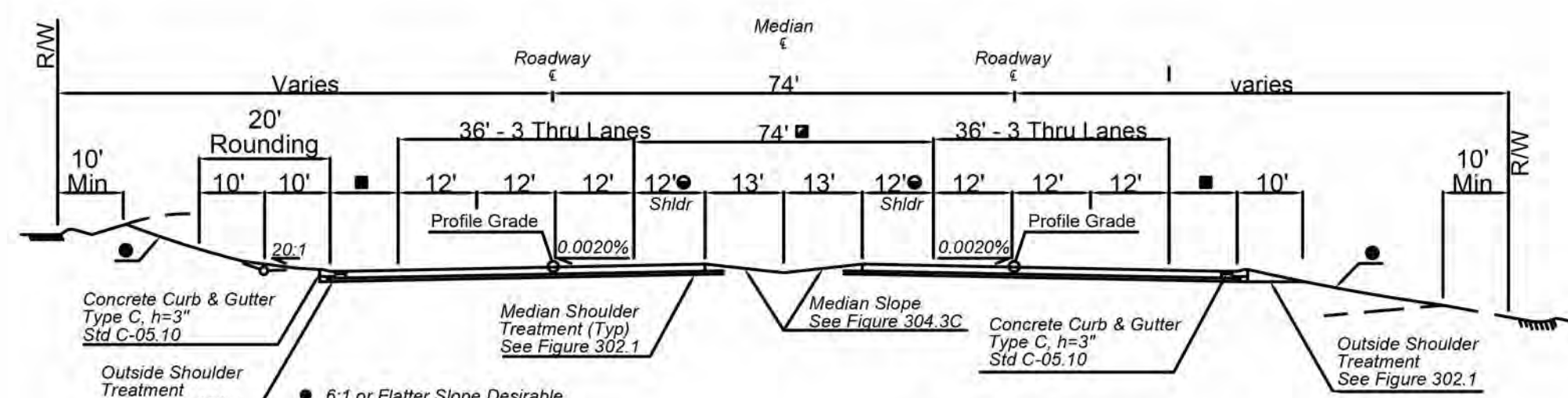
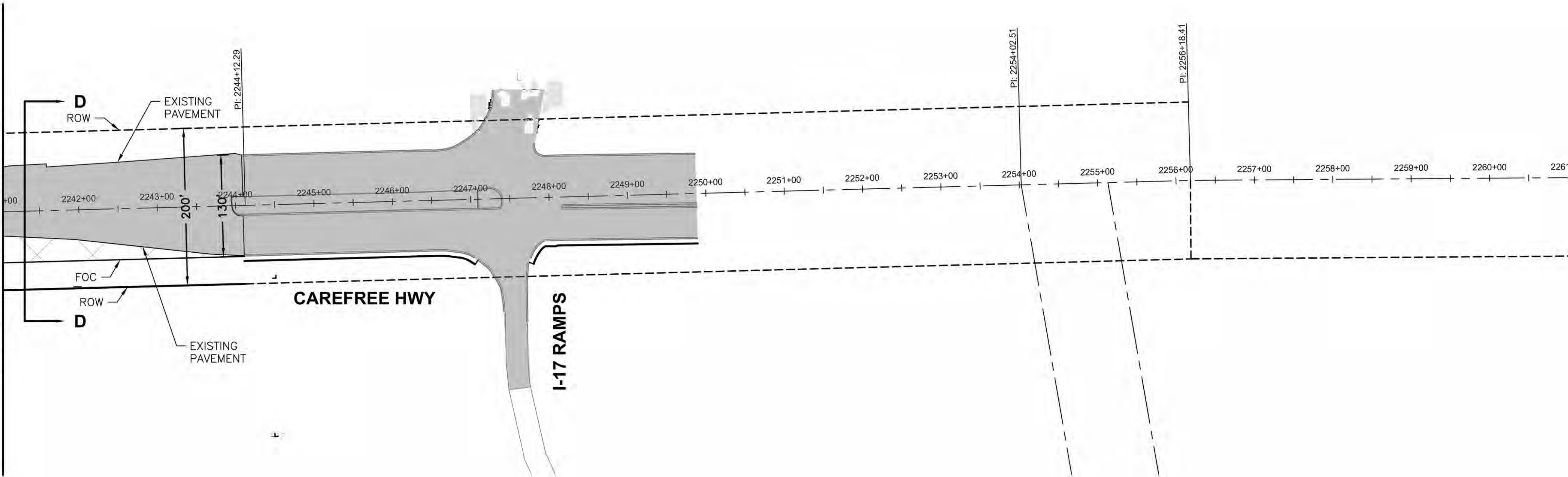
Carefree Highway
Sta 2161+00 to 2201+00

PRELIMINARY
NOT FOR
CONSTRUCTION

SHEET
CF Hwy_24
25 OF 27



SEE SHEET NO. 25
MATCH LINE STA 2241+00



CROSS SECTION D-D

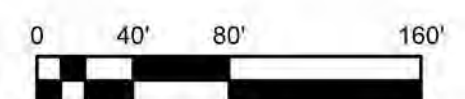
ADOT Roadway Design Guidelines
Figure 306.4B
Interim Facility

NOTES

All proposed intersections shall have right turn lanes that provide 150' of storage with a 75' taper.

LEGEND

- ROW RIGHT OF WAY
FOC FACE OF CURB
EXISTING CITY STREETS/HIGHWAYS (BY OTHERS)
PROPOSED PHASE 1 - ARTERIALS & ADOT ROADWAYS
FUTURE ROADWAYS - COLLECTORS



THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

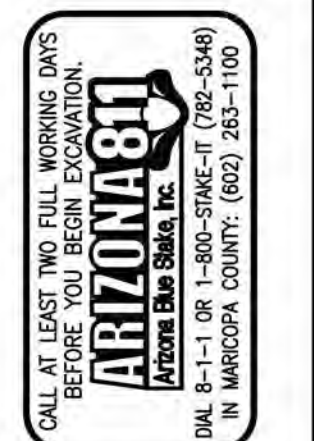
NOTICE:
CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR; NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

CAUTION
OVERHEAD POWER &
UNDERGROUND UTILITIES

- 6:1 or Flatter Slope Desirable
3:1 Max For Landscaping
See Figure 303.2 For Barrier Warrants
- See Table 302.4
- See Section 304.4 for Interim Median Barrier Requirements
- See Section 304.4 for Interim Median Barrier Requirements



| REV/DATE | DESC. |
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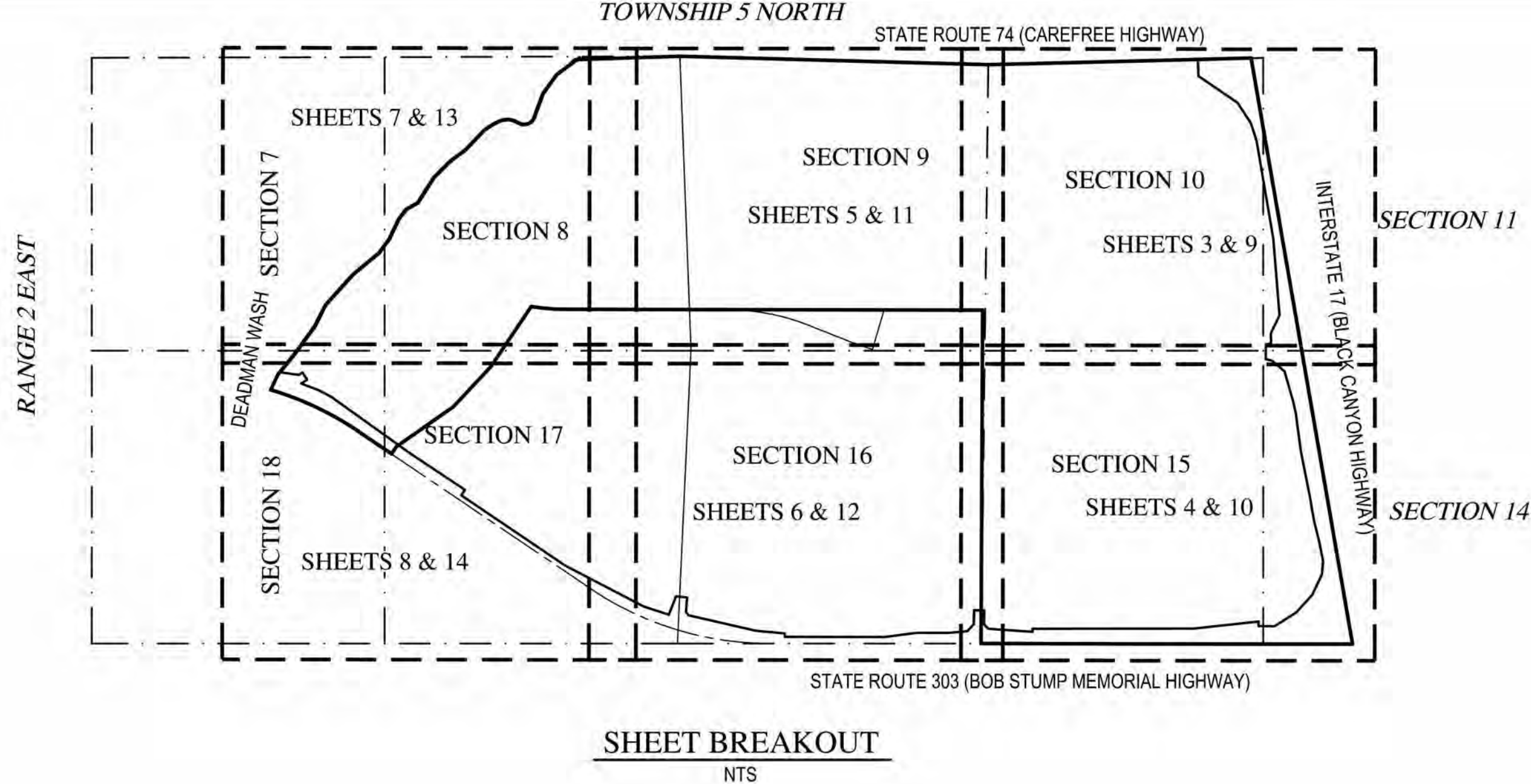
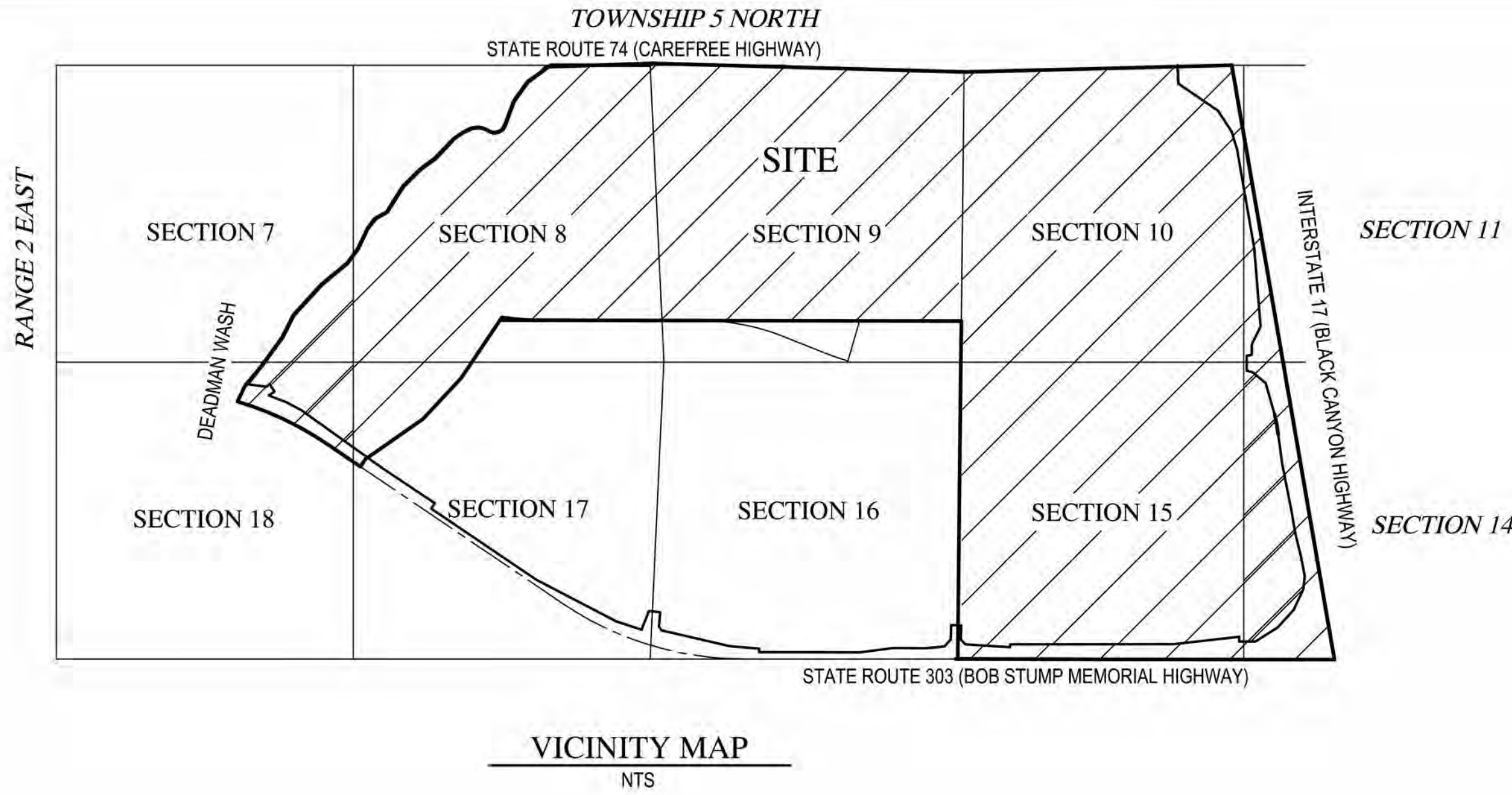
| | |
|---------------|-----------|
| JOB NO. | 07-454 |
| 1ST SUBMITTAL | XX/XX/XX |
| 2ND SUBMITTAL | |
| 3RD SUBMITTAL | |
| DESIGN | S. CROKER |
| DRAWN | S. CROKER |
| CHECKED | L. YORRKE |

Sonoran Oasis Tech Park
West of I-17
Between Carefree Highway and Loop 303
Carefree Highway
Sta 2241+00 to 2261+00

PRELIMINARY
NOT FOR
CONSTRUCTION

SHEET
CF Hwy_26
27 OF 27

APPENDIX E:
ALTA/NSPS LAND TITLE SURVEY



SPECIAL REPORT DESCRIPTION

A PORTION OF SECTIONS 7, 8, 9, 10, 11, 14, 16, 17, 18, 21, 22 AND 23 AND ALL OF SECTION 15, ALL OF TOWNSHIP 5 NORTH, RANGE 2 EAST, ALL OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID SECTION 10;

THENCE WESTERLY ALONG THE NORTH LINE OF SAID SECTION 10, TO THE CENTERLINE OF INTERSTATE 17 BLACK CANYON HIGHWAY, AND THE POINT OF BEGINNING;

THENCE LEAVING SAID NORTH LINE, SOUTHERLY ALONG SAID CENTERLINE, TO THE CENTERLINE OF STATE ROUTE 303 BOB STUMP MEMORIAL HIGHWAY;

THENCE LEAVING SAID CENTERLINE OF INTERSTATE 17, WESTERLY ALONG SAID CENTERLINE OF STATE ROUTE 303, TO THE CENTERLINE OF DEADMAN WASH;

THENCE LEAVING SAID CENTERLINE OF STATE ROUTE 303, NORTHEASTERLY ALONG SAID CENTERLINE OF DEADMAN WASH THROUGH SAID SECTIONS 18, 7, AND 8, TO THE NORTH LINE OF SAID SECTION 8;

THENCE LEAVING SAID CENTERLINE, EASTERLY ALONG THE NORTH LINE OF SAID SECTIONS 8, 9, AND 10, TO THE POINT OF BEGINNING.

EXCEPTING THEREFROM

THAT CERTAIN PARCEL OF LAND DESCRIBED IN ARIZONA STATE LAND PATENT NO. 53-121524-02, RECORDED IN DOCUMENT 2021-0462018, MARICOPA COUNTY RECORDS (MCR), DESCRIBED AS FOLLOWS:

A PORTION OF SECTIONS 8, 9, 16 AND 17, TOWNSHIP 5 NORTH, RANGE 2 EAST, OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTH QUARTER CORNER OF SECTION 10, TOWNSHIP 5 NORTH, RANGE 2 EAST, OF SAID GILA AND SALT RIVER MERIDIAN, A 2-INCH ALUMINUM CAP IN POT HOLE, FROM WHICH, THE NORTHEAST CORNER OF SAID SECTION 10, A 3-INCH ARIZONA DEPARTMENT OF TRANSPORTATION (ADOT) BRASS CAP FLUSH, BEARS NORTH 88°29'17" EAST (BASIS OF BEARING), A DISTANCE OF 2480.60 FEET;

THENCE ALONG THE NORTH LINE OF SAID SECTION 10, SOUTH 88°29'30" WEST, A DISTANCE OF 2478.71 FEET, TO THE NORTHWEST CORNER OF SAID SECTION 10 ALSO BEING THE NORTHEAST CORNER OF SAID SECTION 9,

THENCE LEAVING SAID NORTH LINE OF SECTION 10, ALONG THE EAST LINE OF SAID SECTION 9, SOUTH 00°29'00" WEST, A DISTANCE OF 2654.24 FEET, TO THE EAST QUARTER CORNER OF SAID SECTION 9;

THENCE SOUTH 00°29'57" WEST, A DISTANCE OF 1787.93 FEET, TO THE POINT OF BEGINNING;

THENCE CONTINUING SOUTH 00°29'57" WEST, A DISTANCE OF 865.80 FEET, TO THE SOUTHEAST CORNER OF SAID SECTION 9 ALSO BEING THE NORTHEAST CORNER OF SAID SECTION 16;

THENCE LEAVING SAID EAST LINE OF SECTION 9, ALONG THE EAST LINE OF SAID SECTION 16, SOUTH 00°45'32" WEST, A DISTANCE OF 2651.56 FEET, TO THE EAST QUARTER CORNER OF SAID SECTION 16;

THENCE SOUTH 01°53'34" WEST, A DISTANCE OF 1864.28 FEET, TO THE NORTHERLY LINE OF STATE ROUTE 303 (SR-303) ADOT RIGHT OF WAY EASEMENT PER ARIZONA STATE LAND DEPARTMENT DOCUMENT 16-112646 AND ADOT RIGHT OF WAY PLANS S 303-A-700;

THENCE LEAVING SAID EAST LINE OF SECTION 16, ALONG SAID NORTHERLY LINE OF SR-303, NORTH 88°33'24" WEST, A DISTANCE OF 123.18 FEET;

THENCE SOUTH 01°26'02" WEST, A DISTANCE OF 255.01 FEET;

SPECIAL REPORT DESCRIPTION (CONTINUED)

THENCE SOUTH 42°58'19" WEST, A DISTANCE OF 165.64 FEET;

THENCE SOUTH 84°21'08" WEST, A DISTANCE OF 326.54 FEET;

THENCE NORTH 89°56'40" WEST, A DISTANCE OF 579.96 FEET;

THENCE SOUTH 82°23'32" WEST, A DISTANCE OF 591.07 FEET;

THENCE NORTH 89°59'36" WEST, A DISTANCE OF 1784.31 FEET;

THENCE NORTH 00°26'32" WEST, A DISTANCE OF 63.86 FEET;

THENCE NORTH 85°13'18" WEST, A DISTANCE OF 517.52 FEET;

THENCE NORTH 77°06'38" WEST, A DISTANCE OF 1238.81 FEET;

THENCE NORTH 38°01'02" WEST, A DISTANCE OF 78.35 FEET;

THENCE NORTH 04°16'47" EAST, A DISTANCE OF 260.09 FEET;

THENCE NORTH 84°08'25" WEST, A DISTANCE OF 199.99 FEET;

THENCE SOUTH 21°11'17" WEST, A DISTANCE OF 355.34 FEET;

THENCE NORTH 71°55'10" WEST, A DISTANCE OF 474.39 FEET;

THENCE NORTH 62°33'23" WEST, A DISTANCE OF 1604.10 FEET;

THENCE NORTH 55°59'58" WEST, A DISTANCE OF 2234.95 FEET;

THENCE NORTH 34°01'54" EAST, A DISTANCE OF 115.92 FEET;

THENCE NORTH 56°23'23" WEST, A DISTANCE OF 1154.18 FEET;

THENCE NORTH 53°10'48" WEST, A DISTANCE OF 277.77 FEET;

THENCE LEAVING SAID NORTHERLY LINE OF SR-303, NORTH 54°50'51" EAST, A DISTANCE OF 1187.49 FEET;

THENCE NORTH 43°02'25" EAST, A DISTANCE OF 985.55 FEET;

THENCE NORTH 33°44'44" EAST, A DISTANCE OF 1297.95 FEET, TO A POINT OF INTERSECTION WITH A NON-TANGENT CURVE;

THENCE EASTERLY ALONG SAID NON-TANGENT CURVE TO THE LEFT, HAVING A RADIUS OF 4000.00 FEET, CONCAVE NORTHERLY, WHOSE RADIUS BEARS NORTH 09°12'15" EAST, THROUGH A CENTRAL ANGLE OF 09°12'15", A DISTANCE OF 642.57 FEET, TO THE CURVES END;

THENCE NORTH 90°00'00" EAST, A DISTANCE OF 2875.92 FEET, TO THE BEGINNING OF A CURVE;

THENCE EASTERLY ALONG SAID CURVE TO THE RIGHT, HAVING A RADIUS OF 4000.00 FEET, CONCAVE SOUTHERLY, THROUGH A CENTRAL ANGLE OF 05°20'36", A DISTANCE OF 373.04 FEET, TO A POINT OF INTERSECTION WITH A NON-TANGENT LINE;

THENCE SOUTH 68°30'00" EAST, A DISTANCE OF 845.51 FEET, TO THE BEGINNING OF A CURVE;

THENCE EASTERLY ALONG SAID CURVE TO THE LEFT, HAVING A RADIUS OF 4000.00 FEET, CONCAVE NORTHERLY, THROUGH A CENTRAL ANGLE OF 05°20'36", A DISTANCE OF 373.04 FEET, TO A POINT OF INTERSECTION WITH A NON-TANGENT LINE;

THENCE NORTH 16°09'24" EAST, A DISTANCE OF 737.70 FEET;

THENCE NORTH 90°00'00" EAST, A DISTANCE OF 1856.66 FEET, TO THE POINT OF BEGINNING.

NOTES

- 1) ALL TITLE INFORMATION IS BASED ON A SPECIAL REPORT PREPARED BY FIRST AMERICAN TITLE INSURANCE COMPANY, NO. NCS-1141460-PHX1, DATED AUGUST 18, 2022, RECEIVED ON AUGUST 29, 2022.

PER CLIENT DIRECTION, THIS SURVEY REFLECTS THE TITLE COMMITMENT DESCRIPTION, EXCEPT PORTIONS OF AREAS FROM CLIENT PROVIDED STATE OF ARIZONA PATENT NO. 53-122069-01 AS SHOWN HEREON.

- 2) BASIS OF BEARING
NATIONAL GEODETIC SURVEY (NGS) GEODETIC NORTH BASED ON:

THE HORIZONTAL DATUM FOR THIS SURVEY IS BASED ON STATIC GPS OBSERVATIONS, POST PROCESSED WITH THE NATIONAL GEODETIC SURVEY (NGS) NETWORK OF CONTINUOUS OPERATION REFERENCE STATIONS (CORS), ON 07/06/2020.

PROJECTION: ARIZONA CENTRAL ZONE, NAD 83
DATUM: GRS-80
UNITS: INTERNATIONAL FEET
GEOID MODEL: GEOID 18

CORS STATIONS USED FOR SOLUTION AZPA-PEORIA FOREST 195, AZSV-STAR VALLEY, AZUP-USERY MOUNTAIN PK
LATITUDE: 33°47'01.36814"N
LONGITUDE: 112°08'03.70324"W
ELLIPSOID HEIGHT: 1557.071 INTERNATIONAL FEET
DESCRIPTION SET PK NAIL IN CONCRETE MEDIAN

MODIFIED TO GROUND AT PK NAIL SET IN CONCRETE (GRID) N: 1012752.426 E: 833856.406, USING A SCALE FACTOR OF 1.0001695126.

HORIZONTAL ADJUSTMENT <NONE>
HORIZONTAL ROTATION <NONE>

- 3) THIS SURVEY WAS PERFORMED WITH GLOBAL POSITIONING SYSTEM EQUIPMENT UTILIZING REAL TIME KINEMATICS SURVEYING METHODS. THE MONUMENTS LOCATED ARE WITHIN THE POSITIONAL TOLERANCES RECOMMENDED IN THE ALTA/NSPS SURVEY REQUIREMENTS ADOPTED FOR USE IN 2021 BY THE AMERICAN LAND TITLE ASSOCIATION AND THE NATIONAL SOCIETY OF PROFESSIONAL SURVEYORS.
- 4) AREA OF SUBJECT PROPERTY IS 112,046,768 SQUARE FEET OR 2572.2398 ACRES, MORE OR LESS.
- 5) UNDERGROUND UTILITIES SHOWN ARE FROM FURNISHED INFORMATION PROVIDED BY UTILITY COMPANY. NO UNDERGROUND INVESTIGATION WAS PERFORMED.
- 6) THE ABBREVIATIONS THAT APPEAR WITH THE RECORD INFORMATION REPRESENT THE FOLLOWING:
ABOVE NAMED SPECIAL REPORT AND STATE OF ARIZONA PATENT
(R1) GDACS RECORD OF SURVEY BOOK 588, PAGE 02, MCR (GRID DISTANCES PER RECORD ARE CALCULATED TO GROUND LENGTH)
(R2) ADOT SR-74 74-MA-022-H2946-01R, DATED 01/10/2002
(R3) ADOT 303 303L-MA-025-H5946-01R, DATED MARCH 2007
(R4) ADOT 074-MA-013-H7300-01R, DATED MAY 2010
(R5) ADOT I-17 017-MA-215-H5162-01R, DATED OCTOBER 2005
(R6) ADOT I-17-1(29)/22, DATED SEPTEMBER 1963
- 7) ANY DISTANCES, BEARINGS, DESCRIPTIONS, ETC., WHICH MAY VARY FROM THE PROVISIONS OF THE RECORD INFORMATION NOTED ABOVE REFLECT ACTUAL MEASURED DATA, OR THE BEST INTERPRETATION OF THE UNDERSIGNED.
- 8) ACCORDING TO FEMA FLOOD INSURANCE RATE MAPS NO. 04013C04840L AND 04013C0845L BOTH DATED OCTOBER 16, 2013, THE SUBJECT PROPERTY IS LOCATED IN OTHER FLOOD AREA ZONE X (SHADED), AND SPECIAL FLOOD AREAS ZONE A AND ZONE AE. OTHER FLOOD AREAS ZONE X (SHADED) IS DESCRIBED AS: "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." SPECIAL FLOOD AREA ZONE A IS DESCRIBED AS: "NO BASE FLOOD ELEVATIONS DETERMINED. SPECIAL FLOOD AREA ZONE AE IS DESCRIBED AS: "BASE FLOOD ELEVATIONS DETERMINED." APPROXIMATE ZONE LIMITS ARE SHOWN HEREON
- 9) ADJOINING OWNER INFORMATION IS PER THE MARICOPA COUNTY ASSESSOR'S OFFICE GEOGRAPHIC INFORMATION SYSTEM (GIS) WEBSITE ON MARCH 8, 2023.

NOTES (CONTINUED)

- 10) IN THE OPINION OF THE UNDERSIGNED, SCHEDULE B ITEMS 1, 35, 36 AND 37 ARE NOT PLOTTABLE. HOWEVER, SAID SCHEDULE B ITEMS MAY OR MAY NOT AFFECT SUBJECT PROPERTY.
- 11) IN THE OPINION OF THE UNDERSIGNED, SCHEDULE "B" ITEMS 4, 5, 9, 10, 11, 12, 17 AND 24 DO NOT APPEAR TO AFFECT SUBJECT PROPERTY.
ITEM 4 APPEARS TO BE EAST OF THE CENTERLINE OF I-17.
ITEM 5 APPEARS TO BE THE NORTH 100' OF SECTION 11.
ITEM 9 APPEARS TO BE THE NORTH 100' OF SECTION 7.
ITEM 10 APPEARS TO BE EAST OF THE CENTERLINE OF I-17.
ITEM 11 APPEARS TO BE EAST OF THE CURRENT WESTERLY RIGHT-OF-WAY EASEMENT LINE OF I-17.
ITEM 12 APPEARS TO BE EAST OF THE CENTERLINE OF I-17.
ITEM 17 APPEARS TO BE EAST OF THE CENTERLINE OF I-17.
ITEM 24 APPEARS TO BE THE NORTH 100' OF THE NORTHWEST QUARTER OF SECTION 11.
- 12) IN THE OPINION OF THE UNDERSIGNED, SCHEDULE "B" ITEM 3, APPEARS TO AFFECT SECTIONS 8 AND 17; HOWEVER, EXACT LOCATION IS NOT DEFINED. THE APPROXIMATE EASEMENT LOCATION SHOWN HEREON IS CENTERED ON THE EXISTING UTILITY POLE ALIGNMENT.
- 13) IN THE OPINION OF THE UNDERSIGNED, FOR SCHEDULE B ITEM 13, THE METES AND BOUNDS DESCRIPTION OF THE EASEMENT WITHIN SECTIONS 10 AND 11 APPEARS TO HAVE AN ERROR. THE APPROXIMATE EASEMENT LOCATION IS SHOWN HEREON AS BLANKET WITHIN THE RESPECTIVE QUARTER - QUARTER OF EACH SECTION.
- 14) IN THE OPINION OF THE UNDERSIGNED, SCHEDULE "B" ITEM 27 APPEARS TO AFFECT 1.0 ACRE WITHIN THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 7 AND THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 9; HOWEVER, EXACT LOCATION IS NOT DEFINED. ITEM 27 IS SHOWN HEREON AS BLANKET WITHIN THE RESPECTIVE QUARTER - QUARTER OF EACH SECTION.
- 15) IN THE OPINION OF THE UNDERSIGNED, SCHEDULE "B" ITEM 28, APPEARS TO HAVE A SCRIVENERS ERROR, ITEM 2009-1087461 SHOULD READ 2008-1087461.
- 16) SCHEDULE B ITEMS 30, 31, 32 AND 34 ARE BLANKET IN NATURE AND APPEAR TO AFFECT SUBJECT PROPERTY. PLOTTABLE PORTIONS, IF ANY, OF SAID ITEMS WITHIN THE VICINITY OF SUBJECT PROPERTY ARE SHOWN.
- 17) NO EVIDENCE OF EXISTING BUILDINGS WAS OBSERVED IN THE PROCESS OF CONDUCTING THE SURVEY.
- 18) NO EVIDENCE OF EXISTING ADDRESS WAS OBSERVED IN THE PROCESS OF CONDUCTING THE SURVEY OR IN RECORD DOCUMENTS PROVIDED.
- 19) SUBJECT PROPERTY CONTAINS TRAILS, VEGETATION AND WASHES THAT ARE CONSISTENT WITH LOCAL DESERT TERRAIN.
- 20) IN THE OPINION OF THE UNDERSIGNED, THE WIDTH OF THE EASEMENTS FOR SEWER, WATER, AND FIBER OPTIC FOR SCHEDULE B ITEM 21 IS NOT DEFINED. THE APPROXIMATE LOCATION OF THE CENTERLINE OF THE EASEMENTS ARE SHOWN HEREON BASED ON EVIDENCE LOCATED IN THE FIELD AND THE RESPECTIVE UTILITY MAPS.
- 21) IN THE OPINION OF THE UNDERSIGNED, BASED ON THE DOCUMENTS PROVIDED IN SAID SPECIAL REPORT, THERE DOESN'T APPEAR TO BE AN EASEMENT FOR THE COMMUNICATION LINES SHOWN HEREON.
- 22) IN THE OPINION OF THE UNDERSIGNED, SCHEDULE B ITEM 34 MAY HAVE EXPIRED. AT THE TIME THE TITLE COMMITMENT REFERENCED IN NOTE 1 WAS GENERATED, SAID SCHEDULE B ITEM WAS STILL IN EFFECT. IT IS UNKNOWN WHETHER OR NOT SAID ITEM HAS SINCE BEEN RENEWED. THEREFORE, SAID SCHEDULE B ITEM 34 IS SHOWN HEREON.
- 23) IN THE OPINION OF THE UNDERSIGNED, THE CLIENT PROVIDED EASEMENTS PREPARED BY ENTELLUS INC. APPEAR TO AFFECT SUBJECT PROPERTY AS SHOWN HEREON. SAID EASEMENTS WERE SUPPLIED TO WOODPATEL WITHOUT A RECORDING NUMBER.

CERTIFICATION

TO: STATE OF ARIZONA

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 8, AND 11 OF TABLE A THEREOF. THE FIELDWORK WAS COMPLETED ON JULY 15, 2020.

GABRIEL S. RIOS, RLS 48932
WOOD, PATEL & ASSOCIATES, INC.
2051 WEST NORTHERN AVENUE - SUITE 100
PHOENIX, ARIZONA 85021
(602) 335-8500
SURVEYOR@WOODPATEL.COM

WOOD
PATEL

Wood, Patel & Associates, Inc.
Civil Engineering
Water Resources
Land Survey
Construction Management
602.335.8500
www.woodpatel.com

ALTA/NSPS LAND TITLE SURVEY

NORTH PHOENIX 3500 - REMAINDER PARCEL
LYING WITHIN SECTIONS 7, 8, 9, 10, 11, 14, 15, 16, 17 AND 18, TOWNSHIP 5 NORTH, RANGE 2 EAST,
OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA



| |
|---|
| EXPIRES 12/31/20 |
| COMPLETED SURVEY FIELD WORK ON 10/27/2022 |
| CHECKED BY GSR |
| CAD TECHNICIAN JKP |
| SCALE NTS |
| DATE 03/09/2023 |
| JOB NUMBER WP# 205159 |
| SHEET 1 OF 14 |

SCHEDULE "B" ITEMS

1.

Taxes for the year 2021-2022 are exempt.
2.

A plat recorded in Book 13, Page 61 of Road Maps, purporting to show a county roadway.

(Affects Sections 8, 9 and 10)
3.

Right-of-Way No. 15-00147 granted by the Arizona State Land Department to American Telephone and Telegraph Company of Wyoming for telephone and telegraph and having a term indefinite.

And thereafter said right of way assigned to Mountain States Telephone and Telegraph Company on July 12, 1965

And thereafter change of lessee name to U.S. West Communications, Inc., on March 5, 1991.

And thereafter change of grantee name to QWEST Corporation on December 15, 2000.

(Affects Section 8 and 17)
4.

Right-of-Way No. 09-1905 granted by the Arizona State Land Department to Arizona State Highway Commission for highway and having a term indefinite.

(Affects Section 10, 11, 14 and 23)
5.

Right-of-Way No. 09-2279 granted by the Arizona State Land Department to Maricopa Board of Supervisors for highway and having a term indefinite.

And thereafter change of grantee name to City of Phoenix on November 15, 1995.

(Affects Section 11)
6.

Right-of-Way No. 09-2287 granted by the Arizona State Land Department to Maricopa County Board of Supervisors for highway and having a term indefinite.

Said right of way was recorded May 11, 1960 as Docket 3272, Page 105.

(Affects Section 10)
7.

Right-of-Way No. 09-2283 granted by the Arizona State Land Department to Maricopa County Board of Supervisors for highway and having a term indefinite.

And thereafter said right of way was recorded May 12, 1960 as Docket 3274, Page 188.

(Affects Section 8)
8.

Right-of-Way No. 09-2284 granted by the Arizona State Land Department to Maricopa County Board of Supervisors for highway and having a term indefinite.

And thereafter said right of way was recorded May 12, 1960 as Docket 3274, Page 191.

(Affects Section 9)
9.

Right-of-Way No. 09-2299 granted by the Arizona State Land Department to Maricopa County Board of Supervisors for highway and having a term indefinite.

And thereafter said right of way was recorded May 11, 1960 as Docket 3272, Page 114.

(Affects Section 7)
10.

Right-of-Way No. 09-3195 granted by the Arizona State Land Department to Arizona State Highway Commission for highway and having a term indefinite.

(Affects Sections 10, 11, and 23)
11.

Right-of-Way No. 09-3416 granted by the Arizona State Land Department to Arizona State Highway Commission for highway and having a term indefinite.

(Affects Sections 10, 11, and 23)
12.

Right-of-Way No. 09-3602 granted by the Arizona State Land Department to Maricopa County Board of Supervisors for highway and having a term indefinite.

Change of grantee name to the City of Phoenix dated February 7, 2006.

(Affects Section 11)
13.

Right-of-Way No. 18-3903 now known as 71-3903 granted by the Arizona State Land Department to Black Mountain Gas Company, an Arizona corporation for natural gas lines, meters and regulators used as a public utility and having a term indefinite.

said lease was assigned to Southwest Gas Corporation

said lease was amended on September 18, 2006

said lease was amended on January 7, 2008

(Affects Sections 8, 9, 10,11,12)
14.

Right-of-Way No. 14-111275 granted by the Arizona State Land Department to Arizona Public Service Company for 500/230 kV electrical substation and having a term ending December 10, 2082.

said right of way was amended on September 20, 2021

(Affects Section 15)
15.

Right-of-Way No. 16-111642 granted by the Arizona State Land Department to Arizona Department of Transportation for public road and having a term perpetual.

(Affects Sections 10, 11, 14, 23)
16.

Right-of-Way No. 14-112086 granted by the Arizona State Land Department to Qwest Corporation for four 4" Conduits and having a term ending May 8, 2058.

(Affects Sections 10, 11, 14, 23)
17.

Right-of-Way No. 14-112625 granted by the Arizona State Land Department to CoxCom, Inc. for one overhead 264 paired fiber optic communication cable of Parcels 1 through 4 of Exhibition A and four 2 inch underground fiber optic conduits with one 264 paired fiber optic cable in one conduits in Parcel 5 through 11 in Exhibit A and having a term ending July 29, 2060.

(Affects Sections 11, 14, 23)

SCHEDULE "B" ITEMS (CONTINUED)

18.

Right-of-Way No. 14-112792 granted by the Arizona State Land Department to AT&T for underground 36# fiber optic communication line for internal use only and having a term ending August 14, 2058.

(Affects Sections 10, 11, 14, 23)
19.

Right-of-Way No. 16-112646 granted by the Arizona State Land Department to Arizona Department of Transportation for public road and two pending areas and having a term perpetual.

And thereafter said lease was recorded October 29, 2009 as 2009-1003155

(Affects Sections 7, 15, 16, 17, 18, 21, 22)
20.

Right-of-Way No. 14-113155 granted by the Arizona State Land Department to Arizona Public Service Company for overhead 69 kV transmission line with 12kV under build electric distribution line and having a term ending April 9, 2059.

(Affects Sections 8, 17)
21.

Right-of-Way No. 16-109061 granted by the Arizona State Land Department to City of Phoenix for 78" underground water transmission line described in Exhibit I, underground sewer transmission line described in Exhibit II, underground fiber optic communication line, described in Exhibit III and having a term indefinite.

And thereafter said lease was recorded May 20, 2005 as 2005-672065.

And thereafter said lease was amended June 16, 2006 as 2006-814583.

(Affects Sections 10, 11)
22.

Right-of-Way No. 16-109021 granted by the Arizona State Land Department to City of Phoenix for 42" underground water transmission line and having a term indefinite.

And thereafter said lease was recorded June 3, 2005 as 2005-745724.

(Affects Sections 8, 17)
23.

Right-of-Way No. 16-112562 granted by the Arizona State Land Department to Arizona Public Service Company for one overhead 500kV electrical transmission line with one 230 kV electrical sub transmission line and having a term perpetual.

said right of way was amended on February 14, 2022

(Affects Sections 7, 8, 9, 10, 15, 22, 23)
24.

Right-of-Way No. 16-113080 granted by the Arizona State Land Department to City of Phoenix for underground utilities under existing road easement and having a term perpetual.

And thereafter said lease was recorded January 22, 2009 as 2009-055672.

(Affects Section 11)
25.

Right-of-Way No. 18-77943-00 granted by the Arizona State Land Department to Arizona Public Service Company for one overhead 7.2 kV electric distribution line and having a term ending December 10, 2029.

(Affects Sections 8, 9, 10)
26.

Right-of-Way No. 18-112193-00 granted by the Arizona State Land Department to Arizona Public Service Company for underground 12kV electric distribution line and having a term ending February 6, 2028.

(Affects Section 9)
27.

Special Land Use Permit No. 23-100487-01 granted by the Arizona State Land Department to Aleksander Ostrowski and Krystyna Ostrowski, husband and wife for Apiary Sites and having a term ending January 14, 2025.

(Affects Sections 7, 9)
28.

The effect of resolutions adopting State Route Plan for the I-17 Highway and any Amendments thereto for the purpose of controlling access and acquiring lands in advance for rights-of-way, recorded in 2003-1103787 of Official Records and recorded as 2004-1508465 of Official Records and recorded as 2005-692016 of Official Records and recorded as 2007-953709 of Official Records and as 2009-1087461 of Official Records.

(Affects Sections 8, 9, 10, 11, 14, 15, 16, 17, 18, 21, 22 and 23)

The rights of the State of Arizona for prohibit, limit and control access to the limited access highways known as Interstate 17, Carefree Highway and State Route 303 (Bob Stump Memorial Highway).
29.

Right-of-Way No. 18-23663 granted by the Arizona State Land Department to Arizona Public Service Company for overhead 7.2kV electric distribution line and having a term expiring March 22, 2023.
30.

All matters disclosed on record of surveys, recorded as Book 1561 of Maps, Page 47 as Book 1561 of Maps, Page 48 and as Book 1561 of Maps, Page 49.
31.

All matters as set forth in Ordinance G-6756, recorded November 3, 2020 as 2020-1066262 of Official Records.
32.

All matters as set forth in Notice of Airport in vicinity, recorded August 3, 2021 as 2021-837983 of Official Records.
33.

Right-of-Way No. 14-12267-00 granted by the Arizona State Land Department to Arizona Department of Transportation for underground fiber-optic corridor, 3rd party use fiber optic communication line and conduit and having a term expiring February 10, 2052.

Said right of way recorded as 2022-321195.
34.

Temporary Right of Entry No. 30-122483-00 onto State Trust Lands granted to Southwest Gas Corporation starting November 9, 2021 and ending November 8, 2022
35.

Any facts, rights, interests or claims which would be disclosed by a correct ALTA/NSPS survey.
36.

The rights of parties in possession by reason of any unrecorded lease or leases or month to month tenancies affecting any portion of the within described property.

NOTE: This matter will be more fully set forth or deleted upon compliance with the applicable requirement(s) set forth herein.
37.

Water rights, claims or title to water, whether or not shown by the public records.

LEGEND

| | | | |
|---------|--|----------|--------------------------------|
| # | PLOTTABLE SCHEDULE "B" ITEM | PL | PROPERTY LINE |
| ● | SURVEY MONUMENT FOUND AS NOTED | POB | POINT OF BEGINNING |
| ○ | SURVEY MONUMENT WITH RLS TAG OR CAP TO BE SET UNLESS OTHERWISE NOTED | POC | POINT OF COMMENCEMENT |
| AC | ALUMINUM CAP | PUE | PUBLIC UTILITY EASEMENT |
| ACF | ALUMINUM CAP FLUSH | (R) | RECORD DATA |
| ADOT | ARIZONA DEPARTMENT OF TRANSPORTATION | RB | REBAR |
| AE | ACCESS EASEMENT | RW | RIGHT-OF-WAY |
| A.L | AREA LIGHT | RWE | RIGHT-OF-WAY EASEMENT |
| APN | ASSESSOR PARCEL NUMBER | S.C. | SINGLE CURB |
| APS | ARIZONA PUBLIC SERVICE | SE | SEWER EASEMENT |
| A.R.V. | AIR RELEASE VALVE | S.M.H. | SEWER MANHOLE |
| B.B. | BOTTOM OF BANK | S.L. | STREET LIGHT |
| B/C | BACK OF CURB | S.L.M. | STREET LIGHT MAST ARM |
| BC | BRASS CAP | SLUP | SPECIAL LAND USE PERMIT |
| BCF | BRASS CAP FLUSH | T.B. | TOP OF BANK |
| BCH | BRASS CAP IN HANDHOLE | TE | TELEPHONE EASEMENT |
| B.P. | BARRIER POST | T.L.M. | TELEPHONE LINE MARKER |
| C.B. | CATCH BASIN | T.S. | TRAFFIC SIGNAL |
| C.L.D. | CONCRETE LINED DITCH | T.S.J.B. | TRAFFIC SIGNAL JUNCTION BOX |
| C.L.F. | CHAIN LINK FENCE | T.S.M. | TRAFFIC SIGNAL MAST ARM |
| COP | CITY OF PHOENIX | T.R. | TELEPHONE RISER |
| CP TEST | CATHODIC PROTECTION TEST | U.P. | UTILITY POLE |
| CTV | CABLE TV VAULT | WBO | WATER BLOWOFF |
| DCR | DESIGNATED COUNTY ROAD | WE | WATERLINE EASEMENT |
| DE | DRAINAGE EASEMENT | WIF | WROUGHT IRON FENCE |
| D.G. | DOWN GUY | WM | WATER METER |
| DOC | DOCUMENT | W.M.H. | WATER MANHOLE |
| DW | DRYWELL | W&WWE | WATER AND WASTEWATER EASEMENT |
| EC | EDGE OF CONCRETE | W.V. | WATER VALVE |
| ECB. | ELECTRIC CABINET | V.C.G. | VERTICAL CURB & GUTTER |
| E.J.B. | ELECTRIC JUNCTION BOX | ⓓ | STORM DRAIN MANHOLE |
| E.M. | ELECTRIC METER | ⓔ | ELECTRIC MANHOLE |
| EMH | ELECTRIC MANHOLE | ⓖ | GAS MANHOLE |
| EP | EDGE OF PAVEMENT | Ⓢ | SEWER MANHOLE |
| ESMT | EASEMENT | Ⓣ | TELEPHONE MANHOLE |
| E.V.T. | ELECTRIC VAULT | Ⓦ | WATER MANHOLE |
| FD | FOUND | Ⓨ | SIGN |
| F.H. | FIRE HYDRANT | — C — | UNDERGROUND COMMUNICATION LINE |
| FOE | FIBER OPTIC EASEMENT | — E — | UNDERGROUND ELECTRIC LINE |
| F.O.M. | FIBER OPTIC MARKER | — G — | UNDERGROUND GAS LINE |
| F.V.T. | FIBER VAULT | — GAS — | UNDERGROUND GAS LINE |
| GLE | GAS LINE EASEMENT | — S — | UNDERGROUND SEWER LINE |
| G.L.M. | GAS LINE MARKER | — W — | UNDERGROUND WATER LINE |
| GMH | GAS MANHOLE | — OHU — | OVERHEAD UTILITY LINE |
| G.V. | GAS VALVE | — — — — | BOUNDARY LINE |
| H.W. | HEADWALL | — — — — | EASEMENT LINE |
| IJB | IRRIGATION JUNCTION BOX | — — — — | RIGHT-OF-WAY |
| I.V. | IRRIGATION VALVE | — — — — | SECTION LINE |
| I.V.B. | IRRIGATION VALVE BOX | — X — | FENCE LINE |
| IJB | IRRIGATION JUNCTION BOX | — — — — | APPROXIMATE FLOODPLAIN LINE |
| (M) | MEASURED DATA | ↑ | GATE |
| M.B. | MAILBOX | | |
| MC | MARICOPA COUNTY | | |
| MCDOT | MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION | | |
| MCR | MARICOPA COUNTY RECORDS | | |
| | | | CONCRETE |

LINE AND CURVE TABLES

| LINE TABLE (M&R) | | |
|------------------|-------------|----------|
| LINE | BEARING | DISTANCE |
| L1 | S01°26'02"W | 255.01' |
| L2 | S42°58'19"W | 165.64' |
| L3 | S84°21'08"W | 326.54' |
| L4 | N00°26'32"W | 63.86' |
| L5 | N38°01'02"W | 78.35' |
| L6 | N04°16'47"E | 260.09' |
| L7 | S21°11'17"W | 355.34' |
| L8 | N34°01'54"E | 115.92' |
| L9 | N00°26'19"E | 212.86' |
| L10 | N54°50'51"E | 58.15' |

| LINE TABLE (R3) | | |
|-----------------|-------------|----------|
| LINE | BEARING | DISTANCE |
| L1 | N01°26'30"E | 255.00' |
| L2 | N42°55'05"E | 165.66' |
| L3 | N84°20'56"E | 326.57' |
| L4 | S00°11'24"E | 64.00' |
| L5 | S37°54'08"E | 78.28' |
| L6 | S04°17'24"W | 260.09' |
| L7 | N21°10'40"E | 355.29' |
| L8 | S34°00'00"W | 116.00' |

| CURVE TABLE (M&R) | | | |
|-------------------|------------|----------|-----------|
| CURVE | DELTA | RADIUS | ARC |
| C1 | 17°28'05" | 5729.58' | 1,746.81' |
| C2 | 17°32'29" | 5729.58' | 1,754.14' |
| C3 | 59°52'46" | 350.00' | 365.78' |
| C4 | 103°26'12" | 200.00' | 361.06' |
| C5 | 9°12'15" | 4000.00' | 642.57' |
| C6 | 21°30'00" | 4000.00' | 1,500.99' |

| CURVE TABLE (R3) | | | |
|------------------|-----------|----------|-----------|
| CURVE | DELTA | RADIUS | ARC |
| C1 | 34°11'24" | 5729.58' | 3,418.99' |
| C2 | | 5729.58' | |

ALTA/NSPS LAND TITLE SURVEY

NORTH PHOENIX 3500 - REMAINDER PARCEL

LYING WITHIN SECTIONS 7, 8, 9, 10, 11, 14, 15, 16, 17 AND 18, TOWNSHIP 5 NORTH, RANGE 2 EAST, OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA



Wood, Patel & Associates, Inc.

Civil Engineering
Water Resources
Land Survey
Construction Management

602.335.8500

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EXPIRES 12-31-20

COMPLETED SURVEY FIELD WORK ON 10/27/2022

CHECKED BY GSR

CAD TECHNICIAN JKP

SCALE NTS

DATE 03/09/2023

JOB NUMBER WP# 205159

SHEET 2 OF 14

ALTA/NSPS LAND TITLE SURVEY

LYING WITHIN SECTIONS 7, 8, 9, 10, 11, 14, 15, 16, 17 AND 18, TOWNSHIP 5 NORTH, RANGE 2 EAST,
OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA



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ORIGIN 10/27/2022

WORK ON 10/27/2022
CHECKED BY

AD TECHNICIAN GSR

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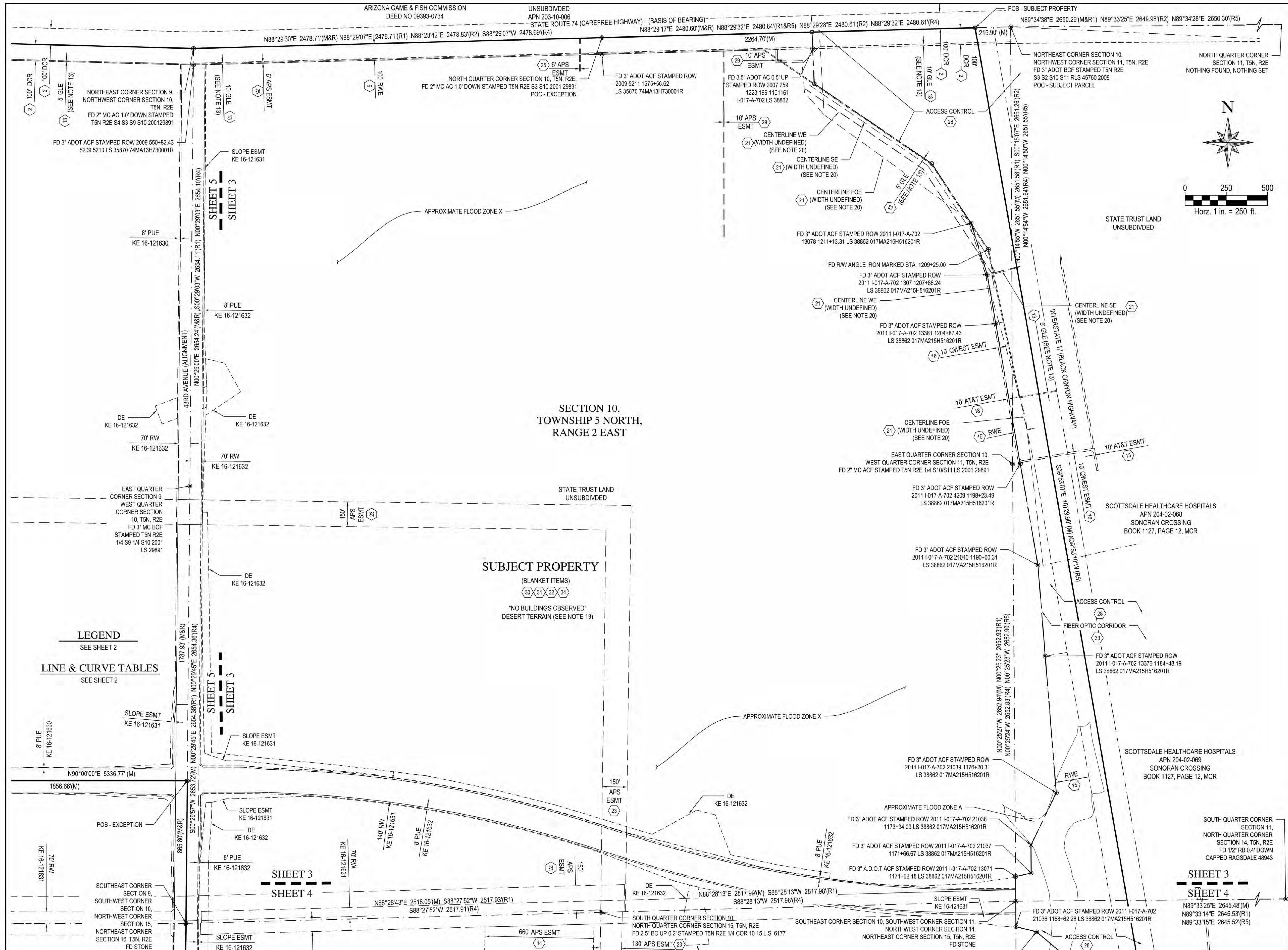
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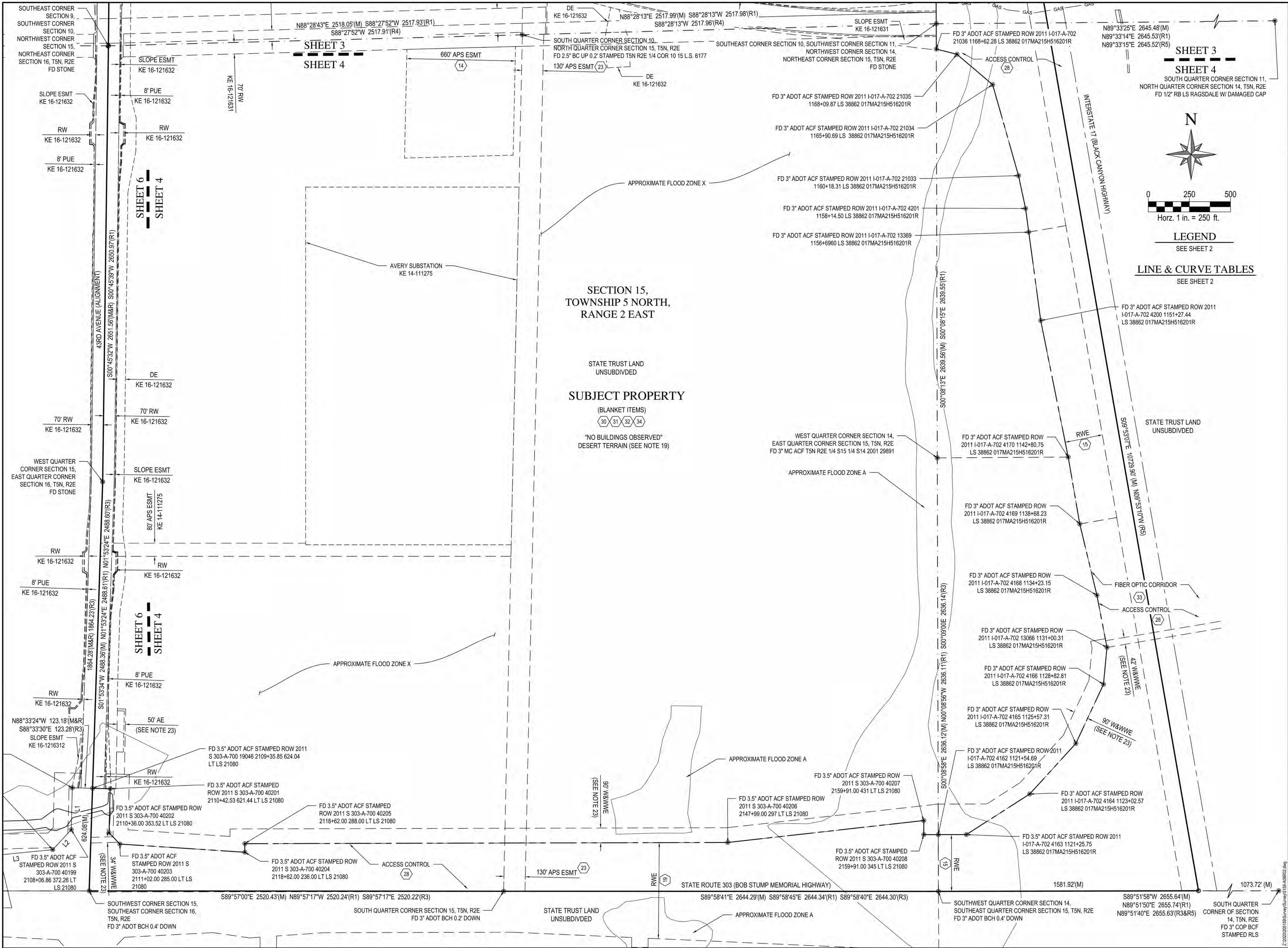
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WP# 205159

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NORTH PHOENIX 3500 - REMAINDER PARCEL
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OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA

REGISTERED LAND SURVEYOR
GABRIEL S. RIOS
ARIZONA, U.S.A.
EXPIRES 12-31-20

COMPLETED SURVEY FIELD
WORK ON 10/27/2022
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JOB NUMBER WP# 205159
SHEET 4 OF 14

NORTH PHOENIX 3500 - REMAINDER PARCEL
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EXPIRES 12-31-23

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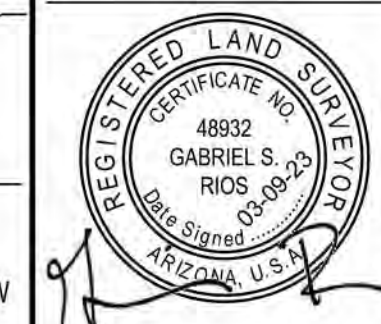
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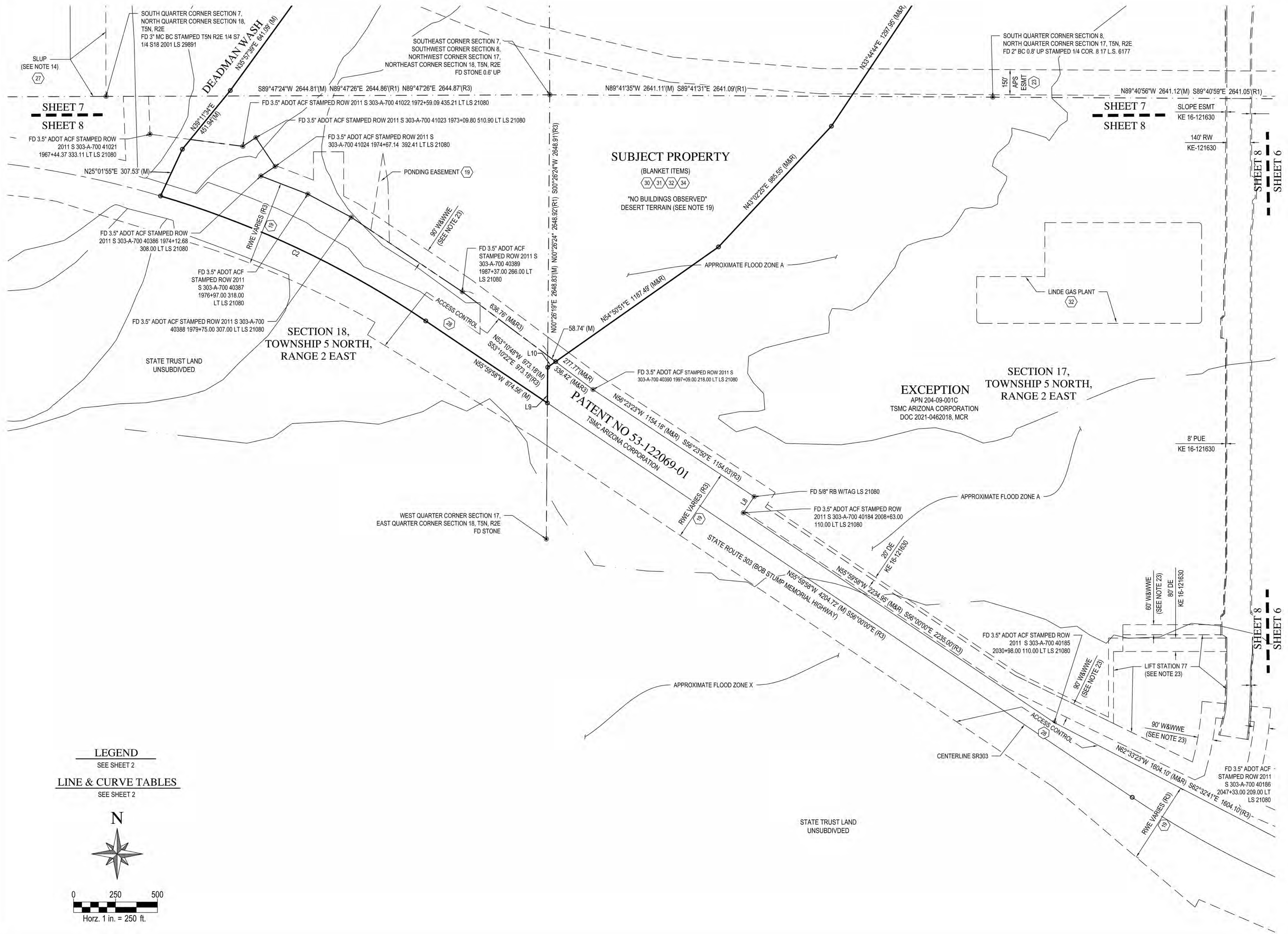
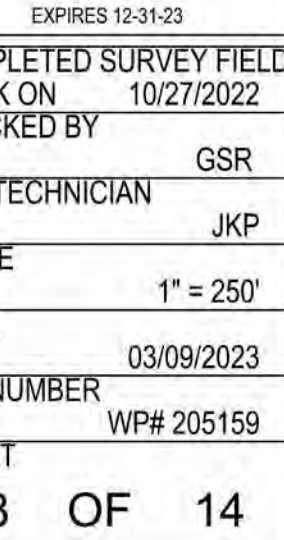
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NORTH PHOENIX 3500 - REMAINDER PARCEL
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JOB NUMBER WP# 205159
SHEET 7 OF 14

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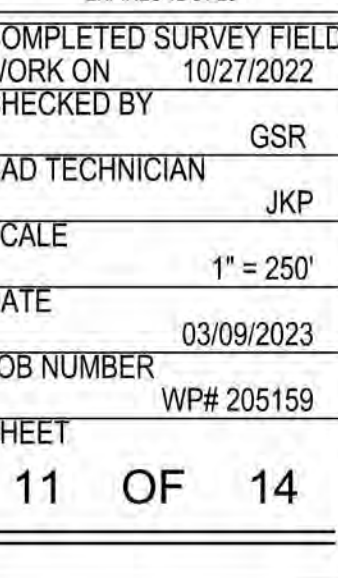
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| SHEET 9 OF 14 |

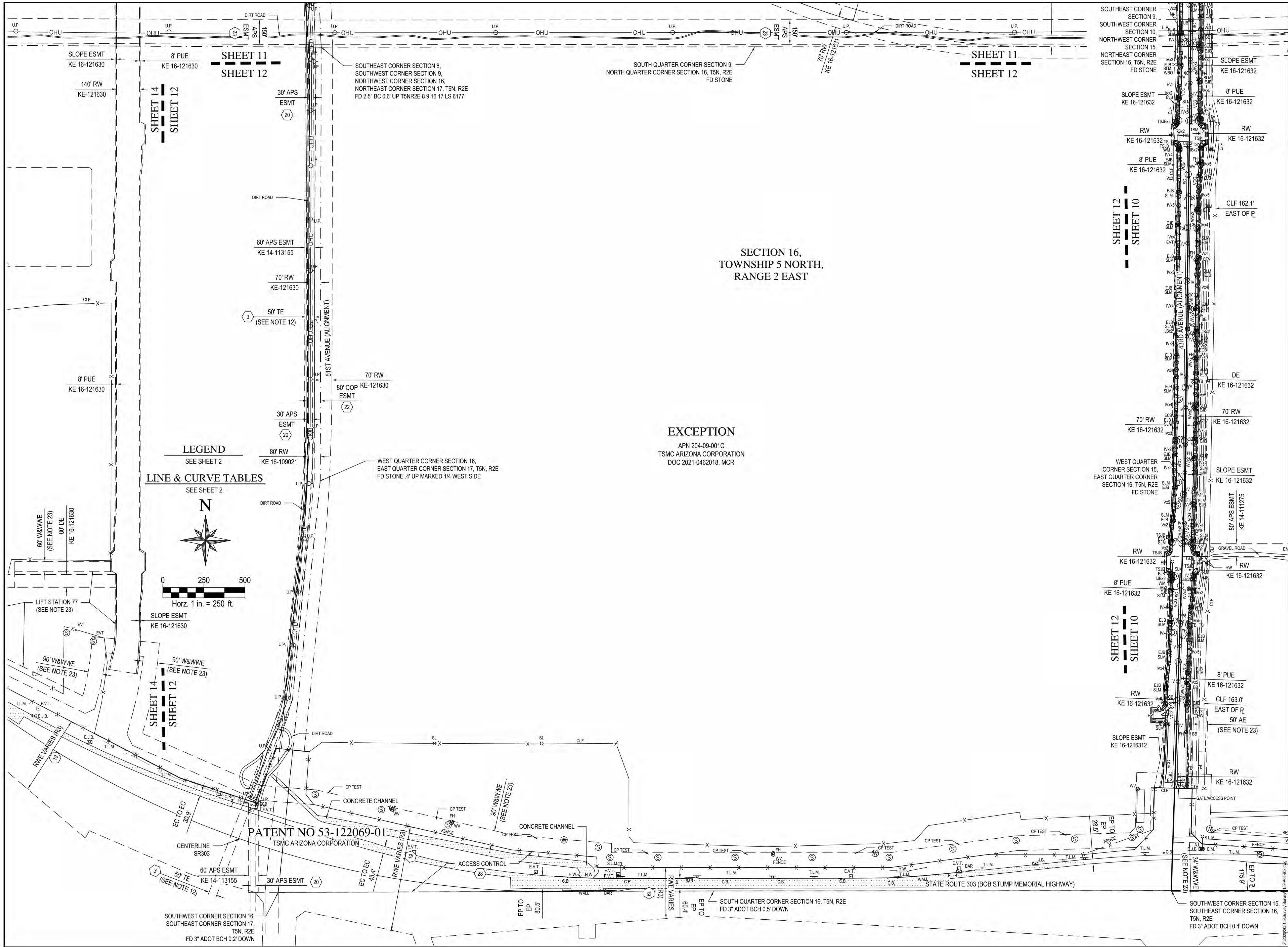
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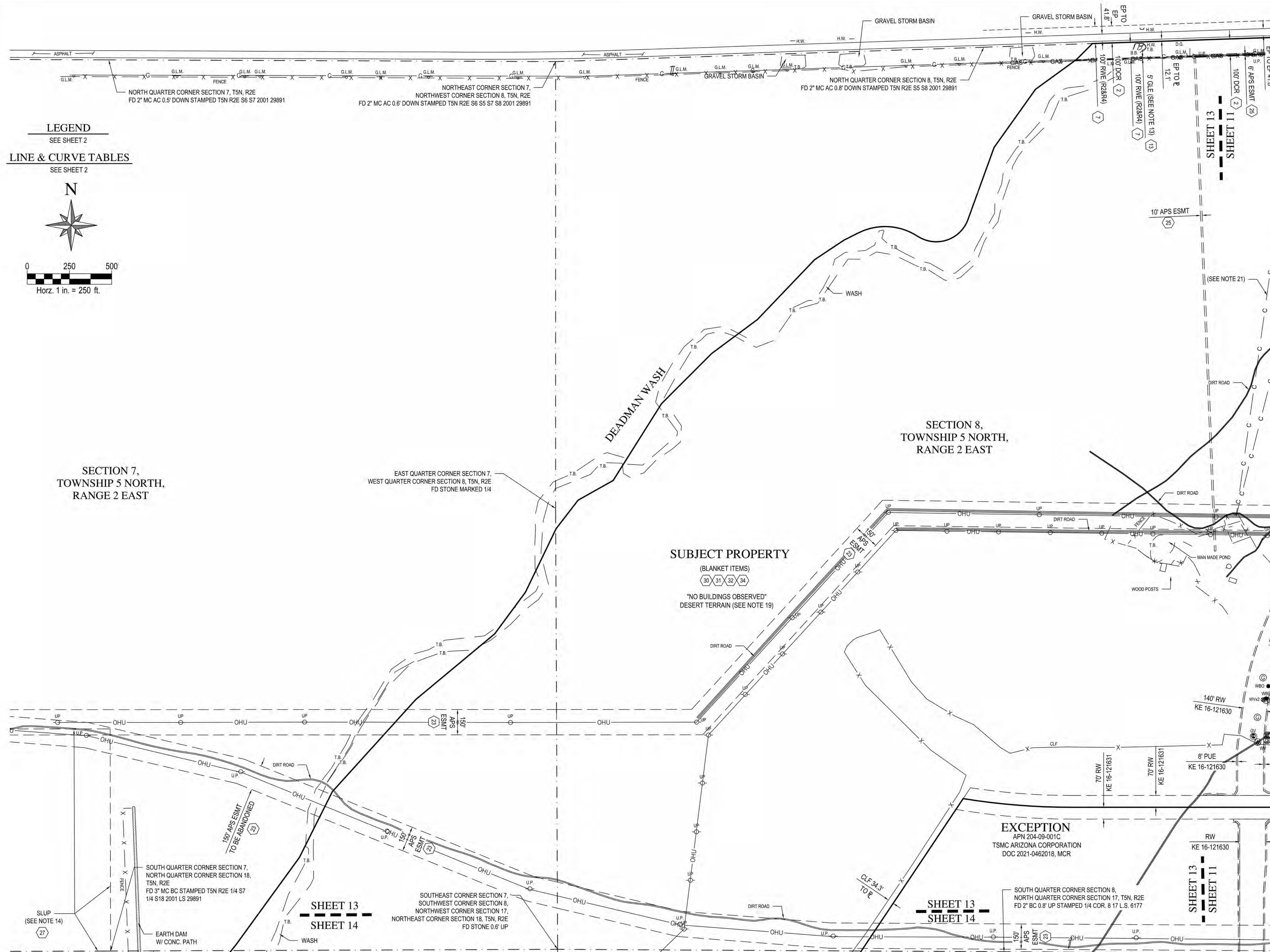
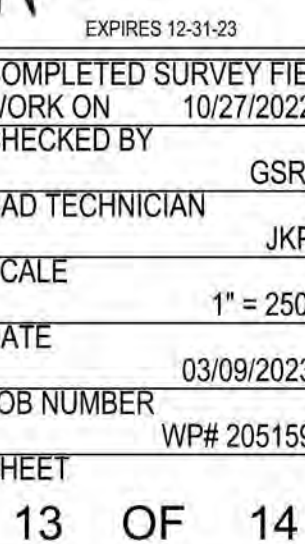
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OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA



EXPIRES 12/31/23
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WORK ON 10/27/2022
CHECKED BY GSR
CAD TECHNICIAN JKP
SCALE 1" = 250'
DATE 03/09/2023
JOB NUMBER WP# 205159
SHEET 12 OF 14



NORTH PHOENIX 3500 - REMAINDER PARCEL
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OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA



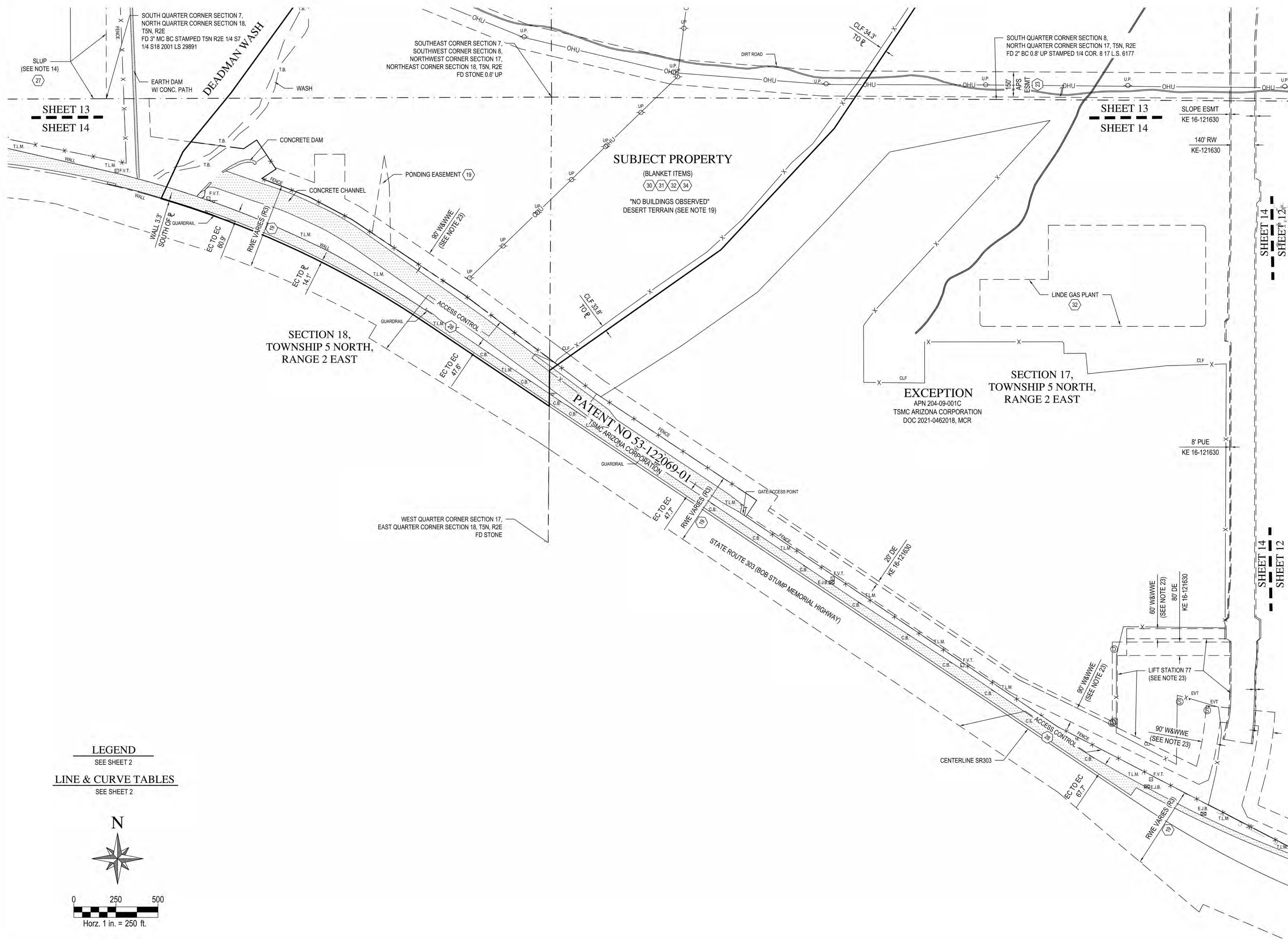
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NORTH PHOENIX 3500 - REMAINDER PARCEL
LYING WITHIN SECTIONS 7, 8, 9, 10, 11, 14, 15, 16, 17 AND 18, TOWNSHIP 5 NORTH, RANGE 2 EAST,
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| COMPLETED SURVEY FIELD WORK ON | 10/27/2022 |
| CHECKED BY | GSR |
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| DATE | 03/09/2023 |
| JOB NUMBER | WP# 205159 |
| SHEET | 14 OF 14 |

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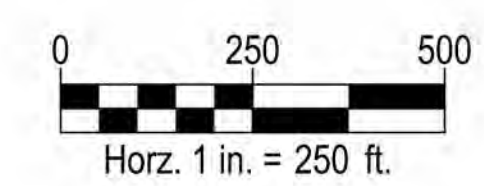


LEGEND

SEE SHEET 2

LINE & CURVE TABLES

SEE SHEET 2



APPENDIX F:
SPECIAL REPORT

SPECIAL REPORT

SCHEDULE A

1. This report is for informational purposes only and is not to be considered as a commitment to issue any form of Title Insurance Policy. This report is for the sole use and benefit of the parties set forth in Number 2 below and liability is hereby limited to the amount of the fee paid.

This report was prepared from only those items of public record shown in the title plant indices of the issuing company to show the condition of title as reflected by same. Those items to which the hereinafter described land is subject are set forth in Schedule B, Part Two. No attempt has been made to reflect the condition of title relating to the items set forth in Schedule B, Part One.

2. For the use and benefit of:

Wood Patel

3. The Title to the fee estate in the land described herein is at this date hereof vested in:

State of Arizona

4. The land referred to in this report is situated in Maricopa County, Arizona, and is described as:
SEE EXHIBIT "A" ATTACHED HEREIN

Search made to August 18, 2022 at 8:00 A.M., as to the records of the Maricopa County
Recorders Office and August 29, 2022 at 8:00 A.M., as to the records of the Arizona State Land
Department

FIRST AMERICAN TITLE INSURANCE COMPANY

By: /

EXHIBIT "A"

A PORTION OF SECTIONS 7, 8, 9, 10, 11, 14, 16, 17, 18, 21, 22 AND 23 AND ALL OF SECTION 15, ALL OF TOWNSHIP 5 NORTH, RANGE 2 EAST, ALL OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID SECTION 10;
 THENCE WESTERLY ALONG THE NORTH LINE OF SAID SECTION 10, TO THE CENTERLINE OF INTERSTATE 17 BLACK CANYON HIGHWAY, AND THE POINT OF BEGINNING;
 THENCE LEAVING SAID NORTH LINE, SOUTHERLY ALONG SAID CENTERLINE, TO THE CENTERLINE OF STATE ROUTE 303 BOB STUMP MEMORIAL HIGHWAY;
 THENCE LEAVING SAID CENTERLINE OF INTERSTATE 17, WESTERLY ALONG SAID CENTERLINE OF STATE ROUTE 303, TO THE CENTERLINE OF DEADMAN WASH;
 THENCE LEAVING SAID CENTERLINE OF STATE ROUTE 303, NORTHEASTERLY ALONG SAID CENTERLINE OF DEADMAN WASH THROUGH SAID SECTIONS 18, 7, AND 8, TO THE NORTH LINE OF SAID SECTION 8;
 THENCE LEAVING SAID CENTERLINE, EASTERLY ALONG THE NORTH LINE OF SAID SECTIONS 8, 9, AND 10, TO THE POINT OF BEGINNING.

EXCEPTING THEREFROM

THAT CERTAIN PARCEL OF LAND DESCRIBED IN ARIZONA STATE LAND PATENT NO. 53-121524-02, RECORDED IN DOCUMENT [2021-0462018](#), MARICOPA COUNTY RECORDS (MCR), DESCRIBED AS FOLLOWS:

A PORTION OF SECTIONS 8, 9, 16 AND 17, TOWNSHIP 5 NORTH, RANGE 2 EAST, OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTH QUARTER CORNER OF SECTION 10, TOWNSHIP 5 NORTH, RANGE 2 EAST, OF SAID GILA AND SALT RIVER MERIDIAN, A 2-INCH ALUMINUM CAP IN POTHOLE, FROM WHICH, THE NORTHEAST CORNER OF SAID SECTION 10, A 3-INCH ARIZONA DEPARTMENT OF TRANSPORTATION (ADOT) BRASS CAP FLUSH, BEARS NORTH 88°29'17" EAST (BASIS OF BEARING), A DISTANCE OF 2480.60 FEET;
 THENCE ALONG THE NORTH LINE OF SAID SECTION 10, SOUTH 88°29'30" WEST, A DISTANCE OF 2478.71 FEET, TO THE NORTHWEST CORNER OF SAID SECTION 10 ALSO BEING THE NORTHEAST CORNER OF SAID SECTION 9,
 THENCE LEAVING SAID NORTH LINE OF SECTION 10, ALONG THE EAST LINE OF SAID SECTION 9, SOUTH 00°29'00" WEST, A DISTANCE OF 2654.24 FEET, TO THE EAST QUARTER CORNER OF SAID SECTION 9;
 THENCE SOUTH 00°29'57" WEST, A DISTANCE OF 1787.93 FEET, TO THE POINT OF BEGINNING;
 THENCE CONTINUING SOUTH 00°29'57" WEST, A DISTANCE OF 865.80 FEET, TO THE SOUTHEAST CORNER OF SAID SECTION 9 ALSO BEING THE NORTHEAST CORNER OF SAID SECTION 16;
 THENCE LEAVING SAID EAST LINE OF SECTION 9, ALONG THE EAST LINE OF SAID SECTION 16, SOUTH 00°45'32" WEST, A DISTANCE OF 2651.56 FEET, TO THE EAST QUARTER CORNER OF SAID SECTION 16;
 THENCE SOUTH 01°53'34" WEST, A DISTANCE OF 1864.28 FEET, TO THE NORTHERLY LINE OF STATE ROUTE 303 (SR-303) ADOT RIGHT OF WAY EASEMENT PER ARIZONA STATE LAND DEPARTMENT DOCUMENT 16-112646 AND ADOT RIGHT OF WAY PLANS S 303-A-700;
 THENCE LEAVING SAID EAST LINE OF SECTION 16, ALONG SAID NORTHERLY LINE OF SR-303, NORTH 88°33'24" WEST, A DISTANCE OF 123.18 FEET;
 THENCE SOUTH 01°26'02" WEST, A DISTANCE OF 255.01 FEET;
 THENCE SOUTH 42°58'19" WEST, A DISTANCE OF 165.64 FEET;
 THENCE SOUTH 84°21'08" WEST, A DISTANCE OF 326.54 FEET;
 THENCE NORTH 89°56'40" WEST, A DISTANCE OF 579.96 FEET;
 THENCE SOUTH 82°23'32" WEST, A DISTANCE OF 591.07 FEET;
 THENCE NORTH 89°59'36" WEST, A DISTANCE OF 1784.31 FEET;

THENCE NORTH 00°26'32" WEST, A DISTANCE OF 63.86 FEET;
 THENCE NORTH 85°13'18" WEST, A DISTANCE OF 517.52 FEET;
 THENCE NORTH 77°06'38" WEST, A DISTANCE OF 1238.81 FEET;
 THENCE NORTH 38°01'02" WEST, A DISTANCE OF 78.35 FEET;
 THENCE NORTH 04°16'47" EAST, A DISTANCE OF 260.09 FEET;
 THENCE NORTH 84°08'25" WEST, A DISTANCE OF 199.99 FEET;
 THENCE SOUTH 21°11'17" WEST, A DISTANCE OF 355.34 FEET;
 THENCE NORTH 71°55'10" WEST, A DISTANCE OF 474.39 FEET;
 THENCE NORTH 62°33'23" WEST, A DISTANCE OF 1604.10 FEET;
 THENCE NORTH 55°59'58" WEST, A DISTANCE OF 2234.95 FEET;
 THENCE NORTH 34°01'54" EAST, A DISTANCE OF 115.92 FEET;
 THENCE NORTH 56°23'23" WEST, A DISTANCE OF 1154.18 FEET;
 THENCE NORTH 53°10'48" WEST, A DISTANCE OF 277.77 FEET;
 THENCE LEAVING SAID NORTHERLY LINE OF SR-303, NORTH 54°50'51" EAST, A DISTANCE OF 1187.49 FEET;
 THENCE NORTH 43°02'25" EAST, A DISTANCE OF 985.55 FEET;
 THENCE NORTH 33°44'44" EAST, A DISTANCE OF 1297.95 FEET, TO A POINT OF INTERSECTION WITH A NON-TANGENT CURVE;
 THENCE EASTERLY ALONG SAID NON-TANGENT CURVE TO THE LEFT, HAVING A RADIUS OF 4000.00 FEET, CONCAVE NORTHERLY, WHOSE RADIUS BEARS NORTH 09°12'15" EAST, THROUGH A CENTRAL ANGLE OF 09°12'15", A DISTANCE OF 642.57 FEET, TO THE CURVES END;
 THENCE NORTH 90°00'00" EAST, A DISTANCE OF 2875.92 FEET, TO THE BEGINNING OF A CURVE;
 THENCE EASTERLY ALONG SAID CURVE TO THE RIGHT, HAVING A RADIUS OF 4000.00 FEET, CONCAVE SOUTHERLY, THROUGH A CENTRAL ANGLE OF 21°30'00", A DISTANCE OF 1500.99 FEET, TO THE CURVES END;
 THENCE SOUTH 68°30'00" EAST, A DISTANCE OF 845.51 FEET, TO THE BEGINNING OF A CURVE;
 THENCE EASTERLY ALONG SAID CURVE TO THE LEFT, HAVING A RADIUS OF 4000.00 FEET, CONCAVE NORTHERLY, THROUGH A CENTRAL ANGLE OF 05°20'36", A DISTANCE OF 373.04 FEET, TO A POINT OF INTERSECTION WITH A NON-TANGENT LINE;
 THENCE NORTH 16°09'24" EAST, A DISTANCE OF 737.70 FEET;
 THENCE NORTH 90°00'00" EAST, A DISTANCE OF 1856.66 FEET, TO THE POINT OF BEGINNING.

SCHEDULE B

PART ONE:

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records.

Proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public records.
2. Any facts, rights, interests or claims which are not shown by the public records but which could be ascertained by an inspection of the land or by making inquiry of persons in possession thereof.
3. Easements, liens, or encumbrances, or claims thereof, which are not shown by the public records.
4. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water; whether or not the aforementioned matters excepted are shown by the public records.
6. Any lien, or right to a lien, for services, labor or material heretofore or hereafter furnished, imposed by law and not shown by the public records.
7. Lack of a right of access to and from the land.

SCHEDULE B

(All recording data refers to records in the office of the County Recorder in the County in which the land is situated.)

EXCEPTIONS:

1. Taxes for the year 2021-2022 are exempt.
2. A plat recorded in [Book 13, Page 61](#) of Road Maps, purporting to show a county roadway.

(Affects Sections 8, 9 and 10)
3. Right-of-Way No. [15-00147](#) granted by the Arizona State Land Department to American Telephone and Telegraph Company of Wyoming for telephone and telegraph and having a term indefinite.

And thereafter said right of way assigned to Mountain States Telephone and Telegraph Company on July 12, 1965

And thereafter change of lessee name to U.S. West Communications, Inc., on March 5, 1991.

And thereafter change of grantee name to QWEST Corporation on December 15, 2000.

(Affects Section 8 and 17)
4. Right-of-Way No. [09-1905](#) granted by the Arizona State Land Department to Arizona State Highway Commission for highway and having a term indefinite.

(Affects Section 10, 11, 14 and 23)
5. Right-of-Way No. [09-2279](#) granted by the Arizona State Land Department to Maricopa Board of Supervisors for highway and having a term indefinite.

And thereafter change of grantee name to City of Phoenix on November 15, 1995.

(Affects Section 11)
6. Right-of-Way No. 09-2287 granted by the Arizona State Land Department to Maricopa County Board of Supervisors for highway and having a term indefinite.

Said right of way was recorded May 11, 1960 as [Docket 3272, Page 105](#).

(Affects Section 10)
7. Right-of-Way No. 09-2283 granted by the Arizona State Land Department to Maricopa County Board of Supervisors for highway and having a term indefinite.

And thereafter said right of way was recorded May 12, 1960 as [Docket 3274, Page 188](#).

(Affects Section 8)

8. Right-of-Way No. 09-2284 granted by the Arizona State Land Department to Maricopa County Board of Supervisors for highway and having a term indefinite.

And thereafter said right of way was recorded May 12, 1960 as [Docket 3274, Page 191](#).

(Affects Section 9)

9. Right-of-Way No. 09-2299 granted by the Arizona State Land Department to Maricopa County Board of Supervisors for highway and having a term indefinite.

And thereafter said right of way was recorded May 11, 1960 as [Docket 3272, Page 114](#).

(Affects Section 7)

10. Right-of-Way No. [09-3195](#) granted by the Arizona State Land Department to Arizona State Highway Commission for highway and having a term indefinite.

(Affects Sections 10, 11, and 23)

11. Right-of-Way No. [09-3416](#) granted by the Arizona State Land Department to Arizona State Highway Commission for highway and having a term indefinite.

(Affects Sections 10, 11, and 23)

12. Right-of-Way No. [09-3602](#) granted by the Arizona State Land Department to Maricopa County Board of Supervisors for highway and having a term indefinite.

Change of grantee name to the City of Phoenix dated February 7, 2006.

(Affects Section 11)

13. Right-of-Way No. [18-3903 now known as 71-3903](#) granted by the Arizona State Land Department to Black Mountain Gas Company, an Arizona corporation for natural gas lines, meters and regulators used as a public utility and having a term indefinite.

said lease was assigned to Southwest Gas Corporation

said lease was amended on September 18, 2006

said lease was amended on January 7, 2008

(Affects Sections 8, 9, 10,11,12)

14. Right-of-Way No. [14-111275](#) granted by the Arizona State Land Department to Arizona Public Service Company for 500/230 kV electrical substation and having a term ending December 10, 2082.

said right of way was amended on September 20, 2021

(Affects Section 15)

15. Right-of-Way No. [16-111642](#) granted by the Arizona State Land Department to Arizona Department of Transportation for public road and having a term perpetual.

(Affects Sections 10, 11, 14, 23)

16. Right-of-Way No. [14-112086](#) granted by the Arizona State Land Department to Qwest Corporation for four 4" Conduits and having a term ending May 8, 2058.

(Affects Sections 10, 11, 14, 23)

17. Right-of-Way No. [14-112625](#) granted by the Arizona State Land Department to CoxCom, Inc. for one overhead 264 paired fiber optic communication cable of Parcels 1 through 4 of Exhibition A and four 2 inch underground fiber optic conduits with one 264 paired fiber optic cable in one conduits in Parcel 5 through 11 in Exhibit A and having a term ending July 29, 2060.

(Affects Sections 11, 14, 23)

18. Right-of-Way No. [14-112792](#) granted by the Arizona State Land Department to AT&T for underground 36# fiber optic communication line for internal use only and having a term ending August 14, 2058.

(Affects Sections 10, 11, 14, 23)

19. Right-of-Way No. 16-112646 granted by the Arizona State Land Department to Arizona Department of Transportation for public road and two pending areas and having a term perpetual.

And thereafter said lease was recorded October 29, 2009 as [2009-1003155](#)

(Affects Sections 7, 15, 16, 17, 18, 21, 22)

20. Right-of-Way No. [14-113155](#) granted by the Arizona State Land Department to Arizona Public Service Company for overhead 69 kV transmission line with 12kV under build electric distribution line and having a term ending April 9, 2059.

(Affects Sections 8, 17)

21. Right-of-Way No. 16-109061 granted by the Arizona State Land Department to City of Phoenix for 78" underground water transmission line described in Exhibit I, underground sewer transmission line described in Exhibit II, underground fiber optic communication line, described in Exhibit III and having a term indefinite.

And thereafter said lease was recorded May 20, 2005 as [2005-672065](#).

And thereafter said lease was amended June 16, 2006 as [2006-814583](#).

(Affects Sections 10, 11)

22. Right-of-Way No. 16-109021 granted by the Arizona State Land Department to City of Phoenix for 42" underground water transmission line and having a term indefinite.

And thereafter said lease was recorded June 3, 2005 as [2005-745724](#).

(Affects Sections 8, 17)

23. Right-of-Way No. [16-112562](#) granted by the Arizona State Land Department to Arizona Public Service Company for one overhead 500kV electrical transmission line with one 230 kV electrical sub transmission line and having a term perpetual.

said right of way was amended on February 14, 2022

(Affects Sections 7, 8, 9, 10, 15, 22, 23)
24. Right-of-Way No. 16-113080 granted by the Arizona State Land Department to City of Phoenix for underground utilities under existing road easement and having a term perpetual.

And thereafter said lease was recorded January 22, 2009 as [2009-055672](#).

(Affects Section 11)
25. Right-of-Way No. [18-77943-00](#) granted by the Arizona State Land Department to Arizona Public Service Company for one overhead 7.2 kV electric distribution line and having a term ending December 10, 2029.

(Affects Sections 8, 9, 10)
26. Right-of-Way No. [18-112193-00](#) granted by the Arizona State Land Department to Arizona Public Service Company for underground 12kV electric distribution line and having a term ending February 6, 2028.

(Affects Section 9)
27. Special Land Use Permit No. [23-100487-01](#) granted by the Arizona State Land Department to Aleksander Ostrowski and Krystyna Ostrowski, husband and wife for Apiary Sites and having a term ending January 14, 2025.

(Affects Sections 7, 9)
28. The effect of resolutions adopting State Route Plan for the I-17 Highway and any Amendments thereto for the purpose of controlling access and acquiring lands in advance for rights-of-way, recorded in [2003-1103787](#) of Official Records and recorded as [2004-1508465](#) of Official Records and recorded as [2005-692016](#) of Official Records and recorded as [2007-953709](#) of Official Records and as [2009-1087461](#) of Official Records.

(Affects Sections 8, 9, 10, 11, 14, 15, 16, 17, 18, 21, 22 and 23)

The rights of the State of Arizona for prohibit, limit and control access to the limited access highways known as Interstate 17, Carefree Highway and State Route 303 (Bob Stump Memorial Highway).
29. Right-of-Way No. [18-23663](#) granted by the Arizona State Land Department to Arizona Public Service Company for overhead 7.2kV electric distribution line and having a term expiring March 22, 2023.
30. All matters disclosed on record of surveys, recorded as [Book 1561 of Maps, Page 47](#) as [Book 1561 of Maps, Page 48](#) and as [Book 1561 of Maps, Page 49](#).
31. All matters as set forth in Ordinance G-6756, recorded November 3, 2020 as [2020-1066262](#) of Official Records.

32. All matters as set forth in Notice of Airport in vicinity, recorded August [3, 2021 as 2021-837983](#) of Official Records.
33. Right-of-Way No. 14-12267-00 granted by the Arizona State Land Department to Arizona Department of Transportation for underground fiber-optic corridor, 3rd party use fiber optic communication line and conduit and having a term expiring February 10, 2052.

Said right of way recorded as [2022-321195](#).

34. Temporary Right of Entry No. [30-122483-00](#) onto State Trust Lands granted to Southwest Gas Corporation starting November 9, 2021 and ending November 8, 2022
35. Any facts, rights, interests or claims which would be disclosed by a correct ALTA/NSPS survey.
36. The rights of parties in possession by reason of any unrecorded lease or leases or month to month tenancies affecting any portion of the within described property.

NOTE: This matter will be more fully set forth or deleted upon compliance with the applicable requirement(s) set forth herein.

37. Water rights, claims or title to water, whether or not shown by the public records.

End of Schedule B

The First American Corporation

PRIVACY POLICY

We Are Committed to Safeguarding Customer Information

In order to better serve your needs now and in the future, we may ask you to provide us with certain information. We understand that you may be concerned about what we will do with such information - particularly any personal or financial information. We agree that you have a right to know how we will utilize the personal information you provide to us. Therefore, together with our parent company, The First American Corporation, we have adopted this Privacy Policy to govern the use and handling of your personal information.

Applicability

This Privacy Policy governs our use of the information which you provide to us. It does not govern the manner in which we may use information we have obtained from any other source, such as information obtained from public records or from another person or entity. First American has also adopted broader guidelines that govern our use of personal information regardless of its source. First American calls these guidelines its Fair Information Values, a copy of which can be found on our web site at www.firstam.com.

Types of Information

Depending upon which of our services you are utilizing, the types of nonpublic personal information that we may collect include:

- Information we receive from you on applications, forms and in other communications to us, whether in writing, in person, by telephone or any other means;
- Information about your transactions with us, our affiliated companies, or others; and
- Information we receive from a consumer reporting agency.

Use of Information

We request information from you for our own legitimate business purposes and not for the benefit of any nonaffiliated party. Therefore, we will not release your information to nonaffiliated parties except: (1) as necessary for us to provide the product or service you have requested of us; or (2) as permitted by law. We may, however, store such information indefinitely, including the period after which any customer relationship has ceased. Such information may be used for any internal purpose, such as quality control efforts or customer analysis. We may also provide all of the types of nonpublic personal information listed above to one or more of our affiliated companies. Such affiliated companies include financial services providers, such as title insurers, property and casualty insurers, and trust and investment advisory companies, or companies involved in real estate services, such as appraisal companies, home warranty companies, and escrow companies. Furthermore, we may also provide all information we collect, as described above, to companies that perform marketing services on our behalf, on behalf of our affiliated companies, or to other financial institutions with whom we or our affiliated companies have joint marketing agreements.

Former Customers

Even if you are no longer our customer, our Privacy Policy will continue to apply.

Confidentiality and Security

We will use our best efforts to ensure that no unauthorized parties have access to any of your information. We restrict access to nonpublic personal information about you to those individuals and entities who need to know that information to provide products and services to you. We will use our best efforts to train and oversee our employees and agents to ensure that your information will be handled responsibly and in accordance with this Privacy Policy and First American's Fair Information Values. We currently maintain physical, electronic, and procedural safeguards that comply with federal regulations to guard your nonpublic personal information.

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APPENDIX G:
NORTH GATEWAY WATER RECLAMAION FACILITY
CONCEPT REPORT

May 31, 2023

Biscuit Flats Dev LLC
2415 East Camelback Road, Suite 920
Phoenix, AZ 85015

Arizona State Land Department
1110 West Washington St.
Phoenix, AZ 85007

Subject: North Gateway Water Reclamation Facility Concept Report

The North Gateway Water Reclamation Facility (WRF) Concept Report is to provide information associated with the treatment and reuse of domestic and industrial wastewater flows from proposed developments associated with the Arizona State Land Trust (ASLD) North Phoenix 3,5000 Development area. The WRF wastewater flow forecasts prepared by Wood Patel (Table 1, below) are used to assess the required WRF treatment capacity, treatment process requirements, and Rough Order of Magnitude (ROM) project cost. We have *italicized* some but not all assumptions to help draw the reader's attention to in preparing this Concept Report.

The North Phoenix 3,500 Development is based on a 3-phase and Build-Out wastewater flow forecast and incorporates the Retained Property immediately west of the North Phoenix 3,500 Development (Table 1). Retained Property flows are expected to occur in Phases 2, 3, and at Build-Out. Based on an Average Annual Day (AAD) flow forecast prepared by Wood Patel, the WRF Phase 1 capacity is 8 million gallons per day (MGD) and incorporates a 1.5 safety factor to provide the necessary operational flexibility and redundancy for an end-of-line plant concept. This WRF 8 MGD capacity is expected to support Phase 1 North Phoenix 3,500 domestic wastewater flows and adjacent areas. The WRF will treat (through MBR technology) wastewater to meet Indirect Potable Reuse (IPR) water quality standards and then be injected and extracted from an adjacent aquifer for subsequent potable use. At the North Gateway site, there is no currently known additional space for injection and extraction wells for MBR flows greater than 8 MGD without additional site-specific investigations. Hence, any additional WRF MBR effluent (Table 1) is anticipated to be pumped and conveyed to a proposed City of Phoenix (City) 78" IPR Site north of North Phoenix 3,500 Development site (78" IPR Site). At the Taiwan Semiconductor Manufacturing Company (TSMC) site, pre-treated fab flows after Phase 1 are expected to be conveyed to the 78" IPR Site for additional treatment (Figure 1 on page 8 of this report). The WRF capacity is expected to increase with the addition of planned MBR treatment modules in each subsequent development phase, and IPR capacity is expected to increase at the 78" IPR Site as necessary in each subsequent development phase. The cumulative North Gateway WRF wastewater flow through Build Out is estimated to be approximately 18 MGD which requires an MBR treatment capacity of 27 MGD (including a 1.5 safety factor).

Table 1: North Gateway WRF Wastewater Flow Summary

| A | B | C | D | E | F | G | H | I | J |
|-----------|---------------------------------|---------------------|---------------------------------------|-------------------------------|---------------------|----------------------------------|------------------------------|-----|------------------------------|
| Phase | North Phoenix 3,500 Time Frames | WW Flows (AAD, MGD) | Retained Adjacent Property Flow (MGD) | Total AAD Flows (MGD) (C + D) | TSMC Fab Flow (MGD) | WRF MBR Flows (AAD, MGD) (E - F) | WRF Treatment Capacity (MGD) | | Pumped to 78" IPR Site (H-I) |
| | | | | | | | MBR* (G x 1.5) | IPR | |
| 1 | 0-5 years | 13 | 0 | 13 | 8 | 5 | 8 | 8 | 0 |
| 2 | 5-10 years | 16.7 | 2.5 | 19.2 | 8 | 11.2 | 17 | 8 | 9 |
| 3 | 10-15 years | 22 | 5 | 27 | 12 | 15 | 22 | 8 | 14 |
| Build Out | >15 years | 25.7 | 8.5 | 34.2 | 16 | 18.2 | 27 | 8 | 19 |

*MBR Phase 1 - MBR treating non-TSMC flows only with 8.0 MGD capacity for IPR

With the above wastewater flow forecasting and limited information on influent wastewater quality characteristics, AECOM applied industry best practices in treatment technology to develop the WRF Process Flow Diagram (Figure 2 on page 9 of this report) for all phases through Build-Out. Specifically:

- In Phase 1, the assumed 8 MGD of wastewater flow will be treated through the WRF including advanced treatment for IPR. The IPR injection and extraction will be accomplished on-site adjacent to the WRF. The anticipated on-site 8 MGD capacity for IPR injection is only an estimate based on available land size and preliminary geotechnical data. *Further hydrogeological analysis of the WRF site is required to determine the actual IPR injection capacity, which may be more or less.*
- For subsequent phases, WRF MBR capacity is expanded from 8 to 27 MGD in three phases (8 to 17 MGD, 17 to 22 MGD, and 22 to 27 MGD). However, due to site space restrictions, a maximum of 8 MGD is assumed to be treated at the WRF site through IPR. WRF MBR effluent beyond 8 MGD would therefore need to be pumped and conveyed to an offsite IPR treatment facility at or near the 78" IPR Site. *Per the previous assumption, if the WRF site is determined through site investigations to not fully accommodate 8 MGD of IPR, MBR effluent will need to be pumped and conveyed to the offsite IPR facility sooner than planned, and lead to higher costs than otherwise contemplated in this analysis.*
- Conceptual-level ROM costs associated with the treatment and infiltration infrastructure at the North Gateway site, conveyance of the MBR effluent to the 78" IPR Site, cost of land for the 78" IPR site, treatment, and infiltration infrastructure at the 78" IPR Site are included in Appendix A.
- At the 78" IPR Site, an estimated 510 acres may be required for the new IPR facilities (including areas for injection and extraction wells and reverse osmosis (RO) brine evaporation ponds). The conveyance of IPR water from WRF to the 78" IPR Site may require approximately 40 acres of dual 24-inch pipeline easements. Based on this concept, *the approximate land acquisition requirements are forecasted to be the following:*

- Phase 1 – WRF & IPR facilities onsite (all facilities are located on City property with no expected land cost).
- Phase 2 - 170 acres for the offsite IPR facilities and 20 acres for the pipeline easement (190 acres total).
- Phase 3 - 170 acres for the offsite IPR facilities and 20 acres for the pipeline easement (190 acres total).
- Build-Out - 170 acres for the offsite IPR facilities (no additional pipeline easements).

The process flow diagram illustrated in Figure 2 presents an MBR-based wastewater process. The treated effluent flows up to 8 MGD are being directed to onsite IPR. Flows greater than 8 MGD are instead directed to an offsite facility at or near the 78" IPR Site (Figure 1). At both IPR sites, IPR-treated water facilities will be installed to treat and convey IPR back to the City's water distribution system. In general, WRF concepts and treatment processes have been developed based on the following assumptions:

- Raw influent wastewater will be received in an influent pump station, and pumped to a preliminary and primary treatment system, followed by a bioreactor inclusive of an MBR process that will provide the high-quality tertiary effluent suitable for subsequent IPR treatment. Biosolids would be conveyed and treated on-site with anaerobic digestion and dewatering.
- In Phase 1, up to 8.0 MGD of domestic wastewater treated via the MBR process with Class A+ effluent will be directed to an IPR treatment facility located at the WRF site. The IPR processes will include RO and UV disinfection / advanced oxidation (UVAOP). IPR-treated water will be injected into the groundwater aquifer by injection wells and extracted for potable reuse.
- When greater than 8.0 MGD of treated effluent is produced from the MBR, a pump station and pipeline will be required to convey IPR flow offsite for additional IPR treatment and injection/extraction facilities.
- Based upon preliminary data provided by the City, the injection wells or infiltration basins may be constructed at an IPR site north of the North Phoenix 3,500 Development site near the 78" Water Transmission where the City has been conducting hydrogeologic studies to accept pre-treated TSMC IPR flows.
- IPR transmission line and pump station would convey MBR treated water from WRF to the 78" IPR Site.

Table 2 summarizes the capacity expansion and where MBR, solids, and IPR treatment will be addressed for each phase of the project.

| Table 2: North Gateway WRF Expansion Summary | | | | | |
|--|--------------------------|----------------------|--------------------------|--|---|
| Phase | New Incr. Capacity (MGD) | Total Capacity (MGD) | MBR and Solids Treatment | IPR Treatment and Infiltration at North Gateway Site (MGD) | IPR Treatment and Infiltration Off Site (MGD) |
| Phase 1 | 8 | 8 | At North Gateway Site | 8 | 0 |
| Phase 2 | 9 | 17 | | 8 | 9 |
| Phase 3 | 5 | 22 | | 8 | 14 |
| Build-Out | 5 | 27 | | 8 | 19 |

The wastewater flow projections in Table 1 also include flows from the two TSMC fab facilities that are currently under construction. These TSMC fab facilities are expected to generate up to 8 MGD in the next few years and increase over time to an ultimate flow of 16 MGD. TSMC industrial flows cannot be directly processed in MBR facilities due to the composition of TSMC's waste and instead are expected to be pre-treated onsite by TSMC and conveyed to offsite wastewater facilities (possibly WRF for further treatment). *As noted above, the WRF site may not have the space capacity to implement IPR above 8 MGD. It is possible that all or a portion of that IPR capacity is utilized by TSMC or other parties during Phase 1. If the WRF IPR capacity, net of TSMC, is not sufficient for Phase 1 of the Auction Property's anticipated wastewater outflow, the excess treated domestic wastewater would need to be pumped to the 78" IPR Site, and that facility would have to be constructed much sooner and therefore lead to higher costs than otherwise contemplated.*

The WRF is planned to be constructed at a site owned by the City (Figure 3) adjacent to I-17 just North of the Central Arizona Project canal. Lift Station 66 is located on this site and will need to be considered in the layout of the WRF. In addition, the preliminary WRF site layout (see Figure 4 on page 10 of this report) is constrained between two natural drainage channels.



Figure 3: Proposed North Gateway WRF Site

The WRF site is located on approximately 206 acres of City-owned property, and is expected to incorporate the WRF footprint along with the IPR vadose wells (extraction and recovery) adjacent to the natural drainage channels flanking the site and just north across the frontage road. *To obtain the necessary construction area, the WRF site may require flood mitigation measures to minimize/eliminate the floodplain footprint in the area.* The WRF footprint is anticipated to need

approximately 50 to 80 acres to construct the WRF facilities with an ultimate MBR capacity of 27 MGD. The IPR groundwater well system area requirements need further hydrogeological investigation. Figure 4 illustrates the WRF layout through full buildout. *The WRF concept is based on the following assumptions described below:*

- Wastewater MBR Treatment Plant full Build-Out design flow of 27 MGD AAD with phasing shown in Table 1.
- The raw wastewater flows into the MBR Treatment Plant is primarily domestic wastewater strength with acknowledged influences from industrial facilities other than TSMC. These industrial and manufacturing flows (exclusive of TSMC industrial flows) have not been quantified as to the specific impacts on influent wastewater Total Suspended Solids (TSS), Biological Oxygen Demand (BOD), or other characteristics that may require onsite pre-treatment.
- TSMC initial 8 MGD of industrial/manufacturing flows is expected to be pre-treated at the TSMC site, and then conveyed to WRF or the 78" IPR Site, for IPR treatment.
- The North Gateway IPR Treatment Facility has a design flow of 8 MGD.
- The IPR concept is for recharge wells and recovery pumping wells to recharge/recover approximately 8 MGD of IPR water adjacent to the WRF site.
- Subject to ultimate capacity needs and further hydrogeologic testing, Phase 1 WRF facilities can be placed in their entirety on the City of Phoenix land.
- Though the IPR treatment at the WRF site is limited to 8 MGD, the MBR component will be expandable to 27 MGD. The phased expansion of this MBR facility is included in the Appendix A cost estimate based upon conceptual flows outlined in Table 1.
- Adequate power supply for the WRF is at/near the site. As of the date of this report, Arizona Public Service (APS) has not confirmed adequate power is available nor when it would be available if additional infrastructure is required.
- WRF site improvement is based on known general site conditions in the area including mitigations for a natural flood channel along the west and east side of the site.
- The existing WRF site is assumed to have no contaminated soils or groundwater at the site.
- No significant offsite utility extensions, conveyance, and/or roadway/site improvements are considered in the construction cost estimate at this time.

Based on the above WRF concept and assumptions, AECOM prepared a conceptual ROM capital construction, engineering, and other project costs for the WRF based on the flows shown in Table 1. To assist in the preparation of this ROM Project cost estimate, AECOM also referenced costs from recent projects (Table 3) where AECOM was involved in the planning, design, procurement, and construction of these projects. Relevant project costs (Table 3) do not consider major offsite improvements including conveyance, land acquisition, and other items which are included in the WRF project cost estimate after Phase 1. For the WRF ROM project cost estimate, AECOM compared the phase cost per gallon to provide some level of comparison of these recent projects that have similarities to WRF.

| Table 3: Relevant Project Cost Analysis | | | | | |
|---|------------|-------------------|---------------------|-----------------------------|---------------|
| Project Name | Location | Design Flow (MGD) | Project Stage | Estimated Construction Cost | \$ per Gallon |
| East County JPA AWP | California | 16 | Construction | \$460M | \$28.75 |
| HRSD James River | Virginia | 16 | Construction | \$468M | \$29.25 |
| South Coast WRF | Barbados | 2.3 | Design/ Procurement | \$100M | \$43.5 |
| One Water Nevada | Reno, NV | 2.2 | Design | \$86M | \$39.1 |

Table 4 summarizes the ROM project cost estimate (Appendix A) for each phase reaching a total of 27 MGD at full buildout. *The ROM project cost estimate incorporates 50% contingencies to account for the conceptual design level development and that no site-specific wastewater quality, engineering and/or site characteristic information has been developed.* This level of contingency is consistent with other projects of similar project concept development.

The cost of land and the permanent easement used in the development of the ROM Project Cost is estimated to be \$80,000 per acre for undeveloped land. The land cost could be higher or lower based upon market conditions. WRF ROM project cost estimate for each phase is detailed in Appendix A and summarized below.

| Table 4: WRF ROM Project Cost Estimate | | | | | |
|--|-----------------------------|--------------------------|--------------------------|----------------------------|---------------------------------|
| Phase | N. Phoenix 3,500 Time Frame | Total WRF Capacity (MGD) | Added WRF Capacity (MGD) | Est. ROM Project Cost (\$) | \$ per Gallon of Added Capacity |
| 1 | 0-5 years | 8 | 8 | \$321.4M | \$40 |
| 2 | 5-10 years | 17 | 9 | \$386.9M | \$43 |
| 3 | 10-15 years | 22 | 5 | \$334.9M | \$67 |
| Build Out | >15 years | 27 | 5 | \$244.9M | \$49 |
| Total | | 27 | | \$1,288.3M | \$48 |

As stated earlier, pretreatment, conveyance, and IPR facilities option(s) related to TSMC's industrial flows have not been fully considered in the above ROM project cost estimates.

The foregoing forward-looking project and construction cost estimates reflect AECOM's views and assumptions with respect to future events as of the date of this letter and are subject to future economic conditions, and other risks and uncertainties. Actual and future results and trends could differ materially from those set forth in such statements due to various factors, including, without limitation, those discussed in this letter. These factors are beyond AECOM's ability to control or predict. Accordingly, AECOM makes no warranty or representation that any of the projected values or results contained in the letter will actually occur or be achieved. This concept report is qualified in its entirety by and should be considered in light of, these limitations, conditions, and considerations. Accordingly, any third party authorized to rely on this concept report may do so only on the condition that the third party accepts full responsibility for such use and strictly complies with the attached Reliance Letter. The Reliance Letter is made part of this letter and shall be signed by any third party (i.e., prospective bidder) prior to its receipt of the North Gateway WRF Concept Report.

We appreciate the opportunity to provide a high-level review of the North Gateway Water Reclamation Facility treatment process concepts for MBR and IPR facilities along with a total ROM project cost estimate. If you have any questions, please do not hesitate to contact me at (719) 440-5287 or my email address below.

Sincerely,
AECOM Technical Services, Inc.



Tim Volz, PE
Principal in-Charge
tim.volz@aecom.com

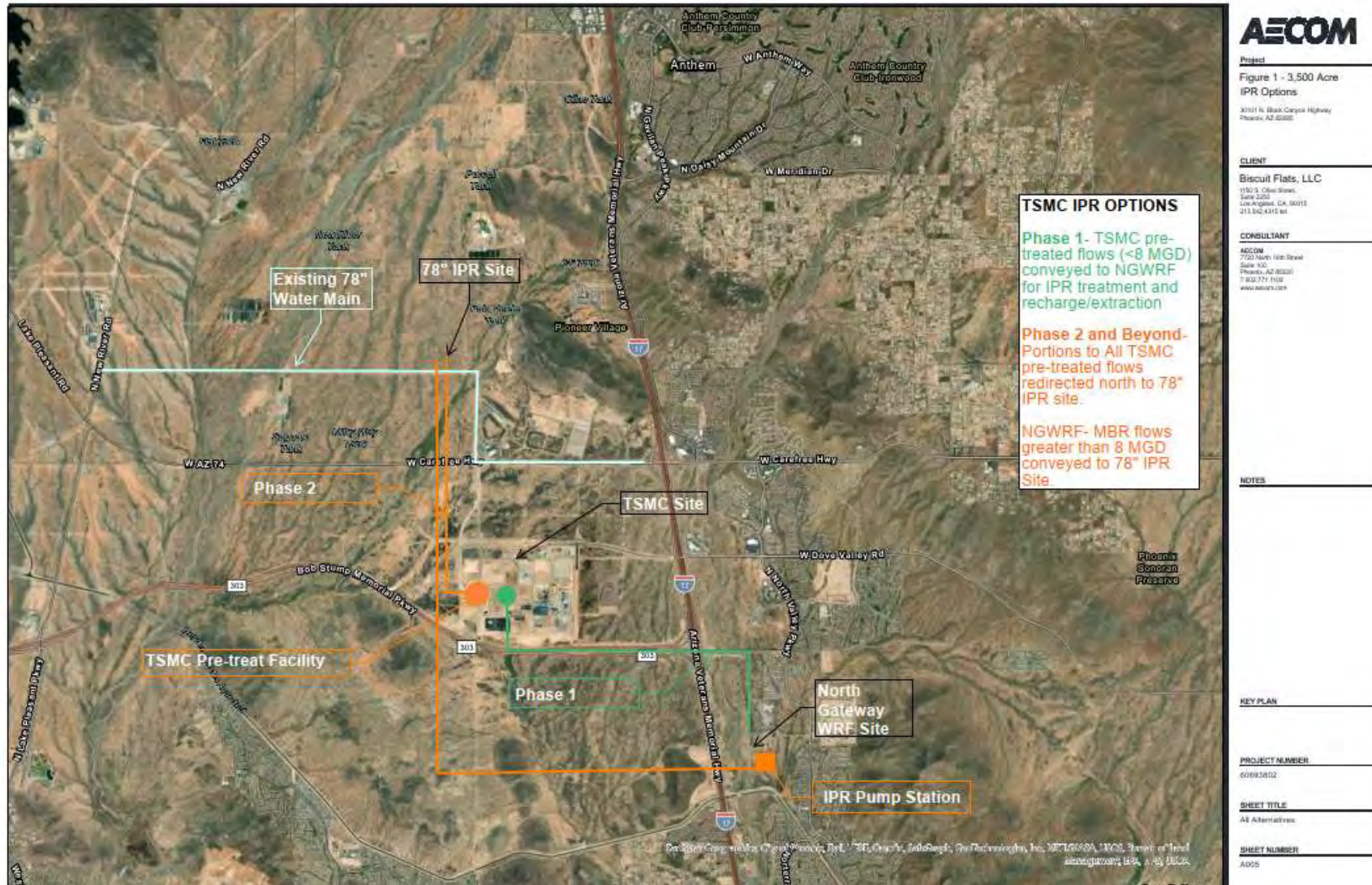


Figure 1 – TSMC IPR Phases

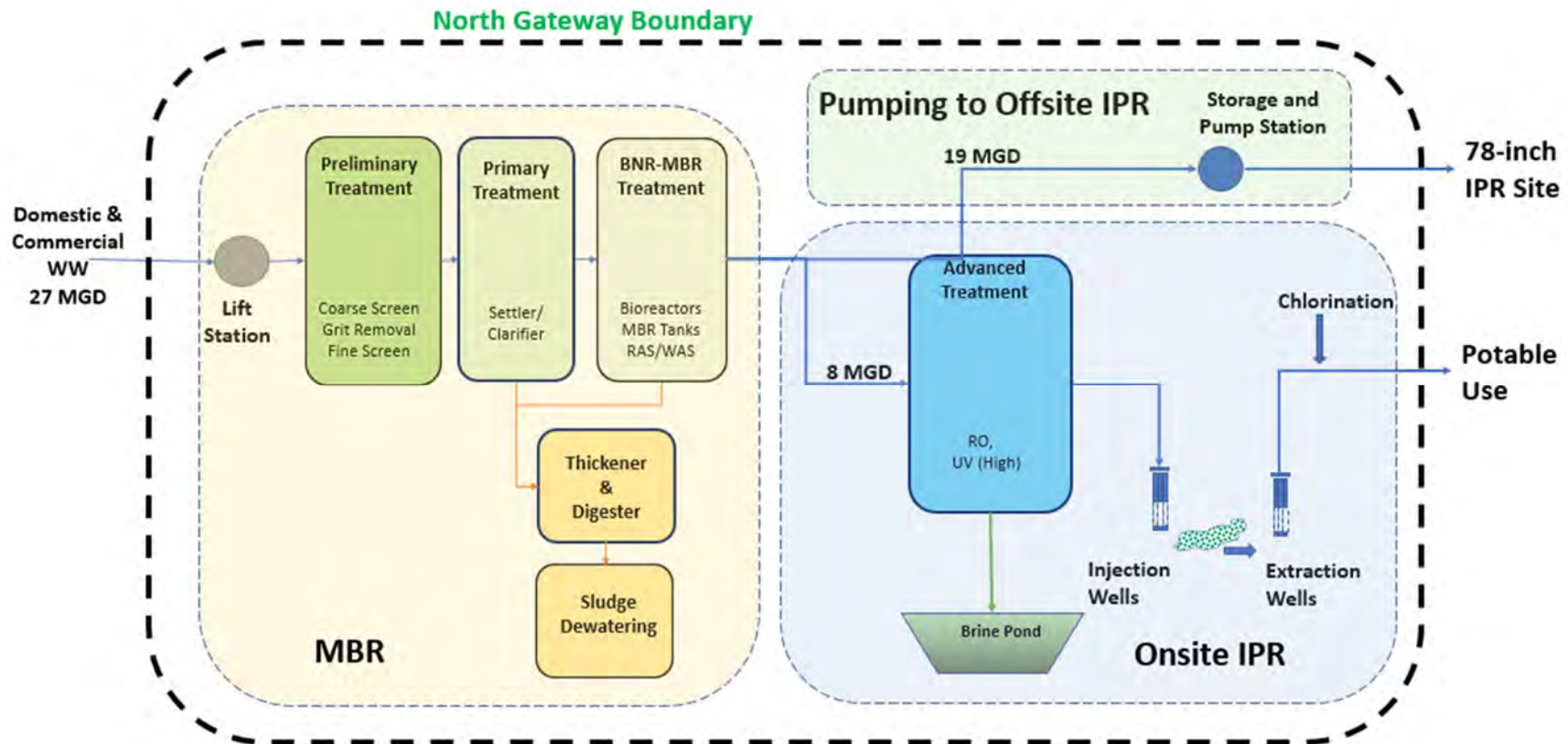


Figure 2 – North Gateway Water Reclamation Facility – Process Flow Diagram (27 MGD)



Figure 4 - Figure 4: North Gateway WRF Preliminary Site Layout

Appendix – A

ROM Project Cost Estimates

| Phase 1: North Gateway Water Reclamation Facility Cost Estimate | | | |
|---|--------------------------|--------------------------|--------------------------|
| Description | MBR Onsite Facility Cost | IPR Onsite Facility Cost | Total WRF Cost MBR + IPR |
| Total Plant Capacity, MGD | 8 | 8 | 8 |
| Added Capacity, MGD | 8 | 8 | 8 |
| | | | |
| WRF Facility Costs | | | |
| Facility Process and Supporting Equipment | \$ 53,981,000 | \$ 50,117,000 | \$ 104,098,000 |
| Facility Structures | \$ 12,848,000 | \$ 14,208,000 | \$ 27,056,000 |
| Pipeline and Pump Station Offsite Conveyance | | | |
| Site Civil | \$ 13,366,000 | \$ 11,578,500 | \$ 24,944,500 |
| Subtotal Facilities Cost | \$ 80,195,000 | \$ 75,903,500 | \$ 156,098,500 |
| Contractor Overhead & Profit | \$ 13,834,000 | \$ 13,093,000 | \$ 26,927,000 |
| WRF Construction Cost Est. Subtotal | \$ 94,029,000 | \$ 88,996,500 | \$ 183,025,500 |
| | | | |
| Contingency (50%) | \$ 47,015,000 | \$ 44,498,500 | \$ 91,513,500 |
| WRF Construction Est. Total Cost | \$ 141,044,000 | \$ 133,495,000 | \$ 274,539,000 |
| | | | |
| Project Design and Admin. Costs | | | |
| Engineering Design | \$ 11,283,480 | \$ 10,679,640 | \$ 21,963,120 |
| Escalation to midpt Construction | \$ 4,701,450 | \$ 4,449,850 | \$ 9,151,300 |
| Sales Tax | \$ 8,086,494 | \$ 7,653,742 | \$ 15,740,236 |
| Land Aquistion | \$ - | \$ - | \$ - |
| WRF Design and Admin Est. Total Cost | \$ 24,071,424 | \$ 22,783,232 | \$ 46,854,656 |
| | | | |
| Total Project Cost Estimate | \$ 165,115,424 | \$ 156,279,000 | \$ 321,394,424 |
| | | | |
| Cost per gallon of added capacity | \$ 21.00 | \$ 20.00 | \$ 40.00 |

| Phase 2: North Gateway Water Reclamation Facility Cost Estimate | | | |
|---|--------------------------|---------------------------|--------------------------|
| Description | MBR Onsite Facility Cost | IPR Offsite Facility Cost | Total WRF Cost MBR + IPR |
| Total Plant Capacity, MGD | 17 | 17 | 17 |
| Added Capacity, MGD | 9 | 9 | 9 |
| | | | |
| WRF Facility Costs | | | |
| Facility Process and Supporting Equipment | \$ 48,277,000 | \$ 59,579,474 | \$ 107,856,474 |
| Facility Structures | \$ - | \$ 30,110,000 | \$ 30,110,000 |
| Pipeline and Pump Station Offsite Conveyance | | \$ 16,805,600 | \$ 16,805,600 |
| Site Civil | \$ 9,655,400 | \$ 16,144,105 | \$ 25,799,505 |
| Subtotal Facilities Cost | \$ 57,932,400 | \$ 122,639,179 | \$ 180,571,579 |
| Contractor Overhead & Profit | \$ 9,993,270 | \$ 21,155,228 | \$ 31,148,498 |
| WRF Construction Cost Est. Subtotal | \$ 67,925,670 | \$ 143,794,407 | \$ 211,720,077 |
| | | | |
| Contingency (50%) | \$ 33,962,500 | \$ 71,897,000 | \$ 105,859,500 |
| WRF Construction Est. Total Cost | \$ 101,888,170 | \$ 215,691,407 | \$ 317,579,577 |
| | | | |
| Project Design and Admin. Costs | | | |
| Engineering Design | \$ 8,151,000 | \$ 17,255,280 | \$ 25,406,280 |
| Escalation to midpt Construction | \$ 3,396,250 | \$ 7,189,700 | \$ 10,585,950 |
| Sales Tax | \$ 5,841,550 | \$ 12,366,284 | \$ 18,207,834 |
| Land Aquisition | \$ - | \$ 15,200,000 | \$ 15,200,000 |
| WRF Design and Admin Est. Total Cost | \$ 17,388,800 | \$ 52,011,264 | \$ 69,400,064 |
| | | | |
| Total Project Cost Estimate | \$ 119,276,970 | \$ 267,702,671 | \$ 386,979,641 |
| | | | |
| Cost per gallon of added capacity | \$ 13.00 | \$ 30.00 | \$ 43.00 |

| Phase 3: North Gateway Water Reclamation Facility Cost Estimate | | | |
|---|--------------------------|---------------------------|--------------------------|
| Description | MBR Onsite Facility Cost | IPR Offsite Facility Cost | Total WRF Cost MBR + IPR |
| Total Plant Capacity, MGD | 22 | 22 | 22 |
| Added Capacity, MGD | 5 | 5 | 5 |
| | | | |
| WRF Facility Costs | | | |
| Facility Process and Supporting Equipment | \$ 39,640,500 | \$ 41,294,474 | \$ 80,934,974 |
| Facility Structures | \$ 9,344,000 | \$ 30,110,000 | \$ 39,454,000 |
| Pipeline and Pump Station Offsite Conveyance | | \$ 14,305,600 | \$ 14,305,600 |
| Site Civil | \$ 9,796,900 | \$ 12,852,805 | \$ 22,649,705 |
| Subtotal Facilities Cost | \$ 58,781,400 | \$ 98,562,879 | \$ 157,344,279 |
| Contractor Overhead & Profit | \$ 10,139,723 | \$ 17,002,118 | \$ 27,141,840 |
| WRF Construction Cost Est. Subtotal | \$ 68,921,123 | \$ 115,564,997 | \$ 184,486,119 |
| | | | |
| Contingency (50%) | \$ 34,460,500 | \$ 57,782,500 | \$ 92,243,000 |
| WRF Construction Est. Total Cost | \$ 103,381,623 | \$ 173,347,497 | \$ 276,729,119 |
| | | | |
| Project Design and Admin. Costs | | | |
| Engineering Design | \$ 8,270,520 | \$ 13,867,800 | \$ 22,138,320 |
| Escalation to midpt Construction | \$ 3,446,050 | \$ 5,778,250 | \$ 9,224,300 |
| Sales Tax | \$ 5,927,206 | \$ 5,778,250 | \$ 11,705,456 |
| Land Aquistion | | \$ 15,200,000 | \$ 15,200,000 |
| WRF Design and Admin Est. Total Cost | \$ 17,643,776 | \$ 40,624,300 | \$ 58,268,076 |
| | | | |
| Total Project Cost Estimate | \$ 121,025,399 | \$ 213,971,797 | \$ 334,997,195 |
| | | | |
| Cost per gallon of added capacity | \$ 24.00 | \$ 43.00 | \$ 67.00 |

| Build-Out Phase: North Gateway Water Reclamation and Off Site IPR Facilities | | | |
|--|--------------------------|---------------------------|--------------------------|
| Description | MBR Onsite Facility Cost | IPR Offsite Facility Cost | Total WRF Cost MBR + IPR |
| Total Plant Capacity, MGD | 27 | 27 | 27 |
| Added Capacity, MGD | 5 | 5 | 5 |
| | | | |
| WRF Facility Costs | | | |
| Facility Process and Supporting Equipment | \$ 38,640,000 | \$ 39,882,000 | \$ 78,522,000 |
| Facility Structures | \$ - | \$ 16,030,000 | \$ 16,030,000 |
| Pipeline and Pump Station Offsite Conveyance | | \$ 1,000,000 | \$ 1,000,000 |
| Site Civil | \$ 7,728,000 | \$ 10,064,160 | \$ 17,792,160 |
| Subtotal Facilities Cost | \$ 46,368,000 | \$ 66,976,160 | \$ 113,344,160 |
| Contractor Overhead & Profit | \$ 7,998,480 | \$ 11,553,360 | \$ 19,551,840 |
| WRF Construction Cost Est. Subtotal | \$ 54,366,480 | \$ 78,529,520 | \$ 132,896,000 |
| | | | |
| Contingency (50%) | \$ 27,183,000 | \$ 39,264,500 | \$ 66,447,500 |
| WRF Construction Est. Total Cost | \$ 81,549,480 | \$ 117,794,020 | \$ 199,343,500 |
| | | | |
| Project Design and Admin. Costs | | | |
| Engineering Design | \$ 6,523,920 | \$ 9,423,480 | \$ 15,947,400 |
| Escalation to midpt Construction | \$ 2,718,300 | \$ 3,926,450 | \$ 6,644,750 |
| Sales Tax | \$ 4,675,476 | \$ 4,675,476 | \$ 9,350,952 |
| Land Aquistion | | \$ 13,600,000 | \$ 13,600,000 |
| WRF Design and Admin Est. Total Cost | \$ 13,917,696 | \$ 31,625,406 | \$ 45,543,102 |
| | | | |
| Total Project Cost Estimate | \$ 95,467,176 | \$ 149,419,426 | \$ 244,886,602 |
| | | | |
| Cost per gallon of added capacity | \$ 19.00 | \$ 30.00 | \$ 49.00 |

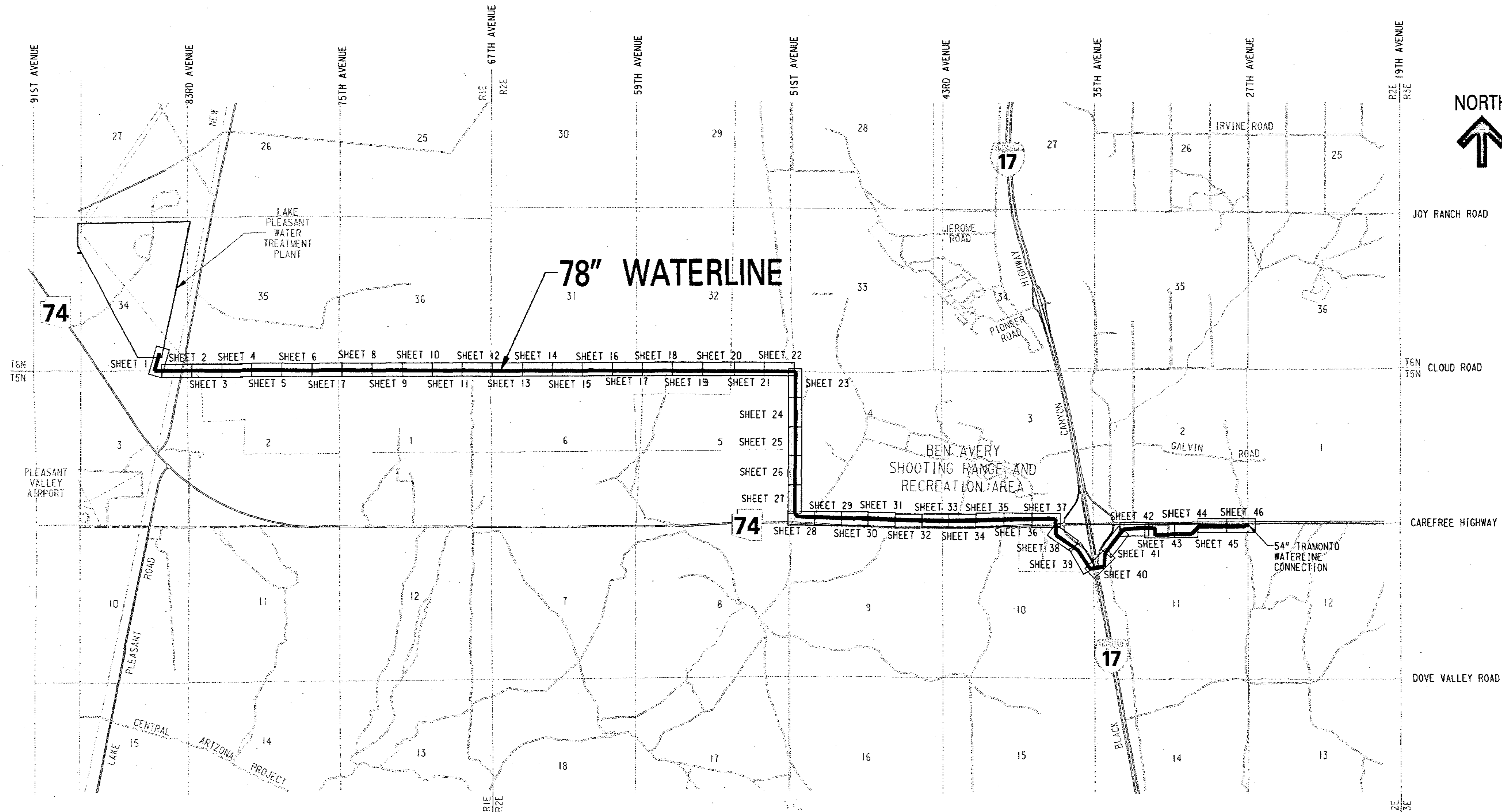
APPENDIX H:

PAGES FROM 78-INCH LAKE PLEASANT WATER LINE PLAN

| REVISION BY CITY OF PHOENIX | | |
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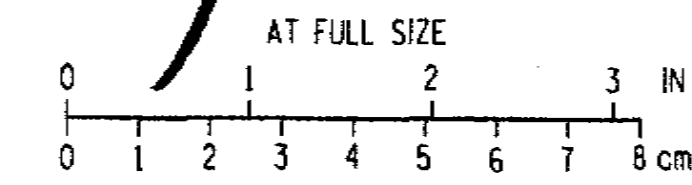
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|-----------------------------|-------------|-------------------|
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| REVISION BY CITY OF PHOENIX | | |
|-----------------------------|-------------|-------------------|
| NO. | DESCRIPTION | REV BY/CD BY DATE |
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SHEET KEY MAP
NTS

15-2006-0068(2896)



CITY OF PHOENIX, ARIZONA
WATER SERVICES DEPARTMENT

Stanley Consultants INC.
2025 East Camelback Road, Suite 130
Phoenix, Arizona 85016-4425
www.stanleygroup.com



78" LAKE PLEASANT WATERLINE
LAKE PLEASANT WATER TREATMENT PLANT
TO THE 54" TRAMONTO WATERLINE
WS85500156

| SHEET KEY MAP | | | | | | | | |
|---------------|-----|------------|----|------------|-----|-----------|--------------|----------|
| DR | JJO | DES | DH | CK | LJL | SHEET NO. | TOTAL SHEETS | AS BUILT |
| DATE: 9-04 | | DATE: 9-04 | | DATE: 9-04 | | G2 | 2 OF 91 | |
| SCALE: NONE | | | | | | | | |

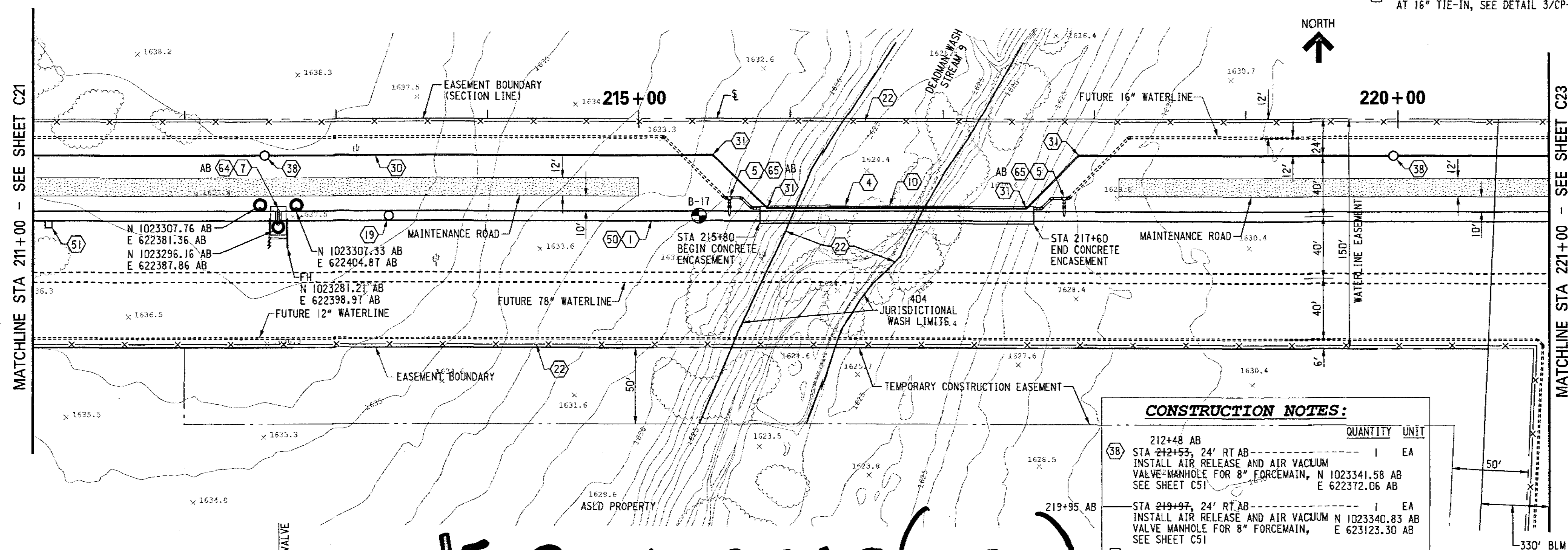
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|-----|-------------|--------|--------|------|
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| | | | | |
| | | | | |

| NO. | DESCRIPTION | REV BY | CHK BY | DATE |
|-----|-------------|--------|--------|------|
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| NO. | DESCRIPTION | REV BY | CHK BY | DATE |
|-----|-------------|--------|--------|------|
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| NO. | DESCRIPTION | REV BY | CHK BY | DATE |
|-----|-------------|--------|--------|------|
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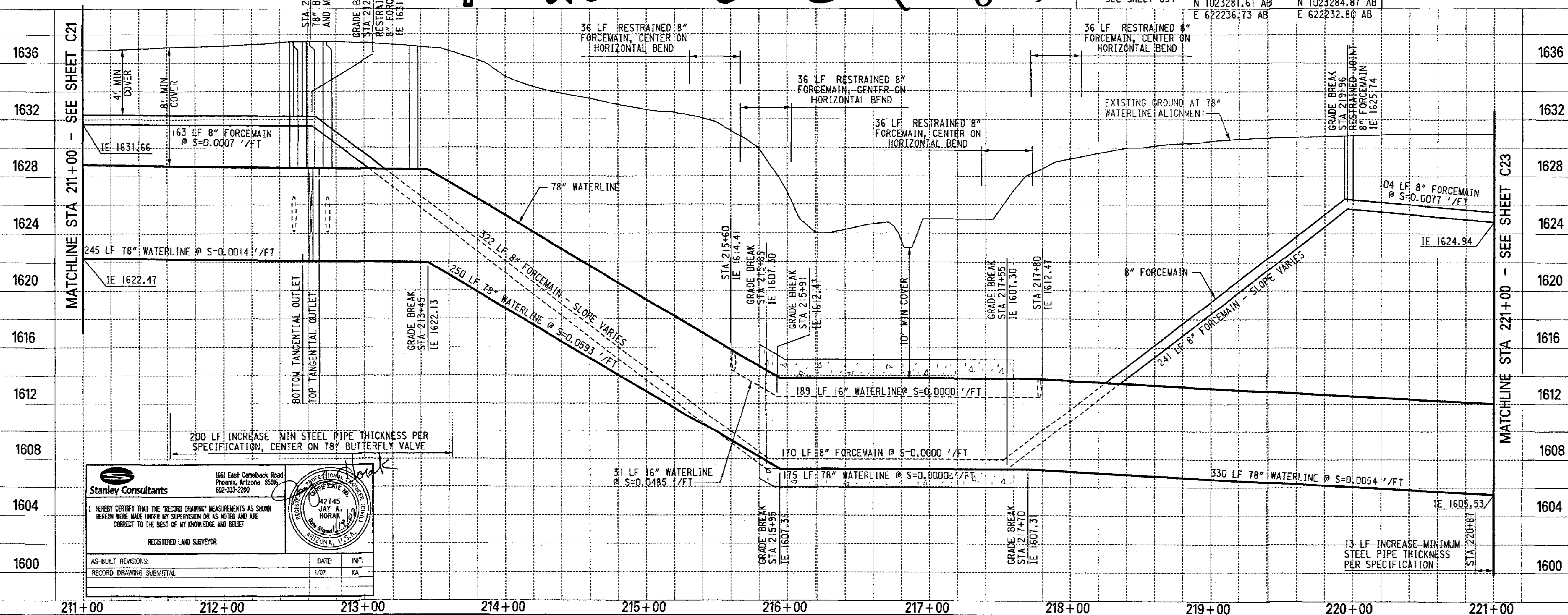
- AB 64 212+52 - ISOLATING JOINT TEST STATION
AT BFV, SEE DETAIL 3/CP-2
- AB 65 215+60 - ISOLATING JOINT TEST STATION
AT 16" TIE-IN, SEE DETAIL 3/CP-4
- AB 65 217+80 - ISOLATING JOINT TEST STATION
AT 16" TIE-IN, SEE DETAIL 3/CP-4



CONSTRUCTION NOTES:

| | QUANTITY | UNIT |
|---|----------|------|
| 38 212+48 AB | 1 | EA |
| STA 212+53, 24' RT AB | 1 | EA |
| INSTALL AIR RELEASE AND AIR VACUUM | | |
| VALVE MANHOLE FOR 8" FORCEMAIN, N 1023341.58 AB | | |
| SEE SHEET C51 | | |
| STA 219+97, 24' RT AB | 1 | EA |
| INSTALL AIR RELEASE AND AIR VACUUM | | |
| VALVE MANHOLE FOR 8" FORCEMAIN, N 1023340.83 AB | | |
| SEE SHEET C51 | | |
| 50 INSTALL FIBEROPTIC DUCTS | 1,000 | LF |
| 211+04, 81'R AB | | |
| 51 STA 211+10, 64' RT | 1 | EA |
| INSTALL FIBEROPTIC HANDHOLES | | |
| SEE SHEET C54 | | |
| N 1023281.61 AB | | |
| E 622236.73 AB | | |
| N 1023284.87 AB | | |
| E 622232.80 AB | | |

15-20006-0068 (27896)



CITY INDEX NO. W985500156

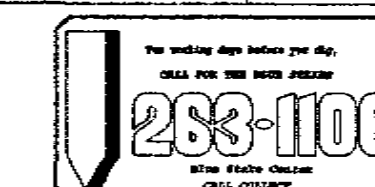
CONSTRUCTION NOTES:

| | QUANTITY | UNIT |
|---|-----------------|------|
| 1 INSTALL 78" WATERLINE | 1,000 | LF |
| 4 INSTALL 16" WATERLINE | 237 | LF |
| 5 STA 215+60, 58' RT 215+62, 59'R AB | N 1023305.70 AB | EA |
| 78" x 78" x 16" TANGENTIAL OUTLET | E 622690.58 AB | EA |
| 16" GATE VALVE | | EA |
| 16" x 16" x 16" TEE | | EA |
| 16" BLIND FLANGE | | EA |
| 16" 45° BEND | | EA |
| STA 217+80, 58' RT 217+84, 59'R AB | N 1023305.26 AB | EA |
| 78" x 78" x 16" TANGENTIAL OUTLET | E 622312.43 AB | EA |
| 16" GATE VALVE | | EA |
| 16" x 16" x 16" TEE | | EA |
| 16" BLIND FLANGE | | EA |
| 16" 45° BEND | | EA |
| SEE SHEET C49 AND C51 | | |
| 7 STA 212+62, 64' RT 212+65, 69'R AB | | |
| INSTALL 78" BUTTERFLY VALVE | | |
| WITH VALVE MH INSTALLATION | | |
| SEE SHEET C47 AND C51 | | |
| 78" BUTTERFLY VALVE | 1 | EA |
| 6" DIA MANHOLE | 3 | EA |
| 6" TOP WITH RESTRAINED JOINTS | 42 | EA |
| 6" TOP TANGENTIAL FLANGED OUTLET | 1 | EA |
| 6" BOTTOM TANGENTIAL FLANGED OUTLET | 1 | EA |
| 6" VALVE (FL x FL) | 3 | EA |
| 6" 45° BEND | 2 | EA |
| 6" 90° BEND | 1 | EA |
| 6" x 6" TEE | 1 | EA |
| 6" FIRE HYDRANT (FURNISHED BY COP) | 1 | EA |
| BOX & COVER PER COP STD DETAIL P1391 | 3 | EA |
| TYPE 'A' DEBRIS CAP PER COP STD | 3 | EA |
| DETAIL P1165 TYPE 'A' | | |
| 30" SIDE ACCESS OUTLET | 2 | EA |
| 10 CONCRETE ENCASED 78" WATERLINE | 180 | LF |
| SEE SHEET 52 AND C51 | | |
| 19 STA 213+35, 64' RT AB | | |
| INSTALL AIR RELEASE AND AIR VACUUM | | |
| VALVE MH FOR 78" WATERLINE, N 1023300.88 AB | | |
| SEE SHEET C50 AND C51 | | |
| 22 DELINEATE AND FENCE WATERLINE | | NPI |
| EASEMENT AND 404 JURISDICTIONAL | | |
| WASH LIMITS AS SPECIFIED | | |
| 30 INSTALL 8" FORCEMAIN | 1,028 | LF |
| STA 215+49, 24' RT | | |
| INSTALL 8" 45° BEND | | |
| STA 215+85, 58' RT | | |
| INSTALL 8" 45° BEND | | |
| STA 217+55, 58' RT | | |
| INSTALL 8" 45° BEND | | |
| STA 217+90, 24' RT | | |
| INSTALL 8" 45° BEND | | |

CONSTRUCTION NOTES CONTINUED AT LEFT

COORDINATE TABLE

| NO. | DESCRIPTION | NORTHING | EASTING |
|-----|-------------|----------|---------|
| | | | |
| | | | |



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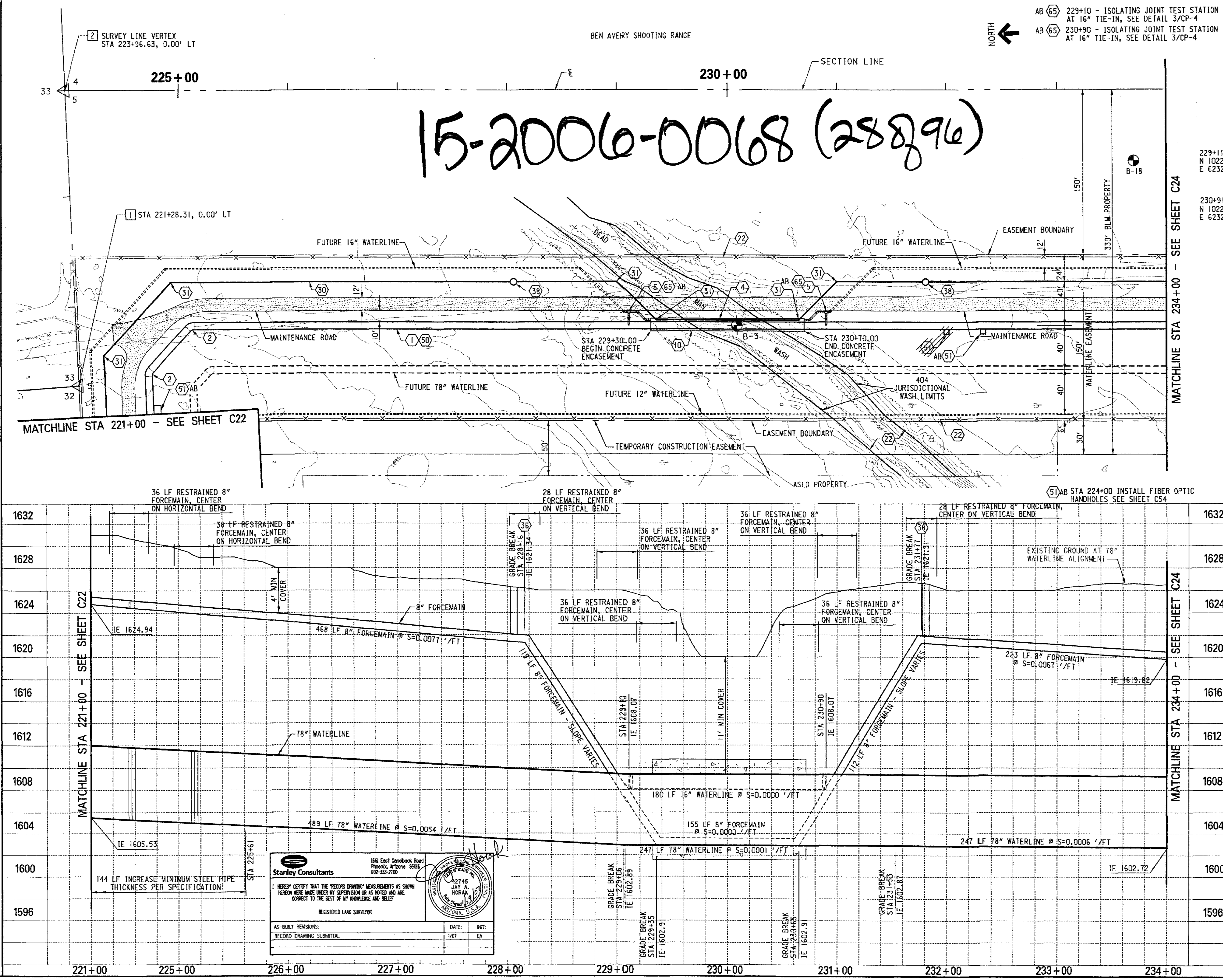
78" LAKE PLEASANT WATERLINE
LAKE PLEASANT WATER TREATMENT PLANT
TO THE 54" TRAMONTO WATERLINE
WS85500156

STA 211+00 TO STA 221+00

| DR | JWO | DES | DH | ICK | LUL | SHEET | TOTAL | AS |
|------------|------------|------------|------------|------------|------------|-------|----------|-------|
| DATE: 9-04 | DATE: 9-04 | DATE: 9-04 | DATE: 9-04 | DATE: 9-04 | DATE: 9-04 | C22 | 27 OF 91 | BUILT |

SCALE: 1" = 40' HORIZONTAL
4" VERTICAL

REVISION BY CITY OF PHOENIX
NO. DESCRIPTION REV BY CNO BY DATE
NO. DESCRIPTION REV BY CNO BY DATE
NO. DESCRIPTION REV BY CNO BY DATE
NO. DESCRIPTION REV BY CNO BY DATE



CITY INDEX NO. WS85500156

CONSTRUCTION NOTES:

| | QUANTITY | UNIT |
|---|----------|------|
| 1. INSTALL 78" WATERLINE | 983 | LF |
| 2. STA 221+37.03, 64' RT INSTALL 78" 44.93° BEND | 1 | EA |
| STA 225+11.36, 214' RT INSTALL 78" 47.74° BEND | 1 | EA |
| 4. INSTALL 16" WATERLINE | 226 | LF |
| 5. STA 229+10, 209' RT 78" x 78" x 16" TANGENTIAL OUTLET | 1 | EA |
| 229+11, 210' RT 16" x 16" x 16" TEE | 1 | EA |
| N 1022860.18 AB E 623291.01 AB 16" BLIND FLANGE | 1 | EA |
| 16" 45° BEND | 2 | EA |
| 230+91 AB N 1022680.83 AB E 623282.92 AB 78" x 78" x 16" TANGENTIAL OUTLET | 1 | EA |
| 16" GATE VALVE | 1 | EA |
| 16" x 16" x 16" TEE | 1 | EA |
| 16" BLIND FLANGE | 1 | EA |
| 16" 45° BEND | 2 | EA |
| SEE SHEET C49 AND CPI | | |
| 10. CONCRETE ENCASED 78" WATERLINE, SEE SHEET 52 AND CPI | 140 | LF |
| 22. DELINEATE AND FENCE WATERLINE EASEMENT AND 404 JURISDICTIONAL WASH LIMITS AS SPECIFIED | | NPI |
| 30. INSTALL 8" FORCEMAIN | 1080 | LF |
| 31. STA 221+53, 24' RT INSTALL 8" 45° BEND | 1 | EA |
| STA 222+18, 88.41' RT INSTALL 8" 45° BEND | 1 | EA |
| STA 229+00, 174' RT INSTALL 8" 45° BEND | 1 | EA |
| STA 229+35, 209' RT INSTALL 8" 45° BEND | 1 | EA |
| STA 230+65, 209' RT INSTALL 8" 45° BEND | 1 | EA |
| STA 231+00, 174' RT INSTALL 8" 45° BEND | 1 | EA |
| 36. STA 228+16 INSTALL 8" 11 1/4° VERTICAL BEND | 1 | EA |
| STA 231+77 INSTALL 8" 11 1/4° VERTICAL BEND | 1 | EA |
| 38. STA 228+06, 174' RT AB-227+95 AB INSTALL AIR RELEASE AND AIR VACUUM VALVE MH FOR 8" FORCEMAIN, N 1022974.30 AB SEE SHEET C51 | 1 | EA |
| STA 231+81, 174' RT 231+83, 173' R AB INSTALL AIR RELEASE AND AIR VACUUM VALVE MH FOR 8" FORCEMAIN N 1022587.28 AB SEE SHEET C51 | 1 | EA |
| 50. INSTALL FIBEROPTIC DUCTS 232+33, 229' R AB N 1022540.22 AB E 623256.73 AB | 983 | LF |
| 51. STA 232+00, 218' RT INSTALL FIBEROPTIC HANDHOLES, 232+37, 231' R AB SEE SHEET C54 | 1 | EA |
| N 1027535.55 AB E 623254.10 AB | | |

COORDINATE TABLE

| NO. | DESCRIPTION | NORTHING | EASTING |
|-----|------------------------|------------|-----------|
| 1 | SURVEY POINT GLO BC | 1023364.27 | 623257.00 |
| 2 | SURVEY POINT GLO BC | 1023364.26 | 623525.35 |

263-1100

CITY OF PHOENIX, ARIZONA
WATER SERVICES DEPARTMENT

Stanley Consultants inc.


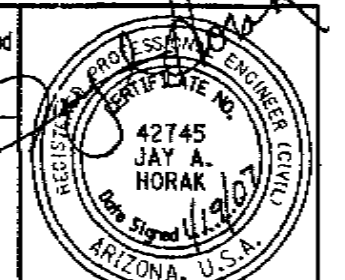
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Phoenix, Arizona 85016-4425
www.stanleygroup.com

78" LAKE PLEASANT WATERLINE
LAKE PLEASANT WATER TREATMENT PLANT
TO THE 54" TRAMONTO WATERLINE
WS85500156
STA 221+00 TO STA 234+00

| DR | JUN | DES | 04 | ICK | LJL | SHEET | TOTAL | AS |
|-------------|------|------------|------|-------|------|------------|----------|-------|
| DATE: | 9-04 | DATE: | 9-04 | DATE: | 9-04 | NO. | SHEETS | BUILT |
| SCALE: 1" = | 40' | HORIZONTAL | | | | C23 | 28 OF 91 | |
| | 4" | VERTICAL | | | | | | |

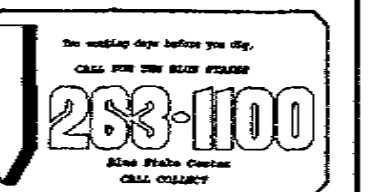
CONSTRUCTION NOTES:

| | QUANTITY | UNIT |
|---|----------|------|
| 1 INSTALL 78" WATERLINE ----- | 1,000 | LF |
| 19 STA 238+97, 214' RTAB | 1 | EA |
| INSTALL AIR RELEASE AND AIR VACUUM VALVE MH FOR 78" WATERLINE, N 1021872.23 AB SEE SHEET C50 AND CP1 E 623239.35 AB | | |
| 22 DELINEATE AND FENCE WATERLINE EASEMENT AND 404 JURISDICTIONAL WASH LIMITS AS SPECIFIED | | NP1 |
| 30 INSTALL 8" FORCEMAIN ----- | 1,000 | LF |
| 50 INSTALL FIBEROPTIC DUCTS ----- | 1,000 | LF |
| AB 60 238+97 - SMART TEST STATION, SEE DETAIL 1/CP-2 | | |

| | | |
|--|--|---|
|  1661 East Camelback Road Phoenix, Arizona 85016 602-355-2200 | |  |
| 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. | | |
| AS-BUILT REVISIONS: RECORD DRAWING SUBMITTAL | | DATE: 1/07 INT: KA |

COORDINATE TABLE

| NO. | DESCRIPTION | NORTHING | EASTING |
|--------------------------|-------------|----------|---------|
| <input type="checkbox"/> | | | |
| <input type="checkbox"/> | | | |



 CITY OF PHOENIX, ARIZONA
WATER SERVICES DEPARTMENT

 Stanley Consultants INC.
 2309 East Camelback Road
 Suite 130
 Phoenix, Arizona 85016-4405
 www.stanleygroup.com

78" LAKE PLEASANT WATERLINE
 LAKE PLEASANT WATER TREATMENT PLANT
 TO THE 54" TRAMONTO WATERLINE
 WS85500156
 STA 234+00 TO STA 244+00

| | | | | | |
|------------|------------|------------|-----------|--------------|----------|
| DR JJO | DES DH | CK LJL | SHEET NO. | TOTAL SHEETS | AS BUILT |
| DATE: 9-04 | DATE: 9-04 | DATE: 9-04 | C24 | 29 OF 91 | |

SCALE: 1" = 40' HORIZONTAL
 4' VERTICAL

BEN AVERY SHOOTING RANGE



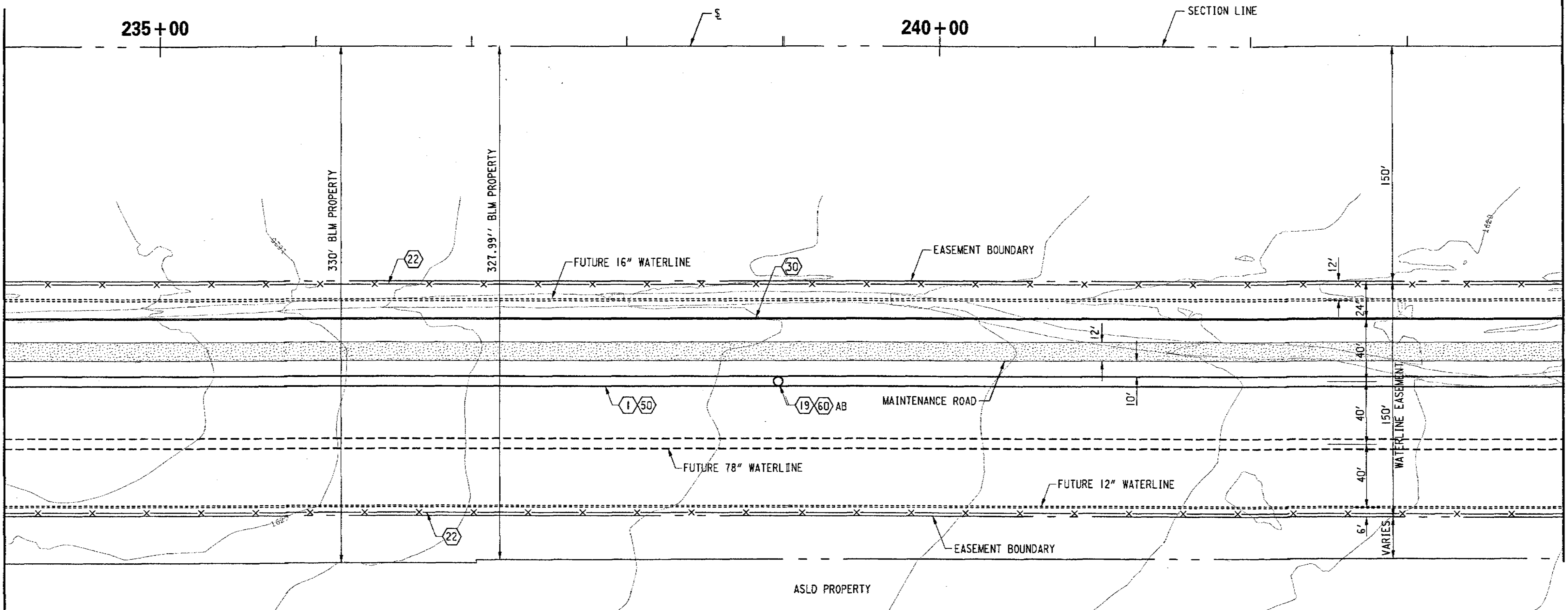
SECTION LINE

235+00

240+00

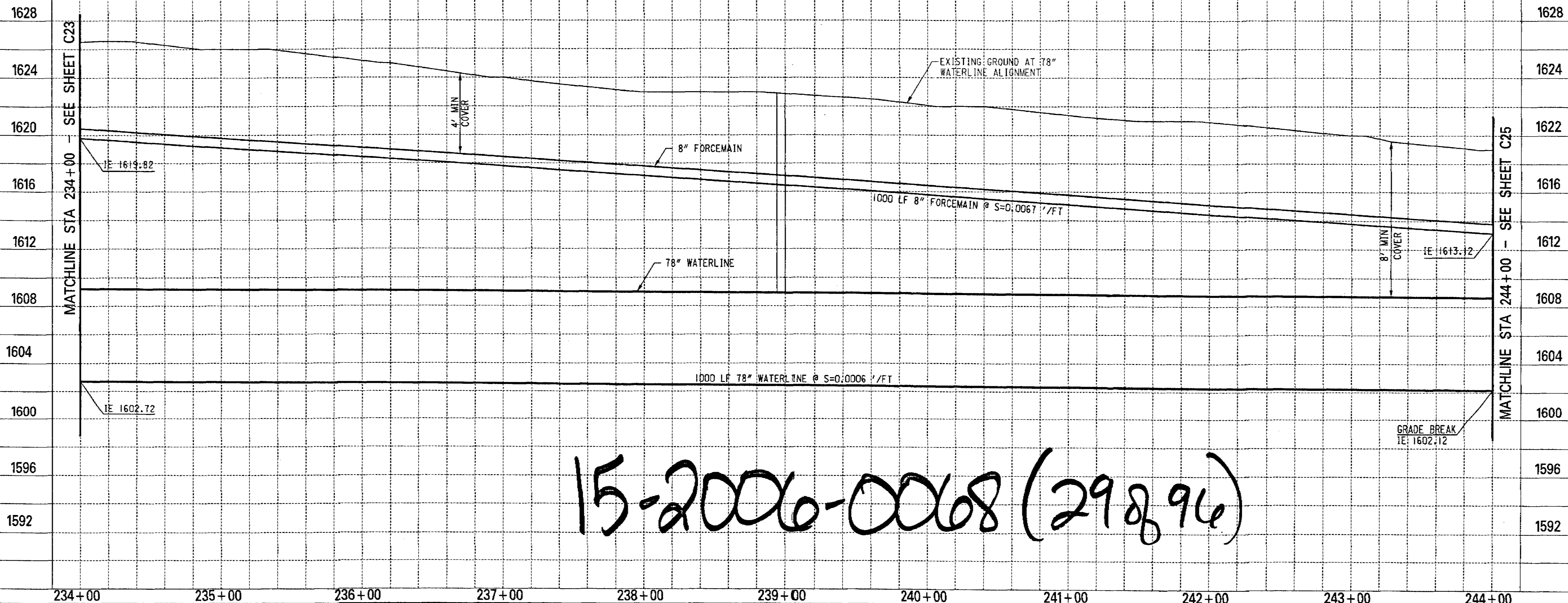
MATCHLINE STA 234+00 - SEE SHEET C23

MATCHLINE STA 244+00 - SEE SHEET C25



MATCHLINE STA 234+00 - SEE SHEET C23

MATCHLINE STA 244+00 - SEE SHEET C25



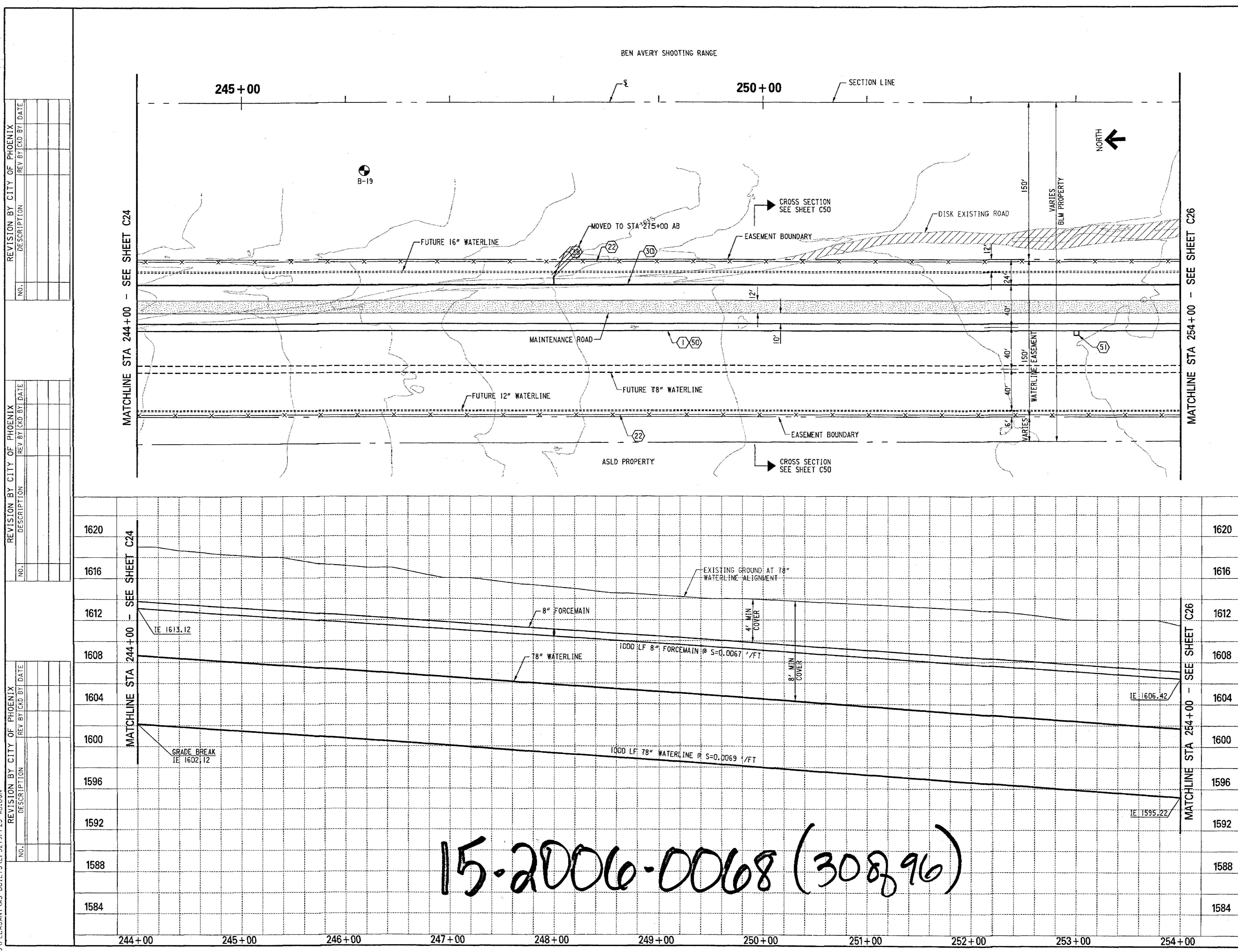
15-2006-0068 (29896)

REVISION BY CITY OF PHOENIX

REVISION BY CITY OF PHOENIX

REVISION BY CITY OF PHOENIX

REVISION BY CITY OF PHOENIX



CITY INDEX NO. WS85500156

CONSTRUCTION NOTES:

| | QUANTITY | UNIT |
|---|----------|------|
| 1 INSTALL 78" WATERLINE----- | 1,000 | LF |
| 22 DELINEATE AND FENCE WATERLINE EASEMENT AND 404 JURISDICTIONAL WASH LIMITS AS SPECIFIED | | NP1 |
| 30 INSTALL 8" FORCEMAIN----- | 1,000 | LF |
| 39 STA 248+00, 174' RT- 275+00, 200'R AB INSTALL 8" FORCEMAIN STUB OUT, SEE SHEET C51 | | |
| 8" x 8" TEE----- | 1 | EA |
| 8" PLUG VALVE----- | 1 | EA |
| 8" PLUG----- | 1 | EA |
| BOX & COVER PER MAG STD DETAIL 270-- | 1 | EA |
| 50 INSTALL FIBEROPTIC DUCTS----- | 1,000 | LF |
| 51 STA 253+00, 210' RT- INSTALL FIBEROPTIC HANDHOLES, SEE SHEET C54 | 1 | EA |
| 252+90, 231 R AB N 1020485.49 AB E 623155.93 AB | | |
| 252+94, 234 R AB N 1020481.26 AB E 623153.04 AB | | |

1651 East Camelback Road
Phoenix, Arizona 85016
602-333-2200

Stanley Consultants

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HEREON WERE MADE UNDER MY SUPERVISION OR AS NOTED AND ARE
CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF

REGISTERED LAND SURVEYOR

42745
JAY A.
HORAK
ARIZONA, U.S.A.

AS-BUILT REVISIONS: _____ DATE: _____ INIT: _____
RECORD DRAWING SUBMITTAL _____ 1/07 KA

COORDINATE TABLE

| NO. | DESCRIPTION | NORTHING | EASTING |
|--------------------------|-------------|----------|---------|
| <input type="checkbox"/> | | | |
| <input type="checkbox"/> | | | |

2929 East Camelback Road
Suite 130
Phoenix, Arizona 85016-4425
www.stanleygroup.com

Stanley Consultants INC.

78" LAKE PLEASANT WATERLINE
LAKE PLEASANT WATER TREATMENT PLANT
TO THE 54" TRAMONTO WATERLINE
WS85500156
STA 244+00 TO STA 254+00

| DR | JUN | DES | DM | CK | LJL | SHEET NO. | TOTAL SHEETS | AS BUILT |
|------------|-----|------------|----|------------|-----|-----------|--------------|----------|
| DATE: 9-04 | | DATE: 9-04 | | DATE: 9-04 | | C25 | 30 OF 91 | |

SCALE: 1" = 40' HORIZONTAL
1" = 4' VERTICAL

| | | QUANTITY | UNIT |
|----|---|----------|------|
| 1 | INSTALL 78" WATERLINE----- | 1,000 | LF |
| 22 | DELINEATE AND FENCE WATERLINE----- EASEMENT AND 404 JURISDICTIONAL WASH LIMITS AS SPECIFIED | --- | NPI |
| 30 | INSTALL 8" FORCEMAIN----- | 1,000 | LF |
| 50 | INSTALL FIBEROPTIC DUCTS----- | 1,000 | LF |

COORDINATE TABLE

| NO. | DESCRIPTION | NORTHING | EASTING |
|--------------------------|-------------|----------|---------|
| <input type="checkbox"/> | | | |
| <input type="checkbox"/> | | | |



 CITY OF PHOENIX, ARIZONA
WATER SERVICES DEPARTMENT

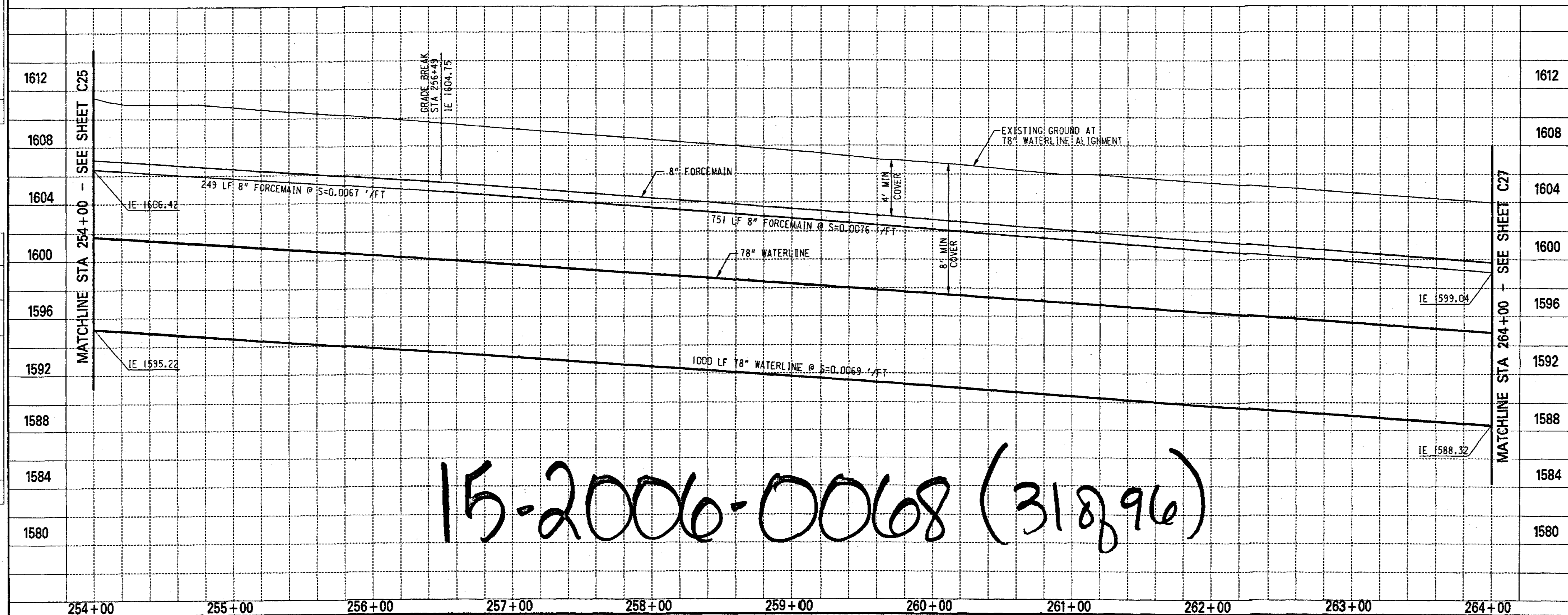
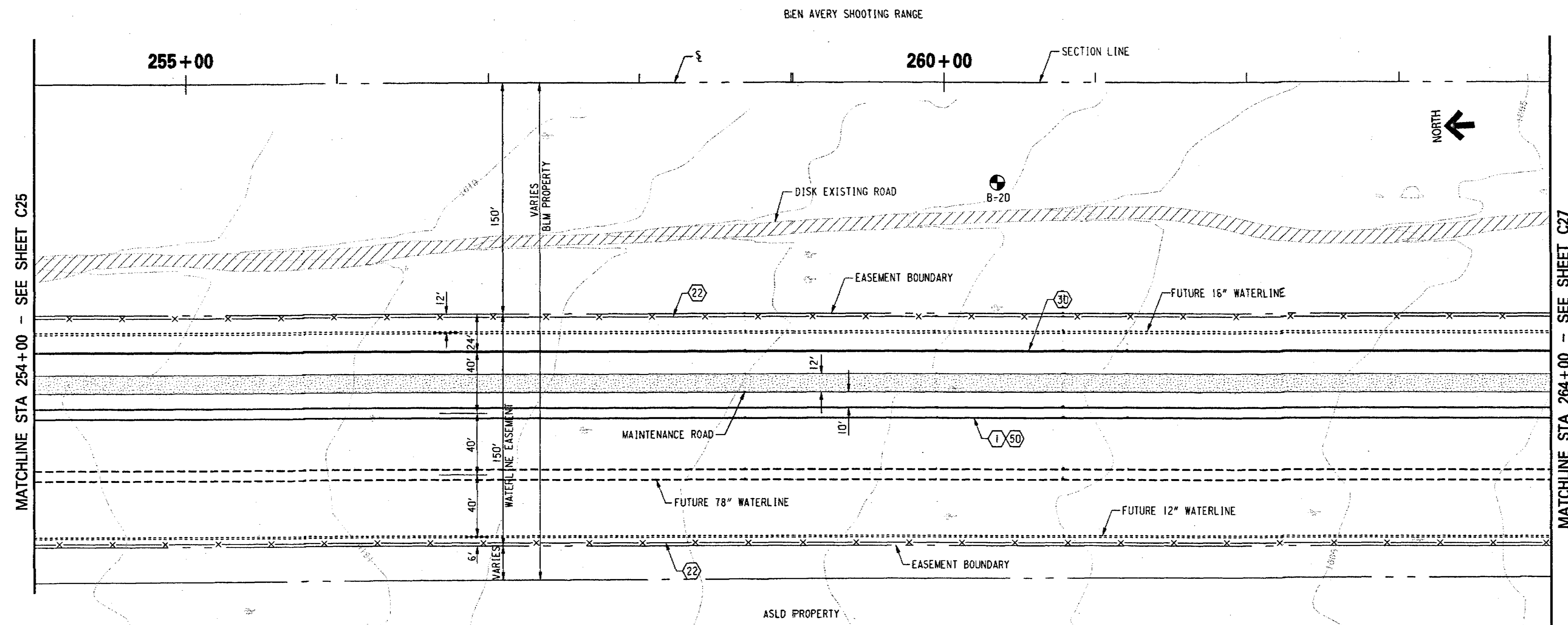


Stanley Consultants INC.
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85016-4425
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78" LAKE PLEASANT WATERLINE
LAKE PLEASANT WATER TREATMENT PLANT
TO THE 54" TRAMONTO WATERLINE
WS85500156
STA 254+00 TO STA 264+00

| | | | | | |
|---|------------|------------|------------|--------------|----------|
| DR JJO | DES DH | ICK LJJ | SHEET NO. | TOTAL SHEETS | AS BUILT |
| DATE: 9-04 | DATE: 9-04 | DATE: 9-04 | | | |
| SCALE: 1" = 40' HORIZONTAL 4' VERTICAL | | | C26 | 31 OF 91 | |

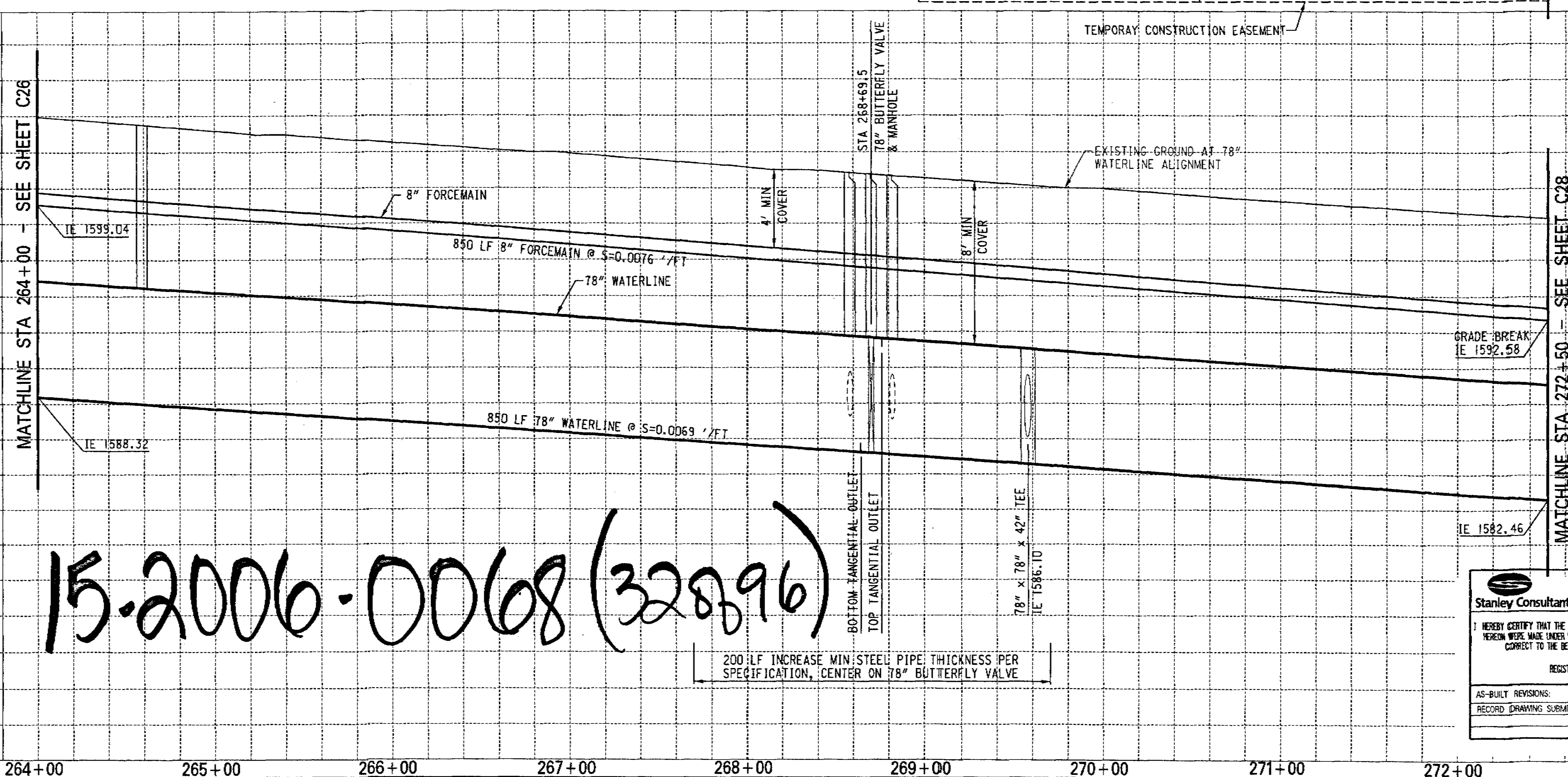
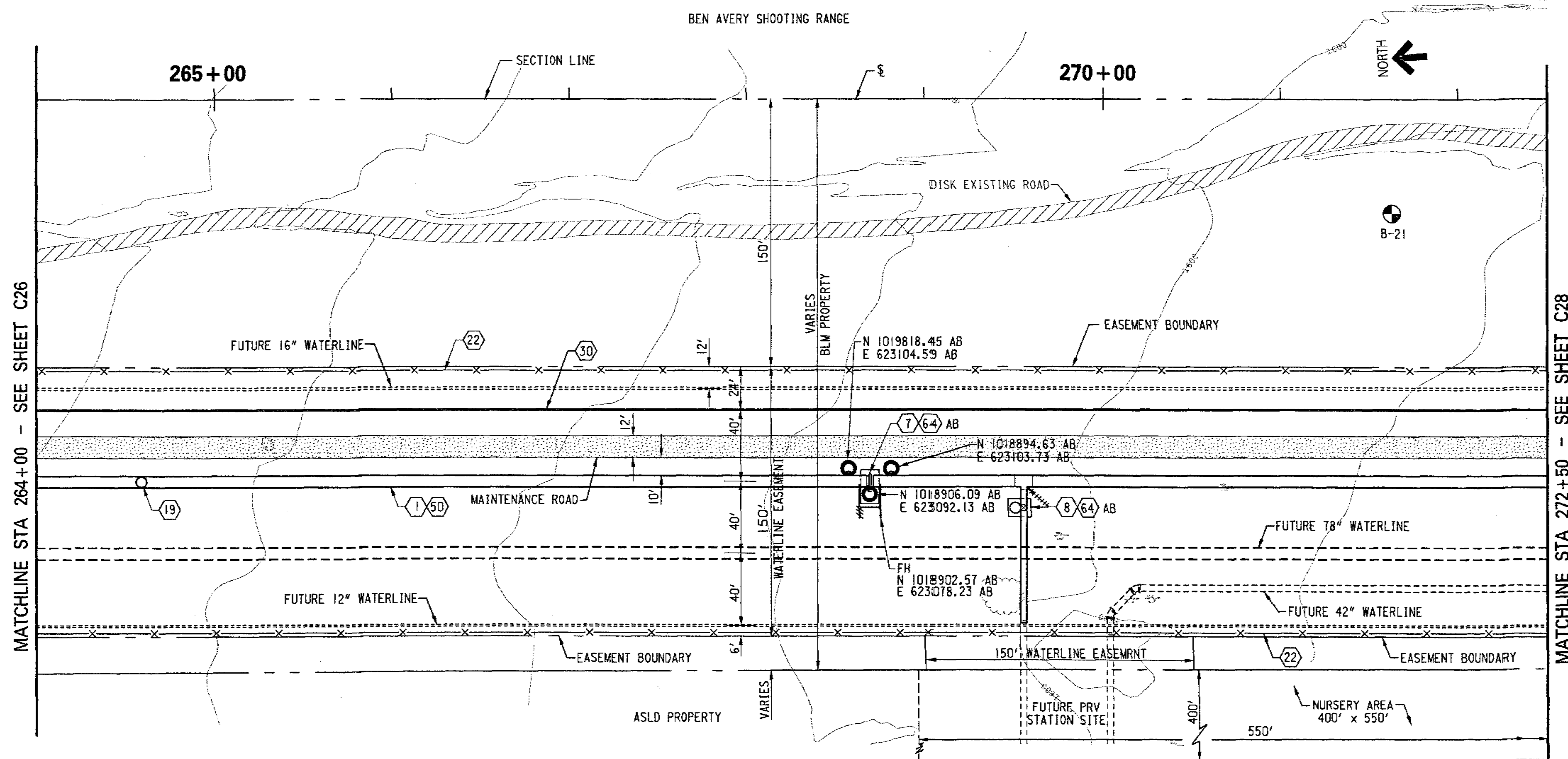


15-2006-0068 (318,96)

| NO. | DESCRIPTION | REV BY | DATE |
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| NO. | DESCRIPTION | REV BY | DATE |
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| NO. | DESCRIPTION | REV BY | DATE |
|-----|-------------|--------|------|
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| | | | |



CITY INDEX NO. WS85500156

CONSTRUCTION NOTES:

| | QUANTITY | UNIT |
|--|----------|------|
| 1) INSTALL 78" WATERLINE----- | 850 | LF |
| 7) STA 268+69.5, 214' RT 268+70.4, 219' R AB INSTALL 78" BUTTERFLY VALVE WITH VALVE MH INSTALLATION SEE SHEET C47 AND CPI | | |
| 78" BUTTERFLY VALVE----- | 1 | EA |
| 6" DIAMETER MANHOLE----- | 3 | EA |
| 6" DIP WITH RESTRAINED JOINTS----- | 42 | LF |
| 6" TOP TANGENTIAL FLANGED OUTLET----- | 1 | EA |
| 6" BOTTOM TANGENTIAL FLANGED OUTLET----- | 1 | EA |
| 6" VALVE (FL x FL)----- | 3 | EA |
| 6" 45° BEND----- | 2 | EA |
| 6" 90° BEND----- | 1 | EA |
| 6" x 6" TEE----- | 1 | EA |
| 6" FIRE HYDRANT (FURNISHED BY COP)----- | 1 | EA |
| BOX & COVER PER COP STD DETAIL P1391 | 3 | EA |
| TYPE 'A' DEBRIS CAP PER COP STD----- | 3 | EA |
| DETAIL P1165 TYPE 'A' | | |
| 30" SIDE ACCESS OUTLET----- | 2 | EA |
| 8) STA 269+55, 214' RT 269+59, 228' R AB INSTALL 42" VALVE, N 1018817.93 AB SEE SHEET C52 AND CPI E 623079.64 AB | | |
| 78" x 78" x 42" TEE----- | 1 | EA |
| 42" BUTTERFLY VALVE----- | 1 | EA |
| 42" WELDED PLUG----- | 1 | EA |
| 42" WATERLINE----- | 15 | EA |
| 6" DIA MANHOLE----- | 1 | EA |
| 19) STA 264+59, 214' RT AB----- | 1 | EA |
| INSTALL AIR RELEASE AND AIR VACUUM VALVE MH FOR 78" WATERLINE, 264+62 AB SEE SHEET C50 AND CPI N 1019314.19 AB E 623117.26 AB | | |
| 22) DELINEATE AND FENCE WATERLINE EASEMENT AND 404 JURISDICTIONAL WASH LIMITS AS SPECIFIED | | NPI |
| 30) INSTALL 8" FORCEMAIN----- | 850 | LF |
| 50) INSTALL FIBEROPTIC DUCTS----- | 850 | LF |
| AB 64) 268+69 - ISOLATING JOINT TEST STATION AT BFV, SEE DETAIL 3/CP-2 | | |
| AB 64) 269+55 - ISOLATING JOINT TEST STATION AT BFV, SEE DETAIL 3/CP-2 | | |

COORDINATE TABLE

| NO. | DESCRIPTION | NORTHING | EASTING |
|-----|-------------|----------|---------|
| | | | |
| | | | |

2929 East Camelback Road
Suite 130
Phoenix, Arizona
85016-4425
www.stanleyconsultants.com

78" LAKE PLEASANT WATERLINE
LAKE PLEASANT WATER TREATMENT PLANT
TO THE 54" TRAMONTO WATERLINE
WS85500156
STA 264+00 TO STA 272+50

OR JJO DES DH CK LUL
 DATE: 9-04 DATE: 9-04 DATE: 9-04
 SCALE: 1" = 40' HORIZONTAL
 4" VERTICAL

SHEET NO. **C27** TOTAL SHEETS 32 OF 91 AS BUILT

1561 East Camelback Road
Phoenix, Arizona 85016
602-333-2200


REGISTERED LAND SURVEYOR


DATE: 9/07 INIT: KA

[illegible]

| NO. | DESCRIPTION | NORTHING | EASTING |
|-----|-------------------------------|------------|-----------|
| 1 | SURVEY POINT | 1018476.46 | 623291.19 |
| 2 | SURVEY POINT ADOT AC 18222 | 1018226.69 | 623279.22 |





 Use meeting steps before you dig.
 CALL FOR THE BLUE STAGES
283-1100
 800 555-0088
 CALL COLLECT



CITY OF PHOENIX, ARIZONA

WATER SERVICES DEPARTMENT



Stanley Consultants INC.

2829 East Camelback Road
 Suite 130
 Phoenix, Arizona
 85016-4423
www.stanleygroup.com

78" LAKE PLEASANT WATERLINE

LAKE PLEASANT WATER TREATMENT PLANT

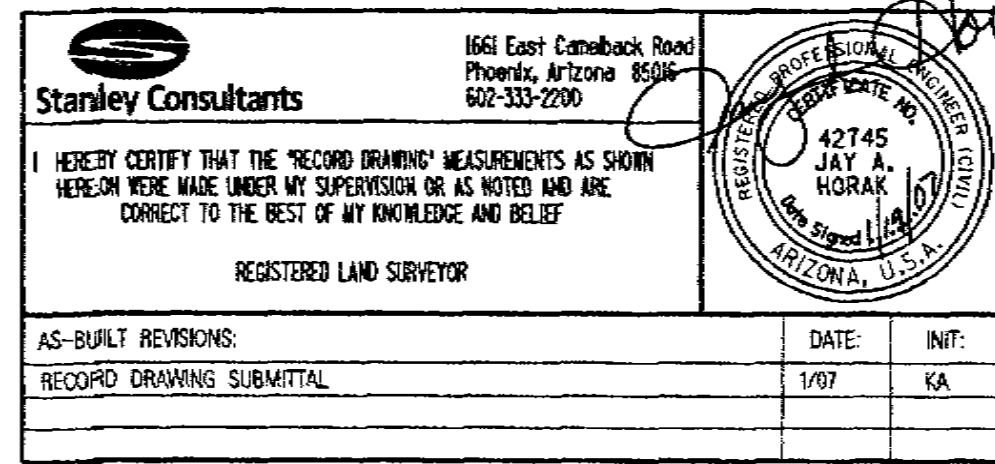
TO THE 54" TRAMONTO WATERLINE

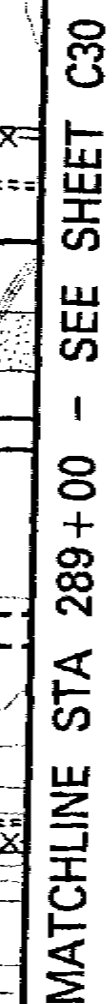
WS85500156



STA 272+50 TO STA 279+00

| | | | | | | | | |
|---|------------|------------|------------|------------|------------|--------------|-----------------|-------------|
| DR | JJO | DES | DH | CK | LJL | SHEET NO. | TOTAL SHEETS | AS BUILT |
| DATE: 9-04 | DATE: 9-04 | DATE: 9-04 | DATE: 9-04 | DATE: 9-04 | DATE: 9-04 | C28 | 33 OF 91 | |
| SCALE: 1" = 40' HORIZONTAL 4' VERTICAL | | | | | | | | |

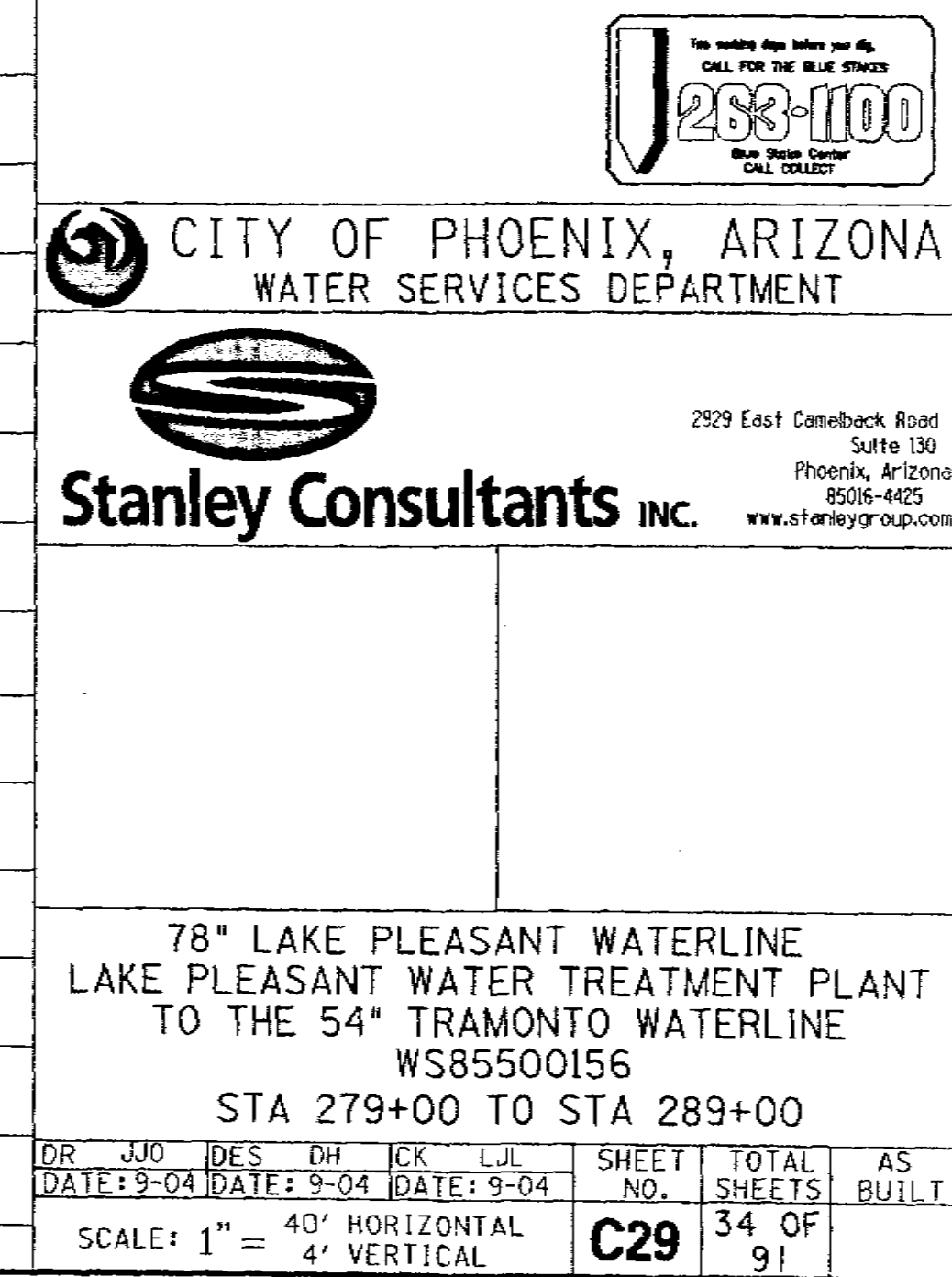
15-2006-0068 (33296)



[illegible]

| | | | |
|--|--|---|--------------|
|  <p>Stanley Consultants</p> | <p>1661 East Camelback Road Phoenix, Arizona 85016 Tel: 333-2200</p> |  | <p>10/2</p> |
| <p>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</p> | | <p>REGISTERED LAND SURVEYOR</p> | |
| <p>AS-BUILT REVISIONS:</p> | | <p>DATE:</p> | <p>INIT:</p> |
| <p>RECORD DRAWING SUBMITTAL</p> | | <p>1/07</p> | <p>KA</p> |
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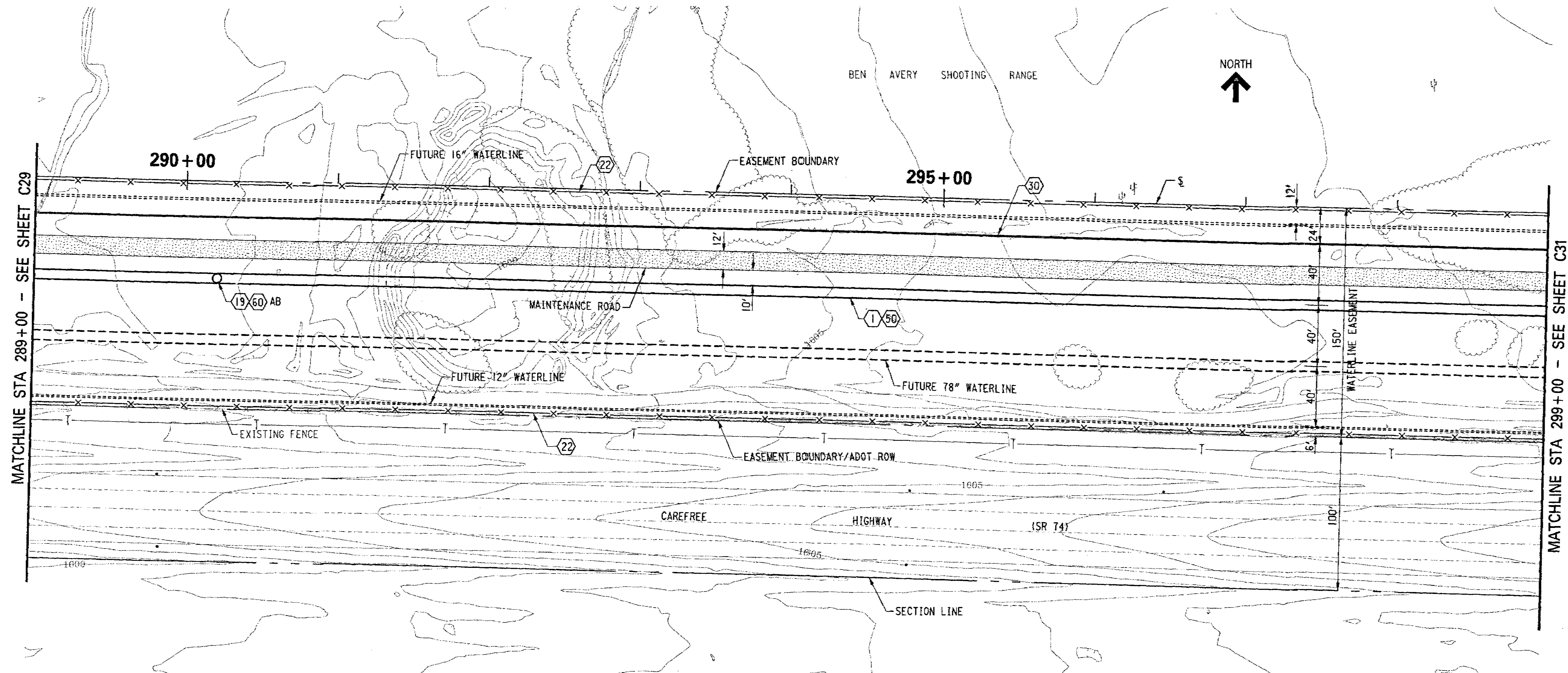
| COORDINATE TABLE | | | |
|--------------------------|-------------|----------|---------|
| NO. | DESCRIPTION | NORTHING | EASTING |
| <input type="checkbox"/> | | | |
| <input type="checkbox"/> | | | |



| REVISION BY CITY OF PHOENIX | DESCRIPTION | REV BY | CHK BY | DATE |
|-----------------------------|-------------|--------|--------|------|
| NO. | | | | |
| | | | | |
| | | | | |

| REVISION BY CITY OF PHOENIX | DESCRIPTION | REV BY | CHK BY | DATE |
|-----------------------------|-------------|--------|--------|------|
| NO. | | | | |
| | | | | |
| | | | | |

| REVISION BY CITY OF PHOENIX | DESCRIPTION | REV BY | CHK BY | DATE |
|-----------------------------|-------------|--------|--------|------|
| NO. | | | | |
| | | | | |
| | | | | |



1661 East Camelback Road
Phoenix, Arizona 85016
602-333-2200

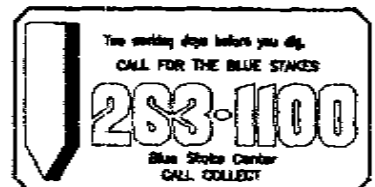
42145
JAY A.
HORA
REGISTERED LAND SURVEYOR
ARIZONA, U.S.A.

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.

AS-BUILT REVISIONS:
RECORD DRAWING SUBMITTAL

DATE: 1/07
INIT: KA

| COORDINATE TABLE | | | |
|--------------------------|-------------|----------|---------|
| NO. | DESCRIPTION | NORTHING | EASTING |
| <input type="checkbox"/> | | | |
| <input type="checkbox"/> | | | |



CITY OF PHOENIX, ARIZONA
WATER SERVICES DEPARTMENT

2929 East Camelback Road
Suite 150
Phoenix, Arizona
85016-4425
www.stanleygroup.com

Stanley Consultants INC.

78" LAKE PLEASANT WATERLINE
LAKE PLEASANT WATER TREATMENT PLANT
TO THE 54" TRAMONTO WATERLINE
WS85500156
STA 289+00 TO STA 299+00

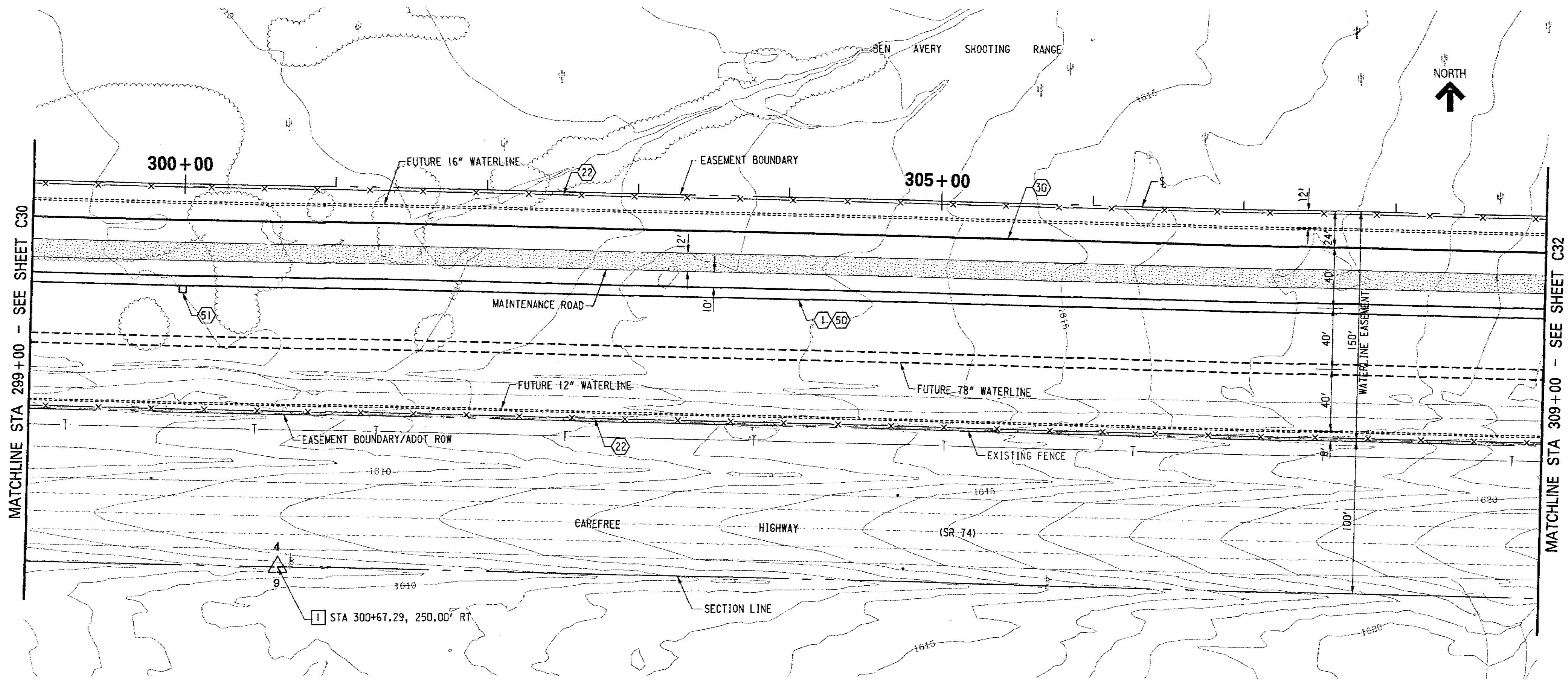
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|------------|------------|------------|---|----------|
| DR: JJO | DES: DH | CHK: LUL | SHEET NO. 35 OF 91 | AS BUILT |
| DATE: 9-04 | DATE: 9-04 | DATE: 9-04 | SCALE: 1" = 40' HORIZONTAL 4" VERTICAL | |

15-20006-0068 (358896)

| NO. | DESCRIPTION | REV BY | CHK BY | DATE |
|-----|-------------|--------|--------|------|
| | | | | |
| | | | | |
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| NO. | DESCRIPTION | REV BY | CHK BY | DATE |
|-----|-------------|--------|--------|------|
| | | | | |
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| NO. | DESCRIPTION | REV BY | CHK BY | DATE |
|-----|-------------|--------|--------|------|
| | | | | |
| | | | | |
| | | | | |



CITY INDEX NO. WS85500156

CONSTRUCTION NOTES:

| | QUANTITY | UNIT |
|--|----------|------|
| 1) INSTALL 78" WATERLINE | 1,000 | LF |
| 22) DELINEATE AND FENCE WATERLINE EASEMENT AND 404 JURISDICTIONAL WASH LIMITS AS SPECIFIED | | NP1 |
| 30) INSTALL 8" FORCEMAIN | 1,000 | LF |
| 50) INSTALL FIBEROPTIC DUCTS | 1,000 | LF |
| 51) STA 300+00, 68' RT INSTALL FIBEROPTIC HANDHOLES, SEE SHEET C54 300+17, 78 R AB N 118328.82 AB E 626017.76 AB 300+21, 81 R AB N 1018325.60 AB E 626078.86 AB | 1 | EA |

Stanley Consultants
1561 East Camelback Road
Phoenix, Arizona 85016
602-333-2200

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REGISTERED LAND SURVEYOR

| | | |
|--------------------------|-------|------|
| AS-BUILT REVISIONS: | DATE: | INT: |
| RECORD DRAWING SUBMITTAL | 1/07 | KA |

| COORDINATE TABLE | | | |
|------------------|-------------------------------|------------|-----------|
| NO. | DESCRIPTION | NORTHING | EASTING |
| 1 | SURVEY POINT MCDOT AC LS29891 | 1018155.18 | 626061.10 |
| | | | |

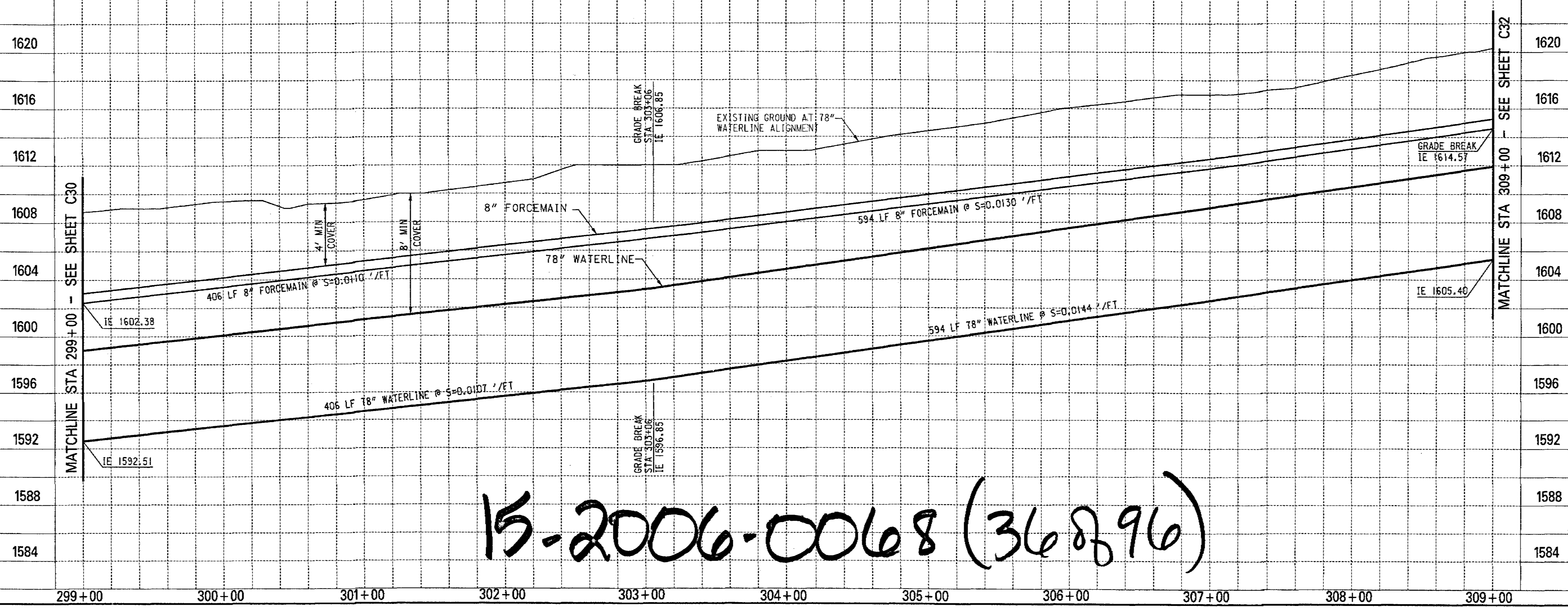


CITY OF PHOENIX, ARIZONA
WATER SERVICES DEPARTMENT

Stanley Consultants INC.
2929 East Camelback Road
Suite 130
Phoenix, Arizona 85016-4425
www.stanleygroup.com

78" LAKE PLEASANT WATERLINE
LAKE PLEASANT WATER TREATMENT PLANT
TO THE 54" TRAMONTO WATERLINE
WS85500156
STA 299+00 TO STA 309+00


| | | | | | |
|---|------------|------------|------------|--------------|----------|
| DR. JJO | DES. DH | CHK. LUL | SHEET NO. | TOTAL SHEETS | AS BUILT |
| DATE: 9-04 | DATE: 9-04 | DATE: 9-04 | C31 | 36 OF 91 | |
| SCALE: 1" = 40' HORIZONTAL 4" VERTICAL | | | | | |



15-2006-0068 (36896)

CONSTRUCTION NOTES:

| | QUANTITY | UNIT |
|---|----------------|------|
| 1 INSTALL 78" WATERLINE | 1,000 | LF |
| 315+85, 65'R AB | | |
| 19 STA 315+83, 64' RT | 1 | EA |
| INSTALL AIR RELEASE AND AIR VACUUM VALVE MH FOR 78" WATERLINE, N 1018301.47 AB | | |
| SEE SHEET C50 AND C51 | E 627583.23 AB | |
| 22 DELINEATE AND FENCE WATERLINE EASEMENT AND 404 JURISDICTIONAL WASH LIMITS AS SPECIFIED | | NP1 |
| 30 INSTALL 8" FORCEMAIN | 1,000 | LF |
| 315+64, 25'R AB | | |
| 38 STA 315+67, 24' RT | 1 | EA |
| INSTALL AIR RELEASE AND AIR VACUUM VALVE MH FOR 8" FORCEMAIN, N 1018341.52 AB | | |
| SEE SHEET C51 | E 627563.32 AB | |
| 50 INSTALL FIBEROPTIC DUCTS | 1,000 | LF |
| AB 60 315+83- SMART TEST STATION | | |
| SEE DETAIL 1/CP 2 | | |



1661 East Camelback Road
Phoenix, Arizona 85016
602-333-2200

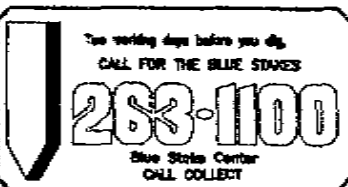
42745
JAY A. HORAK
REGISTERED LAND SURVEYOR
ARIZONA, U.S.A.

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.

| | | |
|--------------------------|-------|-------|
| AS-BUILT REVISIONS: | DATE: | INIT: |
| RECORD DRAWING SUBMITTAL | 1/07 | KA |

COORDINATE TABLE

| NO. | DESCRIPTION | NORTHING | EASTING |
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| <input type="checkbox"/> | | | |



CITY OF PHOENIX, ARIZONA
WATER SERVICES DEPARTMENT

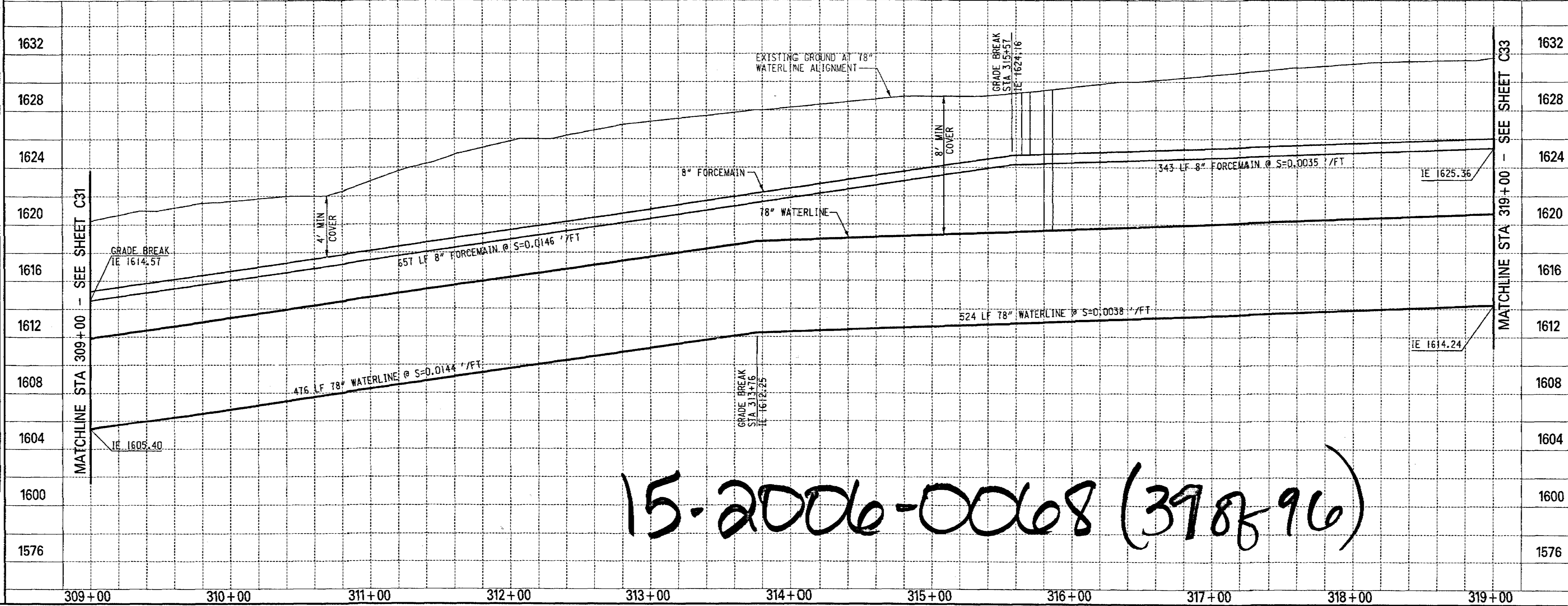
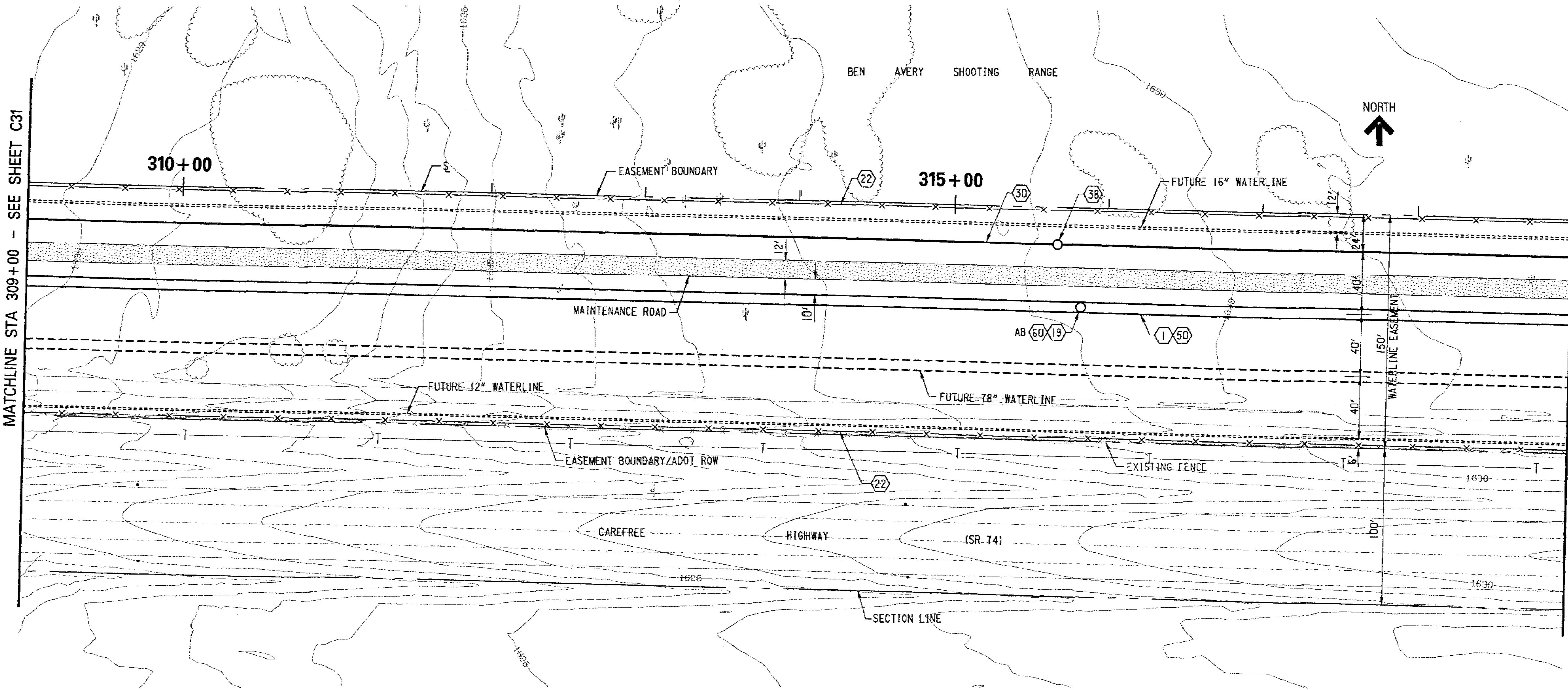


2309 East Camelback Road
Suite 100
Phoenix, Arizona
85016-4425
www.stanleygroup.com

Stanley Consultants inc.

78" LAKE PLEASANT WATERLINE
LAKE PLEASANT WATER TREATMENT PLANT
TO THE 54" TRAMONTO WATERLINE
WS85500156
STA 309+00 TO STA 319+00

| | | | | | |
|---|------------|------------|-----------|--------------|----------|
| DR JJO | DES OH | CR LJJ | SHEET NO. | TOTAL SHEETS | AS BUILT |
| DATE: 9-04 | DATE: 9-04 | DATE: 9-04 | C32 | 37 OF 91 | |
| SCALE: 1" = 40' HORIZONTAL 4' VERTICAL | | | | | |



15-20006-0008 (378596)

CONSTRUCTION NOTES:

- | | QUANTITY | UNIT |
|--|----------|------|
| 1 INSTALL 78" WATERLINE----- | 1,000 | LF |
| 7 STA 324+57.5 - 64' RT 324+58.3, 70' R AB INSTALL 78" BUTTERFLY VALVE WITH VALVE MH INSTALLATION SEE SHEET C47 AND C51 | | |
| 78" BUTTERFLY VALVE----- | 1 | EA |
| 6" DIA MANHOLE----- | 3 | EA |
| 6" DIP WITH RESTRAINED JOINTS----- | 42 | LF |
| 6" TOP TANGENTIAL FLANGED OUTLET----- | 1 | EA |
| 6" BOTTOM TANGENTIAL FLANGED OUTLET----- | 1 | EA |
| 6" VALVE (FL x FL)----- | 3 | EA |
| 6" 45° BEND----- | 2 | EA |
| 6" 90° BEND----- | 1 | EA |
| 6" x 6" TEE----- | 1 | EA |
| 6" FIRE HYDRANT (FURNISHED BY COP)----- | 1 | EA |
| BOX & COVER PER COP STD DETAIL P1391 | 3 | EA |
| TYPE 'A' DEBRIS CAP PER COP STD | | |
| DETAIL P1165 TYPE 'A'----- | 3 | EA |
| 30" SIDE ACCESS OUTLET----- | 2 | EA |
| 22 DELINEATE AND FENCE WATERLINE----- | | NP1 |
| EASEMENT AND 404 JURISDICTIONAL WASH LIMITS AS SPECIFIED | | |
| 30 INSTALL 8" FORCEMAIN----- | 1,000 | LF |
| 50 INSTALL FIBEROPTIC DUCTS----- | 1,000 | LF |
| 51 STA 325+20, 68' RT INSTALL FIBEROPTIC HANDHOLES, SEE SHEET C54 | 1 | EA |
| 325+18, 79 R AB N 1018263.16 AB E 628515.65 AB | | |
| 325+23, 82 R AB N 1018260.44 AB E 628519.78 AB | | |
| AB 60 290+21- SMART TEST STATION SEE DETAIL 1/CP-2 | | |

1561 East Camelback Road
Phoenix, Arizona 85016
602-333-2200

Stanley Consultants

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

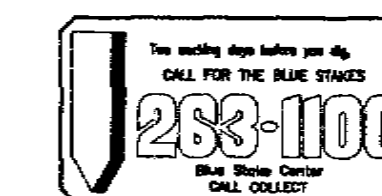
REGISTERED LAND SURVEYOR

AS-BUILT REVISIONS:

| RECORD DRAWING SUBMITTAL | DATE | INT. |
|--------------------------|------|------|
| | 1/07 | EA |

COORDINATE TABLE

| NO. | DESCRIPTION | NORTHING | EASTING |
|-----|----------------------------------|------------|-----------|
| 1 | SURVEY POINT MCDOT AC LS29891 | 1018083.68 | 628843.25 |
| 2 | SURVEY POINT | 1018333.93 | 628836.65 |



CITY OF PHOENIX, ARIZONA
WATER SERVICES DEPARTMENT

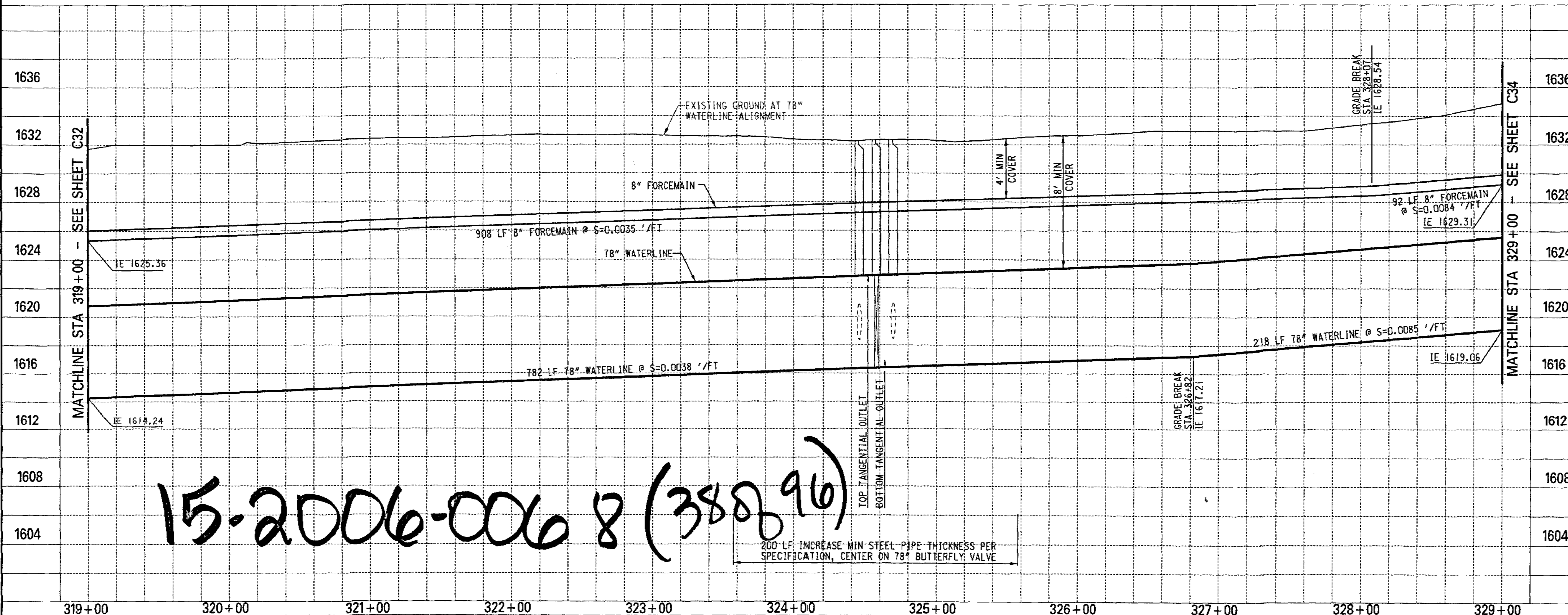
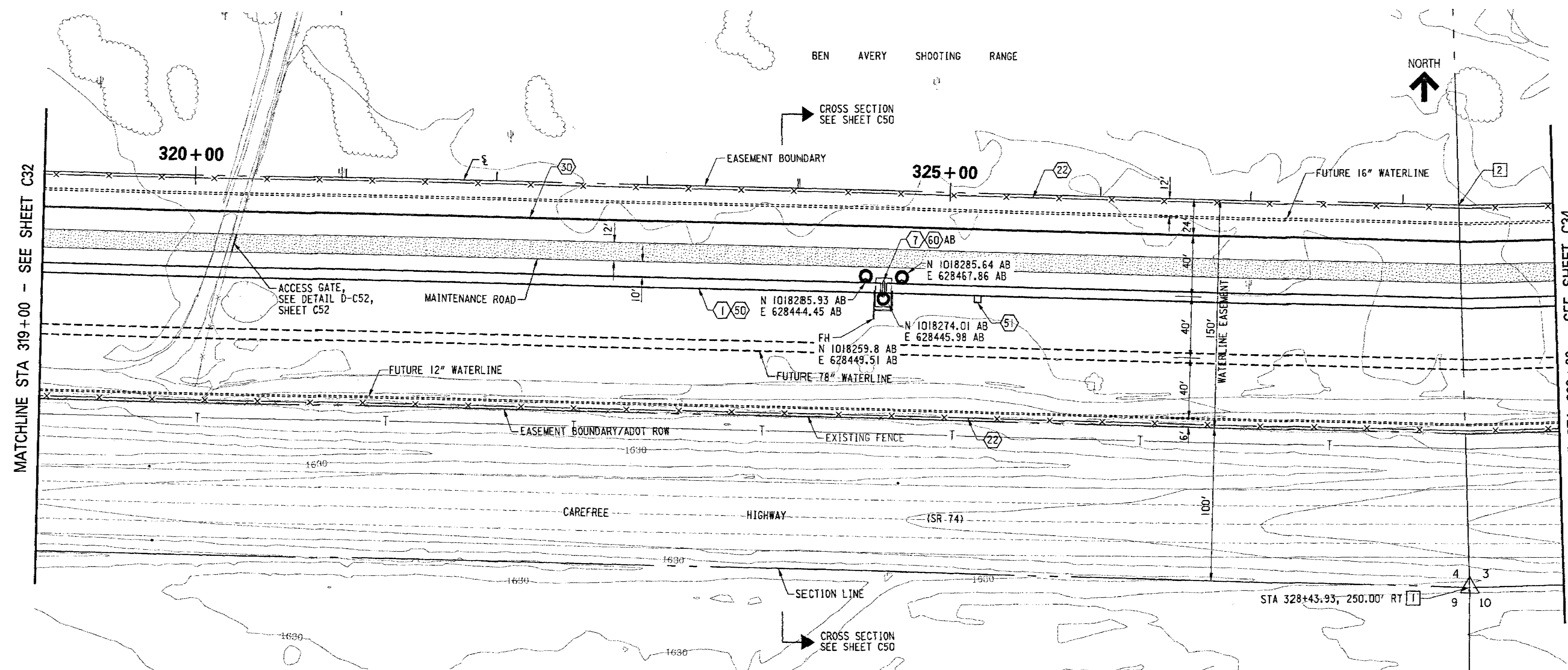
2929 East Camelback Road
Suite 100
Phoenix, Arizona
85016-4425
www.stanleygroup.com

Stanley Consultants INC.

78" LAKE PLEASANT WATERLINE
LAKE PLEASANT WATER TREATMENT PLANT
TO THE 54" TRAMONTO WATERLINE
WS85500156

STA 319+00 TO STA 329+00

| DR | JJO | DES | CHK | LJL | SHEET | TOTAL | AS |
|----------------------------|------------|------------|------------|------------|-------|--------|-------|
| DATE: 9-04 | DATE: 9-04 | DATE: 9-04 | DATE: 9-04 | DATE: 9-04 | NO. | SHEETS | BUILT |
| SCALE: 1" = 40' HORIZONTAL | | | | | C33 | 38 | OF |
| SCALE: 1" = 4' VERTICAL | | | | | | 91 | |



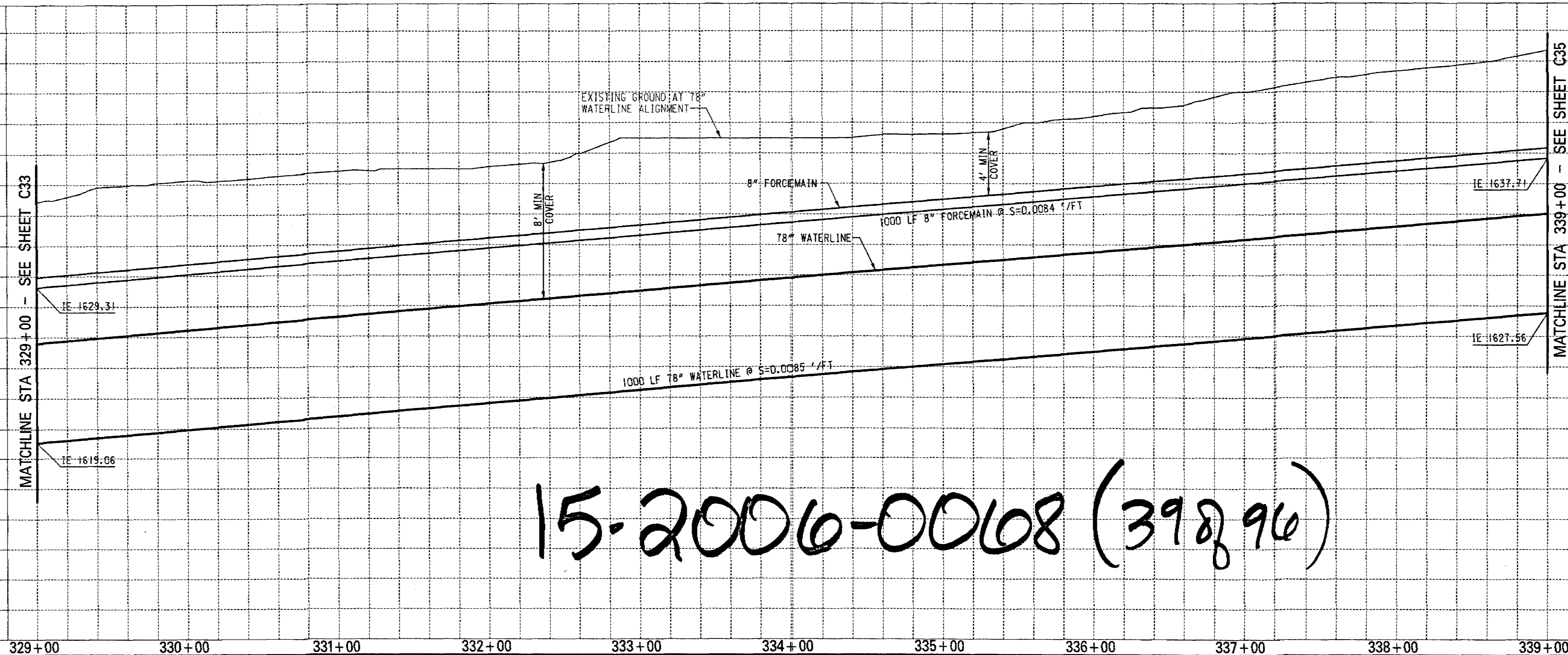
15-2006-006 8 (38896)



200 LF INCREASE MIN STEEL PIPE THICKNESS PER
SPECIFICATION, CENTER ON 78" BUTTERFLY VALVE

| NO. | DESCRIPTION | REV BY | CHK BY | DATE |
|-----|-------------|--------|--------|------|
| | | | | |

| NO. | DESCRIPTION | REV BY | CHK BY | DATE |
|-----|-------------|--------|--------|------|
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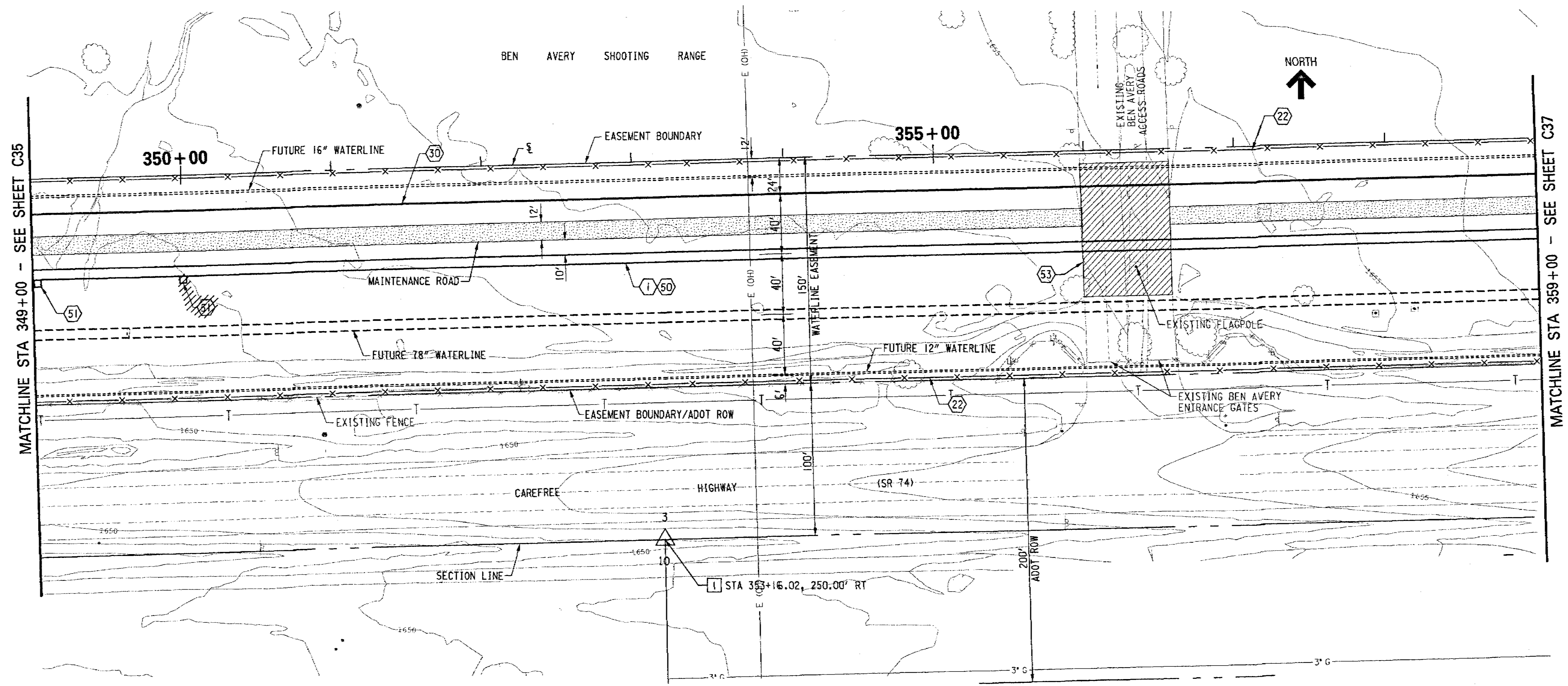
| NO. | DESCRIPTION | REV BY | CHK BY | DATE |
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| COORDINATE TABLE | | | | | |
|--|-------------|--|-----------|--------------|----------|
| NO. | DESCRIPTION | NORTHING | EASTING | | |
| <input type="checkbox"/> | | | | | |
| <input type="checkbox"/> | | | | | |
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| | | | | | |
| | | | | | |
| | | <div><div>Two working days before you dig. CALL FOR THE BLUE STAKES</div><div>263-1100</div><div>Blue Water Center CALL COLLECT</div></div> | | | |
| <div><div></div><div>CITY OF PHOENIX, ARIZONA WATER SERVICES DEPARTMENT</div></div> | | | | | |
| <div><div></div><div>Stanley Consultants INC.</div></div> | | <div>2929 East Camelback Road Suite 150 Phoenix, Arizona 85016-4425 www.stanleygroup.com</div> | | | |
| | | | | | |
| <div>78" LAKE PLEASANT WATERLINE LAKE CAMERON WATER TREATMENT PLANT TO THE 54" TRAMONTO WATERLINE WS85500156 STA 329+00 TO STA 339+00</div> | | | | | |
| DR JJO | DES DH | CK LJJ | SHEET NO. | TOTAL SHEETS | AS BUILT |
| DATE: 9-04 | DATE: 9-04 | DATE: 9-04 | C34 | 39 OF 91 | |
| SCALE: 1" = | | 40' HORIZONTAL 4' VERTICAL | | | |

N:\5215\PLEASANT VAS-BUILT\5-BUILT\5-LP5219PP36-AB.DGN

| REVISION BY CITY OF PHOENIX | | | REVISION BY CITY OF PHOENIX | | | REVISION BY CITY OF PHOENIX | | |
|-----------------------------|-------------|-------------------|-----------------------------|-------------|-------------------|-----------------------------|-------------|-------------------|
| NO. | DESCRIPTION | REV BY/CD BY DATE | NO. | DESCRIPTION | REV BY/CD BY DATE | NO. | DESCRIPTION | REV BY/CD BY DATE |
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CITY INDEX NO. WS85500156

CONSTRUCTION NOTES:

| | QUANTITY | UNIT |
|--|----------|------|
| 1 INSTALL 78" WATERLINE | 1,000 | LF |
| 22 DELINEATE AND FENCE WATERLINE EASEMENT AND 404 JURISDICTIONAL WASH LIMITS AS SPECIFIED | | NPI |
| 30 INSTALL 8" FORCEMAIN | 1,000 | LF |
| 50 INSTALL FIBEROPTIC DUCTS | 1,000 | LF |
| 51 3349+06, 81" R AB | | EA |
| 51 STA 350+00, 68" R AB | | EA |
| 51 INSTALL FIBEROPTIC HANDHOLES, SEE SHEET C54 N 1018309.88 AB N 1018307.18 AB E 630902.29 AB E 630906.58 AB | | EA |
| 53 SAWCUT, REMOVE AND REPLACE EXISTING AC PAVEMENT AND MEDIAN, SEE ASPHALT PAVEMENT SECTION, SHEET C52 | 4,800 | SF |

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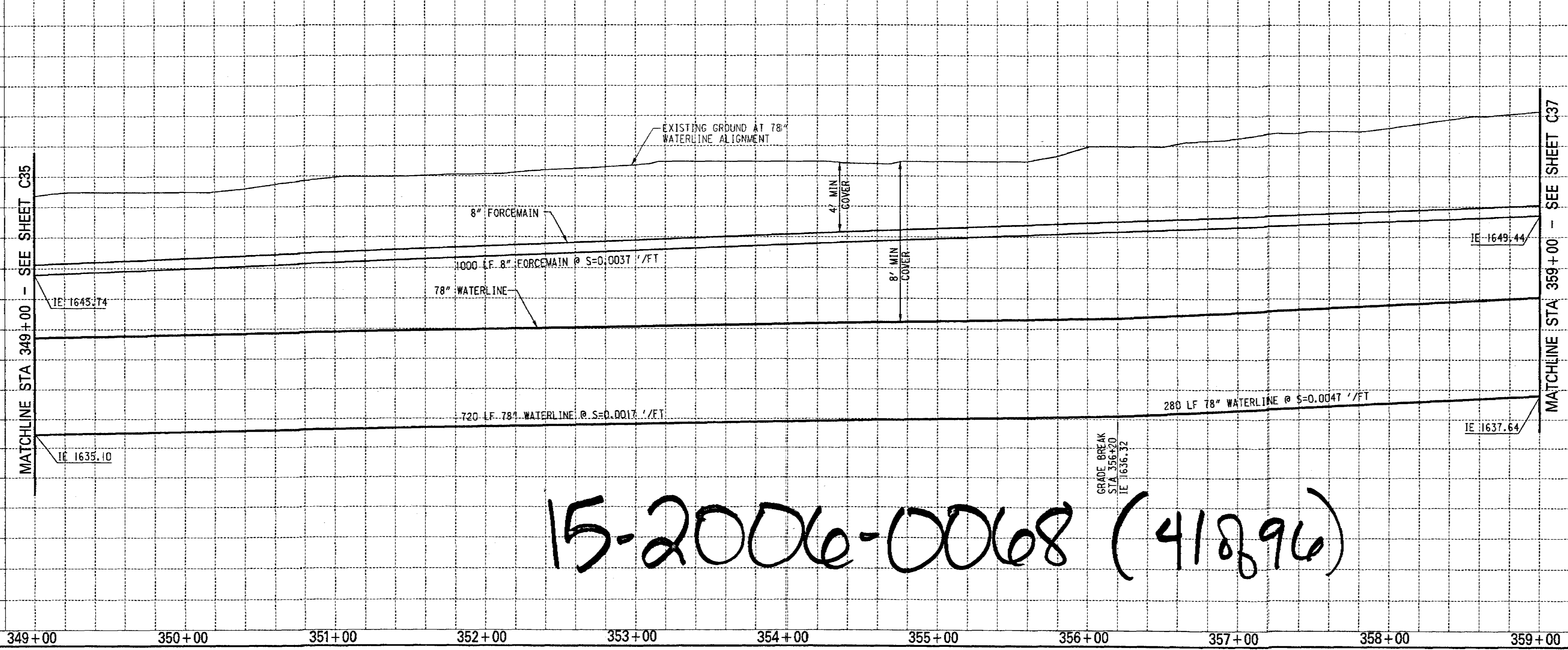
I HEREBY CERTIFY THAT THE "RECORD DRAWING" MEASUREMENTS AS SHOWN HEREON WERE MADE UNDER MY SUPERVISION OR AS NOTED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR

42745
JAY A. HORAK
Arizona, U.S.A.

AS-BUILT REVISIONS:
RECORD DRAWING SUBMITTAL

DATE: 1/07
INT: KA



COORDINATE TABLE

| NO. | DESCRIPTION | NORTHING | EASTING |
|-----|-------------------------------|------------|-----------|
| 1 | SURVEY POINT MCDOT AC LS29891 | 1018149.00 | 631321.07 |

253-1100

CITY OF PHOENIX, ARIZONA
WATER SERVICES DEPARTMENT

Stanley Consultants INC.

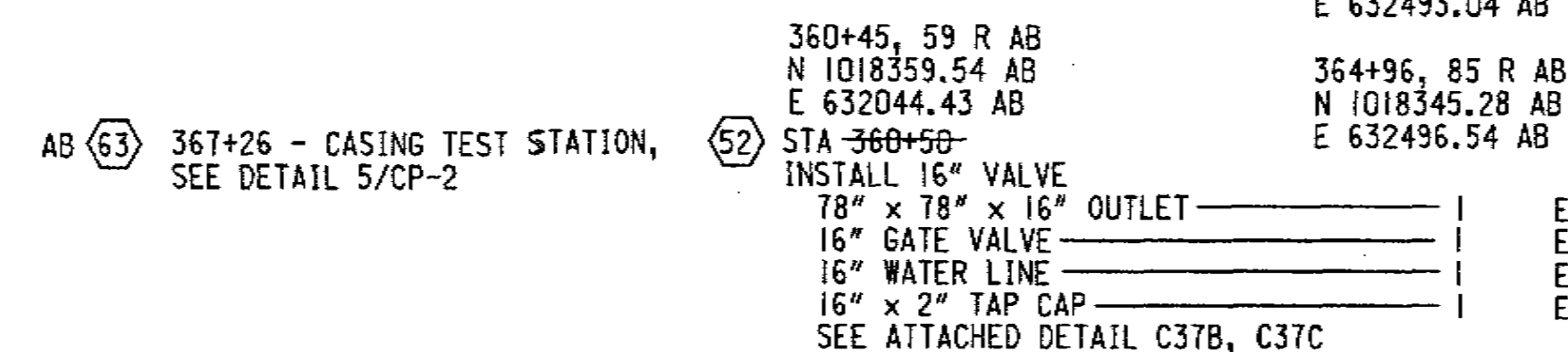
2929 East Camelback Road
Suite 130
Phoenix, Arizona 85016-4425
www.stanleygroup.com

78" LAKE PLEASANT WATERLINE
LAKE PLEASANT WATER TREATMENT PLANT
TO THE 54" TRAMONTO WATERLINE
WS85500156
STA 349+00 TO STA 359+00

DR JJO DES DH CK LUL
DATE: 9-04 DATE: 9-04 DATE: 9-04
SCALE: 1" = 40' HORIZONTAL
4" VERTICAL

SHEET NO. 41 OF 91
TOTAL SHEETS 91
AS BUILT

15-2006-0068 (41896)

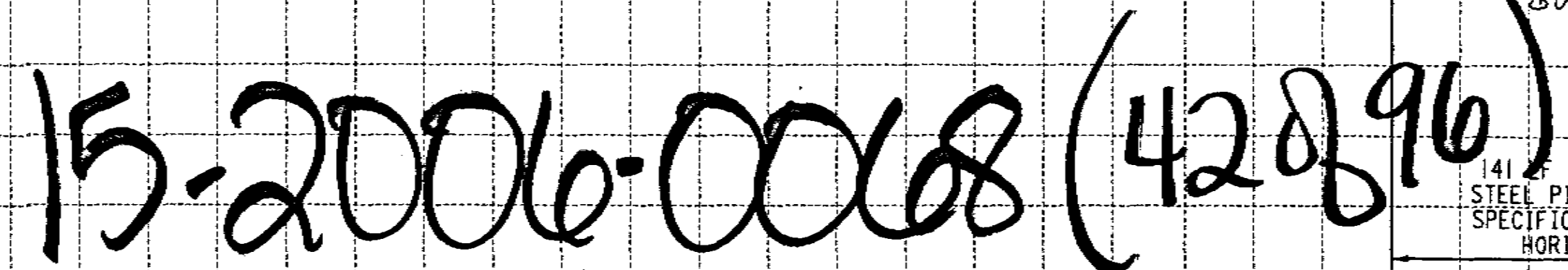
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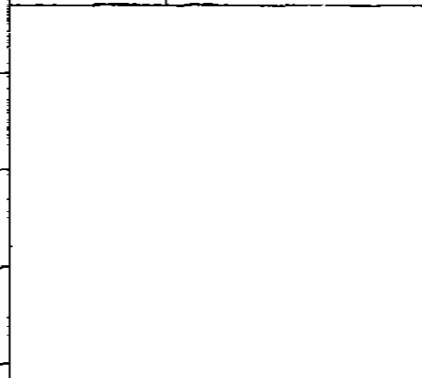

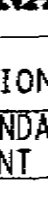

CITY INDEX NO. WS85500156

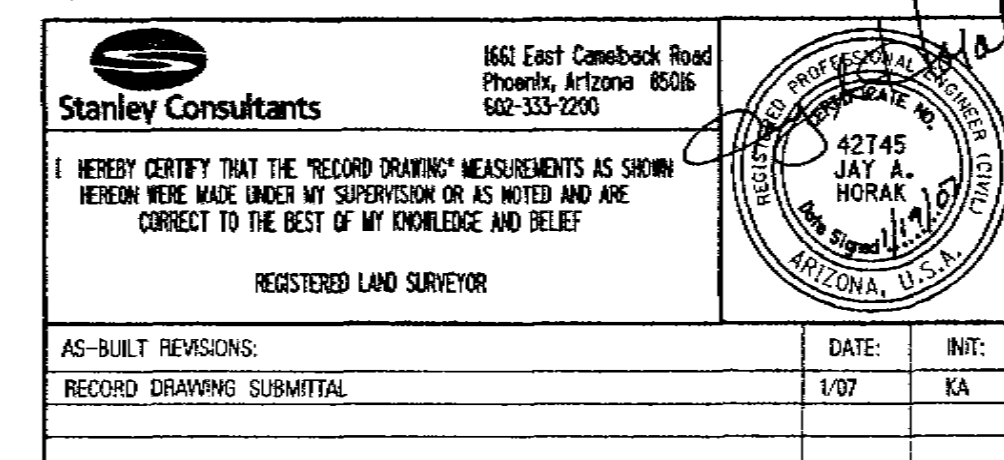
CONSTRUCTION NOTES:

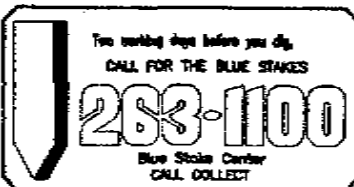


QUANTITY UNIT

| | | | |
|----|--|-----|-----|
| 1 | INSTALL 78" WATERLINE----- | 872 | LF |
| 2 | STA 365+10, 64' RT----- INSTALL 78" 43.68° WELDED BEND | 1 | EA |
| | STA 366+79, 49' RT----- INSTALL 78" 45.53° WELDED BEND | 1 | EA |
| 19 | STA 366+70, 64' RT----- INSTALL AIR RELEASE AND AIR VACUUM VALVE MH FOR 78" WATERLINE, SEE SHEET C50 AND C51 | 1 | EA |
| 20 | INSTALL 120" STEEL CASING ----- SEE SHEET C51 AND C51 | 174 | LF |
| 22 | DELINEATE AND FENCE WATERLINE ---- EASEMENT AND 404 JURISDICTIONAL WASH LIMITS AS SPECIFIED | --- | NPI |
| 30 | INSTALL 8" FORCEMAIN----- | 944 | LF |
| 31 | STA 365+49, 24' RT----- INSTALL 8" 45° BEND | 1 | EA |
| | STA 366+26, 24' RT INSTALL 8" 45° BEND----- | 1 | EA |
| 35 | STA 366+97, 24' RT----- INSTALL 8" 22½° VERTICAL BEND | 1 | EA |
| | STA 367+11, 24' RT ----- INSTALL 8" 22½° VERTICAL BEND | 1 | EA |
| 38 | STA 366+86, 24' RT 25' R AB----- INSTALL AIR RELEASE AND AIR VACUUM VALVE MH FOR 8" FORCEMAIN, N 1018332.60 AB SEE SHEET C51 E 632565.29 AB | 1 | EA |
| 42 | INSTALL 20" STEEL CASING ----- SEE SHEET C51 36" AB | 174 | LF |
| 50 | INSTALL FIBEROPTIC DUCTS ----- | 872 | LF |
| 51 | STA 364+93, 80' R AB----- INSTALL FIBEROPTIC HANDHOLES, SEE SHEET C54 | 1 | EA |
| 59 | AB STA 359+97, 21' RT ----MOVED FROM STA 282+00 INSTALL 8" FORCEMAIN STUB OUT, N 1018395.86 AB SEE SHEET C51 E 631995.51 AB | | |
| | 8" x 8" TEE----- | 1 | EA |
| | 8" PLUG VALVE----- | 1 | EA |
| | 8" PLUG----- | 1 | EA |
| | BOX & COVER PER MAG STD DETAIL 270----- | 1 | EA |



| COORDINATE TABLE | | | | | | |
|--|----------------------------------|--|------------|-----------|--|--|
| NO. | DESCRIPTION | | NORTHING | EASTING | | |
| 1 | EASEMENT BOUNDARY ANGLE POINT | | 1018432.32 | 632585.77 | | |
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|  CITY OF PHOENIX, ARIZONA WATER SERVICES DEPARTMENT | | | | | | |
|  Stanley Consultants INC. | | | | | | |
| 2329 East Camelback Road Suite 130 Phoenix, Arizona 85036-4425 www.stanleygroup.com | | | | | | |
| <div style="display: flex; justify-content: space-between;"> <div> DR. JJO DATE: 9-04 </div> <div> DES. DH DATE: 9-04 </div> <div> CK. L.L DATE: 9-04 </div> </div> | | | | | | |
| <div style="display: flex; justify-content: space-between;"> <div> SHEET NO. </div> <div> TOTAL SHEETS </div> <div> AS BUILT </div> </div> | | | | | | |
| SCALE: 1" = 40' HORIZONTAL 4' VERTICAL | | | | | | |
| STA 359+00 TO STA 369+00 | | | | | | |
| 78" LAKE PLEASANT WATERLINE LAKE PLEASANT WATER TREATMENT PLANT TO THE 54" TRAMONTO WATERLINE WS85500156 | | | | | | |
| <div style="display: flex; justify-content: space-between;"> <div> C37 </div> <div> 42 OF 91 </div> </div> | | | | | | |

[illegible]

| COORDINATE TABLE | | | | | | | | | |
|--|-----|----------------------------------|----|------------|------------|------------|-------------|-------|--|
| NO. | | DESCRIPTION | | | NORTHING | | EASTING | | |
| 1 | | EASEMENT BOUNDARY ANGLE POINT | | | 1017870.09 | | 632608.39 | | |
| | | | | | | | | | |
|  | | | | | | | | | |
|  CITY OF PHOENIX, ARIZONA WATER SERVICES DEPARTMENT | | | | | | | | | |
|  Stanley Consultants INC. | | | | | | | | | |
| 2929 East Camelback Road Suite 150 Phoenix, Arizona 85016-4425 www.stanleygroup.com | | | | | | | | | |
| | | | | | | | | | |
| 78" LAKE PLEASANT WATERLINE LAKE PLEASANT WATER TREATMENT PLANT TO THE 54" TRAMONTO WATERLINE WS85500156 STA 369+00 TO STA 378+50 | | | | | | | | | |
| DR | JJO | DES | DH | CK | LJL | SHEET | TOTAL | AS | |
| DATE: 9-04 | | DATE: 9-04 | | DATE: 9-04 | | NO. | SHEETS | BUILT | |
| SCALE: 1" = 40' HORIZONTAL 4' VERTICAL | | | | | | C38 | 43 OF 91 | | |

CONSTRUCTION NOTES:

| | QUANTITY | UNIT |
|--|--|------|
| 1) INSTALL 78" WATERLINE | 946 | LF |
| 2) STA 380+00.52, 64.26' RT INSTALL 78" 22.44° BEND | 1 | EA |
| STA 387+63.58 EXTENDED, 20' RT INSTALL 78" 66.57° BEND | 1 | EA |
| 19) STA 387+57 EXTENDED, 24' RT INSTALL AIR RELEASE AND AIR VACUUM VALVE MH FOR 78" WATERLINE, SEE SHEET C1 | 386+81, 19 R AB N 1016817.84 AB E 633657.43 AB | EA |
| 20) INSTALL 120" STEEL CASING SEE SHEET C51 AND C61 | 60 | LF |
| 22) DELINEATE AND FENCE WATERLINE EASEMENT AND 404 JURISDICTIONAL WASH LIMITS AS SPECIFIED | — | NP1 |
| 30) INSTALL 8" FORCEMAIN | 958 | LF |
| 31) STA 387+63.96 EXTENDED, 9.48' RT INSTALL 8" 90° BEND | 1 | EA |
| 33) STA 387+53.46 EXTENDED, 9.11' RT INSTALL 8" 111/4° BEND | 1 | EA |
| STA 386+19.18, 24' RT INSTALL 8" 111/4° BEND | 1 | EA |
| 34) STA 387+32 EXTENDED, 12.71' RT INSTALL 8" 45° VERTICAL BEND | 1 | EA |
| STA 387+43 EXTENDED, 10.87' RT INSTALL 8" 45° VERTICAL BEND | 1 | EA |
| 37) REINFORCED CONCRETE ENCASED 8" FORCEMAIN | 20 | LF |
| 46 AB | | |
| 38) STA 379+45, 24' RT AB INSTALL AIR RELEASE AND AIR VACUUM VALVE MH FOR 8" FORCEMAIN, N 1017403.37 AB SEE SHEET C51 | E 633252.78 AB | EA |
| 42) INSTALL 16" CASING PIPE SEE SHEETS C1 AND C2 SHEET C51-A | 65 | LF |
| 50) INSTALL FIBEROPTIC DUCTS | 946 | LF |
| 51) STA 386+00, 68' RT INSTALL FIBEROPTIC HANDHOLES SEE SHEET C54 | 1 | EA |
| 385+72, 73' R AB N 1016878.99 AB E 633569.32 AB | 385+67, 70 R AB N 1016884.04 AB E 633569.18 AB | |

COORDINATE TABLE

| NO. | DESCRIPTION | NORTHING | EASTING |
|-----|----------------------------------|------------|-----------|
| 1 | EASEMENT BOUNDARY ANGLE POINT | 1017385.81 | 633322.13 |
| 2 | EASEMENT BOUNDARY ANGLE POINT | 1016861.96 | 633667.15 |
| 3 | EASEMENT BOUNDARY ANGLE POINT | 1016809.16 | 633678.35 |



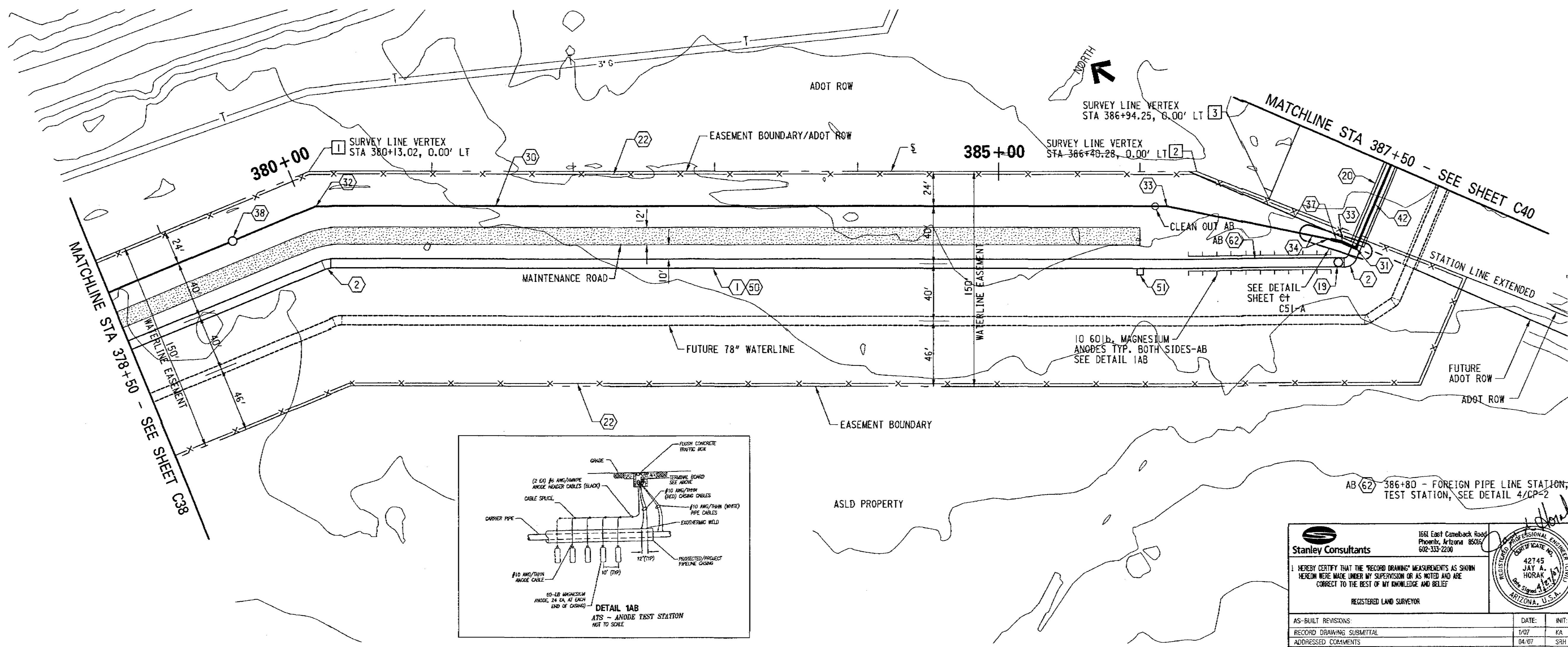
CITY OF PHOENIX, ARIZONA
WATER SERVICES DEPARTMENT

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www.stanleygroup.com



78" LAKE PLEASANT WATERLINE
LAKE PLEASANT WATER TREATMENT PLANT
TO THE 54" TRAMONTO WATERLINE
WS85500156
STA 378+50 TO STA 387+50

DR JJO IDS DH LCK LJE
DATE: 9-04 DATE: 9-04 DATE: 9-04
SHEET NO. TOTAL SHEETS AS BUILT
SCALE: 1" = 40' HORIZONTAL
4" VERTICAL
C39

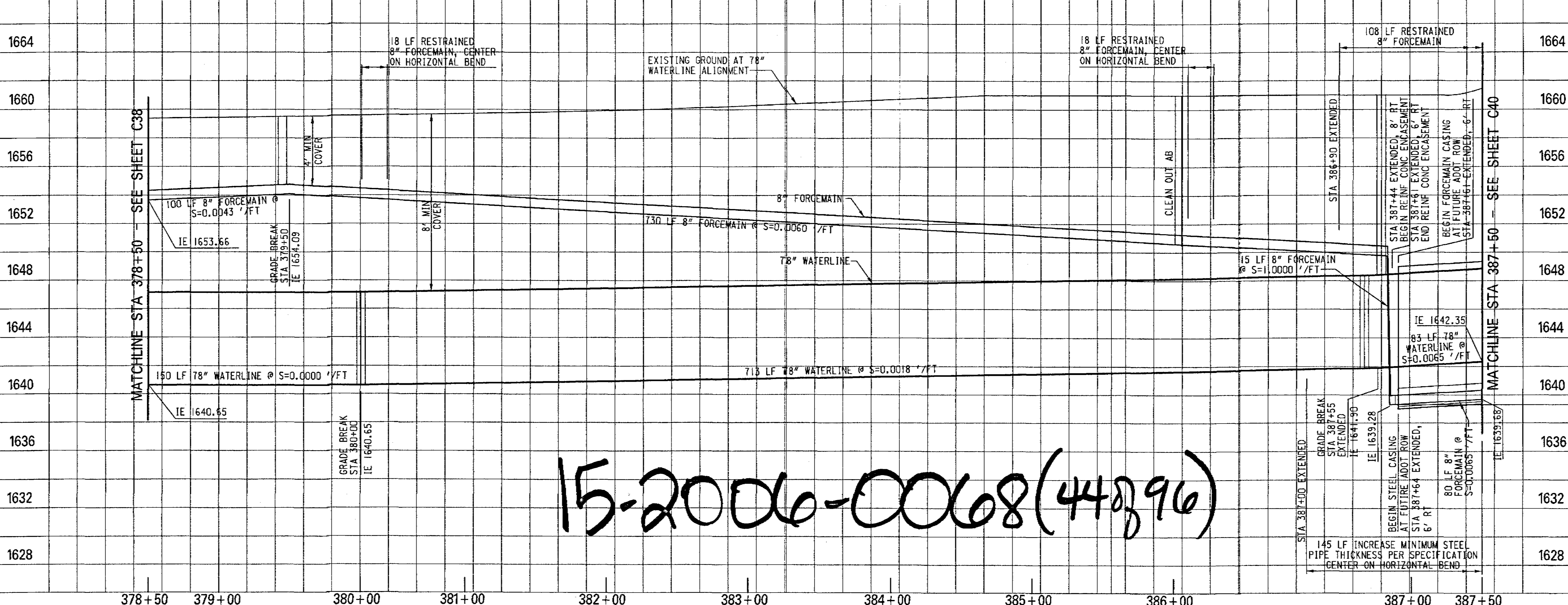


Stanley Consultants
1661 East Camelback Road
Phoenix, Arizona 85016
602-333-2200

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 LAND SURVEYOR

DATE: 1/07 INIT: KA
4/07 SRH

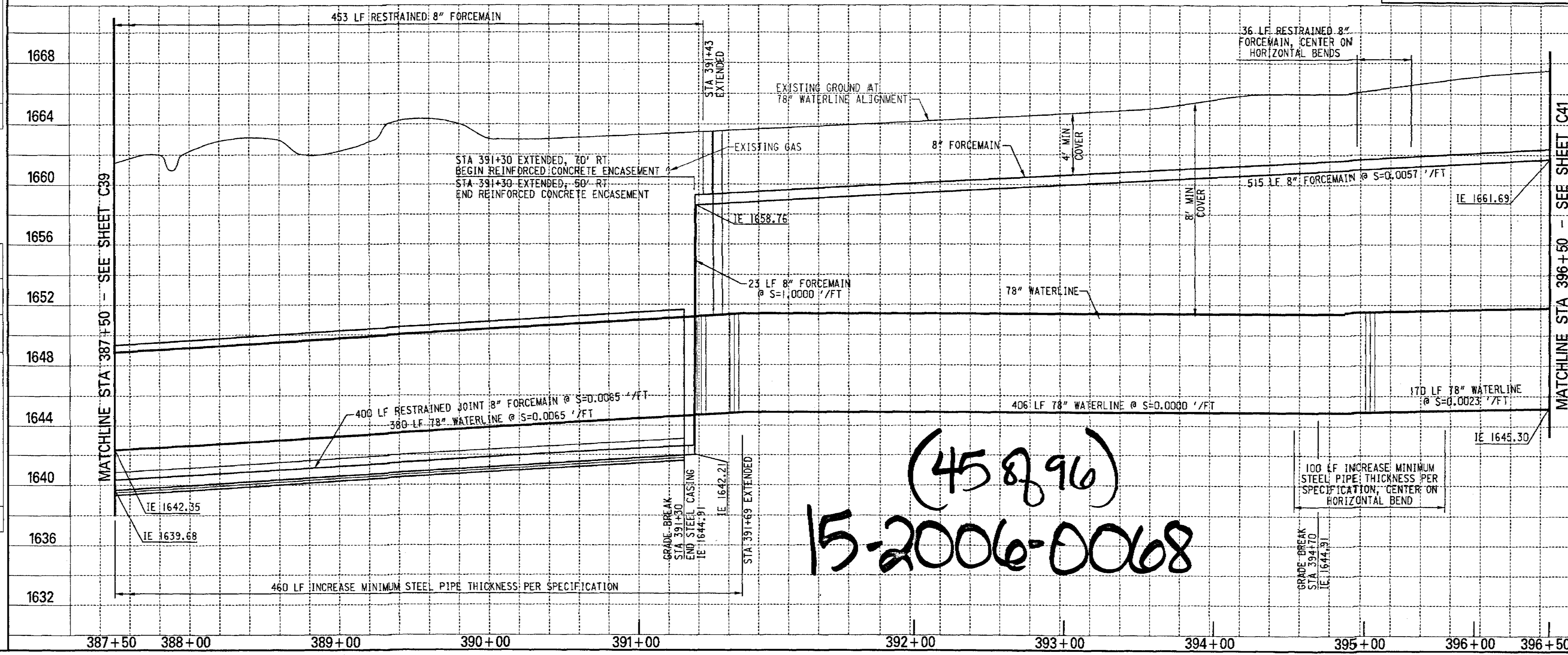
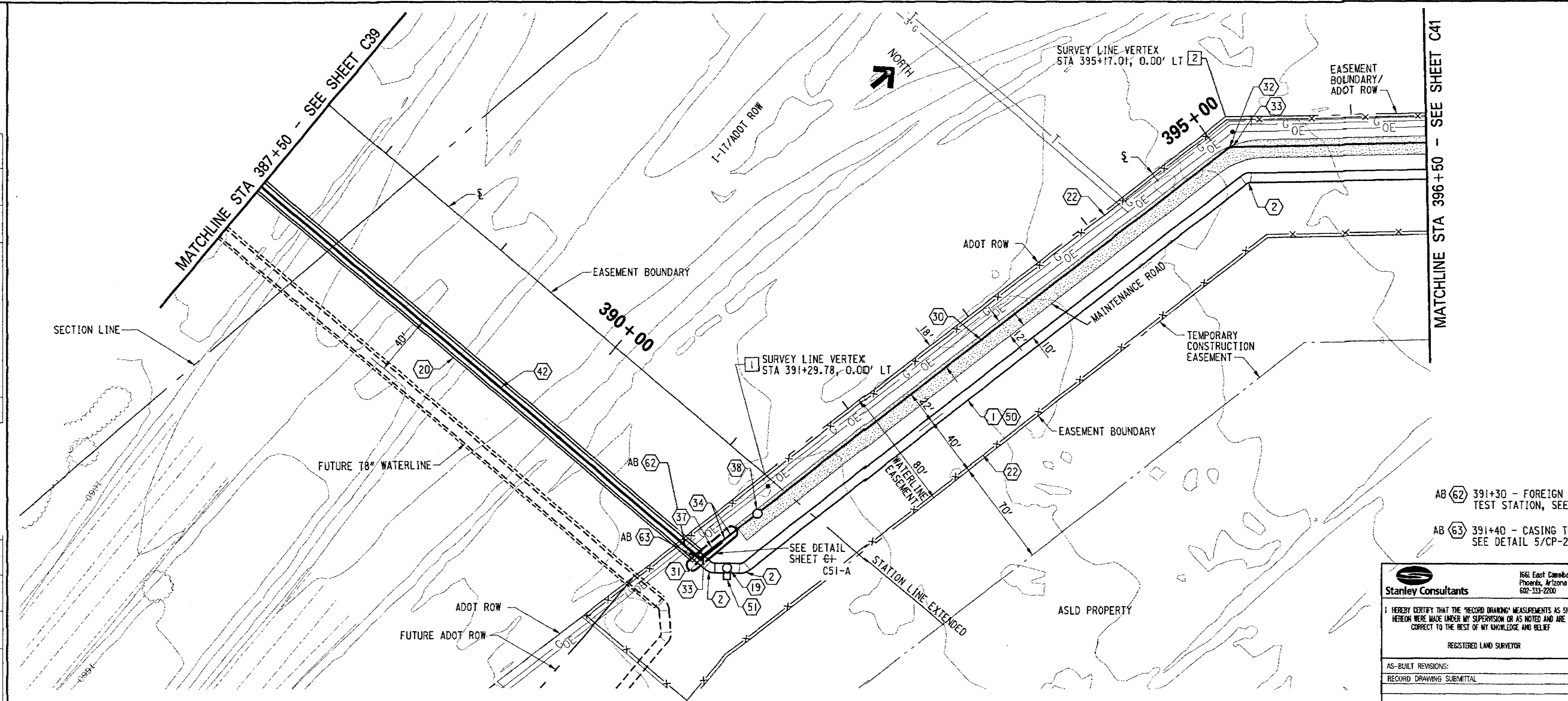


15-2006-0068(44896)

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| NO. | DESCRIPTION | REV BY | CHK BY | DATE |
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(45896)
15-2006-00068

CITY INDEX NO. WS85500156

CONSTRUCTION NOTES:

| | QUANTITY | UNIT |
|---|--|------|
| 1) INSTALL 78" WATERLINE----- | 956 | LF |
| 2) STA 391+41.60 EXTENDED, 70' RT INSTALL 78" 38.83° WELDED BEND | 1 | EA |
| STA 391+58.77 EXTENDED, 56.18' RT INSTALL 78" 38.83° WELDED BEND | 1 | EA |
| STA 395+03.80, 40.23' RT INSTALL 78" 36.73° WELDED BEND | 1 | EA |
| 3) STA 391+50 EXTENDED, 63' RT INSTALL AIR RELEASE AND AIR VACUUM VALVE MH FOR 78" WATERLINE, SEE SHEET C50 AND C51 | 1 | EA |
| 4) STA 387+69, 70' RT INSTALL 120" STEEL CASING SEE SHEET C1 | 380 | LF |
| 5) DELINEATE AND FENCE WATERLINE EASEMENT AND 404 JURISDICTIONAL WASH LIMITS AS SPECIFIED | --- | NP1 |
| 6) INSTALL 8" FORCEMAIN----- | 925 | LF |
| 7) STA 391+32.91, 70' RT INSTALL 8" 90° MJ BEND | 1 | EA |
| 8) STA 391+32.91, 67.63' RT INSTALL 8" 11 1/4° MJ BEND | 1 | EA |
| STA 395+08.56, 18.28' RT INSTALL 8" 11 1/4° MJ BEND | 1 | EA |
| 9) STA 391+37, 50' RT INSTALL 8" 45° MJ VERTICAL BEND | 1 | EA |
| STA 391+38, 34' RT INSTALL 8" 45° MJ VERTICAL BEND | 1 | EA |
| 10) REINFORCED CONCRETE ENCASED 8" FORCEMAIN----- | 20 | LF |
| STA 391+42.20 AB 32.88' R AB 11) STA 391+42.69 EXTENDED, 22.84' RT INSTALL AIR RELEASE AND AIR VACUUM VALVE MH FOR 8" FORCEMAIN, N 1016854.12 AB SEE SHEET C51 E 634124.74 AB | 1 | EA |
| 12) INSTALL 16" CASING PIPE----- | 380 | LF |
| SEE SHEETS C1 AND C2 SHEET C51-A | --- | --- |
| 13) INSTALL FIBEROPTIC DUCTS----- | 956 | LF |
| 14) STA 391+54 EXTENDED, 69' RT INSTALL FIBEROPTIC HANDHOLES, SEE SHEET C54 | 1 | EA |
| STA 391+59, 66' R AB N 1016824.41 AB E 634147.57 AB | 391+64, 66 R AB N 1016825.26 AB E 634152.22 AB | --- |

COORDINATE TABLE

| NO. | DESCRIPTION | NORTHING | EASTING |
|-----|----------------------------------|------------|-----------|
| 1 | EASEMENT BOUNDARY ANGLE POINT | 1016884.49 | 634107.32 |
| 2 | EASEMENT BOUNDARY ANGLE POINT | 1017271.38 | 634123.43 |



CITY OF PHOENIX, ARIZONA
WATER SERVICES DEPARTMENT

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78" LAKE PLEASANT WATERLINE
LAKE PLEASANT WATER TREATMENT PLANT
TO THE 54" TRAMONTO WATERLINE
WS85500156
STA 387+50 TO STA 396+50

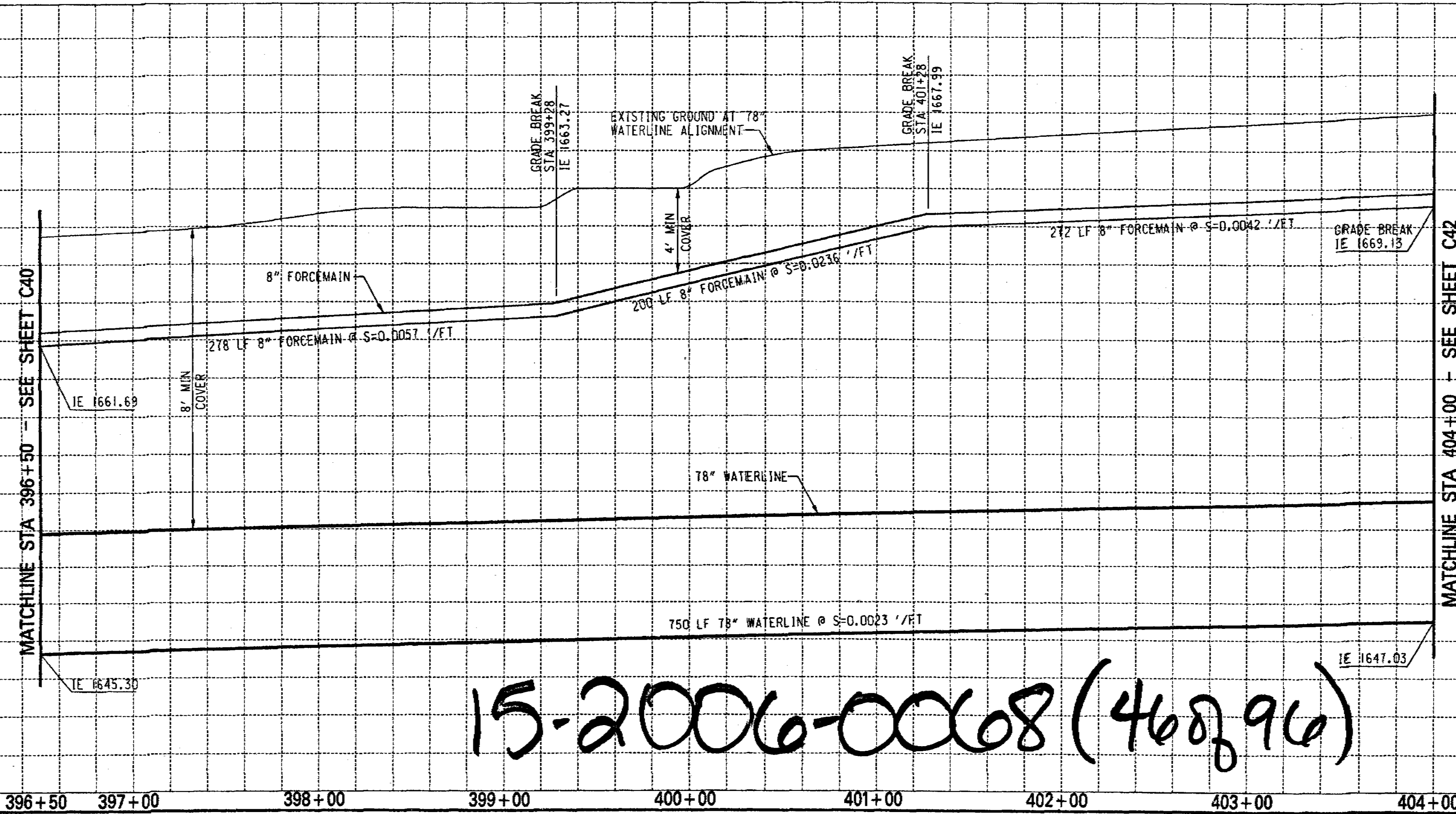
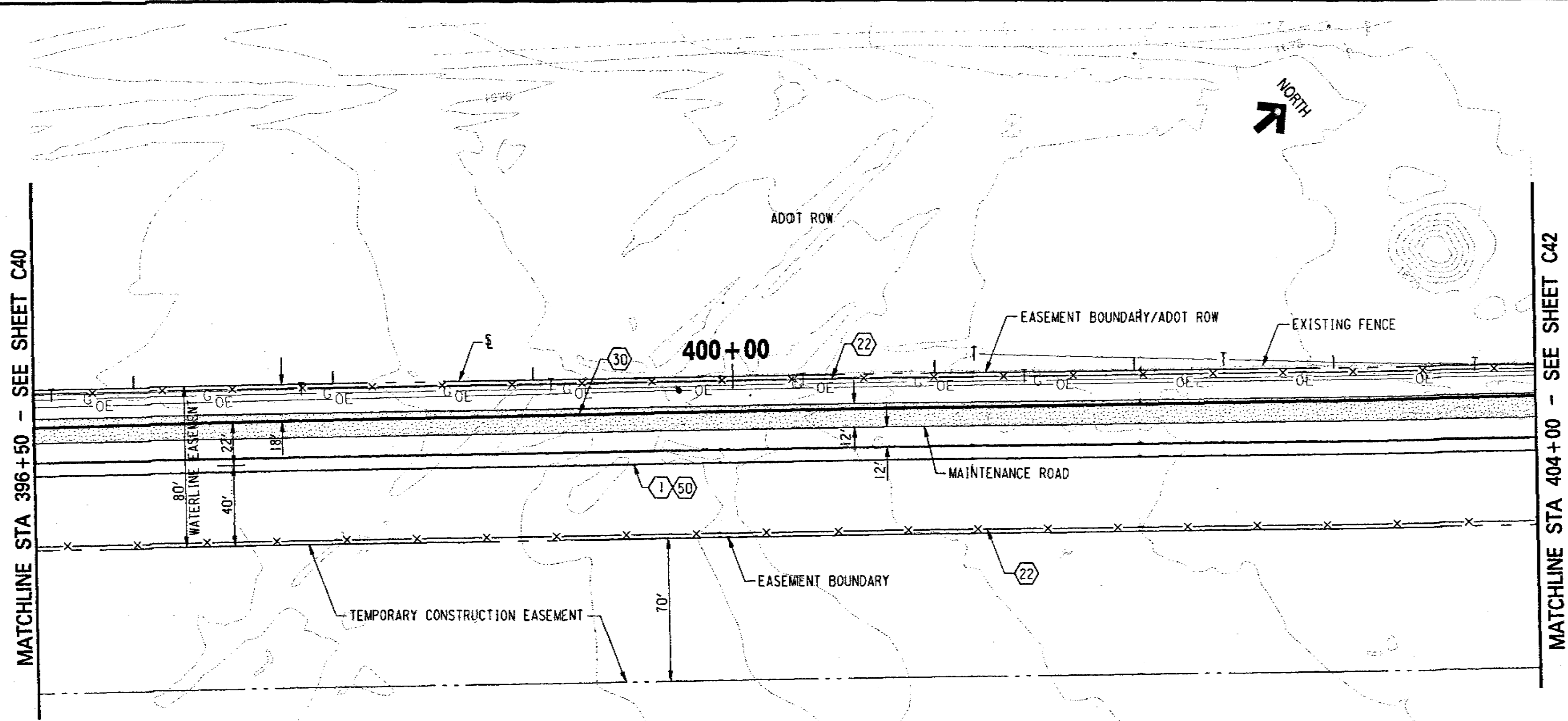
| | | | | | |
|------------|------------|------------|--|--------------|----------|
| DR JJO | DES JH | CHK JLL | SHEET NO. 40 | TOTAL SHEETS | AS BUILT |
| DATE: 9-04 | DATE: 9-04 | DATE: 9-04 | SCALE: 1" = 40' HORIZONTAL 1" = 4' VERTICAL | | |

| NO. | DESCRIPTION | REV BY | CD | DATE |
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NO. 15-2006-0008 (46896)



15-2006-0008 (46896)

CITY INDEX NO. WS85500156

CONSTRUCTION NOTES:

| | QUANTITY | UNIT |
|---|----------|------|
| 1 INSTALL 78" WATERLINE ----- | 750 | LF |
| 22 DELINEATE AND FENCE WATERLINE EASEMENT AND 404 JURISDICTIONAL WASH LIMITS AS SPECIFIED | --- | NP1 |
| 30 INSTALL 8" FORCEMAIN ----- | 750 | LF |
| 50 INSTALL FIBEROPTIC DUCTS----- | 750 | LF |

COORDINATE TABLE

| NO. | DESCRIPTION | NORTHING | EASTING |
|--------------------------|-------------|----------|---------|
| <input type="checkbox"/> | | | |
| <input type="checkbox"/> | | | |



CITY OF PHOENIX, ARIZONA
WATER SERVICES DEPARTMENT

Stanley Consultants INC.
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78" LAKE PLEASANT WATERLINE
LAKE PLEASANT WATER TREATMENT PLANT
TO THE 54" TRAMONTO WATERLINE
WS85500156
STA 396+50 TO STA 404+00

| DR | JUN | DES | CH | CHK | LJK | SHEET NO. | TOTAL SHEETS | AS BUILT |
|------------|------------|------------|----|-----|-----|-----------|--------------|----------|
| DATE: 9-04 | DATE: 9-04 | DATE: 9-04 | | | | C41 | 46 OF 91 | |

SCALE: 1" = 40' HORIZONTAL
1" = 4' VERTICAL



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