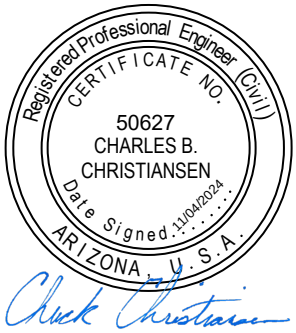
City of Phoenix
Office of the City Engineer
Design and Construction Procurement

HAPPY VALLEY ROAD: 67TH AVENUE TO 35TH AVENUE
ROADWAY IMPROVEMENTS
DESIGN-BID-BUILD

PROJECT NO. ST85100437
FEDERAL AID NO. PHX-0(363)D
ADOT TRACS NO. T0239 01C

PROCUREPHX PRODUCT CATEGORY CODE 912000000
RFx 6000001675

ADDENDUM NO. 2



ISSUE DATE: November 4, 2024

Bidders are hereby notified that the Bidding and Contract Documents for the above project, for which Bids are to be received on November 5, 2024**,** are amended as follows:

1. Delete in Addendum 1:

BIDS WILL BE DUE: TUESDAY, NOVEMBER 5, 2024, AT 2:00 P.M.
SUBMITTED INTO THE DESIGN AND CONSTRUCTION PROCUREMENT BID BOX
LOCATED ON THE 1ST FLOOR LOBBY OF THE PHOENIX CITY HALL BUILDING
200 W. WASHINGTON STREET, PHOENIX, ARIZONA, 85003

BIDS WILL BE READ: TUESDAY, NOVEMBER 5, 2024, AT 2:00 P.M.
ON 5TH FLOOR, ROOM 5 WEST
PHOENIX CITY HALL
200 W. WASHINGTON STREET
PHOENIX, AZ 85003-1611
***All times are local Phoenix time**

Replace with:

BIDS WILL BE DUE: TUESDAY, NOVEMBER 19, 2024, AT 2:00 P.M.
SUBMITTED INTO THE DESIGN AND CONSTRUCTION PROCUREMENT BID BOX
LOCATED ON THE 1ST FLOOR LOBBY OF THE PHOENIX CITY HALL BUILDING
200 W. WASHINGTON STREET, PHOENIX, ARIZONA, 85003

BIDS WILL BE READ: TUESDAY, NOVEMBER 19, 2024, AT 2:00 P.M.
ON 5TH FLOOR, ROOM 5 WEST
PHOENIX CITY HALL
200 W. WASHINGTON STREET
PHOENIX, AZ 85003-1611
***All times are local Phoenix time**

Q1.	Is it possible to add a Mobilization line item due to the size of the project and multiple phases that will be required for construction?
A1.	**A mobilization bid item has been added, see attached Bid Proposal P -2 to -10.**
Q2.	Can an item for Miscellaneous Removals and Other Work Items be added?
A2.	**A miscellaneous removal bid item is added. The bid item is based on the miscellaneous removals found in MAG specification 350 and the City Supplement to MAG specification**

	350. It will be a lump sum bid item and not an allowance. See attached Bid Proposal P - 2 to -10.
Q3.	In review of the soils report, there were no borings done in the area where the new channel and retention basin are located. This area extends north into a mountainous area, and we are concerned with the material in this area being possibly rock. Does the City have any information for this portion of the project?
A3.	**See Percolation Testing Geotechnical Report attached that completed two borings at the retention basin. Additionally, the City obtained four seismic refraction lines in the general area of the channel. See attached Seismic Refraction survey.**
Q4.	The project IFB mentions that this project is subject to compliance with an Army Corps 404 permit. Will bidders be provided a copy of this permit prior to bid the time of bidding to ensure all costs associated with compliance are covered.
A4.	**See attached Nationwide Permit Number 14 (404 Permit).**
Q5.	Will the City be providing materials and density testing for this project or will this be the responsibility of contractor of to provide?
A5.	**As specified in MAG Section 106.2, The City will pay for the initial or normal test required by the Engineer to guard against unsuitable materials or defective workmanship. The City will provide technicians to perform sampling and testing for quality acceptance. The Contractor may provide its own technicians for quality control of its operations and materials, at no additional cost to the City. Additionally, the Contractor shall perform Quality Control functions where required by the applicable specification sections.**
Q6.	What is the percentage or weight per square yard of lime that is to be included within the lime stabilization of subgrade bid item? The plans, specifications, and geotechnical report do not reference the amount/volume of lime which is to be incorporated
A6.	**Per MAG specifications Section 309, the contractor will provide a mix design for review and approval. The minimum percentage of lime is 5%.**
Q7.	Will the cross sections for this project be provided?
A7.	**Cross sections will not be provided. See attached Roadway Excavation Supplemental Information, for information only. The Contractor must verify the accuracy of the reports and earthwork quantities.**
Q8.	If five days after the bid falls on a Sunday, can we submit required DBE documentation on the Monday after the five days?
A8.	**No. The requirement is no later than five calendar days after bid opening.**
Q9.	There are many allowances on the project, do we have to carry the DBE goal for the allowances? Can the allowances be utilized for part of the DBE participation?
A9.	**No. DBE goal should be met in the bid without allowances.** **No. Allowances cannot be counted towards the DBE participation goal in the initial bid.**
Q10.	If a DBE loses certification between bid and turn in dates, will they still count toward the DBE goal?
A10.	**No.**
Q11.	Traffic control states that two lanes of travel should remain open in each direction for arterial, however, there are only two lanes of travel in some areas. How will the contractor maintain traffic?
A11.	**The current special regulations allow for maintaining a single lane for each direction when four or less lanes exist and/or when, in the determination of the City, the scope of**

	work determines it necessary.
Q12.	Will the bus shelters be required to be constructed with this project?
A12.	**No.**
Q13.	Will temporary traffic control be required while the City of Phoenix forces complete the striping work?
A13.	**Yes. Wherever centerline striping, left turn striping, edge line striping, or raised curb median is removed or not signed and stiped as required per the MUTCD and City standards, temporary traffic control will be required to remain in place and an approved TRACS permit obtained until installation is complete.**
Q14.	What is the maximum work zone limit and does the work zone limit include the traffic control that is temporarily in place for the city of Phoenix forces to complete striping?
A14.	**The limit of restrictions will be that no consecutive signalized intersections will have the left turn movement restricted at the same time. Every other traffic signal shall allow left turn movements for all directions. Approval of consecutive restrictions of left turn movements at signalized intersections may be approved at the discretion of the City Street Transportation Department.**
Q15.	Can the lime be added to the subgrade in place, or will it be required to be mixed offsite?
A15.	**Either method is acceptable to the Engineer, provided it meets requirements of the specifications.**
Q16.	What is the address of the yard that the salvaged fire hydrants are to be delivered to?
A16.	**City of Phoenix Water Department – Campbell Yard** **4436 N. 35th Avenue** **Phoenix AZ 85017** **(602) 262-5077**
Q17.	Will the City be requiring/wanting the contractor to extend the lime stabilization and aggregate base course under the new curb and gutter?
A17.	**Yes. 6-inch lime stabilization shall be extended under sections of new curb and gutter, new valley gutter, new sidewalk and new curb ramps. See attached Bid Proposal, P-2 to -10.**
Q18.	Will the city be requiring/wanting the contractors to extend the lime stabilization and aggregate base course under the new valley gutters? If not, we would like to make the City aware that there are several locations where the plans call for lime stabilization and aggregate base courses on both sides of the valley gutter with a small quantity only being required on one side of the valley gutter that will require extensive hand work involved. An example of this would be at approximately station 54+00.
A18.	**See A17.**
Q19.	Are there any restrictions for the lengths of traffic control setup throughout the project?
A19.	**Yes. The length of the traffic control will be determined per the MUTCD and City Traffic Barricade Manual for the restrictions in place. Also, there shall be no consecutive restrictions of left turn movement at signalized intersections.**
Q20.	There is Bid Item M3362000 Slurry Seal Coat (105,682 SY) however, it appears there are no callouts on the plans or any details in the specifications regarding this item. Clarify the location and specifications for this item.
A20.	**Bid Item M3362000 slurry seal coat is required as defined in the City of Phoenix's Street Pavement Cut Policy (TRT/DOC/00164). The implementation of the policy and the HVR**

	design plans define the limits of the improvements and specifications on how to install. Below is the table of the proposed locations and areas of Bid Item M3362000 Slurry Seal Coat and Crack Seal. Where the policy requires the use of microsurfacing due to the street classification, this will be measured and paid under item M3362000 at no additional cost. Note the pavement cut policy also requires crack fill and seal, per MAG Standard Specification 337.

M3362000 Slurry Seal Coat	
Approx. Location	***Area (SY)***
65th Avenue	81
64th Avenue (N)	103
64th Avenue (S)	75
62nd Avenue	189
61st Avenue	113
55th Avenue (N)	548
55th Avenue (S)	213
55th Avenue (S)	197
53rd Avenue (N)	141
53rd Avenue (S)	87
51st Avenue (N)	227
51st Avenue (S)	99
49th Avenue (N)	89
49th Avenue (S)	77
48th Avenue	257
47th Avenue (N)	154
47th Avenue (S)	263
45th Avenue	213
43rd Avenue (N)	172
43rd Avenue (S)	199
41st Avenue	186
40th Drive	133
39th Drive (N)	208
39th Drive (S)	147
35th Avenue (N)	742
35th Avenue (S)	195
Totals:	**5,109**

Q21.	Clarify what electrical materials are being provided and installed by the City. The special provisions, pay items and the traffic signal plans and details (specifically note 3) contradict each other.
A21.	***Plans:*** **Note 3 on Wilson & Company's traffic signal sheets reflects a non-federal aid note to contractors. See attached revised plans. Replace Note 3 on sheets 320, 328, 336, 344, and 346 with the following:** **3. WORK TO BE PERFORMED BY CITY OF PHOENIX SIGNAL CREWS** **Traffic Signal representative shall approve marked layout of ADA ramps, junction boxes and foundation locations prior to excavation, prep contractor furnished controller cabinets and internal equipment (contractor to pick up and install controller cabinet), inspect and approve all traffic signal equipment installed by contractor and terminate, test, and activate all field wiring into controller cabinet(s).** ***Specifications:*** **Remove SECTION 474 TRAFFIC SIGNAL POLES AND ACCESSORIES from the Project Special Provisions. The City Traffic Signal Standard Specifications will still apply.** ***Estimate:*** **Quantities are correct. No changes.**
Q22.	Will the City consider adding a bid item for Message Boards?
A22.	**No. Message boards are to be included in the Traffic Control bid item.**

Q23.	For the channel lining reinforcement, will the engineer accept the use of fiber mesh concrete in lieu of the welded wire fabric?
A23.	**There is not an approved fiber mesh concrete mix design. For bid substitutions, see Information for Bidders, 1. B. page I.F.B. -1, REQUEST FOR SUBSTITUTIONS.**
Q24.	Due to the long duration of the project and unstable oil prices, will the City adopt the ADOT oil escalator for this project to cover the asphalt?
A24.	**No. ADOT oil escalator will not be used on this project.**
Q25.	Will all temporary and permanent striping on the project including temporary lane markings be provided by the City?
A25.	**Temporary striping will not be provided by the City. Permanent striping will be provided by the City. Any traffic control required to maintain traffic will be provided by the contractor as part of the Traffic Control bid item.**
Q26.	Clarify if contractors will be allowed to keep traffic control in place/installed 24 hours per day? Will all lane closures need to be taken down at the end of each work shift?
A26.	**Scope of work will determine what restrictions and traffic control will be needed. When the scope of work dictates that a 24-hour restriction is required, barricades can remain in place on a 24-hour basis as approved per the scope of work and the Engineer.**
Q27.	Will all required police officers be paid for under the uniformed police officer allowance? Or is this item only for additional uniformed police officers required at the direction of the City?
A27.	**Only the use of off-duty police officers used for the purpose of maintaining traffic through the project limits will be paid under the allowance.**
Q28.	Will unforeseen material escalations be paid for by the City out of the allowances or are all material escalations the responsibility of the contractor?
A28.	**Escalations are not paid for by the City. All material escalation will be the responsibility of the contractor.**
Q29.	Will sidewalk closures be allowed on one side of Happy Valley Road at a time, or will the contractor be required to provide temporary sidewalks and curb ramps during construction operations? If so, under what pay item are these temporary facilities to be paid under?
A29.	**The COP requires that paved or unpaved sidewalks be maintained along arterial and collector streets on the same side of the roadway per the MUTCD and City Traffic Barricade Manual. How and what material or equipment is required to accomplish this is determined by the conditions in the field/scope of work.** **Contactors will be required to provide an accessible temporary pedestrian walkway when taking a sidewalk and/or an implied path out of service. Only under emergency situations will the City consider closing a sidewalk, and special accommodations may need to be made that require pedestrian access. The City will review the location to find the most suitable path in that case.** **There is no separate measurement or payment for the temporary sidewalks or paths, it is considered incidental to the work being performed.**
Q30.	Confirm that the contractor is responsible for maintaining traffic control for up to 16 weeks after completion of pavement operations to facilitate the City's pavement marking crew.
A30.	**See below Technical Specification 1.**
Q31.	Is it possible for contractors to perform exploratory excavations in these areas prior to the time of bid at our expense to test soil conditions and their dig ability?

A31.	**No. See attached Seismic Refraction Survey.**
Q32.	The bid documents refer to the potential need for archeological monitoring. We would like to request that an allowance be included to bill all costs associated with this scope of work.
A32.	**No. The City will hire an archeological monitor under a separate contract.**
Q33.	There is a bid item for the directional drilling for the 2.5" conduit related to the APS lighting, but there is not a bid item for the directional drilling for the 2.5" conduit related to the traffic signals. Clarify how this work will be paid.
A33.	**The 2.5" conduit related to the traffic signals will be paid for under item number 4711003 and constructed in accordance with City Traffic Signal Standard Specification 471.**
Q34.	The same situation exists with the (two) 1.25" fiber conduits. Are the existing sidewalks, driveways, and roadways to be open cut for the installation of the two 1.25" fiber conduits? Clarify how this will be paid for.
A34.	**Payment for two - 1.25" (PVC) fiber conduits will be per pay item M7320292 per lineal foot. See special provisions Section 732 (Method can be either boring or open trench or combination of both).**
Q35.	Is it the intent of the City to have the roadway traffic signal conduits installed by open cut trenching methods within the roadway?
A35.	**See City Traffic Signal Standard Specification 471 for method of traffic signal conduit placement.**
Q36.	The bid submittal checklist states that we need to submit the bid form “Completed Certification with Regard to Equal Opportunity Clause for Contractor and Subcontractors (E.O.C.-1). I could not locate said form in the bid packet. Will this be included in the Addendum?
A36.	**See attached Certification with Regards to Equal Opportunity Clause for Contractor and Subcontractors E.O.C. -1.**

1. Delete Table of Contents (TOC) in its entirety and replace with the attached TOC.

2. Delete the following sections in its entirety and replace with the following:
    a. Information for Bidders, Section II – Submittals, (01) Bid Proposal P -2 to -10, and replace with the attached Bid Proposal P -2 to -10.
    b. Information for Bidders, Section II – Submittals, (8) E.O.C.-1 and replace with the following document, Section II, Submittals, (8) E.O.C.-1, Certification with Regards to Equal Opportunity Clause for Contractor and Subcontractors.
    c. Revise: Information for Bidders, Sec. I, A. QUESTIONS ON PLANS AND SPECIFICATION: **All questions regarding the plans and specifications must be received, in writing by Thursday, November 7, 2024 by 5 p.m.**

Technical Specifications

1. Add the following to Special Provisions, 401 TRAFFIC CONTROL, Add the following to Subsection 401.5 GENERAL TRAFFIC REGULATION: Page SP -20:

a. **Traffic Control For Signing And Striping By City Forces:** The City of Phoenix Traffic Services Division (TSD) will complete the signing and striping work for the project. When the Contractor is ready for final signing and striping, the contractor shall notify the Engineer and make a request for the City Forces to complete the work. TSD will not schedule the signing and striping until they inspect the Site and see that the final pavement treatment is applied. It may take up to 16 weeks to complete the final signing and striping. During that time, the Contractor shall keep all traffic control devices in place, according to the approved traffic control plan, until their removal is approved by the Engineer. The Engineer may request a new traffic control plan or changes to the traffic control during this period. The Contractor shall make requested changes at no additional cost. No separate measurement or payment will be made for the extended duration of traffic control devices between the time that the Contractor makes the request until the time of completion of the work by City Forces. The work shall be included in the bid item "TRAFFIC CONTROL DEVICES".

2. Delete the following section in entirety:
   a. Special Provisions, Item 30., SECTION 474 TRAFFIC SIGNAL POLES AND ACCESSORIES, Page S.P. -41 to -43.

Plan Sheets:
The following plan sheets have been revised as attached:

1. Sheet 4 of 368
2. Sheet 6 of 368
3. Sheet 41 of 368
4. Sheet 107 of 368
5. Sheet 306 of 368
6. Sheet 320 of 368
7. Sheet 328 of 368
8. Sheet 336 of 368
9. Sheet 344 of 368
10. Sheet 346 of 368

NOTE: Bidders must acknowledge receipt of this Addendum by listing the number and date, where provided, on the PROPOSAL P-1.

END OF ADDENDUM

Attachments:
Nationwide Permit Number 14 (404 Permit), 18 Pages
Roadway Excavation Supplemental Information, 2 Pages
Percolation Testing Geotechnical Report, 5 Pages
Seismic Refraction Survey, 2 Pages
Bid Proposal, P-2 to 10
Certification with Regard to Equal Opportunity Clause for Contractor and Subcontractors E.O.C. -1
Revised Plan Sheets, 10 Pages
Table of Contents

NATIONWIDE PERMIT NUMBER 14
Linear Transportation Projects

U.S. ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT
Arizona Regulatory Branch

BUILDING STRONG®

A. General Information

This document provides the terms and conditions of the nationwide permit (NWP) by combining information from (1) the terms and conditions of the NWP (https://www.federalregister.gov/documents/2021/12/27/2021-27441/reissuance-and-modification-of-nationwide-permits), (2) Regional conditions, and (3) the Clean Water Act Section 401 water quality certification decisions (401 WQCs). The NWP is in effect from February 25, 2022 through March 14, 2026 unless modified, reissued, or revoked before that time. It is incumbent upon the permittee to remain informed of changes to the NWPs.

Links to documents related to the NWP program may be found at
https://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/Nationwide-Permits/

Key Sections

B. Nationwide Permit Terms

14. Linear Transportation Projects. Activities required for crossings of waters of the United States associated with the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, driveways, airport runways, and taxiways) in waters of the United States. For linear transportation projects in non-tidal waters, the discharge of dredged or fill material cannot cause the loss of greater than 1/2-acre of waters of the United States. For linear transportation projects in tidal waters, the discharge of dredged or fill material cannot cause the loss of greater than 1/3-acre of waters of the United States. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.

This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges of dredged or fill material, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) the loss of waters of the United States exceeds 1/10-acre; or (2) there is a discharge of dredged or

fill material in a special aquatic site, including wetlands. (See general condition 32.) (Authorities: Sections 10 and 404)

Note 1: For linear transportation projects crossing a single waterbody more than one time at separate and distant locations, or multiple waterbodies at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. Linear transportation projects must comply with 33 CFR 330.6(d).

Note 2: Some discharges of dredged or fill material for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under Section 404(f) of the Clean Water Act (see 33 CFR 323.4).

Note 3: For NWP 14 activities that require pre-construction notification, the PCN must include any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings that require Department of the Army authorization but do not require pre-construction notification (see paragraph (b)(4) of general condition 32). The district engineer will evaluate the PCN in accordance with Section D, "District Engineer's Decision." The district engineer may require mitigation to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see general condition 23).

C. Nationwide Permit General Conditions

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his or her authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).

7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.

13. Removal of Temporary Structures and Fills. Temporary structures must be removed, to the maximum extent practicable, after their use has been discontinued. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. Wild and Scenic Rivers. (a) No NWP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.

(b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. Permittees shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.

(c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: http://www.rivers.gov/.

17. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

18. Endangered Species. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify designated critical habitat or critical habitat proposed for such designation. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless ESA section 7 consultation addressing the consequences of the proposed activity on listed species or critical habitat has been completed. See 50 CFR 402.02 for the definition of "effects of the action" for the purposes of ESA section 7 consultation, as well as 50 CFR 402.17, which provides further explanation under ESA section 7 regarding "activities that are reasonably certain to occur" and "consequences caused by the proposed action."

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA (see 33 CFR 330.4(f)(1)). If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat or critical habitat proposed for such designation, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation), the pre-construction notification must include the name(s) of the endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or that utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. For activities where the non-Federal applicant has identified listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have "no effect" on listed species (or species proposed for listing or designated critical habitat (or critical habitat proposed for such designation), or until ESA section 7 consultation or conference has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(d) As a result of formal or informal consultation or conference with the FWS or NMFS the district engineer may add species-specific permit conditions to the NWPs.

(e) Authorization of an activity by an NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the FWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will coordinate with the agency that issued the ESA section 10(a)(1)(B) permit to determine whether the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation conducted for the ESA section 10(a)(1)(B) permit. If that coordination results in concurrence from the agency that the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation for the ESA section 10(a)(1)(B) permit, the district engineer does not need to conduct a separate ESA section 7 consultation for the proposed NWP activity. The district engineer will notify

the non-federal applicant within 45 days of receipt of a complete pre-construction notification whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.

(g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their world wide web pages at http://www.fws.gov/ or http://www.fws.gov/ipac and http://www.nmfs.noaa.gov/pr/species/esa/ respectively.

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for ensuring that an action authorized by an NWP complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting the appropriate local office of the U.S. Fish and Wildlife Service to determine what measures, if any, are necessary or appropriate to reduce adverse effects to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

20. Historic Properties. (a) No activity is authorized under any NWP which may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)(1)). If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties might have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of, or potential for, the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts commensurate with potential impacts, which may include background research, consultation, oral history interviews, sample field investigation, and/or field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of section 106 of the NHPA: no historic properties affected, no adverse effect, or adverse effect.

(d) Where the non-Federal applicant has identified historic properties on which the proposed NWP activity might have the potential to cause effects and has so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects to historic properties or that NHPA section 106 consultation has been completed. For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after

consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

21. Discovery of Previously Unknown Remains and Artifacts. Permittees that discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by an NWP, they must immediately notify the district engineer of what they have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. Designated Critical Resource Waters. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, 52, 57 and 58 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed by permittees in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after she or he determines that the impacts to the critical resource waters will be no more than minimal.

23. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects.

(d) Compensatory mitigation at a minimum one-for-one ratio will be required for all losses of stream bed that exceed 3/100-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. This compensatory mitigation requirement may be satisfied through the restoration or enhancement of riparian areas next to streams in accordance with paragraph (e) of this general condition. For losses of stream bed of 3/100-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through

stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).

(e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. If restoring riparian areas involves planting vegetation, only native species should be planted. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation.

(2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f).)

(3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.

(4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)). If permittee-responsible mitigation is the proposed option, and the proposed compensatory mitigation site is located on land in which another federal agency holds an easement, the district engineer will coordinate with that federal agency to determine if proposed compensatory mitigation project is compatible with the terms of the easement.

(5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan needs to address only the baseline conditions at the impact site and the number of credits to be provided (see 33 CFR 332.4(c)(1)(ii)).

(6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan (see 33 CFR 332.4(c)(1)(ii)).

(g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any NWP activity resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs.

(h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

(i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.

24. Safety of Impoundment Structures. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state or federal, dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. Water Quality. (a) Where the certifying authority (state, authorized tribe, or EPA, as appropriate) has not previously certified compliance of an NWP with CWA section 401, a CWA section 401 water quality certification for the proposed discharge must be obtained or waived (see 33 CFR 330.4(c)). If the permittee cannot comply with all of the conditions of a water quality certification previously issued by certifying authority for the issuance of the NWP, then the permittee must obtain a water quality certification or waiver for the proposed discharge in order for the activity to be authorized by an NWP.

(b) If the NWP activity requires pre-construction notification and the certifying authority has not previously certified compliance of an NWP with CWA section 401, the proposed discharge is not authorized by an NWP until water quality certification is obtained or waived. If the certifying authority issues a water quality certification for the proposed discharge, the permittee must submit a copy of the certification to the district engineer. The discharge is not authorized by an NWP until the district engineer has notified the permittee that the water quality certification requirement has been satisfied by the issuance of a water quality certification or a waiver.

(c) The district engineer or certifying authority may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). If the permittee cannot comply with all of the conditions of a coastal zone management consistency concurrence previously issued by the state, then the permittee must obtain an individual coastal zone management consistency concurrence or presumption of concurrence in order for the activity to be authorized by an NWP. The district engineer or a state may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its CWA section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is authorized, subject to the following restrictions:

(a) If only one of the NWPs used to authorize the single and complete project has a specified acreage limit, the acreage loss of waters of the United States cannot exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

(b) If one or more of the NWPs used to authorize the single and complete project has specified acreage limits, the acreage loss of waters of the United States authorized by those NWPs cannot exceed their respective specified acreage limits. For example, if a commercial development is constructed under NWP 39, and the single and complete project includes the filling of an upland ditch authorized by NWP 46, the maximum acreage loss of waters of the United States for the commercial development under NWP 39 cannot exceed 1/2-acre, and the total acreage loss of waters of United States due to the NWP 39 and 46 activities cannot exceed 1 acre.

29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

"When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

_____
(Transferee)

_____
(Date)

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

(a) A statement that the authorized activity was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;

(b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and

(c) The signature of the permittee certifying the completion of the activity and mitigation.

The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

31. Activities Affecting Structures or Works Built by the United States. If an NWP activity also requires review by, or permission from, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a "USACE project"), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires section 408 permission and/or review is not authorized by an NWP until the appropriate Corps office issues the section 408 permission or completes its review to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

32. Pre-Construction Notification. (a) *Timing*. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review

process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

(1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) *Contents of Pre-Construction Notification*: The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed activity;

(3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;

(4) (i) A description of the proposed activity; the activity's purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures.

(ii) For linear projects where one or more single and complete crossings require pre-construction notification, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete crossing of those wetlands, other special aquatic sites, and other waters (including those single and complete crossings authorized by an NWP but do not require PCNs). This information will be used by the district engineer to evaluate the cumulative adverse environmental effects of the proposed linear project, and does not change those non-PCN NWP activities into NWP PCNs.

(iii) Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

(5) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial and intermittent streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45-day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed and a PCN is required, the prospective permittee must submit a statement describing how the mitigation

requirement will be satisfied, or explaining why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(7) For non-federal permittees, if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat (or critical habitat proposed for such designation), the PCN must include the name(s) of those endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;

(8) For non-federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with section 106 of the National Historic Preservation Act;

(9) For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the PCN must identify the Wild and Scenic River or the "study river" (see general condition 16); and

(10) For an NWP activity that requires permission from, or review by, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from, or review by, the Corps office having jurisdiction over that USACE project.

(c) *Form of Pre-Construction Notification*: The nationwide permit pre-construction notification form (Form ENG 6082) should be used for NWP PCNs. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.

(d) *Agency Coordination*: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the activity's adverse environmental effects so that they are no more than minimal.

(2) Agency coordination is required for: (i) all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States; (ii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and (iii) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes.

(3) When agency coordination is required, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to notify the district engineer via telephone, facsimile transmission, or e-mail that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure that the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(4) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(5) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

D. District Engineer's Decision

1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If a project proponent requests authorization by a specific NWP, the district engineer should issue the NWP verification for that activity if it meets the terms and conditions of that NWP, unless he or she determines, after considering mitigation, that the proposed activity will result in more than minimal individual and cumulative adverse effects on the aquatic environment and other aspects of the public interest and exercises discretionary authority to require an individual permit for the proposed activity. For a linear project, this determination will include an evaluation of the single and complete crossings of waters of the United States that require PCNs to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings of waters of the United States authorized by an NWP. If an applicant requests a waiver of an applicable limit, as provided for in NWPs 13, 36, or 54, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in only minimal individual and cumulative adverse environmental effects.

2. When making minimal adverse environmental effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. He or she will also consider the cumulative adverse environmental effects caused by activities authorized by an NWP and whether those cumulative adverse environmental effects are no more than minimal. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional or condition assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse environmental effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns.

3. If the proposed activity requires a PCN and will result in a loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for NWP activities with smaller impacts, or for impacts to other types of waters. The district engineer will consider any proposed compensatory mitigation or other mitigation measures the applicant has included in the proposal in determining whether the net adverse environmental effects of the proposed activity are no more than minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse environmental effects are no more than minimal, after considering mitigation, the district engineer will notify the permittee and include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure that the NWP activity results in no more than minimal adverse environmental effects. If the net adverse environmental effects of the NWP activity (after consideration of the mitigation proposal) are determined by the district engineer to be no more than minimal, the district engineer will provide a timely written response to the applicant. The response will state that the NWP activity can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer.

4. If the district engineer determines that the adverse environmental effects of the proposed activity are more than minimal, then the district engineer will notify the applicant either: (a) that the activity does not qualify for

authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the activity is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal; or (c) that the activity is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse environmental effects, the activity will be authorized within the 45-day PCN period (unless additional time is required to comply with general conditions 18, 20, and/or 31), with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation plan or a requirement that the applicant submit a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal. When compensatory mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

E. Further Information

1. District engineers have authority to determine if an activity complies with the terms and conditions of an NWP.

2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.

3. NWPs do not grant any property rights or exclusive privileges.

4. NWPs do not authorize any injury to the property or rights of others.

5. NWPs do not authorize interference with any existing or proposed Federal project (see general condition 31).

F. Nationwide Permit Definitions

Best management practices (BMPs): Policies, practices, procedures, or structures implemented to mitigate the adverse environmental effects on surface water quality resulting from development. BMPs are categorized as structural or non-structural.

Compensatory mitigation: The restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

Currently serviceable: Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

Direct effects: Effects that are caused by the activity and occur at the same time and place.

Discharge: The term "discharge" means any discharge of dredged or fill material into waters of the United States.

Ecological reference: A model used to plan and design an aquatic habitat and riparian area restoration, enhancement, or establishment activity under NWP 27. An ecological reference may be based on the structure, functions, and dynamics of an aquatic habitat type or a riparian area type that currently exists in the region where the proposed NWP 27 activity is located. Alternatively, an ecological reference may be based on a conceptual model for the aquatic habitat type or riparian area type to be restored, enhanced, or established as a result of the proposed NWP 27 activity. An ecological reference takes into account the range of variation of the aquatic habitat type or riparian area type in the region.

Enhancement: The manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

Establishment (creation): The manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area.

High Tide Line: The line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

Historic Property: Any prehistoric or historic district, site (including archaeological site), building, structure, or other object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria (36 CFR part 60).

Independent utility: A test to determine what constitutes a single and complete non-linear project in the Corps Regulatory Program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

Indirect effects: Effects that are caused by the activity and are later in time or farther removed in distance, but are still reasonably foreseeable.

Loss of waters of the United States: Waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. The loss of stream bed includes the acres of stream bed that are permanently adversely affected by filling or excavation because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage of loss of waters of the United States is a threshold measurement of the impact to jurisdictional waters or wetlands for determining whether a project may qualify for an NWP; it is not a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and services. Waters of the United States temporarily filled, flooded, excavated, or drained, but restored to pre-construction contours and elevations after construction, are not included in the measurement of loss of waters of the United States. Impacts resulting from activities that do not require Department of the Army authorization, such as activities eligible for exemptions under section 404(f) of the Clean Water Act, are not considered when calculating the loss of waters of the United States.

Navigable waters: Waters subject to section 10 of the Rivers and Harbors Act of 1899. These waters are defined at 33 CFR part 329.

Non-tidal wetland: A non-tidal wetland is a wetland that is not subject to the ebb and flow of tidal waters. Non-tidal wetlands contiguous to tidal waters are located landward of the high tide line (i.e., spring high tide line).

Open water: For purposes of the NWPs, an open water is any area that in a year with normal patterns of precipitation has water flowing or standing above ground to the extent that an ordinary high water mark can be determined. Aquatic vegetation within the area of flowing or standing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. Examples of "open waters" include rivers, streams, lakes, and ponds.

Ordinary High Water Mark: The term ordinary high water mark means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

Perennial stream: A perennial stream has surface water flowing continuously year-round during a typical year.

Practicable: Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

Pre-construction notification: A request submitted by the project proponent to the Corps for confirmation that a particular activity is authorized by nationwide permit. The request may be a permit application, letter, or similar

document that includes information about the proposed work and its anticipated environmental effects. Pre-construction notification may be required by the terms and conditions of a nationwide permit, or by regional conditions. A pre-construction notification may be voluntarily submitted in cases where pre-construction notification is not required and the project proponent wants confirmation that the activity is authorized by nationwide permit.

Preservation: The removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

Re-establishment: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

Rehabilitation: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

Riffle and pool complex: Riffle and pool complexes are special aquatic sites under the 404(b)(1) Guidelines. Riffle and pool complexes sometimes characterize steep gradient sections of streams. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a course substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. A slower stream velocity, a streaming flow, a smooth surface, and a finer substrate characterize pools.

Riparian areas: Riparian areas are lands next to streams, lakes, and estuarine-marine shorelines. Riparian areas are transitional between terrestrial and aquatic ecosystems, through which surface and subsurface hydrology connects riverine, lacustrine, estuarine, and marine waters with their adjacent wetlands, non-wetland waters, or uplands. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality. (See general condition 23.)

Shellfish seeding: The placement of shellfish seed and/or suitable substrate to increase shellfish production. Shellfish seed consists of immature individual shellfish or individual shellfish attached to shells or shell fragments (i.e., spat on shell). Suitable substrate may consist of shellfish shells, shell fragments, or other appropriate materials placed into waters for shellfish habitat.

Single and complete linear project: A linear project is a project constructed for the purpose of getting people, goods, or services from a point of origin to a terminal point, which often involves multiple crossings of one or more waterbodies at separate and distant locations. The term “single and complete project” is defined as that portion of the total linear project proposed or accomplished by one owner/developer or partnership or other association of owners/developers that includes all crossings of a single water of the United States (i.e., a single waterbody) at a specific location. For linear projects crossing a single or multiple waterbodies several times at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately.

Single and complete non-linear project: For non-linear projects, the term “single and complete project” is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. A single and complete non-linear project must have independent utility (see definition of “independent utility”). Single and complete non-linear projects may not be “piecemealed” to avoid the limits in an NWP authorization.

Stormwater management: Stormwater management is the mechanism for controlling stormwater runoff for the purposes of reducing downstream erosion, water quality degradation, and flooding and mitigating the adverse effects of changes in land use on the aquatic environment.

Stormwater management facilities: Stormwater management facilities are those facilities, including but not limited to, stormwater retention and detention ponds and best management practices, which retain water for a period of

time to control runoff and/or improve the quality (i.e., by reducing the concentration of nutrients, sediments, hazardous substances and other pollutants) of stormwater runoff.

Stream bed: The substrate of the stream channel between the ordinary high water marks. The substrate may be bedrock or inorganic particles that range in size from clay to boulders. Wetlands contiguous to the stream bed, but outside of the ordinary high water marks, are not considered part of the stream bed.

Stream channelization: The manipulation of a stream's course, condition, capacity, or location that causes more than minimal interruption of normal stream processes. A channelized jurisdictional stream remains a water of the United States.

Structure: An object that is arranged in a definite pattern of organization. Examples of structures include, without limitation, any pier, boat dock, boat ramp, wharf, dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, artificial island, artificial reef, permanent mooring structure, power transmission line, permanently moored floating vessel, piling, aid to navigation, or any other manmade obstacle or obstruction.

Tidal wetland: A tidal wetland is a jurisdictional wetland that is inundated by tidal waters. Tidal waters rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by other waters, wind, or other effects. Tidal wetlands are located channelward of the high tide line.

Tribal lands: Any lands title to which is either: 1) held in trust by the United States for the benefit of any Indian tribe or individual; or 2) held by any Indian tribe or individual subject to restrictions by the United States against alienation.

Tribal rights: Those rights legally accruing to a tribe or tribes by virtue of inherent sovereign authority, unextinguished aboriginal title, treaty, statute, judicial decisions, executive order or agreement, and that give rise to legally enforceable remedies.

Vegetated shallows: Vegetated shallows are special aquatic sites under the 404(b)(1) Guidelines. They are areas that are permanently inundated and under normal circumstances have rooted aquatic vegetation, such as seagrasses in marine and estuarine systems and a variety of vascular rooted plants in freshwater systems.

Waterbody: For purposes of the NWPs, a waterbody is a "water of the United States." If a wetland is adjacent to a waterbody determined to be a water of the United States, that waterbody and any adjacent wetlands are considered together as a single aquatic unit (see 33 CFR 328.4(c)(2)).

G. Nationwide Permit Regional Conditions (Arizona)

1. The permittee shall submit a pre-construction notification (PCN) for all 2021 NWPs, in accordance with General Condition 32, in the following circumstances:

a. Activities that would result in a loss* of waters of the United States within all perennial and intermittent waterbodies and special aquatic sites. (Refer to Regional Condition 2 for restrictions in special aquatic sites within the state of Arizona.)

b. Activities resulting in a discharge of dredged or fill material in waters of the U.S. on Tribal Lands**;

c. All waterbodies designated by the Arizona Department of Environmental Quality as Outstanding Arizona Waters (OAWs), within 1600 meters (or 1 mile) upstream and/or 800 meters (1/2 mile) downstream of a designated OAW, and on tributaries to OAWs within 1600 meters of the OAW (see http://www.azdeq.gov/index.html).

d. All waterbodies designated by the Arizona Department of Environmental Quality as 303(d)-impaired surface waters, within 1600 meters (or 1 mile) upstream and/or 800 meters (1/2 mile) downstream of a designated impaired surface water, and on tributaries to impaired waters within 1600 meters of the impaired water (see http://www.azdeq.gov/index.html).

2. All 2021 NWPs are revoked in the state of Arizona for activities in wetlands, mudflats, vegetated shallows, or riffle and pool complexes, as defined at 40 CFR Part 230.40-45, resulting in a loss* of waters of the United States greater than 0.10 acre.

* "Loss" means waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity.

**"Tribal Lands" refers to any lands title to which is either: 1) held in trust by the United States for the benefit of any Indian tribe or individual; or 2) held by any Indian tribe or individual subject to restrictions by the United States against alienation.

NOTE: Regional Conditions on the Navajo Nation may be found at https://www.spa.usace.army.mil/Portals/16/docs/civilworks/regulatory/publicnotices/Navajo%20Nation/2021%20NWP%20Reissuance_Final%20Public%20Notice_Navajo%20Nation.pdf?ver=Y05br0Ih59RLEwptpfmJOA%3d%3d.

H. 401 Water Quality Certification (401 WQC)

A 401 WQC is mandatory for any activity that requires a Clean Water Act Section 404 permit. A 401 WQC is required prior to discharging any dredged or fill material into a water of the United States. Only one of the following 401 WQCs listed below will apply to your project. The geographical location of your project will determine which 401 WQC is applicable. The 401 WQCs issued for this NWP will remain in effect through March 14, 2026.

On all "Non-Tribal Lands", lands that are not part of federally recognized Indian Reservation, the Arizona Department of Environmental Quality (ADEQ) is the agency responsible for issuing the 401 WQC.

On all "Tribal Lands", lands that are part of a federally recognized Indian Reservation, the U.S. Environmental Protection Agency (EPA) is responsible for issuing the 401 WQC except where EPA has delegated the 401 WQC authority.

If "Individual Certification" is required you must apply for, receive, and comply with the 401 WQC issued by ADEQ, EPA, or the appropriate Tribe.

Non-tribal Lands - 401 ADEQ WQCs*

Arizona Department of Environmental Quality — Certified for all projects, except ADEQ requires that a project proponent submit an application to the department for a State WQC if the proposed activity will occur within the ordinary high water mark of any of the following waters: An outstanding Arizona water; an impaired water; a water that is listed as not-attaining; or a lake. This conditional certification, authorized under A.R.S. 49-202(C), is necessary to ensure the proposed activities will not cause or contribute to an exceedance in a surface water quality standard under Arizona Administrative Code R18-11.

Tribal Lands - 401 WQCs

Fort Apache Indian Reservation (White Mountain Apache Tribe):	Individual Certification waived for all projects.
Gila River Indian Community	Individual Certification required for all projects.
Hopi Indian Reservation (Hopi Tribe):	Individual Certification required for all projects.
Hualapai Indian Reservation (Hualapai Tribe):	Individual Certification waived for all projects.
San Carlos Apache Tribe	Individual Certification waived for all projects.
Navajo Indian Reservation (Navajo Nation):	Individual Certification required for all projects.
All other Indian Reservations (EPA):	Conditionally Certified.

401 WQC Contact Information

Arizona Department of Environmental Quality
Water Quality Division
110 West Washington Street
Phoenix, Arizona 85007
Phone: (602) 771-4409
401WQC@azdeq.gov
https://azdeq.gov/cwa401

White Mountain Apache Tribe (Fort Apache Indian Reservation)
Environmental Protection Office
P.O. Box 816
Fort Apache, AZ 85926
Phone: (928) 338-4325
https://whitemountainapache.org/resources/

Gila River Indian Community
Department of Environmental Quality
P.O. Box 97
Sacaton, AZ 85147
Phone: (520) 562-2234
www.gricdeq.org

Hopi Tribe
Water Resources Program
P.O. Box 123
Kykotsmovi, Arizona 86039
Phone: (928) 734-3712
https://www.hopi-nsn.gov/tribal-services/department-natural-resources-2/water-resources/

Hualapai Tribe
Hualapai Department of Natural Resources
P.O. Box 300
Peach Springs, AZ 86434
Phone: (928) 769-2254 x2255
http://hualapai-nsn.gov/services/natural-resources/

Navajo Nation
Navajo Nation Environmental Protection Agency
PO Box 339
Window Rock, AZ 86515
Phone: (928) 871-7692
https://www.navajoepa.org/

San Carlos Apache Tribe.
Apache Gem Rd. Marker 2
San Carlos, Arizona 85550
www.SanCarlosApache.com

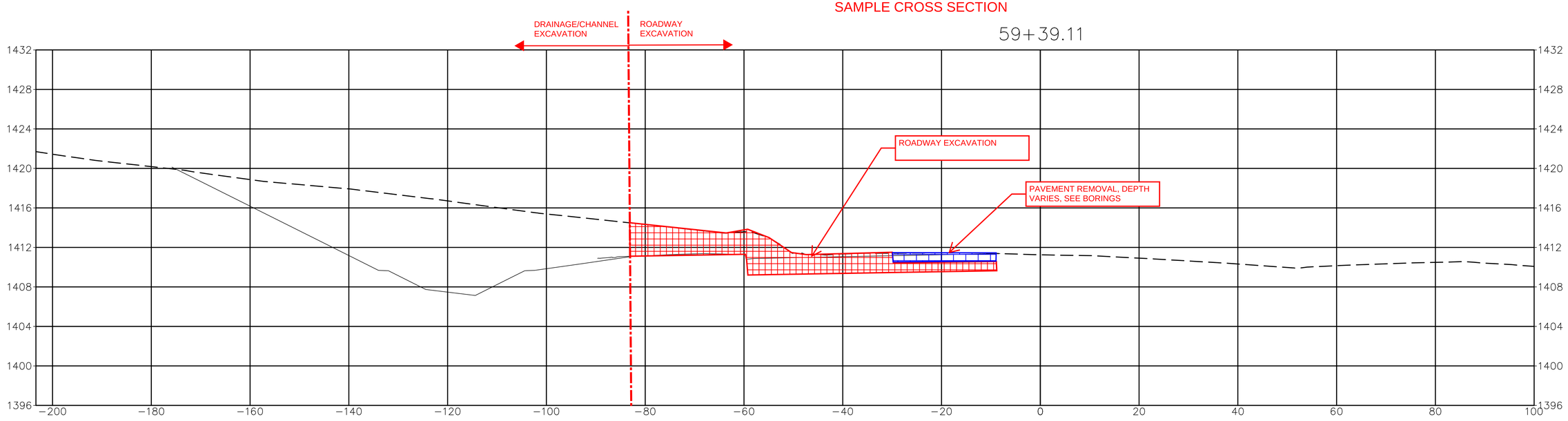
U.S. Environmental Protection Agency
Pacific Southwest, Region IX
75 Hawthorne Street
San Francisco, California 94105
R9cwa401@epa.gov
https://www.epa.gov/

M2050001 ROADWAY EXCAVATION SUPPLEMENTAL INFORMATION

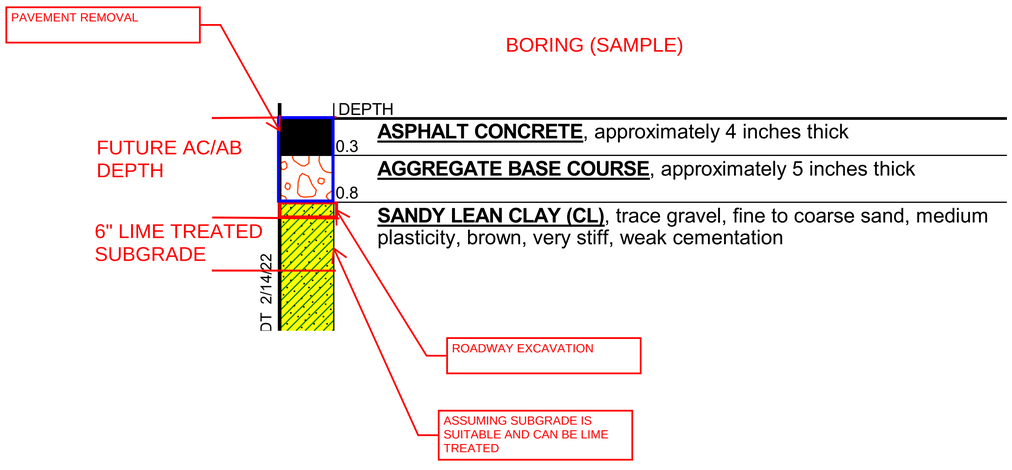
M2050001 ROADWAY EXCAVATION

STREET FROM	TO	STA BEGIN	STA END	AREA (SF)	SECTION DIFFERENCE AC AND AB(IN) INCLUDES USING AND LIME TREATING 6" EX SUBGRADE	CY CUT	CY FILL	NET CUT	NET FILL	CY NET	ALL NUMBERS WITH NO EARTHWORK SWELL/SHRINK ADDED AT END		
67TH AVE	62ND AVE	10+00	33+50								Pavement		
62ND AVE	56TH AVE	33+50	72+00	144,297	2.5	1,113					Pavement area in full depth replacement minus islands		
				97,557	10.5	3,162		4,275			Pavement in new soil		
						9,437		13,712			Cut/Fill by model top surface volume (not adjusted)	CUT	1.00
							-2,519		-2,519			FILL	1.00
62ND AVE	56TH AVE	33+50	72+00	55,260	2.5	426		14,138			LANDSCAPING ROCK 2.5" CUT (ASSUMING GRANITE OUTSIDE MOUNTAIN AREA IS CLOSE TO NET ZERO EXCAVATION		
56TH AVE	51ST AVE	72+00	110+60								MILL AND OVERLAY		
53RD AVE	51ST AVE	98+40	110+60	19,629	10.5	636		14,774			Widening Section		
51ST AVE	47TH AVE	110+60	137+50	113,975	-6		-2,111		-4,630		Pavement Area full depth replacement (minus islands)	IMPORT SUBGRADE FROM OTHER PART OF JOB	
51ST AVE	47TH AVE	110+60	137+50	113,975	0	0					(Split in half due to borings being different in 1 mile block)		
47TH AVE	43RD AVE	137+50	163+80	207,209	3.5	2,238		17,013			Pavement Area full depth replacement (minus islands)		
43RD AVE	39TH DR	163+80	191+40	112,852	-1.5		-522		-5,152		Pavement Area full depth replacement (minus islands)		
				112,582	3.5	1,216		18,229			(Split in half due to borings being different in 1 mile block)		
39TH DR	35TH AVE	191+40	218+50								MILL AND OVERLAY		
						18,229	-5,152			NET			
										13,077	CUT		
										14,385	**CUT WITH 1.1 SWELL FACTOR** CY		
				FILL DENOTED AS NEGATIVE							ESTIMATE BASED ON BORINGS IN EARTHWORK REPORT, EXISTING PAVEMENT THICKNESSES CAN VARY AND ALTER THIS ESTIMATE		

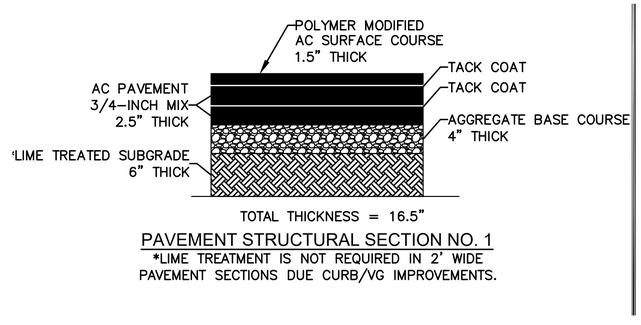
SAMPLE CROSS SECTION



BORING (SAMPLE)



DESIGN PAVEMENT SECTION



PAVEMENT STRUCTURAL SECTION NO. 1

*LIME TREATMENT IS NOT REQUIRED IN 2' WIDE PAVEMENT SECTIONS DUE CURB/VG IMPROVEMENTS.

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May 30, 2023

Wilson & Company, Inc., Engineers and Architects
410 North 44th Street, Suite 460
Phoenix, Arizona 85008

Attn: Mr. Todd J. Cencimino, P.E.
Phone: (602) 283-2732
Email: todd.cencimino@wilsonco.com

Re: Addendum No. 1 - Percolation Testing - Proposed Stormwater Retention Basins
Geotechnical Engineering Report
Proposed Happy Valley Road Improvements
From 67th Avenue to 35th Avenue
Phoenix, Arizona
City of Phoenix Project No.: ST85100437
Terracon Project No. 65215140

Terracon Consultants, Inc. (Terracon) performed a geotechnical exploration at the referenced site and summarized the results in a report titled *Geotechnical and Pavement Design Report, Proposed Happy Valley Road Improvements, From 67th Avenue to 35th Avenue, Phoenix, Arizona*; Terracon Project No. 65215140, report dated June 3, 2022. In addition, as requested by Wilson & Co., Terracon performed 1 test boring and 2 percolation tests at the proposed stormwater retention basin planned as part of the proposed roadway and drainage improvements. The approximate locations of the boring and percolation tests are shown on the attached Exploration Plan.

Terracon advanced a geotechnical boring with hollow stem augers to a depth of approximately 20 feet in the proposed basin area. As requested by Wilson & Co., Terracon subsequently performed 2 percolation tests (designated as Perc-1 and Perc-2) at depths of approximately 12 feet below the existing ground surface. The percolation testing was performed by drilling a boring with an 8-inch outside diameter hollow stem auger to the test depth and installing a 2-inch PVC casing within the percolation test boring. The bottom approximately 5 feet of the PVC casing was slotted and as the augers were removed, filter gravel was placed around the bottom 1 foot of the PVC casing. The test holes were then pre-soaked for approximately 2 hours. A Terracon field engineer performed the percolation tests using a water level indicator to take water level field measurements during the percolation testing. The percolation testing was performed in general accordance with Method 2 (EPA Falling Head Percolation Test Procedure) outlined in the Flood Control District of Maricopa County Drainage Design Manual. Upon completion of the testing, the PVC casing was removed, and the boreholes backfilled with the auger cuttings. The field measurements of the percolation test results are summarized in the following table:

Terracon Consultants, Inc. 4685 South Ash Avenue, Suite H-4, Tempe, Arizona 85282
P [480] 897-8200 F [480]-897-1133 terracon.om

Test Location	Surface Conditions	Depth (feet)	Soil Classification	Percolation Rate Field Measurements (minutes/inch)
Perc-1	Bare Earth	12	Silty Sand	12
Perc-2	Bare Earth	12	Silty Sand	13

The percolation test field measurements shown above are provided to aid with the design of the proposed storm-water retention basins. We understand the storm-water retention basin design will be performed by others. The field percolation rates measured are based on the soil conditions encountered at the specific location of the percolation tests, and percolation rates may vary from the values reported here at other locations within the basin area. It should be noted that siltation and vegetation growth along with other factors may affect the infiltration rates of the on-site areas. The infiltration rates presented above are unfactored field measurements, and appropriate de-rating factors should be applied to these percolation rates during the design of the proposed storm-water retention basin (performed by others). The de-rating factors should be in accordance with the Maricopa County Drainage Policies and Standards (or other applicable standards).

We recommend the proposed retention basins be constructed/excavated with light weight equipment to help reduce compaction of the basin bottom surface, which will ultimately be used for infiltration of storm water. Once constructed, no traffic should be allowed to travel across the basin bottom. It should be noted that compaction of the basin bottom will result in reduced infiltration rates. If compaction of the basin bottom does occur, the exposed surface should be scarified to a minimum depth of 8 inches and left uncompacted.

All other recommendations presented in our geotechnical report should be adhered to during the design and construction of the development. This addendum letter shall be attached to the original geotechnical report (Terracon Project No. 65215140) and become a part thereof. We appreciate the opportunity to be of service to you on this project. If you have any questions concerning this data report, or if we may be of further service, please contact us.

Sincerely,
TERRACON CONSULTANTS, INC.

Matthew R. Kleinholz, P.E.
Geotechnical Project Engineer

EXPIRES 6/30/2024

Ramon Padilla, P.E.
Geotechnical Department Manager

Attachments: Site Location, Exploration Plan, & Boring Log

SITE LOCATION

Happy Valley Road Improvements ■ Phoenix, Arizona
May 30, 2023 ■ Terracon Project No. 65215140

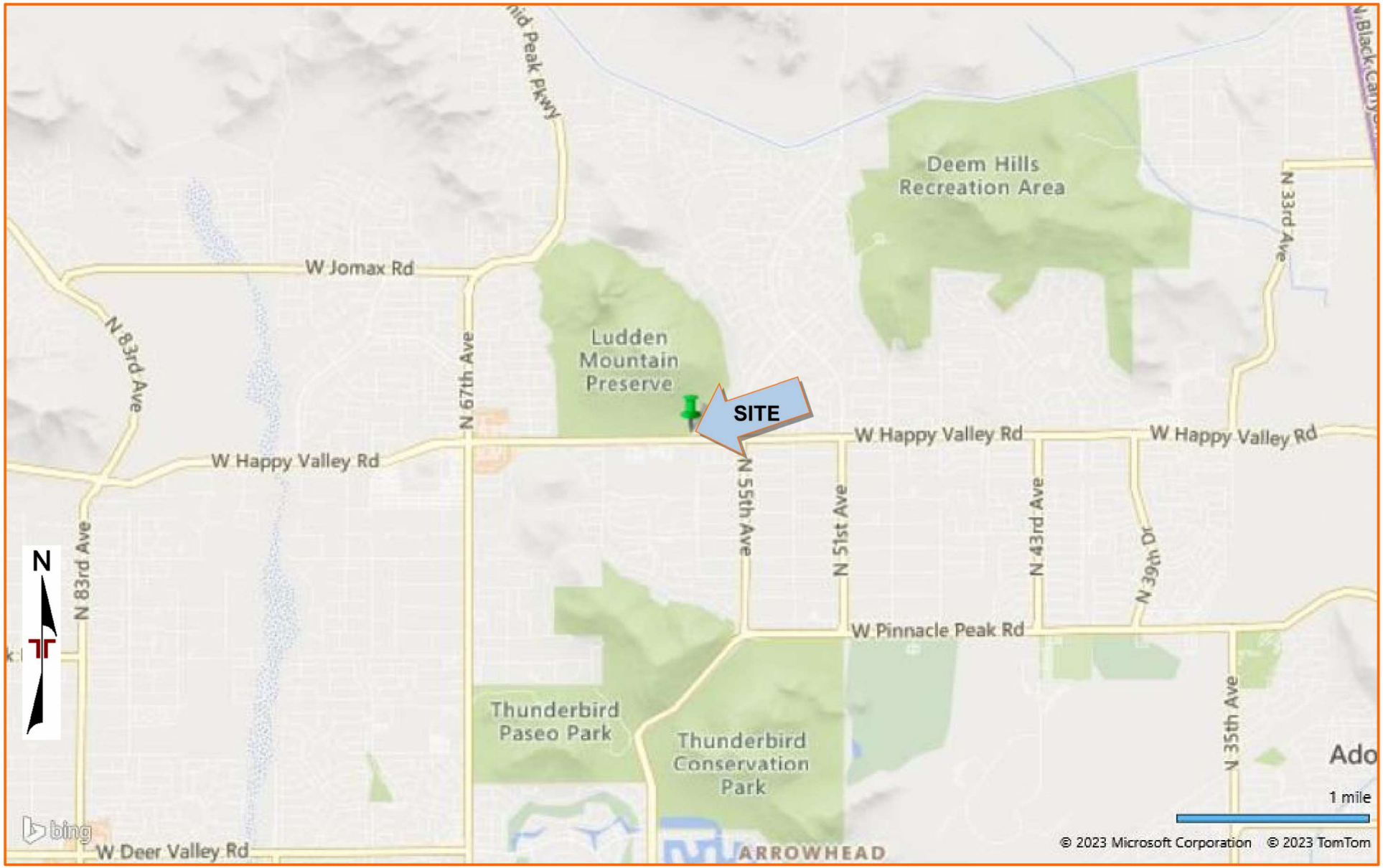


DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

TOPOGRAPHIC MAP IMAGE COURTESY OF THE U.S. GEOLOGICAL SURVEY
QUADRANGLES INCLUDE: HEDGPETH HILLS, AZ (1/1/1981).

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

AERIAL PHOTOGRAPHY PROVIDED BY MICROSOFT BING MAPS

BORING LOG NO. B-1

PROJECT: Happy Valley Road Improvements- 67th Ave to 35th Ave

CLIENT: Wilson & Company Inc Engineers & Architects Phoenix, Arizona

SITE: Happy Valley Road Phoenix, Arizona

LOCATION See Exploration Plan

Latitude: 33.7127° Longitude: -112.1834°

GRAPHIC LOG	DEPTH	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	SILTY SAND (SC), trace gravel, fine to coarse sand, fine gravel, nonplastic, reddish brown, dense, weak cementation				26-38				
		5			19-23				
	with gravel, fine gravel	10			20-26				
	13.0 **SILTY CLAYEY SAND (SC-SM)**, trace gravel, fine to coarse sand, fine gravel, low plasticity, tan, very dense	15			50/5"				
	19.5 ***Boring Terminated at 19.5 Feet***				50/4"				

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
8" O.D. Hollow Stem Auger

Abandonment Method:
Boring backfilled with auger cuttings upon completion.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
4685 S Ash Ave, Ste H-4
Tempe, AZ

Boring Started: 04-12-2023 | Boring Completed: 04-12-2023

Drill Rig: CME 75 | Driller: Wildcat Drilling

Project No.: 65215140

4685 South Ash Avenue
Tempe, Arizona
P (480) 897-8200
Terracon.com

October 28, 2024

City of Phoenix
1034 E Madison St
Phoenix, Arizona 85034

Attn: Jose M. Rodriguez, P.E.
Email: jose.m.rodriguez@phoenix.gov

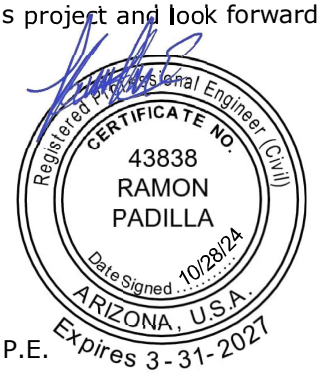
Re: Seismic Refraction Survey
Proposed Happy Valley Road Improvements
From 67th Avenue to 35th Avenue
City of Phoenix Project No. ST85100437
Federal Aid No. PHX-0(363)D
ADOT TRACS No. T0239 01C
Terracon Project No.: 65215140A

As requested by the City of Phoenix (COP) and as authorized by the COP Request for Test (RFT) dated 10/21/2024 for COP Project No. ST85100437, Terracon Consultants, Inc. (Terracon) performed additional services on this project consisting of seismic refraction surveys at selected locations along the northern portion of Happy Valley Road. The purpose of our additional services was to further explore the subsurface at selected locations and supplement our previous subsurface characterization for the project. Four seismic refraction profiles were completed at locations provided by the City of Phoenix and noted on Exhibit 1. Each seismic line consisted of a linear series of 24 seismic sensors (geophones) spaced 5 feet apart. A seismic signal was generated using a sledgehammer and metal plate at several locations along the array. Each dataset was combined to generate 2-D modeled profiles of the compression (P) wave velocity. Refer to the attached Exhibit 1 for the seismic survey results.

These geophysical processes rely on instrument signals to indicate physical conditions in the field. Signal information can be affected by on-site conditions beyond the control of the field geophysicist. Utilizing conventional observation, sampling, and testing of selected areas are recommended to confirm the results from the geophysical survey. **As with all geophysical methods, the results provide a level of confidence but should not be considered absolute.**

Thank you for the continued opportunity to work with your team on this project and look forward to future collaboration.

Sincerely,
Terracon Consultants, Inc.

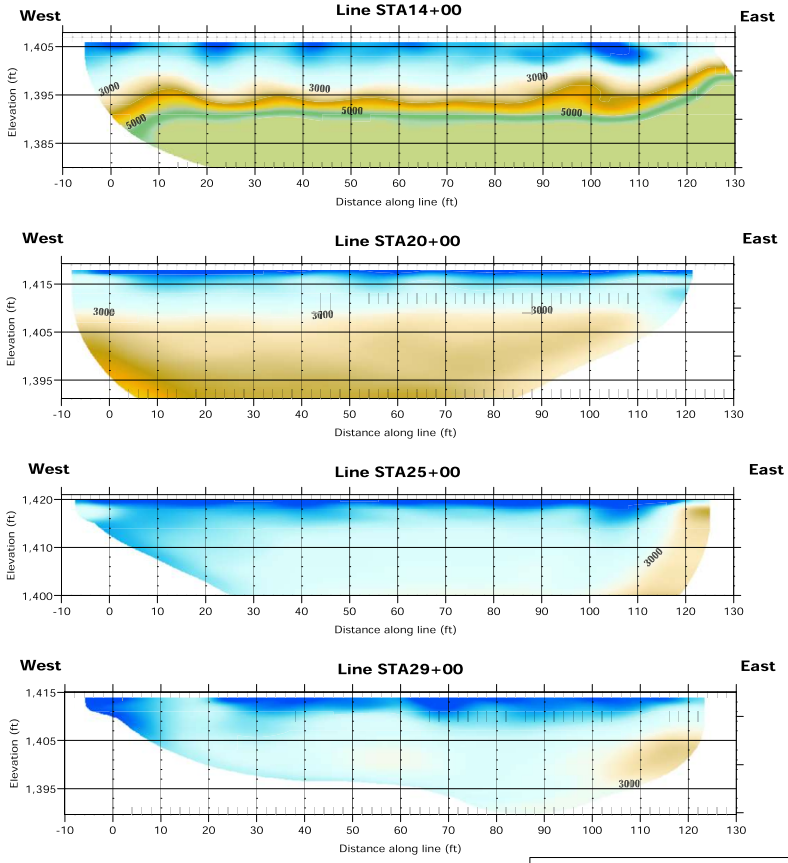


Olivia Salvaggio
Senior Staff Geophysicist

Ramon Padilla, P.E.
Geotechnical Services Manager

Technical Review: Stephen Brellenthin, P.G.

Attachments: Exhibit 1 – Seismic Refraction Profiles



Compression (P) Wave Velocity (ft/sec)

1000 2000 3000 4000 5000 6000

Legend	Notes	Exhibit 1 - Seismic Refraction Profiles
	1. Profile scales: Horizontal/Vertical - 1" = 20' 2. Elevation developed using Google Earth. 3. Site map aerial imagery acquired from USDA and may not represent current site conditions.	Project: Proposed Happy Valley Road Improvements Location: Phoenix, Arizona Client: City of Phoenix Project No.: 65215140A Date: October 25, 2024

CITY OF PHOENIX
BID PROPOSAL FORM

Happy Valley Road: 67th Avenue to 35th Avenue
Project No: ST895100437
Federal Aid No: PHX-0(363)
ADOT TRACS No: MA-PHX-T0238 01C

ITEM NO.	BID (OR) M NUMBER	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
1	E6992000	Allowance for StormWater Pollution Prevention Best Management Practices (BMP'S)	Allow	1	$200,000.00	$200,000.00
2	M1002005	Mobilization/Demolition	LS	1		
3	M1042005	Allowance for Extra Work	Allow	1	$2,500,000.00	$2,500,000.00
4	M1058000	Construction Surveying And Layout	LS	1		
5	M1058002	2-Person Survey Party Contingent Item	HR	250		
6	M2001005	Earthwork for Basin,includes clearing and grubbing of the site, excavation, grading and shaping	CY	27,385		
7	M2050001	Roadway Excavation, Including Haul	CY	14,385		
8	M2010011	Clearing and Grubbing (Roadway Widen Areas)	SY	93,262		
9	M2152001	Channel Excavation	CY	36,132		
10	M2200007	Rip Rap, D50=6"	CY	51		
11	M2200012	Rip Rap, D50=12"	CY	222		
12	M2204001	Rock Rirap, 3" to 6"	SF	130,605		
13	M2205005	Replace Grouted Rip Rap (MAG 220)	SF	54		
14	M2205010	Sawcut and Remove Grouted Rip Rap	SF	26		
15	M3000052	Asphalt Concrete Pavement Milling (1.5" Depth)	SY	100,164		
16	M3010001	Subgrade Preparation	SY	118,177		
17	M3010002	6" Thick Lime Treated Subgrade(MAG 309)	SY	118,177		
18	M3100000	4" Thick Aggregate Base Course (MAG 310)	Ton	23,006		
19	M3210250	5" Thick Asphalt Concrete Surface Course, Type C 3/4 (MAG 321)	Ton	29,155		
20	M3260100	Polymer Modified Asphalt Concrete Surface Course (1.5" Thick)	Ton	17,036		
21	M3290100	Emulsified Asphalt For Tack Coat, Type SS-1H	Ton	104		
22	M3304100	Power Broom	Hr	960		
23	M3362000	Slurry Seal Coat	SY	5,109		
24	M3400000	Concrete Median Nose, 4' Thick, MAG STD DET 223	SF	861		

CITY OF PHOENIX
BID PROPOSAL FORM

Happy Valley Road: 67th Avenue to 35th Avenue
Project No: ST895100437
Federal Aid No: PHX-0(363)
ADOT TRACS No: MA-PHX-T0238 01C

ITEM NO.	BID (OR) M NUMBER	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
25	M3400009	Decorative Brick Pavers, MAG STD DET 225	SF	14,127		
26	M3400240	Concrete Valley Gutter & Apron, MAG STD DET 240	SF	6,920		
27	M3400400	Concrete Sidewalk, 4" Thick, COP STD DET P1230	SF	65,914		
28	M3400415	Truncated Domes for Sidewalk Ramps, COP STD DET P1232	SF	880		
29	M3400485	Concrete Curb Ramp, COP STD DET P1233, P1234, P1235, P1236, P1237,P1238, P1239, P1240, OR P1241 (9" Thick)	SF	21,993		
30	M3400490	Concrete Sidewalk Ramp, COP STD DET P1241-2, P1241-4 (9" Thick)	SF	2,003		
31	M3400500	Concrete Curb Ramp, 9" Thick, MCDOT STD DET 2022	SF	528		
32	M3400551	Concrete Driveway, Return Type, COP STD DET P1243	SF	2,919		
33	M3400553	Concrete Driveway Entrance, 9" Thick, COP STD DET P1244	SF	1,136		
34	M3400556	Concrete Driveway Entrance, 9" Thick, COP STD DET P1255-2	SF	1,045		
35	M3401256	Concrete Bus Bay Pavement, COP STD DET P1256-1, 9" Thick, Class "A" Concrete	SF	3,034		
36	M3401260	Parkway Bus Shelter/Accessory Pad, 9" Thick, COP STD DET P1260	SF	3,381		
37	M3401262	Parkway Bus Shelter/Accessory Pad, 9" Thick, COP STD DET P1262	SF	8,761		
38	M3402201	Concrete Curb & Gutter, MAG STD DET 220, Type "A", H=6"	LF	11,078		
39	M3402221	Concrete Single Curb, MAG STD DET 222, Type "A"	LF	21,752		
40	M3402230	Concrete Header Per Plans	LF	26		
41	M3450020	Adjust EX Manhole Frame & Cover, MAG STD DET 422 & COP STD DET P1430	EA	60		
42	M3453006	Adjust EX Utility Valve, MAG STD DET 391-1 & 391-2	EA	4		
43	M3453008	Adjust Water Valve, Type "A", COP STD DET P1391 & P1391-1	EA	137		
44	M3453016	Adjust Survey Momument Handhole Frame & Cover COP STD DET P1270	EA	13		
45	M3500010	Remove Portland Cement Concrete Single Curb, Curb & Gutter, Header Curb or Embankment Curb	LF	4,367		
46	M3500020	Remove Portland Cement Concrete Sidewalk, Driveway,Valley Gutter & Slab	SF	50,238		
47	M3500026	Remove Decorative Brick Pavers	SF	710		
48	M3500036	Remove Catch Basin, Backfill & Compact	EA	23		

CITY OF PHOENIX
BID PROPOSAL FORM

Happy Valley Road: 67th Avenue to 35th Avenue
Project No: ST895100437
Federal Aid No: PHX-0(363)
ADOT TRACS No: MA-PHX-T0238 01C

ITEM NO.	BID (OR) M NUMBER	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
49	M3400037	Remove Headwall, Backfill & Compact	EA	12		
50	M3400040	Remove Pipe, Backfill & Compact	LF	144		
51	M3400041	Remove Pipe	LF	106		
52	M3500060	Remove Asphalt Concrete Pavement	SY	105,941		
53	M3500062	Aspahlt Sawcutting	LF	15,580		
54	M3500063	Concrete Sawcutting	LF	969		
55	M3500109	Remove Block Wall	LF	12		
56	M3500150	Remove Tree, 12" Diameter and Larger	EA	33		
57	M3500170	Remove Existing Bushes, Shurbs, Cacti, of Small Trees	EA	219		
58	M3500300	Miscellaneous Removal and Other Work	LS	1		
59	M3500309	Sign Removal	EA	94		
60	M3505026A	#12 THHN Wire	LF	4,300		
61	M3505027	#10 Bond Wire	LF	2,150		
62	M3513120A	2.5" SCH 40 PVC Lighting Conduit (Directionally Bored)	LF	3,257		
63	M3513120B	2.5" SCH 40 PVC Lighting Conduit (Trench)	LF	3,981		
64	M3513250	No. 5 Junction Box (APS)	EA	41		
65	M3515045	Remove Existing Light Poles Standard, Per Plan	EA	5		
66	M3515052A	Furnish and Install 38'-6" Street Light Pole w/ 6' Mast Arm	EA	33		
67	M3515052B	Furnish and Install 38'-6" Street Light Pole w/ 8' Mast Arm	EA	2		
68	M3515052C	Furnish and Install 30'-6" Street Light Pole w/ 6' Mast Arm	EA	8		
69	M3515052D	Furnish and Install 6' Street Light Mast Arm Onto Existing Utility Pole	EA	6		
70	M3515071	Furnish and Install 9,250 Lumen LED Street Light per COP Street Lighting Procedures, Standards, and Specifications Manual, Latest Edition (Gray)	EA	41		
71	M3515076	Furnish and Install 4,700 Lumen LED Street Light per COP Street Lighting Procedures, Standards, and Specifications Manual, Latest Edition (Gray)	EA	8		
72	M3515383	Remove Existing Light Mart Arm From Utility Pole	EA	1		

CITY OF PHOENIX
BID PROPOSAL FORM

Happy Valley Road: 67th Avenue to 35th Avenue
Project No: ST895100437
Federal Aid No: PHX-0(363)
ADOT TRACS No: MA-PHX-T0238 01C

ITEM NO.	BID (OR) M NUMBER	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
73	M3515384	Remove Existing Junction Box per Plan	EA	5		
74	M4012000	Traffic Control Devices	LS	1		
75	M4013000	Allowance for Uniformed, Off-Duty Law Enforcement Officer	Allow	1	$800,000.00	$800,000.00
76	M4153104	Safety Rail, COP Standard Detail P1173	EA	1		
77	M4201006	Remove 6' Chain Link Fence	LF	3,356		
78	M4258008	Gravel Mulch, 2" Minus (4" Thick)	SY	66		
79	M4303000	Plant Establishment Guarantee and Maintenance (including Water and power if required)	Month	12		
80	M4304007	Decomposed Granite, Stabilized for MultiPurpose Trail, 1/4" Minus, 4" Thick	SF	70,253		
81	M4304023	Decomposed Granite, 1/2 Inch Screened for General Landscape	SY	28,842		
82	M4305001	1 Gallon Shrub	EA	8		
83	M4305005	5 Gallon Shrub	EA	1,567		
84	M4305008	5 Gallon Accent	EA	2,126		
85	M4305015	15 Gallon Tree	EA	29		
86	M4305024	24" Box, Trees	EA	239		
87	M4307006	Hydroseed, Native Mix	SF	59,000		
88	M4309800	Cacti, Transplant	EA	1		
89	M4309820	Saguaro, Transplanting	EA	7		
90	M4400004	Modify Existing Irrigation System and Restore Landscaping Per Plans	LS	1		
91	M4400250	1/2", PVC Irrigation Pipe, Schedule 40	LF	4,234		
92	M4400255	3/4", PVC Irrigation Pipe, Schedule 40	LF	21,972		
93	M4400260	1" PVC Irrigation Pipe, Schedule 40	LF	7,811		
94	M4400262	2" PVC Irrigation Pipe, Sch. 40	LF	85		
95	M4400270	1 1/2", PVC Irrigation Pipe, Schedule 40	LF	2,335		
96	M4403100	1" Reduced Pressure Backflow Prevention Unit and Cage	EA	9		

CITY OF PHOENIX
BID PROPOSAL FORM

Happy Valley Road: 67th Avenue to 35th Avenue
Project No: ST895100437
Federal Aid No: PHX-0(363)
ADOT TRACS No: MA-PHX-T0238 01C

ITEM NO.	BID (OR) M NUMBER	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
97	M4403150	1-1/2" Reduced Pressure Backflow Prevention Unit and Cage	EA	2		
98	M4404305	3/4" Gate Valve	EA	20		
99	M4404315	1-1/2" Gate Valve	EA	7		
100	M4404320	2" Gate Valve	EA	1		
101	M4404400	Flush Valves	EA	78		
102	M4404505	Pressure Regulator	EA	30		
103	M4404510	Multi-Port Emitter and Riser Assembly with Bug Cap	EA	1,370		
104	M4405400	4" Schedule 40 PVC Irrigation Sleeve	LF	2,229		
105	M4405600	6" Schedule 40 PVC Irrigation Sleeve	LF	668		
106	M4406106	4 to 6 Station Sprinkler Controller, Solar Powered, with Security Cabinet	EA	11		
107	M4406200	1" Solar Valve and Assembly	EA	18		
108	M4406250	1-1/2" Solar Valve and Assembly	EA	2		
109	M4711000	1" Schedule 40 PVC Conduit	LF	77		
110	M4711001	2" Schedule 40 PVC Conduit	LF	884		
111	M4711003	2 1/2" Schedule 40 PVC Conduit	LF	8,267		
112	M4711005	4" Schedule 40 PVC Conduit	LF	87		
113	M4712003	No. 7 Junction Box	EA	31		
114	M4722001	Foundation for Type BP Pole	EA	1		
115	M4722004	Foundation for Type AP Pole	EA	7		
116	M4722007	Foundation for Type GP Pole	EA	2		
117	M4722010	Foundation for Type LP Pole	EA	19		
118	M4722013	Foundation for Type P45/DP45 Pole	EA	9		
119	M4722016	Foundation for Type P70/DP70 Pole	EA	18		
120	M4724002	Foundation for Power Pedestal, Type B	EA	7		

CITY OF PHOENIX
BID PROPOSAL FORM

Happy Valley Road: 67th Avenue to 35th Avenue
Project No: ST895100437
Federal Aid No: PHX-0(363)
ADOT TRACS No: MA-PHX-T0238 01C

ITEM NO.	BID (OR) M NUMBER	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
121	M4724004	Foundation for Traffic Signal Controller Cabinet	EA	8		
122	M4731000	Bicycle Loop Detector	EA	2		
123	M4731001	6' x 6' Loop Detector	EA	12		
124	M4732002	APS Pedestrian Push Button	EA	50		
125	M4733001	Dual EVP Detector and Confirmation Light	EA	24		
126	M4741008N	P45 25' Signal Mast Arm	EA	2		
127	M4741012	P45 35' Signal Mast Arm	EA	2		
128	M4741013	P45 40' Signal Mast arm	EA	2		
129	M4741014	P45 45' Signal Mast Arm	EA	4		
130	M4741015N	P70 50' Signal Mast Arm	EA	2		
131	M4741016N	P70 55' Signal Mast Arm	EA	4		
132	M4741917N	P70 60' Signal Mast Arm	EA	7		
133	M4741919N	P70 70' Signal Mast Arm	EA	3		
134	M4741036	Type BP Pole, 4'	EA	1		
135	M4741034	Type AP Pole, 15'	EA	7		
136	M4741038	Type GP Pole	EA	2		
137	M4741038	Type LP Pole	EA	19		
138	M4741039	Type P45 Pole	EA	9		
139	M4741041	Type P70 Pole	EA	18		
140	M4741053	Damper	EA	22		
141	M4751002	Electrical Power Service Pedestal, Type B	EA	8		
142	M4751002	Traffic Signal Controller Cabinet	EA	7		
143	M4761001	Type F- 3 Section 12" Signal Head	EA	31		
144	M4761002	Type F1- 3 Section 12" Signal Head	EA	67		

CITY OF PHOENIX
BID PROPOSAL FORM

Happy Valley Road: 67th Avenue to 35th Avenue
Project No: ST895100437
Federal Aid No: PHX-0(363)
ADOT TRACS No: MA-PHX-T0238 01C

ITEM NO.	BID (OR) M NUMBER	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
145	M476100FA	Type FA- 4 Section 12" Signal Head	EA	18		
146	M476100FA1	Type FA1- 4 Section 12" Signal Head	EA	19		
147	M476100X	Type R - 3 Section 12" Signal Head	EA	5		
148	M476100X	Type R1- 3 Section 12" Signal Head	EA	10		
149	M4741024	5' Riser, Single Luminaire Mast Arm Shoe	EA	34		
150	M47410XX	5' Riser, Dual Luminaire Mast Arm Shoe, 90 degree	EA	1		
151	M4741030	20' Riser, Single Luminaire Mast Arm Shoe	EA	8		
152	M4771001	LED Traffic Signal Luminaire	EA	48		
153	M4741014	COP Luminaire Mast Arm	EA	46		
154	M4762009	Countdown Pedestrian Signal Head (LED)	EA	50		
155	M4781001	Single Conductor Wire, #10 AWG White	LF	288		
156	M4781005	Single Conductor Wire, #10 Bare Copper	LF	984		
157	M478200X	5C ISMA Cable	LF	288		
158	M478400X	42C ISMA Cable	LF	288		
159	M478400X	Video Detection Cable	LF	288		
160	M4784004	EVP Detector and Confirmation Cable	LF	2,894		
161	M4786001	All Conductors, Cables & Splicing for Intersection	EA	15		
162	M4791001	Removal of Pole Type "A"	EA	29		
163	M4791008	Removal of Pole Type "M" with Mast Arm	EA	14		
164	M4791010	Removal of Pole, Type "SM/SR" with Mast Arm	EA	24		
165	M4792001	Removal of Controller Cabinet	EA	8		
166	M4792002	Removal of Traffic Signal Power Pedestal	EA	10		
167	M4793001	Removal of Traffic Signal Pole Foundations	EA	81		
168	M4794001	Miscellaneous Removal of Incidental Traffic Items	L.S.	1		

CITY OF PHOENIX
BID PROPOSAL FORM

Happy Valley Road: 67th Avenue to 35th Avenue
Project No: ST895100437
Federal Aid No: PHX-0(363)
ADOT TRACS No: MA-PHX-T0238 01C

ITEM NO.	BID (OR) M NUMBER	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
169	M5052062	Concrete Scupper, MAG Standard Detail 206	EA	5		
170	M5052063	Concrete Scupper, MAG Standard Detail 206, Modified	EA	1		
171	M5055007	Headwall For 12" Pipe, MAG Standard Details 501-1 And 501-2	EA	1		
172	M5055021	Concrete End Sections, MAG Standard Detail 545	EA	1		
173	M5055009	Headwall for 18" Pipe, MAG Standard Detail 501-3	EA	1		
174	M5051541	Concrete Catch Basin, Modified, Type "M-1, L=10-Ft", Phx. Supp. Detail P-1569-2	EA	1		
175	M5051502	Concrete Catch Basin, Type "F", MAG Detail 535	EA	1		
176	M5052069	Concrete Spillway, MAG Std. Dtl 206-1	SF	864		
177	M5052074	Concrete Channel Lining Per Plans	SY	10,808		
178	M5155048	Trash Rack MAG Standard Detail 502-1	EA	1		
179	M6103710	Waterline Realignment, 10" and 12", Contingent Item	EA	1		
180	M6106003	Remove and Salvage Fire Hydrant	EA	2		
181	M6108010	New Fire Hydrant, COP STD DET P1359, P1360, P1361, P1362	EA	2		
182	M6180213	22" X 13.5" Hortizonal Elliptical Pipe	LF	147		
183	M6184018	18" Rubber Gasket Reinforced Concrete Pipe, Class IV	LF	35		
184	M6210012	12" Corragated Metal Pipe	LF	20		
185	7320292	Electrical Conduit (2-1.25") (PVC)	LF	22,826		
186	7320450	Pullbox (No.8) (City of Phoenix)	EA	21		
187	7320460	Pullbox (No.9) (City of Phoenix)	EA	16		
188	7320654	Break-Away Connector System (With 250' Tail)	EA	13		
189	7320787	Single Mode Fiber Optic Cable (144 Fibers)	LF	25,226		
190	7320794	Fiber Optic Splice Closure (City of Phoenix)	EA	12		
191	M7370424	Fiber Optic Equipment (Phoenix Field Hardened Ethernet Switch)	EA	11		
192	M7370455	Miscellaneous Electrical (As-Built Drawings)	LS	1		

CITY OF PHOENIX
BID PROPOSAL FORM

Happy Valley Road: 67th Avenue to 35th Avenue
Project No: ST895100437
Federal Aid No: PHX-0(363)
ADOT TRACS No: MA-PHX-T0238 01C

ITEM NO.	BID (OR) M NUMBER	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
193	M9001001	Illuminated Street Sign	EA	27		
194	M9011001	Wireless Network Radio	EA	8		
195	M9021000	Video Detection Camera System (Per intersection)	EA	8		
196	M9021001	PTZ CCTV Camera	EA	7		
		BID (ITEMS 1 THROUGH 196 - INCLUSIVE) TOTAL				

_____**& _____/100 DOLLARS**
WRITTEN WORDS

Prepared By:

_____
Signature

_____
Name

_____
Position/Title

_____
Firm Name

CERTIFICATION WITH REGARD TO THE PERFORMANCE OF PREVIOUS CONTRACTS OR SUBCONTRACTS SUBJECT TO THE EQUAL OPPORTUNITY CLAUSE AND THE FILING OF REQUIRED REPORTS
APRIL 1969

The bidder _____, proposed subcontractor _____, hereby certifies that he has _____, has not _____, participated in a previous contract or subcontract subject to the equal opportunity clause, as required by Executive Orders 10925, 11114, or 11246, and that he has _____, has not _____, filed with the Joint Reporting committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.

_____
(Company)

By: _____

_____
(Title)

Date: _____

Note: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7b (1),) and must be submitted by bidders and proposed subcontractors only in connection with contracts and subcontracts which are subject to the equal opportunity clause. Contracts and subcontracts which are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5 (Generally only contracts or subcontracts of $10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by the Executive Orders or their implementing regulations.

Information concerning Standard Form 100 (EEO-1) is available from:

Joint Reporting Committee P.O.
Box 19100
Washington, D.C. 20036-9100

Proposed prime contractors and subcontractors who have participated in a previous contract or subcontract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

R7/03

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
PHOENIX STREETS – MARICOPA CO.

Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA811
Call 811 or click Arizona811.com

36634
TODD J. CENCIMINO
ARIZONA U.S.A.

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437	4	368	

06/2024
DATE:
WILSON & COMPANY
DRAWN: RJN | DESIGN: ASF | CHECKED: TJC

ITEM NO.	DESCRIPTION	UNIT	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	SHEET 4 SUB TOTAL
M3000052	ASPHALT CONCRETE PAVEMENT MILLING (1.5" DEPTH)	SY	3,039	6,349	5,353	5,650	4,755	2,784	2,160	2,258	0	0	1,161	2,393	3,000	4,578	5,211	4,720	4,641	4,356	4,269	3,274	2,318	0	0	0	0	0	0	0	0	**72,270**
M3010001	SUBGRADE PREPARATION	SY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
M3010002	6" THICK LIME TREATED SUBGRADE (MAG 311)	SY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
M3100000	4" THICK AGGREGATE BASE COURSE (MAG 310)	TON	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
M3210250	5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE C 3/4 (MAG 321)	TON	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
M3260100	POLYMER MODIFIED ASPHALT CONCRETE SURFACE COURSE (1.5" THICK)	TON	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
M3290100	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0**
M3400000	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
M3400009	DECORATIVE BRICK PAVERS, MAG STD DET 225	SF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
M3400240	CONCRETE VALLEY GUTTER & APRON, MAG STD DET 240	SF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
M3400400	CONCRETE SIDEWALK, COP STD DET P1230	SF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
M3400415	TRUNCATED DOMES FOR SIDEWALK RAMPS, COP STD DET P1232	SF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
M3400485	CONCRETE CURB RAMP, COP STD DET P1233, P1234, P1235, P1236, P1237,P1238, P1239, P1240, OR P1241 (6" IN)	SF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
M3400490	CONCRETE SIDEWALK RAMP, COP STD DETAIL P1241-2, P1241-4 (9" INCH)	SF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
M3400500	CONCRETE CURB RAMP, MCDOT STD DET 2022	SF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
M3400551	CONCRETE DRIVEWAY, RETURN TYPE, COP STD DET P1243	SF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
M3400553	CONCRETE DRIVEWAY ENTRANCE, COP STD DET P1244	SF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
M3400556	CONCRETE DRIVEWAY ENTRANCE, COP STD DET P1255-2	SF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
M3401256	CONCRETE BUS BAY PAVEMENT, COP STD DET P1256-1, 9" THICK, CLASS "A" CONCRETE	SF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
M3401260	PARKWAY BUS SHELTER/ACCESSORY PAD, COP STD DET P1260	SF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
M3401262	PARKWAY BUS SHELTER/ACCESSORY PAD, COP STD DET P1262	SF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
M3402201	CONCRETE CURB & GUTTER, MAG STD DET 220, TYPE "A", H=6"	LF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
M3402221	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE "A"	LF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
M3450020	ADJUST EX MANHOLE FRAME & COVER, MAG STD DET 422 & COP STD DET P1430	EA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
M3453006	ADJUST EX UTILITY VALVE, MAG STD DET 391-1 & 391-2	EA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
M3453008	ADJUST WATER VALVE, TYPE "A", COP STD DET P1391 & P1391-1	EA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
M3453016	ADJUST SURVEY MONUMENT HANDHOLE FRAME & COVER, COP STD DET P1270	EA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
M3500010	REMOVE PORTLAND CEMENT CONCRETE SINGLE CURB, CURB & GUTTER, HEADER CURB OR EMBANKMENT CURB	LF	0	0	191	230	0	95	0	290	199	0	100	20	0	0	73	558	0	54	97	0	112	20	6	86	161	112	110	123	246	**2,883**
M3500020	REMOVE PORTLAND CEMENT CONCRETE SIDEWALK, DRIVEWAY,VALLEY GUTTER & SLAB	SF	0	0	1,556	1,706	618	1,155	0	2,133	2,574	0	1,758	215	87	0	288	3,417	0	622	1,321	0	1,265	110	28	0	1,633	3,322	1,998	2,045	3,314	**31,165**
M3500026	REMOVE DECORATIVE BRICK PAVERS	SF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	**100**
M3500036	REMOVE CATCH BASIN, BACKFILL & COMPACT	EA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	**1**
M3500037	REMOVE HEADWALL	EA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	2	4	0	0	0	0	0	**12**
M3500040	REMOVE PIPE, BACKFILL & COMPACT	LF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	144	0	0	0	0	0	**144**
M3500041	REMOVE PIPE	LF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55	21	20	0	0	0	0	0	**96**
M3500060	REMOVE ASPHALT CONCRETE PAVEMENT	SY	0	0	131	903	1,373	1,579	1,731	2,341	4,475	4,958	3,680	2,118	2,348	1,333	901	595	31	724	562	1,053	3,207	4,900	3,370	3,995	4,453	4,726	4,678	4,468	4,450	**69,083**
M3500062	ASPHALT SAWCUTTING	LF	0	0	343	1,082	1,002	1,044	500	640	0	0	308	522	852	1,000	1,060	837	54	974	822	1,500	929	0	0	64	91	87	79	0	82	**13,872**
M3500063	CONCRETE SAWCUTTING	LF	0	0	41	65	10	31	0	36	15	0	86	0	5	7	10	51	0	14	13	0	48	7	0	0	20	8	22	23	49	**561**
M3500109	REMOVE BLOCK WALL	LF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	**12**
M3500150	REMOVE TREE, 12" DIAMETER AND LARGER	EA	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8	7	4	5	2	2	2	**33**
M3500170	REMOVE EXISTING BUSHES, SHRUBS, CACTI, OR SMALL TREES	EA	0	0	0	10	1	0	0	6	8	0	13	0	0	0	0	17	0	4	0	0	5	1	2	22	38	19	12	18	9	**185**
M4201006	REMOVE 6' CHAIN LINK FENCE	LF	0	0	0	0	0	449	500	500	500	500	500	407	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3,356**
M4258008	GRAVEL MULCH, 4" THICK	SY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
M4304007	DECOMPOSED GRANITE, STABILIZED FOR MULTIPURPOSE TRAIL, 1/4" MINUS, 4" THICK	SF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
M6106003	REMOVE EXISTING FIRE HYDRANT	EA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	**2**
M6108010	NEW FIRE HYDRANT, COP STD DET P1359, P1360, P1361, P1362	EA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
M7320292	ELECTRICAL CONDUIT (2-1.25") (PVC) (OPEN TRENCH) OR (BORED) OR (T-PATCH)	LF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
M7320445	PULLBOX (NO.8) (CITY OF PHOENIX)	EA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
M7320460	PULLBOX (NO.9) (CITY OF PHOENIX)	EA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
M7320654	BREAK-AWAY CONNECTOR SYSTEM (WITH TAIL)	EA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
M7320488	SINGLE MODE FIBER OPTIC CABLE (144 FIBERS)	LF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
M7320794	FIBER OPTIC SPLICE CLOSURE (CITY OF PHOENIX)	EA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
M7370424	FIBER OPTIC EQUIPMENT (PHOENIX FIELD HARDENED ETHERNET SWITCH)	EA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**

GENERAL NOTES:

1. SEE DRAINAGE PLAN SHEETS FOR DRAINAGE QUANTITIES.

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE
1	MEDIAN REMOVAL	RJN	TJC	10/25

ROADWAY QUANTITY SUMMARY

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437

DR: RJN DATE: 06/24 | DES: ASF DATE: 06/24 | CK: TJC DATE: 06/24 | DWG. NO. G-2.01

SHEET NAME: ST85100437QS01.DWG, PLOT DATE: 10/28/2024

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
PHOENIX STREETS – MARICOPA CO.

Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA811
Call 811 or click Arizona811.com

36634
TODD J. CENCIMINO
DATE SIGNED 10/28/24
ARIZONA U.S.A.

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437	6	368	

06/2024
DATE:

WILSON & COMPANY 2155 W. 14th Street Suite 200 Tempe, Arizona 85281

DRAWN: RJN | DESIGN: ASF | CHECKED: TJC

ITEM NO.	DESCRIPTION	UNIT	SHEET NUMBERS																													TOTAL QTY
			91	93	95	97	99	101	103	105	107	109	111	113	115	117	119	121	123	125	127	129	131	133	135	137	139	141	143	145	146	
M3000052	ASPHALT CONCRETE PAVEMENT MILLING (1.5" DEPTH)	SY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	458	**100,164**
M3010001	SUBGRADE PREPARATION	SY	581	11	241	981	1,174	3,646	4,872	4,236	4,774	4,413	4,607	4,544	4,385	4,433	4,051	4,180	5,231	4,097	4,589	4,406	4,877	2,630	0	0	0	0	392	164	48	**105,777**
M3010002	6" THICK LIME TREATED SUBGRADE (MAG 311)	SY	581	11	241	981	1,174	3,646	4,872	4,236	4,774	4,413	4,607	4,544	4,385	4,433	4,051	4,180	5,231	4,097	4,589	4,406	4,877	2,630	0	0	0	0	392	164	48	**105,777**
M3100000	4" THICK AGGREGATE BASE COURSE (MAG 310)	TON	126	2	52	213	255	793	1,060	921	1,038	960	1,002	988	954	964	881	909	1,138	891	998	958	1,061	572	0	0	0	0	85	36	10	**23,006**
M3210250	5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE C 3/4 (MAG 321)	TON	160	3	66	270	324	1,005	1,343	1,167	1,316	1,216	1,270	1,252	1,209	1,222	1,117	1,152	1,442	1,129	1,265	1,214	1,344	725	0	0	0	0	108	45	13	**29,155**
M3260100	POLYMER MODIFIED ASPHALT CONCRETE SURFACE COURSE (1.5" THICK)	TON	438	385	380	434	368	493	403	350	395	365	381	376	363	367	335	346	433	339	379	364	403	434	392	371	400	396	446	94	42	**17,036**
M3290100	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	1.96	1.56	1.61	2.08	1.87	3.20	3.25	2.82	3.18	2.94	3.07	3.03	2.92	2.96	2.70	2.79	3.49	2.73	3.06	2.94	3.25	2.62	1.58	1.49	1.61	1.60	1.93	0.44	0.18	**103.94**
M3400000	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	36	28	17	29	0	34	0	19	20	40	20	20	20	0	20	20	0	20	38	21	17	34	0	0	0	0	34	0	0	**861**
M3400009	DECORATIVE BRICK PAVERS, MAG STD DET 225	SF	7	127	686	409	71	653	364	135	185	339	173	157	153	0	173	215	0	157	260	418	409	447	0	0	0	0	0	0	0	**14,127**
M3400240	CONCRETE VALLEY GUTTER & APRON, MAG STD DET 240	SF	425	0	0	0	0	0	0	0	511	595	960	815	0	531	0	0	0	0	496	0	0	0	0	0	0	0	998	0	0	**6,920**
M3400400	CONCRETE SIDEWALK, COP STD DET P1230	SF	1,545	0	0	1,907	2,500	1,933	4,700	7,515	5,409	3,175	2,275	651	1,105	1,641	0	423	224	0	724	2,500	2,077	0	0	0	0	0	1,343	1,572	0	0	**65,914**
M3400415	TRUNCATED DOMES FOR SIDEWALK RAMPS, COP STD DET P1232	SF	20	0	20	60	0	80	0	0	80	40	20	40	0	40	0	0	80	0	40	0	40	0	0	0	0	0	80	0	0	**880**
M3400485	CONCRETE CURB RAMP, COP STD DET P1233, P1234, P1235, P1236, P1237,P1238, P1239, P1240, OR P1241 (6" IN)	SF	636	0	856	991	0	2,870	0	0	1,227	723	614	1,126	0	820	0	0	2,439	0	916	0	800	0	0	0	0	0	2,531	0	61	**21,993**
M3400490	CONCRETE SIDEWALK RAMP, COP STD DETAIL P1241-2, P1241-4 (9" INCH)	SF	0	0	0	0	0	0	0	0	0	219	0	0	0	80	0	0	0	0	294	0	282	0	0	0	0	0	0	0	0	**2,003**
M3400500	CONCRETE CURB RAMP, MCDOT STD DET 2022	SF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**528**
M3400551	CONCRETE DRIVEWAY, RETURN TYPE, COP STD DET P1243	SF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2,919**
M3400553	CONCRETE DRIVEWAY ENTRANCE, COP STD DET P1244	SF	0	0	0	0	0	0	0	0	0	0	0	0	828	308	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1,136**
M3400556	CONCRETE DRIVEWAY ENTRANCE, COP STD DET P1255-2	SF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	700	0	0	**1,045**
M3401256	CONCRETE BUS BAY PAVEMENT, COP STD DET P1256-1, 9" THICK, CLASS "A" CONCRETE	SF	0	0	0	0	0	290	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3,034**
M3401260	PARKWAY BUS SHELTER/ACCESSORY PAD, COP STD DET P1260	SF	497	0	0	500	0	0	0	0	797	0	0	0	0	594	0	0	496	0	497	0	0	0	0	0	0	0	0	0	0	**3,381**
M3401262	PARKWAY BUS SHELTER/ACCESSORY PAD, COP STD DET P1262	SF	0	0	0	0	0	200	708	0	0	0	0	741	0	0	0	0	0	0	761	0	0	563	0	566	686	0	0	0	0	**8,761**
M3402201	CONCRETE CURB & GUTTER, MAG STD DET 220, TYPE "A", H=6"	LF	183	0	53	576	500	590	523	1,001	1,000	610	61	112	123	245	0	0	326	0	171	0	168	0	0	0	0	0	152	0	7	**11,078**
M3402221	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE "A"	LF	20	48	906	113	1,001	463	1,001	822	135	369	445	454	201	0	794	607	0	1,002	562	1,004	607	322	0	0	0	0	30	0	15	**21,752**
M3450020	ADJUST EX MANHOLE FRAME & COVER, MAG STD DET 422 & COP STD DET P1430	EA	3	1	0	2	0	1	2	1	2	2	4	0	0	1	0	0	3	2	1	0	0	2	0	1	4	0	6	0	0	**60**
M3453006	ADJUST EX UTILITY VALVE, MAG STD DET 391-1 & 391-2	EA	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
M3453008	ADJUST WATER VALVE, TYPE "A", COP STD DET P1391 & P1391-1	EA	8	3	5	5	0	6	1	0	6	2	2	5	2	3	0	1	5	1	5	1	2	5	0	0	4	4	14	0	0	**137**
M3453016	ADJUST SURVEY MONUMENT HANDHOLE FRAME & COVER, COP STD DET P1270	EA	1	0	0	1	0	1	0	0	1	0	1	0	0	1	0	0	2	0	0	0	0	1	0	0	0	0	1	0	0	**13**
M3500010	REMOVE PORTLAND CEMENT CONCRETE SINGLE CURB, CURB & GUTTER, HEADER CURB OR EMBANKMENT CURB	LF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	110	**4,367**
M3500020	REMOVE PORTLAND CEMENT CONCRETE SIDEWALK, DRIVEWAY,VALLEY GUTTER & SLAB	SF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	88	**50,238**
M3500026	REMOVE DECORATIVE BRICK PAVERS	SF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	113	**710**
M3500036	REMOVE CATCH BASIN, BACKFILL & COMPACT	EA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
M3500037	REMOVE HEADWALL	EA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**12**
M3500040	REMOVE PIPE, BACKFILL & COMPACT	LF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**144**
M3500041	REMOVE PIPE	LF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**96**
M3500060	REMOVE ASPHALT CONCRETE PAVEMENT	SY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	**105,941**
M3500062	ASPHALT SAWCUTTING	LF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	123	**15,580**
M3500063	CONCRETE SAWCUTTING	LF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	**969**
M3500109	REMOVE BLOCK WALL	LF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**12**
M3500150	REMOVE TREE, 12" DIAMETER AND LARGER	EA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**33**
M3500170	REMOVE EXISTING BUSHES, SHRUBS, CACTI, OR SMALL TREES	EA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**219**
M4201006	REMOVE 6' CHAIN LINK FENCE	LF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3,356**
M4258008	GRAVEL MULCH, 4" THICK	SY	0	0	0	20	0	23	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**66**
M4304007	DECOMPOSED GRANITE, STABILIZED FOR MULTIPURPOSE TRAIL, 1/4" MINUS, 4" THICK	SF	353	0	0	0	0	0	0	0	0	2,812	4,176	4,066	5,007	3,104	5,005	5,014	394	0	0	0	0	0	0	0	0	0	0	0	0	3,445	**70,253**
M6106003	REMOVE EXISTING FIRE HYDRANT	EA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
M6108010	NEW FIRE HYDRANT, COP STD DET P1359, P1360, P1361, P1362	EA	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
M7320292	ELECTRICAL CONDUIT (2-1.25") (PVC) (OPEN TRENCH) OR (BORED) OR (T-PATCH)	LF	550	550	550	550	550	550	552	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	407	0	0	**22,826**
M7320445	PULLBOX (NO.8) (CITY OF PHOENIX)	EA	0	1	1	0	0	0	0	1	1	1	0	0	1	1	0	1	0	1	2	0	1	0	1	0	0	1	0	0	0	**21**
M7320460	PULLBOX (NO.9) (CITY OF PHOENIX)	EA	1	0	0	1	0	1	0	0	0	0	2	1	0	0	0	0	2	0	0	0	0	1	0	0	1	0	1	0	0	**16**
M7320654	BREAK-AWAY CONNECTOR SYSTEM (WITH TAIL)	EA	1	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	1	0	0	1	0	1	0	0	**13**
M7320488	SINGLE MODE FIBER OPTIC CABLE (144 FIBERS)	LF	650	600	600	650	550	650	552	600	600	600	650	650	600	600	550	600	650	600	650	550	600	650	600	550	650	600	507	0	0	**25,226**
M7320794	FIBER OPTIC SPLICE CLOSURE (CITY OF PHOENIX)	EA	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	1	0	1	0	0	1	0	0	1	0	1	0	0	**12**
M7370424	FIBER OPTIC EQUIPMENT (PHOENIX FIELD HARDENED ETHERNET SWITCH)	EA	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	1	0	0	1	0	1	0	0	**11**

GENERAL NOTES:

1. SEE DRAINAGE PLAN SHEETS FOR DRAINAGE QUANTITIES.

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE
1	MEDIAN REMOVAL	RJN	TJC	10/25

"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ROADWAY QUANTITY SUMMARY

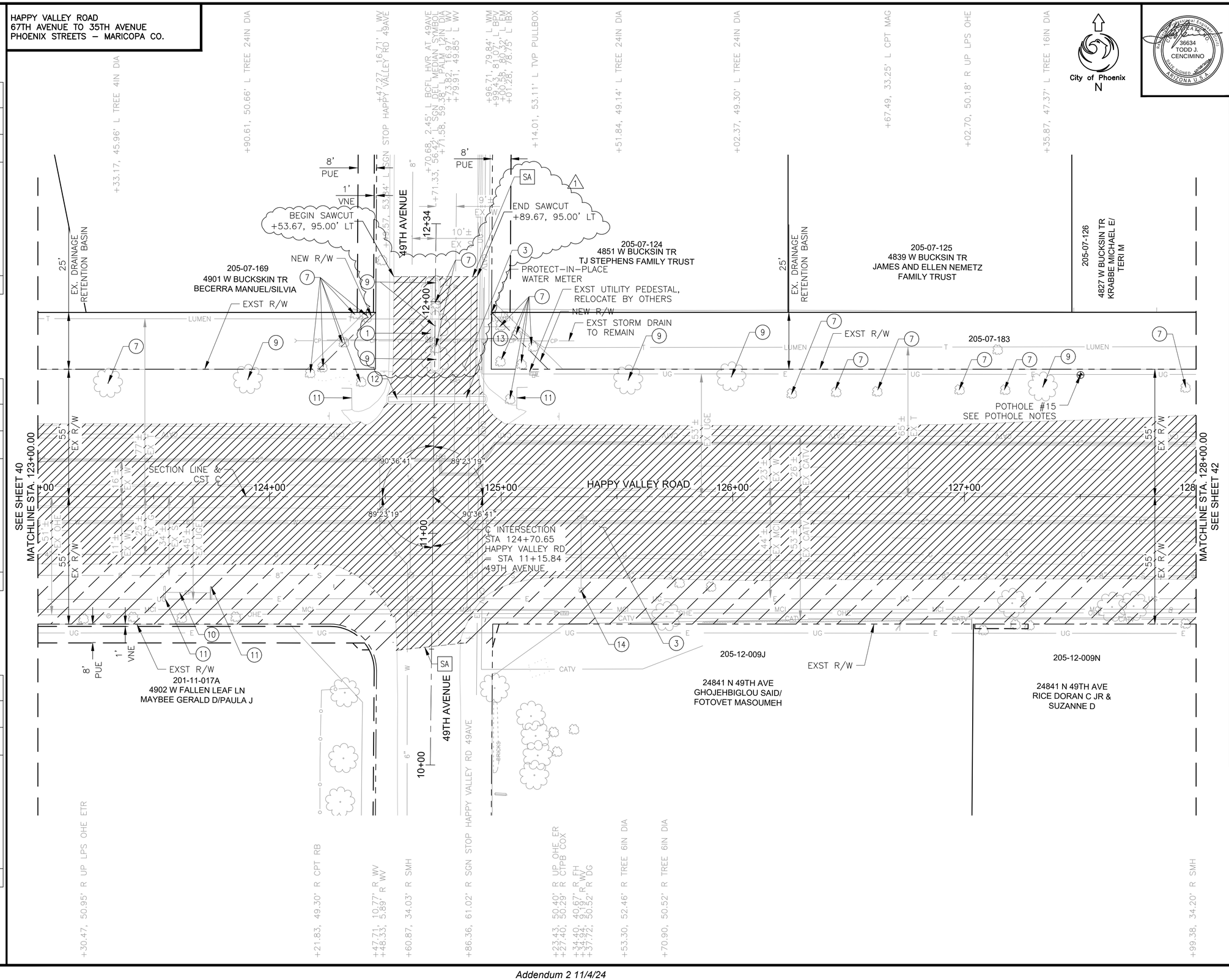
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437

DR: RJN	DES: ASF	CK: TJC	DWG. NO. G-2.03
DATE: 06/24	DATE: 06/24	DATE: 06/24	6 OF 368

SHEET NAME: ST85100437QSO3.DWG, PLOT DATE: 10/28/2024

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
PHOENIX STREETS – MARICOPA CO.



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437	41	368	

06/2024 DATE:

DRAWN: RJN | DESIGN: ASF | CHECKED: TJC

WILSON & COMPANY

36634 TODD J. CENCIMINO REGISTERED PROFESSIONAL ENGINEER ARIZONA U.S.A.

REMOVAL/RELOCATION

NO	DESCRIPTION	UNIT	QTY
(1)	REMOVE PCC SINGLE CURB, CURB & GUTTER	LF	86
(3)	REMOVE ASPHALT CONCRETE PAVEMENT	SY	3995
(7)	REMOVE EXISTING BUSHES, SHRUBS, CACTI, OR SMALL TREES	EA	22
(9)	REMOVE TREE 12" DIAMETER AND LARGER	EA	7
(10)	REMOVE PIPE	LF	20
(11)	REMOVE HEADWALL	EA	4
(12)	REMOVE PIPE, SLURRY BACKFILL, AND COMPACT	LF	144
(13)	REMOVE CATCH BASIN, BACKFILL, AND COMPACT	EA	1
(14)	REMOVE EXISTING FIRE HYDRANT	EA	1
SA	ASPHALT SAWCUTTING	LF	64

1

POTHOLE NOTES:

POTHOLE #15
APS ELECTRIC
UTILITY TOP=1414.12
2.5" & (3) 2" PLASTIC CONDUIT PIPES
127+50.07, 52.48' LT

GENERAL NOTES:

1. PROTECT-IN-PLACE SAGUARO AND BARREL CACTI WITHIN THE CLEAR & GRUB LIMITS IF POSSIBLE. IF NOT POSSIBLE, TRANSPLANT THE CACTI TO SUITABLE LOCATION USING BEST PRACTICES.

LEGEND

- ASPHALT CONCRETE PAVEMENT MILLING (1.5" DEPTH)
- REMOVE PCC SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB
- REMOVE DECORATIVE BRICK PAVERS
- REMOVE ASPHALT CONCRETE PAVEMENT
- CLEAR & GRUB

▲ C.O.P. BM 1507: BCHH AT THE INTERSECTION OF HAPPY VALLEY ROAD AND 47TH AVENUE ELEV: 1411.07' (C.O.P. DATUM)

Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA811
Call 811 or click Arizona811.com

"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

REMOVAL PLAN

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437

DR: RJN	DES: ASF	CK: TJC	DWG. NO. P-1.24
DATE: 06/24	DATE: 06/24	DATE: 06/24	
SCALE: 1" = 20' HORIZONTAL			41 OF 368

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CK'D BY	DATE

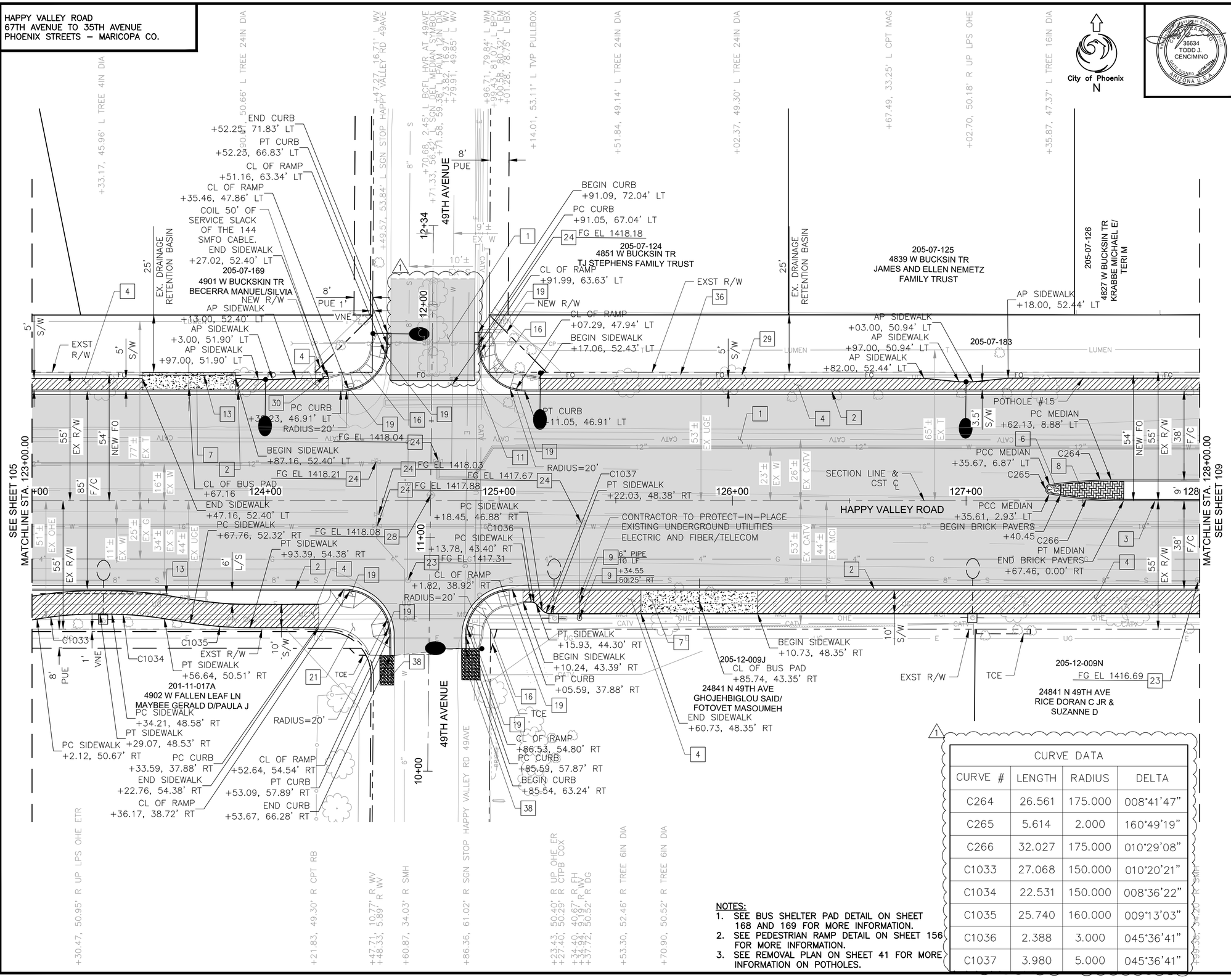
REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CK'D BY	DATE
1	MEDIAN REMOVAL	RJN	TJC	10/25

Addendum 2 11/4/24

SHEET NAME: ST85100437REM24.DWG, PLOT DATE: 10/28/2024

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
PHOENIX STREETS – MARICOPA CO.



NOTES:
1. SEE BUS SHELTER PAD DETAIL ON SHEET 168 AND 169 FOR MORE INFORMATION.
2. SEE PEDESTRIAN RAMP DETAIL ON SHEET 156 FOR MORE INFORMATION.
3. SEE REMOVAL PLAN ON SHEET 41 FOR MORE INFORMATION ON POTHOLES.

1

CURVE DATA			
CURVE #	LENGTH	RADIUS	DELTA
C264	26.561	175.000	008°41'47"
C265	5.614	2.000	160°49'19"
C266	32.027	175.000	010°29'08"
C1033	27.068	150.000	010°20'21"
C1034	22.531	150.000	008°36'22"
C1035	25.740	160.000	009°13'03"
C1036	2.388	3.000	045°36'41"
C1037	3.980	5.000	045°36'41"

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE
1	MEDIAN REMOVAL	RJN	TJC	10/25

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437	107	368	

06/2024 DATE:

DRAWN: RJN | DESIGN: ASF | CHECKED: TJC

36634 TODD J. CENCIMINO REGISTERED ENGINEER ARIZONA U.S.A.

WILSON & COMPANY

CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
	PAVEMENT STRUCTURAL SECTION NO. 1		
1	SUBGRADE PREPARATION	SY	4774
1	POLYMER MODIFIED AC SURFACE COURSE, 1.5" THICK	TON	395
1	ASPHALT CONCRETE BASE COURSE, TYPE C 3/4" MIX, 5" THICK	TON	1316
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	3.18
1	AGGREGATE BASE COURSE, 4" THICK	TON	1038
1	LIME TREATED SUBGRADE, 6" THICK	SY	4774
2	CONCRETE CURB & GUTTER, MAG STD DET 220-1, TYPE A, H=6"	LF	1000
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF	135
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	5409
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	20
7	BUS SHELTER/ACCESSORY PAD COP STD DET P1260	SF	797
8	DECORATIVE BRICK PAVERS MAG STD DET. 225	SF	185
9	NEW FIRE HYDRANT, COP STD DET P1359, P1360, P1361, P1362	EA	1
11	CONCRETE VALLEY GUTTER/APRON MAG STD DET 240	SF	511
13	4" SCHEDULE 40 PVC IRRIGATION SLEEVE	LF	98
16	CONCRETE CURB RAMP, COP STD DET P1237	SF	694
19	TRUNCATED DOMES, COP STD DET P1232	SF	80
21	CONCRETE CURB RAMP, COP STD DET P1238-1	SF	533
23	ADJUST EX MANHOLE FRAME &, COVER,MAG STD DET 422 & P1430	EA	2
24	ADJUST WATER VALVE, TYPE "A", COP STD DET P1391 & P1391-1	EA	6
28	ADJUST SURVEY MONUMENT HH FRAME & COVER, STD DET P1270	EA	1
29	ELECTRICAL CONDUIT (2-1.25") (PVC)	LF	550
30	PULLBOX (NO. 8) (CITY OF PHOENIX)	EA	1
36	SINGLE MODE FIBER OPTIC CABLE (144 FIBERS)	LF	600
38	GRAVEL MULCH, 4" THICK	SY	23

▲ C.O.P. BM 1507: BCHH AT THE INTERSECTION OF HAPPY VALLEY ROAD AND 47TH AVENUE ELEV: 1411.07' (C.O.P. DATUM)

Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA811 Call 811 or click Arizona811.com

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ROADWAY PLAN

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437

DR: RJN	DES: ASF	CK: TJC	DWG. NO. P-2.47
DATE: 06/24	DATE: 06/24	DATE: 06/24	
SCALE: 1" = 20' HORIZONTAL			107 OF 368

SHEET NAME: ST85100437PL24.DWG, PLOT DATE: 10/28/2024

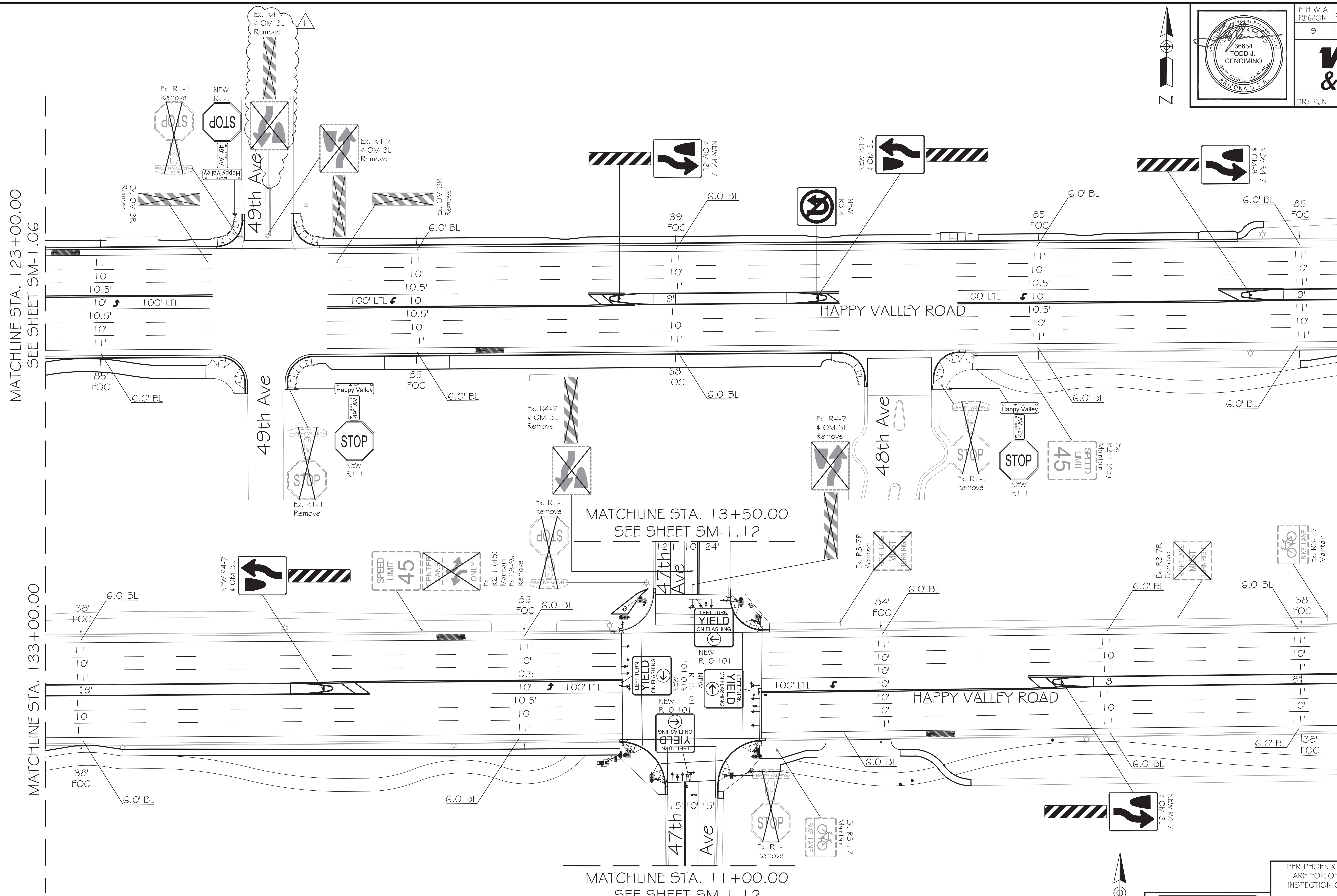
Addendum 2 11/4/24

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST85100437	306	368

WILSON & COMPANY
410 North 44th Street
Suite 460
Phoenix, Arizona 85008

DR: RJN | DES: ASF | CK: TJC | DATE: 05/2024

PAINT & SIGN: HAPPY VALLEY ROAD - 67TH AVENUE TO 35TH AVENUE



NOTES:

1. Install R2-1 (45), 4 per side per mile, Happy Valley Road - 67th Avenue to 35th Avenue
2. Install R3-17, 2 per side per mile depending on Engineer's judgment
3. Install 4 Bike Symbols per side per mile depending on Engineer's judgement
4. Extend Bike Lane to curb return of intersection or marked crosswalk unless otherwise noted
5. Maintain existing signs unless otherwise noted

PAINT AND SIGN PLAN APPROVAL IS VALID FOR 365 CALENDAR DAYS FROM DATE SIGNED. IF THE NOTIFICATION IS NOT RECEIVED PRIOR TO THE 365 DAYS LAPSING, THE PAIN AND SIGN PLAN MUST BE RE-SUBMITTED FOR APPROVAL OR AN EXTENSION GRANTED BY THE TRAFFIC SERVICES DEPUTY DIRECTOR OR AN AUTHORIZED REPRESENTATIVE TO ENSURE THAT THE PROPOSED PAIN AND SIGN PLAN IS STILL ACCEPTABLE.

THE CITY OF PHOENIX INSPECTOR SHALL NOTIFY THE CITY OF PHOENIX TRAFFIC SERVICES FIELD INVESTIGATOR UNIT (602) 262-4684 A MINIMUM OF FIFTEEN (15) BUSINESS DAYS PRIOR TO HAVING TRAFFIC SIGN AND PAVEMENT WORK COMMENCE

DATE SAVED: 10/31/23
C:\USERS\RJNELSON\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WCI_PROJECTS\D0536584\ST85100437SM07.DWG

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE
1	MEDIAN REMOVAL	RJN	TJC	10/25

Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA811
Call 811 or click Arizona811.com

APPROVED BY:

TRAFFIC SERVICES ENGINEER
DATE 10/1/2024

STREET TRANSPORTATION TRAFFIC SERVICES DEPUTY DIRECTOR
DATE 10/3/2024

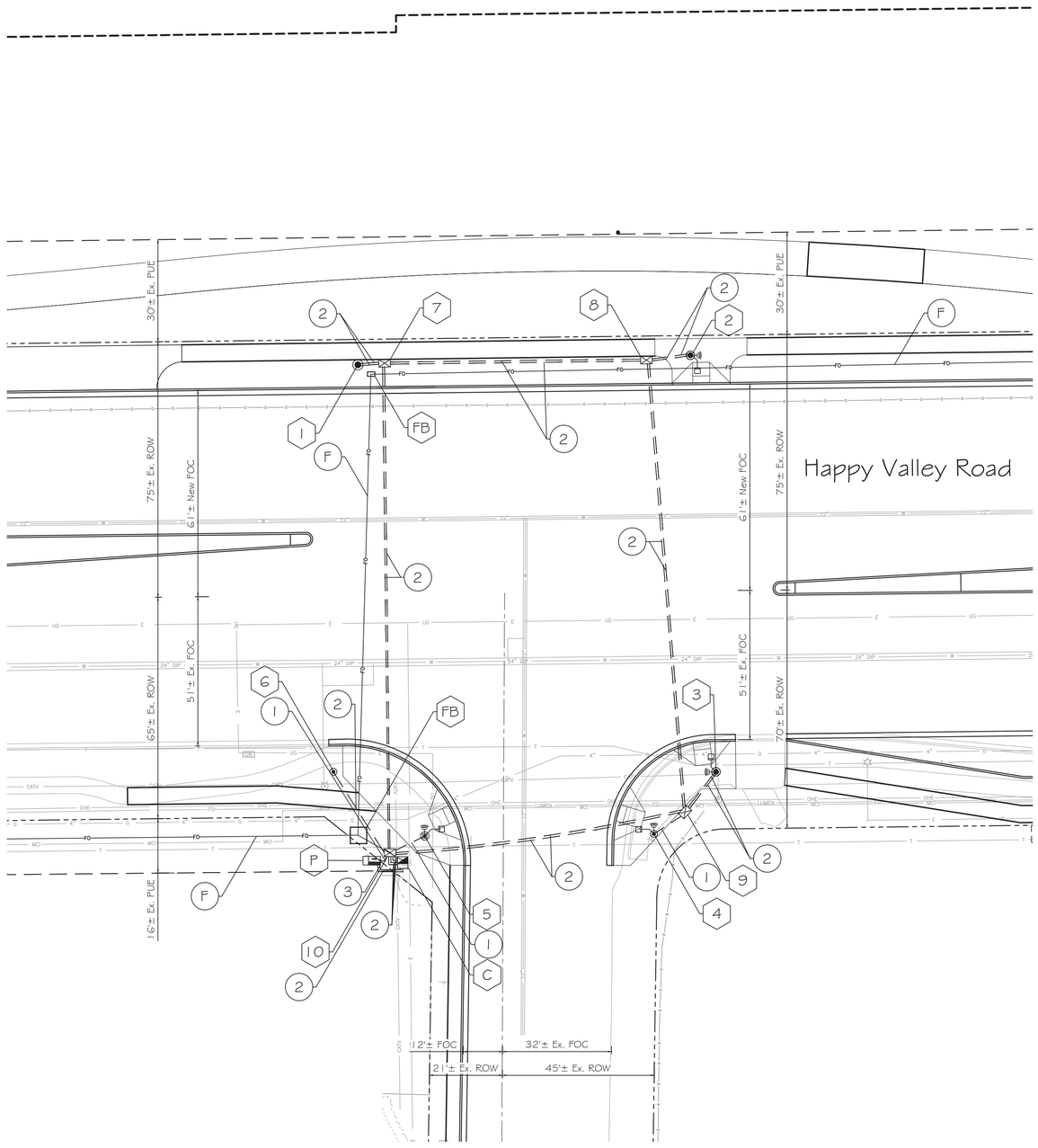
PAINT & SIGN PLANS

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437

PROJECT #: ST85100437			FILE NO: SM-1.07	
DR: RJN DATE: 05/24	DES: ASF DATE: 05/24	CK: TJC DATE: 05/24	SHEET NO:	TOTAL SHEETS
SCALE: 1" = 40'		QS. #:	7	12

PROJECT #: ST85100437 FILE #: 11589



1. GENERAL NOTES: Contractor as referenced herein is the Developer Contractor.

1.1 The contractor shall notify the City of Phoenix Traffic Signal Shop (602-262-6733) a minimum of fourteen (14) calendar days prior to beginning any traffic signal work. Submittals of all equipment shall be furnished to the Signal Shop and approved prior to ordering any traffic signal equipment. The contractor shall verify they have the current approved plan set prior to starting and ordering any equipment.

1.2 The contractor shall layout all ADA ramps, junction boxes and foundation locations for approval by a traffic signal representative. Contractor must have a current visible Bluestake showing all utilities. All ADA ramps shall be laid out in white marking paint to determine best traffic signal pole locations.

1.3 Traffic Signal Plan approval is valid for 365 calendar days from date sealed. If signal construction has not begun prior to the 365 days elapsing, the signal plans must be re-submitted for approval or an extension granted by the Deputy Director of Traffic Services or an authorized representative to ensure that existing traffic signal equipment locations and standard detail references are current.

1.4 All traffic signal equipment and materials shall follow the current City of Phoenix Traffic Signal Standard Details and Specifications. (www.phoenix.gov/streets/reference-material) The contactor shall have a copy of these standards along with a complete set of approved plans on site at all times during signal and lighting systems construction. The contractor shall have a competent supervisor capable of reading and understanding plans and specifications and thoroughly experienced in the construction of traffic signals. The contractor's supervisor or lead shall possess a current International Municipal Signal Association (IMSA) Level II Traffic Signal Electrician Certification and must be on site during any traffic signal construction activities. It will be the responsibility of the contractor to supply verification of certification. If a jobsite is inspected and a certified Electrician is not on site, a stop work order will be issued.

1.5 The contractor is responsible for the construction of the project; its planning, safety, quality and completion. The City of Phoenix inspection team would make the determination if the work performed meets the criteria and if not, may request that the work be redone at the contractor's expense.

1.6 Foundation elevations must be within 1/4" of finished sidewalk grade.

1.7 A minimum of a four (4) foot clear path is required around all traffic signal poles. A four by four (4x4) flat landing centered on the pedestrian push button must be maintained as provided on the latest Traffic Signal Standard Details (see note 1.4).

1.8 Contractor shall verify location and orientation of all pole and mast arm mounted equipment on all new traffic signal poles and mast arms with the Traffic Signal shop's representative prior to drilling any holes in the poles or mast arms. Failure to get approval may result in replacement of the pole at the contractor's expense.

2. WORK TO BE PERFORMED BY THE CONTRACTOR

The contractor shall supply all materials and perform all work except as indicated in note 3.

3. WORK TO BE PERFORMED BY CITY OF PHOENIX SIGNAL CREWS

Traffic Signal representative shall approve marked layout of ADA ramps, junction boxes and foundation locations prior to excavation, prep contractor furnished controller cabinets and internal equipment (contractor to pick up and install controller cabinet), inspect and approve all traffic signal equipment installed by contractor and terminate, test and activate all field wiring into controller cabinet(s). 1

Arizona Professional Engineering Consultant — CERTIFICATE NO. — 39284 — TRENT W. THATCHER — 10-31-24

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST85100437	320	368

WILSON & COMPANY — 410 North 44th Street, Suite 460, Phoenix, Arizona 85008

DR: CMW	DES: CMW	CK: TWT	DATE: 05/24

PROPOSED FOUNDATION SCHEDULE

NO.	TYPE	OFFSET FROM HAPPY VALLEY MON LINE	OFFSET FROM 61st AVENUE MON LINE
C	CONT	78 ft. SOUTH	30 ft. WEST
P	PSP	78 ft. SOUTH	38 ft. WEST
1	P70	68 ft. NORTH	43 ft. WEST
2	P45	69 ft. NORTH	54 ft. EAST
3	P45	53 ft. SOUTH	62 ft. EAST
4	AP	71 ft. SOUTH	44 ft. EAST
5	LP	71 ft. SOUTH	23 ft. WEST
6	AP	52 ft. SOUTH	50 ft. WEST

PROPOSED JUNCTION BOX SCHEDULE

NO.	TYPE	OFFSET FROM HAPPY VALLEY MON LINE	OFFSET FROM 61st AVENUE MON LINE
7	#7	68 ft. NORTH	36 ft. WEST
8	#7	68 ft. NORTH	41 ft. EAST
9	#7	35 ft. SOUTH	53 ft. EAST
10	#7	75 ft. SOUTH	33 ft. WEST

INSTALL

- (C) 8 Phase Controller Foundation - See Foundation Schedule
- (P) Type B Power Service Pedestal Foundation w/Battery Backup See Foundation Schedule
- (1) thru (6) See Foundation Schedule
- (7) thru (10) See Junction Box Schedule
- (FB) Fiber Optic Junction Box - See Roadway Plans

- (1) 2" Schedule 40 PVC
- (2) 2 1/2" Schedule 40 PVC
- (3) 1" Schedule 40 PVC
- (F) Fiber Optic Conduit - See Roadway Plans

1

N

Contact Arizona 811 at least two full working days before you begin excavation. ARIZONA811 Call 811 or click Arizona811.com

PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX

TRAFFIC SIGNAL PLAN

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD AT 61st AVENUE
ST85100437
FOUNDATION

APPROVED BY:

TRAFFIC SIGNAL ENGINEER — DATE: 10/1/2024

STREET TRANSPORTATION TRAFFIC SERVICES DEPUTY DIRECTOR — DATE: 10/3/2024

1

REVISION BY CITY OF PHOENIX				
NO.	DESCRIPTION	REV BY	CKD BY	DATE
1	NOTES UPDATE	CMW	TWT	10/24

PROJECT #:			FILE NO: 11710
DR: CMW	DES: CMW	CK: TWT	SHEET NO: 1
DATE: 05/2024	DATE: 05/2024	DATE: 05/2024	TOTAL SHEETS 4
SCALE: 1" = 20'		QS. #:	

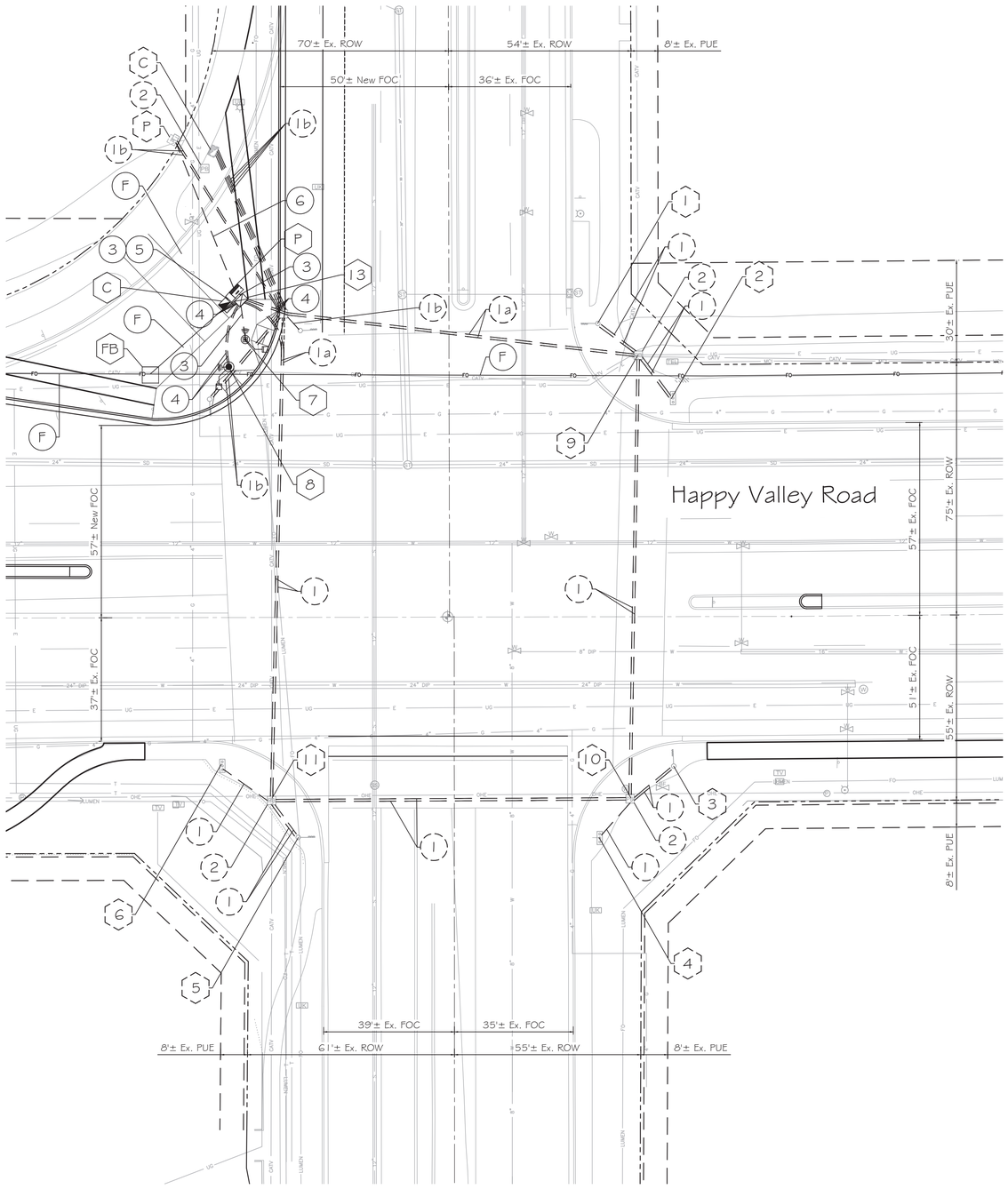
TRAFFIC SIGNAL-HAPPY VALLEY AT 61st AVENUE

PROJECT #: ST85100437

FILE #:

DATE SAVED: 10/28/24 C:\USERS\CMWASCOVICH\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WCI_PROJECTS\D0556964\ST85100437_61STAVE.DWG

Addendum 2 11/4/24



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2. WORK TO BE PERFORMED BY THE CONTRACTOR

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4. SITE SPECIFIC NOTES

4.1 Four existing 2 1/2" Schedule 40 PVC run from the Cabinet (C) to Junction Box (5). Proposed Junction Box (4) to be installed along conduit run. Cable coils in Junction Box (5) to be relocated to Junction Box (4). Conduit within Junction Box (5) to be replaced with 2 1/2" Schedule 40 PVC split conduit. Junction Box (5) to be removed.

4.2 Junction Box (6) to be removed. Proposed cables to connect to existing cables in Junction Box (6).

1

N

1

REVISION BY CITY OF PHOENIX				
NO.	DESCRIPTION	REV BY	CKD BY	DATE
1	NOTES UPDATE	CMW	TWT	10/24

APPROVED BY:

TRAFFIC SIGNAL ENGINEER — DATE: 10/1/2024

STREET TRANSPORTATION TRAFFIC SERVICES DEPUTY DIRECTOR — DATE: 10/3/2024

39284 TRENT W. THATCHER — Registered Professional Engineer — CERTIFICATE NO. — Not Valid Without Signature

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST85100437	328	368

WILSON & COMPANY — 410 North 44th Street, Suite 460, Phoenix, Arizona 85008

DR: CMW	DES: CMW	CK: TWT	DATE: 05/24

EXISTING FOUNDATION SCHEDULE			
NO.	TYPE	OFFSET FROM HAPPY VALLEY MON LINE	OFFSET FROM 55th AVENUE MON LINE
1	P40	87 ft. NORTH	44 ft. EAST
2	LP	65 ft. NORTH	66 ft. EAST
3	P55	45 ft. SOUTH	65 ft. EAST
4	LP	66 ft. SOUTH	43 ft. EAST
5	P35	65 ft. SOUTH	46 ft. WEST
6	LP	44 ft. SOUTH	69 ft. WEST

PROPOSED FOUNDATION SCHEDULE			
NO.	TYPE	OFFSET FROM HAPPY VALLEY MON LINE	OFFSET FROM 55th AVENUE MON LINE
7	LP	88 ft. NORTH	60 ft. WEST
8	P70	75 ft. NORTH	65 ft. WEST

EXISTING JUNCTION BOX SCHEDULE			
NO.	TYPE	OFFSET FROM HAPPY VALLEY MON LINE	OFFSET FROM 55th AVENUE MON LINE
9	EX	78 ft. NORTH	56 ft. EAST
10	EX	54 ft. SOUTH	52 ft. EAST
11	EX	54 ft. SOUTH	54 ft. WEST

PROPOSED JUNCTION BOX SCHEDULE			
NO.	TYPE	OFFSET FROM HAPPY VALLEY MON LINE	OFFSET FROM 55th AVENUE MON LINE
12	#7	128 ft. NORTH	55 ft. WEST
13	#7	91 ft. NORTH	54 ft. EAST

EXISTING

- (C) Existing Controller with Foundation - Remove
- (P) Existing Power Service Pedestal with Foundation - Remove
- (1) Existing 2 1/2" Schedule 40 PVC - Protect-In-Place
- (1a) Existing 2 1/2" Schedule 40 PVC - To Be Extended and Routed to Proposed Junction Box as Shown on Plans
- (1b) Existing 2 1/2" Schedule 40 PVC - To Be Removed
- (2) Existing Traffic Junction Box - Protect-In-Place

INSTALL

- (1) thru (8) See Foundation Schedule
- (9) thru (13) See Junction Box Schedule
- (FB) Fiber Optic Junction Box - See Roadway Plans
- (3) 2" Schedule 40 PVC
- (6) 3" Schedule 40 PVC
- (4) 2 1/2" Schedule 40 PVC
- (5) 1" Schedule 40 PVC
- (F) Fiber Optic Conduit - See Roadway Plans

Contact Arizona 811 at least two full working days before you begin excavation — ARIZONA811 — Call 811 or click Arizona811.com

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TRAFFIC SIGNAL PLAN

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

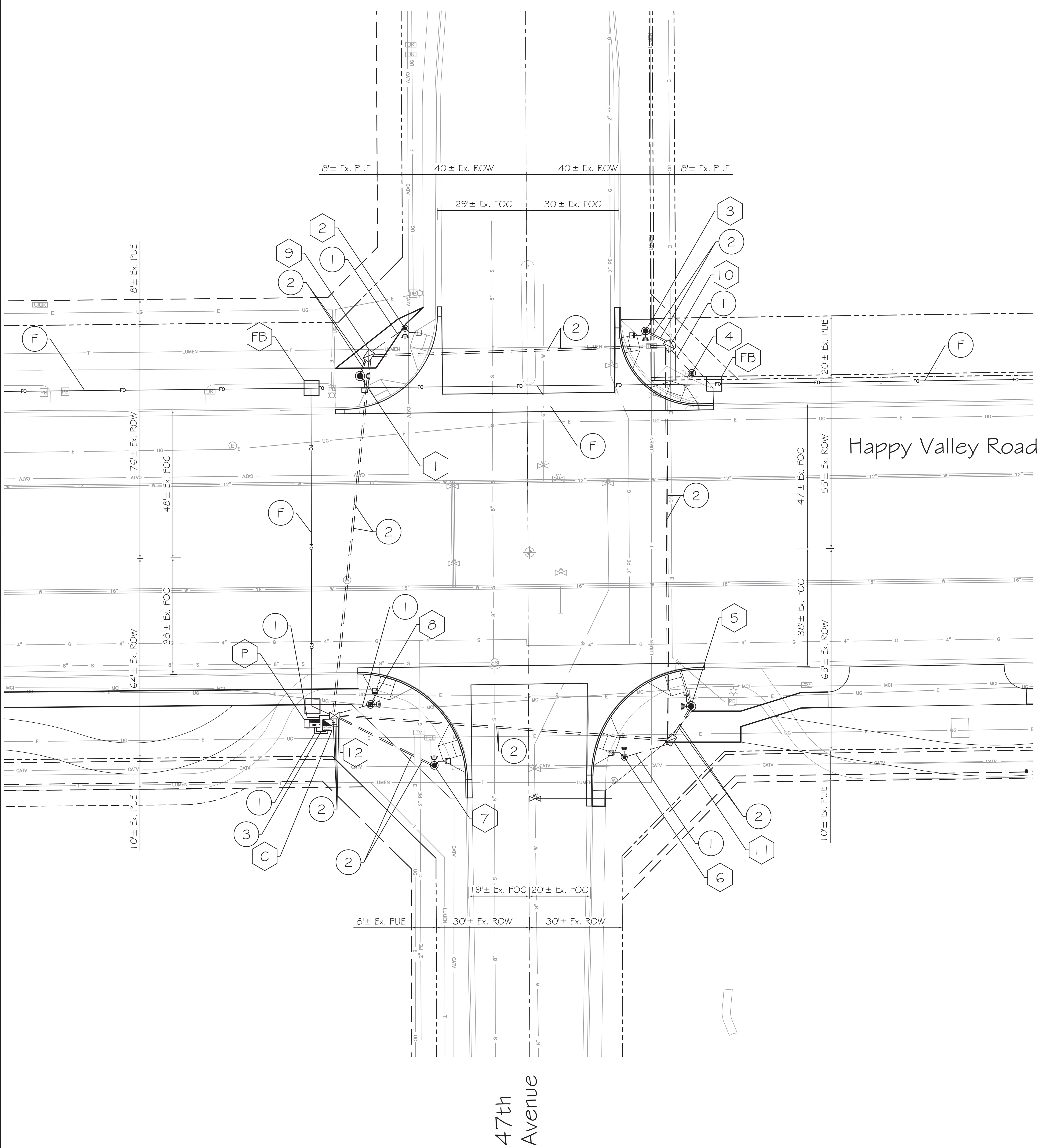
HAPPY VALLEY ROAD AT 55th AVENUE
ST85100437
FOUNDATION

PROJECT #:			FILE NO: 11711
DR: CMW	DES: CMW	CK: TWT	SHEET NO: 1
DATE: 05/2024	DATE: 05/2024	DATE: 05/2024	TOTAL SHEETS: 4
SCALE: 1" = 20'		QS. #:	

TRAFFIC SIGNAL HAPPY VALLEY AT 55th AVENUE

PROJECT #: ST85100437

FILE #:



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F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST85100437	336	368

WILSON & COMPANY
410 North 44th Street
Suite 460
Phoenix, Arizona 85008

DR: CMW | DES: CMW | CK: TWT | DATE: 05/24

TRAFFIC SIGNAL:HAPPY VALLEY AT 47th AVENUE

PROPOSED FOUNDATION SCHEDULE

NO.	TYPE	OFFSET FROM HAPPY VALLEY MON LINE	OFFSET FROM 47th AVENUE MON LINE
C	CONT	54 ft. SOUTH	65 ft. WEST
P	PSP	54 ft. SOUTH	69 ft. WEST
1	P70	58 ft. NORTH	54 ft. WEST
2	AP	73 ft. NORTH	39 ft. WEST
3	P45	71 ft. NORTH	38 ft. EAST
4	LP	57 ft. NORTH	53 ft. EAST
5	P70	49 ft. SOUTH	46 ft. EAST
6	AP	66 ft. SOUTH	31 ft. EAST
7	LP	68 ft. SOUTH	30 ft. WEST
8	P45	48 ft. SOUTH	51 ft. WEST

PROPOSED JUNCTION BOX SCHEDULE

NO.	TYPE	OFFSET FROM HAPPY VALLEY MON LINE	OFFSET FROM 47th AVENUE MON LINE
9	#7	64 ft. NORTH	51 ft. WEST
10	#7	66 ft. NORTH	46 ft. EAST
11	#7	61 ft. SOUTH	46 ft. EAST
12	#7	51 ft. SOUTH	63 ft. WEST

INSTALL

1 thru 8 See Foundation Schedule

FB Fiber Optic Junction Box - See Roadway Plans

C 8 Phase Controller Foundation - See Foundation Schedule

P Type B Power Service Pedestal Foundation w/Battery Backup - See Foundation Schedule

1 2" Schedule 40 PVC

2 2 1/2" Schedule 40 PVC

3 1" Schedule 40 PVC

F Fiber Optic Conduit - See Roadway Plans

9 thru 12 See Junction Box Schedule

PROJECT #: ST85100437

FILE #:

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ARIZONA811
Call 811 or click Arizona811.com

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE
1	NOTES UPDATE	CMW	TWT	10/24

APPROVED BY:

TRAFFIC SIGNAL ENGINEER
DATE: 10/1/2024

STREET TRANSPORTATION TRAFFIC SERVICES DEPUTY DIRECTOR
DATE: 10/3/2024

PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX

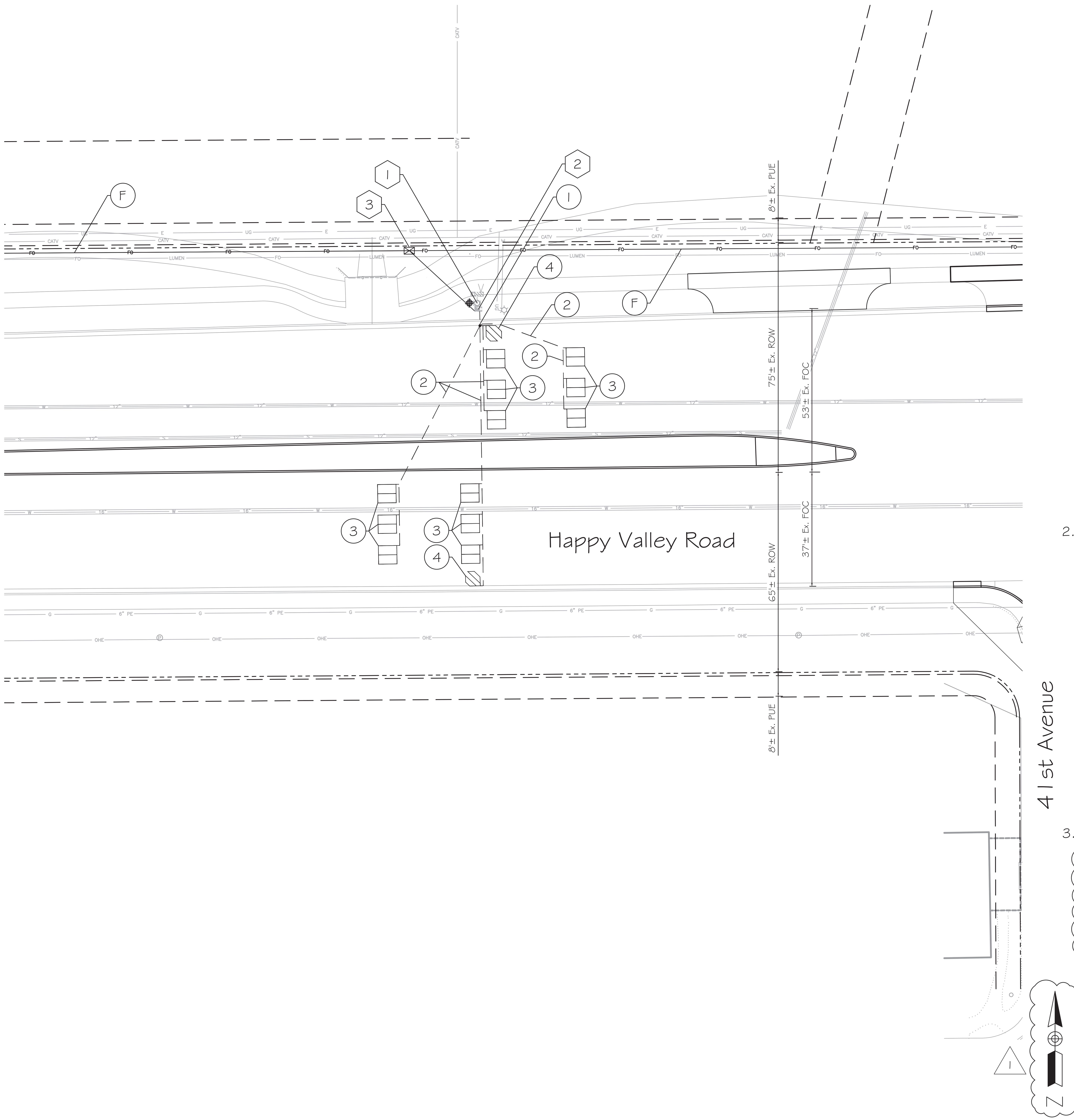
TRAFFIC SIGNAL PLAN

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD AT 47th AVENUE
ST85100437
FOUNDATION

PROJECT #:		FILE NO: 11712	
DR: CMW / DATE: 05/2024	DES: CMW / DATE: 05/2024	CK: TWT / DATE: 05/2024	SHEET NO: 1 / TOTAL SHEETS: 4
SCALE: 1" = 20'	QS. #:		

DATE SAVED: 5/28/24 C:\USERS\CMWASCOVICH\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WCI_PROJECTS\D0556964\ST85100437_47THAVE.DWG



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1.2 Contractor must have a current visible Bluestake showing all utilities.

1.3 Traffic Signal Plan approval is valid for 365 calendar days from date sealed. If signal construction has not begun prior to the 365 days elapsing, the signal plans must be re-submitted for approval or an extension granted by the Deputy Director of Traffic Services or an authorized representative to ensure that existing traffic signal equipment locations and standard detail references are current.

1.4 The contractor shall have a complete set of approved plans including current City of Phoenix Traffic Signal Standard Details (www.phoenix.gov/streets/reference-material) on site at all times during signal and lighting systems construction. The contractor shall have a competent supervisor capable of reading and understanding plans and specifications and thoroughly experienced in the construction of traffic signals. The contractor's supervisor or lead shall possess a current International Municipal Signal Association (IMSA) Level II Traffic Signal Electrician Certification and must be on site during any traffic signal construction activities. It will be the responsibility of the contractor to supply verification of certification. If a jobsite is inspected and a certified Electrician is not on site, a stop work order will be issued.

1.5 The contractor is responsible for the construction of the project; its planning, safety, quality and completion. The City of Phoenix inspection team would make the determination if the work performed meets the criteria and if not, may request that the work be redone at the contractor's expense.

1.6 Traffic Signal Loops must be installed per City of Phoenix City Standard Detail TS 5-1.

2. WORK TO BE PERFORMED BY THE CONTRACTOR

2.1 The contractor shall complete all trenching and all demolition work unless otherwise noted and to provide and install all conduit runs per the latest Traffic Signal Standard Details (see note 1.4).

2.2 Loop lead-in conduits shall be schedule 40 rigid PVC installed in accordance with the latest Traffic Signal Standard Details (see note 1.4). All conduits shall be installed in straight lines (unless approved by the Signal Shop Inspector), junction box to junction box or junction box to signal equipment foundation with one 90-degree sweep on each end as specified in the plans. All conduits entering junction boxes shall be vertical. All conduit ends except those in the controller cabinet foundation will be provided with a "bell end" fitting of appropriate size. Contractor shall provide sufficient space between conduits for "bell ends" to be installed in one piece without alterations. All conduits shall have a pull and locating conductor. Contractor shall install a #10 bare copper solid conductor or a detectable mule tape, installed as directed by signal shop staff.

3. WORK TO BE PERFORMED BY CITY OF PHOENIX SIGNAL CREWS

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F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST85100437	344	368

Registered Professional Engineer (Civil) Certificate No. 39284 TRENT W. THATCHER, Date Signed 10/28/2024, Arizona, U.S.A.

WILSON & COMPANY
410 North 44th Street
Suite 460
Phoenix, Arizona 85008

DR: CMW | DES: CKH | CK: TWT | DATE: 05/24

TRAFFIC SIGNAL:HAPPY VALLEY AT 41st AVENUE

PROPOSED JUNCTION BOX SCHEDULE

NO.	TYPE	OFFSET FROM HAPPY VALLEY MON LINE	OFFSET FROM EXISTING TRAFFIC POLE
9	#7	73 ft. NORTH	22 ft. WEST

EXISTING

(1) Existing Traffic Signal Pole - Protect-In-Place

(2) Existing Traffic Junction Box - Protect-In-Place

INSTALL

(F) Fiber Optic Conduit - See Roadway Plans

(1) Conduit End Cap, See Note 1.6

(2) Saw Cut Traffic Detector Loop(s), See Note 1.6

(3) 6' x 6' Traffic Detector Loop, See Note 1.6

(4) Bicycle Detector Loop, See Note 1.6

(3) See Junction Box Schedule

PROJECT #: ST85100437

Contact Arizona 811 at least two full working days before you begin excavation. ARIZONA811 Blue Stake, Inc. Call 811 or click Arizona811.com

PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX

TRAFFIC SIGNAL PLAN

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD AT 41st AVENUE
ST85100437
FOUNDATION

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE
1	NOTES UPDATE	CMW	TWT	10/24

APPROVED BY:

TRAFFIC SIGNAL ENGINEER — DATE: 10/1/2024

STREET TRANSPORTATION TRAFFIC SERVICES DEPUTY DIRECTOR — DATE: 10/3/2024

PROJECT #:		FILE NO: 12168	
DR: CMW DATE: 05/2024	DES: CKH DATE: 05/2024	CK: TWT DATE: 05/2024	SHEET NO: / TOTAL SHEETS
SCALE: 1" = 20'	QS. #:	1	2

FILE #:

DATE SAVED: 5/28/24 C:\USERS\CMWASCOVICH\APPDATA\LOCAL\BENTLEY\PROJECTWISE\WCI_PROJECTS\D0556964\ST85100437_41ST AVE.DWG

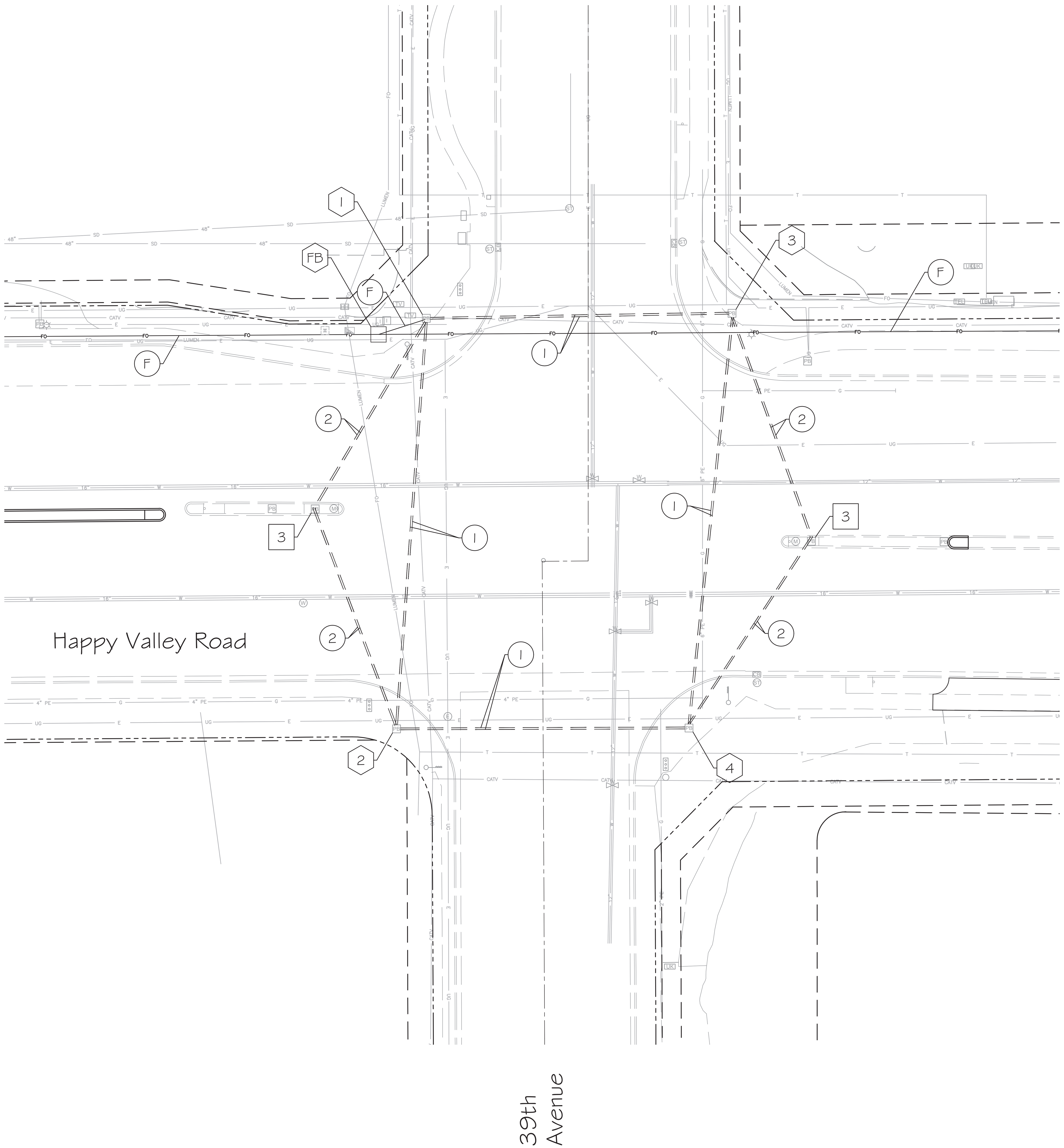
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST85100437	346	368

WILSON &COMPANY
410 North 44th Street
Suite 460
Phoenix, Arizona 85008

Registered Professional Engineer (Civil) — Certificate No. 39284 — TRENT W. THATCHER

DR: CMW | DES: CMW | CK: TWT | DATE: 05/24

TRAFFIC SIGNAL HAPPY VALLEY AT 39th AVENUE



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2. WORK TO BE PERFORMED BY THE CONTRACTOR

2.1 The contractor shall complete all trenching and all demolition work unless otherwise noted and to provide and install the following per the latest Traffic Signal Standard Details (see note 1.4).

- All other foundations (controllers and power service pedestal (PSP))
- All junction boxes with 18" of sump (installed completely inside or completely outside of concrete)
- All conduit runs, including the conduit runs from the PSP to the utility companies point of service
- All pole anchor cages, nuts and bolts required for pole foundations installed by the contractor in addition to those specified in note

Note: City to provide service pedestal rings (see note 3).

2.2 All underground conduits shall be schedule 40 rigid polyvinyl chloride (PVC) installed 24 inches to 30 inches below finished grade except for loop lead-in conduits, which shall be schedule 40 rigid PVC installed in accordance with the latest Traffic Signal Standard Details (see note 1.4). All conduits shall be installed in straight lines (unless approved by the Signal Shop Inspector), junction box to junction box or junction box to signal equipment foundation with one 90-degree sweep on each end as specified in the plans. All conduits entering junction boxes shall be vertical. Conduits in all foundations shall be located as close as possible to center of the foundation and vertical with foundation below the bottom of the cover. All conduit ends except those in the controller cabinet foundation will be provided with a "bell end" fitting of appropriate size. Contractor shall provide sufficient space between conduits for "bell ends" to be installed in one piece without alterations. All conduits shall have a pull and locating conductor. Contractor shall install a #10 bare copper solid conductor or a detectable mule tape, installed as directed by signal shop staff.

2.3 Removal of existing streetlights, the contractor shall:

- Request de-energization of all streetlights listed for removal
- Provide complete removal of streetlight pole, mast arm and luminaire
- Properly dispose of all streetlight material

3. WORK TO BE PERFORMED BY CITY OF PHOENIX SIGNAL CREWS

Traffic Signal representative shall approve marked layout of ADA ramps, junction boxes and foundation locations prior to excavation, prep contractor furnished controller cabinets and internal equipment (contractor to pick up and install controller cabinet), inspect and approve all traffic signal equipment installed by contractor and terminate, test and activate all field wiring into controller cabinet(s). (1)

4. SITE SPECIFIC NOTES

4.1 Existing Junction Box 3 to be removed. Pull existing conductors out of existing conduit and reroute through the newly placed conduit.

EXISTING

- (1) Traffic Signal Junction Box - Protect-In-Place
- (2) Traffic Signal Junction Box - Protect-In-Place
- (3) Traffic Signal Junction Box - Protect-In-Place
- (4) Traffic Signal Junction Box - Protect-In-Place
- (2) Existing Conduit - Abandon in Place

INSTALL

- (FB) Fiber Optic Junction Box - See Roadway Plans
- (F) Fiber Optic Conduit - See Roadway Plans
- (1) 2 1/2" Schedule 40 PVC

REMOVE

- [3] Traffic Signal Junction Box - 1
  See Note 4.1

PROJECT #: ST85100437

FILE #:

Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA811
Call 811 or click Arizona811.com

REVISION BY CITY OF PHOENIX				
NO.	DESCRIPTION	REV BY	CKD BY	DATE
1	NOTES UPDATE	CMW	TWT	10/24

APPROVED BY:

TRAFFIC SIGNAL ENGINEER
DATE: 10/1/2024

STREET TRANSPORTATION TRAFFIC SERVICES DEPUTY DIRECTOR
DATE: 10/3/2024

PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX

TRAFFIC SIGNAL PLAN

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD AT 39th AVENUE
ST85100437
FOUNDATION

PROJECT #:			FILE NO: 12169	
DR: CMW	DES: CMW	CK: TWT	SHEET NO:	TOTAL SHEETS
DATE: 05/2024	DATE: 05/2024	DATE: 05/2024		
SCALE: 1" = 20'		QS. #:	1	2

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FEDERAL AID NO.: PHX-0(363)D
ADOT TRACS NO.: MA-PHX-T0239 01C

(9) List of Major Subcontractors and Suppliers	L.O.S. – 1
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