

Final Preliminary Engineering Report

Happy Valley Road: 67th Avenue to 35th Avenue

City of Phoenix, Arizona

JUNE 2020

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Prepared For:
City of Phoenix



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1.0 EXECUTIVE SUMMARY

The City of Phoenix (City) has retained AZTEC Engineering Group, Inc. (AZTEC) to provide preliminary design services for the scoping of improvements on Happy Valley Road (HVR) from 67th Avenue to 35th Avenue. The City is interested in obtaining federal funding to complete this project, as HVR is a major thoroughfare within the City's street network system. The project will begin with planning and preliminary design. The City is actively pursuing regional and federal funds to advance the preliminary phase, once completed, to final design and construction. This project is currently not on the City of Phoenix Five-Year Capital Improvement Program (CIP); however, the City is pursuing all avenues for funding.

The purpose of this project is to improve the roadway based on the City's modified A/B section with median islands and three through lanes and one bike lane in each direction. Certain aspects of the typical section will be revised to accommodate existing constraints such as the width of R/W (R/W), curb and gutter and median islands. The purpose of this project is to provide preliminary design services to the City which will conceptually illustrate the improvements needed to complete HVR along the project limits and minimize costs.

HVR from 67th Avenue to 35th Avenue is a major arterial roadway that supports commuting traffic to and from Interstate 17 and also supports local traffic for the residential and commercial development along the corridor. This roadway's local and regional importance supports the City's intent to make improvements to meet their current standards and the resulting PER. The study focuses primarily on HVR between 43rd Avenue and 67th Avenue, however, also addresses HVR north side improvements from 35th Avenue to 37th Avenue. Most of the improvements are complete between 35th Avenue and 43rd Avenue with the exception of the north side of HVR between 35th Avenue and 37th Avenue. The 35th Avenue/HVR intersection improvements have also been included as part of this project.

The existing roadway includes intermittent curb and gutter along both sides of the roadway throughout the project limits. Two or three lanes are provided in each direction with occasional landscaped medians. Sidewalk is provided on both sides where curb and gutter is present. Existing utilities within the project limits include street lighting, sewer and water lines, drainage facilities, gas lines, underground and overhead electric lines, telephone, cable television and fiber optic lines. The 67th Avenue/HVR intersection is co-owned by the City and the City of Peoria and was recently modified to provide westbound to southbound dual lefts. The 55th Avenue/HVR intersection was recently rebuilt by the City as a traffic signal upgrade and the intersection of 39th Avenue is scheduled for signal modifications within FY '20. Pavement overlay of HVR from 51st Avenue to 61st Avenue is scheduled for FY '23, and pavement fog seal of HVR at the 35th Avenue/HVR intersection is scheduled for FY '21.

Proposed improvements along HVR between 67th Avenue and 35th Avenue include roadway widening, addition of curb, gutter, sidewalk, scenic trails, raised medians, bus pads, street lighting, and upgrades to pedestrian facilities and traffic signals. Minor R/W acquisition is required for the proposed improvements and the utility impacts appear to be minimal with only potential relocations occurring at



the new signal pole locations. Construction costs are estimated to be \$15,497,685.64 for this project with a construction duration of approximately 17 months from construction NTP.

2.0 INTRODUCTION

The City has retained AZTEC to provide preliminary design services for the scoping of improvements on HVR from 67th Avenue to 35th Avenue. The City is interested in obtaining federal funding to complete this project, as HVR is a major thoroughfare within the City's street network system. The project will begin with planning and preliminary design. The City is actively pursuing regional and federal funds to advance the preliminary phase, once completed, to final design and construction. This project is currently not on the City Five-Year Capital Improvement Program (CIP); however, the City is pursuing all avenues for funding.

3.0 CURRENT SITE CHARACTERISTICS

HVR from 67th Avenue to 35th Avenue is a normally crowned major arterial with a current posted speed limit of 45 mph. According to MAG Transportation Data Management System, HVR had an Average Daily Traffic of 33,628 in 2019 (18,178 EB and 15,450 WB). There are existing bicycle and pedestrian improvements along the roadway in various locations, as well as transit stops located at various intervals (ranges from ¼ mile to 1 ½ miles). A wide range of existing development exists along the corridor, including but not limited to residential subdivisions, commercial shopping centers, gas stations, single home residential lots, government agencies and a community college. Many of these developments have full access directly off of HVR via access roads or driveways. Currently, the existing drainage pattern in the area is from north to south, with street drainage along HVR as follows: from 35th Avenue to 43rd Avenue, from 53rd Avenue to 43rd Avenue, from 53rd to Glendale Community College North (GCCN), from 61st Avenue to GCCN, and from 61st Avenue to 67th Avenue.

After speaking with the City Planning Department, it was determined that there are currently two developments in the approval phases. The first development (APN 201-10-985) is a QuikTrip currently being planned at the northwest corner of 35th Avenue and HVR, which will not affect any improvements along HVR other than a new driveway as there is already existing curb, gutter, and sidewalk. The other development that is planned (APN 201-42-576) is an automotive shop located approximately 550-ft east of 55th Avenue, adjacent to the newly constructed CVS Pharmacy. It is anticipated that the City will require the developer to replace the current asphalt sidewalk with a concrete sidewalk, however, no other improvements are anticipated. The City also listed another development that is currently being discussed (APN 201-42-577), which is just east of the proposed automotive shop. This proposed development, if submitted to the City, will most likely require the same conditions to be followed as the automotive shop.

The existing roadway includes intermittent curb and gutter along both sides of the roadway throughout the project limits. Two or three lanes are provided in each direction with occasional landscaped medians. Sidewalk is provided on both sides where curb and gutter is present. Existing utilities within the project limits include street lighting, sewer and water lines, drainage facilities, gas lines, underground and overhead electric lines, telephone, cable television and fiber optic lines. The 67th Avenue/HVR intersection is co-owned by the City and City of Peoria and was recently modified to provide westbound to southbound dual lefts. The 55th Avenue/HVR intersection was recently rebuilt by the City as a traffic signal upgrade and the 39th Drive intersection is scheduled for left turn arrow modifications in FY' 20. Pavement overlay of HVR



from 51st Avenue to 61st Avenue is scheduled for FY '23, and pavement fog seal of HVR at the 35th Avenue/HVR intersection is scheduled for FY '21.

HVR between 67th Avenue and 35th Avenue has been improved to the ultimate roadway width with the exception of the following segments:

- North side of HVR between 35th Avenue and 37th Avenue
- North and south sides of HVR from 185-ft east of 48th Avenue to 665-ft west of 49th Avenue
- South side of HVR from 665-ft west of 49th Avenue to 53rd Avenue
- North side of HVR from 1215-ft west of 55th Avenue to 650-ft east of 64th Avenue

Table 1 details the existing characteristics of HVR within the project limits:

Table 1: Existing Condition Characteristics

HVR Segment	Median Width/Type	Monument Line to N. FC Dimension	Monument Line to S. FC Dimension	Width of R/W
35 th Avenue to 37 th Avenue	16-ft/Painted	37-ft	57-ft	Varies: 130-ft-150-ft
37 th Avenue to 39 th Avenue	14-ft/Raised	57-ft	37-ft	145-ft
39 th Avenue to 145-ft East of 41 st Avenue	12-ft/Painted	57-ft	37-ft	130-ft
145-ft East of 41 st Avenue to 45 th Avenue	12-ft/Painted	47-ft	Varies: 35-ft-37-ft	140-ft
45 th Avenue to 47 th Avenue	12-ft/Painted	47-ft	Varies: 35-ft-37-ft	120-ft
47 th Avenue to 185-ft East of 48 th Avenue	12-ft/Painted	47-ft	38-ft	Varies: 140-ft-150-ft
185-ft East of 48 th Avenue to 665-ft West of 49 th Avenue	12-ft/Painted	N/A: Curb does not exist	N/A: Curb does not exist	110-ft
665-ft West of 49 th Avenue to 53 rd Avenue	12-ft/Painted	Varies: 57-ft-62-ft	N/A: Curb does not exist	Varies: 130-ft-135-ft
53 rd Avenue to 55 th Avenue	12-ft/Painted	57-ft	37-ft	130-ft
55 th Avenue to 1215-ft West of 55 th Avenue	12-ft/Painted	72-ft	Varies: 37-ft-44-ft	Varies: 130-ft-160-ft
1215-ft West of 55 th Avenue to 650-ft East of 64 th Avenue	12-ft/Painted	N/A: Curb does not exist	44-ft	Varies: 130-ft-140-ft
650-ft East of 64 th Avenue to 67 th Avenue	12-ft/Painted 33-ft/Raised	Varies: 55-ft-57-ft	Varies: 57-ft-64-ft	Varies: 150-ft-165-ft



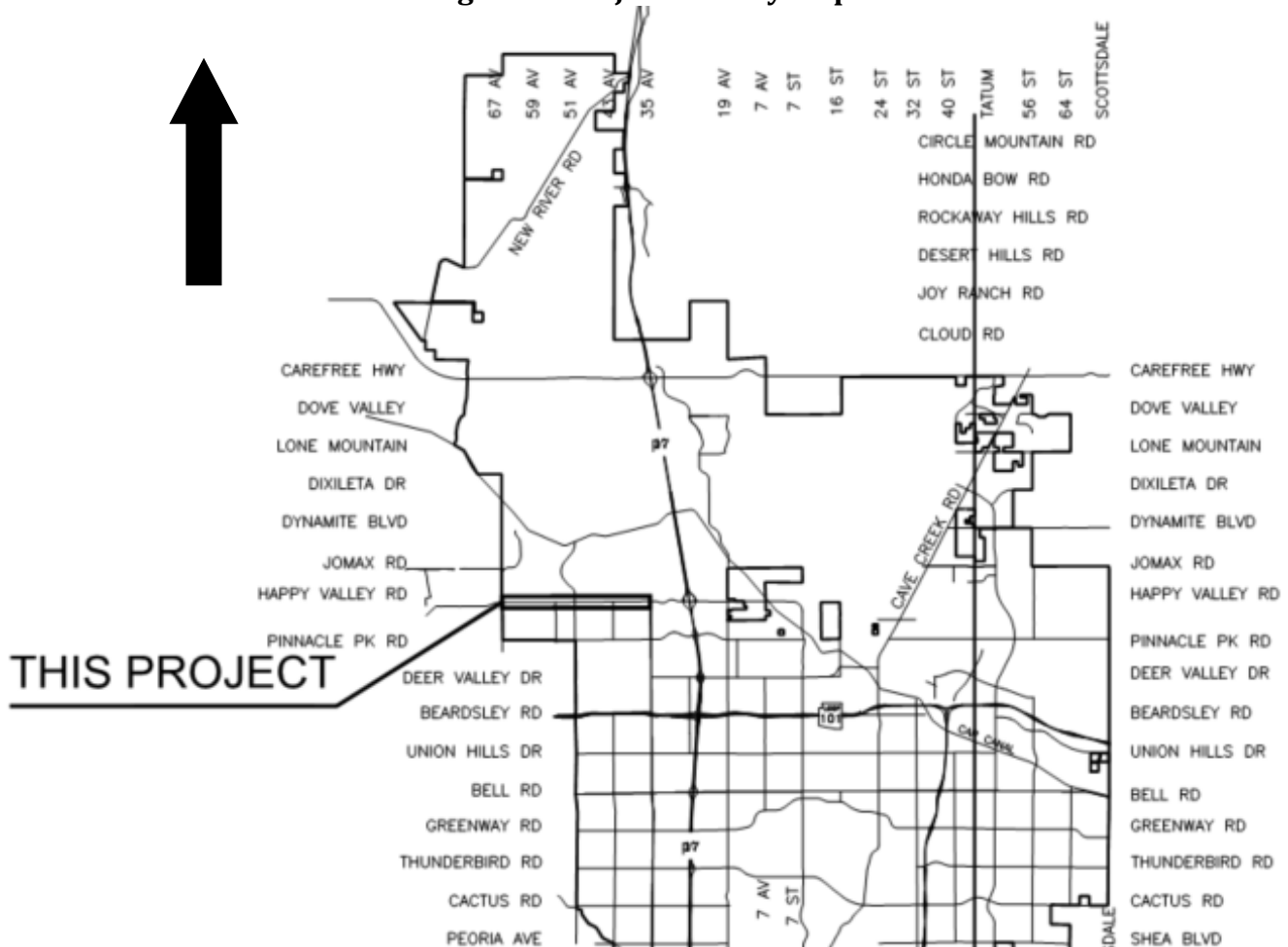
4.0 PROJECT PURPOSE

The purpose of this project is to improve the roadway based on the City’s modified A/B section with median islands and three through lanes and one buffered bike lane in each direction. Certain aspects of the typical section will be revised to accommodate existing constraints such as the width of right-of-way (R/W), curb and gutter, travel lane widths, median islands and utilities. The purpose of this project is to provide preliminary design services to the City which will conceptually illustrate the improvements needed to complete HVR along the project limits and minimize costs.

5.0 PROJECT NEED

HVR from 67th Avenue to 35th Avenue is a major arterial roadway that supports commuting traffic to and from Interstate 17 and also supports local traffic for the residential and commercial development along the corridor. Figure 1 below shows the Vicinity Map for this project:

Figure 1: Project Vicinity Map



This roadway’s local and regional importance supports the City’s intent to make improvements to meet their current standards and the resulting PER. The study focuses primarily on HVR between 43rd Avenue and 67th Avenue, however, also addresses HVR north side improvements from 35th Avenue to 37th Avenue. Most of the improvements are complete between 35th Avenue and 43rd Avenue with the



exception of the north side of HVR between 35th Avenue and 37th Avenue. The 35th Avenue/HVR intersection improvements have also been evaluated as part of this project.

6.0 PROJECT BACKGROUND

The City has retained AZTEC to provide preliminary design services for the scoping of improvements HVR from 67th Avenue to 35th Avenue. The City is interested in obtaining federal funding to complete this project, as HVR is a major thoroughfare within the City’s street network system. The project will begin with planning and preliminary design. The City is actively pursuing regional and federal funds to advance the preliminary phase, once completed, to final design and construction. This project is currently not on the City CIP; however, the City is pursuing all avenues for funding.

7.0 UTILITY AND RAILROAD COORDINATION

The City’s Public Works Department Central Records Section and Arizona Blue Stake identified existing utilities within the project area. Existing utilities include sewer and water, gas, underground and overhead electric, telephone, cable television and fiber optic lines. A list of all utility owners in the project area and their contact information can be found in Table 2: Utility Contacts.

Table 2: Utility Contacts

Utility	Contact	Phone	Facility
Arizona Public Service	Bobby Garza	(602) 371-7989	Overhead and Underground Electric
CenturyLink (via Terra Technologies, LLC)	Kevin Wagner	(815) 245-9640	Overhead and Underground Communications
City of Glendale	Greg Rodzenko	(623) 930-3623	Water Transmission Main
City of Peoria	Jesse Gonzalez	(623) 773-7548	Telco & Fiber Optics
City of Phoenix Traffic Signals	Zeke Rios	(602) 256-3409	Traffic Signals and Fiber Optic
City of Phoenix Water Services	Jami Erickson	(602) 261-8229	Water, Sewer, Reclaimed Water and Storm Drain
Cox Communications	Jose Aguirre	(480) 306-2438	CATV & Fiber Optics
Maricopa County Parks and Recreation	Jeff Gruver	(602) 506-8398	Irrigation, Sewer, Water and Electric
MCI (Verizon Business)	David Halliday	(602) 954-2223	Fiber Optic
Pauley Construction, LLC	Michelle Sanchez	(480) 268-1524	Communications, Fiber Optic
Southwest Gas	Valerie Gallardo-Weller	(602) 484-5342	Gas



Regarding lighting, the north side of HVR between 45th Avenue and 47th Avenue includes restrictions that present challenges to the installation of lighting in the area. These restrictions include existing improvements, utilities, and R/W. In this area, the R/W available on the north side of HVR is 20-ft less than other areas. This is due to the private parcels on the north side of the road being longer, with their southern edges extending 20-ft closer to HVR. Due to this R/W constraint the sidewalk edge is only 2-ft away from the private property walls. Based on existing utility records and the survey features, there are existing electrical and telephone utilities located in this 2-ft gap, leaving no room to install new light polls without major utility relocations. Light poles were included in the area with the new sidewalk wrapping around the bases; however, utility relocations will most likely be required here.

The known utilities are shown on the plan sheets. Minor conflicts with these existing utilities are anticipated as part of the proposed construction. Full utility locating/potholing will be required to verify the extent of the conflicts. Based on the responses received from the facility owners, costs for relocations could not be determined and will need to be evaluated during final design.

Adjustments of the existing water valve/gas valve cans and manhole frames/covers will be required as well. The estimated cost for these adjustments on this project is \$99,250.00.

Comments received from the utility companies are included in **Appendix G**.

8.0 R/W INFORMATION/LAND OWNERSHIP

HVR from 67th Avenue to 35th Avenue is classified as a major arterial, with the existing R/W ranging from 110-ft wide to 150-ft wide with a few areas that are wider than this range due to bus bays along the corridor. The purpose of this project is to improve this segment of HVR based on the City's modified A/B section with median islands which includes three through lanes and a buffered bike lane in each direction.

There are numerous instances along HVR where existing improvements sit outside of the dedicated R/W but within dedicated easements (i.e. R/W, Sidewalk, Drainage, Landscape, etc.) in the majority of the cases. One example of this is with two parcels on the south side of HVR near 35th Avenue where portions of the exiting curb, gutter and sidewalk are located outside of the public R/W (APN No. 205-15-471 and APN No. 205-11-005J); along these two parcels, no improvements are proposed and an existing R/W Easement is in place requiring no further action. These parcels are shown below in Figure 2 and Figure 3, respectively:

Figure 2: APN 205-15-471





Figure 3: APN 205-11-005J



Portions of R/W will need to be acquired at certain intersections where new ramps are being constructed and where new driveways are being proposed per City Standard Details. A list of the required R/W can be seen below:

Table 3: R/W Acquisition

Parcel Number	R/W Area (SF)
205-07-215	58
205-07-048	188
205-07-183	115
205-07-184	81
201-12-011C	27
205-14-586	46
205-14-587	45
201-10-985C	26
Total	586 SF

Temporary Construction Easements will be required in areas where construction of the proposed improvements is located less than 5-ft from the existing property lines. A list of these properties can be seen below:



Table 4: Temporary Construction Easements Required

Parcel Number	TCE Area (SF)
205-07-215	47
201-12-511	41
201-12-512	111
201-12-011C	25
201-11-810	471
201-11-809	301
201-11-326	55
201-11-032	12
201-38-790	9
201-11-025	13
201-38-790	64
201-11-017A	70
205-12-009J	13
205-12-987	1454
205-07-048	18
205-07-181	22
205-07-047	254
205-07-334	114
201-10-988A	28
205-11-005J	497
205-11-005G	298
Total	3,917 SF

A 65-ftx40-ft Drainage Easement was found to be required at the GCCN Campus (APN 201-12-011C) for the proposed culver that will be constructed. No other easements were found to be required.

City Real Estate Division reviewed this information and provided a cost of \$20/SF for R/W acquisition (\$11,720), \$20/SF for the Drainage Easement (\$52,000) and \$2/SF for TCE's (\$7,834), resulting in the amount of \$71,554.00 for total R/W costs.

9.0 ROADWAY DESIGN/GEOMETRICS

All design shall be in compliance with the current City of Phoenix Street Planning and Design Guidelines, City of Phoenix Administrative Procedure No. 155 (AP-155), the American Association of State Highway and Transportation Officials (AASHTO) and COP Storm Drain Manual design criteria. Table 5: Roadway Design Criteria summarizes the criteria used for the design.



Table 5: Roadway Design Criteria

Design Criteria	Value Used for Design
R/W Width	Varies 110-ft to 160-ft
Design Speed	55 mph
Posted Speed	45 mph
Minimum Longitudinal Grade	0.20%
Maximum Longitudinal Grade	6%
Minimum Cross Slope	0.005 ft/ft (0.02 ft/ft Nominal)
Minimum Lane Width	Varies 10-ft to 11-ft Outside, 11-ft to 12-ft Inside
Taper Rate	30:1 (To be Confirmed during Final Design)
Bike Lane Width	Varies 5.5-ft to 6-ft
Bike Lane Buffer Width	2.0-ft to 3.0-ft
Median Width	Varies 8-ft to 20-ft
Curb Return Radii	Varies 20-ft to 35-ft
Pavement Structural Section	7 ½ - inch AC over Compacted Subgrade (To be confirmed by City Materials Section during Final Design)
Sidewalks	5-ft
Scenic Trail	10-ft

The horizontal alignment for HVR was developed using existing conditions and design/as-built plans. The Typical Modified Cross Section A/B was used to accommodate existing constraints by reducing the width of traffic lanes and median from the standard section, which can be seen in different variations based on existing constraints and proposed conditions in Figures 4, 5, 6, 7 & 8. The evaluation of the proposed arterial street widening was based on the existing horizontal and vertical alignment, the known utilities and the existing R/W and easements.

Figure 4: 14-ft Wide (Varies) Raised Median

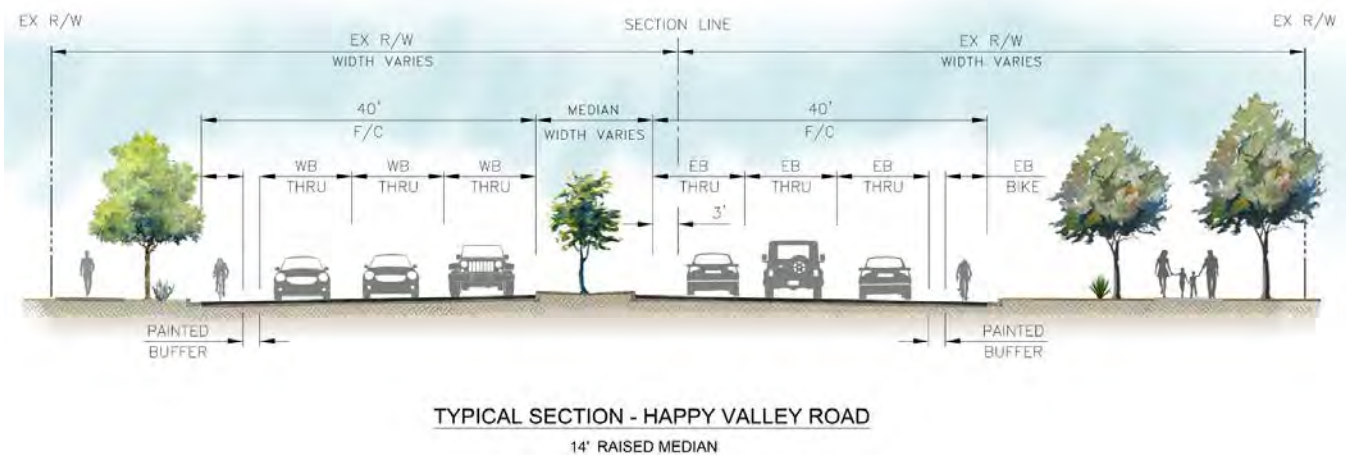




Figure 5: East Bound Left Turn

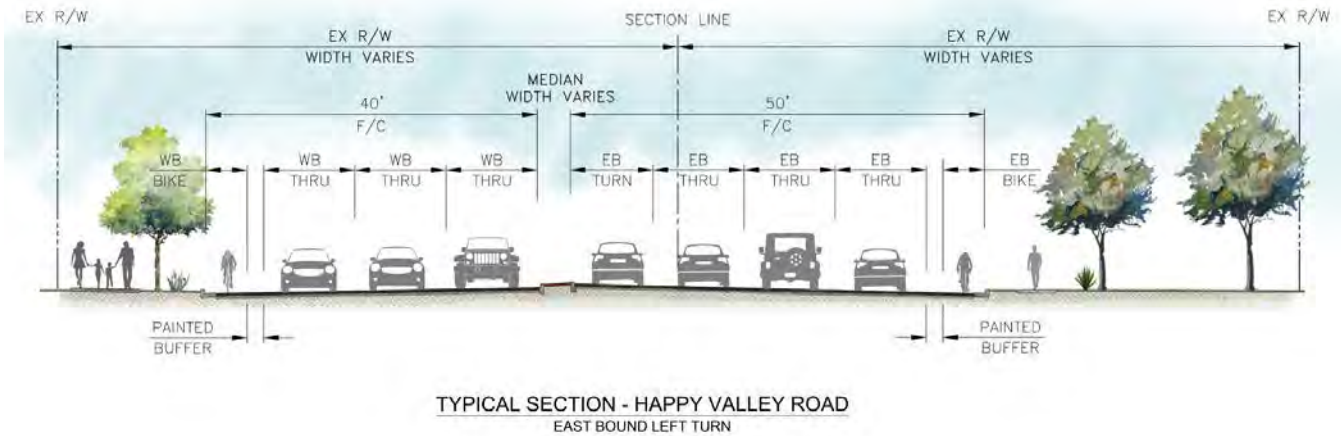


Figure 6: West Bound Left Turn

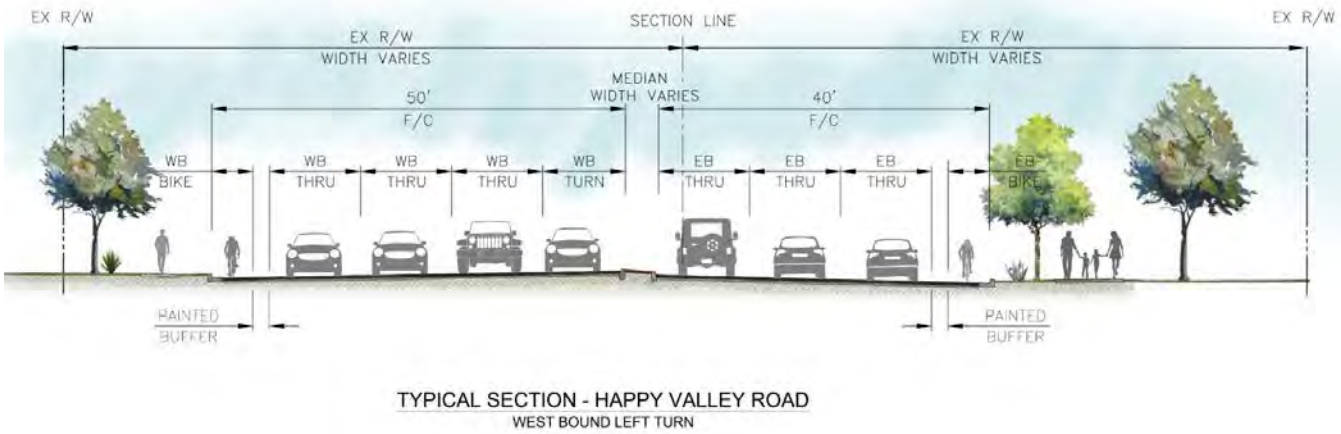


Figure 7: West Bound Left & Right Turn

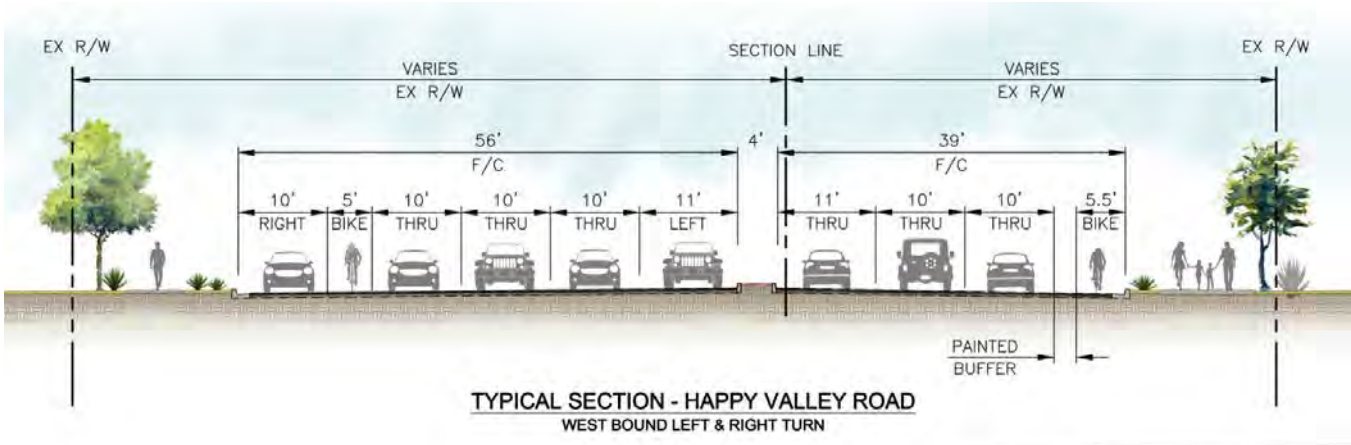
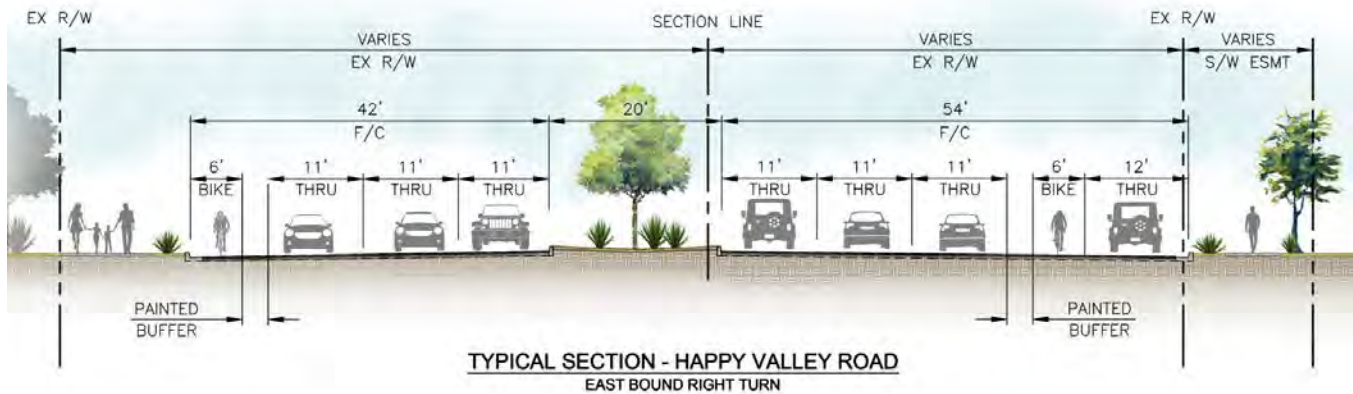




Figure 8: East Bound Right Turn



Utilizing this modified A/B section, widening of the existing roadway will only be needed in one location; the widening will occur on the north side of HVR to add a through westbound lane between 56th Avenue and 62nd Avenue, as the existing pavement width is not wide enough to accommodate a third lane and a buffered bike lane. The improvements associated with this widening includes a full depth pavement section, curb, gutter, and sidewalk.

The City has expressed their desire to include raised medians throughout the project limits along the center of the roadway to improve safety. The raised medians will act as access management as well as a natural traffic calming device, as speeding is an ongoing safety issue along the corridor. These medians have been designed between 8-ft wide and 20-ft wide dependent upon existing constraints and proposed improvements (i.e. buffered bike lanes, curb, gutter, etc.).

PROWAG Evaluation of Existing Pedestrian Facilities

As a part of the scoping efforts, an evaluation has been completed throughout the entire corridor to determine whether existing pedestrian improvements meet current PROWAG Standards. The existing improvements that were evaluated as a part of this review were ramps, sidewalk, and driveways.

As a result of the evaluation, it was found that a large portion of the existing sidewalk is not compliant with PROWAG standards regarding the maximum cross slope of 2%. A minimum width of 5-ft was also one of the components that was looked at for the existing sidewalk; this factor was not an issue, as all of the existing walks met this requirement. There were many areas where sidewalk was also found to be badly deteriorated or lifted, resulting in a non-compliant path for pedestrians to travel on. Examples of some of these sidewalks can be see below in Figure 9.



Figure 9: Examples of Existing Non-Compliant Sidewalks



Multiple sections of existing sidewalk not meeting current PROWAG standards have been identified on the plans, with a total of 39,402 SF of sidewalk proposed for replacement.

At many of the intersections within the project limits there are different styles of curb ramps (perpendicular, parallel). There are a number of ramps that meet the current PROWAG slope requirements. However, many of the ramps are not compliant to current standards. The existing concrete ramps, curb and gutter, and portions of the sidewalk directly adjacent to the ramps will be removed to construct PROWAG compliant ramps. Some of the criteria that were used while evaluating the existing ramps per PROWAG standards include:

- Wing Slopes – Maximum 10%
- Ramp Slope – Maximum 8.33%
- Landing/Sidewalk Slope – Maximum 2%
- Landing sizes – Minimum 4-ftx4-ft

An example of a non-compliant ramp, which appears to have been constructed fairly recently, can be seen below in Figure 10.



Figure 10: Existing PROWAG Non-Compliant Ramp (NW Corner of HVR & 55th Ave)



An example of an existing compliant ramp can be seen below in Figure 11.



Figure 11: Existing PROWAG Compliant Ramp (SE Corner of HVR & 65th Ave)



A total of 11 ramps were identified as not meeting PROWAG requirements and have been identified for replacement as a part of these scoping efforts. Also, 8 driveways were identified as needing to be replaced to meet PROWAG standards.

City Ramp Evaluation

After the PROWAG evaluation was completed and the non-compliant ramps were identified for removal and replacement, the remaining ramps were evaluated to determine whether they meet current City Standards.

Of the existing street intersections, both signalized and non-signalized, it was determined that 21 existing pedestrian ramps do not meet the current City standards. The reason that these ramps did not meet City standards is because they are single ramps when in actuality they should be doubles based on Section 8.6 of the COP Street Planning and Design Guidelines. Below is a list of the intersections where these ramps currently exist:

- South ramps at 65th Avenue (2)
- South ramps at 62nd Avenue (2)
- South ramps at 61st Avenue (2)



- Southwest ramp at 53rd Avenue
- South ramps at 48th Avenue (2)
- Ramps at all corners at 47th Avenue (4)
- South ramps at 45th Avenue (2)
- South ramps at 41st Avenue (2)
- South ramps at 40th Drive (2)
- South ramps at 37th Avenue (2)

The double ramps that have been proposed not only provide access across the side streets (i.e. 65th Ave, 62nd Ave, etc.), but also provide pedestrian access to the ramps on the north side of HVR including the T-Intersections.

Buffered Bike Lanes

Buffered bike lanes are a feature that the City would like to incorporate throughout the project wherever possible. To accommodate this request, medians were modified from the standard 14-ft width to 8-ft width along with the outer lanes being reduced to 10-ft and 11-ft widths as approved by the Traffic Services Division. This will allow for the 1.5-ft to 2-ft wide painted buffers to be installed adjacent to the 5.5-ft to 6-ft wide bike lanes. Buffered bike lanes have been incorporated into the design from 35th Avenue to 41st Avenue and 47th Avenue to 67th Avenue.

There is one stretch of roadway between 45th Avenue and 43rd Avenue on the south side of HVR where a buffered bike lane will not fit due to existing conditions. Though a non-buffered bike lane is not the preferred option, it is not uncommon throughout the City in areas where a buffered bike lane is not possible. A full 6-ft wide bike lane with an adjacent 11.5-ft wide thru lane is proposed in this area, which varies from some other locations with a 5.5-ft wide buffered bike lane and an adjacent 10-ft wide thru lane. Both options meet the City's minimum design requirements.

As an alternative to the non-buffered bike lane between 43rd Avenue and 45th Avenue, the City has the option to remove a portion of the existing improvements on the south side of HVR. There is a sufficient amount of City R/W in this area to accommodate this without requiring acquisition. No more than a 10-ft wide portion would need to be removed to account for the additional pavement required to include a buffered bike lane on each side. This is an option that, if the City feels better meets their needs, can be further evaluated during final design.

Transit Stops

Transit stops have been incorporated into the design to allow for future routes to service the corridor where feasible based on the City requirements. City Transit Department has indicated that the design should incorporate bus pads at ¼ mile intervals beginning from the current bus bay at 35th Avenue.

New bus bays, pads and stops have been included at the following locations per the City's request:

- EB HVR, east of 67th Avenue
- WB HVR, west of 64th Avenue
- EB HVR, east of 64th Avenue
- WB HVR, west of 64th Avenue



- EB HVR, east of 61st Avenue
- EB HVR, east of 59th Avenue
- WB HVR, west of 59th Avenue
- EB HVR, east of 55th Avenue
- EB HVR, east of 53rd Avenue
- WB HVR, west of 53rd Avenue
- EB HVR, east of 51st Avenue
- WB HVR, west of 51st Avenue
- WB HVR, west of 49th Avenue
- EB HVR, east of 49th Avenue
- EB HVR, east of 47th Avenue
- WB HVR, west of 47th Avenue
- WB HVR, west of 45th Avenue
- EB HVR, east of 45th Avenue
- EB HVR, east of 43rd Avenue/Stetson Hills Loop
- WB HVR, west of 43rd Avenue/Stetson Hills Loop
- EB HVR, west of 41st Avenue
- WB HVR, east of 41st Avenue
- EB HVR, east of 39th Avenue
- WB HVR, west of 39th Avenue
- EB HVR, east of 37th Avenue
- WB HVR, west of 37th Avenue
- WB HVR, west of 35th Avenue

The existing bus bay west of 55th Avenue for westbound traffic has been identified as a non-serviceable stop for future traffic operations due to the geometry and conflict with the merging lane from southbound 55th Avenue. After a discussion with Traffic Services, it was determined that the splitter island should be reduced and restriped to eliminate the conflicts with the transit vehicles. Minor modifications may be required to the signals at this location; however, this will be further evaluated during final design.

Multi-Use Recreational Trail

The City has indicated that there is a trail requirement along the north side of HVR between Interstate 17 and 45th Avenue and between 51st Avenue and 67th Avenue, as well as on the south side of HVR between 45th Avenue and 51st Avenue. The 10-ft wide trail has been included in the roadway plan sheets wherever possible within these limits and has been shown within the Multi-Use Recreational Trail Easement where it exists.

The section between 48th Avenue and 51st Avenue presents challenges based on the fact that there are existing permanent residential improvements within the area. These improvements consist of a masonry wall, metal buildings for recreational vehicles, and other buildings directly adjacent to the property line. Due to this, obtaining R/W along the area for the sole purpose of including a trail was deemed unfeasible by the project team. It was agreed that, though not the desired improvement, a



shared concrete path was an option if both the trail and the sidewalk would not fit. The design has included a 10-ft wide multi-use concrete pathway within these limits.

Currently, the easement for this Multi-Use Recreational Trail exists in all areas where the trail was included except for south side of HVR between 48th Avenue and 51st Avenue; however, the shared use path here fits within the existing R/W.

Private Driveway Access

A number of residents located on the south side of HVR between 48th Avenue and 53rd Avenue have direct access via gates through the back wall of their property to HVR. These access points have been in place since this portion of the City was classified as the County. Since the annexation, HVR has been classified as a major arterial which does not allow direct access points to individual residences. Driveways were included as a part of the design for the properties with vehicular gates and with no direct access to Fallen Leaf Lane. As a part of the scoping efforts, these driveways will remain in place with additional public outreach and further evaluation needing to take place during final design.

Valley Gutter Evaluation

Per the COP Planning and Street Design Guidelines, Section 3.11.5 states that valley gutters shall only be used at minor collectors and local residential streets. With this, the design has removed the valley gutters at the signalized intersections and replaced them with pavement sections that are graded to allow the drainage patterns to remain the same. These intersections along HVR include 35th Avenue (north side), 39th Avenue (south side), and 55th Avenue (north and south sides).

The City also requested that all intersections, signalized or not, be evaluated to assist with vehicles that pass over the valley gutters as there are many instances of them bottoming out. Each intersection was looked at to make sure that the drainage would still work if the valley gutters were removed. The intersections that allowed for the valley gutter to be removed are identified in the plans with a new pavement structural section 10-ft on each side of the valley gutter to allow for grading; however, these limits will need further evaluation during final design. Intersections that do not allow for the valley gutters to be removed will have the valley gutter updated to meet current MAG Standard Detail 240 if they do not already.

Table 6 below shows a list of the existing valley gutters and what was determined based on their evaluation:



Table 6: Valley Gutter Evaluation

Direction and Intersection	Valley Gutter to be Removed	Valley Gutter to be Replaced
South Side of 55 th Ave	X	
North Side of 55 th Ave	X	
North Side of 53 rd Ave	X	
North Side of 47 th Ave		X
South Side of 47 th Ave	X	
South Side of 45 th Ave		X
South Side of 41 st Ave		X
South Side of 40 th Drive	X	
South Side of 39 th Drive	X	
South Side of 37 th Drive	X	
North Side of 35 th Ave	X	

Table 7 shows a brief overall summary of the proposed roadway improvements along HVR between the specified segments:

Table 7: Proposed Roadway Improvements

Segment	Roadway Widening	Curb & Gutter	Sidewalk	Raised Median	Pedestrian Ramps
35 th Avenue to 39 th Avenue		X	X	X	X
39 th Avenue to 43 rd Avenue			X	X	X
43 rd Avenue to 47 th Avenue			X	X	X
47 th Avenue to 51 st Avenue	X	X	X	X	X
51 st Avenue to 55 th Avenue	X	X	X	X	X
55 th Avenue to 59 th Avenue	X	X	X	X	X
59 th Avenue to 64 th Avenue			X	X	X
64 th Avenue to 67 th Avenue			X	X	X

Originally, it was discussed that a microseal would be included along HVR within the project limits. After additional discussions, COP Materials noted that it would be more appropriate to include a minimum of a 1" mill and overlay. This will not only address any distress elements within the existing pavement condition, but will also bring the Pavement Condition Index up to 100 and will add an expected pavement life of anywhere between 5 and 10 years.



10.0 PRELIMINARY DRAINAGE EVALUATION

Existing Drainage

HVR from 67th Avenue to 35th Avenue and any areas around it that may possibly contribute to the drainage areas of the project have been determined to be *Zone X* flood areas by the Federal Emergency Management Agency (FEMA) National Flood Insurance Program. This has been determined by Panels 1255 and 1260, map numbers 04013C1255L and 04013C1260L, respectively, both effective October 16, 2013. Both panels can be found in **Appendix C**.

HVR from 67th Avenue to 35th Avenue is a normally crowned road with several high points and low points. During a storm event, street runoff would flow from 67th Avenue to 43rd Avenue and from 35th Avenue to 43rd Avenue. At 43rd Avenue, there is a large scupper that captures street flows and outfalls into a large retention basin on the Stetson Hills Parcels 10A & 11 subdivision on the northeast corner of HVR and 43rd Avenue. There is a low spot in the roadway west of 55th Avenue with catch basins on both sides of the road capturing runoff flowing west of 53rd Avenue and east of a high point located over a culvert that is just west of the sag. There is another existing sag in the roadway east of the main entrance to Glendale Community College North (GCCN) campus. There is a scupper at this sag and a few flanker scuppers located east and west of the sag that all outflow into retention basins in GCCN property. These scuppers capture runoff flowing west of the high point at the Stetson Valley culvert crossing and east of a high point located east of 61st Avenue. HVR at this location is superelevated in a way so that runoff from Ludden Mountain, north of GCCN, may flow across the roadway into these scuppers. Runoff will flow west from the high point east of 61st Avenue to 67th Avenue while being collected by various scuppers and catch basins along the way.

Pavement spread hydraulics were calculated along the corridor where the proposed improvements will potentially impact the amount of runoff or allowable spread width of the roadway. It was determined that the City spread criteria per the City of Phoenix Storm Water Policies and Standards Manual Section 6.3.4.5 of one dry-lane per direction during the 2-year storm event was met throughout the project. There are areas of special interest that will be discussed further below.

Per the City of Phoenix Storm Water Policies and Standards Manual Section 6.3.5.1, the maximum distance that drainage may be carried as surface flow in the street is 660 feet before reaching a catch basin or outfall. There are several instances throughout the project where this requirement is not met, summarized in Table 8.



Table 8: HVR Discharge Points and Travel Distance

Start of Drainage Area	Discharge Point	Surface Flow Travel Distance (ft)
WB/EB 18+00	WB/EB 11+00	700
WB 34+00	WB 27+20	680
EB 47+00	EB 27+60	1940
WB 44+50	WB 37+50	700
WB 54+50	WB 44+50	1000
WB 84+00	WB 77+00	700
WB 104+50	WB 152+25	4775
EB 93+00	EB 77+00	1600
EB 98+50	EB 111+00	1250
EB 111+00	EB 124+50	1350
EB 124+50	EB 164+00	3950
WB 152+25	WB 164+00	1175
EB 191+50	EB 174+00	1750
WB 190+50	WB 174+00	1650
WB 206+75	WB 174+50	3225
WB 217+00	WB 206+75	1025
EB 199+25	EB 191+50	775
EB 217+00	EB 204+65	1235

The same section of the COP Manual states that the spacing requirement can be waived for streets with longitudinal slopes of 2% or greater, or portions of streets with very minimal flow. This section is reviewed more in depth in the Preliminary Drainage Report associated with this project.

All the areas where the requirement is not met are existing conditions except for the discharge points at Stations WB 37+50 and 44+50. These discharge points are a proposed scupper and proposed inlet and can be moved or waived, if applicable, during final design.



HVR and 49th Avenue

The intersection of HVR and 49th Avenue has several drainage features that will be discussed. The figure below shows the intersection with HVR running west to east and 49th Avenue running north to south. Only the north end of the intersection is shown as it is more relevant to the drainage narrative.

Figure 12: Intersection of HVR and 49th Avenue



Currently, there are walls separating Indian Springs Estates drainage basins north of the wall, and a City drainage swale south of the wall. The drainage basins temporarily store the runoff collected from the Indian Springs Estates development to the north. These basins are graded to flow from west to east and have a pipe connecting the two underneath 49th Avenue. The drainage swale flows from west to east and was intended to capture street runoff that would otherwise pond against the wall. There is a dual 12" culvert crossing underneath 49th Avenue flowing from west to east. The drainage swale was intended to continue flowing east but, based on field visits, it is more probable that any runoff in the swale would pond by the eastern outlet of the culvert. There is also a grate inlet that spans across 49th Avenue that captures runoff from 49th Avenue and areas of residential streets that would flow towards 49th Avenue. This grate inlet sits directly above the culvert crossing and drains into it.

Due to the year in which Indian Springs Estates was designed and constructed, there is reason to believe that the drainage basins were designed to hold and attenuate a 10-year storm event. During most rainfall events, the water will flow towards the east to the outfall pipe. In case of a larger storm event where flows may overtop the basins, the walls surrounding the basins have overflow holes that will allow stormwater to come out through the walls. This excess stormwater will pond up behind the sidewalk and eventually spill over the sidewalk and into the WB HVR gutter. When an event like this occurs, the flows coming from 49th Avenue into HVR will be enough that the stormwater from the overflow holes will be negligible.

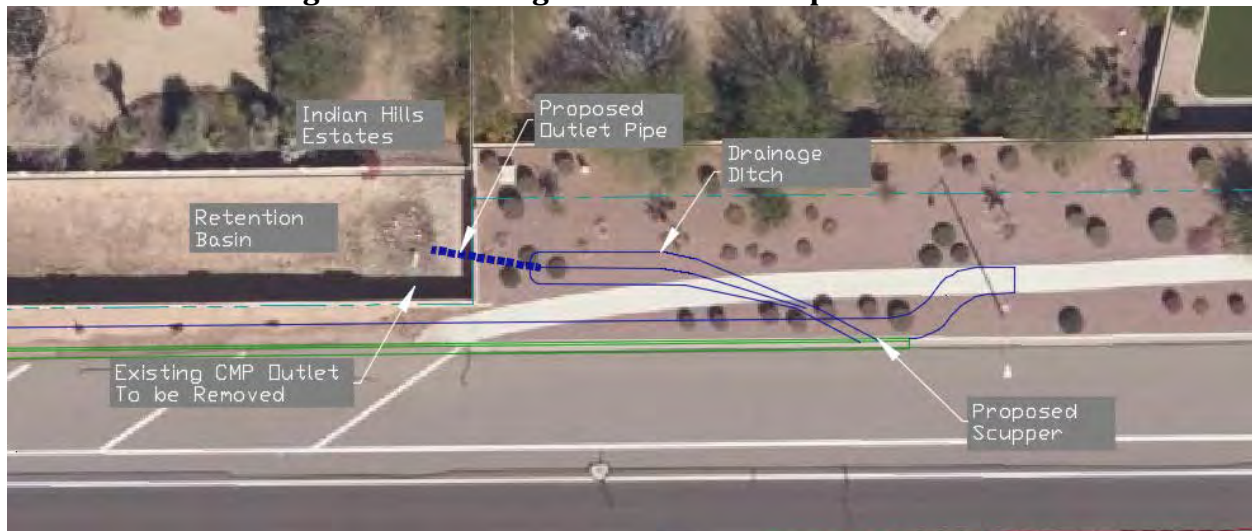
The proposed improvements can also be seen in Figure 10. The roadway will be widened and there will be curb, gutter, and a sidewalk. The drainage basins were left completely untouched and were consequently not hydrologically analyzed. The drainage swale will now be covered by the roadway. Since the drainage swale was intended to capture street runoff, the pavement spread analysis was used to determine the effects of the absence of the ditch. Since the culvert is being removed due to



the widening of the roadway, the grate inlet will also have to be removed. The offsite drainage area contributing to the runoff from 49th Avenue, as can be seen in **Appendix D**, and time of concentration were determined to calculate the runoff coming into HVR from 49th Avenue during the 2-year storm event. The calculated runoff flow was then input into the pavement spread analysis. A valley gutter will also be used at this intersection to better maintain the historic flow pattern of draining from west to east along HVR and that the flows coming south from 49th Avenue will wrap the corner and also continue east along HVR.

The drainage basin for Indian Springs Estates continues sloping to the east to the outfall pipe as shown in Figure 13. There is also a ditch coming in from the north that drains the development properties and roads east of 49th Avenue. From the grading and drainage plans for Indian Springs Estates and site visits, it has been determined that the outfall is a 12" Corrugated Metal Pipe (CMP) where the upstream end of the pipe is at the bottom of the basin. The pipe then goes through the footing for the wall and comes out on the other end as an opening through the side of the footing with a small grouted rip rap splash pad. Because the upstream end of the pipe is at the bottom of the basin, it was determined that as the basin fills with water, the outlet pipe will be flowing full as it drains the basin.

Figure 13: Drainage Basin Outfall Improvements



The proposed improvements include placing new sidewalk where the grouted rip rap splash pad for the outfall is currently located. The pipe being at the bottom of the basin raises concerns of the hydrostatic pressure in the basin pushing the water out at high velocities into the sidewalk and HVR travel-way. It would be unsafe for pedestrians walking on the sidewalk and vehicles travelling along HVR, so an alternative was necessary. The existing outfall pipe will be removed where it is exposed to air and slurry backfilled and compacted under the footing of the wall. A new 12" CMP will instead serve as the outfall to the basin. Since the proposed pipe will be the same size and have the same invert elevation as the existing outfall, no hydrologic analysis of the basin is necessary. The proposed 12" CMP will drain into a ditch that will diffuse the energy of the runoff and allow the water to flow at a lower velocity to a reverse scupper. The scupper is angled in a way so that the runoff won't spread so far into the roadway and instead will flow into the gutter. The amount of flow from a 12" CMP running full was used for pavement spread calculations at this location.

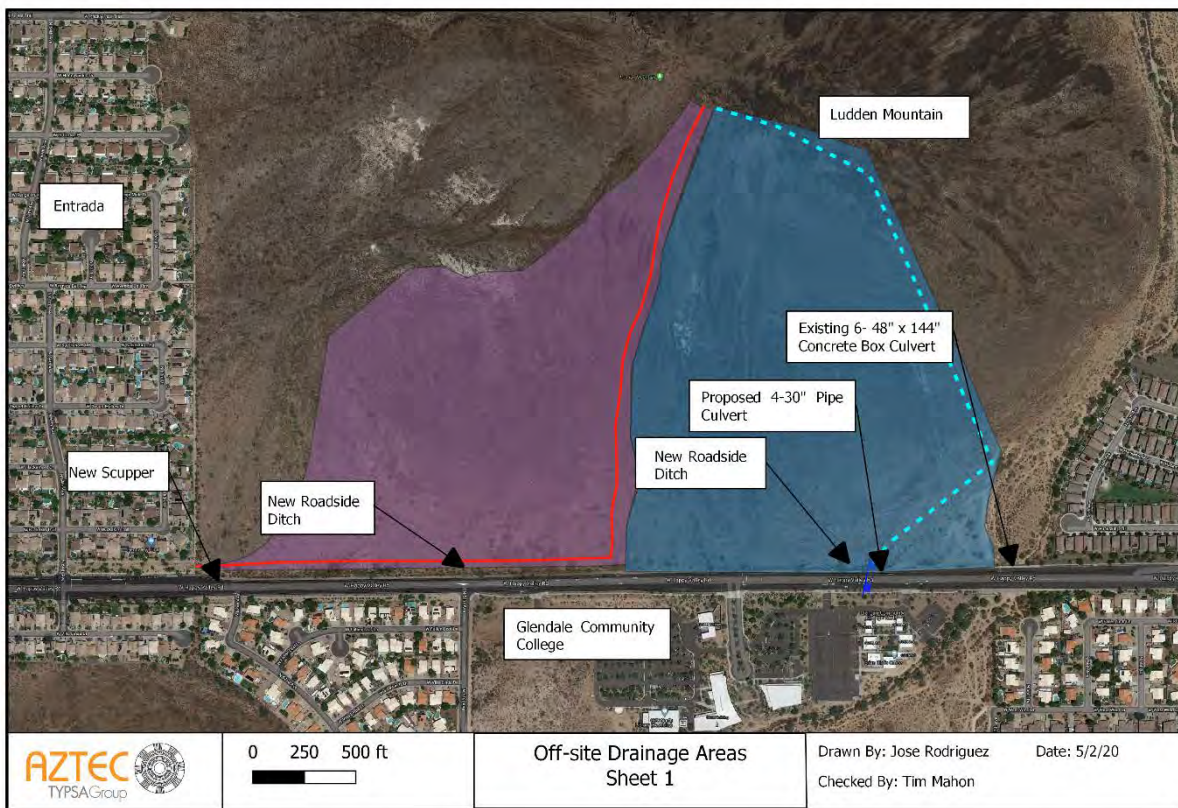


Pavement spread calculations were made from this location to the scuppers further east where the runoff would outflow. It was determined that the added pavement, runoff from 49th Avenue, and runoff from the outfall pipe will not violate the spread or depth criteria in this location.

HVR and Ludden Mountain

Ludden Mountain is located north of HVR across the road from GCCN between 62nd Avenue to the west and 55th Avenue to the east. The drainage areas were delineated using 2-ft contours received from the Flood Control District of Maricopa County (FCDMC). See Figure 14 below for a visual of the drainage areas and flow paths in this area.

Figure 14: Ludden Mountain Drainage Areas



The purple and blue shapes show the drainage areas that would impact the site. In the existing condition, the flow from the blue drainage area ponds up on the side of the road during low flow events while the purple drainage area runoff will flow along the shoulder of HVR towards the Entrada subdivision drainage channel. During high flow events, the cross slope of HVR at this location allows for the runoff to sheet flow across the road and be collected by existing scuppers on the EB curb of HVR. These scuppers outfall to the GCCN retention basins that will drain to channel system south and east of the site. Any drainage areas west of the purple shape will be collected by a concrete drainage ditch running from north to south along the edge of the development and will not impact this site. Any drainage areas east of the blue shape will be collected by the existing channel that flows towards the culvert crossing underneath HVR. This drainage area sheet can also be found in **Appendix D**.



The proposed improvements in this location include widening the roadway and adding curb, gutter, sidewalk, and a multi-use trail on the north side of the road. These improvements will cut off the existing flow pattern and can cause the runoff to pond and eventually overtop these improvements. To mitigate these effects, two trapezoidal drainage ditches are recommended: one running from the high point west to an existing drainage ditch, and the other running east from the high point to a proposed 4 barrel 30" pipe culvert. The longest flow path for each drainage area can be seen in Figure 1. These flow paths were used to calculate the time of concentration for each drainage area and in turn the total runoff flowing through the ditches during the 100-year storm event. Flowmaster was used to determine the depth and velocity of the flow in each ditch with a specified slope, side slope, and bottom width of the ditch. The ditches will have a 4:1 side slope with 1 foot of freeboard above the flow depth calculated from Flowmaster. See **Appendix E** for the FlowMaster results. Table 9 summarizes these results.

Table 9: Ludden Mountain Trapezoidal Drainage Ditches

Ditch	Side Slope (H:V)	Bottom Width (ft)	Flow Depth (ft)	Velocity (ft/s)	Flow Rate (cfs)	Ditch Depth (ft)
STA 54+30 to 33+50	4:1	10	1.39	4.82	104.30	2.50
STA 54+60 to 66+50	4:1	10	1.83	4.82	153.00	3.00

According to the City of Phoenix Stormwater Policies Table 6.6.1 and Standards Manual and the FCDMC Drainage Design Manual, the velocity in the ditches does not surpass the 5 ft/s allowable velocity for unlined channels so channel lining is not needed. However, it is still recommended to use rip rap on the north bank for both ditches to mitigate erosion from sheet flow coming off of Ludden Mountain and into the ditches.

The ditch flowing west will tie into the Entrada subdivision drainage channel. Currently, flows from Ludden Mountain west of the high point along HVR will either go into an Entrada subdivision concrete drainage channel running north to south along the eastern edge of the subdivision or will follow along the HVR shoulder to a v-ditch. Both the v-ditch and the concrete channel outfall into the Entrada subdivision drainage channel. The proposed ditch will maintain historic flow patterns and do the same. To mitigate the effects of concentrated flows entering the existing drainage channel, rip rap will be placed at the outfall of the ditch that will dissipate the energy of the water entering the ditch and allow for a stable merge between the proposed ditch and the existing concrete channel into the Entrada subdivision drainage channel.

The ditch flowing east will outfall into a proposed 4-30" pipe culvert that outfalls into a GCCN retention basin located immediately south of HVR. During high flow events today, the runoff will overtop HVR and go into scuppers on the EB HVR gutter which also outfall into the GCCN retention basins, so there are no changes to the historical flow pattern.



Cross Culvert

A new cross culvert is necessary to carry flows from Ludden Mountain to the GCCN retention basin system. Without the cross culvert, runoff from Ludden Mountain would pond up behind the multi-use path and sidewalk and eventually overtop the new curb and gutter and flow across HVR. This situation is not recommended and could increase the potential for drivers on HVR to hydroplane and would contribute to pavement damage and lead to a shorter life of the roadway.

One of the key controlling criteria is the existing elevation at the EB gutter flowline of 1406.3'. At that location, City of Phoenix Storm Water Policies and Standards requires a minimum cover of 1-ft (Figure 6.5.3). Using a 36" RCP, the invert elevation at this EB gutter flowline location will be $1,406.3' - 1' - (36'' + 4'')/12$ or 1,401.97'. Since the outlet invert elevation at the GCCN detention basin is approximately 1,402.0', this alternative will not work. This is also one of the reasons why a 6-ft x 6-ft RC Box will not work.

Using the next smaller size pipe of 30" RCP, the invert elevation at this EB gutter flowline location will be $1,406.3' - 1' - (30'' + 3.5'')/12$ or 1,402.51'.

Based on the above information, HY-8 software was used to model the cross culvert. The inlet invert elevation, inlet HW elevation and outlet velocity were also used as control in the modeling and the result shows that a system of 4 – 30" RCP works. Several inlet invert elevation were considered and an inlet elevation that results in an ideal outlet velocity that has a HW less than 1,407.9' is between 1,403.0' to 1,403.3'. See the Preliminary Drainage Report for the HY-8 model and report.

The next smaller size pipe of 24" RCP was analyzed and the result shows that a system of 6 – 24" RCP works.

The recommended cross culvert system is a 4 – 30" RCP system.

It is worth noting that there are multiple utilities that will have to be potholed and possibly relocated due to the culvert system. There is a fiber optic line, a gas line, a 24" ductile iron pipe water line, and a 12" water line.

It is recommended that the controlling elevations mentioned above be surveyed as this might affect the modeling results.

11.0 PRELIMINARY TRAFFIC EVALUATION

Traffic Signals

All the existing traffic signals on the project corridor were evaluated for needed upgrades in order to meet the ultimate roadway buildout. Additionally, the intersections were assessed for needed improvements to be PROWAG compliant. The existing traffic signals that were to be evaluated include:

- 35th Avenue/HVR
- 39th Drive/HVR
- 43rd Avenue/HVR
- 51st Avenue/HVR



- 55th Avenue/HVR
- Glendale Community College Driveway/HVR
- 64th Avenue/HVR
- 67th Avenue/HVR

Based on discussions with the Traffic Services Division, the intersections of 39th Drive/HVR, 55th Avenue/HVR and 67th Avenue/HVR are already scheduled to be upgraded to meet PROWAG requirements, and to accommodate the ultimate build out of HVR. These improvements will be part of the City’s ongoing traffic signal intersection improvement program and are anticipated to be fully constructed prior to construction of the HVR widening project. As such, traffic signal improvements at these three intersections were not evaluated as part of this report.

The proposed development of the state land parcel on the north side of HVR from 37th Drive to 35th Avenue is working with the Street Transportation Department on a proposed traffic signal at the 37th Drive intersection. A traffic signal at this location is anticipated to be fully constructed prior to final design and construction of the HVR widening project

Table 10 identifies what improvements are needed at the remaining study traffic signals. These improvements are reflected in **Appendix A: Roadway and Drainage Plans**.

Table 10: Existing Traffic Signals

Existing Traffic Signal	Required Improvements		
	Replace Signal Poles	Install PPB – all movements- PROWAG	Flashing Yellow Left Turn Arrows
35th Avenue/HVR	X	X	X
43rd Avenue/HVR	X	X	X
51st Avenue/HVR	X	X	X
Glendale C.C. Dwy/ HVR	X	X	X
64th Avenue/HVR	X	X	X

During the evaluation of the project corridor with the City Traffic Signals Department, the potential for future traffic signals at the intersections of 61st Ave/HVR and 47th Avenue/HVR was also discussed. However, neither of these intersections have been analyzed for meeting Traffic Signal Warrants. Due to this, traffic signals at these two intersections were not considered as part of this project. These intersections will be evaluated during final design to determine if providing a traffic signal is warranted. Currently at 61st Ave, the existing two left turn lane (TWLTL) is used as a northbound to westbound acceleration lane. With the construction of the median, this acceleration lane will be removed and could increase the likelihood of this intersection meeting Traffic Signal Warrants.



Signing and Marking

The existing lanes will be modified to provide three vehicle lanes in each direction along with buffered bike lanes for the entire corridor, except for the small portion of roadway on the south side of HVR between 45th Avenue and 43rd Avenue. Marked left turn lanes will be added at the median breaks and traffic signals. The existing right turns lanes will remain with some adjustment to striping. Existing traffic signs not impacted by roadway construction are to be maintained unless otherwise directed by City staff. New signs will be installed where needed including additional bike facility signs and flashing yellow arrow signs (at traffic signals). As part of the enhanced bike facilities, bike symbols with green paint will be added to the bike lanes along with markings to designate the buffer between vehicle lanes and bike lanes. Left, right and U turn pavement arrows will be placed in turn lanes.

Roadway Lighting

LED roadway lighting is already provided on both sides of HVR throughout the majority of study area, with the exception being in areas adjacent to undeveloped parcels. Table 11 shows the lighting conditions throughout the project.

Table 11: Existing Lighting Conditions

HVR - Roadway Segment	Direction	No Lighting	Light Poles	Lights on Utility Poles
35th Ave - 37th Dr	Eastbound		X	
	Westbound	X		
37th Dr - 41st Ave	Eastbound			X
	Westbound		X	
41st Ave - 45th Ave	Eastbound			X
	Westbound		X	
45th Ave - 47th Ave	Eastbound		X	
	Westbound	X		
47th Ave - 48th Ave	Eastbound		X	
	Westbound		X	
48th Ave - 50th Ave	Eastbound			X
	Westbound	X		
50th Ave - 53rd Ave	Eastbound	X		
	Westbound		X	
53rd Ave - 56th Dr	Eastbound			X
	Westbound		X	
56th Dr - 63rd Dr	Eastbound		X	X
	Westbound	X		
63rd Dr - 67th Ave	Eastbound		X	
	Westbound		X	

The recommended lighting improvements include installing roadway lights wherever there are existing gaps along the corridor. Per the *City of Phoenix Streetlighting Layout Guidelines, Final (March 2017)*, arterials with City Sections A/B shall have a standard spacing of 200-ft to 250-ft. For planning purposes, a standard spacing of 200-ft was used, with 250-ft being the maximum space. New lights should also be



installed on local roadways, at their intersections with an arterial roadway. Where possible, new lights should be installed on City standard light poles. In areas where existing overhead utility lines would conflict with new light poles the new lights should be installed on the existing utility poles, with approval from the owning utility company, APS.

The proposed lighting improvements are reflected in the roadway design plans included in **Appendix A: Roadway and Drainage Plans**.

As shown in **Appendix A**, new roadway lights are proposed at all existing gaps in lighting throughout the corridor.

Transit

Based on discussions with the City Transit Department, there is a future bus transit route planned within the study area of HVR. Due to this, both bus bays and bus pads were incorporated into the improvements. Per the *City of Phoenix Street Planning and Design Guidelines* transit bays were considered at all arterial to arterial street intersections. Bus pads were also added at 1/4 mile intervals based on direction from the City Transit Department.

12.0 PRELIMINARY LANDSCAPING EVALUATION

The improvements for HVR include new landscaped roadway medians, areas adjacent to new multi-use paths (MUP), and between back of curb and sidewalk. In addition, there are areas of potential enhancement to the existing landscape located between back of curb and R/W limit throughout. The corridor is comprised primarily of commercial and residential developments with one large tract of desert owned by the City.

Existing Landscape Conditions

The existing landscape throughout the corridor appears to be maintained by the adjacent development whether that be a commercial property or a residential development/HOA. Based on a recent visit, much of the landscape is in fair to poor condition. Many of the trees have bad\irregular form, been over pruned, and appear to be stressed. The same can be said for much of the shrub material. Existing shrubs have been over-pruned, badly shaped (pruned into balls) and not allowed to develop into their natural form. There also appears to be many areas where plants have died and not been replaced.

New Landscape Areas

Landscape: New landscape consisting of trees, shrubs/accents, decomposed granite, native seeding and irrigation will be located within the new roadway medians, areas adjacent to new MUP's and landscape planter strips between curb and sidewalk where new sidewalk is planned to be added. There are select areas of existing landscape, both in medians and areas between back of curb and the right of way/sidewalk easement identified to be enhanced with the addition of shrubs/accent plantings. The key to the new landscape will be to pick the right sized tree or shrub for the given location. Plant selection will need to consider existing utilities (both above and below ground), space available, water required, maintenance to be provided, and sight visibility constraints. Any landscape improvements will need to follow the Sonoran Boulevard Development Standards for HVR that was adopted by City



Council on December 18, 1996 and be consistent with standards identified in the City of Phoenix Street Landscape Standards, December 2006.

Irrigation: It is anticipated that there will be six (6) separate irrigation systems designed to serve the new landscape in the medians and areas back of curb. Each system will cover approximately 3,200 feet along the project corridor. Each system will be independent and automatic with its own water source point of connection, backflow preventer, solar powered controller, automatic control valves, manual shut off valves, drip emitters, PVC mainline and lateral piping and sleeving.

Enhanced Landscape Areas

Landscape: New plant material for identified enhancement areas will supplement existing landscape areas, replace missing plant material and will consist primarily of accent type plant material.

Irrigation: Irrigation for enhanced landscape areas will be connected to the existing irrigation systems located in those areas, including the addition of new drip emitters and piping as needed. It is anticipated that the existing systems may be a mixture of City, HOA, commercial and community college properties.

Estimated Landscape & Irrigation Cost

New Landscape Area

The estimated landscape and irrigation costs for 231,002 square feet of new landscape areas are: \$610,271. Costs associated with new landscape areas were developed and based on area calculations. Trees for new landscape areas were based on 1 tree per 277 square feet of new landscape area less adjustments for minimum distances from curbs, median ends and elimination of areas deemed to be inappropriate for new tree plantings. Shrub/accent plantings were based on 1 shrub per 55 square feet of new landscape area less adjustments for minimum distances from curbs and median ends.

Costs associated with new landscape area irrigation are based on the need for six (6) separate independent automatic irrigation systems, each system having the following: one 1 inch water service and meter, one reduced pressure backflow preventer and enclosure, one automatic solar powered controller, six remote control drip valve assemblies, manual shut off valves for roadway crossings, 1 ½ inch Sch 40 PVC mainline piping, 1 inch Sch 40 PVC submain piping, and ¾ inch Sch 40 PVC lateral piping and Sch 40 PVC open cut and directional bore pipe sleeving.

Enhanced Landscape Area

The estimated landscape and irrigation costs for 263,595 square feet of enhanced landscape areas are: \$201,758. Costs associated with enhanced landscape areas were developed and based on area calculations. Shrub/accent plantings were based on 1 shrub per 165 square feet of new landscape area less adjustments for minimum distances from curbs and median ends.

Costs associated with enhanced landscape area irrigation was based on the use of existing irrigation systems in place to water plants with and the addition of new emitters for new plantings and new lateral piping as needed.



Certain areas of landscaping along the project will be affected due to the proposed improvements, with bushes, trees, and decorative rock/decomposed granite being removed or disturbed. It is estimated that the cost of the landscaping replacement/repairs will be \$25,000.

The construction costs for new landscaping and landscaping enhancement are reflected in the cost estimate as Landscaping Allowance for a total of \$812,029.

13.0 PRELIMINARY ENVIRONMENTAL EVALUATION

This project would, in part, be constructed using federal aid funds, requiring compliance with the *National Environmental Policy Act* (NEPA). While supporting technical analyses would still need to be conducted, it appears the planned improvements are not expected to create significant environmental impacts, and therefore, NEPA approval is anticipated under either 23 CFR 771.117(c) or 23 CFR 771.117(d). The environmental review, consultation, and other actions required by applicable federal environmental laws for this project would be carried out by the Arizona Department of Transportation (ADOT) pursuant to 23 U.S.C. 326 and a Memorandum of Understanding dated January 3, 2018, and executed by the Federal Highway Administration (FHWA) and ADOT. In addition to any environmental commitments determined by ADOT, applicable City of Phoenix (COP) regulations would also need to be considered and implemented, e.g. Phoenix City Code 32C regarding stormwater quality protection.

Public/Agency Scoping

COP anticipates holding public meetings to solicit community comments, input, and feedback to inform and guide the scope and design development for this project. Public meetings and outreach would be consistent with the COP Street Transportation Department’s (STR) established processes and its Public Involvement Plan (July 2018). NEPA scoping letters would be distributed to applicable agencies to provide notification of the proposed project and solicit comments, input, and feedback.

Socioeconomic Impacts

Acquisition of temporary construction easements and permanent easements (to accommodate multi-use paths and drainage improvements) would be needed; however, relocations, displacements, or access changes would not occur.

Localized traffic congestion and delays to adjacent land owners/tenants and the traveling public are anticipated throughout construction. Street closures are not anticipated, and access will be maintained.

No adverse or permanent effects on businesses, residents, or the surrounding community is anticipated. Therefore, the presence of Title VI/environmental justice populations is not anticipated to be assessed.

Biological Resources

It is anticipated that ADOT Environmental Planning (EP) would require preparation of a Biological Evaluation Short Form (BESF). The BESF would follow the current guidelines as determined by ADOT EP. Species lists from the U.S. Fish and Wildlife Service’s Information, Planning, and Conservation system and the Arizona Game and Fish Department’s Online Environmental Review tool would be



queried and reviewed by a qualified biologist. Potential impacts to species would be assessed and recommendations for applicable mitigation measures would be made.

COP environmental staff completed an initial assessment in May 2019 as summarized below:

- Vegetation in the project area may provide habitat for active nests protected under the Migratory Bird Treaty Act. Impacts to vegetation should be avoided to the extent practicable during final design and construction.
- Potential habitat for the Sonoran Desert tortoise is near the project area. It is possible, but not highly likely, that tortoises would use the wash corridors in the project area as movement corridors.
- Minimally suitable habitat for the western burrowing owl is present in scattered parcels along the project corridor.
- The COP STR Migratory Bird Treaty Act, Sonoran Desert tortoise, and western burrowing owl construction flyers would be included in the bid documents and provided to the contractor, subcontractors, and all field personnel at the preconstruction meeting. The flyers would be posted by the contractor at the construction site at all times during construction.

Clean Water Act Sections 404/401 and 402

Potential Waters of the U.S. are present in the project area. Prior to 60% design, COP environmental staff will review project information and preliminary plans to determine the appropriate course of action or permitting.

No unique or impaired waters are known to be located within 0.25-mile of the project area.

During final design, ground disturbance would be calculated. It is likely that ground disturbance would exceed 1 acre; therefore, COP STR's construction contractor would prepare a Storm Water Pollution Prevention Plan following Arizona Pollutant Discharge Elimination System construction general permit requirements. Additionally, the contractor would still need to comply with the requirements of Phoenix City Code 32C regarding stormwater quality protection and appropriate best management practices would need to be implemented prior to ground-disturbing activities.

Floodplains

A review of the Federal Emergency Management Agency's Flood Insurance Rate Maps has determined the project is located in a shaded Zone X, panels 04013C1255L and 04013C1260L, dated October 16, 2013.

Cultural Resources

As this project would utilize federal aid funds, it is considered an undertaking pursuant to Section 106 of the *National Historic Preservation Act of 1966*. In assuming its acting role as the lead federal agency, ADOT EP would initiate and continue Section 106 consultation and related administrative procedures.

As part of COP's standard compliance review process, an assessment, similar to a Class I records review, was undertaken by the COP Archaeology Office. Based upon the results of a previous survey and a data recovery project, further archaeological work is not recommended. If any archaeological



materials would be encountered during ground-disturbing activities, the contractor would be required to cease all ground-disturbing activities within 10 meters of the discovery and the COP Archaeology Office would be notified immediately and allowed time to properly assess the materials.

An assessment was also undertaken by the COP Historic Preservation Office. There are no listed or eligible historic properties or districts within or adjacent to the project area; therefore, it is anticipated that no historic properties will be affected.

Section 4(f) Resources

Section 4(f) of the U.S. Department of Transportation Act of 1966, states that the FHWA “may approve a transportation program or project requiring publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, state or local significance, or land of a historic site of national, state, or local significance (as determined by the federal, state, or local officials having jurisdiction over the park, area, refuge, or site) only if there is not prudent or feasible alternative to using that land and the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.” (49 U.S.C. 303).

According to the COP Trail System map, a shared-use path has been identified along Happy Valley from I-17 west to 67th Avenue. Improvements to segments of existing path or new path construction would be evaluated during final design. Therefore, impacts to potential 4(f) resources would be further evaluated at that time.

Section 6(f) Resources

Section 6(f) of the Land & Water Conservation Fund Act (L&WCF) exists to ensure that the federal investment of L&WCF Act funds is being maintained in public outdoor recreation use. No Section 6(f) resources appear to be located within or adjacent to the project area; therefore, no involvement with or impact to these resources are anticipated. However, presence of 6(f) resources would be further evaluated during the environmental clearance process.

Visual

The project would construct new paving, curb, gutter, sidewalk, ADA ramps, bicycle lanes, street lights, bus pads, bus shelters, irrigation and relocate/adjust existing fire hydrants, scuppers, and driveways. The visual quality of the project area would be altered with the addition of new elements and relocation of existing elements; however, these additions/modifications would be consistent with the current visual quality of the area.

Hazardous Materials

Consistent with current ADOT EP guidelines, environmental regulatory database reports would be ordered and reviewed and a Preliminary Initial Site Assessment (PISA) would be prepared during the environmental clearance process. Additionally, it is anticipated that a site visit would be necessary to collect suspect materials for testing of lead-based paint (LBP) and asbestos-containing material (ACM) from potentially impacted structures and roadway striping. A hazardous materials evaluation report would be prepared documenting the sampling methodology and summarizing the laboratory test



results of the suspected LBP and ACM samples. COP would coordinate with the ADOT EP hazardous materials coordinator to confirm the appropriate activities, methodologies, and technical reports.

Noise

One eastbound and one westbound lane would be added between 47th Avenue and 51st Avenue (approximately 5,292 feet) and one westbound lane would be added between 56th Avenue and 62nd Avenue (approximately 4,100 feet). Sensitive noise receptors are located adjacent to the project and traffic capacity would be added to existing roadway; therefore, further coordination with ADOT EP would be undertaken to determine the next steps in the noise analysis process. Construction noise would be temporary and controlled by appropriate means and methods.

Air Quality

The proposed project is located in the Phoenix carbon monoxide maintenance area, the Phoenix ozone 8-hour non-attainment area, and the Phoenix PM₁₀ non-attainment area.

It is listed in the Maricopa Association of Governments’ Transportation Improvement Program under number PHX20-106DZ. Currently, it is listed in ADOT’s State Transportation Improvement Program under Project Number T0239 and can be found in MAG’s Arterial Life Cycle Program as seen in Figure 15.

Figure 15: MAG Arterial Life Cycle Program

Happy Valley Rd:67th Ave to I-17	ACI-HPV-20-03	\$ 500,000	\$ 13,291,635					
Happy Valley Rd: I-17 to 35th Ave	ACI-HPV-20-03-A			RARF	DES	2003	4	A/CO
				RARF	ROW	2004	4	A/CO
				RARF	CONST	2005	4	A/CO
Happy Valley Rd: 35th Ave to 43rd Ave	ACI-HPV-20-03-B			RARF	PREDES	2008	4	
				RARF	DES	2025	4	
				RARF	ROW	2026	4	
				RARF	CONST	2027	4	
Happy Valley Rd: 43rd Ave to 55th Ave	ACI-HPV-20-03-C			RARF	PREDES	2009	4	
				RARF	DES	2025	v	
				RARF	ROW	2026	4	
				RARF	CONST	2027	4	
Happy Valley Rd: 55th Ave to 67th Ave	ACI-HPV-20-03-D			RARF	DES	2025	4	
				RARF	ROW	2026	4	
				RARF	CONST	2027	4	

The City environmental staff would coordinate closely with ADOT EP to evaluate if the proposed project would have localized air quality impacts and to determine if a quantitative analysis would be necessary.



Sole Source Aquifer

The proposed project is not located within a sole source aquifer; therefore, no impacts to sole source aquifers would occur.

14.0 PRELIMINARY GEOTECHNICAL EVALUATION

According to the City, a geotechnical investigation and pavement design memo will be completed during final design. However, based on existing conditions and as-builts of HVR between 35th Avenue and I-17, the pavement structural section is anticipated to be 7 ½ - inch AC over compacted subgrade for the full structural sections. Throughout the remainder of the project limits, a 1" mill and overlay will be applied.

15.0 ROADWAY AND DRAINAGE PLANS

All design work is in compliance with the current City of Phoenix Administrative Procedure No. 155 (AP-155), the American Association of State Highway and Transportation Official (AASHTO) and COP Storm Drain design criteria. Roadway and Drainage Plans have been completed for the Initial Preliminary Engineering Report and can be found in **Appendix A**.

16.0 CONSTRUCTION FEASIBILITY ISSUES

There are no major items foreseen that may cause major construction issues regarding the project improvements. There are, however, two minor areas where utilities may need to be addressed to facilitate the proposed sidewalk:

- Station 125+15 Lt, an existing utility vault may need to be relocated or adjusted to grade
- Approximately Station 115+00 to 129+15 Rt, Overhead Power Poles sit close to the back of the sidewalk

Regarding lighting the north side of HVR between 45th Avenue and 47th Avenue includes restrictions that provide challenges to the installation of lighting in the area. These restrictions include existing improvements, utilities, and R/W. In this area the R/W available on the north side of HVR is 20-ft less than other areas. This is due to the private parcels on the north side of the road being longer, with their southern edges extending 20-ft closer to HVR. Due to this R/W constraint the sidewalk edge is only 2-ft away from the private property walls. Based on existing utility records and the survey features, there are existing electrical and telephone utilities located in this 2-ft gap, leaving no room to install new light polls without major utility relocations. Light poles were included in the area with the sidewalk wrapping around the bases; however, utility relocations will most likely be required here.

17.0 CONSTRUCTION COST ESTIMATES

The preliminary construction cost estimate for this project is \$15,497,685.64. The estimated final design fee is \$1,549,768.56. The estimated R/W costs are \$71,554. The estimated Construction Administration Costs are \$1,549,768.56. The overall project costs are estimated to be \$18,668,776.76.

The unit costs for this estimate are based upon recent City bid tabulations for projects similar in nature and size between 2018 and 2020.



A preliminary overall project construction cost estimate has been developed for this project and is included in **Appendix B**.

Currently funding for final design and construction of the project is not yet allocated. Preliminary planning by the City has funding for final design coming from the Maricopa County Regional Area Road Fund (RARF) in 2021-2022. Construction would then be scheduled for 2023-2024 and be funded through the forthcoming MAG Transportation Improvement Program (2020-2024). The City is also interested in obtaining federal funding to complete the project.

18.0 INVOLVEMENT MATRIX

The involvement matrix for this project can be found in **Appendix F**.

19.0 CONSTRUCTION SCHEDULE/DURATION

The project will be constructed in three phases to mitigate the impact to traffic flow on HVR.

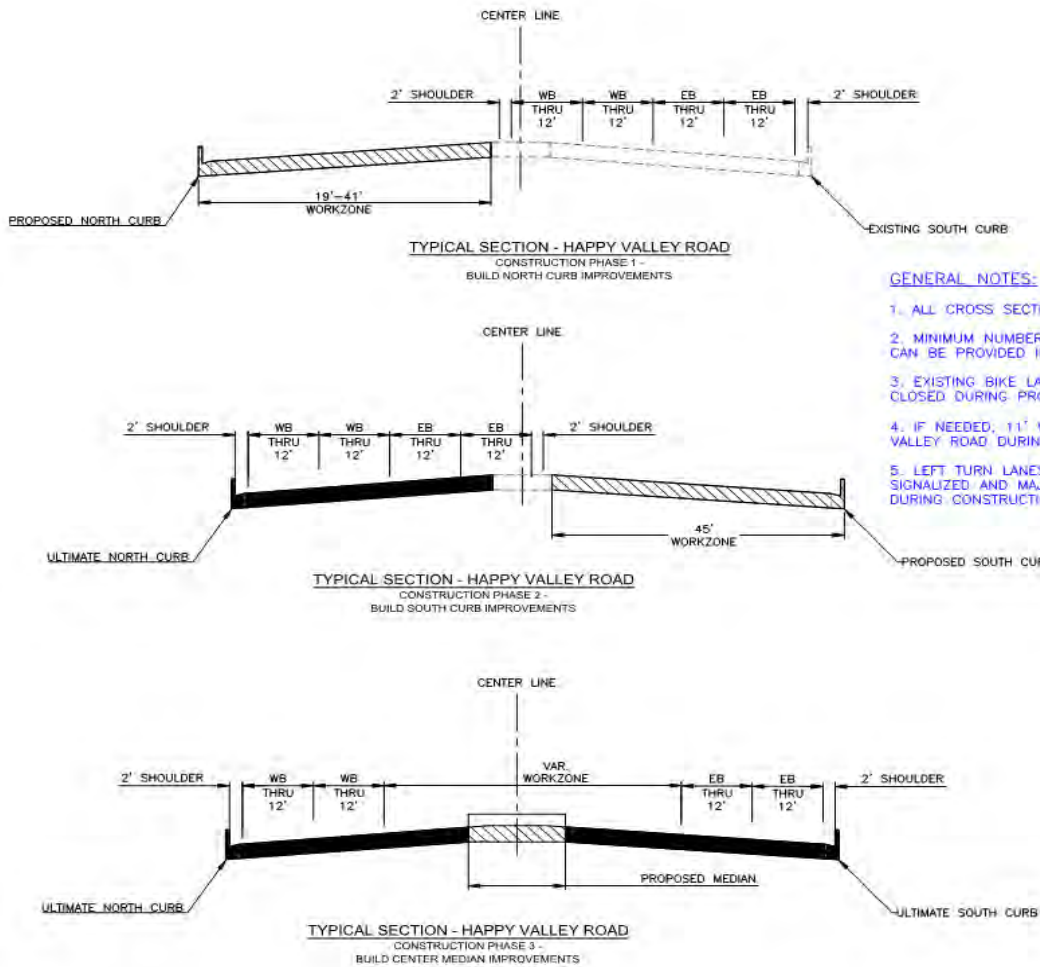
Phase 1 will include construction of the north curb improvements. During Phase 1 eastbound and westbound traffic on HVR will be shifted towards the south curb line in order to allow room for construction on the north side of the roadway. Phase 2 will include the construction of the south curb improvements while traffic on HVR is shifted towards the completed north curb. In areas where there is existing median, vehicles will be shifted toward the existing median in order to provide room for construction of the outside curb lines during Phases 1 and 2. The final phase will consist of constructing the center median improvements. Eastbound and westbound traffic will be shifted outward towards the recently completed curb lines to provide room in the center area for construction. Figure 16 shows typical sections of the three construction phases and the general lane restrictions associated with construction. All phases of construction will allow for a minimum of two through lanes being maintained on HVR in both directions. All existing left turn lanes at major intersections will also be maintained.

It is anticipated that project construction will take a total of 17 months from construction NTP. A summary of the anticipated durations for all final design and construction activities is provided below. A detailed schedule is provided in **Appendix H**.

- Final Design Procurement 2 Months
- Final Design and Clearances 16 Months
- ROW Acquisition 13 Months
- Utility Relocations, If Needed 3 Months
- Construction Procurement 6 Months
- Construction Duration 17 Months



Figure 16: Construction Phase Typical Sections



GENERAL NOTES:

1. ALL CROSS SECTIONS SHOWN FACING UP STATION.
2. MINIMUM NUMBER OF THROUGH LANES SHOWN. MORE CAN BE PROVIDED IF CONSTRUCTION PERMITS.
3. EXISTING BIKE LANES ON HAPPY VALLEY ROAD SHALL BE CLOSED DURING PROJECT CONSTRUCTION.
4. IF NEEDED, 11' WIDE LANES MAY BE UTILIZED ON HAPPY VALLEY ROAD DURING CONSTRUCTION.
5. LEFT TURN LANES SHALL BE PROVIDED AT ALL SIGNALIZED AND MAJOR UN-SIGNALIZED INTERSECTIONS DURING CONSTRUCTION.

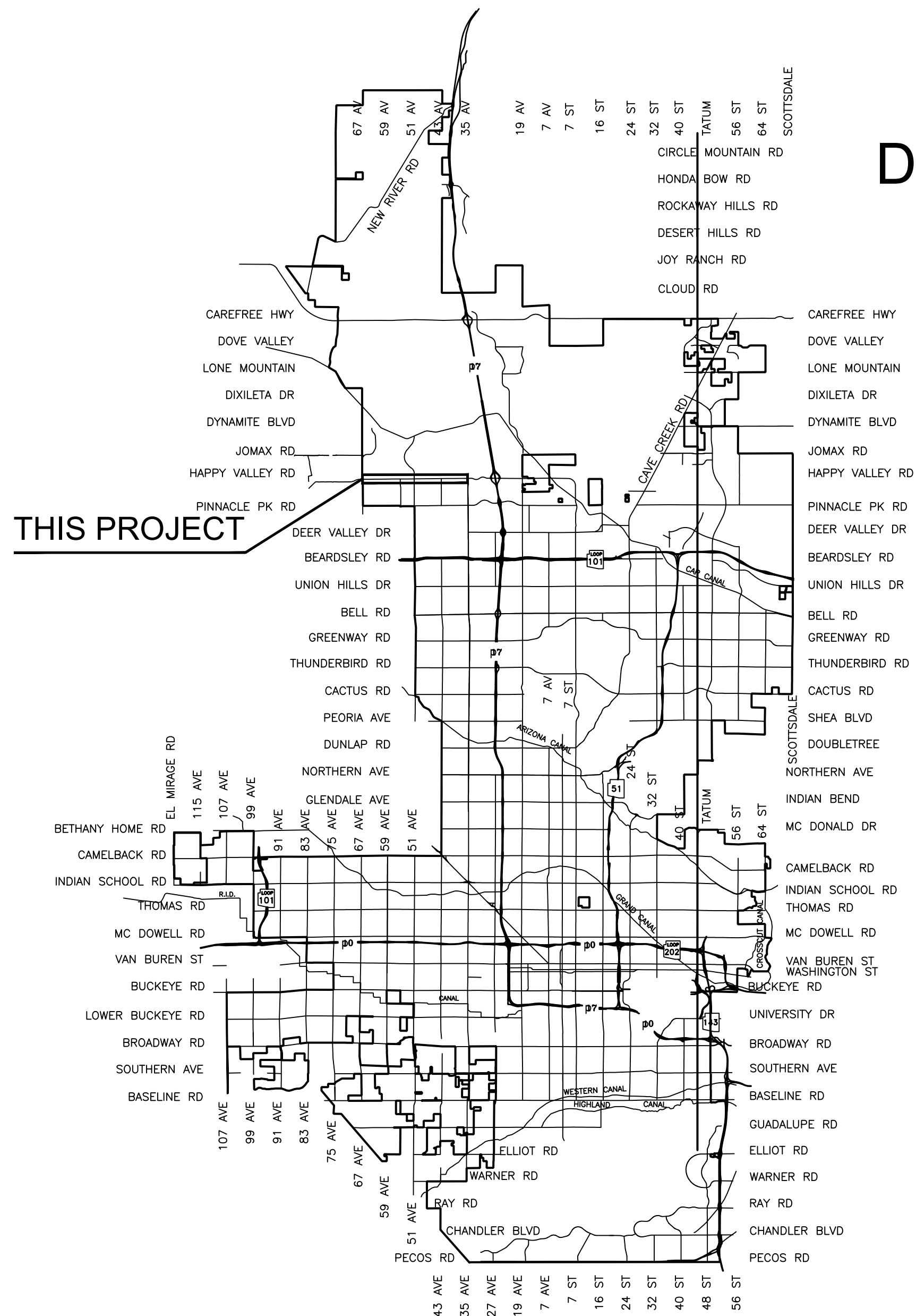
Appendix A – Roadway and Drainage Plans

CITY OF PHOENIX
 STREET TRANSPORTATION DEPARTMENT
 DESIGN & CONSTRUCTION MANAGEMENT DIVISION
 PAVING AND STORM DRAIN

HAPPY VALLEY ROAD
 35TH AVENUE TO 67TH AVENUE
 ST85100437-2



2020



VICINITY MAP
 NTS
 City of Phoenix

CITY BENCHMARKS

- ▲ C.O.P BM 1516: BCHH INTERSECTION OF 35TH AVE AND HAPPY VALLEY ROAD
ELEV: 1422.62 (NAD83 DATUM)
- ▲ C.O.P BM 1509: BCHH INTERSECTION OF 43RD AVE AND HAPPY VALLEY ROAD
ELEV: 1397.46 (NAD83 DATUM)
- ▲ C.O.P BM 1479: BCHH INTERSECTION OF 55TH AVE AND HAPPY VALLEY ROAD
ELEV: 1419.72 (NAD83 DATUM)
- ▲ C.O.P BM 1208: BCHH INTERSECTION OF 67TH AVE AND HAPPY VALLEY ROAD
ELEV: 1379.71 (NAD83 DATUM)

APPROVED _____ DATE
 ASSISTANT STREET TRANSPORTATION DIRECTOR

APPROVED _____ DATE
 DEPUTY STREET TRANSPORTATION DIRECTOR

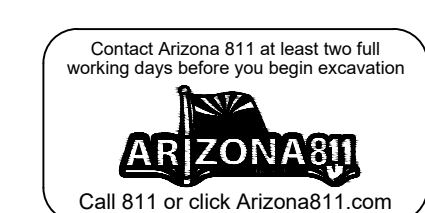
FINAL 30% Review NOT FOR CONSTRUCTION OR RECORDING	F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
	9	ARIZ.	ST85100437-2	1	95	
AZTEC						
DRAWN: RJR DESIGN: RJR CHECKED: G.G. DATE: 02/20						

MAYOR
 KATE GALLEG0
 CITY MANAGER
 ED ZUERCHER
 CITY COUNCIL

- DISTRICT NO 1. THELDA WILLIAMS
- DISTRICT NO 2. JIM WARING
- DISTRICT NO 3. DEBRA STARK
- DISTRICT NO 4. LAURA PASTOR
- DISTRICT NO 5. BETTY GUARDADO
- DISTRICT NO 6. SAL DICICCIO
- DISTRICT NO 7. MICHAEL NOWAKOWSKI
- DISTRICT NO 8. CARLOS GARCIA

INDEX OF SHEETS

SHEET NO.	DWG. SERIES NO.	SHEET TITLE
1	G-1.01	COVER
2	G-1.02	LEGEND AND GENERAL NOTES
3-4	G-1.03-G-1.04	KEY MAP
5-6	G-2.01-G-2.02	QUANTITY SUMMARY SHEETS
7-8	G-3.01-G-3.02	TYPICAL SECTIONS
9	G-4.01	GEOMETRIC LAYOUT
10-51	P-1.01- P-1.42	HAPPY VALLEY ROADWAY PLANS
52	SDS-1.01	DRAINAGE DESIGN SUMMARY
53-94	DR-1.01-DR-1.42	DRAINAGE PLANS
95	DR-2.01	CULVERT DETAIL SHEET



"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."

ST85100437-2: HAPPY VALLEY ROAD 35TH AVENUE TO 67TH AVENUE DESIGN SERVICES 30% SUBMITTAL Q.S. 4-5

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

LEGEND

GENERAL NOTES

FINAL
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	2	95	
DATE: 04/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

- ▲ BENCHMARK
- NEW SURVEY MONUMENT - M.A.G. DETAIL 120-1 TYPE "B"
- ⊙ EXISTING SURVEY MONUMENT - M.A.G. DETAIL 120-1 TYPE "B"
- NEW SURVEY MONUMENT - M.A.G. DETAIL 120-1 TYPE "A"
- ⊠ EXISTING SURVEY MONUMENT - M.A.G. DETAIL 120-1 TYPE "A"
- ===== NEW VERTICAL CURB & GUTTER - M.A.G. DETAIL 220 TYPE "A"
- === EXISTING CURB & GUTTER
- //// NEW CONCRETE SIDEWALK - STD. DETAIL P1230
- //// EXISTING CONCRETE SIDEWALK
- ===== NEW CONCRETE DRIVEWAY OR ALLEY ENT. PER DETAIL NO. ON PLANS
- ===== EXISTING CONCRETE DRIVEWAY OR ALLEY ENT.
- ===== NEW CONCRETE SIDEWALK RAMP PER DETAIL ON PLANS
- ===== EXISTING CONCRETE SIDEWALK RAMP
- NEW SLOPE EASEMENT
- EXISTING SLOPE EASEMENT
- NEW TCE
- EXISTING EASEMENT LINE
- NEW R/W LINE
- EXISTING R/W LINE
- NEW PAVEMENT CENTER LINE OR MONUMENT LINE
- EXISTING PAVEMENT CENTER LINE OR MONUMENT LINE
- ===== NEW DECORATIVE PAVEMENT
- ===== EXISTING DECORATIVE PAVEMENT
- C --- NEW CUT LINE
- F --- NEW FILL LINE
- ===== NEW BLOCK WALL
- ===== EXISTING BLOCK FENCE
- X --- NEW WIRE FENCE
- X --- EXISTING WIRE FENCE
- ===== EXISTING PAVEMENT
- ▲ AVERAGE GROUND ELEVATION AT R/W LINE (SHOWN IN PROFILE)
- NEW MAIL BOX
- EXISTING MAIL BOX
- 3/4" w M NEW WATER SERVICE W/SIZE AND WATER METER BOX
- 3/4" w M EXISTING WATER SERVICE W/SIZE AND WATER METER BOX
- 12" DIP W NEW UTILITY LINE W/SIZE & TYPE (12" AND SMALLER)
- 12" DIP W EXISTING UTILITY LINE W/SIZE & TYPE (12" AND SMALLER)
- 36" DIP W NEW UTILITY LINE W/SIZE & TYPE (GREATER THAN 12")
- 36" DIP W EXISTING UTILITY LINE W/SIZE & TYPE (GREATER THAN 12")
- ⊕ NEW MANHOLE (UTILITY DESIGNATION IN CENTER)
- ⊕ EXISTING MANHOLE (UTILITY DESIGNATION IN CENTER)
- ===== NEW STORM SEWER (GREATER THAN 12")
- ===== EXISTING STORM SEWER OR NEW STORM SEWER SHOWN ON SEPARATE PLANS (GREATER THAN 12")
- ===== NEW CATCH BASIN, GUTTER INLET (LENGTH TO SCALE)
- ===== EXISTING CATCH BASIN, GUTTER INLET
- ===== NEW CATCH BASIN, CURB INLET (LENGTH TO SCALE)
- ===== EXISTING CATCH BASIN, CURB INLET
- ===== NEW CATCH BASIN, CURB & GUTTER INLET (LENGTH TO SCALE)
- ===== EXISTING CATCH BASIN, CURB & GUTTER INLET
- NEW IRRIGATION STANDPIPE - M.A.G. DETAIL 503
- EXISTING IRRIGATION STANDPIPE
- NEW OR RELOCATED FIRE HYDRANT BY CONTRACTOR
- EXISTING FIRE HYDRANT
- ⊗ NEW OR RELOCATED UTILITY VALVE BY CONTRACTOR
- ⊗ EXISTING UTILITY VALVE
- ⊠ NEW OR RELOCATED IRRIGATION BOX BY CONTRACTOR
- ⊠ EXISTING IRRIGATION BOX
- ⊕ ADJUST EXIST. WATER VALVE BOX - C.O.P. DETAIL P1391

- ⊕ T.N. = EXISTING WATER VALVE W/TOP OF OPERATING NUT ELEVATION
- ▲ NEW STREET OR TRAFFIC SIGN
- ▲ EXISTING STREET OR TRAFFIC SIGN
- NEW TRAFFIC SIGNAL POLE W/MAST ARM & SIGNAL INDICATIONS
- EXISTING TRAFFIC SIGNAL POLE W/MAST ARM & SIGNAL INDICATIONS
- NEW OR RELOCATED UTILITY POLE W/LINE INDICATING WIRE DIRECTION
- EXISTING UTILITY POLE W/LINE INDICATING WIRE DIRECTION
- NEW OR RELOCATED POWER POLE DOWN GUY ANCHOR
- EXISTING POWER POLE DOWN GUY ANCHOR
- NEW LUMINAIRE MOUNTED ON UTILITY POLE
- NEW LED COBRAHEAD LUMINAIRE WITH MAST ARM
- EXISTING STREET LIGHT MOUNTED ON UTILITY POLE
- EXISTING STREET LIGHT POLE
- ⊗ EXISTING TREE OR STUMP TO BE REMOVED (GREATER THAN 12" DIA.)
- ⊗ EXISTING TREE OR STUMP TO BE REMOVED 12" DIA. OR LESS (NPI)
- ⊗ EXISTING TREE TO BE TRANSPLANTED BY CONTRACTOR
- ⊗ EXISTING TREE TO REMAIN (GREATER THAN 12" DIA.)
- ⊗ EXISTING TREE TO REMAIN (12" DIA. AND SMALLER)
- ⊗ EXISTING PINE TREE
- ⊗ EXISTING PALM TREE
- ⊗ EXISTING LARGE SHRUB
- ⊗ EXISTING SMALL SHRUB
- ⊗ EXISTING BUSH

- ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH CONTRACT SPECIFICATIONS; PLANS; CITY OF PHOENIX SUPPLEMENTS TO MAG STANDARD SPECIFICATIONS AND DETAILS; AND MAG STANDARD SPECIFICATIONS AND DETAILS, IN THAT ORDER OF PRECEDENCE, AT THE TIME OF CONSTRUCTION BID.
- ALL STORM SEWER MANHOLES ARE TO BE CONSTRUCTED WITHOUT STEPS.
- PIPE CONNECTIONS TO EXISTING CONCRETE PIPE MAINS SHALL BE MADE IN ACCORDANCE WITH DETAILS CALLED OUT ON THE PLANS. CONNECTION TO MAINS SHALL NOT BE CLOSER THAN 5', CENTER TO CENTER.
- PIPE CONNECTIONS TO NEW PRECAST CONCRETE PIPE MAINS SHALL BE MADE WITH FACTORY MADE WYES OR TEES. THE DETAIL OF THE FITTINGS MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO MANUFACTURE. PIPE CONNECTIONS TO NEW CAST IN PLACE CONCRETE PIPE MAINS SHALL BE MADE PER C.O.P. DETAIL P1576.
- CATCH BASIN CONNECTOR PIPES SHALL BE LAID ON A STRAIGHT ALIGNMENT AND SLOPE UNLESS OTHERWISE SPECIFIED. IF BREAKS IN ALIGNMENT OR SLOPE ARE NECESSARY TO MEET FIELD CONDITIONS, THE MAXIMUM DEFLECTION SHALL BE 22-1/2". THE BEND SHALL BE COLLARED ACCORDING TO C.O.P. DETAIL P1505. ANY ANGLE BENDS GREATER THAN 22-1/2" SHALL BE PREFABRICATED.
- CONNECTOR PIPES SHALL CONNECT TO CATCH BASIN WALLS AT AN ANGLE NOT TO EXCEED 22-1/2" FROM PERPENDICULAR.
- FACILITIES WHICH ARE NOT SPECIFICALLY LOCATED WITH ACTUAL VERTICAL AND HORIZONTAL CONTROLS, ARE LOCATED ONLY APPROXIMATELY AND TO THE BEST AVAILABLE INFORMATION PROVIDED BY VARIOUS OWNERS OF THE FACILITIES, AND SUPPLEMENTED BY VISUAL SURFACE INFORMATION WHERE APPROPRIATE. ACCURACY, LOCATION AND COMPLETENESS OF THIS INFORMATION SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO INITIATION OF CONSTRUCTION.
- AT LEAST TWO WORKING DAYS BEFORE CONSTRUCTION, THE CONTRACTOR SHALL CONTACT BLUESTAKE TO FIND AND FLAG UNDERGROUND UTILITIES. THE CONTRACTOR SHALL CONTACT OTHER APPROPRIATE UTILITIES DIRECTLY IF THEY ARE NOT ON BLUESTAKE SYSTEM.
- VERTICAL CONTROL IS BASED ON NATIONAL GEODETIC SURVEY.
- UNLESS OTHERWISE NOTED, STATIONS SHOWN ON PIPE PROFILES ARE ALONG CENTERLINE OF PIPE.
- UNLESS OTHERWISE NOTED, PIPE SHALL BE BEDDED AND BACKFILLED IN ACCORDANCE WITH CITY OF PHOENIX DETAIL P1200 AND MAG SECTION 601.
- CATCH BASINS ARE STATIONED PERPENDICULAR TO THE CENTERLINE OF THE STREET AT THE CENTERLINE OF THE MAINTENANCE BASIN.
- SANITARY SEWER MAINS AND TAPS CROSSING OVER STORM DRAIN MAINS SHALL BE SUPPORTED PER M.A.G. DETAIL 403-1, 403-2, OR 403-3.
- ALL EXISTING PRECAST CONCRETE SAFETY CURBS AND ALL EXISTING WOODEN PARKING CURBS, WHICH ARE INSIDE THE RIGHT OF WAY AND APPROXIMATELY PARALLEL TO THE NEW CURB LINE, SHALL BE RESET ON THE RIGHT OF WAY DIRECTLY OPPOSITE THEIR EXISTING LOCATION, WITH THE BACK EDGE ON THE RIGHT OF WAY LINE. ALL OTHER PRECAST CONCRETE SAFETY CURBS INSIDE THE STREET RIGHT OF WAY SHALL BE SALVAGED AND STOCK PILED FOR THE OWNER AT THE RIGHT OF WAY LINE.
- EXISTING PRECAST CONCRETE SAFETY CURBS OUTSIDE THE RIGHT OF WAY, WHICH ARE DISTURBED BY NEW CONSTRUCTION SHALL BE RESET IN THEIR ORIGINAL POSITION BY THE CONTRACTOR.
- ALL EXISTING DRIVEWAYS AND ALL EXISTING ALLEYS SHALL BE GRADED TO MATCH THE NEW WORK IN ACCORDANCE WITH STD. DETAIL P1164, UNLESS OTHERWISE SPECIFIED. EXISTING SURFACING SHALL BE REMOVED AND REPLACED AS NECESSARY.

STRUCTURAL NOTES

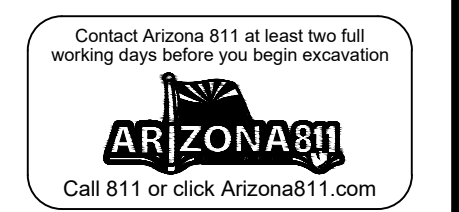
"CLEAR" DIMENSIONS FOR DEPTH OF REINFORCING STEEL ARE FROM FACE OF CONCRETE TO FACE OF BARS.

ALL EXPOSED EDGES OF CONCRETE SHALL BE BEVELED OR ROUNDED.

ALL EXPOSED CONCRETE SURFACES SHALL BE FINISHED IN ACCORDANCE WITH ARIZONA DEPT. OF TRANSPORTATION STANDARD SPECIFICATION 601-3.05 - FINISHING CONCRETE, UNLESS OTHERWISE SPECIFIED.

ABBREVIATIONS

DWY	DRIVEWAY
TCE	TEMPORARY CONSTRUCTION EASEMENT
PUE	PUBLIC UTILITY EASEMENT
BC	BRASS CAP
HH	HANDHOLE
MH	MANHOLE
CB	CATCH BASIN
R/W	RIGHT OF WAY
EX, EXST	EXISTING
BCR	BEGIN CURB RETURN
ECR	END CURB RETURN
GB	GRADE BREAK
TC	TOP OF CURB
G	GUTTER
P	PAVEMENT
S	SAWCUT 2' MIN
SL	EXISTING ROADWAY LIGHT TO REMAIN



"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."

LEGEND AND GENERAL NOTES

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

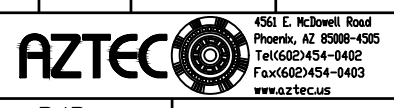
DR: RJR	DES: RJR	CK: G.G.	DWG. NO. G-1.02
DATE: 04/20	DATE: 04/20	DATE: 04/20	
SCALE: NONE			2 OF 95

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

FINAL
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	3	95	

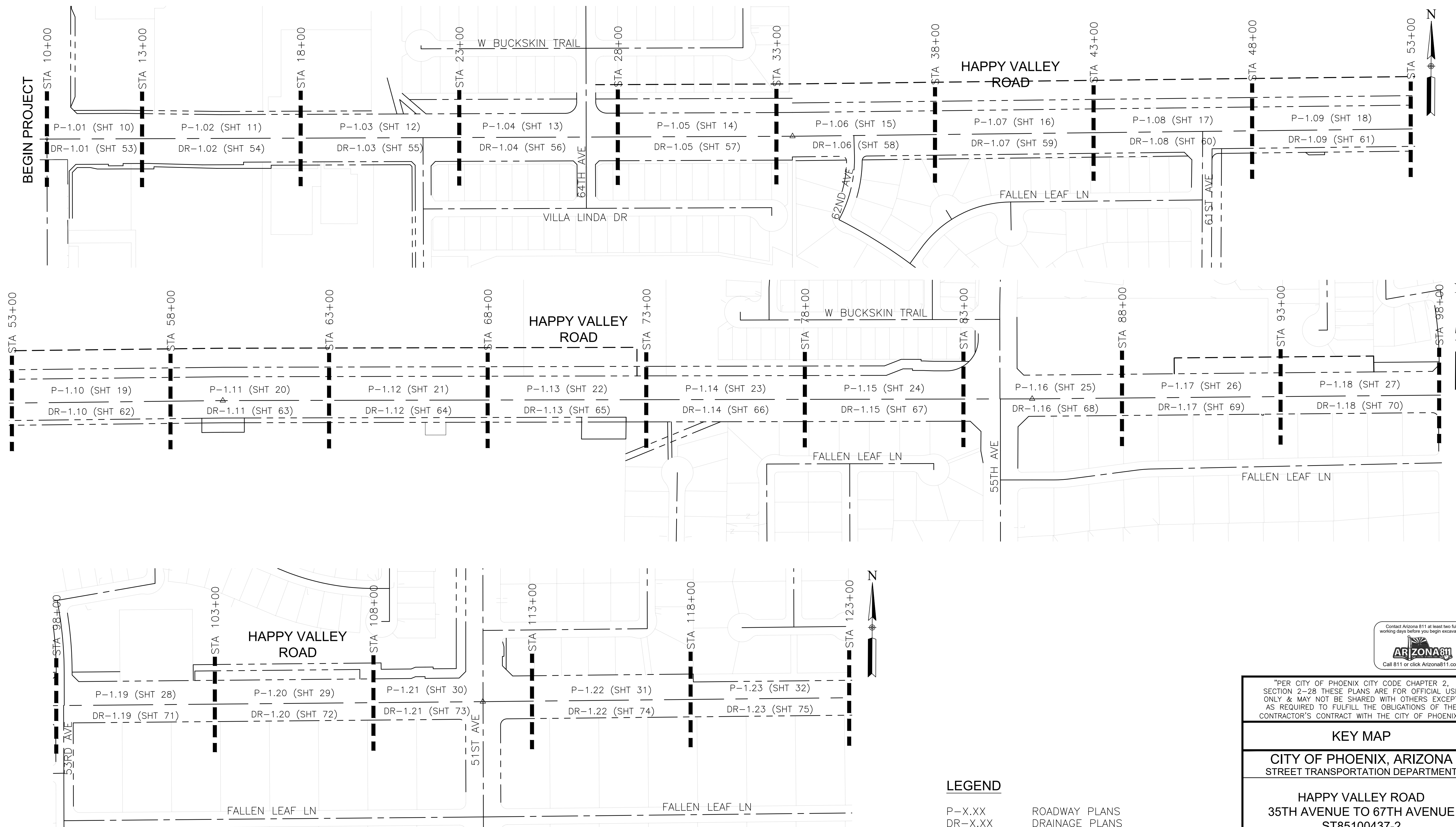
DATE: 04/20
DRAWN: RJR DESIGN: RJR CHECKED: G.G.



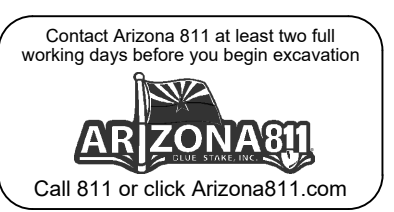
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



LEGEND
P-X.XX ROADWAY PLANS
DR-X.XX DRAINAGE PLANS



"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."

KEY MAP
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CHK: G.G.	DWG. NO. G-1.03
DATE: 04/20	DATE: 04/20	DATE: 04/20	3 OF 95
SCALE: 1"=150'			

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

FINAL
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	4	95	

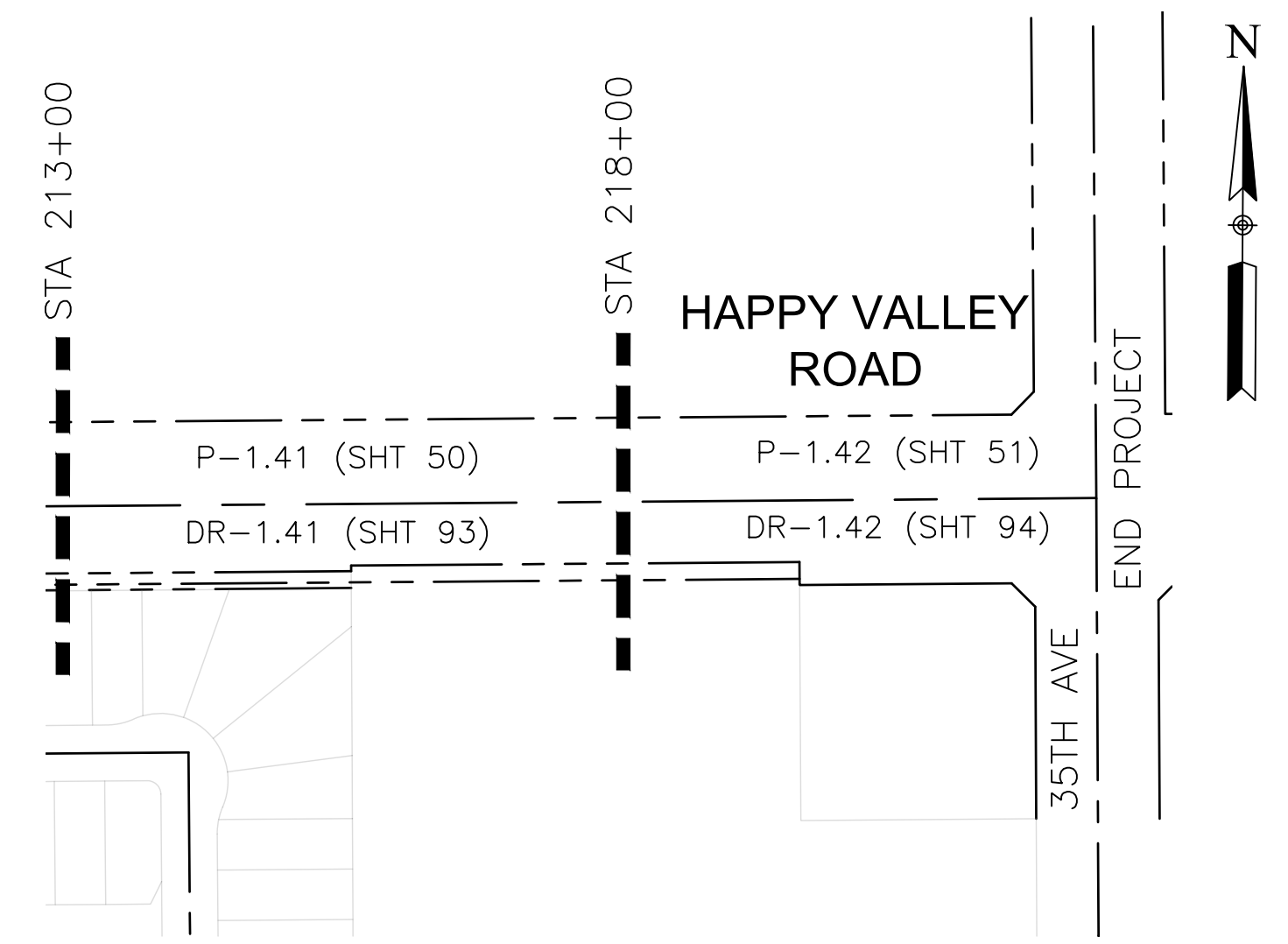
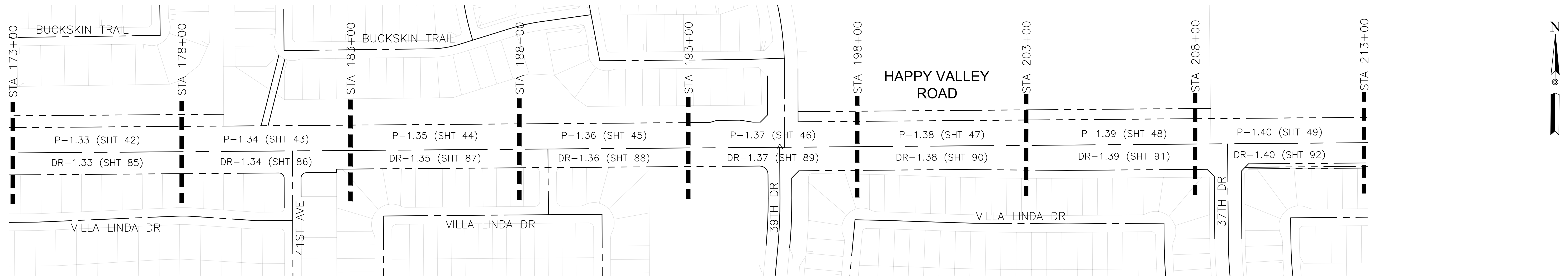
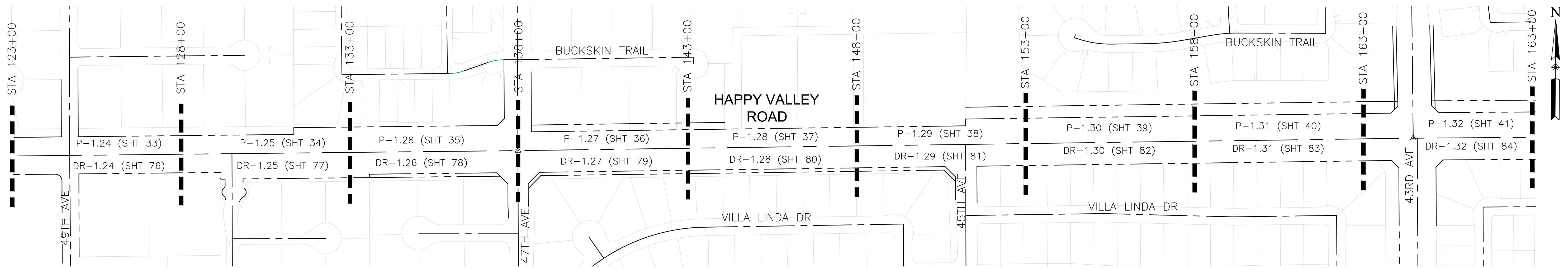
04/20
DATE: 04/20
DRAWN: RJR DESIGN: RJR CHECKED: G.G.

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NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



LEGEND
P-X.XX ROADWAY PLANS
DR-X.XX DRAINAGE PLANS

Arizona 811
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."


KEY MAP
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR DES: RJR CK: G.G. DWG. NO. G-1.04
DATE: 04/20 DATE: 04/20 DATE: 04/20
SCALE: 1"=150' 4 OF 95

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

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	6	95	

04/20				
DATE:				
DRAWN: RJR	DESIGN: RJR	CHECKED: G.G.		

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 OR RECORDING

QUANTITY SUMMARY

ITEM No.	DESCRIPTION	UNIT	SHEET NUMBERS																										TOTAL QTY	
			P-1.31	P-1.32	P-1.33	P-1.34	P-1.35	P-1.36	P-1.37	P-1.38	P-1.39	P-1.40	P-1.41	P-1.42	DR-1.06	DR-1.07	DR-1.08	DR-1.09	DR-1.10	DR-1.11	DR-1.12	DR-1.13	DR-1.19	DR-1.21	DR-1.22	DR-1.23	DR-1.24	DR-1.25		DR-1.40
M2152001	CHANNEL EXCAVATION	CY														1036	998	1130	1516	1633	1989	1335						24		9,661
M2200007	RIP RAP, D50=6", T=1'	CY														228	216	235	352	386	454	275							1	2146
M2200012	RIP RAP, D50=12", T=2'	CY														60		21											1	83
M2205005	REPLACE GROUTED RIPRAP PER MAG SECTION 220	SF																									54		54	
M2205010	SAWCUT AND REMOVE GROUTED RIPRAP	SF																									26		26	
M30000050	ASPHALT CONCRETE PAVEMENT MILLING	SY	4297	5257	4099	4566	4406	4611	4941	4691	4504	4535	4745	4725															183,370	
M3010001	SUBGRADE PREPARATION	SY	404	77	670	382	907	689	552			486	370	188															37,443	
M3210117	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	236	289	225	251	242	254	272	258	248	249	261	260															10,086	
M3210325	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	56	11	92	53	125	95	76			67	51	26															5,172	
M3210350	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	112	21	186	106	252	192	153			135	103	52															10,372	
M3290100	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	1.17	1.33	1.19	1.24	1.33	1.32	1.38	1.17	1.26	1.25	1.28	1.23															46.09	
M3400000	CONCRETE MEDIAN NOSE	SF	20		20	38	21	17	35			17	34	19															915	
M3400009	DECORATIVE BRICK PAVERS	SF	166		157	260	418	218	358			278	544																12,949	
M3400240	CONCRETE VALLEY GUTTER & APRON, MAG STD DETAIL 240	SF				490																							2,282	
M3400400	CONCRETE SIDEWALK, COP STD DETAIL P1230	SF	2211	217	3215	466	2500	3128	1767			3220	3731	1889															89,550	
M3400415	TRUNCATED DOMES FOR SIDEWALK RAMPS, STD DETAIL P1232	SF																												
M3400485	CONCRETE CURB RAMP, STD DETAILS P1233, P1234, P1236, P1237, P1238, P1239, P1240, OR P1241 (6" INCH)	SF		2606		934		831	1264			2086		2567															25,728	
M3400492	CONCRETE SIDEWALK RAMP, COP STD DETAIL P1241-2	SF				564		564																					3,912	
M3400553	CONCRETE DRIVEWAY ENTRANCE, COP STD DETAIL P1244	SF																											1,093	
M3400556	CONCRETE DRIVEWAY ENTRANCE, COP STD DETAIL P1255-2	SF																											2,432	
M3401262	PARKWAY BUS SHELTER/ACCESSORY PAD, COP STD DETAIL P1262	SF				1242			568		555	693																	11,859	
M3402201	CONCRETE CURB & GUTTER, MAG STD DETAIL 220, TYPE A, H=6"	LF		325		260		134	106			575	454	286															12,031	
M3402221	CONCRETE SINGLE CURB, STD DETAIL 222, TYPE "A"	LF	591		988	533	988	592	291			592	579																24,118	
M3450020	ADJUST EX MANHOLE FRAME & COVER, MAG STD DET 422 & COP DET P1430	EA		3	2	1			1		1	3		4															43	
M3453006	ADJUST EX UTILITY VALVE, MAG STD DET 391-1 & 391-2	EA																											3	
M3453008	ADJUST WATER VALVE, TYPE "A", COP STD DET P1391 & P1391-1	EA	1	5	1	5	1	2	5			2	2	12															131	
M3500010	REMOVE PORTLAND CEMENT CONCRETE SINGLE CURB, CURB & GUTTER, HEADER CURB OR EMBANKMENT CURB	LF		231		252		132	219			205	62	270															3552	
M3500020	REMOVE PORTLAND CEMENT CONCRETE SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SF	2157	1887	1446	2270	2485	4173	3971		228	3066	1419	4635															66,411	
M3500036	REMOVE CATCH BASIN, BACKFILL & COMPACT	EA																											1	
M3400037	REMOVE HEADWALL	EA																											12	
M3400040	REMOVE PIPE, BACKFILL & COMPACT	LF																											166	
M3400041	REMOVE PIPE	LF																											102	
M3500060	REMOVE ASPHALT CONCRETE PAVEMENT	SY	404	77	672	401	907	510	161			486	370	186																
M4258008	GRAVEL MULCH, 4" THICK	SY																											9	
M4304007	DECOMPOSED GRANITE, STABILIZED FOR MULTIPURPOSE TRAIL, 1/4" MINUS, 4" THICK	SF																											42,759	
M5052062	CONCRETE SCUPPER, MAG STANDARD DETAIL 206	EA														6	3											1	10	
M5052063	CONCRETE SCUPPER, MAG STANDARD DETAIL 206, MODIFIED	EA																											1	
M5055014	HEADWALL FOR 4-30" PIPE, MAG STANDARD DETAIL 501-1 AND 501-2	EA																											2	
M6180030	30" STORM SEWER PIPE	LF																											760	
M6181015	15" CATCH BASIN CONNECTOR PIPE	LF																											41	
M6210012	12" C.M.P.	LF																										20	20	

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QUANTITY SUMMARY
 CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT
 HAPPY VALLEY ROAD
 35TH AVENUE TO 67TH AVENUE
 ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. G-2.02
DATE: 04/20/20	DATE: 04/20/20	DATE: 04/20	
SCALE: NONE			6 OF 95

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

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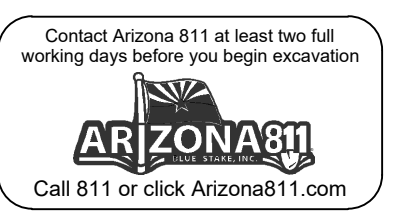
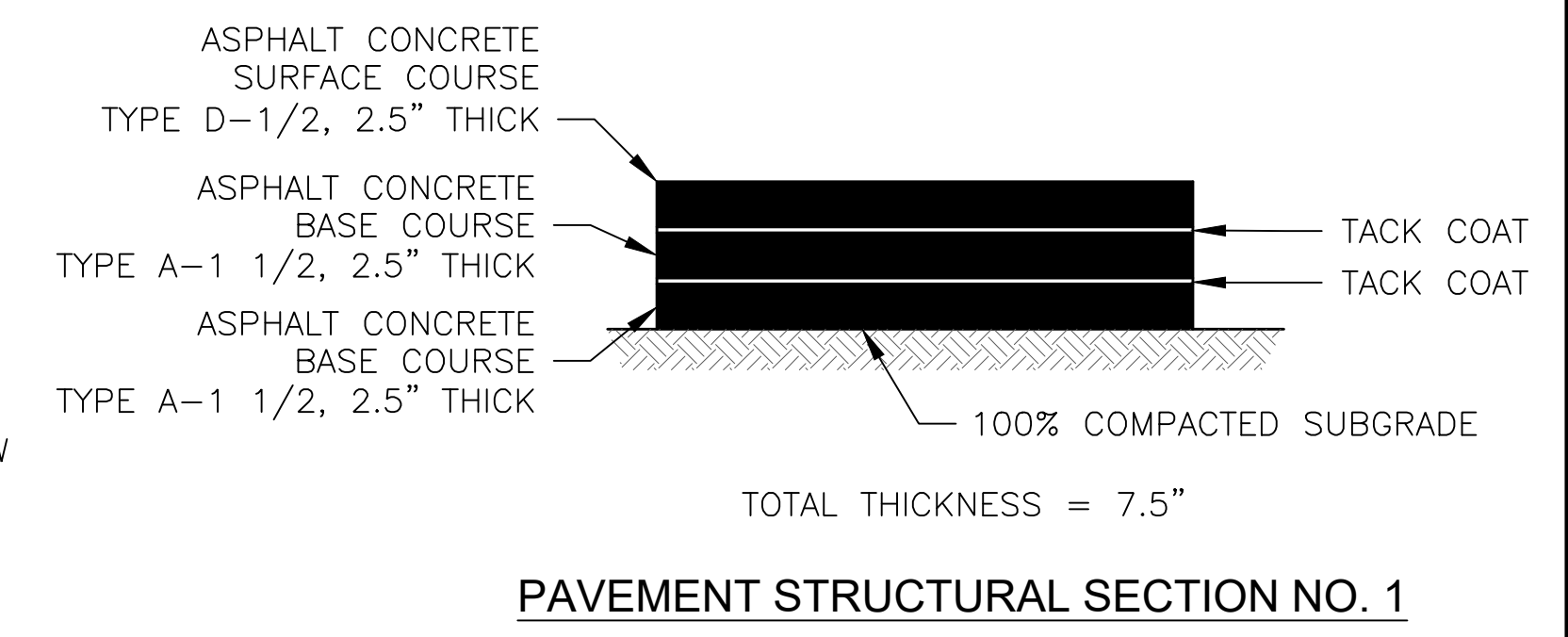
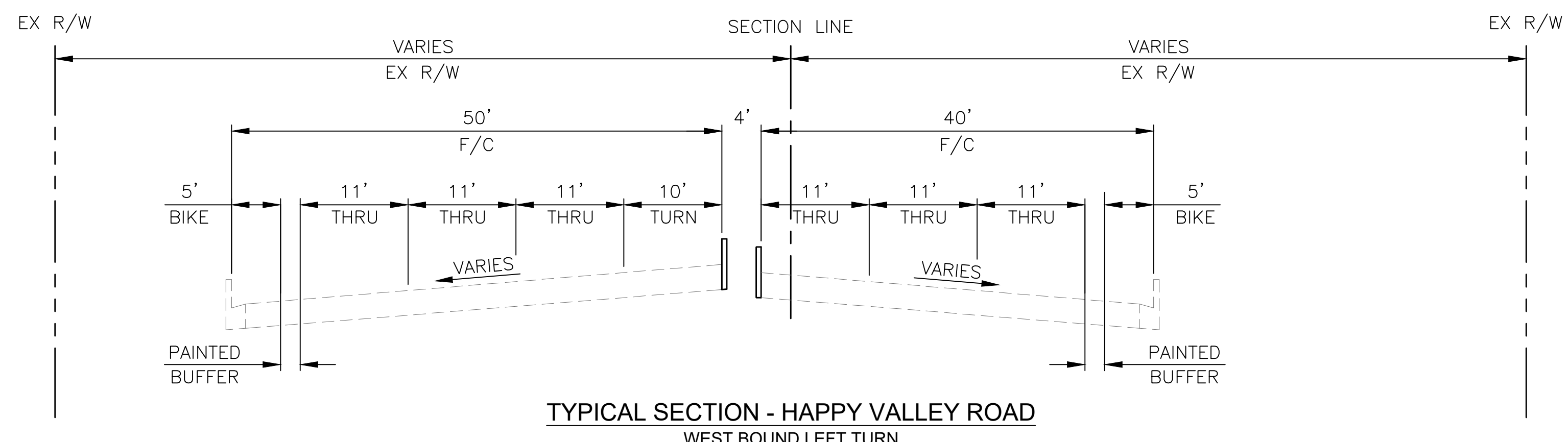
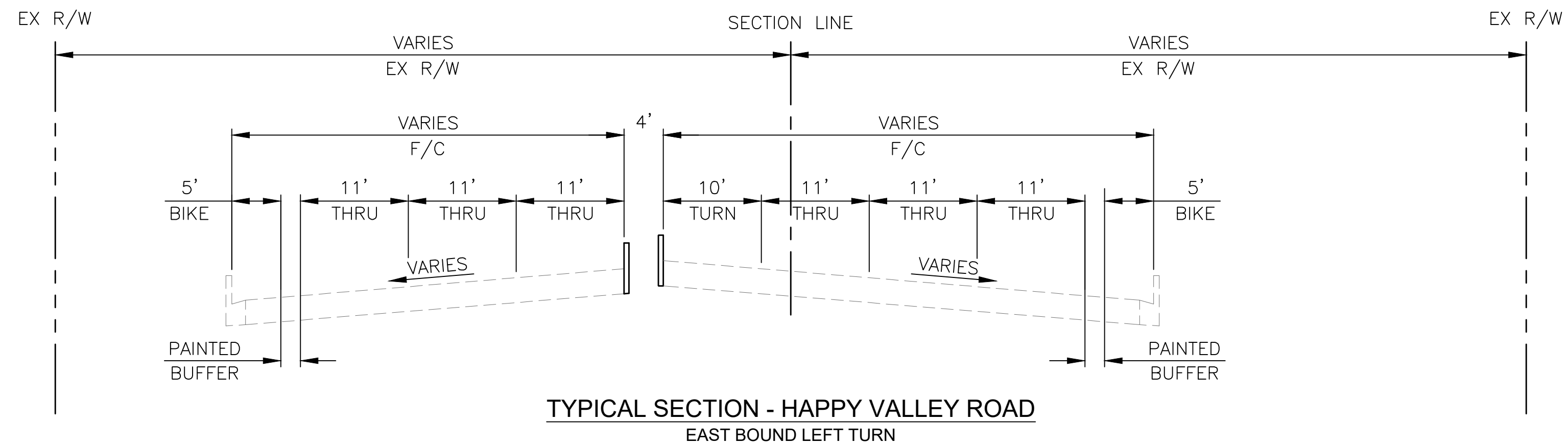
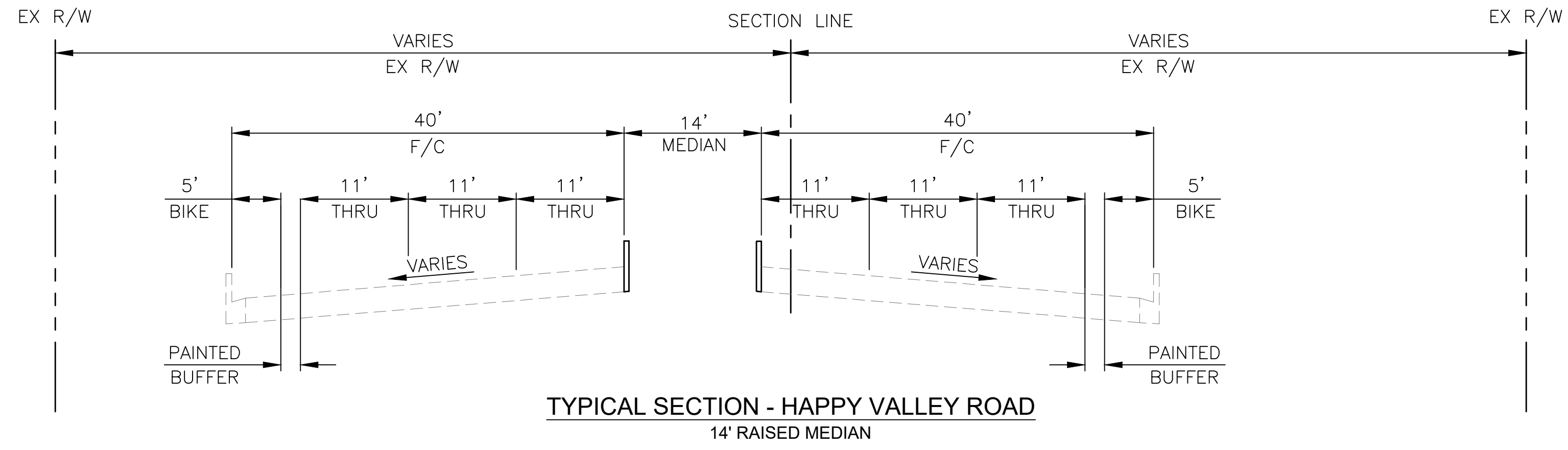
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	7	95	

DATE: 04/20
DRAWN: RJR DESIGN: RJR CHECKED: G.G.

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



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TYPICAL SECTIONS	
CITY OF PHOENIX, ARIZONA STREET TRANSPORTATION DEPARTMENT	
HAPPY VALLEY ROAD 35TH AVENUE TO 67TH AVENUE ST85100437-2	
DR: RJR DES: RJR CK: G.G. DATE: 04/20/20 DATE: 04/20/20 DATE: 04/20/20	DWG. NO. G-3.01 SCALE: 1"=10' 7 OF 95

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

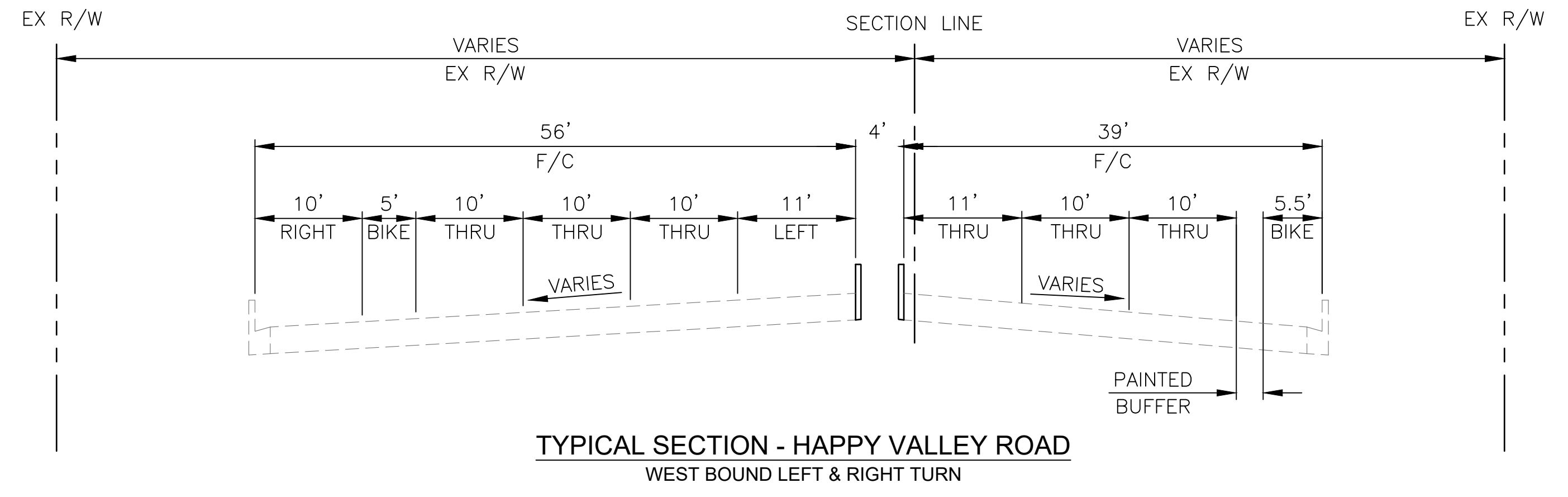
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F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	8	95	
DATE: 04/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

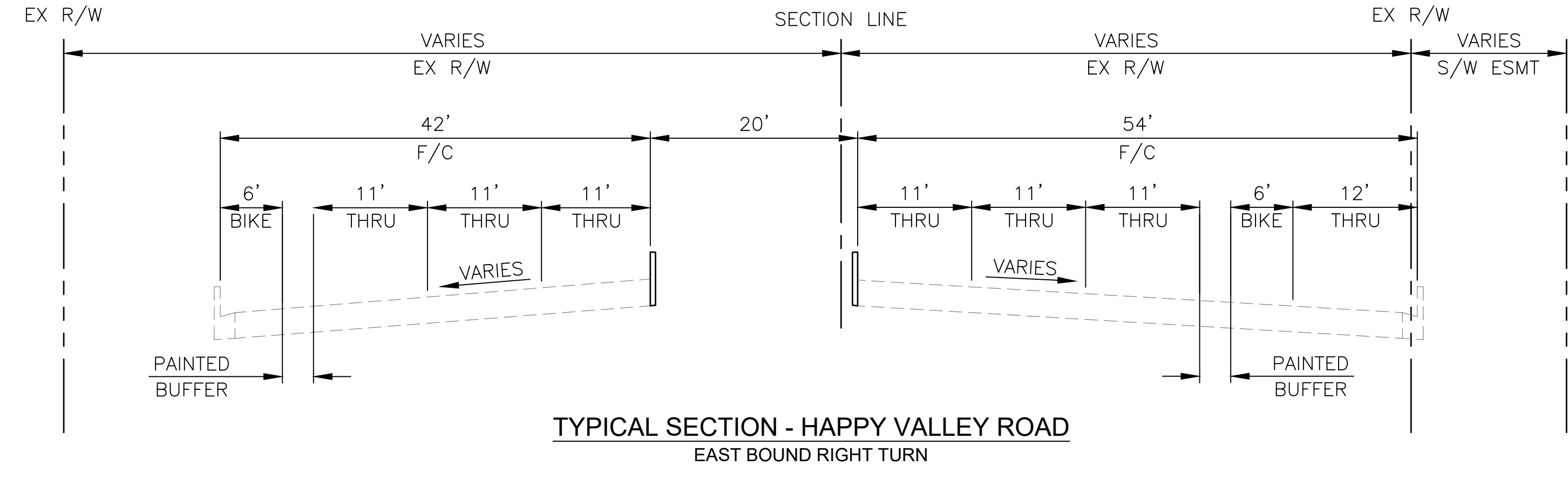
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NO.	DESCRIPTION	REV BY	CHK BY	DATE

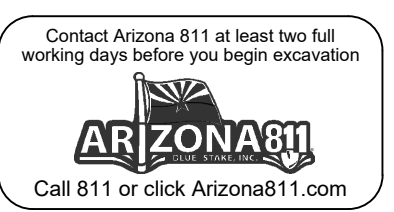
NO.	DESCRIPTION	REV BY	CHK BY	DATE



TYPICAL SECTION - HAPPY VALLEY ROAD
WEST BOUND LEFT & RIGHT TURN



TYPICAL SECTION - HAPPY VALLEY ROAD
EAST BOUND RIGHT TURN



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TYPICAL SECTIONS

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

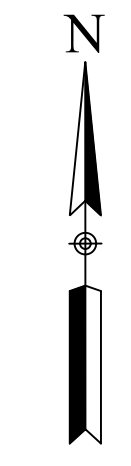
HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CHK: G.G.	DWG. NO. G-3.01
DATE: 04/20	DATE: 04/20	DATE: 04/20	8 OF 95
SCALE: 1"=10'			

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

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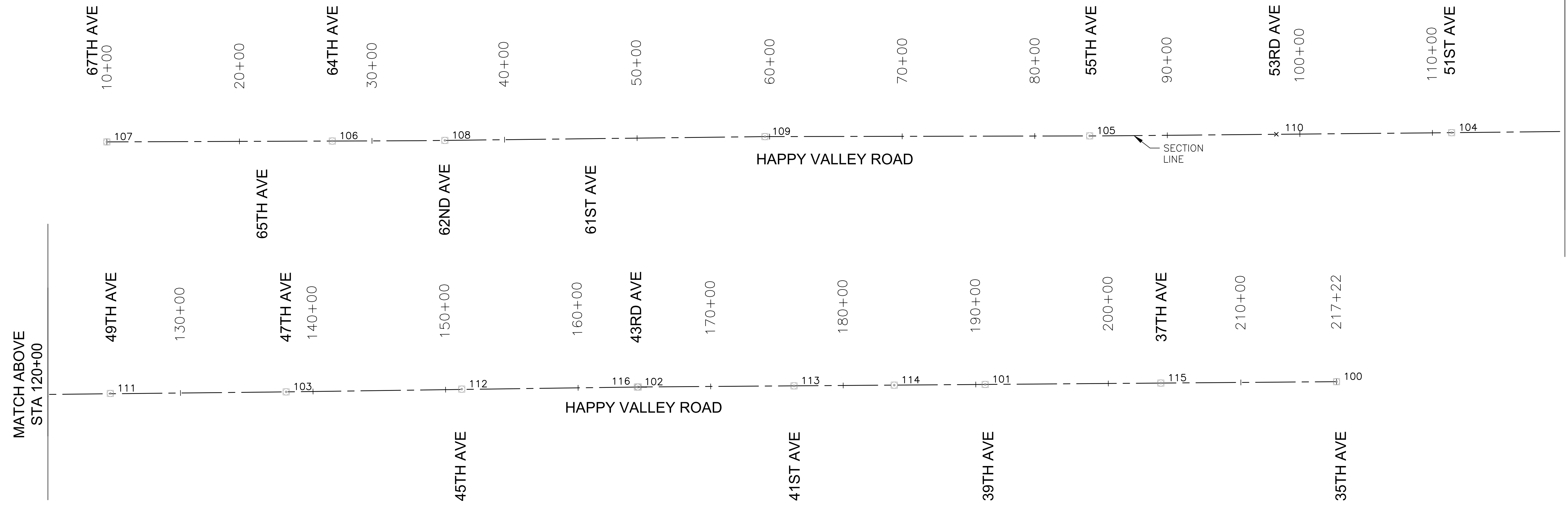
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	9	95	
DATE: 04/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		



NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
100	987122.3105	633705.6496	1422.62	BCHH HVR@35AVE*
101	987101.4939	631054.7541	1405.63	BCFL HVR@39DR
102	987082.2680	628438.1470	1397.42	BCHH HVR@43AVE EAST
103	987045.3796	625781.4800	1410.84	BCHH HVR@47AVE*
104	987017.0739	623129.3997	1419.83	BCHH HVR@51AVE*
105	986992.8429	620399.0833	1419.77	BCHH HVR@55AVE*
106	986954.1172	614685.4787	1381.30	BCHH HVR@64AVE
107	986947.5921	612984.7904	1379.87	BCHH HVR@67AVE
108	986958.9560	615534.5584	1387.50	BCFL HVR@62AVE
109	986987.4391	617949.5411	1410.39	BCHH HVR@GCC NORTH
111	987033.6763	624455.0503	1417.96	BCFL HVR@49AVE
112	987066.2300	627106.2711	1403.03	BCFL HVR@45AVE
113	987090.7962	629612.8996	1398.43	BCFL HVR@41AVE
114	987096.2677	630368.8829	1401.26	BCFL HVR@40DR
115	987111.9840	632380.0554	1412.70	BCFL HVR@37DR
116	987082.1455	628431.0246	1397.57	BCHH HVR@43AVE WEST

CONTROL NOTE:

THE HORIZONTAL DATUM IS NAD83(HARN) STATE PLANE, ARIZONA CENTRAL ZONE, ADJUSTED FROM GRID TO GROUND USING A COMBINED SCALE FACTOR OF 1.00016, WITH A SCALE ORIGIN POINT OF X=0.00, Y=0.00.

THE BASIS OF BEARINGS IS GRID NORTH NAD 83 STATE PLANE, ARIZONA CENTRAL ZONE.

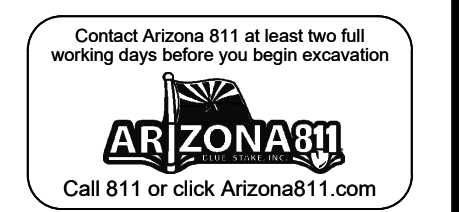
ELEVATIONS ARE ON THE NGVD29 VERTICAL DATUM.

PRIMARY BENCHMARKS FOR THE PROJECT ARE AS FOLLOWS:

C.O.P BM 1516: FD 3" PHOENIX BC IN HH 0.4' DN NO STAMPING (INTERSECTION OF HAPPY VALLEY & 35TH AVE)
ELEV: 1422.62 (NAD83 DATUM)

C.O.P BM 1507: FD 3" PHOENIX BC IN HH 0.2' DN NO STAMPING (INTERSECTION OF HAPPY VALLY & 47TH AVE)
ELEV: 1410.84 (NAD83 DATUM)

C.O.P BM 1438: FD 3" PHOENIX BC IN HH 0.45' DN NO STAMPING (INTERSECTION OF HAPPY VALLEY & 55TH AVE)
ELEV: 1419.77 (NAD83 DATUM)



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GEOMETRIC LAYOUT

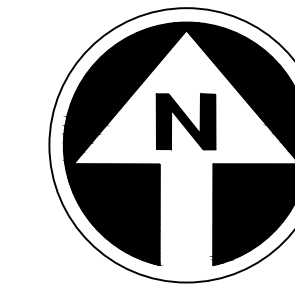
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR | DES: RJR | CK: G.G. | DWG. NO. G-4.01
DATE: 04/20 | DATE: 04/20 | DATE: 04/20
SCALE: 1"=400'

9 OF 95

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



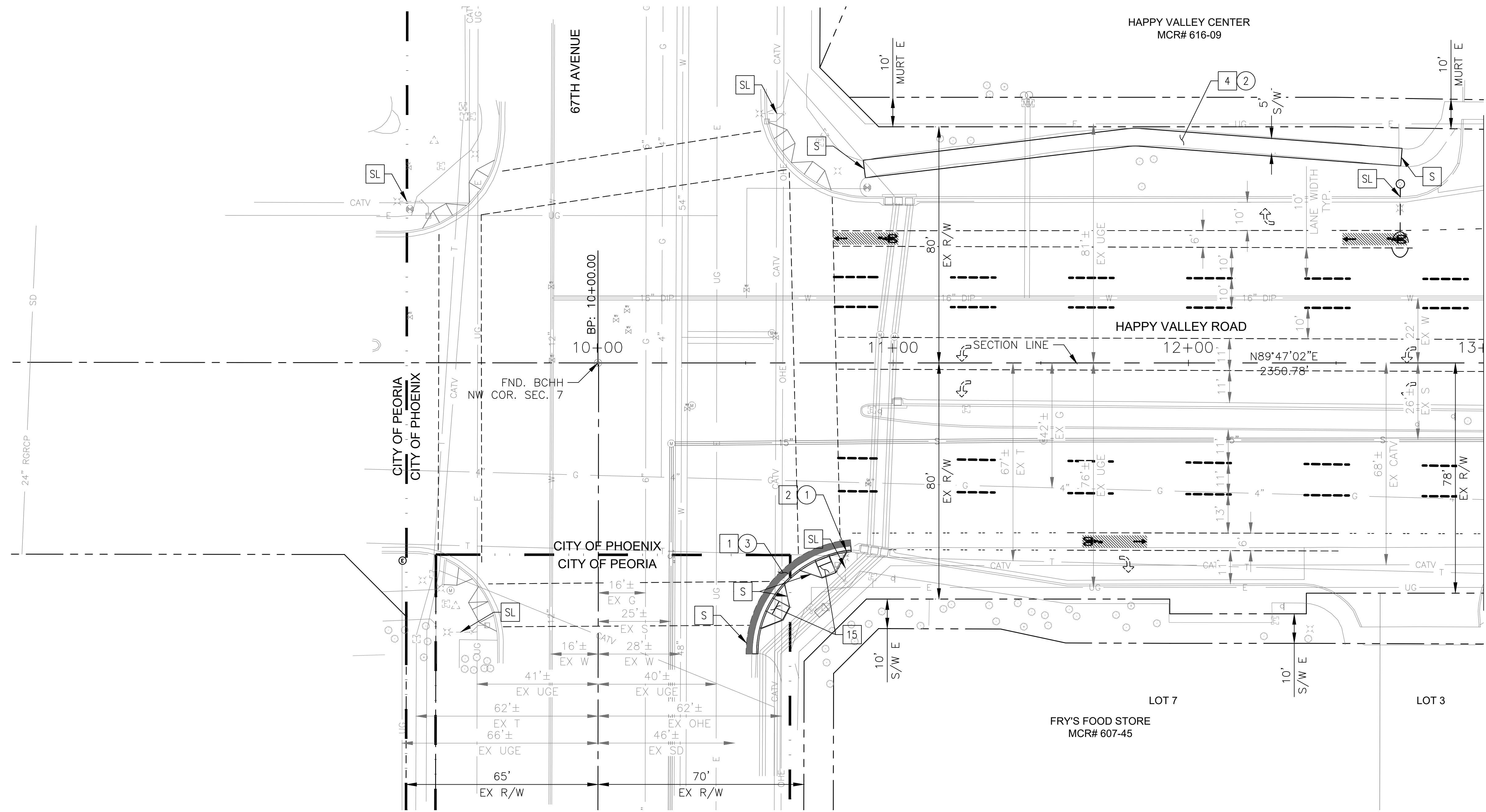
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F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	10	95	
DATE: 04/20		AZTEC			
DRAWN: RJR	DESIGN: RJR	CHECKED: G.G.			

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

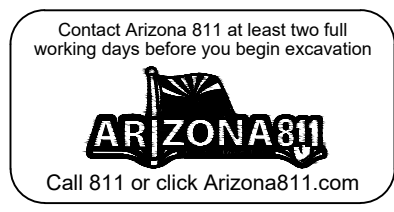
NO.	DESCRIPTION	REV BY	CHK BY	DATE



MATCH LINE STA 13+00 SEE SHEET 11

CONSTRUCTION NOTES		
NO	DESCRIPTION	UNIT QTY
PAVEMENT STRUCTURAL SECTION NO. 1		
1	SUBGRADE PREPARATION	SY 13
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON 1.8
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON 3.6
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON 0.01
2	CONCRETE CURB & GUTTER MAG STD DET 220, TYPE A, H=6"	LF 54
4	CONCRETE SIDEWALK, COP STD DET P1230	SF 1097
15	CONCRETE CURB RAMP, COP STD DET P1236	SF 134

REMOVAL/RELOCATION		
NO	DESCRIPTION	UNIT QTY
1	REMOVE PCC SINGLE CURB, CURB & GUTTER	LF 53
2	REMOVE PCC SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SF 1213
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY 13



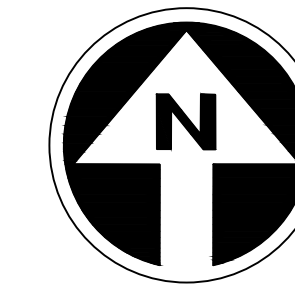
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ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.01
DATE: 04/20	DATE: 04/20	DATE: 04/20	
SCALE: 1"=20' HORIZ.			10 OF 95

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



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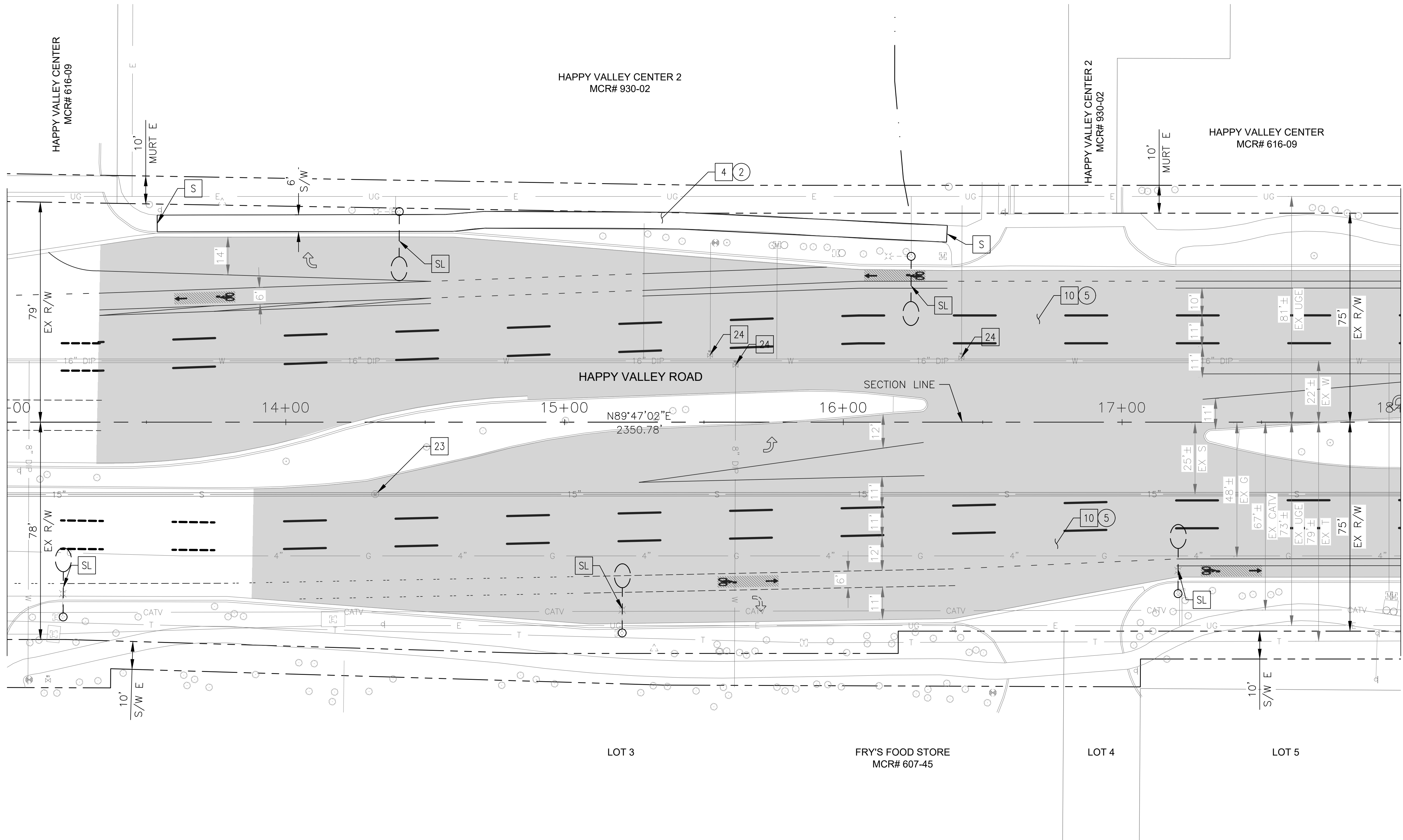
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	11	95	
DATE: 04/20		AZTEC			
DRAWN: RJR	DESIGN: RJR	CHECKED: G.G.			

CONSTRUCTION NOTES				
NO	DESCRIPTION	UNIT	QTY	
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	1706	
10	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	341	
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	1.43	
23	ADJUST EX MANHOLE FRAME & COVER, MAG STD DET 422 & P1430	EA	1	
24	ADJUST WATER VALVE, TYPE "A", COP STD DET P1391 & P1391-1	EA	3	

REMOVAL/RELOCATION				
NO	DESCRIPTION	UNIT	QTY	
2	REMOVE PCC SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SF	1686	
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SY	5701	

MATCHLINE STA 13+00 SEE SHEET 10

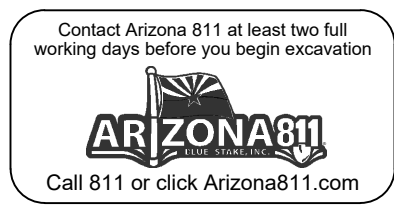
MATCHLINE STA 18+00 SEE SHEET 12



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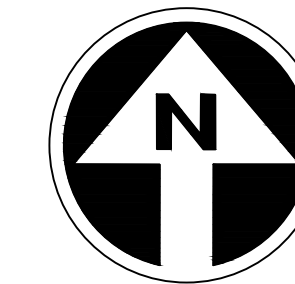
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.02
DATE: 04/20	DATE: 04/20	DATE: 04/20	SCALE: 1"=20' HORIZ.
			11 OF 95

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



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OR RECORDING

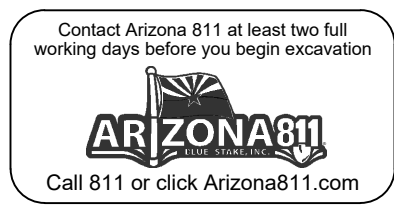
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	12	95	
DATE: 04/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
	SUBGRADE PREPARATION	SY	71
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	10
	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	20
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.02
2	CONCRETE CURB & GUTTER MAG STD DET 220, TYPE A, H=6"	LF	196
3	CONCRETE SINGLE CURB MAG STD DET 222, TYPE A	LF	117
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	290
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	18
8	INTERLOCKING CONCRETE PAVERS MAG STD DET 225	SF	308
10	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	289
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	1.31
14	CONCRETE CURB RAMP 6" THICK, COP STD DET P1236	SF	886
17	CONCRETE SIDEWALK RAMP, COP STD DET P1241-2	SF	564
23	ADJUST EX MANHOLE FRAME & COVER, MAG STD DET 422 & P1430	EA	4
24	ADJUST WATER VALVE, TYPE "A", COP STD DET P1391 & P1391-1	EA	4

REMOVAL/RELOCATION

NO	DESCRIPTION	UNIT	QTY
1	REMOVE PCC SINGLE CURB, CURB & GUTTER	LF	170
2	REMOVE PCC SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SF	1622
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	71
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SY	5248



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ROADWAY PLAN

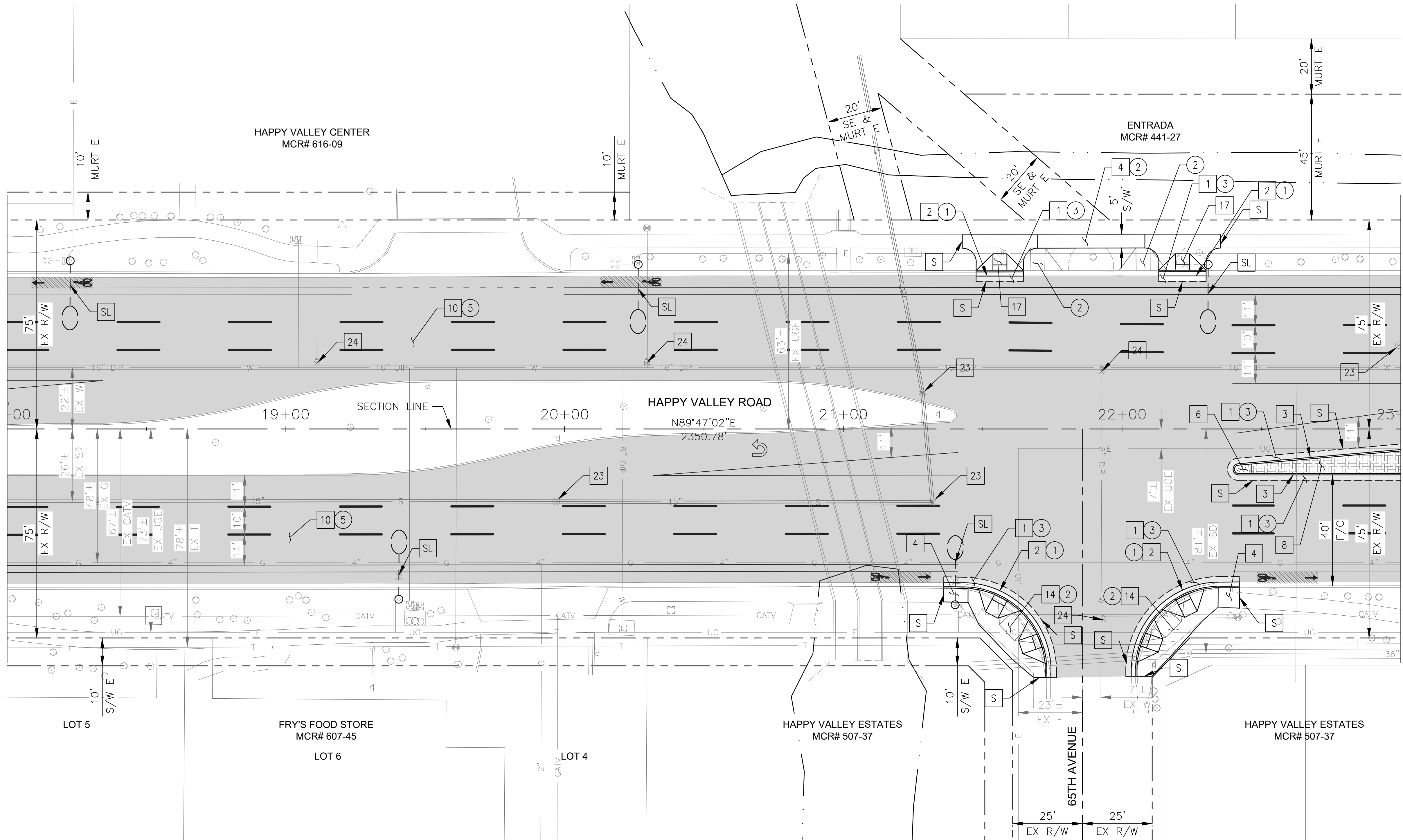
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.03
DATE: 04/20	DATE: 04/20	DATE: 04/20	
SCALE: 1"=20' HORIZ.			12 OF 95

MATCHLINE STA 18+00 SEE SHEET 11

MATCHLINE STA 23+00 SEE SHEET 13

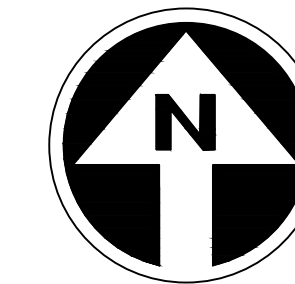


NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

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



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OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	13	95	
DATE: 04/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

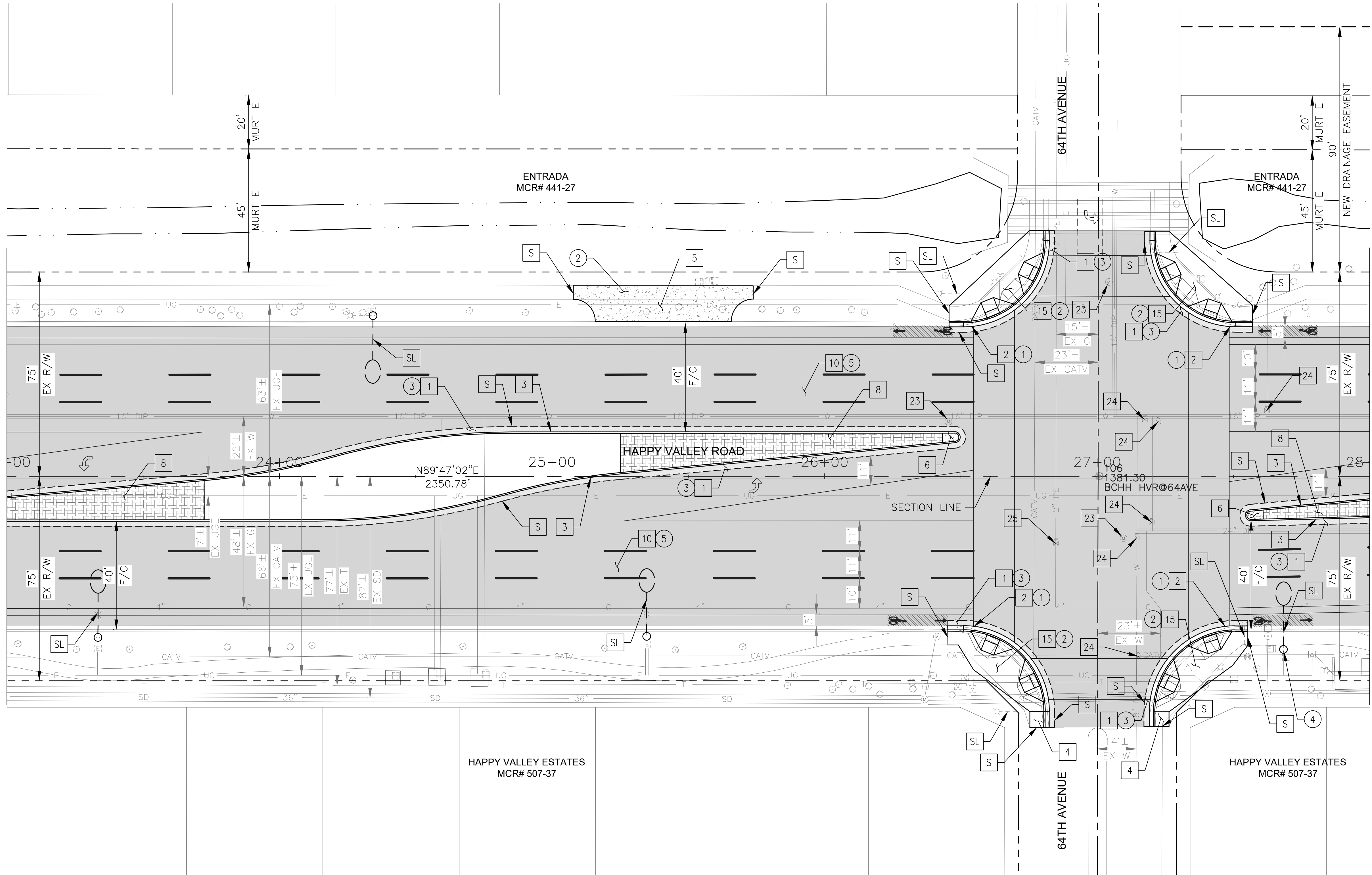
NO.	DESCRIPTION	REVISION BY	CHKD BY	DATE

NO.	DESCRIPTION	REVISION BY	CHKD BY	DATE

NO.	DESCRIPTION	REVISION BY	CHKD BY	DATE

MATCHLINE STA 23+00 SEE SHEET 12

MATCHLINE STA 28+00 SEE SHEET 14



CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	809
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	112
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	225
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.20
2	CONCRETE CURB & GUTTER, MAG STD DET 220-1, TYPE A, H=6"	LF	229
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF	769
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	58
5	BUS SHELTER/ACCESSORY PAD, COP STD DET P1262	SF	762
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	36
8	INTERLOCKING CONCRETE PAVERS, MAG STD DET. 225	SF	2051
10	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	322
15	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	1.47
15	CONCRETE CURB RAMP, COP STD DET P1236	SF	2130
23	ADJUST EX MANHOLE FRAME & COVER, MAG STD DET 422 & P1430	EA	3
24	ADJUST WATER VALVE, TYPE "A", COP STD DET P1391 & P1391-1	EA	6
25	ADJUST EX UTILITY VALVE, MAG STD DET 391-1 & 391-2	EA	1

REMOVAL/RELOCATION

NO	DESCRIPTION	UNIT	QTY
1	REMOVE PCC SINGLE CURB, CURB & GUTTER	LF	219
2	REMOVE PCC SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SF	1800
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	809
4	REMOVE AND SALVAGE LIGHT POLE	EA	1
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SY	5861



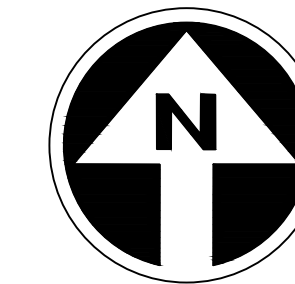
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.04
DATE: 04/20	DATE: 04/20	DATE: 04/20	SCALE: 1"=20' HORIZ.
			13 OF 95

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



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F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	14	95	
DATE: 04/20		AZTEC			
DRAWN: RJR	DESIGN: RJR	CHECKED: G.G.			

CONSTRUCTION NOTES

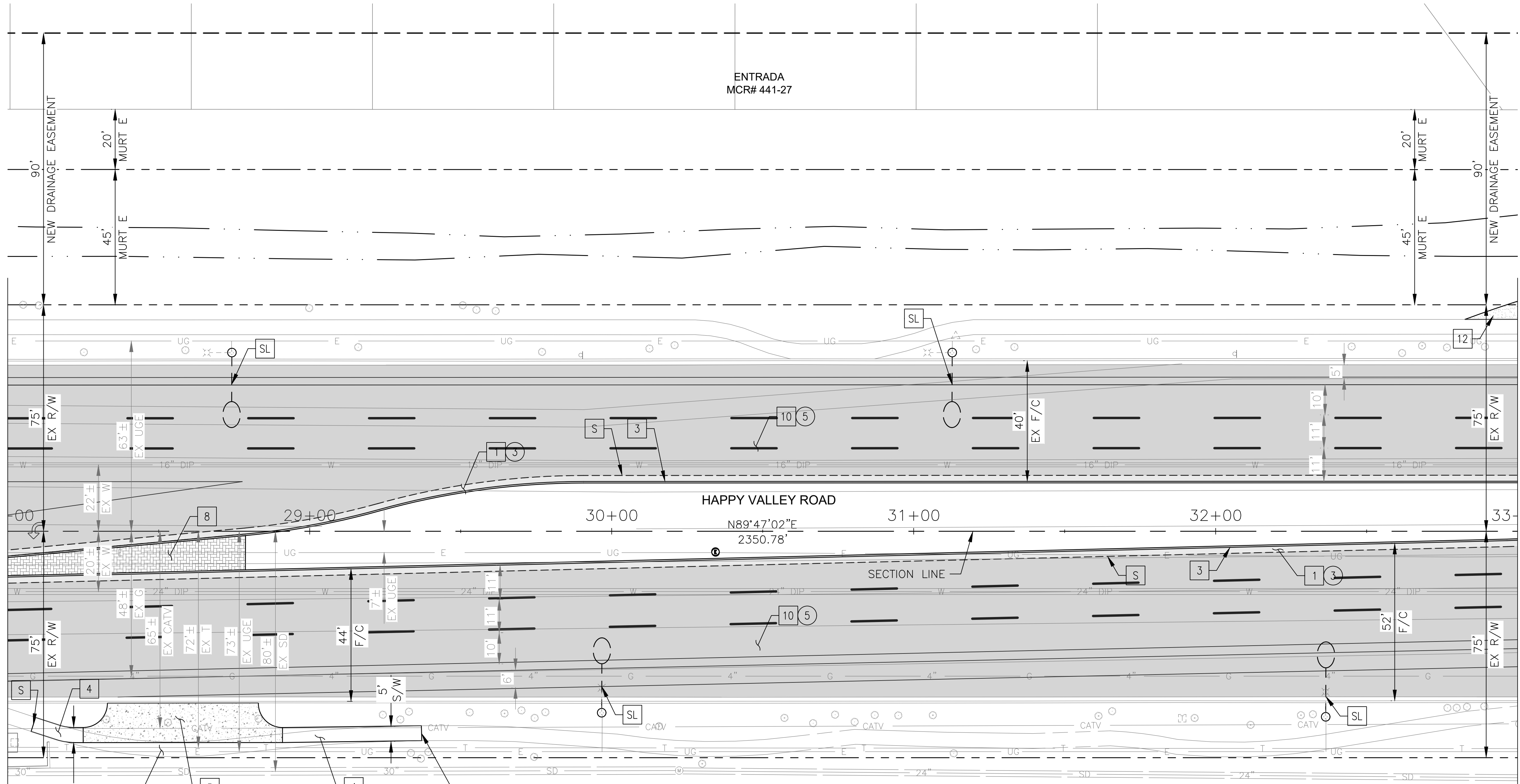
NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	1369
	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	189
	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	381
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.34
3	CONCRETE SINGLE CURB MAG STD DET 222, TYPE A	LF	1002
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	311
5	BUS SHELTER/ACCESSORY PAD COP STD DET P1262	SF	761
8	INTERLOCKING CONCRETE PAVERS MAG STD DET. 225	SF	684
10	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	273
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	1.24
12	DECOMPOSED GRANITE, STABILIZED FOR MULTIPURPOSE TRAIL, 1/4" MINUS, 4" THICK	SF	53

REMOVAL/RELOCATION

NO	DESCRIPTION	UNIT	QTY
2	REMOVE PCC SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SF	632
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	1369
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SF	4964

MATCHLINE STA 28+00 SEE SHEET 13

MATCHLINE STA 33+00 SEE SHEET 15



NO.	DESCRIPTION	REV BY	CHK BY	DATE

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NO.	DESCRIPTION	REV BY	CHK BY	DATE



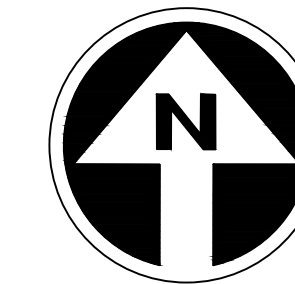
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.05
DATE: 04/20	DATE: 04/20	DATE: 04/20	14 OF 95
SCALE: 1"=20' HORIZ.			

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



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F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	15	95	
DATE: 04/20		AZTEC			
DRAWN: RJR	DESIGN: RJR	CHECKED: G.G.			

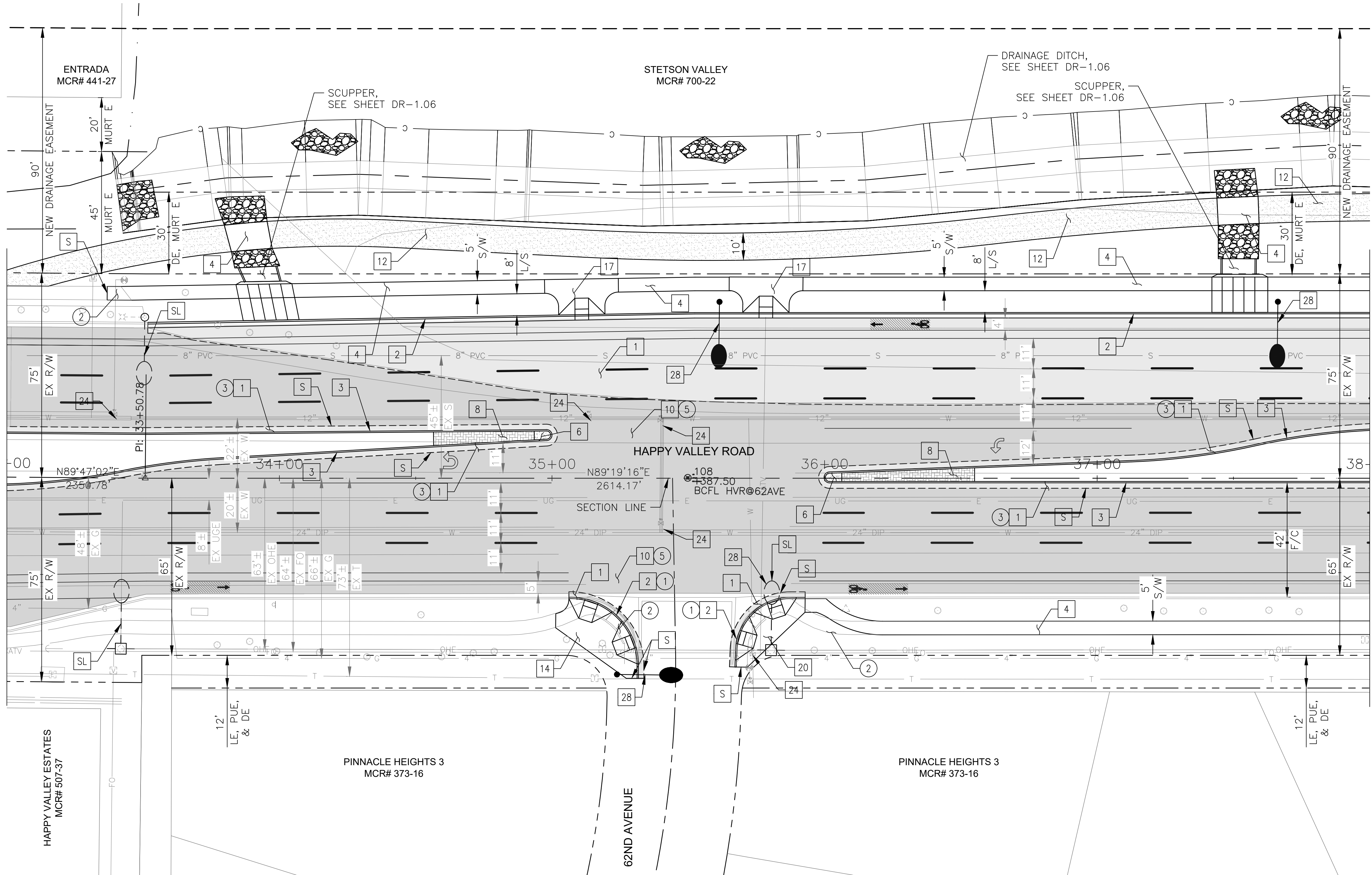
NO.	REVISION BY	DESCRIPTION	DATE

NO.	REVISION BY	DESCRIPTION	DATE

NO.	REVISION BY	DESCRIPTION	DATE

MATCHLINE STA 33+00 SEE SHEET 14

MATCHLINE STA 38+00 SEE SHEET 16



NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	1885
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	260
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	518
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.47
2	CONCRETE CURB & GUTTER, MAG STD DET 220-1, TYPE A, H=6"	LF	536
3	CONCRETE SINGLE CURB MAG STD DET 222, TYPE A	LF	776
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	3407
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	49
8	DECORATIVE BRICK PAVERS, MAG STD DET. 225	SF	351
10	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	215
10	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.98
12	DECOMPOSED GRANITE, STABILIZED FOR MULTIPURPOSE TRAIL, 1/4" MINUS, 4" THICK	SF	4692
14	CONCRETE CURB RAMP, COP STD DET P1235	SF	484
17	CONCRETE SIDEWALK RAMP, COP STD DET P1241-2	SF	564
20	CONCRETE SIDEWALK RAMP, COP STD DET P1238-2	SF	334
24	ADJUST WATER VALVE, TYPE "A", COP STD DET P1391 & P1391-1	EA	5
28	PROPOSED ROADWAY LIGHT	EA	3

REMOVAL/RELOCATION			
NO	DESCRIPTION	UNIT	QTY
1	REMOVE PCC SINGLE CURB, CURB & GUTTER	LF	79
2	REMOVE PCC SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SF	1446
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	612
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SF	3912



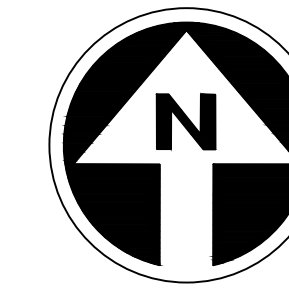
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ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.06
DATE: 04/20	DATE: 04/20	DATE: 04/20	15 OF 95
SCALE: 1"=20' HORIZ.			

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



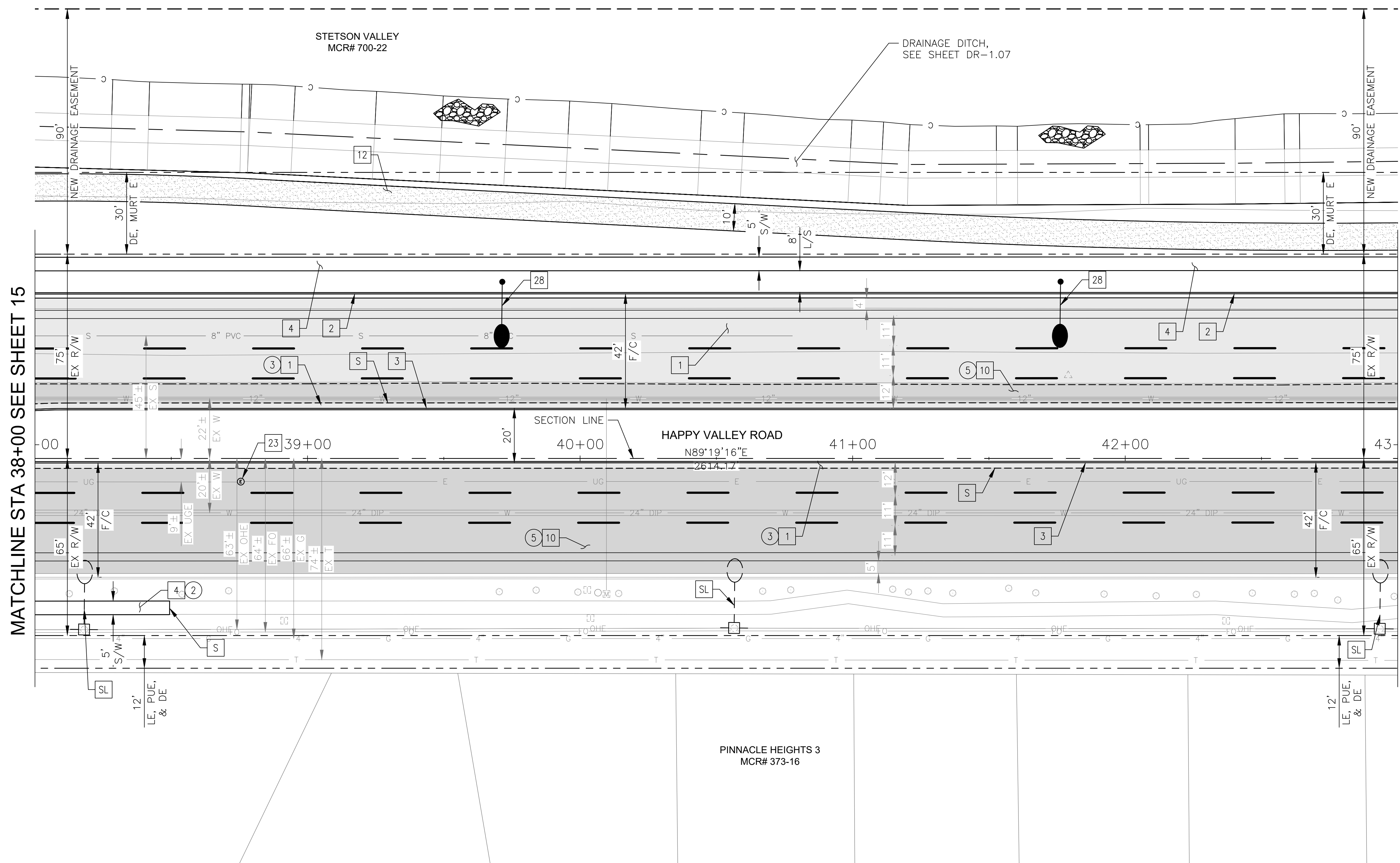
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F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	16	95	
DATE: 04/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

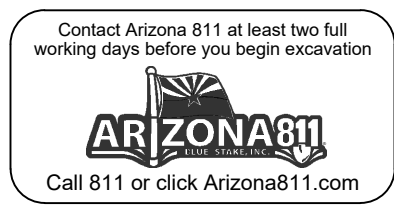


MATCHLINE STA 38+00 SEE SHEET 15

MATCH LINE STA 43+00 SEE SHEET 17

CONSTRUCTION NOTES			
NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	3062
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	426
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	850
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.77
2	CONCRETE CURB & GUTTER, MAG STD DET 220-1, TYPE A, H=6"	LF	500
3	CONCRETE SINGLE CURB MAG STD DET 222, TYPE A	LF	1000
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	2749
10	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	153
10	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.70
12	DECOMPOSED GRANITE, STABILIZED FOR MULTIPURPOSE TRAIL, 1/4" MINUS, 4" THICK	SF	5002
23	ADJUST EX MANHOLE FRAME & COVER, MAG STD DET 422 & P1430	EA	1
28	PROPOSED ROADWAY LIGHT	EA	2

REMOVAL/RELOCATION			
NO	DESCRIPTION	UNIT	QTY
2	REMOVE PCC SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SF	250
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	1333
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SF	2782



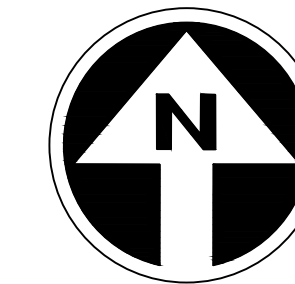
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ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.07
DATE: 04/20	DATE: 04/20	DATE: 04/20	SCALE: 1"=20' HORIZ.
			16 OF 95

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



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F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	17	95	
DATE: 04/20		AZTEC			
DRAWN: RJR	DESIGN: RJR	CHECKED: G.G.			

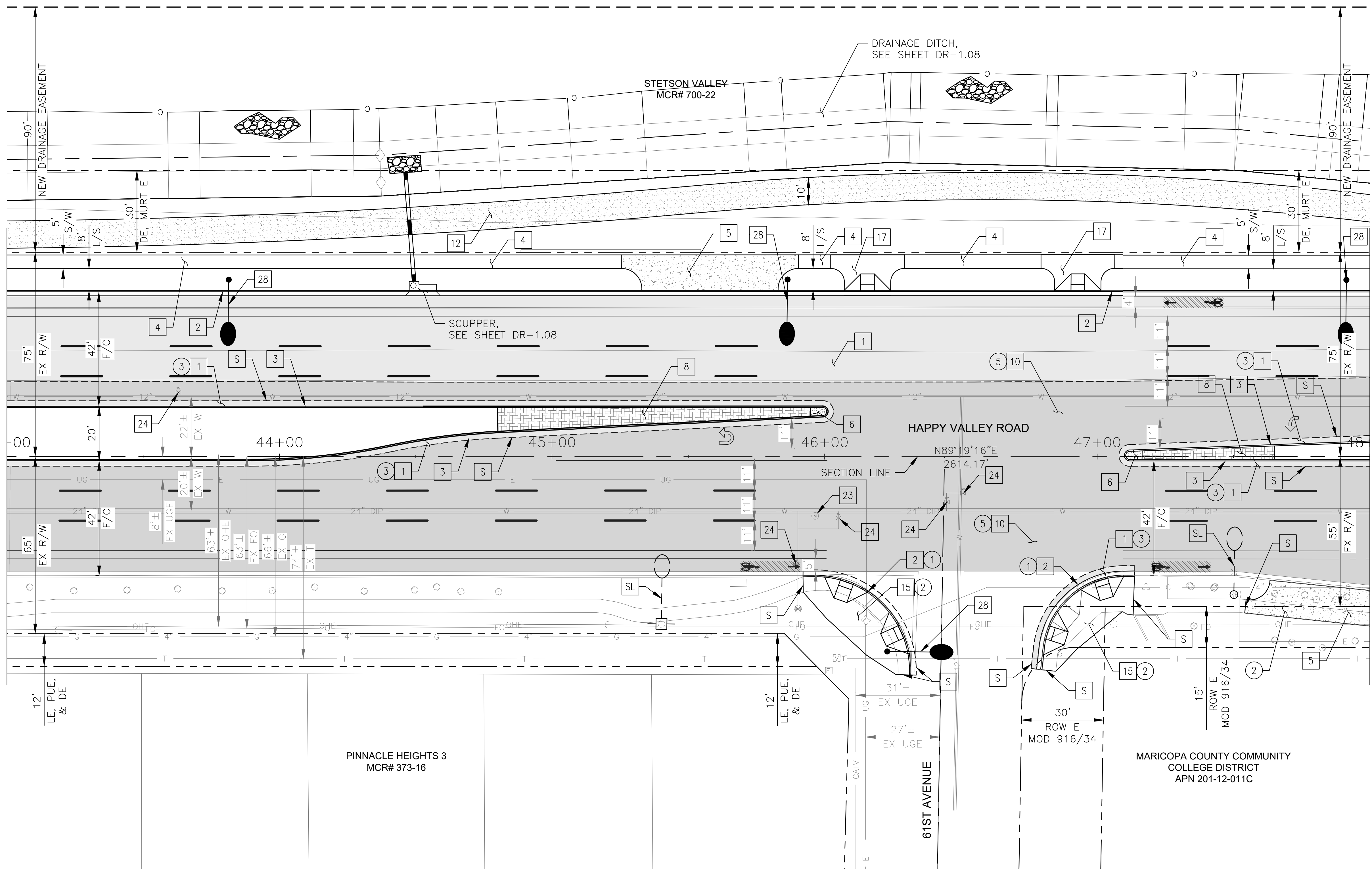
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE STA 43+00 SEE SHEET 16

MATCHLINE STA 48+00 SEE SHEET 18



NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	2420
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	334
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	666
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.61
2	CONCRETE CURB & GUTTER, MAG STD DET 220-1, TYPE A, H=6"	LF	500
3	CONCRETE SINGLE CURB MAG STD DET 222, TYPE A	LF	757
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	1905
5	BUS SHELTER/ACCESSORY PAD COP STD DET P1262	SF	1268
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	35
8	DECORATIVE BRICK PAVERS, MAG STD DET. 225	SF	199
10	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	188
10	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.85
12	DECOMPOSED GRANITE, STABILIZED FOR MULTIPURPOSE TRAIL, 1/4" MINUS, 4" THICK	SF	5000
15	CONCRETE CURB RAMP, COP STD DET P1236	SF	1276
17	CONCRETE SIDEWALK RAMP, COP STD DET P1241-2	SF	564
23	ADJUST EX MANHOLE FRAME & COVER, MAG STD DET 422 & P1430	EA	1
24	ADJUST WATER VALVE, TYPE "A", COP STD DET P1391 & P1391-1	EA	5
28	PROPOSED ROADWAY LIGHT	EA	4

REMOVAL/RELOCATION			
NO	DESCRIPTION	UNIT	QTY
1	REMOVE PCC SINGLE CURB, CURB & GUTTER	LF	116
2	REMOVE PCC SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SF	963
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	678
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SY	3417



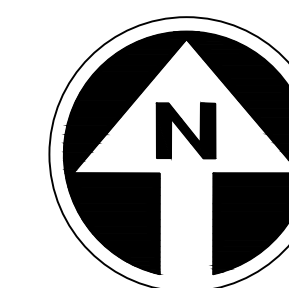
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ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.08
DATE: 04/20	DATE: 04/20	DATE: 04/20	17 OF 95

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



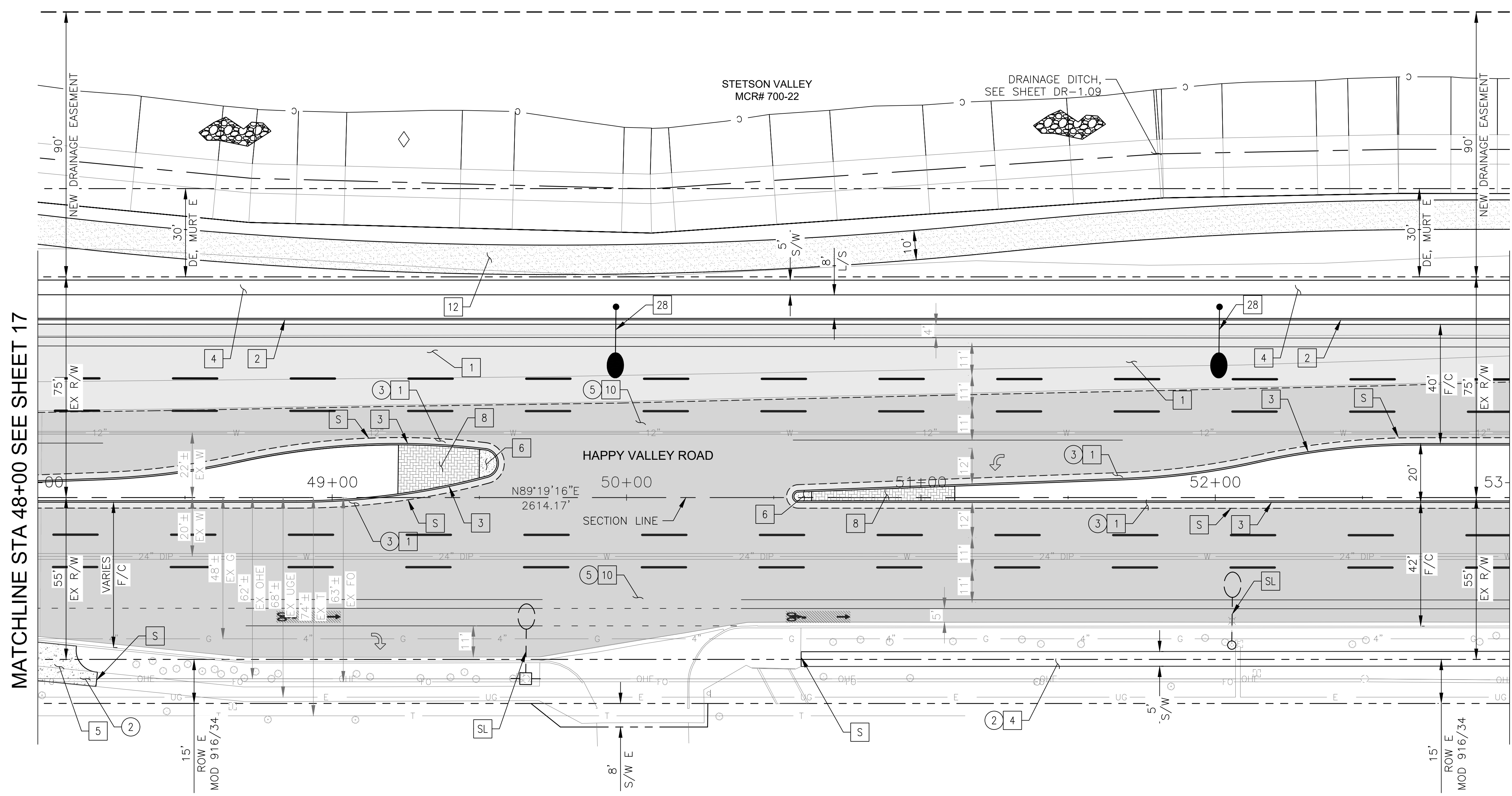
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F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	18	95	
DATE: 04/20		AZTEC			
DRAWN: RJR	DESIGN: RJR	CHECKED: G.G.			

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



MATCHLINE STA 48+00 SEE SHEET 17

MATCHLINE STA 53+00 SEE SHEET 19

CONSTRUCTION NOTES			
NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	2119
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	292
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	583
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.53
2	CONCRETE CURB & GUTTER, MAG STD DET 220-1, TYPE A, H=6"	LF	500
3	CONCRETE SINGLE CURB MAG STD DET 222, TYPE A	LF	777
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	3701
5	BUS SHELTER/ACCESSORY PAD COP STD DET P1260	SF	219
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	64
8	DECORATIVE BRICK PAVERS, MAG STD DET. 225	SF	577
10	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	218
10	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.99
12	DECOMPOSED GRANITE, STABILIZED FOR MULTIPURPOSE TRAIL, 1/4" MINUS, 4" THICK	SF	5010
28	PROPOSED ROADWAY LIGHT	EA	4

REMOVAL/RELOCATION			
NO	DESCRIPTION	UNIT	QTY
2	REMOVE PCC SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SF	1274
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	717
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SY	3960



"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."

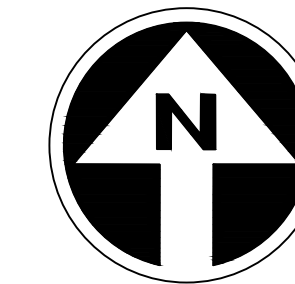
ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.09
DATE: 04/20	DATE: 04/20	DATE: 04/20	SCALE: 1"=20' HORIZ.
			18 OF 95

MARICOPA COUNTY COMMUNITY
COLLEGE DISTRICT
APN 201-12-011C

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



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Review
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CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	19	95	
DATE: 04/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

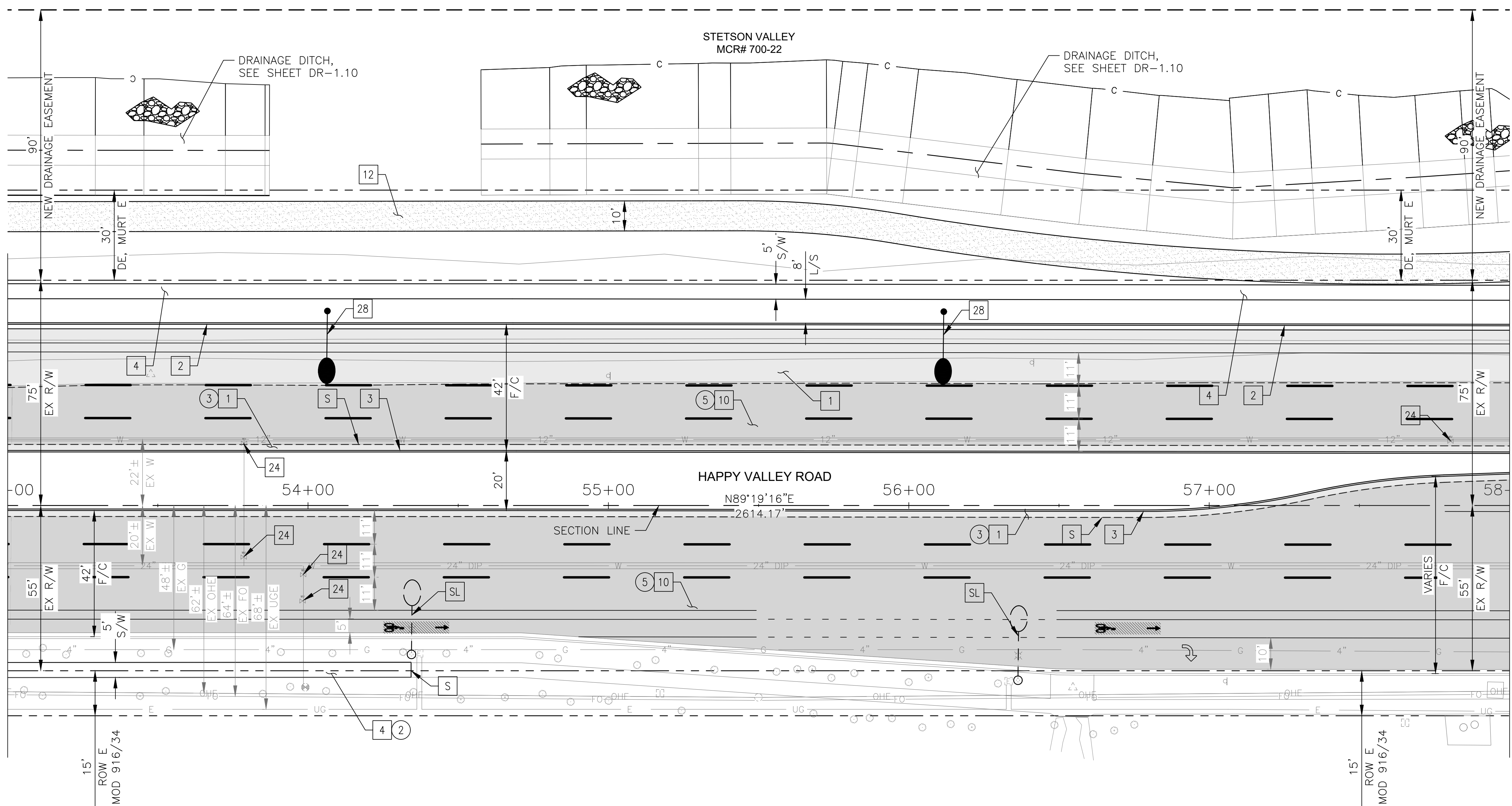
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE STA 53+00 SEE SHEET 18

MATCHLINE STA 58+00 SEE SHEET 20



CONSTRUCTION NOTES			
NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	2253
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	311
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	620
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.56
2	CONCRETE CURB & GUTTER, MAG STD DET 220-1, TYPE A, H=6"	LF	500
3	CONCRETE SINGLE CURB MAG STD DET 222, TYPE A	LF	1001
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	3173
10	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	216
10	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.98
12	DECOMPOSED GRANITE, STABILIZED FOR MULTIPURPOSE TRAIL, 1/4" MINUS, 4" THICK	SF	5009
24	ADJUST WATER VALVE, TYPE "A", COP STD DET P1391 & P1391-1	EA	5
28	PROPOSED ROADWAY LIGHT	EA	2

REMOVAL/RELOCATION			
NO	DESCRIPTION	UNIT	QTY
2	REMOVE PCC SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SF	653
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	1242
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SY	3933



"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."

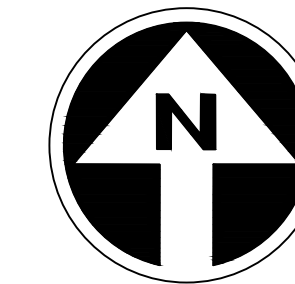
ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.10
DATE: 04/20	DATE: 04/20	DATE: 04/20	SCALE: 1"=20' HORIZ.
			19 OF 95

MARICOPA COUNTY COMMUNITY
COLLEGE DISTRICT
APN 201-12-011C

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



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30%
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CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	20	95	

DATE: 04/20
DRAWN: RJR DESIGN: RJR CHECKED: G.G.



CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
	SUBGRADE PREPARATION	SY	1482
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	205
	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	408
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.37
2	CONCRETE CURB & GUTTER, MAG STD DET 220-1, TYPE A, H=6"	LF	595
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF	675
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	1904
5	BUS SHELTER/ACCESSORY PAD, COP STD DET P1262	SF	1504
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	35
8	DECORATIVE BRICK PAVERS, MAG STD DET. 225	SF	448
	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	248
10	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	1.13
12	DECOMPOSED GRANITE, STABILIZED FOR MULTIPURPOSE TRAIL, 1/4" MINUS, 4" THICK	SF	4998
14	CONCRETE CURB RAMP, COP STD DET P1235	SF	972
17	CONCRETE SIDEWALK RAMP, COP STD DET P1241-2	SF	564
24	ADJUST WATER VALVE, TYPE "A", COP STD DET P1391 & P1391-1	EA	5
27	EXISTING ROADWAY LIGHT TO REMAIN	EA	2
28	PROPOSED ROADWAY LIGHT	EA	2

REMOVAL/RELOCATION			
NO	DESCRIPTION	UNIT	QTY
1	REMOVE PCC SINGLE CURB, CURB & GUTTER	LF	184
2	REMOVE PCC SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SF	1167
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	483
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SY	4515



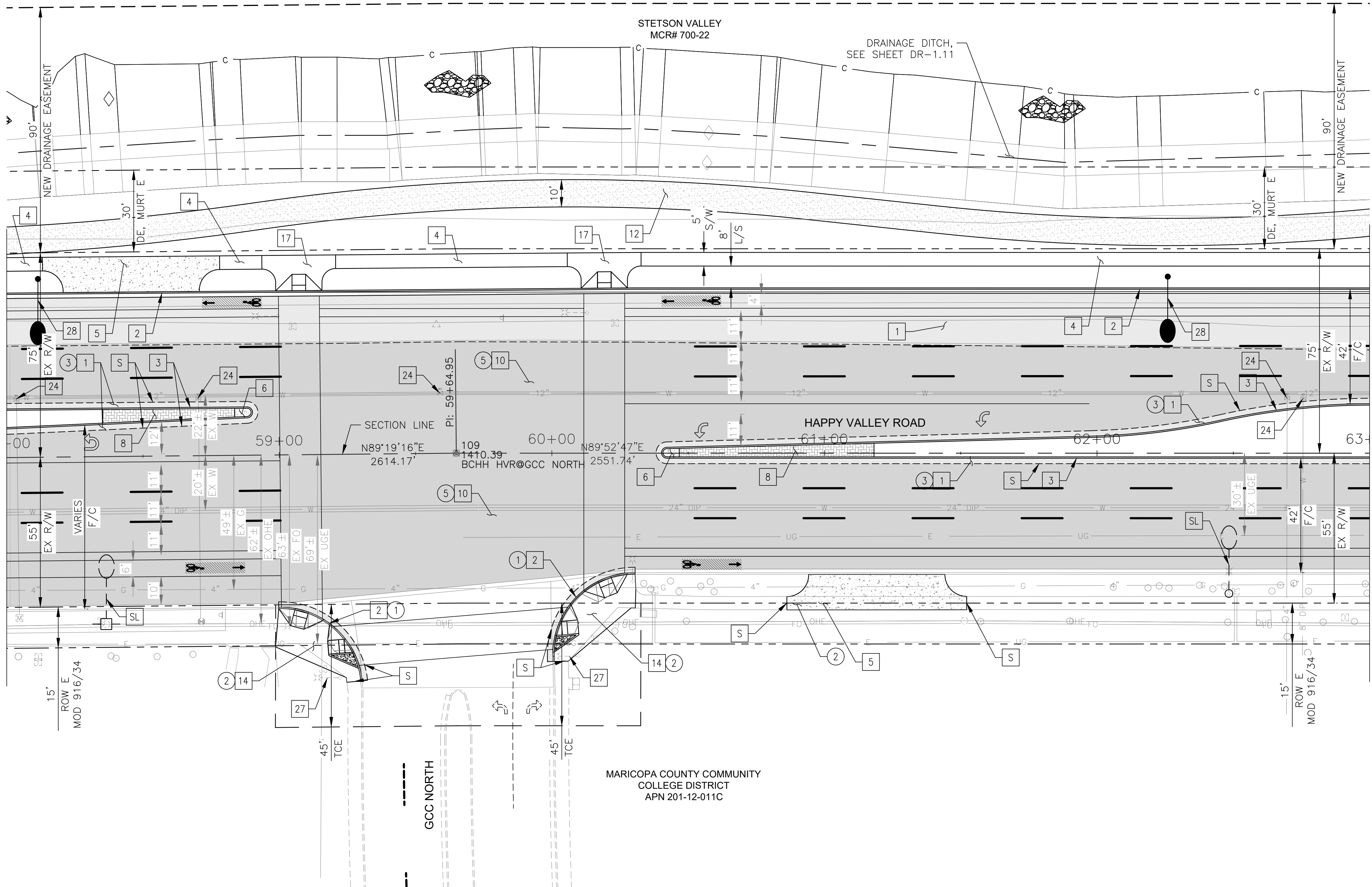
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR DES: RJR CK: G.G. DWG. NO. P-1.11
DATE: 04/20 DATE: 04/20 DATE: 04/20
SCALE: 1"=20' HORIZ. 20 OF 95

MATCHLINE STA 58+00 SEE SHEET 19

MATCHLINE STA 63+00 SEE SHEET 21

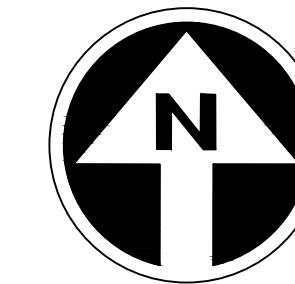


NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

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



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OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	21	95	
DATE: 04/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

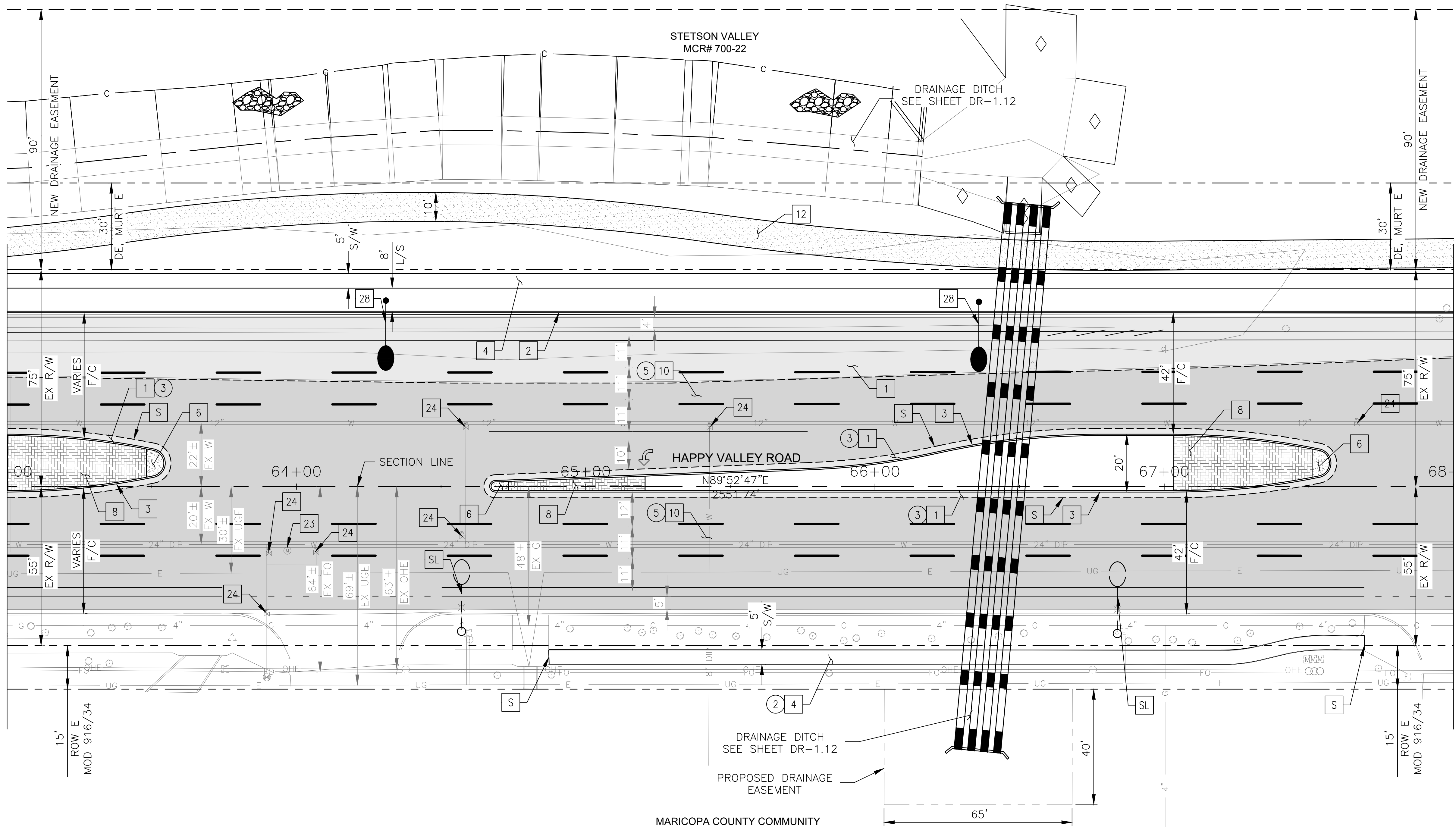
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE STA 63+00 SEE SHEET 20

MATCHLINE STA 68+00 SEE SHEET 22



CONSTRUCTION NOTES			
NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	1773
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	245
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	488
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.44
2	CONCRETE CURB & GUTTER, MAG STD DET 220-1, TYPE A, H=6"	LF	500
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF	654
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	3908
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	64
8	DECORATIVE BRICK PAVERS, MAG STD DET. 225	SF	193
10	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	222
10	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	1.01
12	DECOMPOSED GRANITE, STABILIZED FOR MULTIPURPOSE TRAIL, 1/4" MINUS, 4" THICK	SF	5015
23	ADJUST EX MANHOLE FRAME &, COVER, MAG STD DET 422 & P1430	EA	1
24	ADJUST WATER VALVE, TYPE "A", COP STD DET P1391 & P1391-1	EA	7
28	PROPOSED ROADWAY LIGHT	EA	2

REMOVAL/RELOCATION			
NO	DESCRIPTION	UNIT	QTY
2	REMOVE PCC SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SF	1379
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	646
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SY	4030



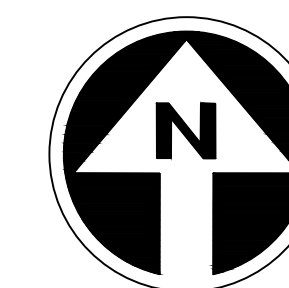
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.12
DATE: 04/20	DATE: 04/20	DATE: 04/20	21 OF 95
SCALE: 1"=20' HORIZ.			

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



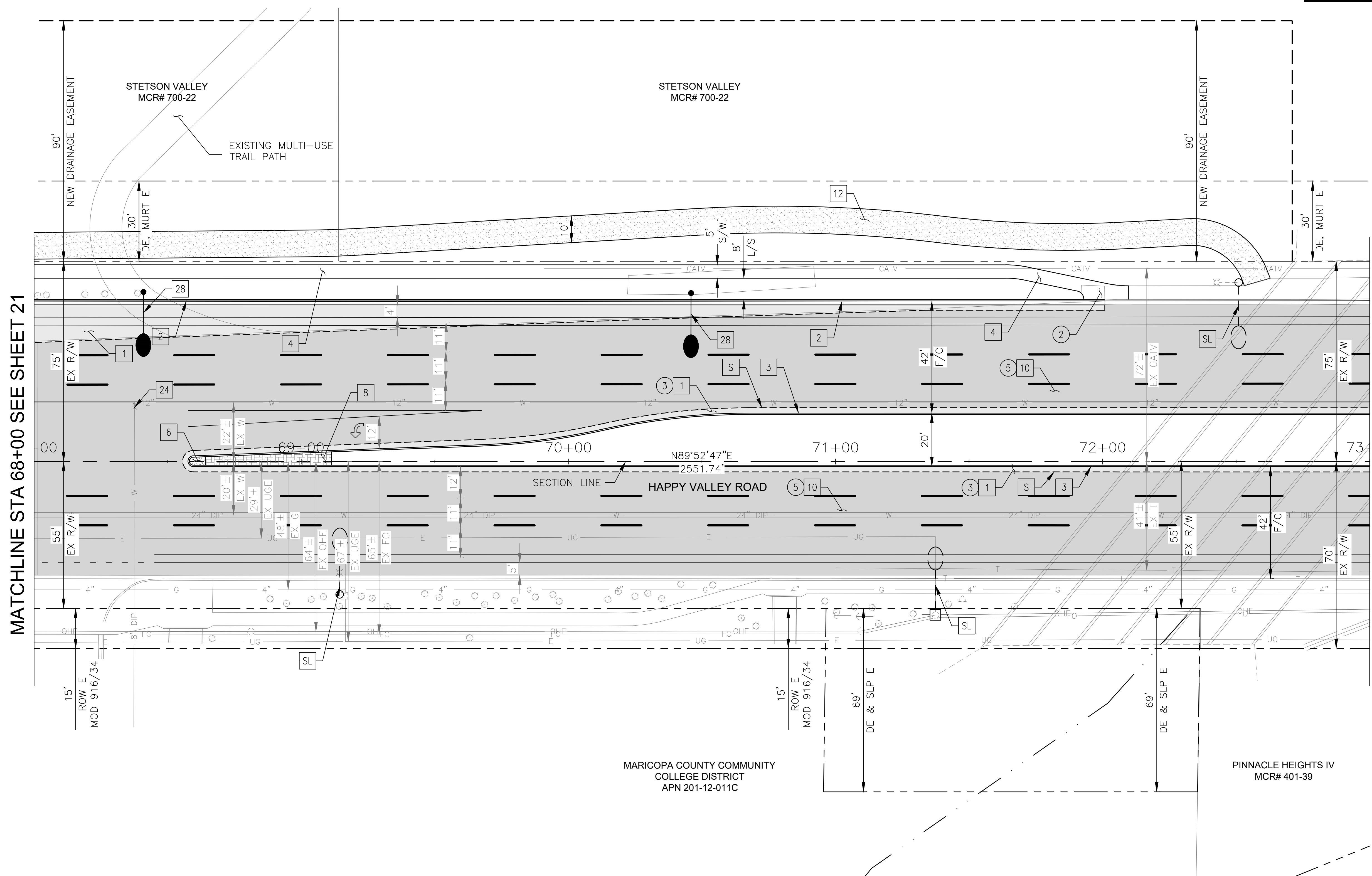
FINAL
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CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	22	95	
DATE: 04/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



MATCHLINE STA 68+00 SEE SHEET 21

MATCHLINE STA 73+00 SEE SHEET 23

MARICOPA COUNTY COMMUNITY
COLLEGE DISTRICT
APN 201-12-011C

PINNACLE HEIGHTS IV
MCR# 401-39

CONSTRUCTION NOTES			
NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	1257
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	173
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	346
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.31
2	CONCRETE CURB & GUTTER, MAG STD DET 220-1, TYPE A, H=6"	LF	401
3	CONCRETE SINGLE CURB MAG STD DET 222, TYPE A	LF	873
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	2072
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	17
8	DECORATIVE BRICK PAVERS, MAG STD DET. 225	SF	193
10	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	253
10	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	1.15
12	DECOMPOSED GRANITE, STABILIZED FOR MULTIPURPOSE TRAIL, 1/4" MINUS, 4" THICK	SF	4656
24	ADJUST WATER VALVE, TYPE "A", COP STD DET P1391 & P1391-1	EA	1
28	PROPOSED ROADWAY LIGHT	EA	2

REMOVAL/RELOCATION			
NO	DESCRIPTION	UNIT	QTY
2	REMOVE PCC SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SF	98
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	950
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SY	4596



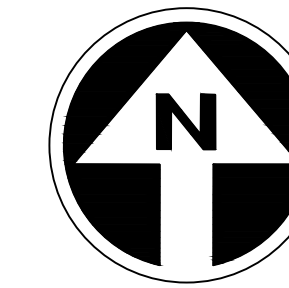
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.13
DATE: 04/20	DATE: 04/20	DATE: 04/20	22 OF 95
SCALE: 1"=20' HORIZ.			

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



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OR RECORDING

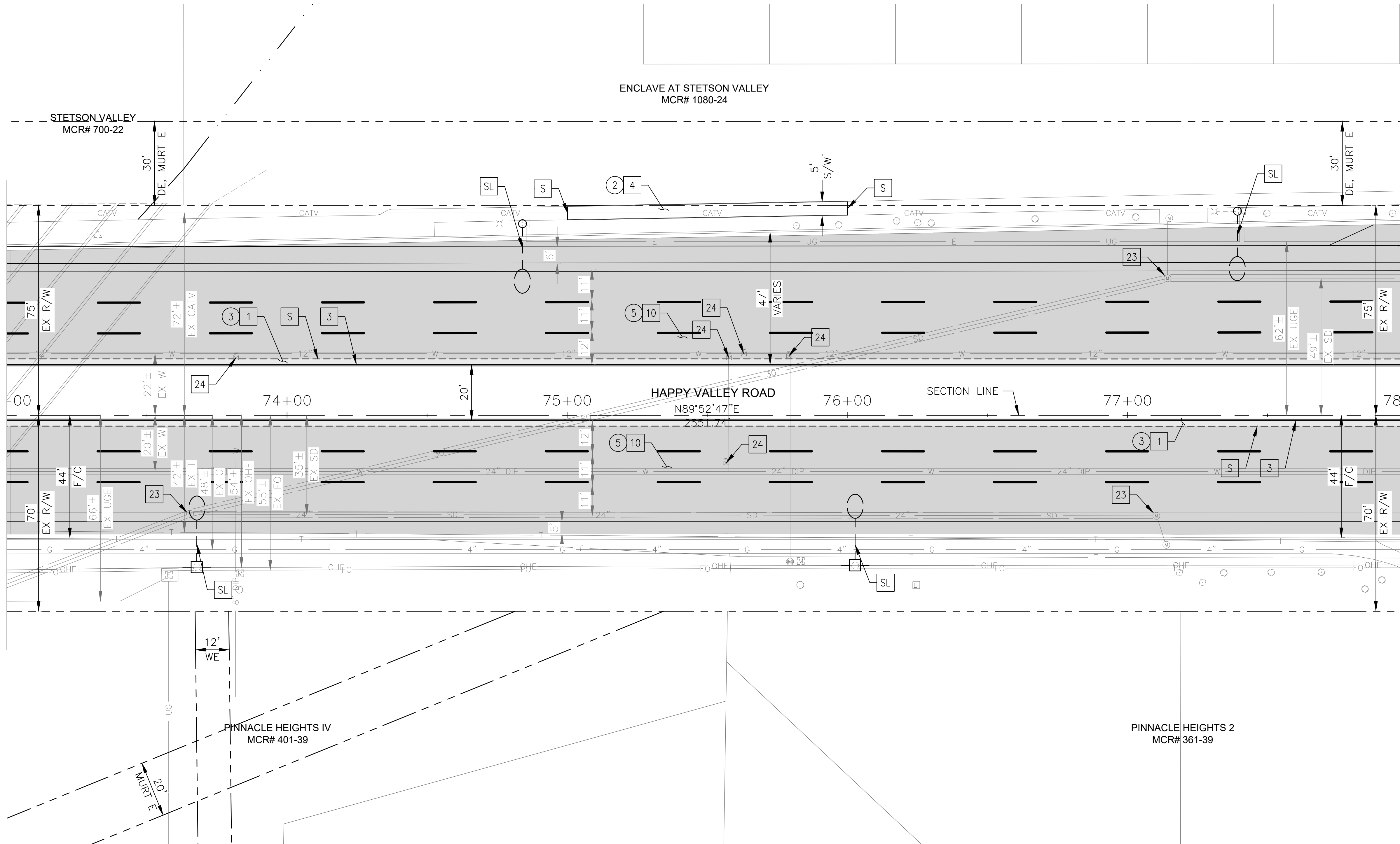
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	23	95	
DATE: 04/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

CONSTRUCTION NOTES			
NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
	SUBGRADE PREPARATION	SY	1333
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	184
	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	371
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.33
3	CONCRETE SINGLE CURB MAG STD DET 222, TYPE A	LF	1000
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	487
10	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	263
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	1.20
23	ADJUST EX MANHOLE FRAME & COVER, MAG STD DET 422 & P1430	EA	3
24	ADJUST WATER VALVE, TYPE "A", COP STD DET P1391 & P1391-1	EA	5

REMOVAL/RELOCATION			
NO	DESCRIPTION	UNIT	QTY
2	REMOVE PCC SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SF	487
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	1333
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SY	4781

MATCHLINE STA 73+00 SEE SHEET 22

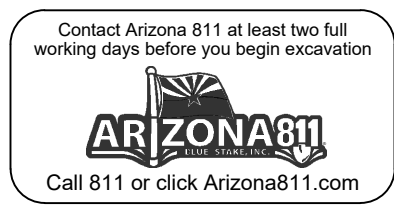
MATCHLINE STA 78+00 SEE SHEET 24



NO.	DESCRIPTION	REV BY	CHK BY	DATE

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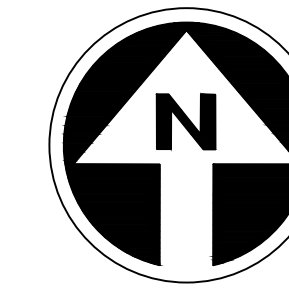
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.14
DATE: 04/20	DATE: 04/20	DATE: 04/20	23 OF 95
SCALE: 1"=20' HORIZ.			

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



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CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	24	95	
DATE: 04/20					
DRAWN: RJR	DESIGN: RJR	CHECKED: G.G.			

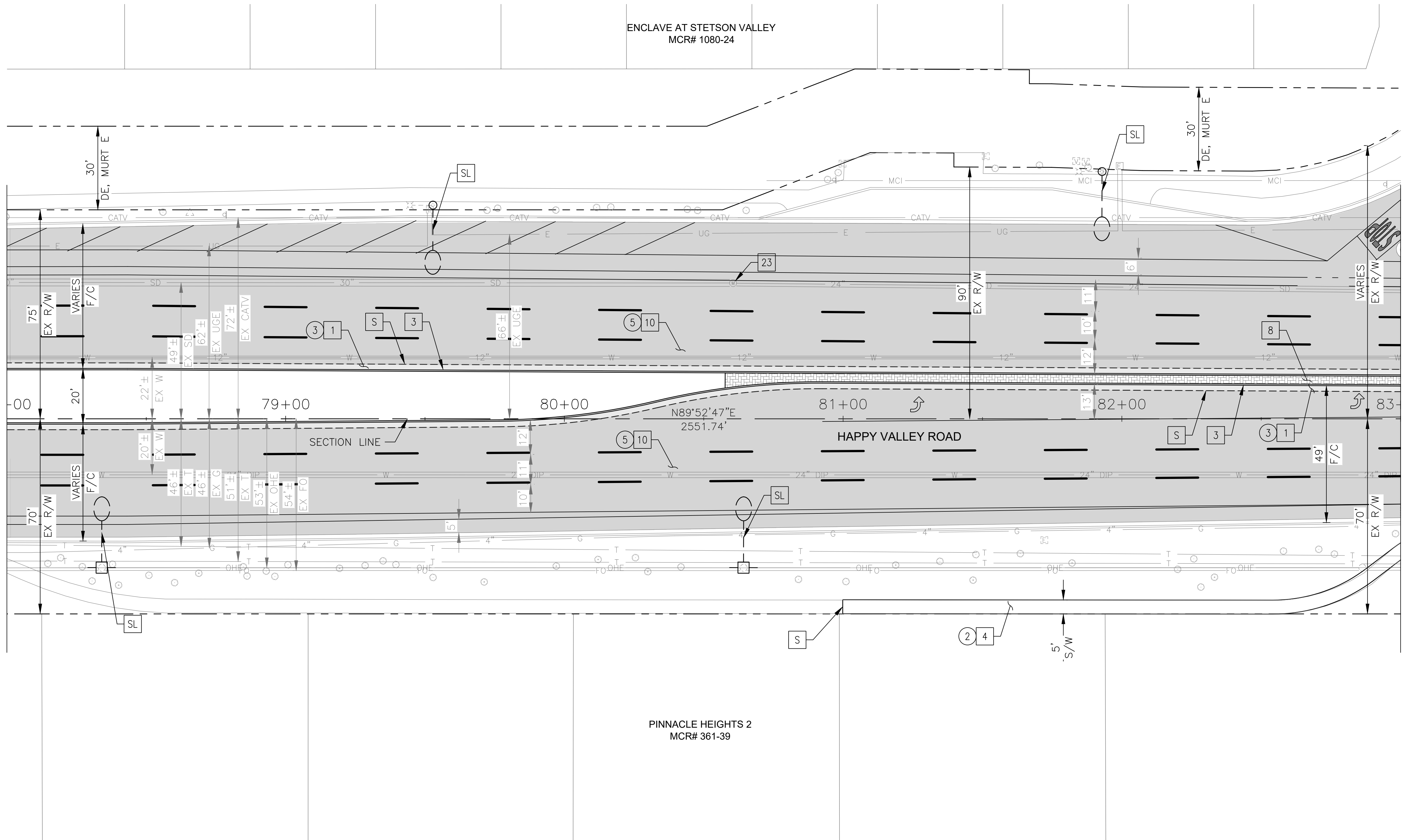
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE STA 78+00 SEE SHEET 23

MATCHLINE STA 83+00 SEE SHEET 25



CONSTRUCTION NOTES				
NO	DESCRIPTION	UNIT	QTY	
PAVEMENT STRUCTURAL SECTION NO. 1				
1	SUBGRADE PREPARATION	SY	835	
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	115	
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	232	
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.21	
3	CONCRETE SINGLE CURB MAG STD DET 222, TYPE A	LF	1001	
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	1028	
8	DECORATIVE BRICK PAVERS, MAG STD DET. 225	SF	755	
10	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	302	
10	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	1.37	
23	ADJUST EX MANHOLE FRAME & COVER, MAG STD DET 422 & P1430	EA	1	

REMOVAL/RELOCATION				
NO	DESCRIPTION	UNIT	QTY	
2	REMOVE PCC SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SF	1014	
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	830	
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SY	5486	



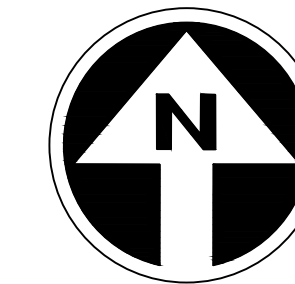
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.15
DATE: 04/20	DATE: 04/20	DATE: 04/20	24 OF 95
SCALE: 1"=20' HORIZ.			

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



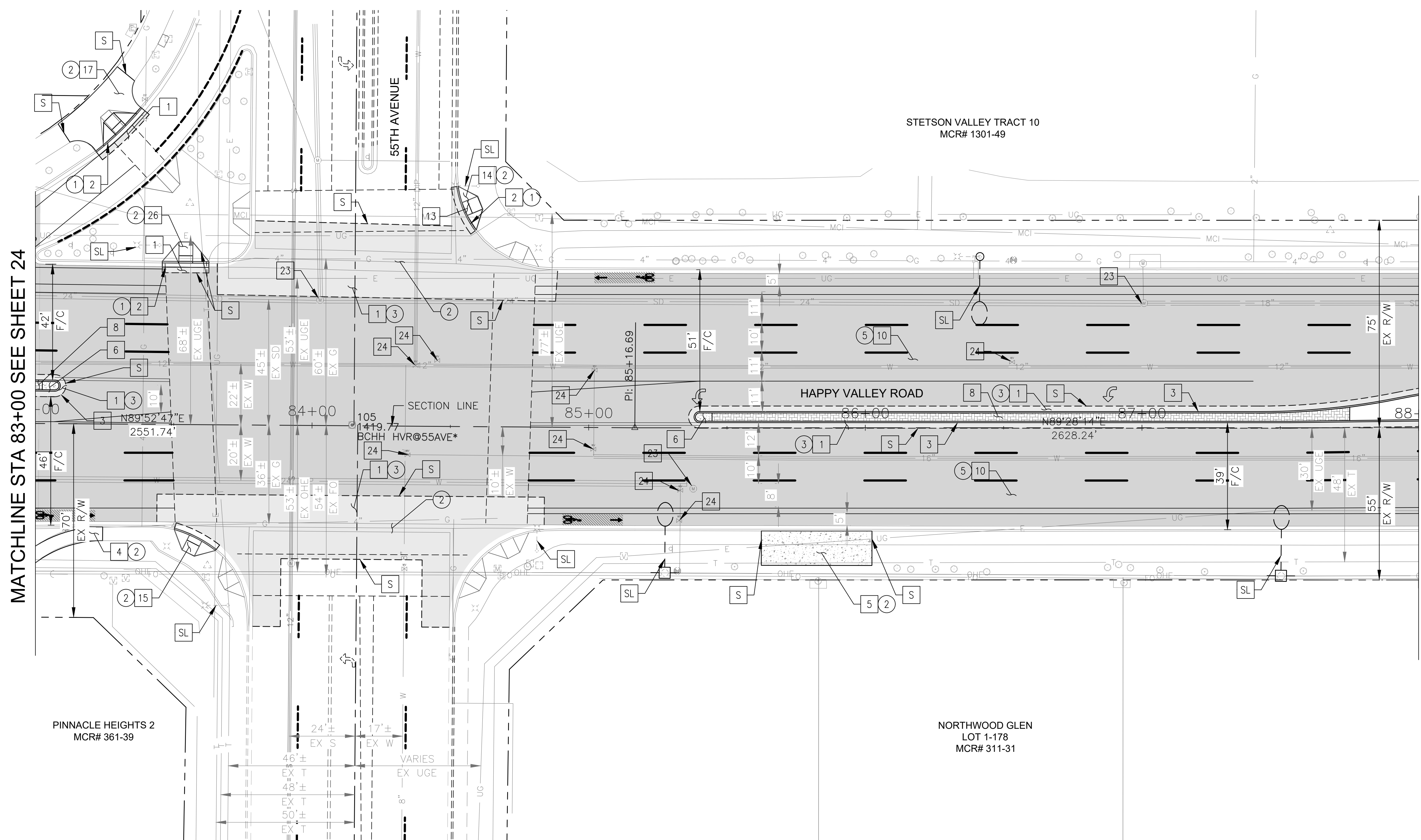
FINAL
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Review
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CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	25	95	
DATE: 04/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

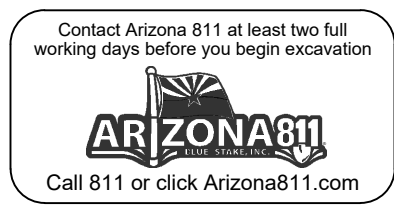


MATCHLINE STA 83+00 SEE SHEET 24

MATCHLINE STA 88+00 SEE SHEET 26

CONSTRUCTION NOTES				
NO	DESCRIPTION	UNIT	QTY	
PAVEMENT STRUCTURAL SECTION NO. 1				
1	SUBGRADE PREPARATION	SY	960	
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	132	
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	262	
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.24	
2	CONCRETE CURB & GUTTER MAG STD DET 220, TYPE A, H=6"	LF	74	
3	CONCRETE SINGLE CURB MAG STD DET 222, TYPE A	LF	517	
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	133	
5	BUS SHELTER/ACCESSORY PAD COP STD DET P1262	SF	497	
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	34	
8	DECORATIVE BRICK PAVERS, MAG STD DET. 225	SF	713	
10	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	271	
10	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	1.16	
14	CONCRETE CURB RAMP, COP STD DET P1235	SF	68	
15	CONCRETE CURB RAMP, COP STD DET P1236	SF	66	
17	CONCRETE SIDEWALK RAMP, COP STD DET P1241-2	SF	447	
23	ADJUST EX MANHOLE FRAME & COVER, MAG STD DET 422 & P1430	EA	3	
24	ADJUST WATER VALVE, TYPE "A", COP STD DET P1391 & P1391-1	EA	8	
26	CONCRETE CURB RAMP, COP STD DET P1240	SF	78	

REMOVAL/RELOCATION				
NO	DESCRIPTION	UNIT	QTY	
1	REMOVE PCC SINGLE CURB, CURB & GUTTER	LF	74	
2	REMOVE PCC SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SF	2844	
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	505	
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SY	4933	



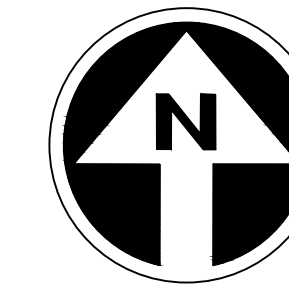
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.16
DATE: 04/20	DATE: 04/20	DATE: 04/20	25 OF 95
SCALE: 1"=20' HORIZ.			

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



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CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	26	95	
DATE: 04/20		AZTEC			
DRAWN: RJR	DESIGN: RJR	CHECKED: G.G.			

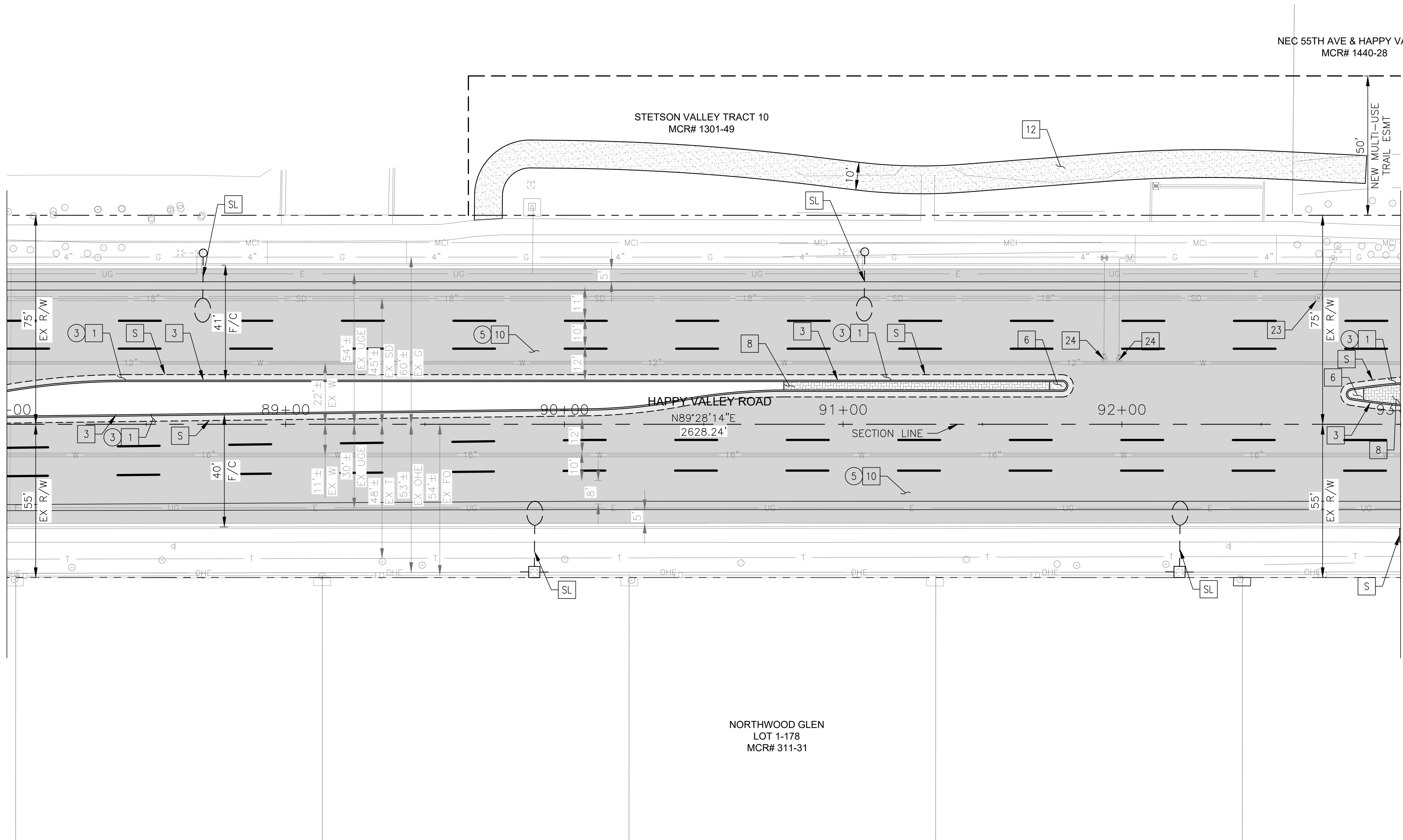
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE STA 88+00 SEE SHEET 25

MATCHLINE STA 93+00 SEE SHEET 27



CONSTRUCTION NOTES			
NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	738
	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	102
	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	205
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.18
3	CONCRETE SINGLE CURB MAG STD DET 222, TYPE A	LF	819
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	38
8	DECORATIVE BRICK PAVERS, MAG STD DET. 225	SF	364
10	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	249
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	1.17
12	DECOMPOSED GRANITE, STABILIZED FOR MULTIPURPOSE TRAIL, 1/4" MINUS, 4" THICK	SF	3324
23	ADJUST EX MANHOLE FRAME & COVER, MAG STD DET 422 & P1430	EA	1
24	ADJUST WATER VALVE, TYPE "A", COP STD DET P1391 & P1391-1	EA	2

REMOVAL/RELOCATION			
NO	DESCRIPTION	UNIT	QTY
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	738
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SY	4523



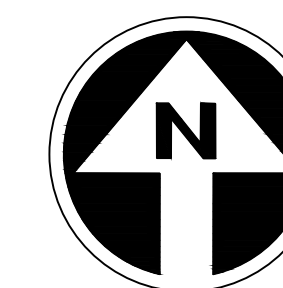
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ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.17
DATE: 04/20	DATE: 04/20	DATE: 04/20	SCALE: 1"=20' HORIZ.
			26 OF 95

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



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OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	27	95	
DATE: 04/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

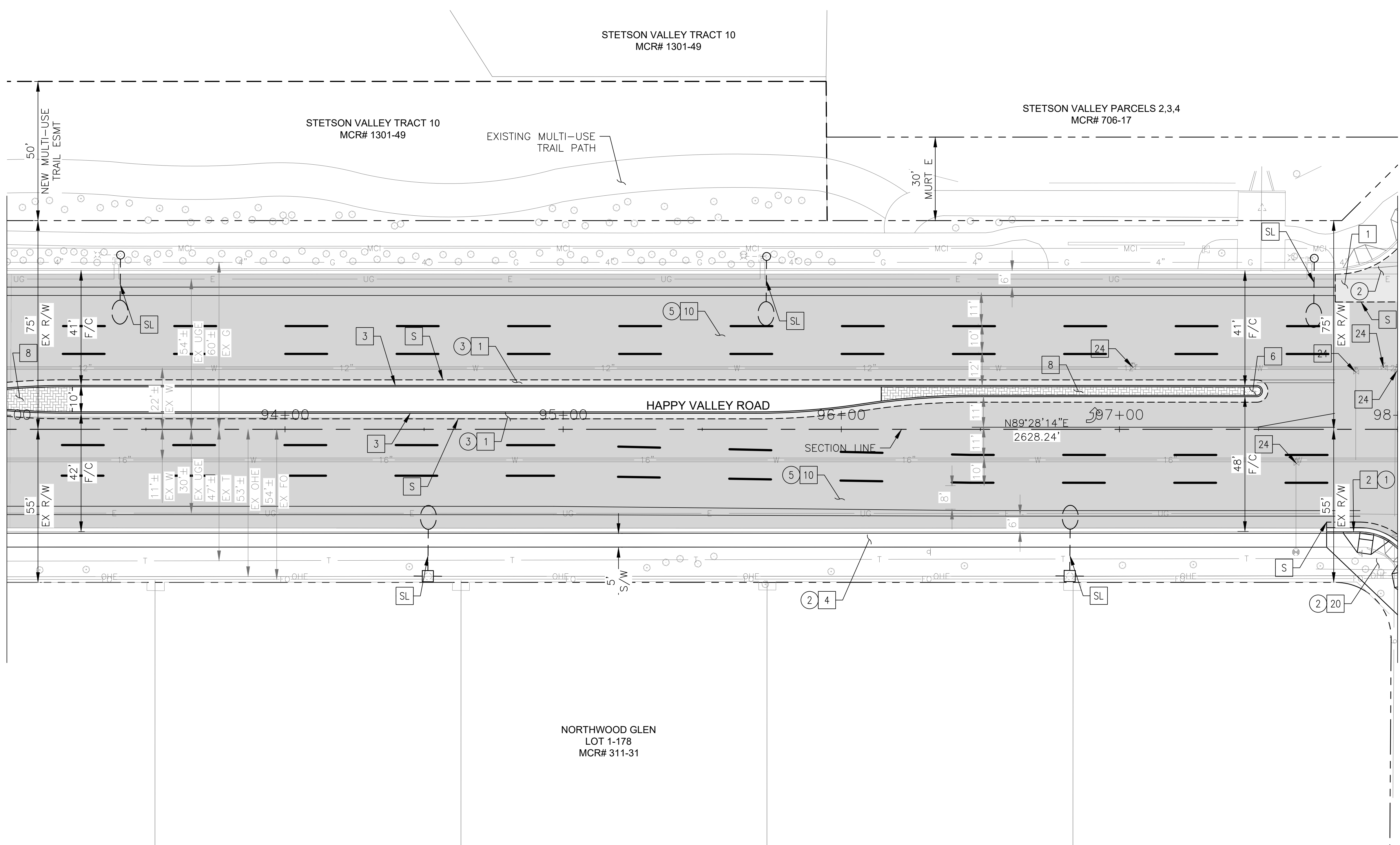
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE STA 93+00 SEE SHEET 26

MATCHLINE STA 98+00 SEE SHEET 28



CONSTRUCTION NOTES			
NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	606
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	84
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	168
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.15
2	REMOVE PCC SIDEWALK, DRIVEWAY VALLEY GUTTER & SLAB	SF	27
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF	890
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	2442
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	24
8	DECORATIVE BRICK PAVERS, MAG STD DET. 225	SF	614
10	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	257
20	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	1.17
24	CONCRETE SIDEWALK RAMP, COP STD DET P1238-2	SF	409
24	ADJUST WATER VALVE, TYPE "A", COP STD DET P1391 & P1391-1	EA	5

REMOVAL/RELOCATION			
NO	DESCRIPTION	UNIT	QTY
1	REMOVE PCC SINGLE CURB, CURB & GUTTER	LF	501
2	REMOVE PCC SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SF	2513
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	606
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SY	4667



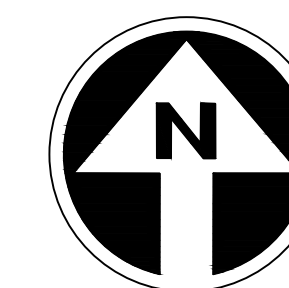
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.18
DATE: 04/20	DATE: 04/20	DATE: 04/20	SCALE: 1"=20' HORIZ.
			27 OF 95

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



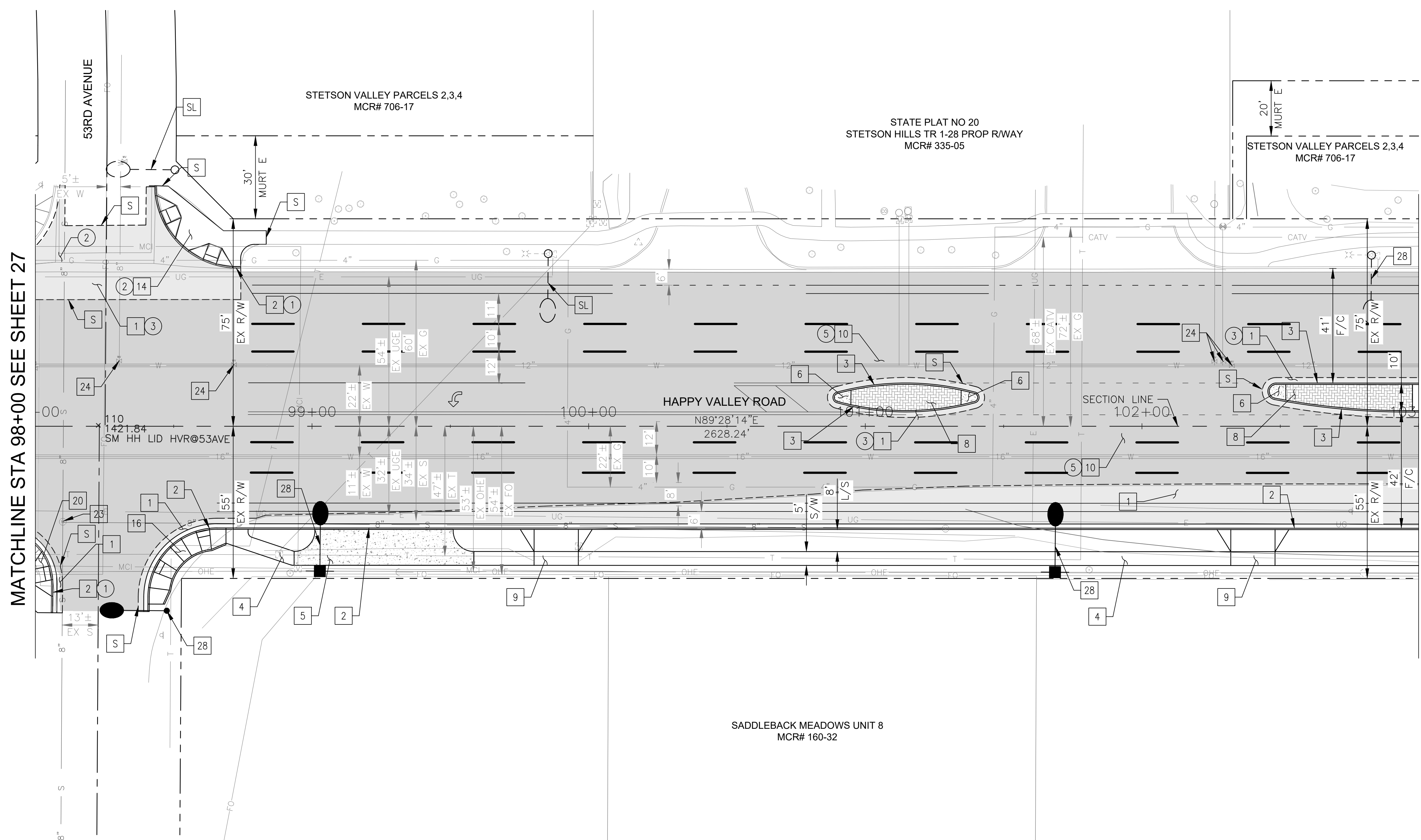
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CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	28	95	
DATE: 04/20					
DRAWN: RJR	DESIGN: RJR	CHECKED: G.G.			

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



MATCHLINE STA 98+00 SEE SHEET 27

MATCHLINE STA 103+00 SEE SHEET 29

CONSTRUCTION NOTES				
NO	DESCRIPTION	UNIT	QTY	
PAVEMENT STRUCTURAL SECTION NO. 1				
1	SUBGRADE PREPARATION	SY	872	
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	120	
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	242	
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.22	
2	CONCRETE CURB & GUTTER, MAG STD DET 220-1, TYPE A, H=6"	LF	554	
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF	217	
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	1685	
5	BUS SHELTER/ACCESSORY PAD COP STD DET P1262	SF	749	
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	86	
8	INTERLOCKING CONCRETE PAVERS MAG STD DET. 225	SF	132	
9	DRIVEWAY ENTRANCE - TYPE II COP STD DET P1255-2	SF	496	
10	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	248	
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	1.13	
14	CONCRETE CURB RAMP, COP STD DET P1235	SF	494	
16	CONCRETE CURB RAMP, COP STD DET P1237	SF	280	
20	CONCRETE CURB RAMP, COP STD DET P1238-2	SF	123	
23	ADJUST EX MANHOLE FRAME & COVER, MAG STD DET 422 & P1430	EA	1	
24	ADJUST WATER VALVE, TYPE "A", COP STD DET P1391 & P1391-1	EA	5	
28	PROPOSED ROADWAY LIGHT	EA	3	

REMOVAL/RELOCATION				
NO	DESCRIPTION	UNIT	QTY	
1	REMOVE PCC SINGLE CURB, CURB & GUTTER	LF	17	
2	REMOVE PCC SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SF	53	
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	218	
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SY	4500	



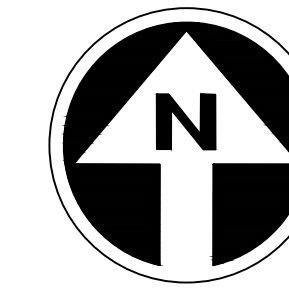
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ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.19
DATE: 04/20	DATE: 04/20	DATE: 04/20	
SCALE: 1"=20' HORIZ.			28 OF 95

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



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F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	29	95	
DATE: 04/20		AZTEC			
DRAWN: RJR	DESIGN: RJR	CHECKED: G.G.			

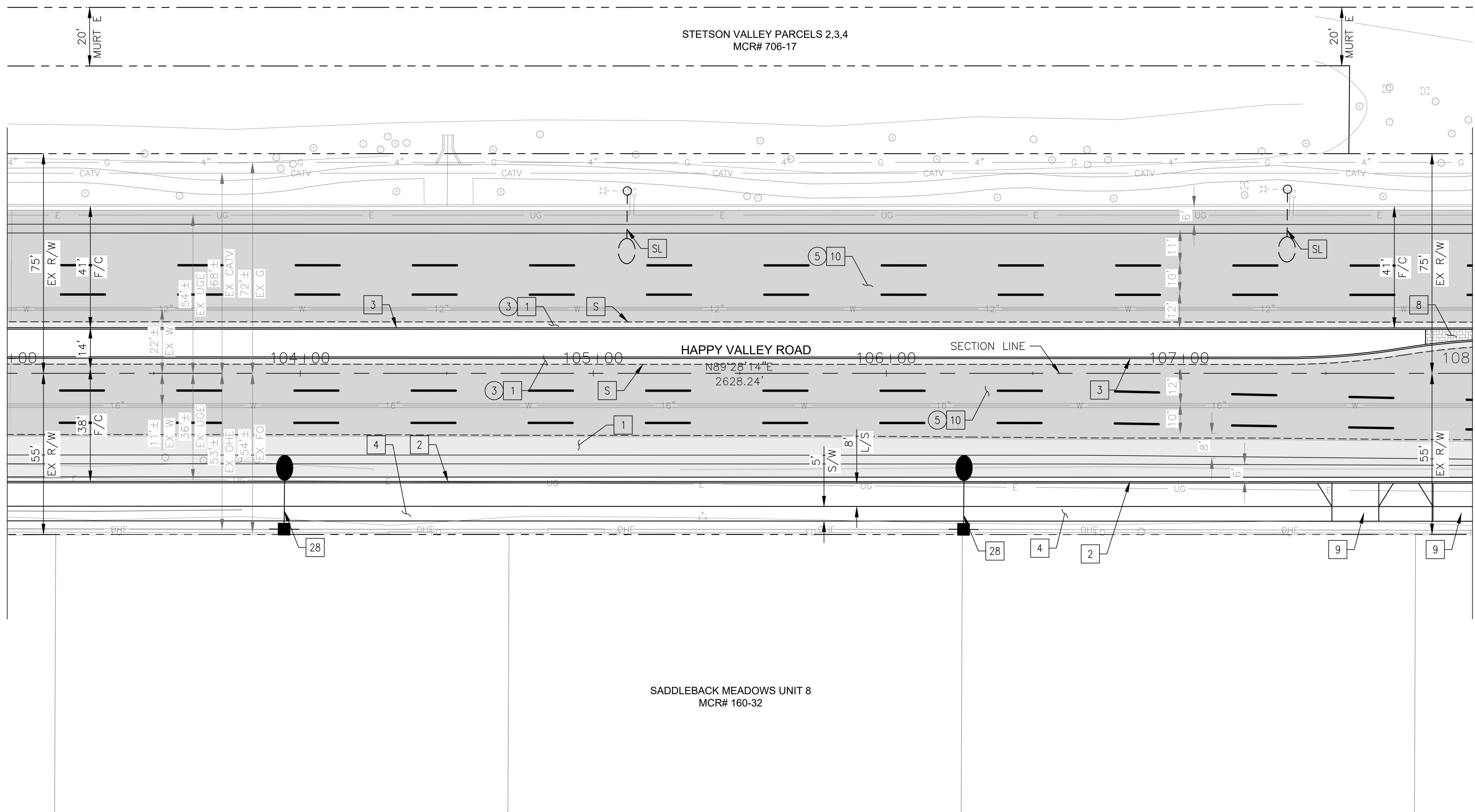
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NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

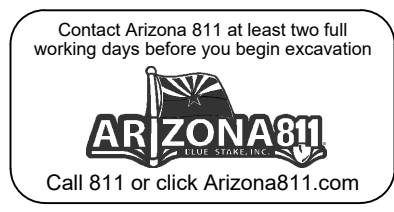
MATCHLINE STA 103+00 SEE SHEET 28

MATCHLINE STA 108+00 SEE SHEET 30



CONSTRUCTION NOTES				
NO	DESCRIPTION	UNIT	QTY	
PAVEMENT STRUCTURAL SECTION NO. 1				
1	SUBGRADE PREPARATION	SY	1700	
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	235	
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	473	
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.43	
2	CONCRETE CURB & GUTTER, MAG STD DET 220-1, TYPE A, H=6"	LF	500	
3	CONCRETE SINGLE CURB MAG STD DET 222, TYPE A	LF	1001	
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	2353	
8	DECORATIVE BRICK PAVERS, MAG STD DET. 225	SF	85	
9	DRIVEWAY ENTRANCE - TYPE II COP STD DET P1255-2	SF	441	
10	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	197	
10	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.89	
28	PROPOSED ROADWAY LIGHT	EA	2	

REMOVAL/RELOCATION				
NO	DESCRIPTION	UNIT	QTY	
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	963	
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SY	3578	



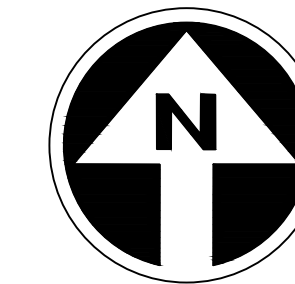
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ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.20
DATE: 04/20	DATE: 04/20	DATE: 04/20	29 OF 95
SCALE: 1"=20' HORIZ.			

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



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OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	30	95	
DATE: 04/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

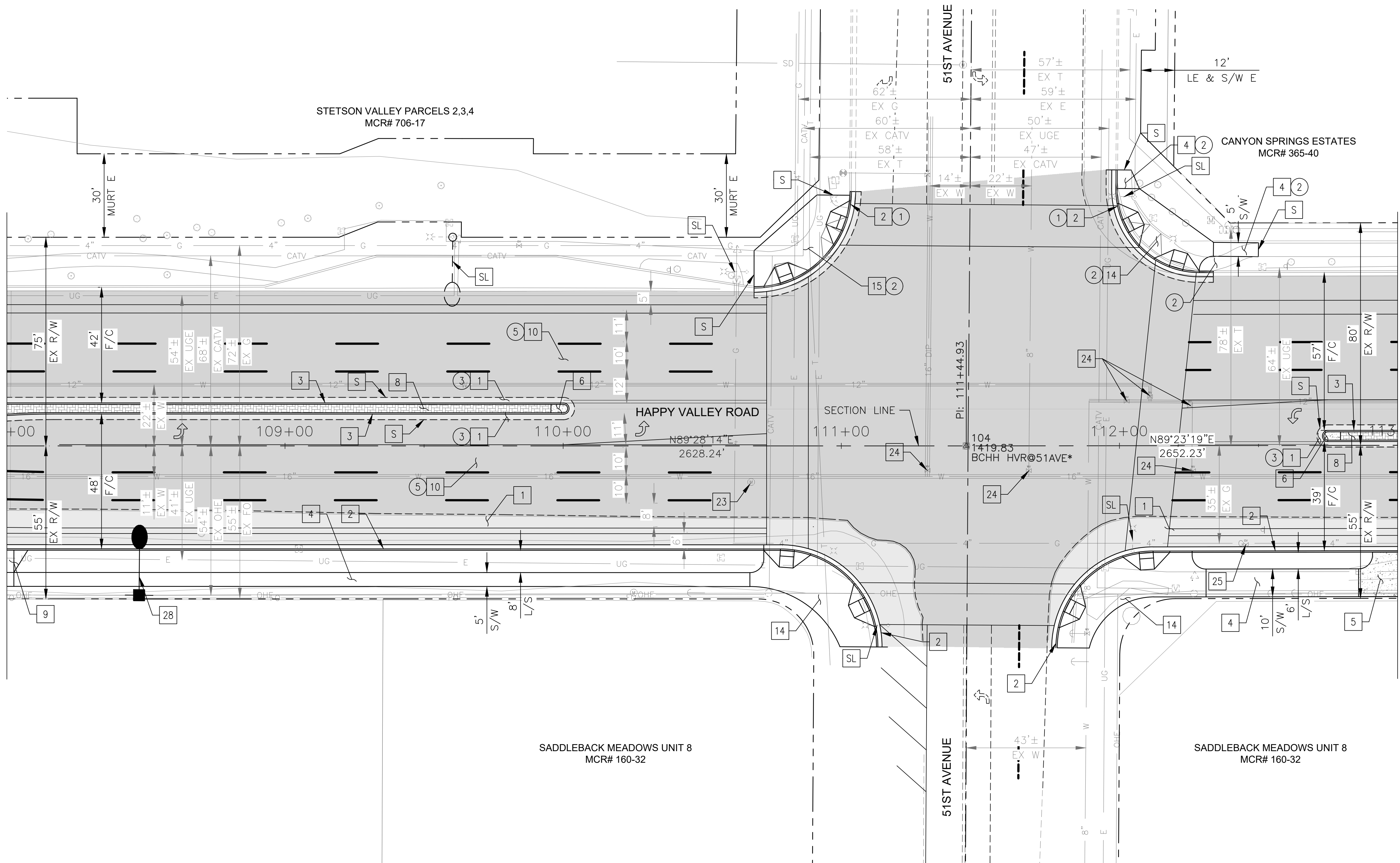
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NO.	DESCRIPTION	REVISION BY	DATE

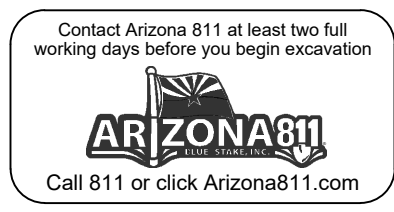
MATCHLINE STA 108+00 SEE SHEET 29

MATCHLINE STA 113+00 SEE SHEET 31



CONSTRUCTION NOTES				
NO	DESCRIPTION	UNIT	QTY	
PAVEMENT STRUCTURAL SECTION NO. 1				
1	SUBGRADE PREPARATION	SY	898	
	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	124	
	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	250	
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.22	
2	CONCRETE CURB & GUTTER MAG STD DET 220, TYPE A, H=6"	LF	590	
3	CONCRETE SINGLE CURB MAG STD DET 222, TYPE A	LF	432	
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	1996	
5	BUS SHELTER/ACCESSORY PAD COP STD DET P1262	SF	197	
6	MEDIAN NOSE TRANSITION, MAG STD DET 223	SF	34	
8	DECORATIVE BRICK PAVERS MAG STD DET. 225	SF	1147	
9	DRIVEWAY ENTRANCE - TYPE II COP STD DET P1255-2	SF	55	
10	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	317	
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	1.29	
14	CONCRETE CURB RAMP, COP STD DET P1235	SF	2238	
15	CONCRETE CURB RAMP, COP STD DET P1236	SF	656	
23	ADJUST EX MANHOLE FRAME & COVER, MAG STD DET 422 & P1430	EA	1	
24	ADJUST WATER VALVE, TYPE "A", COP STD DET P1391 & P1391-1	EA	6	
25	ADJUST EX UTILITY VALVE, MAG STD DET 391-1 & 391-2	EA	1	
28	PROPOSED ROADWAY LIGHT	EA	1	

REMOVAL/RELOCATION				
NO	DESCRIPTION	UNIT	QTY	
1	REMOVE PCC SINGLE CURB, CURB & GUTTER	LF	88	
2	REMOVE PCC SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SF	887	
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	206	
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SY	5763	



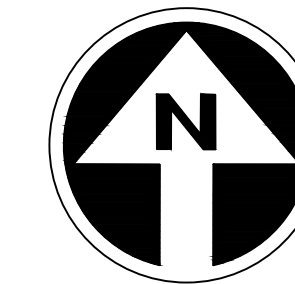
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.21
DATE: 04/20	DATE: 04/20	DATE: 04/20	30 OF 95
SCALE: 1"=20' HORIZ.			

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



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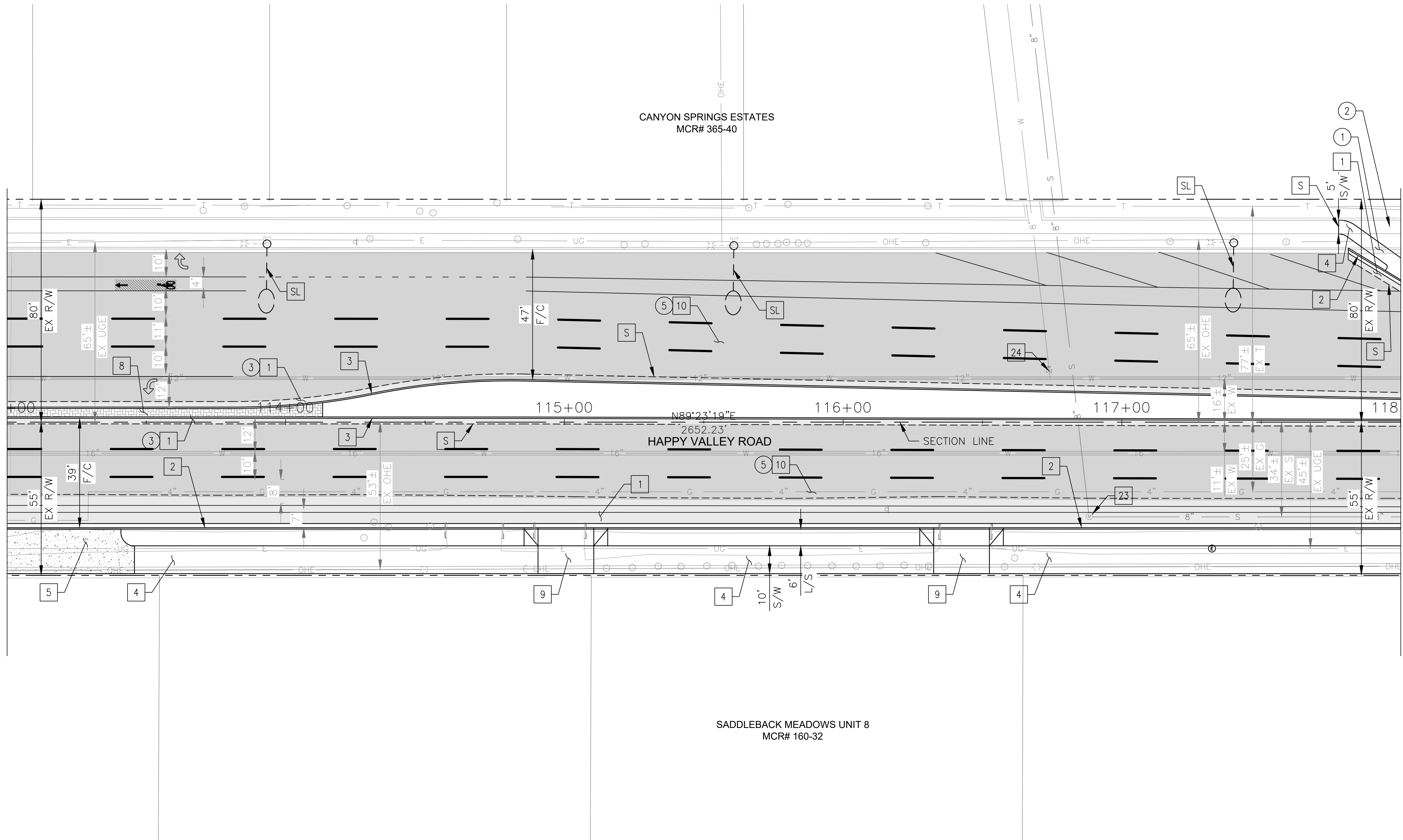
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	31	95	
DATE: 04/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

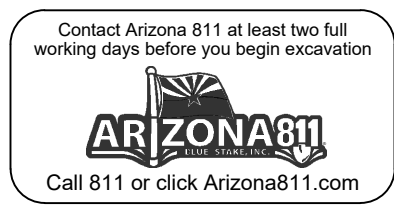
MATCHLINE STA 113+00 SEE SHEET 30



MATCHLINE STA 118+00 SEE SHEET 32

CONSTRUCTION NOTES			
NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	1268
	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	175
	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	353
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.32
2	CONCRETE CURB & GUTTER, MAG STD DET 220-1, TYPE A, H=6"	LF	522
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF	1001
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	4278
5	BUS SHELTER/ACCESSORY PAD COP STD DET P1262	SF	712
8	DECORATIVE BRICK PAVERS, MAG STD DET. 225	SF	477
9	DRIVEWAY ENTRANCE - TYPE II COP STD DET P1255-2	SF	760
10	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	239
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	1.09
23	ADJUST EX MANHOLE FRAME & COVER, MAG STD DET 422 & P1430	EA	1
24	ADJUST WATER VALVE, TYPE "A", COP STD DET P1391 & P1391-1	EA	1

REMOVAL/RELOCATION			
NO	DESCRIPTION	UNIT	QTY
1	REMOVE PCC SINGLE CURB, CURB & GUTTER	LF	19
2	REMOVE PCC SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SF	256
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	750
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SY	4343



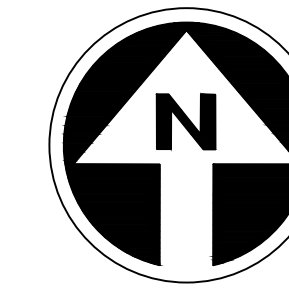
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ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.22
DATE: 04/20	DATE: 04/20	DATE: 04/20	31 OF 95
SCALE: 1"=20' HORIZ.			

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



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OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	32	95	
DATE: 04/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

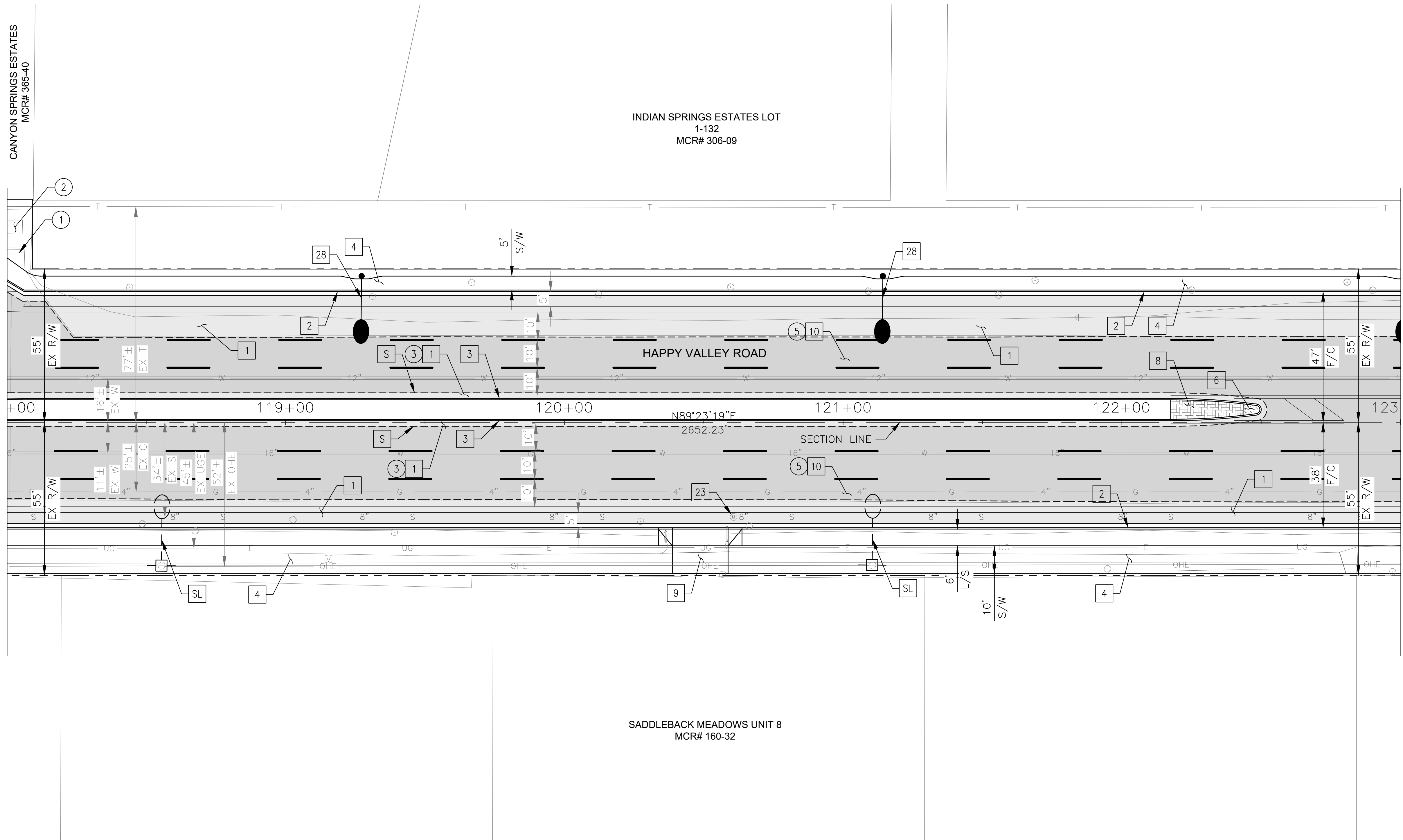
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

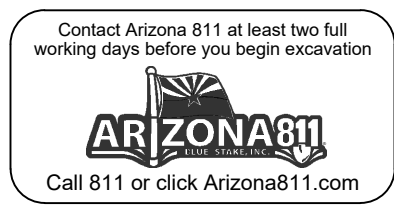
MATCHLINE STA 118+00 SEE SHEET 31

MATCHLINE STA 123+00 SEE SHEET 33



CONSTRUCTION NOTES				
NO	DESCRIPTION	UNIT	QTY	
PAVEMENT STRUCTURAL SECTION NO. 1				
1	SUBGRADE PREPARATION	SY	1806	
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	249	
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	502	
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.45	
2	CONCRETE CURB & GUTTER, MAG STD DET 220-1, TYPE A, H=6"	LF	1001	
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF	876	
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	7292	
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	20	
8	INTERLOCKING CONCRETE PAVERS MAG STD DET. 225	SF	157	
9	DRIVEWAY ENTRANCE - TYPE II COP STD DET P1255-2	SF	380	
10	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	162	
10	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.74	
23	ADJUST EX MANHOLE FRAME & COVER, MAG STD DET 422 & P1430	EA	1	
28	PROPOSED ROADWAY LIGHT	EA	2	

REMOVAL/RELOCATION				
NO	DESCRIPTION	UNIT	QTY	
1	REMOVE PCC SINGLE CURB, CURB & GUTTER	LF	6	
2	REMOVE PCC SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SF	143	
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	598	
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SY	2946	



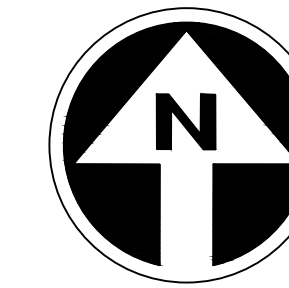
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.23
DATE: 04/20	DATE: 04/20	DATE: 04/20	SCALE: 1"=20' HORIZ.
			32 OF 95

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



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Review
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CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	33	95	
DATE: 04/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

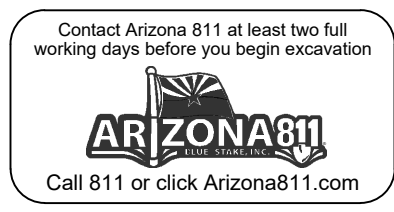
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

CONSTRUCTION NOTES				
NO	DESCRIPTION	UNIT	QTY	
PAVEMENT STRUCTURAL SECTION NO. 1				
1	SUBGRADE PREPARATION	SY	1077	
	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	149	
	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	296	
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.27	
2	CONCRETE CURB & GUTTER, MAG STD DET 220-1, TYPE A, H=6"	LF	999	
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF	287	
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	5045	
5	BUS SHELTER/ACCESSORY PAD COP STD DET P1262	SF	797	
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	20	
8	INTERLOCKING CONCRETE PAVERS MAG STD DET. 225	SF	157	
9	DRIVEWAY ENTRANCE - TYPE II COP STD DET P1255-2	SF	300	
10	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	206	
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.94	
11	CONCRETE VALLEY GUTTER/APRON MAG STD DET 240	SF	510	
16	CONCRETE CURB RAMP, COP STD DET P1237	SF	684	
21	CONCRETE CURB RAMP, COP STD DET P1238-1	SF	544	
23	ADJUST EX MANHOLE FRAME &, COVER, MAG STD DET 422 & P1430	EA	1	
24	ADJUST WATER VALVE, TYPE "A", COP STD DET P1391 & P1391-1	EA	6	
28	PROPOSED ROADWAY LIGHT	EA	5	

REMOVAL/RELOCATION				
NO	DESCRIPTION	UNIT	QTY	
1	REMOVE PCC SINGLE CURB, CURB & GUTTER	LF	1033	
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	238	
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SY	3745	

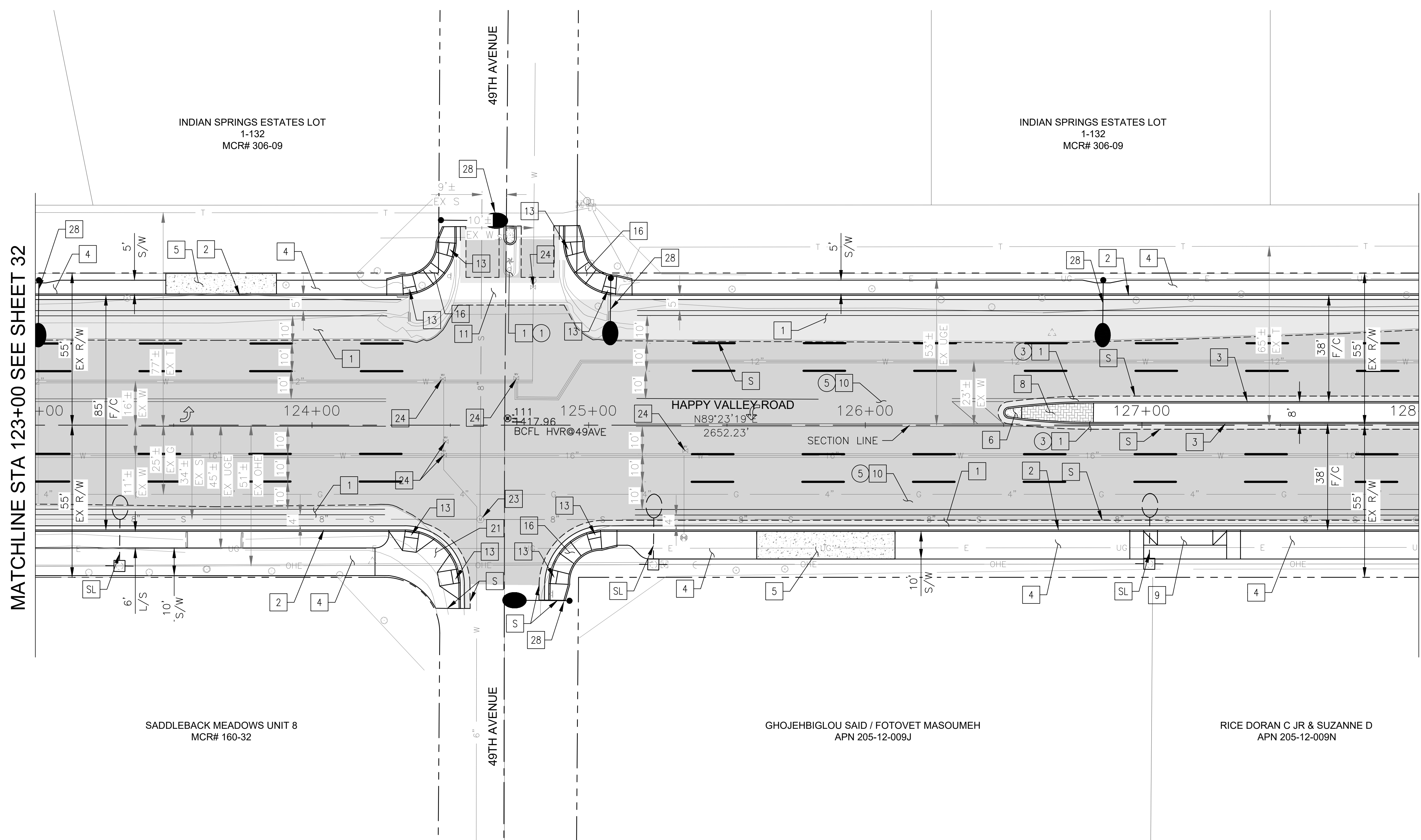


"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

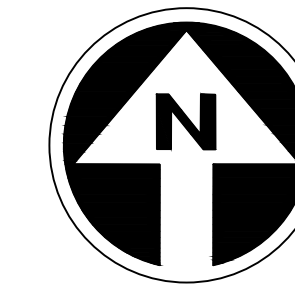
ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.24
DATE: 04/20	DATE: 04/20	DATE: 04/20	
SCALE: 1"=20' HORIZ.			33 OF 95



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



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OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	34	95	
DATE: 04/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

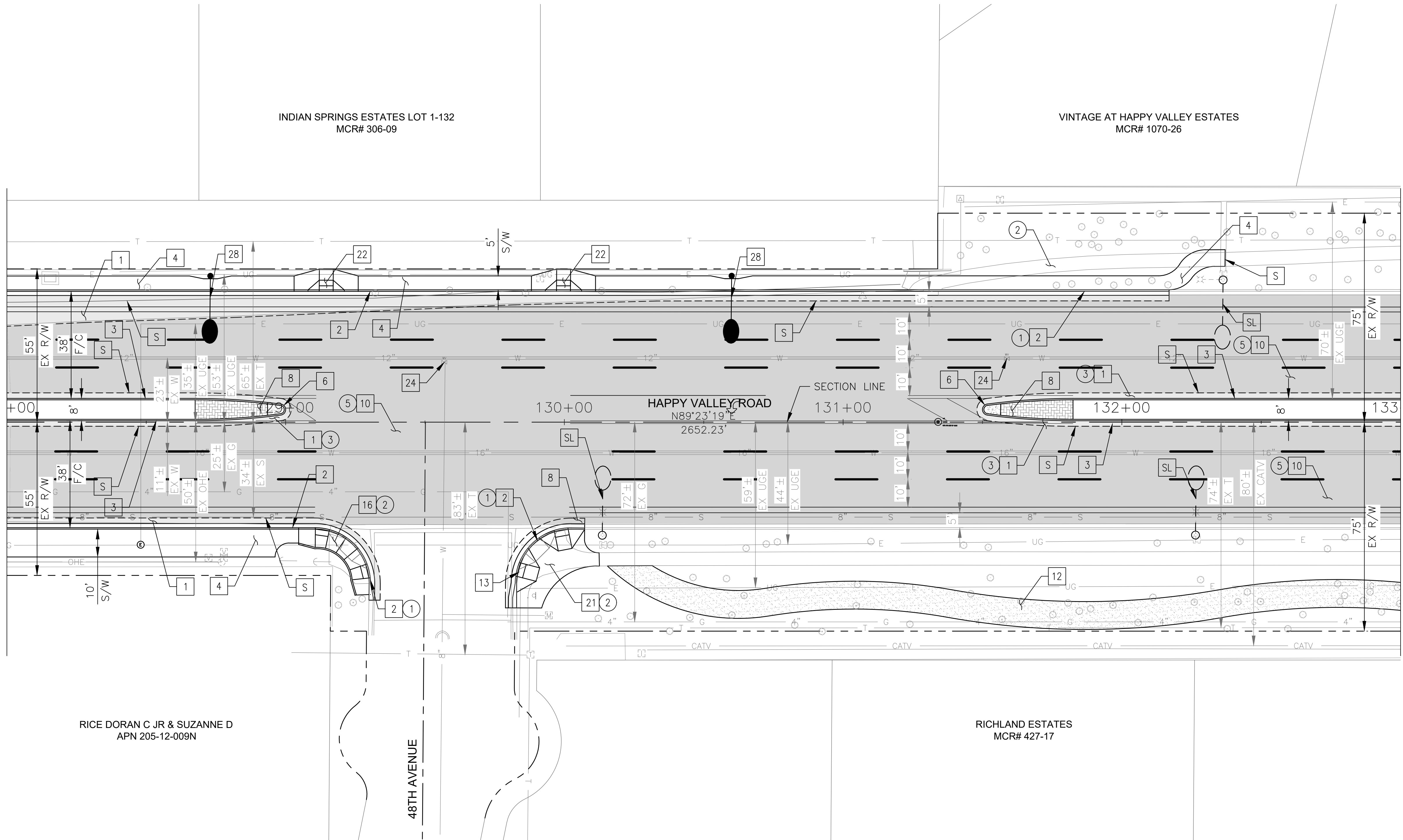
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NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

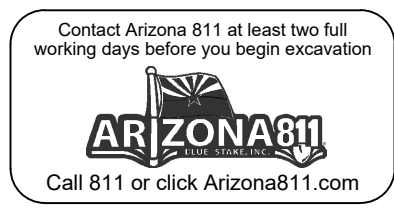
MATCHLINE STA 128+00 SEE SHEET 33

MATCHLINE STA 133+00 SEE SHEET 35



CONSTRUCTION NOTES			
NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	475
	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	66
	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	132
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.12
2	CONCRETE CURB & GUTTER, MAG STD DET 220-1, TYPE A, H=6"	LF	609
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF	474
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	2993
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	40
8	INTERLOCKING CONCRETE PAVERS MAG STD DET. 225	SF	314
10	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	239
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	1.05
12	DECOMPOSED GRANITE, STABILIZED FOR MULTIPURPOSE TRAIL, 1/4" MINUS, 4" THICK	SF	2824
16	CONCRETE CURB RAMP, COP STD DET P1237	SF	228
21	CONCRETE CURB RAMP, COP STD DET P1238-3	SF	483
22	CONCRETE CURB RAMP, COP STD DET P1241-3	SF	281
24	ADJUST WATER VALVE, TYPE "A", COP STD DET P1391 & P1391-1	EA	2
28	PROPOSED ROADWAY LIGHT	EA	2

REMOVAL/RELOCATION			
NO	DESCRIPTION	UNIT	QTY
1	REMOVE PCC SINGLE CURB, CURB & GUTTER	LF	151
2	REMOVE PCC SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SF	547
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	325
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SY	4347



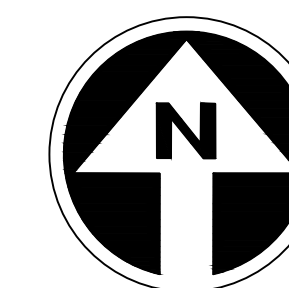
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.25
DATE: 04/20	DATE: 04/20	DATE: 04/20	34 OF 95
SCALE: 1"=20' HORIZ.			

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



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OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	35	95	
DATE: 04/20		AZTEC			
DRAWN: RJR	DESIGN: RJR	CHECKED: G.G.			

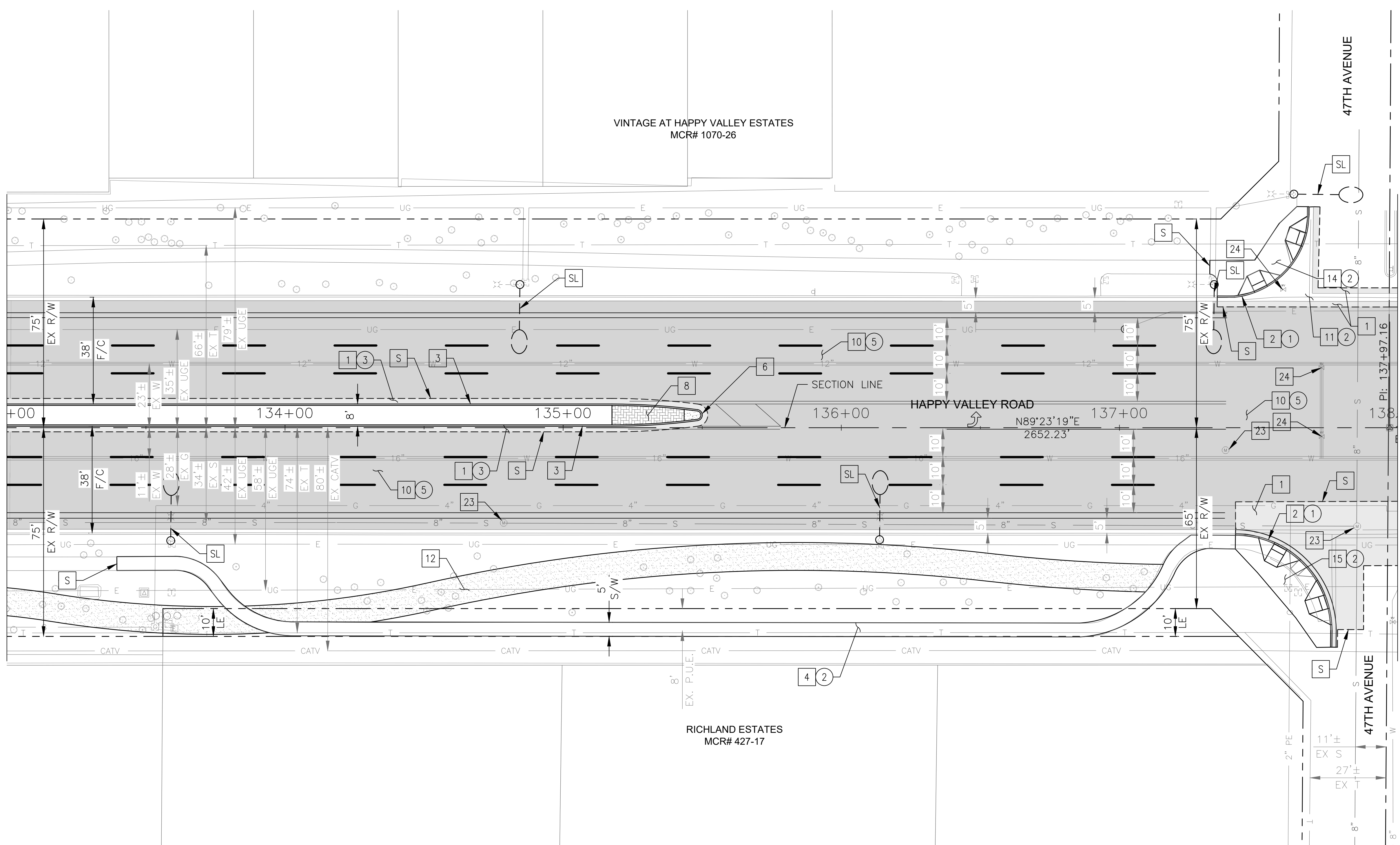
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE STA 133+00 SEE SHEET 34

MATCHLINE STA 138+00 SEE SHEET 36



NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	329
	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	45
	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	92
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.08
2	CONCRETE CURB & GUTTER MAG STD DET 220, TYPE A, H=6"	LF	113
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF	487
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	2138
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	20
8	INTERLOCKING CONCRETE PAVERS MAG STD DET. 225	SF	157
10	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	239
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	1.09
11	CONCRETE VALLEY GUTTER/APRON MAG STD DET 240	SF	510
12	DECOMPOSED GRANITE, STABILIZED FOR MULTIPURPOSE TRAIL, 1/4" MINUS, 4" THICK	SF	3993
14	CONCRETE CURB RAMP, COP STD DET P1235	SF	485
15	CONCRETE CURB RAMP, COP STD DET P1236	SF	282
23	ADJUST EX MANHOLE FRAME & COVER, MAG STD DET 422 & P1430	EA	3
24	ADJUST WATER VALVE, TYPE "A", COP STD DET P1391 & P1391-1	EA	4

REMOVAL/RELOCATION			
NO	DESCRIPTION	UNIT	QTY
1	REMOVE PCC SINGLE CURB, CURB & GUTTER	LF	120
2	REMOVE PCC SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SF	2769
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	329
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SY	4345



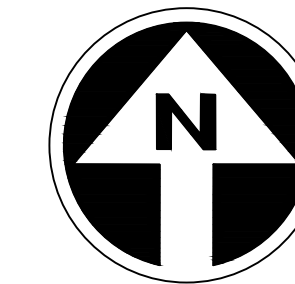
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ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.26
DATE: 04/20	DATE: 04/20	DATE: 04/20	35 OF 95

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



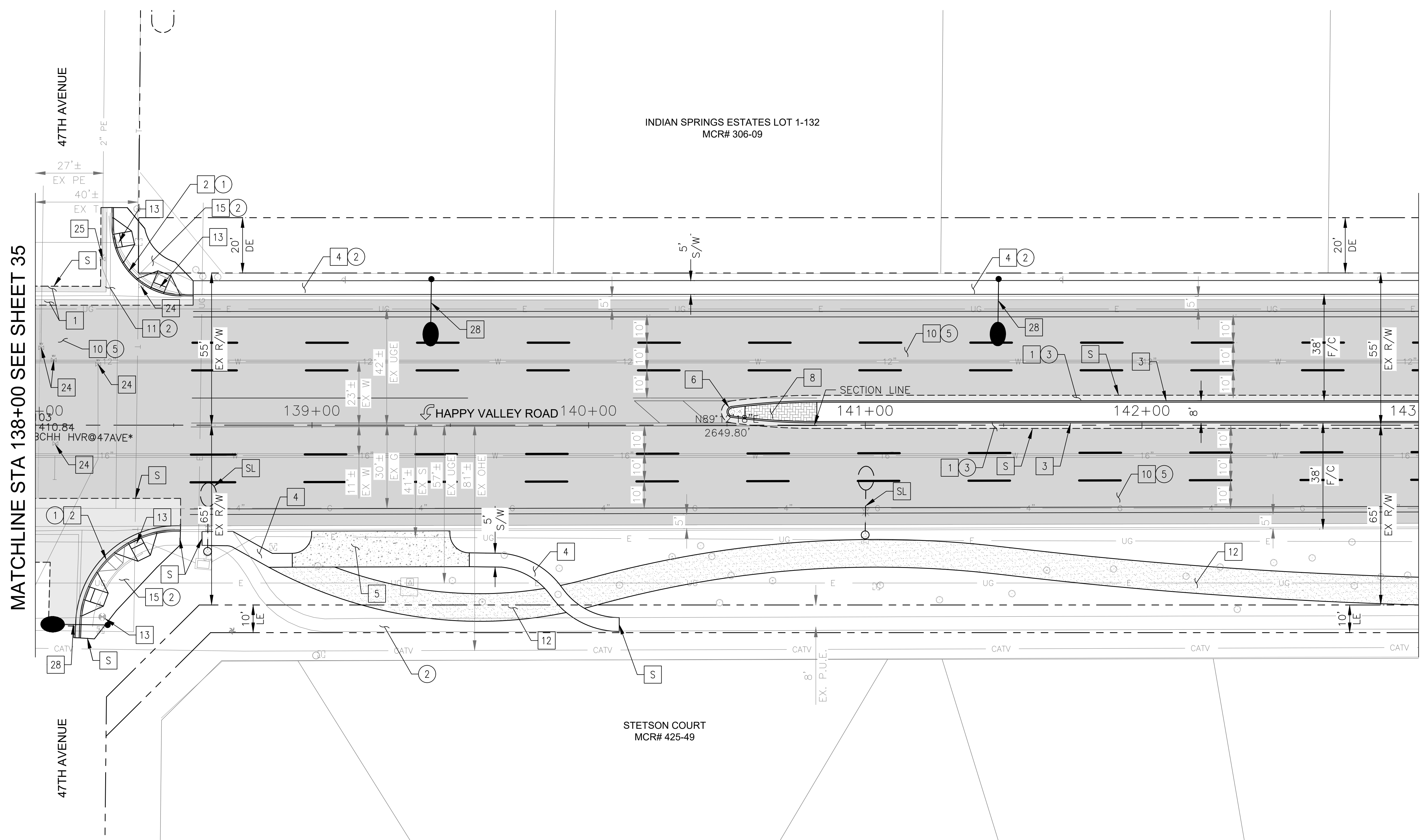
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F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	36	95	
DATE: 04/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	501
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	69
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	139
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.13
2	CONCRETE CURB & GUTTER MAG STD DET 220, TYPE A, H=6"	LF	111
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF	487
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	2701
5	BUS SHELTER/ACCESSORY PAD COP STD DET P1262	SF	741
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	20
8	INTERLOCKING CONCRETE PAVERS MAG STD DET. 225	SF	157
10	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	237
10	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	1.08
11	CONCRETE VALLEY GUTTER/APRON MAG STD DET 240	SF	306
12	DECOMPOSED GRANITE, STABILIZED FOR MULTIPURPOSE TRAIL, 1/4" MINUS, 4" THICK	SF	4024
15	CONCRETE CURB RAMP, COP STD DET P1236	SF	1008
24	ADJUST WATER VALVE, TYPE "A", COP STD DET P1391 & P1391-1	EA	5
25	ADJUST EX UTILITY VALVE, MAG STD DET 391-1 & 391-2	EA	1
28	PROPOSED ROADWAY LIGHT	EA	3

REMOVAL/RELOCATION			
NO	DESCRIPTION	UNIT	QTY
1	REMOVE PCC SINGLE CURB, CURB & GUTTER	LF	104
2	REMOVE PCC SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SF	3449
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	458
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SY	4308



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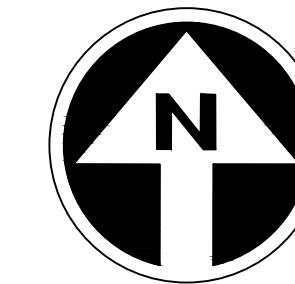
ROADWAY PLAN

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.27
DATE: 04/20	DATE: 04/20	DATE: 04/20	
SCALE: 1"=20' HORIZ.			36 OF 95

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



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OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	37	95	
DATE: 04/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

NO.	REVISION BY	DESCRIPTION	DATE

NO.	REVISION BY	DESCRIPTION	DATE

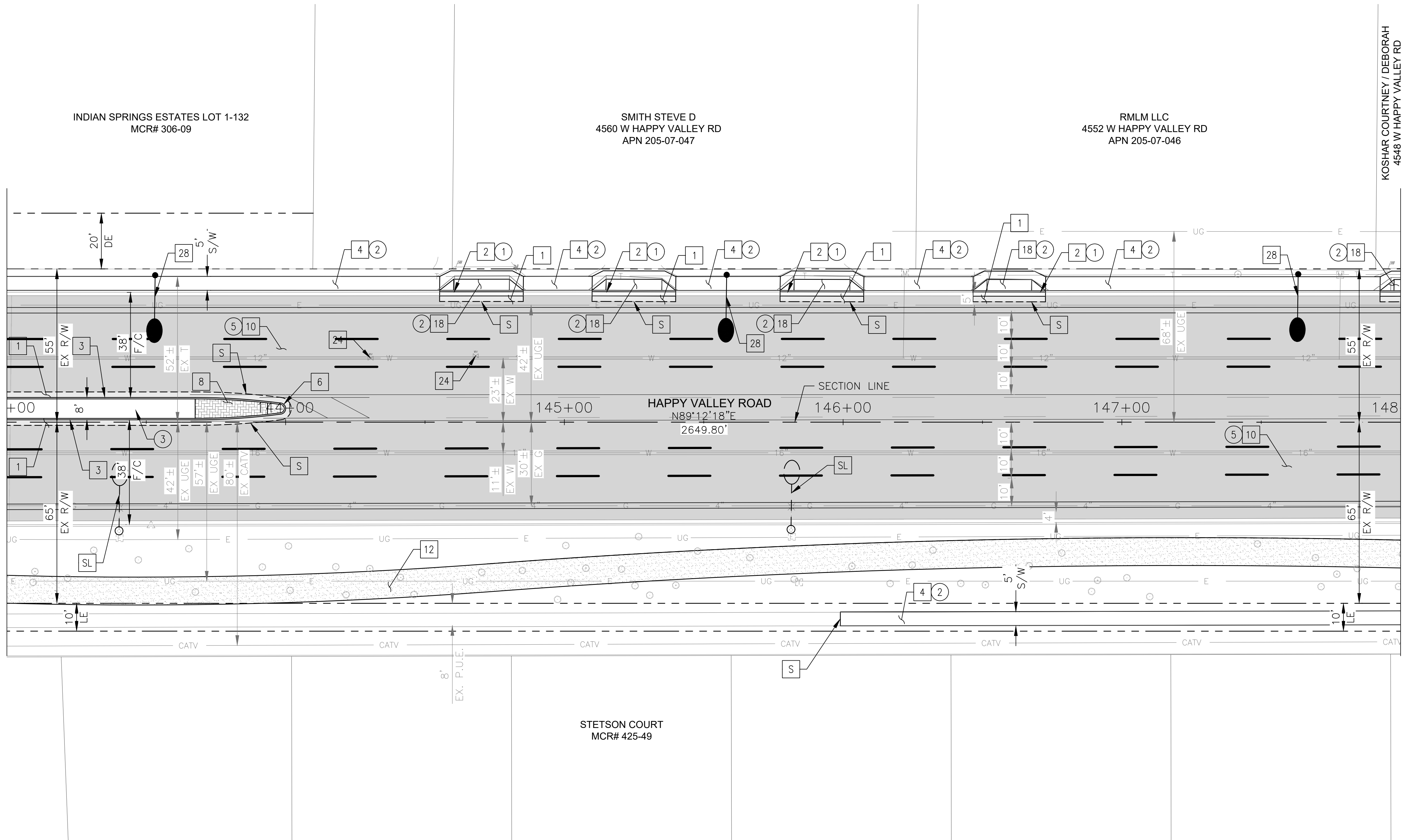
NO.	REVISION BY	DESCRIPTION	DATE

CONSTRUCTION NOTES				
NO	DESCRIPTION	UNIT	QTY	
PAVEMENT STRUCTURAL SECTION NO. 1				
1	SUBGRADE PREPARATION	SY	156	
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	22	
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	43	
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.04	
2	CONCRETE CURB & GUTTER MAG STD DET 220, TYPE A, H=6"	LF	124	
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF	187	
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	2881	
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	20	
8	INTERLOCKING CONCRETE PAVERS MAG STD DET. 225	SF	157	
10	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	241	
10	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	1.09	
12	DECOMPOSED GRANITE, STABILIZED FOR MULTIPURPOSE TRAIL, 1/4" MINUS, 4" THICK	SF	5113	
18	CONCRETE DRIVEWAY ENTRANCE, COP STD DET P1244	SF	831	
24	ADJUST WATER VALVE, TYPE "A", COP STD DET P1391 & P1391-1	EA	2	
28	PROPOSED ROADWAY LIGHT	EA	3	

REMOVAL/RELOCATION				
NO	DESCRIPTION	UNIT	QTY	
1	REMOVE PCC SINGLE CURB, CURB & GUTTER	LF	124	
2	REMOVE PCC SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SF	3786	
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	129	
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SY	4379	

MATCHLINE STA 143+00 SEE SHEET 36

MATCHLINE STA 148+00 SEE SHEET 38

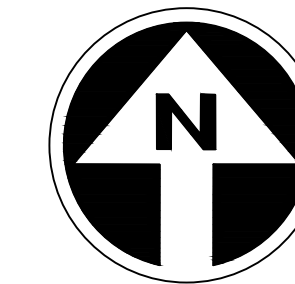


PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX.

ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.28
DATE: 04/20	DATE: 04/20	DATE: 04/20	
SCALE: 1"=20' HORIZ.			37 OF 95

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



FINAL
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Review
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CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	38	95	
DATE: 04/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

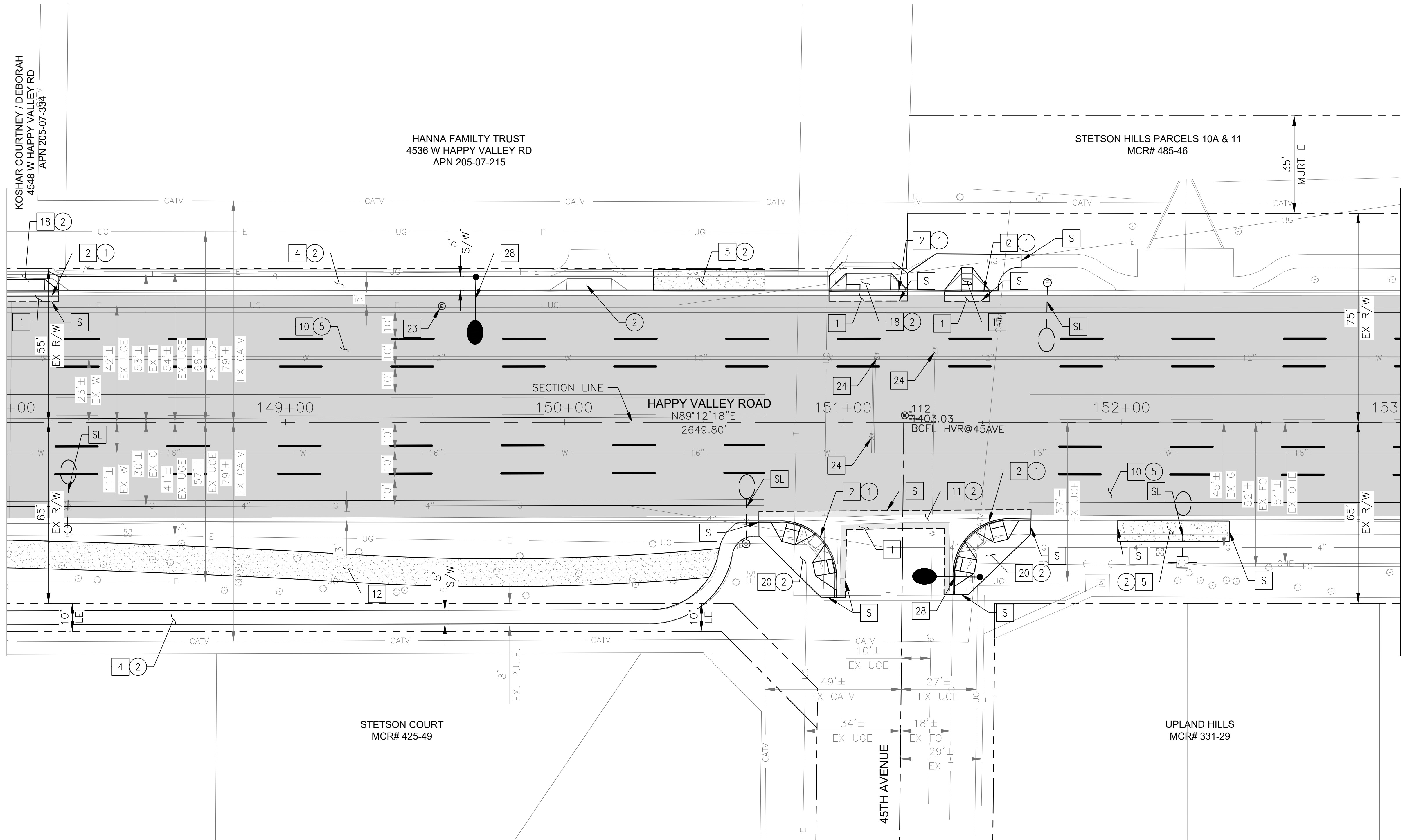
REVISION BY	DESCRIPTION	DATE

REVISION BY	DESCRIPTION	DATE

REVISION BY	DESCRIPTION	DATE

MATCHLINE STA 148+00 SEE SHEET 37

MATCHLINE STA 153+00 SEE SHEET 39



NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	50
	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	7
	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	14
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.01
2	CONCRETE CURB & GUTTER MAG STD DET 220, TYPE A, H=6"	LF	156
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	2974
5	BUS SHELTER/ACCESSORY PAD COP STD DET P1262	SF	594
10	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	242
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	1.10
12	DECOMPOSED GRANITE, STABILIZED FOR MULTIPURPOSE TRAIL, 1/4" MINUS, 4" THICK	SF	2548
11	CONCRETE VALLEY GUTTER/APRON MAG STD DET 240	SF	466
17	CONCRETE SIDEWALK RAMP, COP STD DET P1241-2	SF	81
18	CONCRETE DRIVEWAY ENTRANCE, COP STD DET P1244	SF	262
20	CONCRETE SIDEWALK RAMP, COP STD DET P1238-2	SF	817
23	ADJUST EX MANHOLE FRAME & COVER, MAG STD DET 422 & P1430	EA	1
24	ADJUST WATER VALVE, TYPE "A", COP STD DET P1391 & P1391-1	EA	3
28	PROPOSED ROADWAY LIGHT	EA	2

REMOVAL/RELOCATION			
NO	DESCRIPTION	UNIT	QTY
1	REMOVE PCC SINGLE CURB, CURB & GUTTER	LF	156
2	REMOVE PCC SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SF	4218
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	40
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SY	4404



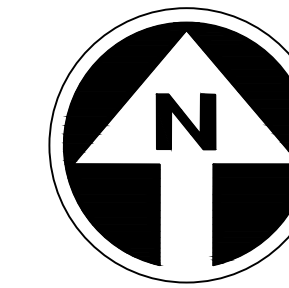
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ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.29
DATE: 04/20	DATE: 04/20	DATE: 04/20	
SCALE: 1"=20' HORIZ.			38 OF 95

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



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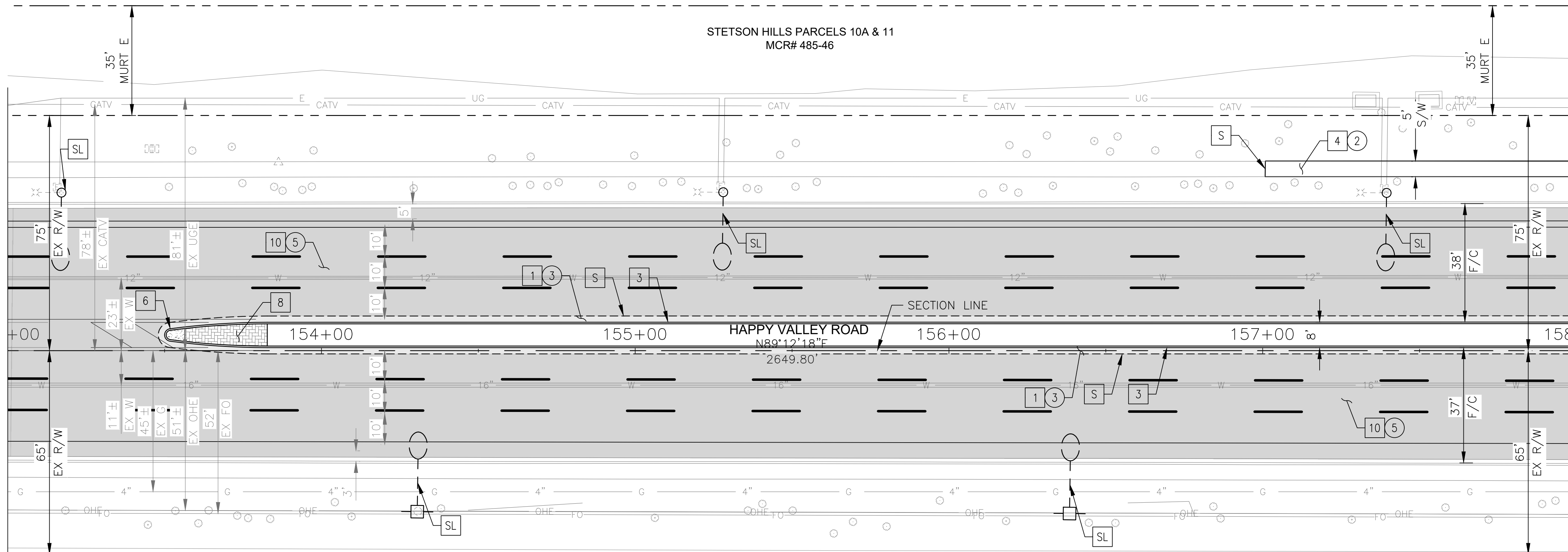
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	39	95	
DATE: 04/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

CONSTRUCTION NOTES			
NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
	SUBGRADE PREPARATION	SY	601
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	83
	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	167
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.15
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF	887
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	499
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	20
8	INTERLOCKING CONCRETE PAVERS MAG STD DET. 225	SF	160
10	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	221
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	1.00

REMOVAL/RELOCATION			
NO	DESCRIPTION	UNIT	QTY
2	REMOVE PCC SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SF	492
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	4026
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SY	601

MATCHLINE STA 153+00 SEE SHEET 38

MATCH LINE STA 158+00 SEE SHEET 40



NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



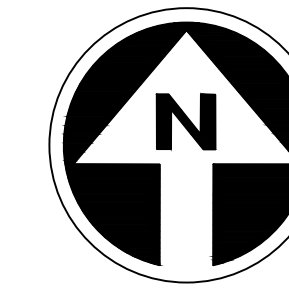
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.30
DATE: 04/20	DATE: 04/20	DATE: 04/20	SCALE: 1"=20' HORIZ.
			39 OF 95

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



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OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	40	95	
DATE: 04/20		AZTEC			
DRAWN: RJR	DESIGN: RJR	CHECKED: G.G.			

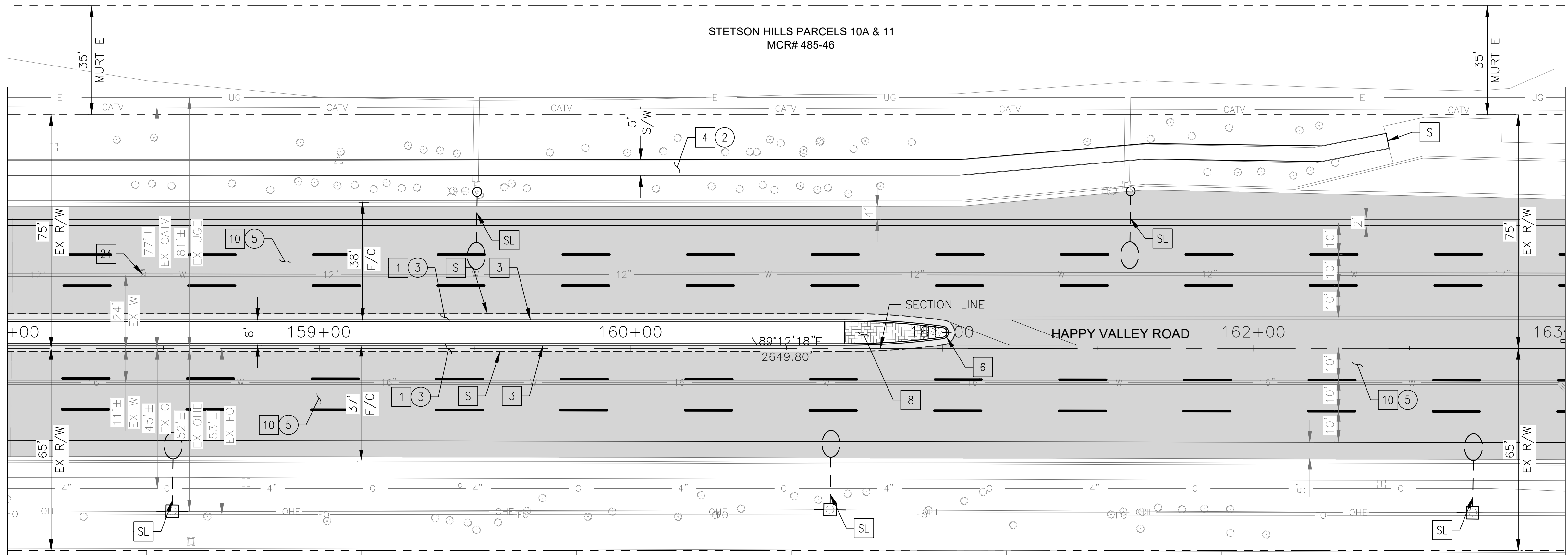
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NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

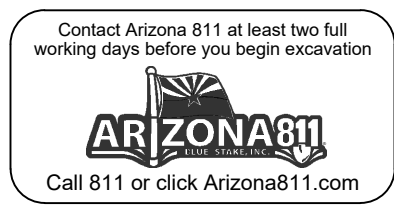
MATCHLINE STA 158+00 SEE SHEET 39

MATCH LINE STA 163+00 SEE SHEET 41



CONSTRUCTION NOTES			
NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	404
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	56
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	112
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.10
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF	591
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	2211
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	20
8	INTERLOCKING CONCRETE PAVERS MAG STD DET. 225	SF	166
10	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	236
10	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	1.07
24	ADJUST WATER VALVE, TYPE "A", COP STD DET P1391 & P1391-1	EA	1

REMOVAL/RELOCATION			
NO	DESCRIPTION	UNIT	QTY
2	REMOVE PCC SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SF	2157
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	404
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SY	4297



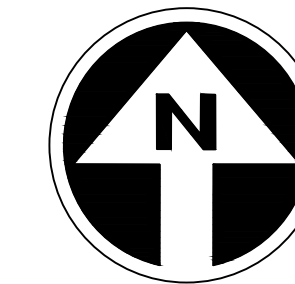
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.31
DATE: 04/20	DATE: 04/20	DATE: 04/20	
SCALE: 1"=20' HORIZ.			40 OF 95

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



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OR RECORDING

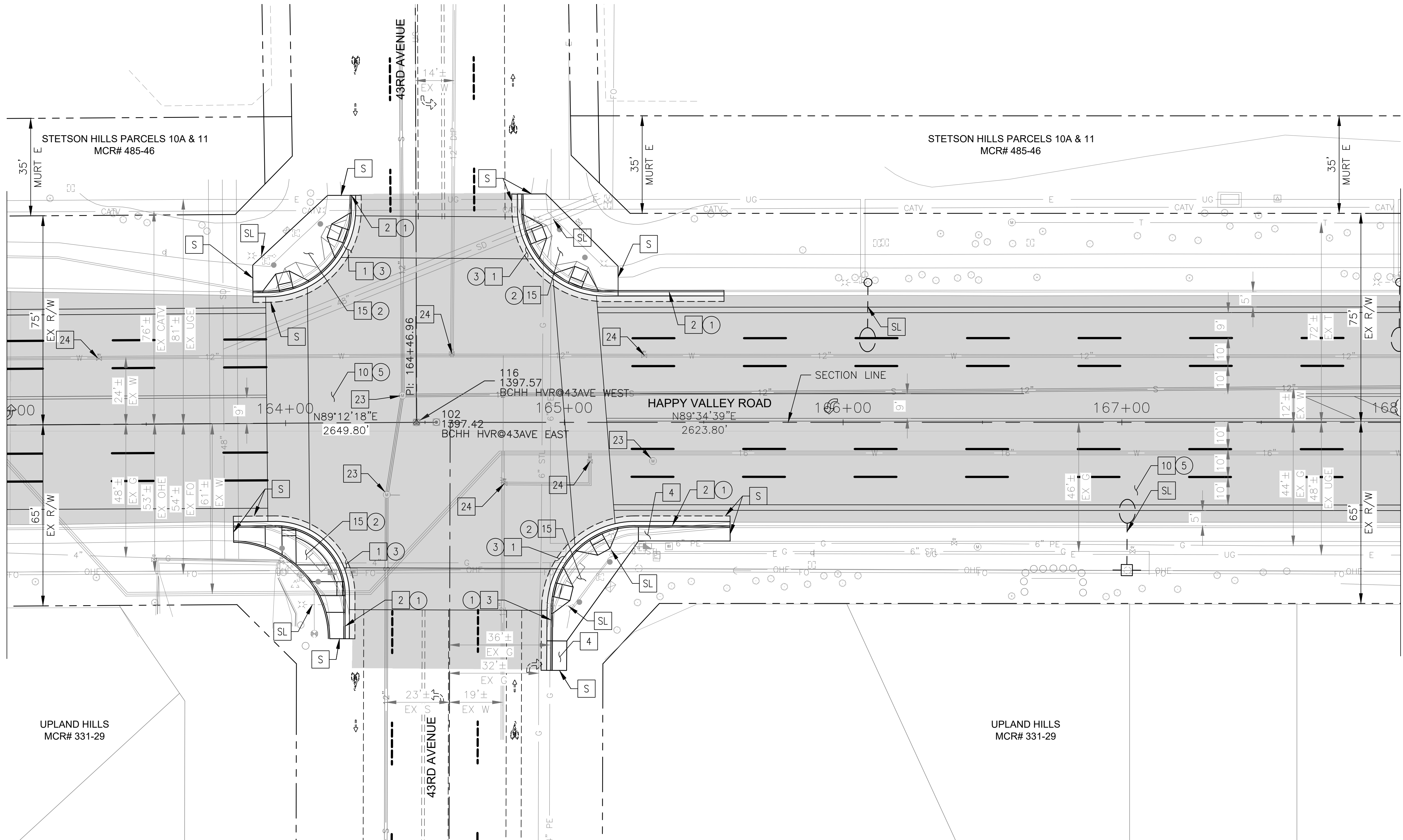
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	41	95	
DATE: 04/20		AZTEC			
DRAWN: RJR	DESIGN: RJR	CHECKED: G.G.			

CONSTRUCTION NOTES				
NO	DESCRIPTION	UNIT	QTY	
1	SUBGRADE PREPARATION	SY	77	
	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	11	
	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	21	
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.02	
2	CONCRETE CURB & GUTTER, MAG STD DET 220-1, TYPE A, H=6"	LF	325	
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	217	
10	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	289	
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	1.31	
15	CONCRETE CURB RAMP, COP STD DET P1236	SF	2606	
23	ADJUST EX MANHOLE FRAME & COVER, MAG STD DET 422 & P1430	EA	3	
24	ADJUST WATER VALVE, TYPE "A", COP STD DET P1391 & P1391-1	EA	5	

REMOVAL/RELOCATION				
NO	DESCRIPTION	UNIT	QTY	
1	REMOVE PCC SINGLE CURB, CURB & GUTTER	LF	231	
2	REMOVE PCC SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SF	1887	
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	77	
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SY	5257	

MATCHLINE STA 163+00 SEE SHEET 40

MATCH LINE STA 168+00 SEE SHEET 42



NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



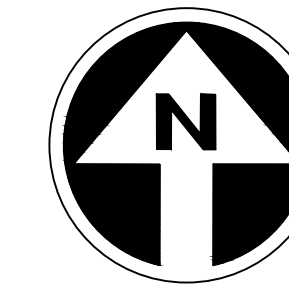
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.32
DATE: 04/20	DATE: 04/20	DATE: 04/20	41 OF 95
SCALE: 1"=20' HORIZ.			

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



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OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	42	95	
DATE: 04/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

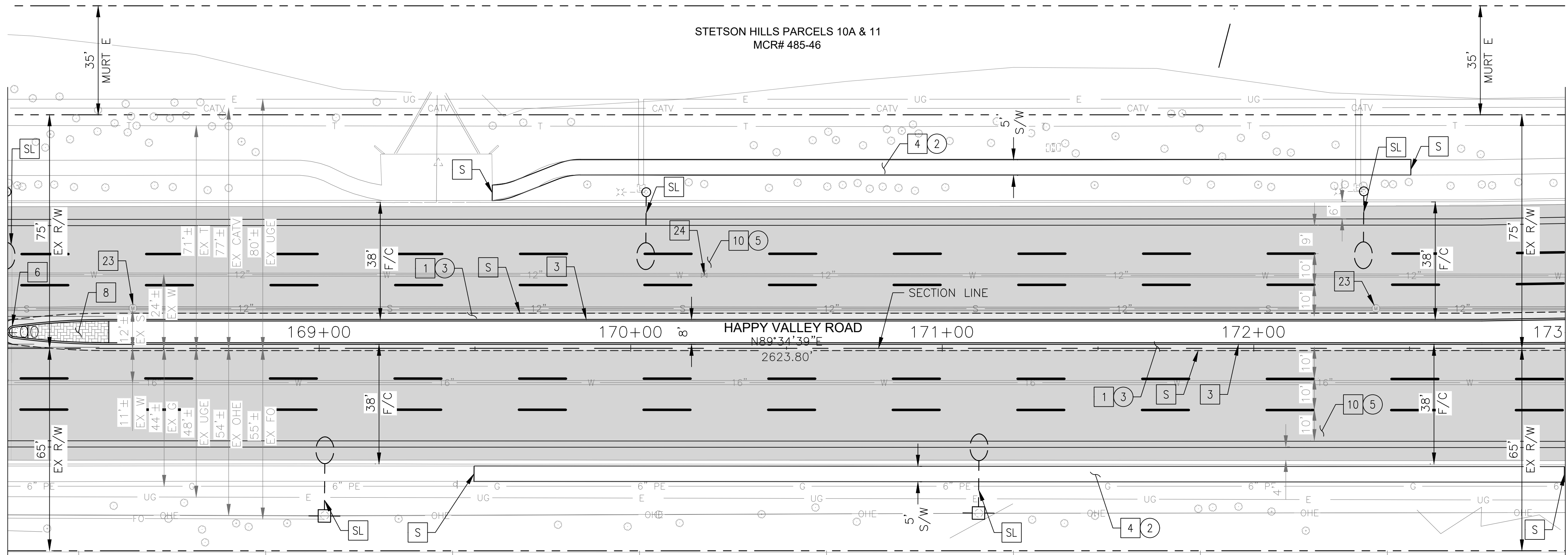
CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
	SUBGRADE PREPARATION	SY	670
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	92
	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	186
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.17
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF	988
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	3215
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	20
8	INTERLOCKING CONCRETE PAVERS MAG STD DET. 225	SF	157
10	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	225
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	1.02
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	1

REMOVAL/RELOCATION			
NO	DESCRIPTION	UNIT	QTY
2	REMOVE PCC SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SF	1446
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	672
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SY	4099

MATCHLINE STA 168+00 SEE SHEET 41

MATCH LINE STA 173+00 SEE SHEET 43

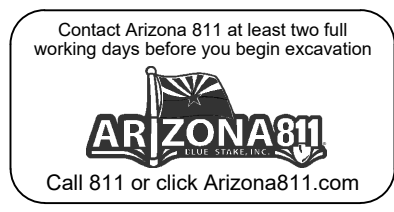


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NO.	DESCRIPTION	REV BY	CHK BY	DATE

UPLAND HILLS
MCR# 331-29



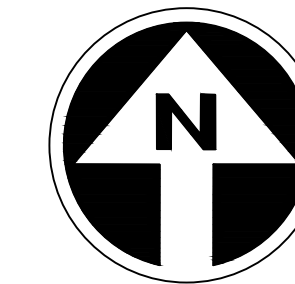
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ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.33
DATE: 04/20	DATE: 04/20	DATE: 04/20	
SCALE: 1"=20' HORIZ.			42 OF 95

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



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F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	43	95	
DATE: 04/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

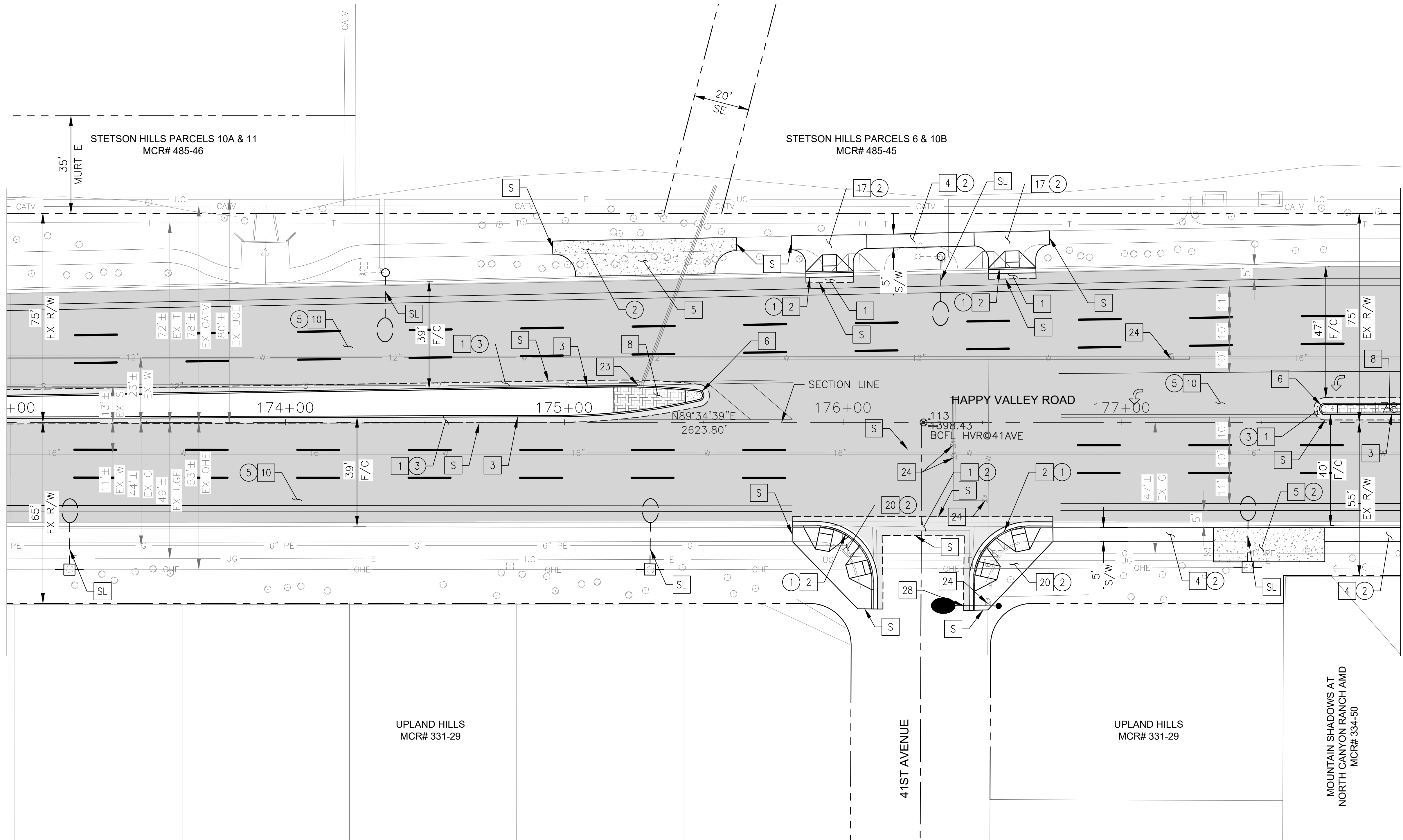
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NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

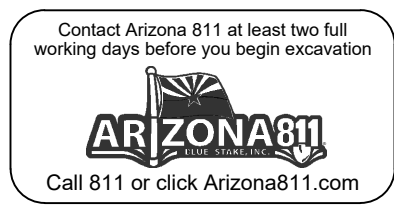
MATCHLINE STA 173+00 SEE SHEET 42

MATCH LINE STA 178+00 SEE SHEET 44



NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	382
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	53
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	106
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.10
2	CONCRETE CURB & GUTTER MAG STD DET 220, TYPE A, H=6"	LF	260
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF	533
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	466
5	BUS SHELTER/ACCESSORY PAD COP STD DET P1262	SF	1242
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	38
8	DECORATIVE BRICK PAVERS, MAG STD DET. 225	SF	260
10	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	251
10	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	1.14
11	CONCRETE VALLEY GUTTER/APRON MAG STD DET 240	SF	490
17	CONCRETE SIDEWALK RAMP, COP STD DET P1241-2	SF	564
20	CONCRETE SIDEWALK RAMP, COP STD DET P1238-2	SF	934
23	ADJUST EX MANHOLE FRAME & COVER, MAG STD DET 422 & P1430	EA	1
24	ADJUST WATER VALVE, TYPE "A", COP STD DET P1391 & P1391-1	EA	5
28	PROPOSED ROADWAY LIGHT	EA	1

NO	DESCRIPTION	UNIT	QTY
REMOVAL/RELOCATION			
1	REMOVE PCC SINGLE CURB, CURB & GUTTER	LF	252
2	REMOVE PCC SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SF	2270
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	401
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SY	4566



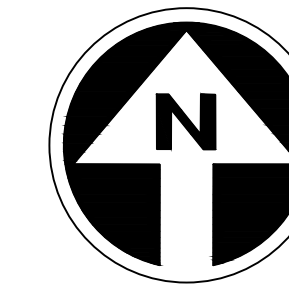
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ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.34
DATE: 04/20	DATE: 04/20	DATE: 04/20	43 OF 95
SCALE: 1"=20' HORIZ.			

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



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F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	44	95	
DATE: 04/20		AZTEC			
DRAWN: RJR	DESIGN: RJR	CHECKED: G.G.			

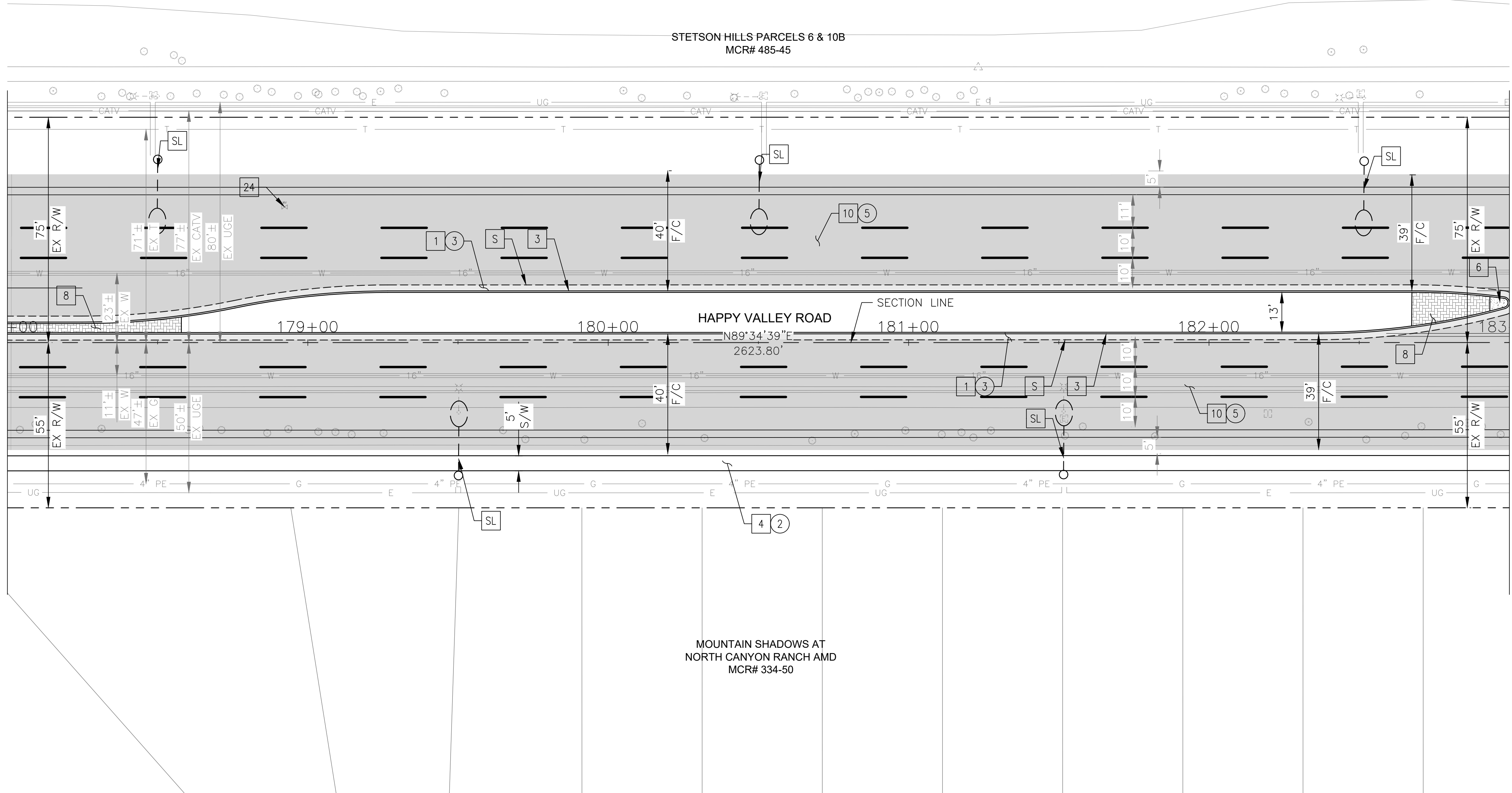
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NO.	DESCRIPTION	REV BY	CHK BY	DATE

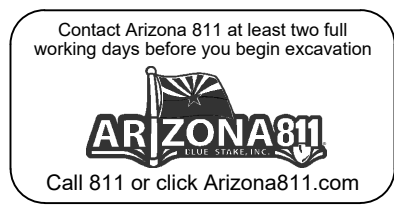
MATCHLINE STA 178+00 SEE SHEET 43

MATCHLINE STA 183+00 SEE SHEET 45



CONSTRUCTION NOTES			
NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	907
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	125
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	252
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.23
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF	988
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	2500
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	21
8	DECORATIVE BRICK PAVERS, MAG STD DET. 225	SF	418
10	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	242
10	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	1.10
24	ADJUST WATER VALVE, TYPE "A", COP STD DET P1391 & P1391-1	EA	1

REMOVAL/RELOCATION			
NO	DESCRIPTION	UNIT	QTY
2	REMOVE PCC SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SF	2485
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	907
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SY	4406



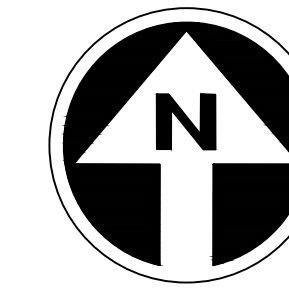
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ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.35
DATE: 04/20	DATE: 04/20	DATE: 04/20	SCALE: 1"=20' HORIZ.
			44 OF 95

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



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F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	45	95	
DATE: 04/20		AZTEC			
DRAWN: RJR	DESIGN: RJR	CHECKED: G.G.			

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

CONSTRUCTION NOTES				
NO	DESCRIPTION	UNIT	QTY	
PAVEMENT STRUCTURAL SECTION NO. 1				
1	SUBGRADE PREPARATION	SY	689	
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	95	
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	192	
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.17	
2	CONCRETE CURB & GUTTER MAG STD DET 220, TYPE A, H=6"	LF	134	
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF	592	
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	3128	
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	17	
8	DECORATIVE BRICK PAVERS, MAG STD DET. 225	SF	218	
10	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	254	
10	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	1.15	
17	CONCRETE SIDEWALK RAMP, COP STD DET P1241-2	SF	564	
20	CONCRETE SIDEWALK RAMP, COP STD DET P1238-2	SF	831	
24	ADJUST WATER VALVE, TYPE "A", COP STD DET P1391 & P1391-1	EA	2	
28	PROPOSED ROADWAY LIGHT	EA	1	

REMOVAL/RELOCATION				
NO	DESCRIPTION	UNIT	QTY	
1	REMOVE PCC SINGLE CURB, CURB & GUTTER	LF	132	
2	REMOVE PCC SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SF	4173	
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	510	
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SY	4611	

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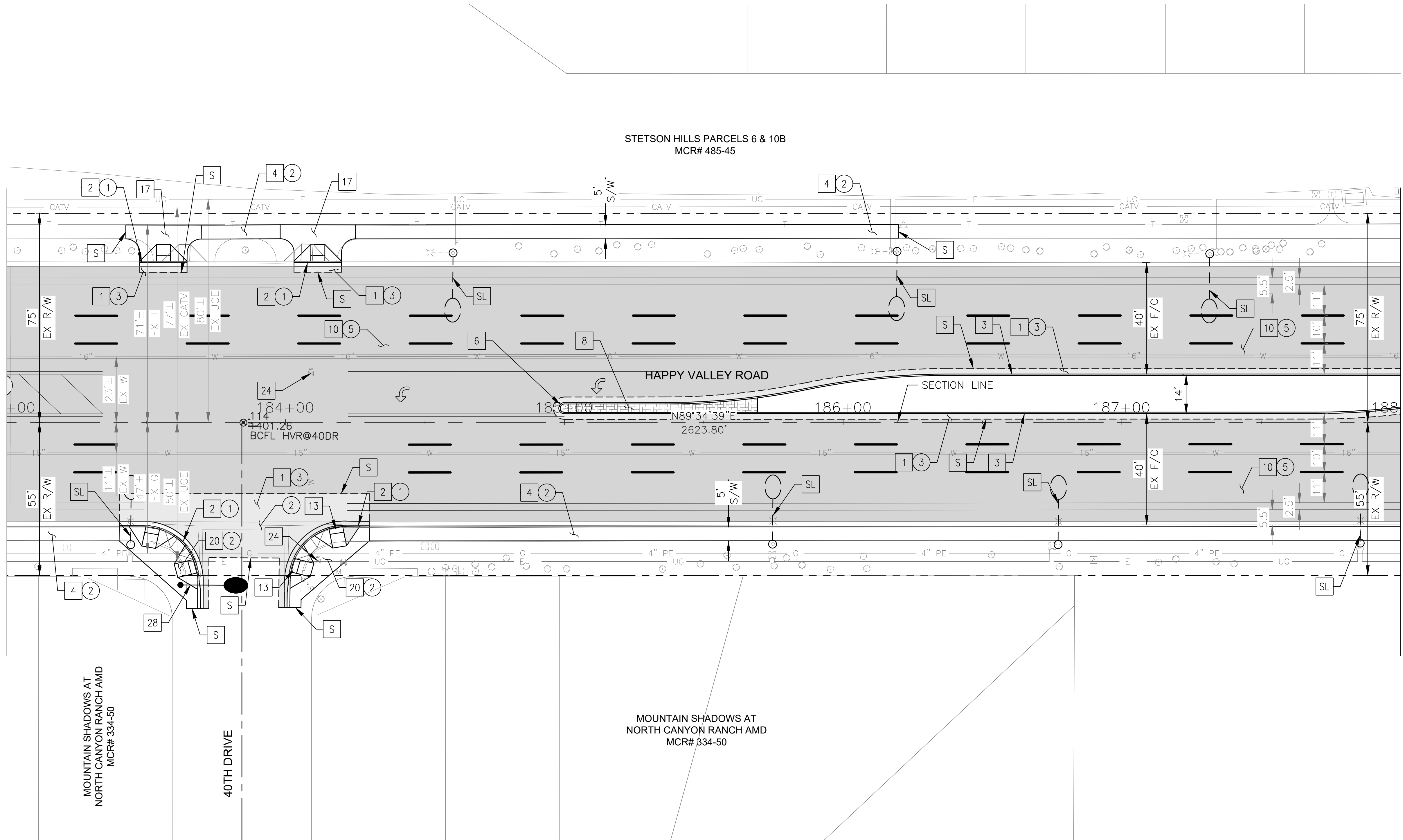
ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

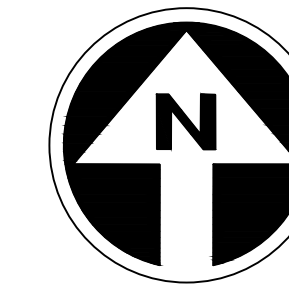
DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.36
DATE: 04/20	DATE: 04/20	DATE: 04/20	SCALE: 1"=20' HORIZ.
			45 OF 95

MATCHLINE STA 183+00 SEE SHEET 44

MATCHLINE STA 188+00 SEE SHEET 46



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



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Review
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OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	46	95	

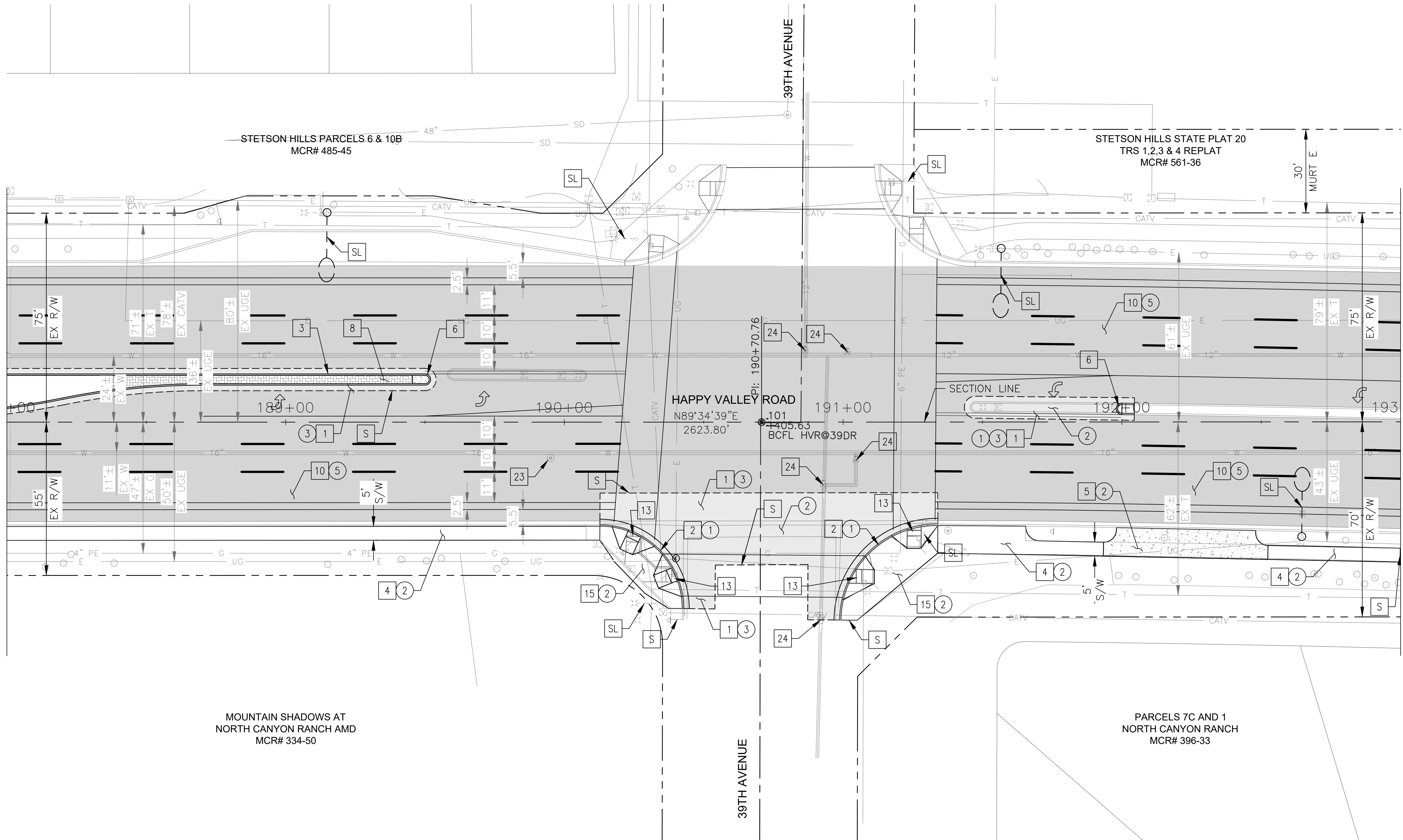
04/20
DATE: **AZTEC**
DRAWN: RJR | DESIGN: RJR | CHECKED: G.G.

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE STA 188+00 SEE SHEET 45



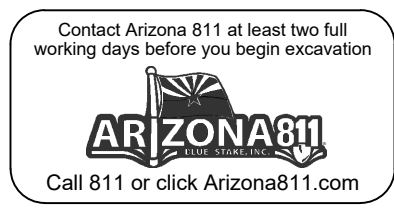
MATCHLINE STA 193+00 SEE SHEET 47

CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	552
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	76
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	153
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.14
2	CONCRETE CURB & GUTTER MAG STD DET 220, TYPE A, H=6"	LF	106
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF	291
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	1767
5	BUS SHELTER/ACCESSORY PAD COP STD DET P1262	SF	568
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	35
8	DECORATIVE BRICK PAVERS, MAG STD DET. 225	SF	358
10	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	272
10	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	1.24
15	CONCRETE CURB RAMP, COP STD DET P1236	SF	1264
23	ADJUST EX MANHOLE FRAME & COVER, MAG STD DET 422 & P1430	EA	1
24	ADJUST WATER VALVE, TYPE "A", COP STD DET P1391 & P1391-1	EA	5

REMOVAL/RELOCATION

NO	DESCRIPTION	UNIT	QTY
1	REMOVE PCC SINGLE CURB, CURB & GUTTER	LF	219
2	REMOVE PCC SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SF	3971
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	161
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SY	4941



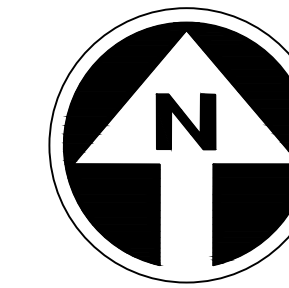
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.37
DATE: 04/20	DATE: 04/20	DATE: 04/20	46 OF 95
SCALE: 1"=20' HORIZ.			

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



FINAL
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	47	95	
DATE: 04/20		AZTEC			
DRAWN: RJR	DESIGN: RJR	CHECKED: G.G.			

CONSTRUCTION NOTES					
NO	DESCRIPTION	UNIT	QTY		
10	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	258		
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	1.17		

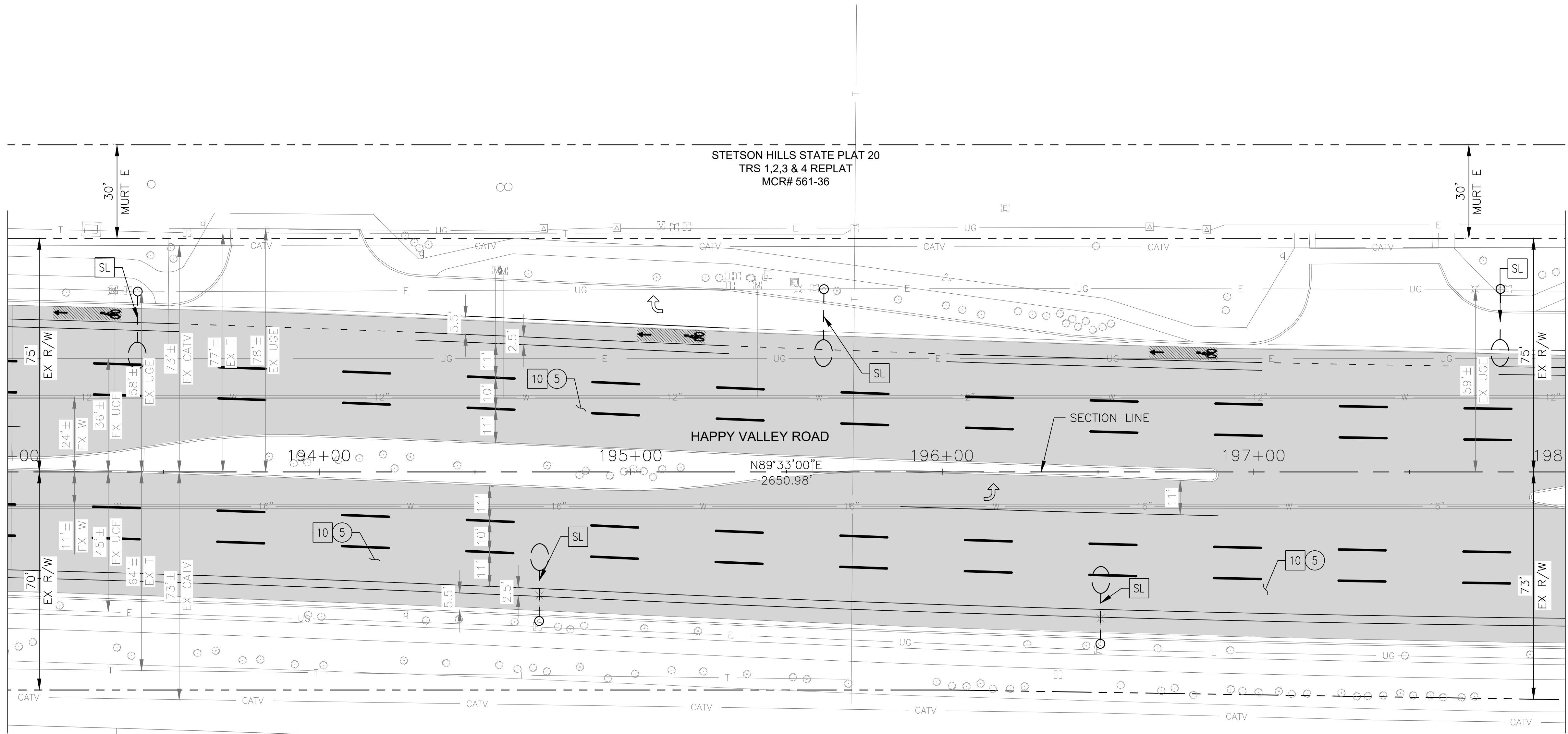
NO.	REVISION BY	DESCRIPTION	DATE

NO.	REVISION BY	DESCRIPTION	DATE

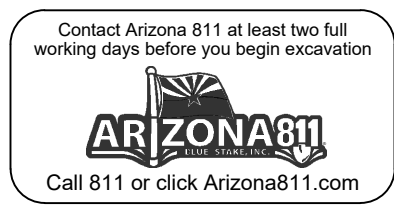
NO.	REVISION BY	DESCRIPTION	DATE

MATCHLINE STA 193+00 SEE SHEET 46

MATCHLINE STA 198+00 SEE SHEET 48



REMOVAL/RELOCATION					
NO	DESCRIPTION	UNIT	QTY		
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SY	4691		



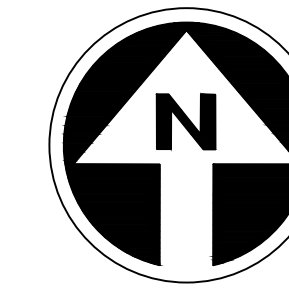
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.38
DATE: 04/20	DATE: 04/20	DATE: 04/20	
SCALE: 1"=20' HORIZ.			47 OF 95

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



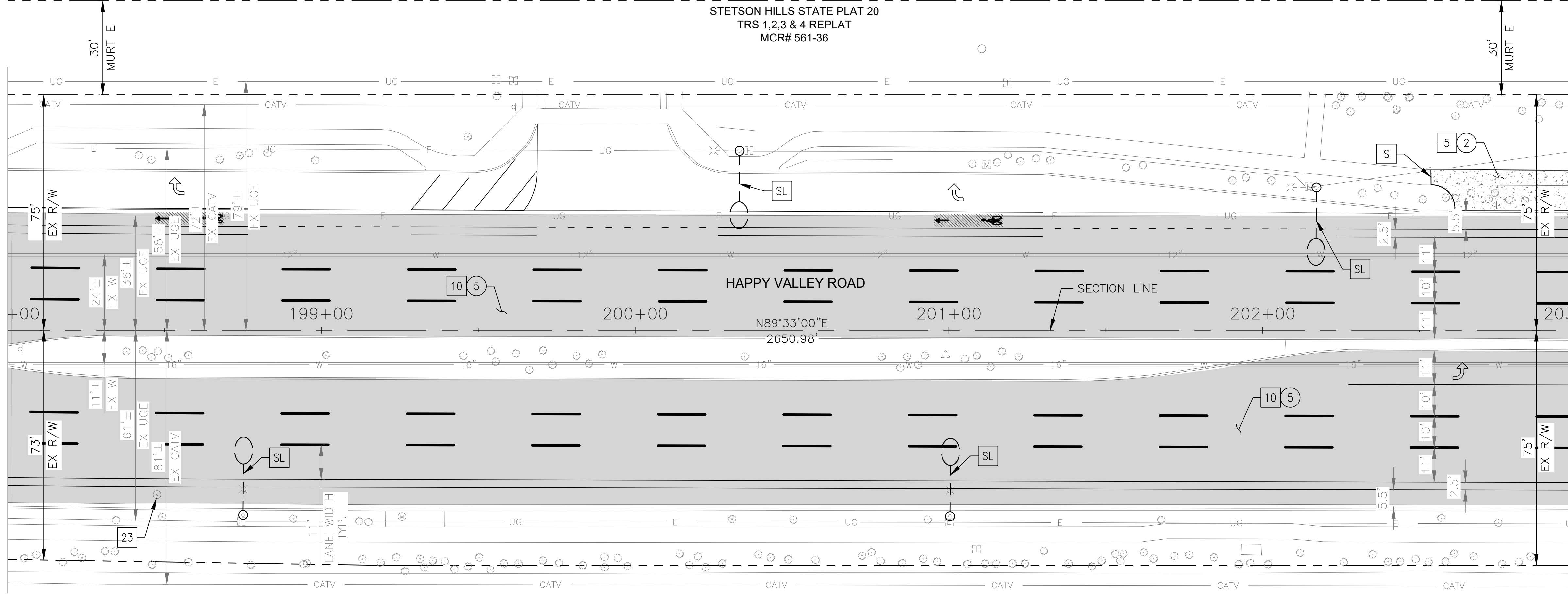
FINAL
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	48	95	
DATE: 04/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

CONSTRUCTION NOTES				
NO	DESCRIPTION	UNIT	QTY	
5	BUS SHELTER/ACCESSORY PAD COP STD DET P1262	SF	555	
10	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	248	
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	1.26	
23	ADJUST EX MANHOLE FRAME & COVER, MAG STD DET 422 & P1430	EA	1	

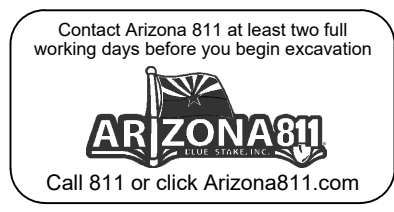
MATCHLINE STA 198+00 SEE SHEET 47

MATCH LINE STA 203+00 SEE SHEET 49



PARCELS 7C AND 1
NORTH CANYON RANCH
MCR# 396-33

REMOVAL/RELOCATION				
NO	DESCRIPTION	UNIT	QTY	
2	REMOVE PCC SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SF	228	
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SY	4504	



"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 PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

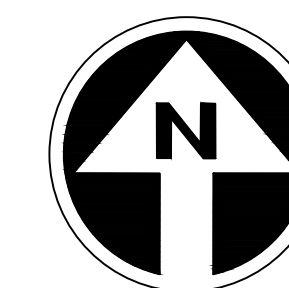
DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.39
DATE: 04/20	DATE: 04/20	DATE: 04/20	
SCALE: 1"=20' HORIZ.			48 OF 95

NO.	DESCRIPTION	REV BY	CHK BY	DATE

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NO.	DESCRIPTION	REV BY	CHK BY	DATE

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



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CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	49	95	
DATE: 04/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

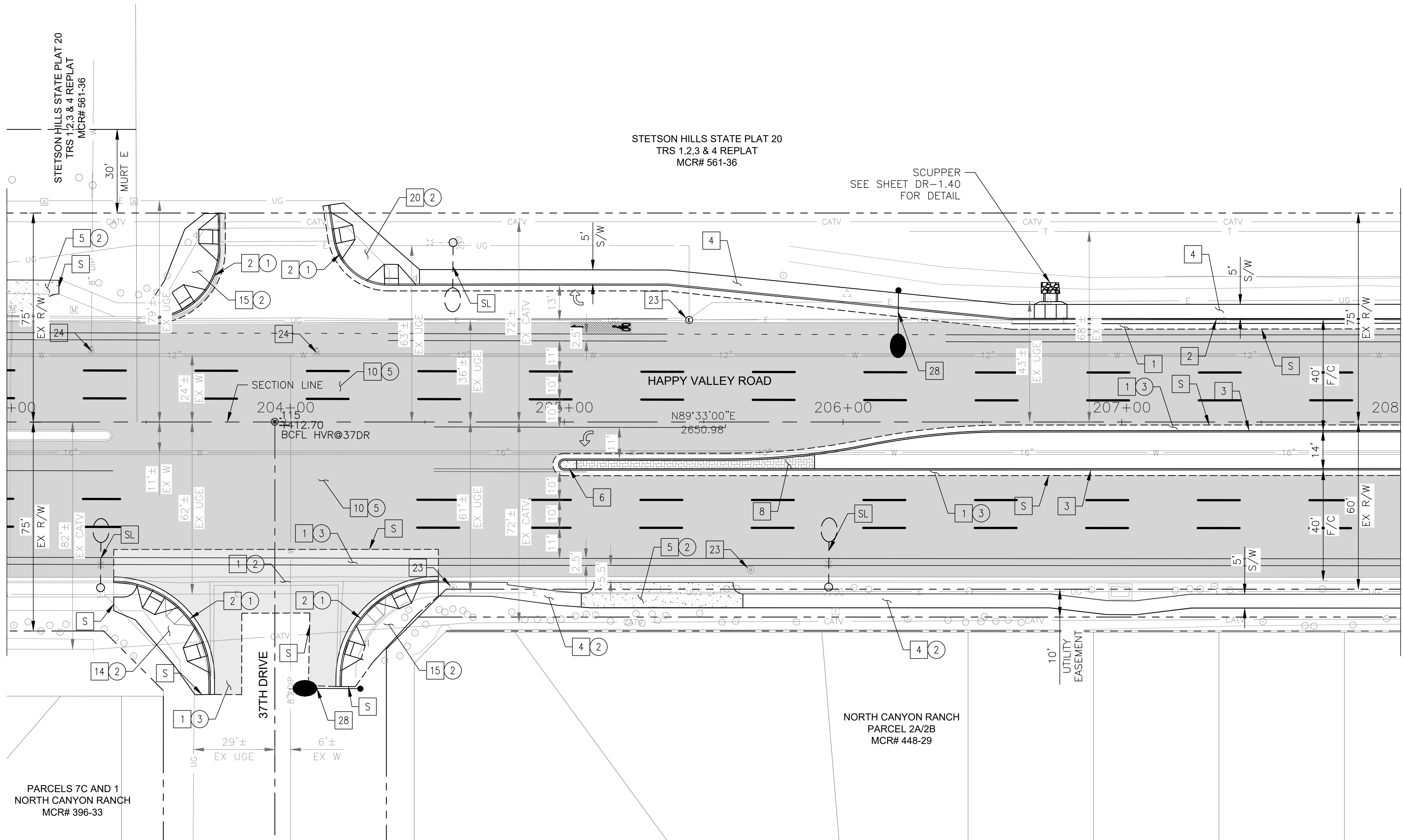
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE STA 203+00 SEE SHEET 48

MATCHLINE STA 208+00 SEE SHEET 50



CONSTRUCTION NOTES			
NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	486
	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	67
	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	135
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.12
2	CONCRETE CURB & GUTTER, MAG STD DET 220-1, TYPE A, H=6"	LF	592
3	CONCRETE SINGLE CURB MAG STD DET 222, TYPE A	LF	575
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	3220
5	BUS SHELTER/ACCESSORY PAD COP STD DET P1262	SF	693
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	17
8	DECORATIVE BRICK PAVERS, MAG STD DET. 225	SF	278
	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	249
10	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	1.13
14	CONCRETE CURB RAMP, COP STD DET P1235	SF	563
15	CONCRETE CURB RAMP, COP STD DET P1236	SF	1033
20	CONCRETE SIDEWALK RAMP, COP STD DET P1238-2	SF	490
23	ADJUST EX MANHOLE FRAME & COVER, MAG STD DET 422 & P1430	EA	3
24	ADJUST WATER VALVE, TYPE "A", COP STD DET P1391 & P1391-1	EA	2
28	PROPOSED ROADWAY LIGHT	EA	2

REMOVAL/RELOCATION			
NO	DESCRIPTION	UNIT	QTY
1	REMOVE PCC SINGLE CURB, CURB & GUTTER	LF	205
2	REMOVE PCC SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SF	3066
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	486
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SY	4535



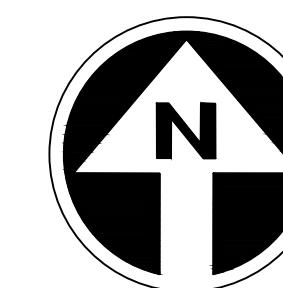
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.40
DATE: 04/20	DATE: 04/20	DATE: 04/20	49 OF 95
SCALE: 1"=20' HORIZ.			

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



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30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	50	95	

04/20
DATE: _____
DRAWN: RJR DESIGN: RJR CHECKED: G.G.

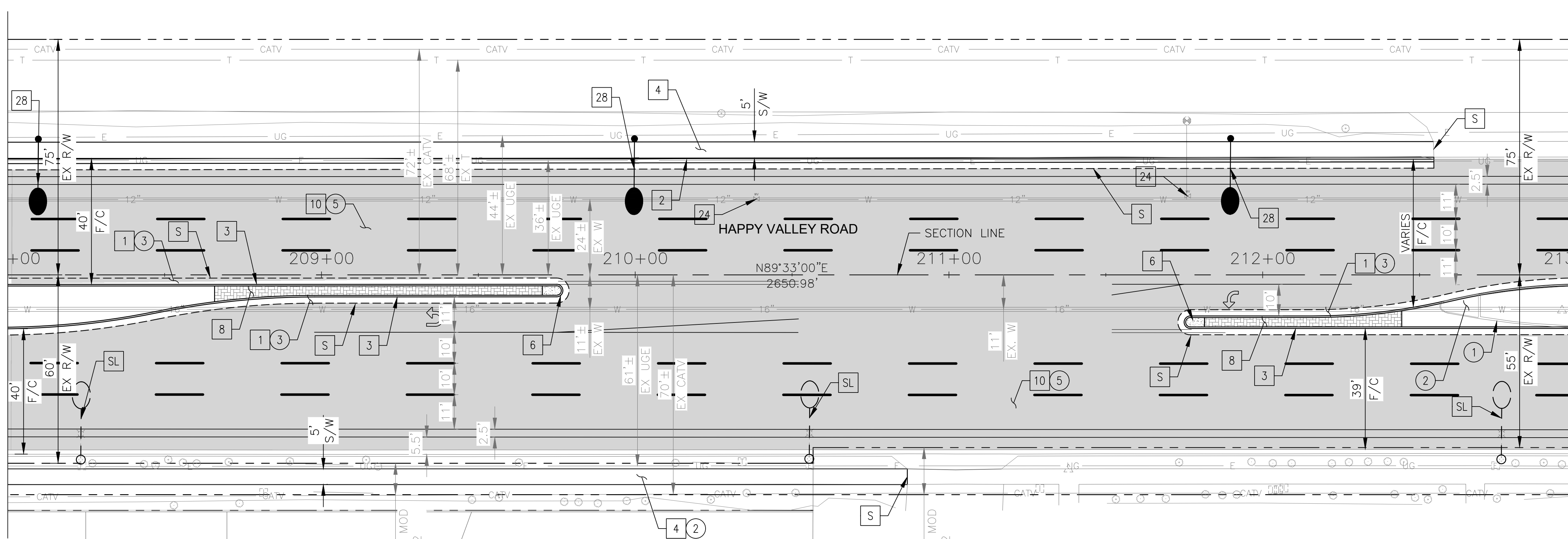
AZTEC
Civil & Survey
Phoenix, AZ 85008-455
760-820-9442
Fax: 602-454-9443
www.aztec.com

CONSTRUCTION NOTES			
NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
	SUBGRADE PREPARATION	SY	370
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	51
	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	103
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.09
2	CONCRETE CURB & GUTTER, MAG STD DET 220-1, TYPE A, H=6"	LF	454
3	CONCRETE SINGLE CURB MAG STD DET 222, TYPE A	LF	579
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	3731
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	34
8	DECORATIVE BRICK PAVERS, MAG STD DET. 225	SF	544
10	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	261
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	1.19
24	ADJUST WATER VALVE, TYPE "A", COP STD DET P1391 & P1391-1	EA	2
28	PROPOSED ROADWAY LIGHT	EA	3

STETSON HILLS STATE PLAT 20
TRS 1,2,3 & 4 REPLAT
MCR# 561-36

MATCHLINE STA 208+00 SEE SHEET 49

MATCHLINE STA 213+00 SEE SHEET 51



NORTH CANYON RANCH
PARCEL 2A/2B
MCR# 448-29

CHURCH OF JESUS CHRIST
APN 205-11-005J

REMOVAL/RELOCATION			
NO	DESCRIPTION	UNIT	QTY
1	REMOVE PCC SINGLE CURB, CURB & GUTTER	LF	62
2	REMOVE PCC SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SF	1419
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	370
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SY	4745



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ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.41
DATE: 04/20	DATE: 04/20	DATE: 04/20	SCALE: 1"=20' HORIZ.

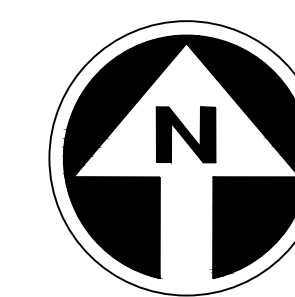
50 OF 95

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

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



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OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	51	95	

04/20
DATE:
DRAWN: RJR DESIGN: RJR CHECKED: G.G.

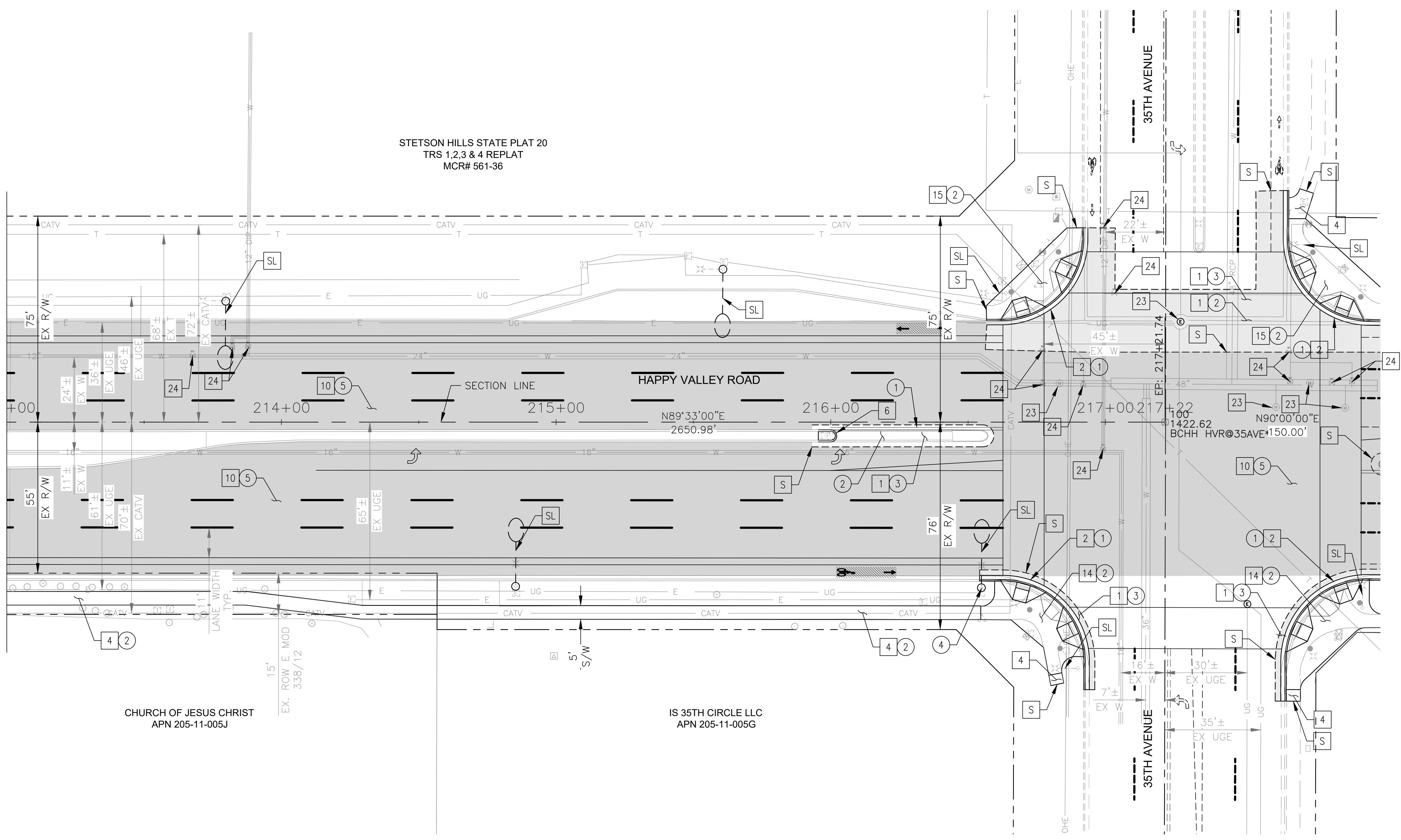
AZTEC
Civil & Survey Dept
Phoenix, AZ 85008-4505
714/207-0142
Fax: 602-454-9443
aztec@aztec.com

REVISION BY: CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE

REVISION BY: CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE

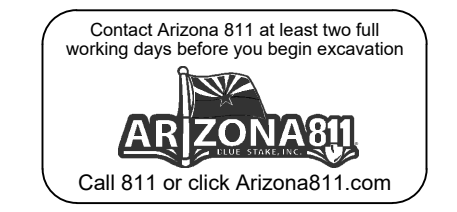
REVISION BY: CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE STA 213+00 SEE SHEET 50



CONSTRUCTION NOTES				
NO	DESCRIPTION	UNIT	QTY	
PAVEMENT STRUCTURAL SECTION NO. 1				
1	SUBGRADE PREPARATION	SY	188	
	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	26	
	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	52	
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.05	
2	CONCRETE CURB & GUTTER, MAG STD DET 220-1, TYPE A, H=6"	LF	286	
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	1889	
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	19	
10	1" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	260	
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	1.18	
14	CONCRETE CURB RAMP, COP STD DET P1235	SF	1303	
15	CONCRETE CURB RAMP, COP STD DET P1236	SF	1264	
23	ADJUST EX MANHOLE FRAME & COVER, MAG STD DET 422 & P1430	EA	4	
24	ADJUST WATER VALVE, TYPE "A", COP STD DET P1391 & P1391-1	EA	12	

REMOVAL/RELOCATION				
NO	DESCRIPTION	UNIT	QTY	
1	REMOVE PCC SINGLE CURB, CURB & GUTTER	LF	270	
2	REMOVE PCC SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB	SF	4635	
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	186	
4	REMOVE AND SALVAGE LIGHT POLE	EA	1	
5	ASPHALT CONCRETE PAVEMENT MILLING (1" DEPTH)	SY	4871	



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ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.42
DATE: 04/20	DATE: 04/20	DATE: 04/20	SCALE: 1"=20' HORIZ.


51 OF 95

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

FINAL
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	52	95	

06/20
DATE:
DRAWN: JER DESIGN: JER CHECKED: TMM



REG. NO. 132898
PHOENIX, AZ 85008-0001
TEL: (602) 954-0422
FAX: (602) 954-0423
WWW.AZTEC.COM

STREET TRANSPORTATION STORM DRAIN DESIGN SUMMARY SHEET

REVISION BY CITY OF PHOENIX

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

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

NO.	DESCRIPTION	REV BY	CHK BY	DATE
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AREA NO.	INLET NO.	INLET STA.	AREA - ACRES			INFILTRATION in. / hr. f_c	FOR CONCENTRATION TIME		T_C MIN.	INLET I	RUNOFF TO INLET $Q = C.I.A.$	AVERAGE UPSTREAM GUTTER SLOPE ft. / ft.	CROSS SLOPE AT INLET ft. / ft.	FLOWBY TO THIS CATCH BASIN	FLOW BY + RUNOFF (Q)	DEPTH OF WATER UPSTREAM GUTTER	WIDTH OF WATER IN STREET	GUTTER VELOCITY	DEPTH OF SUMP IF A SUMP	INLET TYPE	Q ACCEPTED BY C.E.B.	FLOWBY	TO INLET NO.	MAIN STORM DRAIN						CONNECTOR PIPE							
			TOTAL AREA IMPER.	T_C (MIN.)	MAIN STORM DRAIN		SLOPE MAIN STORM DRAIN ft. / ft.	SIZE MAIN STORM DRAIN																VELOCITY MAIN STORM DRAIN f.p.s.	LENGTH MAIN STORM DRAIN	ΔT_C MIN.	ELEVATION		HYDRAULIC GRADE LINE			HEAD BETWEEN 0.5' BELOW LIP GUTTER TO H.G. MAIN	LENGTH CONN. PIPE	DIA. CONN. PIPE	DEPTH CATCH BASIN		
					I																						Q ₂	CROWN INLET	CROWN OUTLET	S_f ft. / ft.	H_L ft.					ELEVATION INLET	ELEVATION OUTLET

"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."

STORM DRAIN DESIGN SHEET

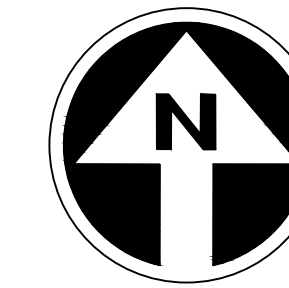
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2



DR: JER DES: JER CK: TMM DWG. NO. SDS-1.01
DATE: 06/20/20 DATE: 06/20/20 DATE: 06/20/20
SCALE: 1"=80' HORIZ. 52 OF 95

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



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30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	53	95	

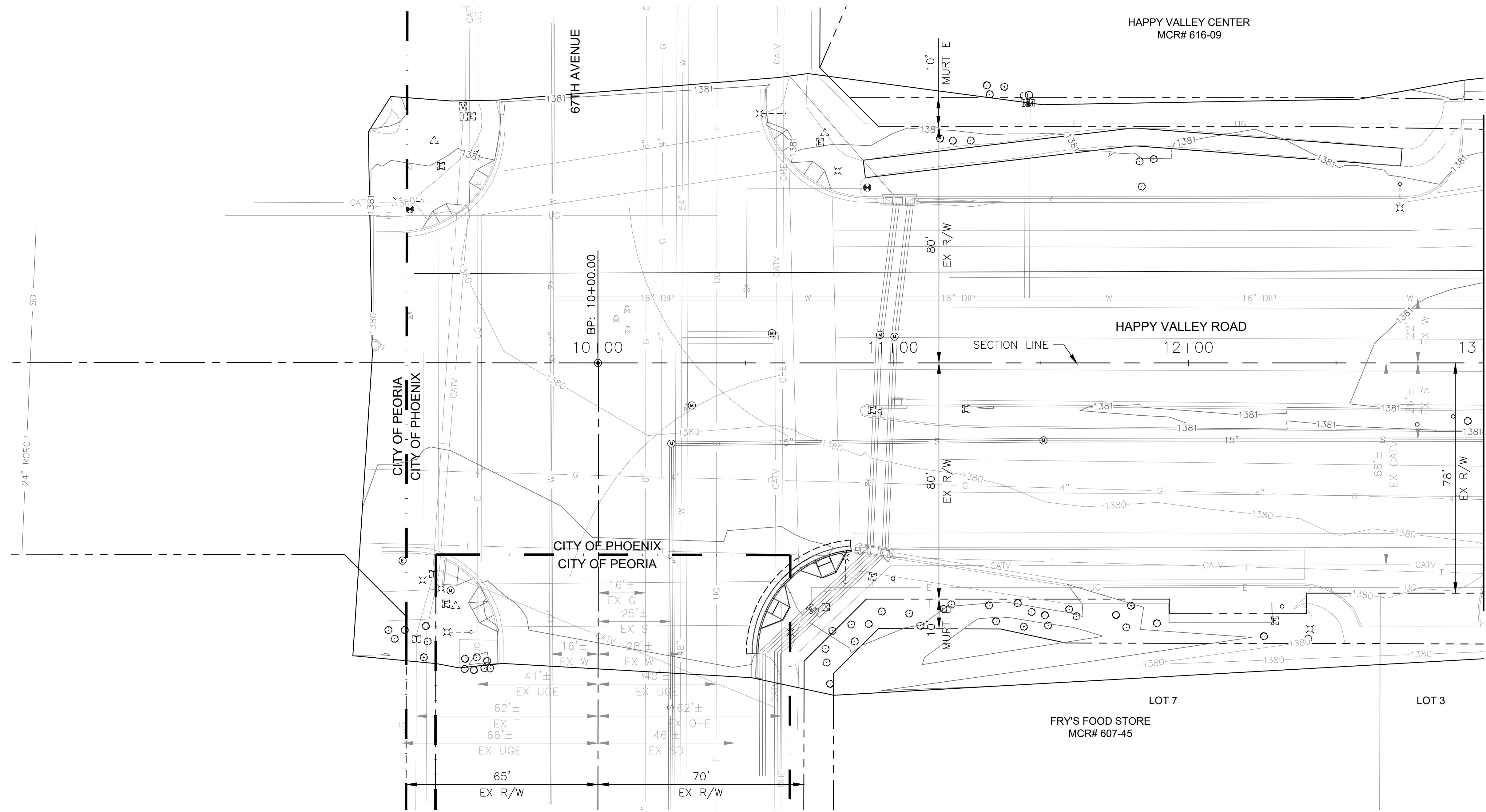
06/20
DATE: 06/20
DRAWN: JER DESIGN: JER CHECKED: TMM

AZTEC
Civil & Survey Staff
Phoenix, AZ 85008-4505
704-520-5544
Fax: 704-520-5443
www.aztec.com

NO.	DESCRIPTION	REV BY	CHKD BY	DATE

NO.	DESCRIPTION	REV BY	CHKD BY	DATE

NO.	DESCRIPTION	REV BY	CHKD BY	DATE



MATCH LINE STA 13+00 SEE SHEET 54

"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."

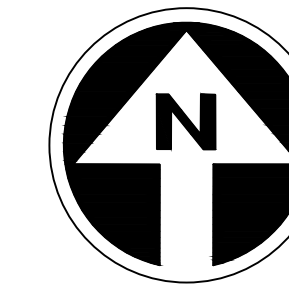
DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-1.01
DATE: 06/20	DATE: 06/20	DATE: 06/20	53 OF 95
SCALE: 1"=20' HORIZ.			

NO PROPOSED DRAINAGE
WORK ON THIS SHEET

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



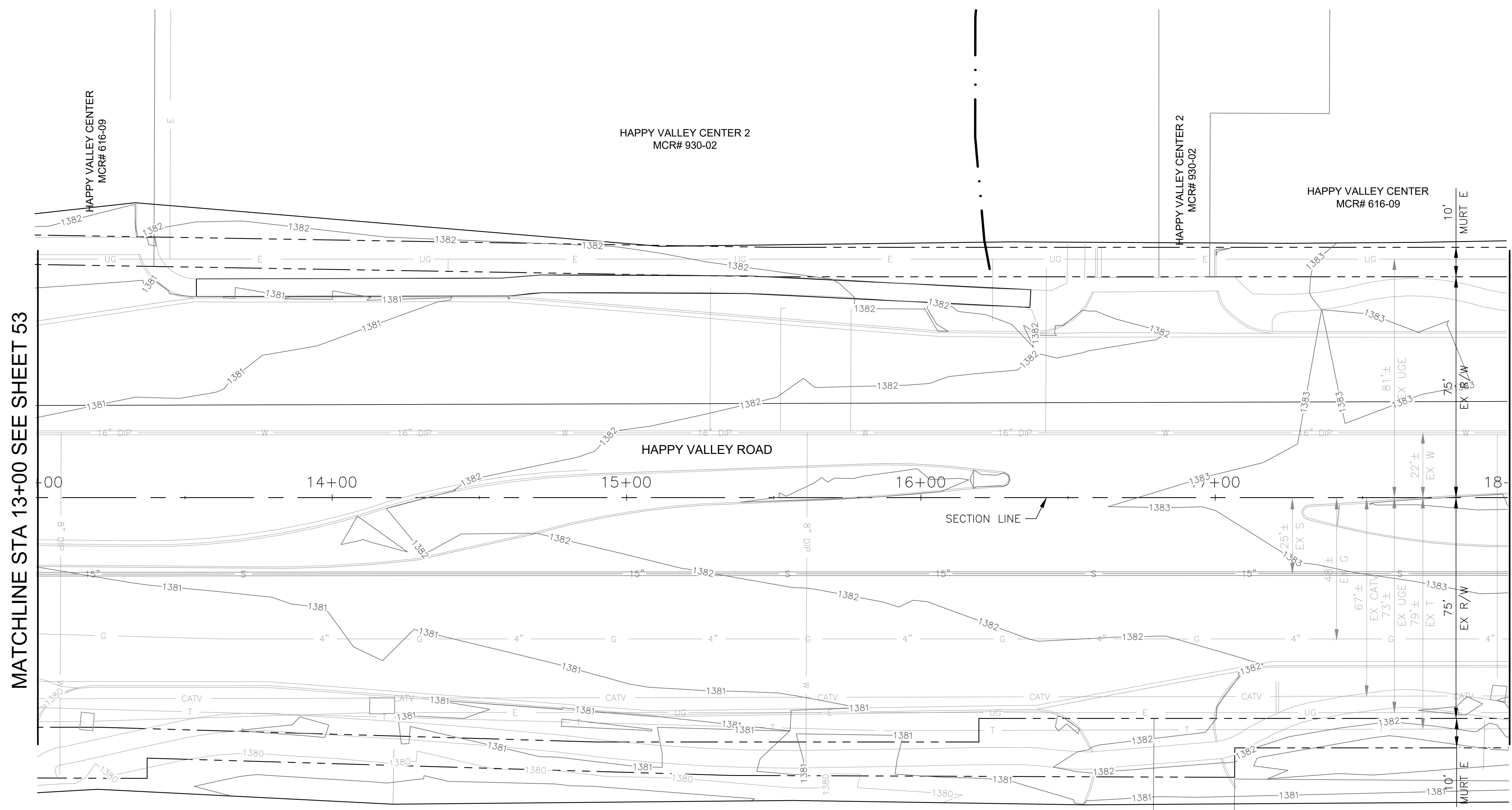
FINAL
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Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	54	95	
DATE: 06/20		AZTEC			
DRAWN: JER	DESIGN: JER	CHECKED: TMM			

NO.	REVISION BY	DESCRIPTION	DATE

NO.	REVISION BY	DESCRIPTION	DATE

NO.	REVISION BY	DESCRIPTION	DATE



MATCHLINE STA 13+00 SEE SHEET 53

MATCHLINE STA 18+00 SEE SHEET 55

LOT 3

FRY'S FOOD STORE
MCR# 607-45

LOT 4

LOT 5

NO PROPOSED DRAINAGE
WORK ON THIS SHEET

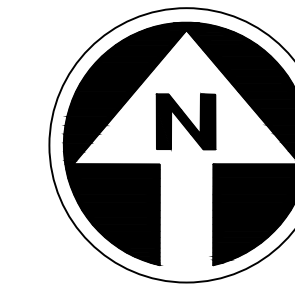
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SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE
ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT
AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE
CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-1.02
DATE: 06/20	DATE: 06/20	DATE: 06/20	54 OF 95
SCALE: 1"=20' HORIZ.			

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



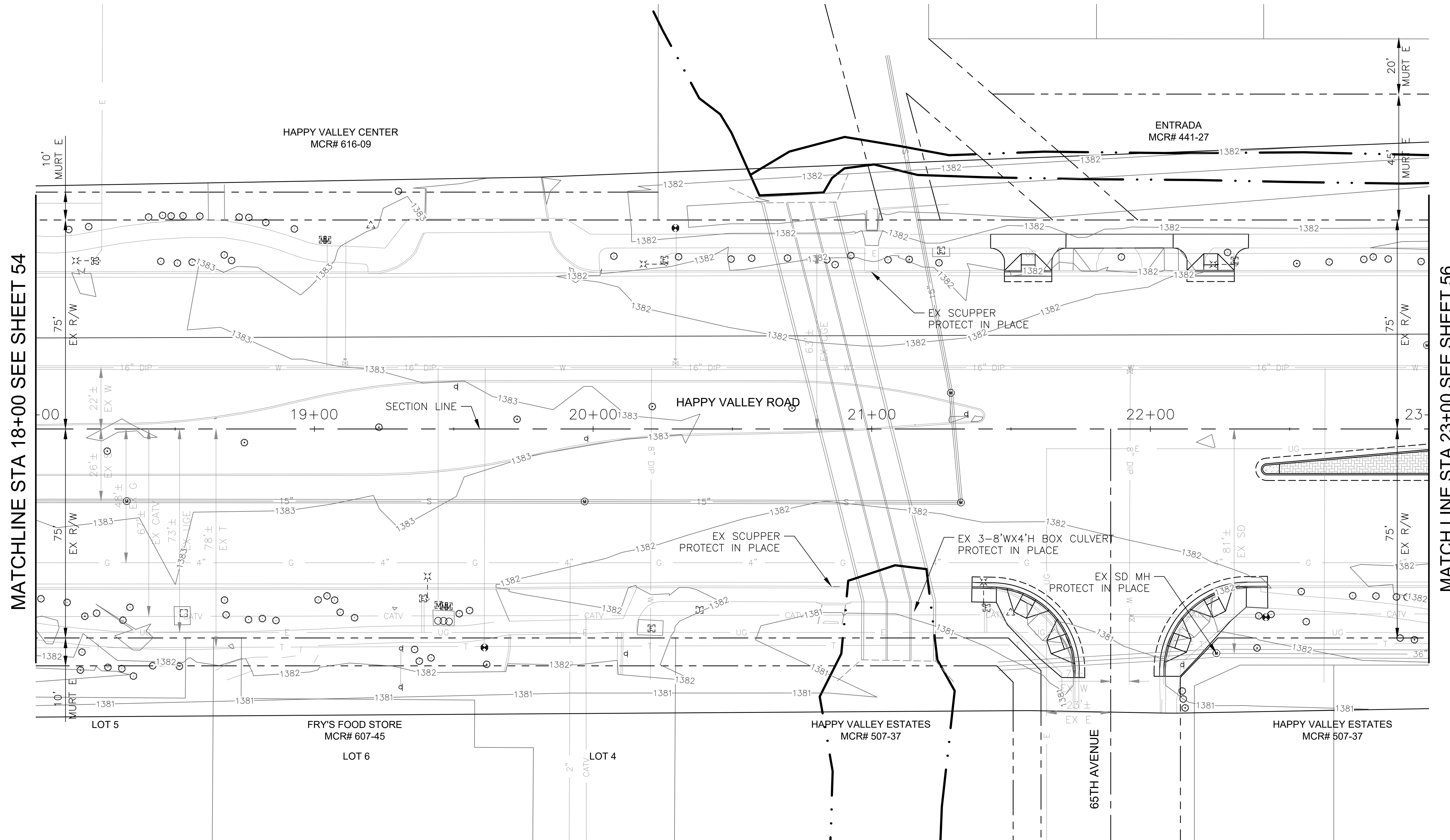
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NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	55	95	
DATE: 06/20		AZTEC			
DRAWN: JER	DESIGN: JER	CHECKED: TMM			

NO.	REVISION BY	DESCRIPTION	DATE

NO.	REVISION BY	DESCRIPTION	DATE

NO.	REVISION BY	DESCRIPTION	DATE



MATCHLINE STA 18+00 SEE SHEET 54

MATCHLINE STA 23+00 SEE SHEET 56

NO PROPOSED DRAINAGE
WORK ON THIS SHEET

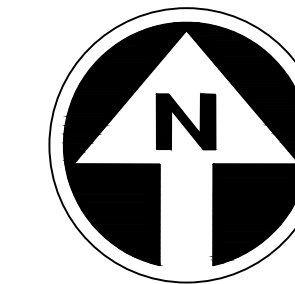
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DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-1.03
DATE: 06/20	DATE: 06/20	DATE: 06/20	55 OF 95
SCALE: 1"=20' HORIZ.			

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



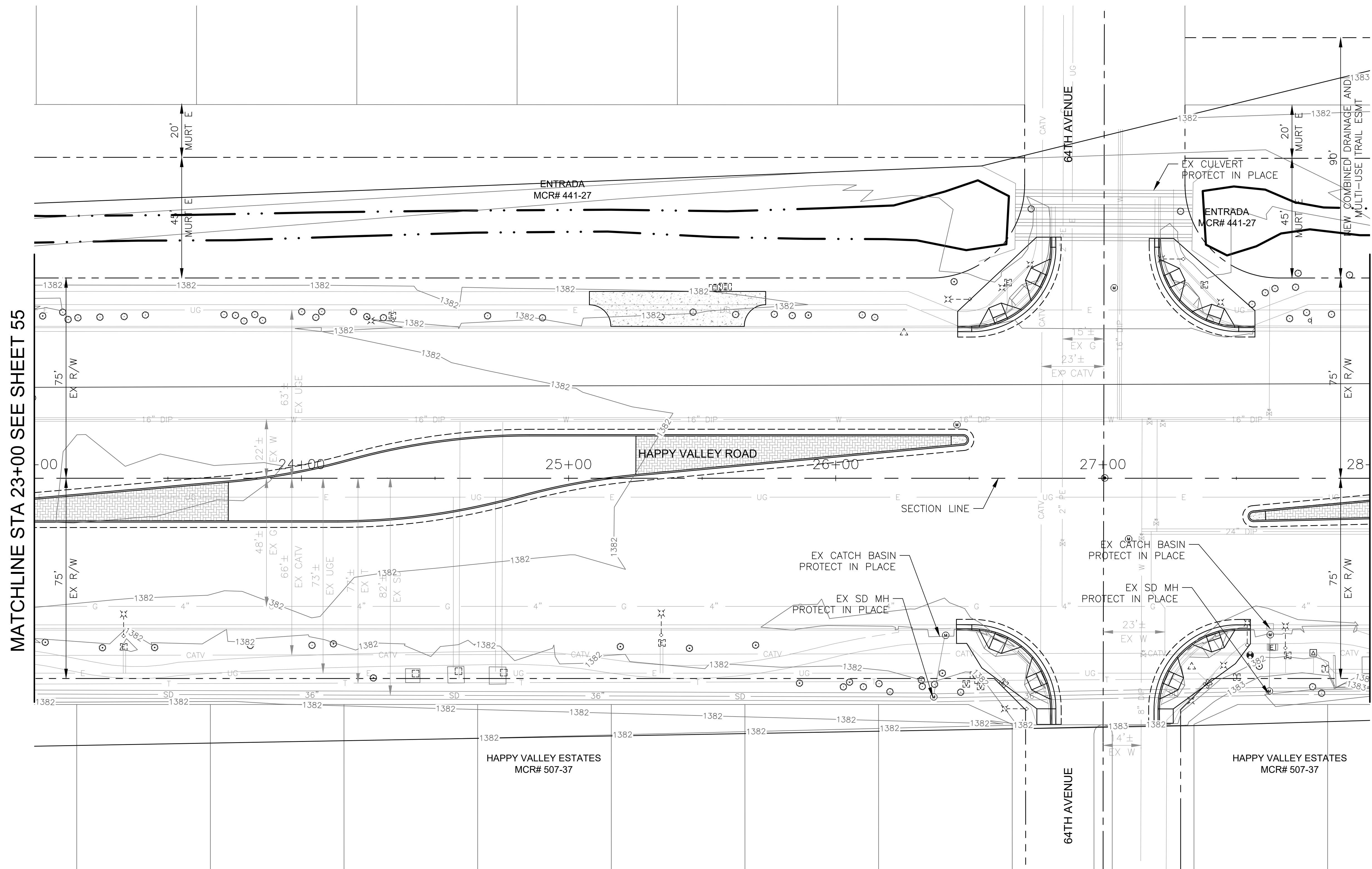
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NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	56	95	
DATE: 06/20		AZTEC			
DRAWN: JER	DESIGN: JER	CHECKED: TMM			

NO.	DESCRIPTION	REV BY	CHKD BY	DATE

NO.	DESCRIPTION	REV BY	CHKD BY	DATE

NO.	DESCRIPTION	REV BY	CHKD BY	DATE



MATCHLINE STA 23+00 SEE SHEET 55

MATCHLINE STA 28+00 SEE SHEET 57

NO PROPOSED DRAINAGE
WORK ON THIS SHEET

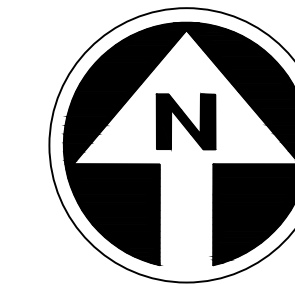
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DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-1.04
DATE: 06/20	DATE: 06/20	DATE: 06/20	56 OF 95
SCALE: 1"=20' HORIZ.			

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



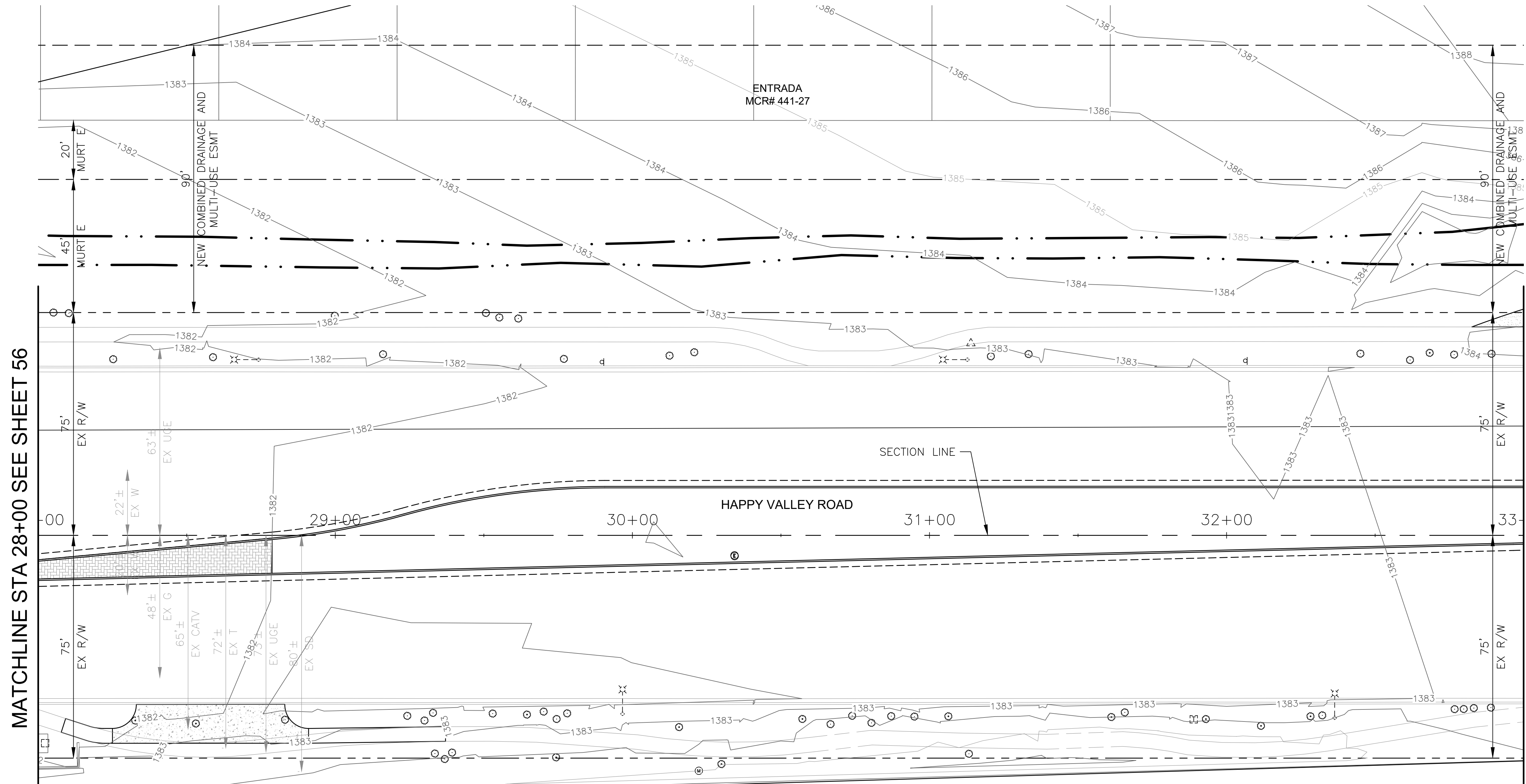
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NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	57	95	
DATE: 06/20		AZTEC			
DRAWN: JER	DESIGN: JER	CHECKED: TMM			

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



MATCHLINE STA 28+00 SEE SHEET 56

MATCHLINE STA 33+00 SEE SHEET 58

"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."

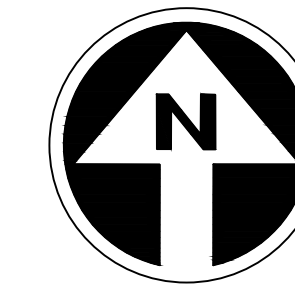
DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

NO PROPOSED DRAINAGE
WORK ON THIS SHEET

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-1.05
DATE: 06/20	DATE: 06/20	DATE: 06/20	57 OF 95
SCALE: 1"=20' HORIZ.			

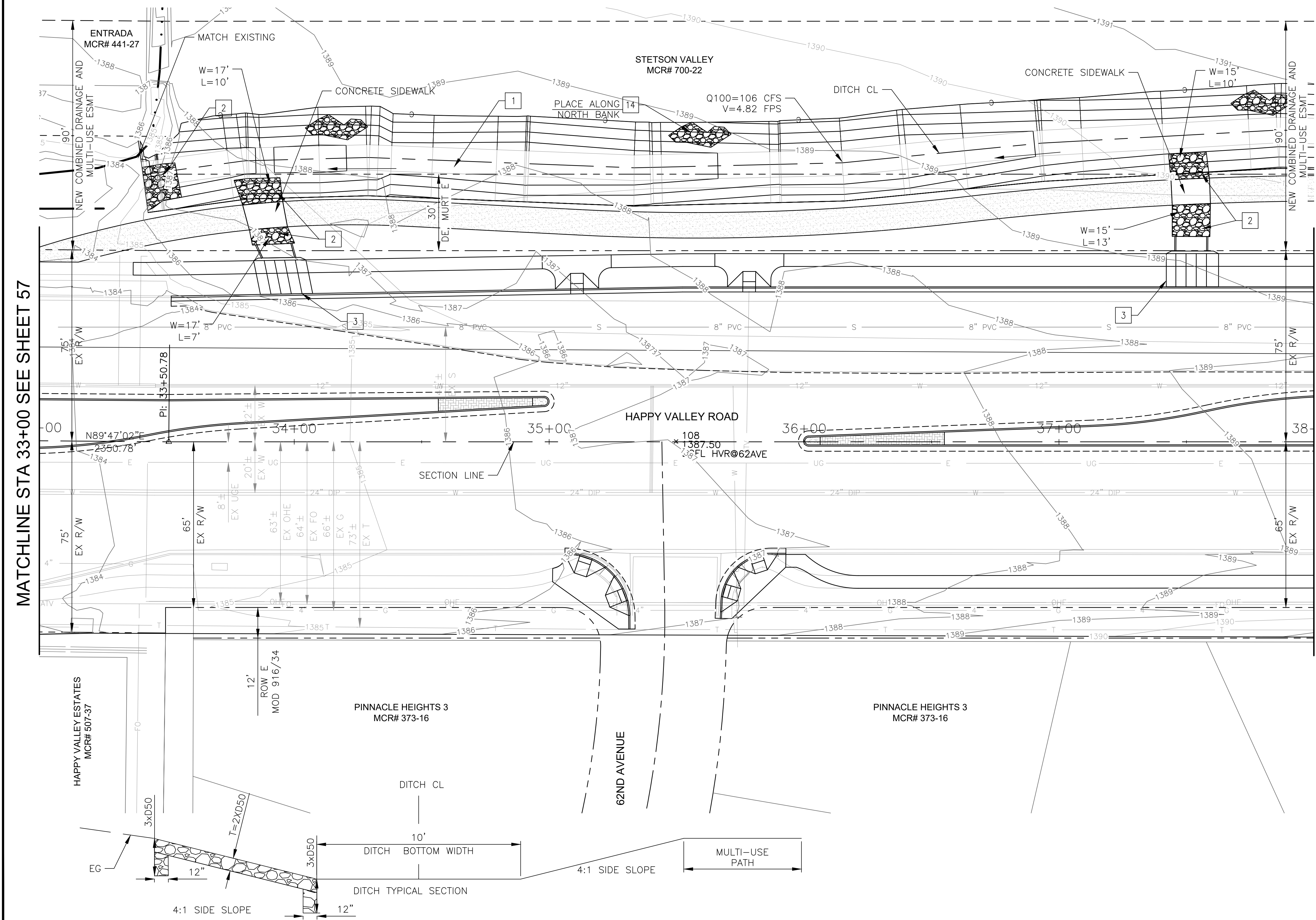
HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
PHOENIX STREETS - MARICOPA CO.



FINAL
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	58	95	
DATE: 06/20		AZTEC			
DRAWN: JER	DESIGN: JER	CHECKED: TMM			

CONSTRUCTION NOTES				
NO	DESCRIPTION	UNIT	QTY	
1	EARTHEN TRAPEZOIDAL DITCH 4:1 SIDE SLOPES, 10' BOTTOM WIDTH	CY	1036	
2	RIP RAP, D50=12", T=2'	CY	60	
3	TRIPLE CONCRETE SCUPPER, MAG STD DET 206	EA	2	
14	RIP RAP, D50=6", T=1'	CY	228	



NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

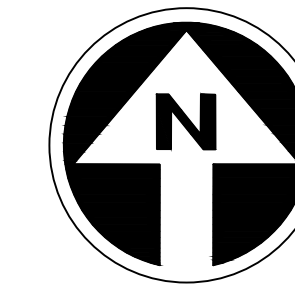
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-1.06
DATE: 06/20	DATE: 06/20	DATE: 06/20	58 OF 95
SCALE: 1"=20' HORIZ.			

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



FINAL
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	59	95	
DATE: 06/20		AZTEC			
DRAWN: JER	DESIGN: JER	CHECKED: TMM			
CONSTRUCTION NOTES					
NO	DESCRIPTION	UNIT	QTY		
1	EARTHEN TRAPEZOIDAL DITCH 4:1 SIDE SLOPES, 10' BOTTOM WIDTH	CY	998		
14	RIPRAP, D50=6", T=1'	CY	216		

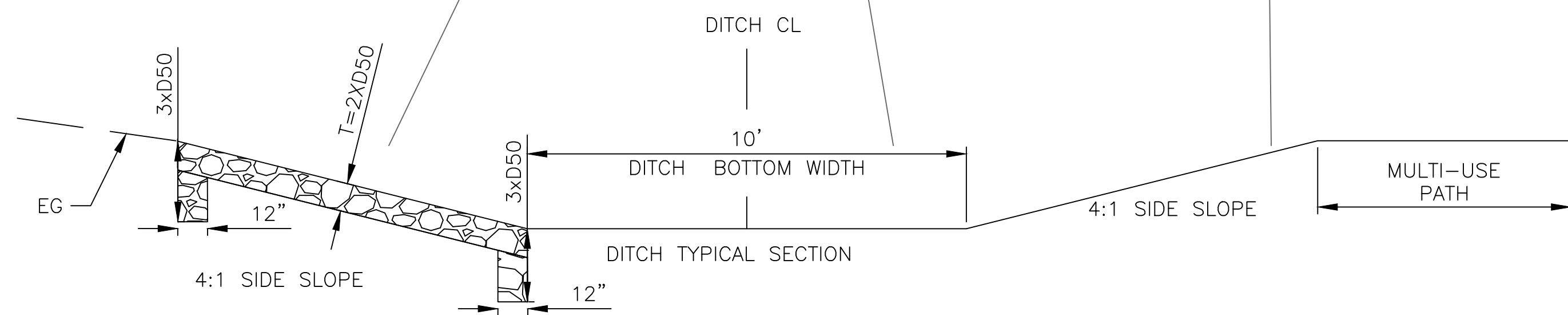
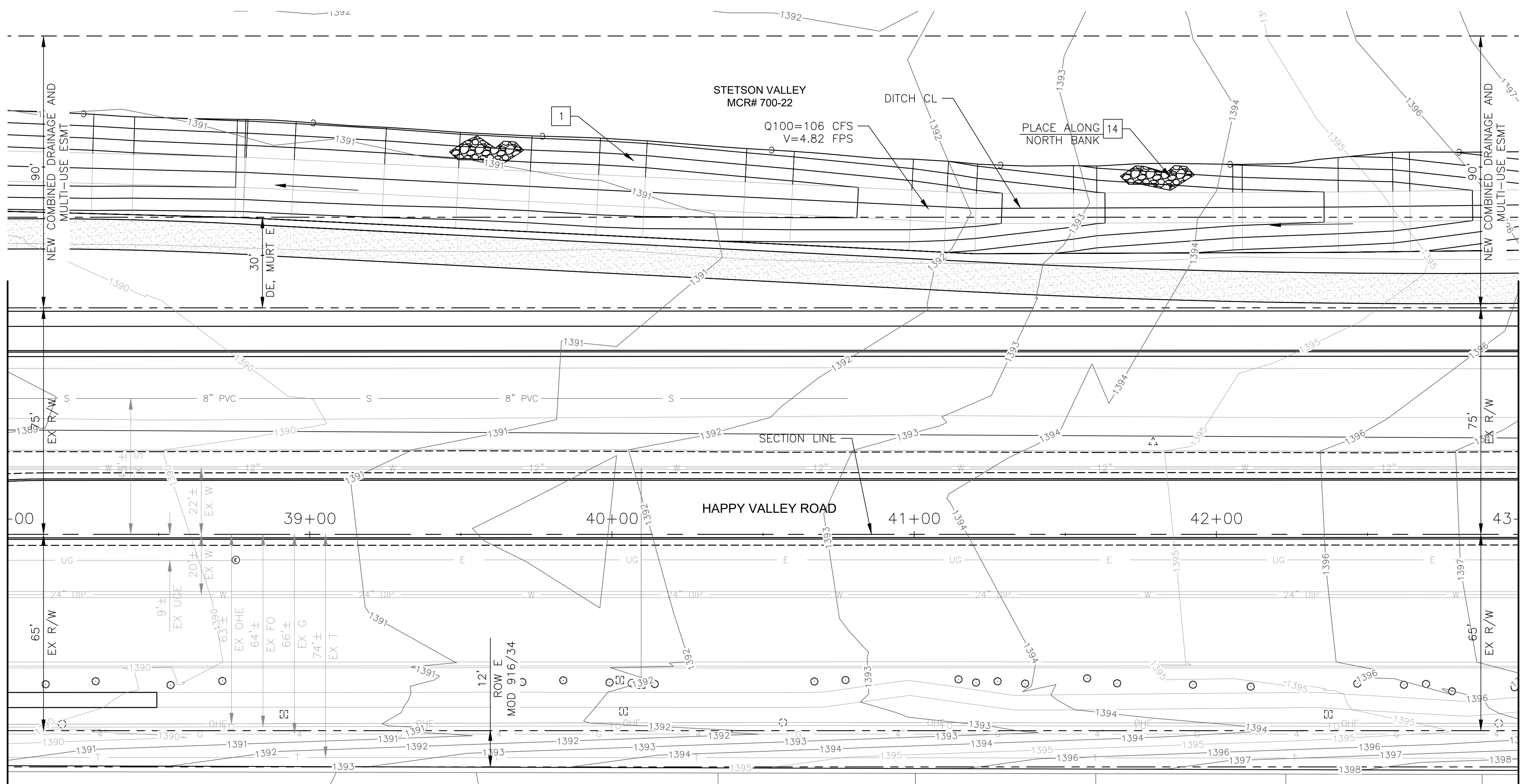
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE STA 38+00 SEE SHEET 58

MATCH LINE STA 43+00 SEE SHEET 60

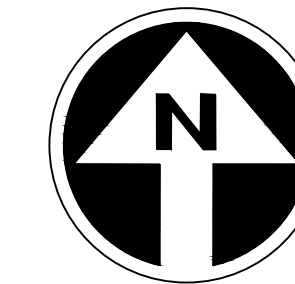


"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-107
DATE: 06/20	DATE: 06/20	DATE: 06/20	59 OF 95
SCALE: 1"=20' HORIZ.			

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



FINAL
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	60	95	
DATE: 06/20		AZTEC			
DRAWN: JER	DESIGN: JER	CHECKED: TMM			

NO.	DESCRIPTION	REV BY	CHK BY	DATE

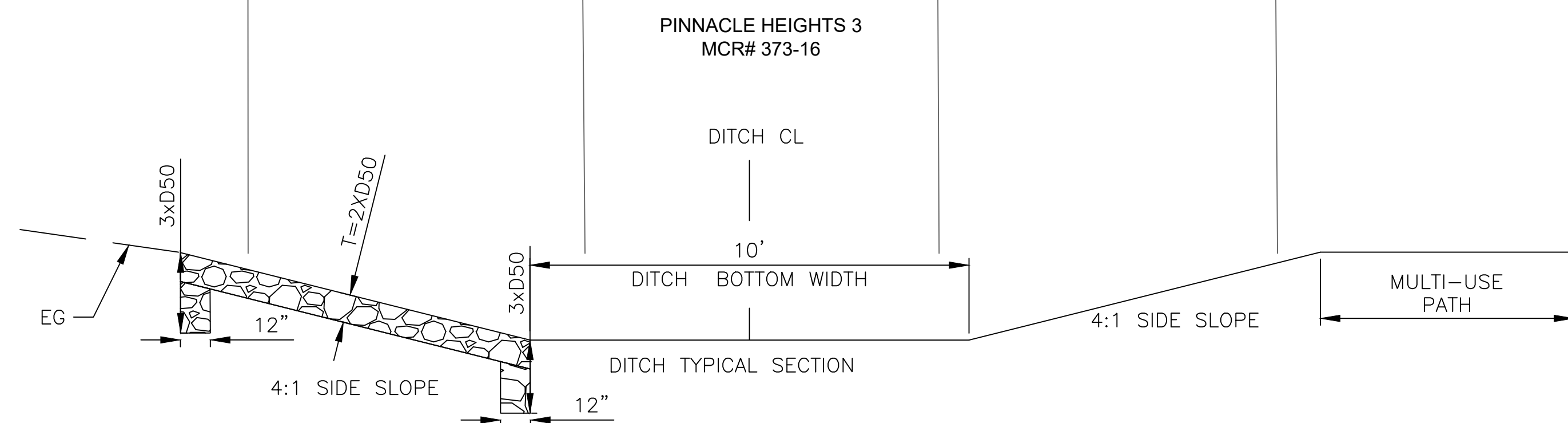
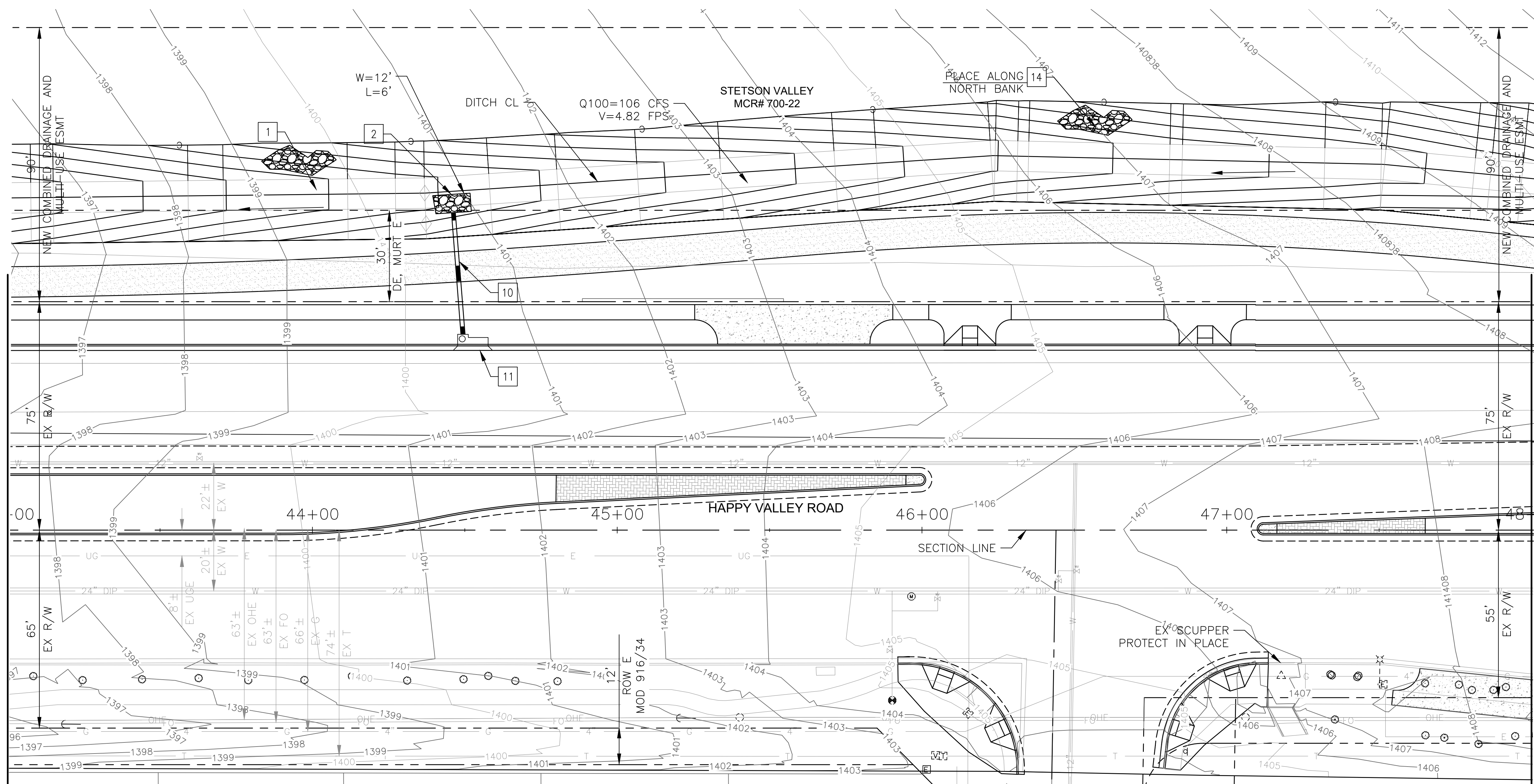
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

CONSTRUCTION NOTES				
NO	DESCRIPTION	UNIT	QTY	
1	EARTHEN TRAPEZOIDAL DITCH 4:1 SIDE SLOPES, 10' BOTTOM WIDTH	CY	1130	
2	RIP RAP, D50=12", T=2'	CY	21	
10	INSTALL 15" RGRCP	LF	41	
11	INSTALL CATCH BASIN PER STD DET P1569, TYPE M-1, L=17'	EA	1	
14	RIPRAP, D50=6", T=1'	CY	235	

MATCHLINE STA 43+00 SEE SHEET 59

MATCHLINE STA 48+00 SEE SHEET 61



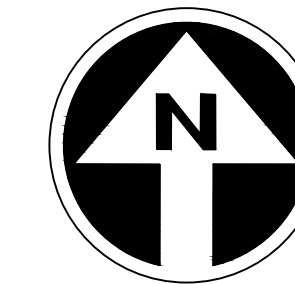
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-1.08
DATE: 06/20	DATE: 06/20	DATE: 06/20	60 OF 95

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



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CONSTRUCTION
OR RECORDING

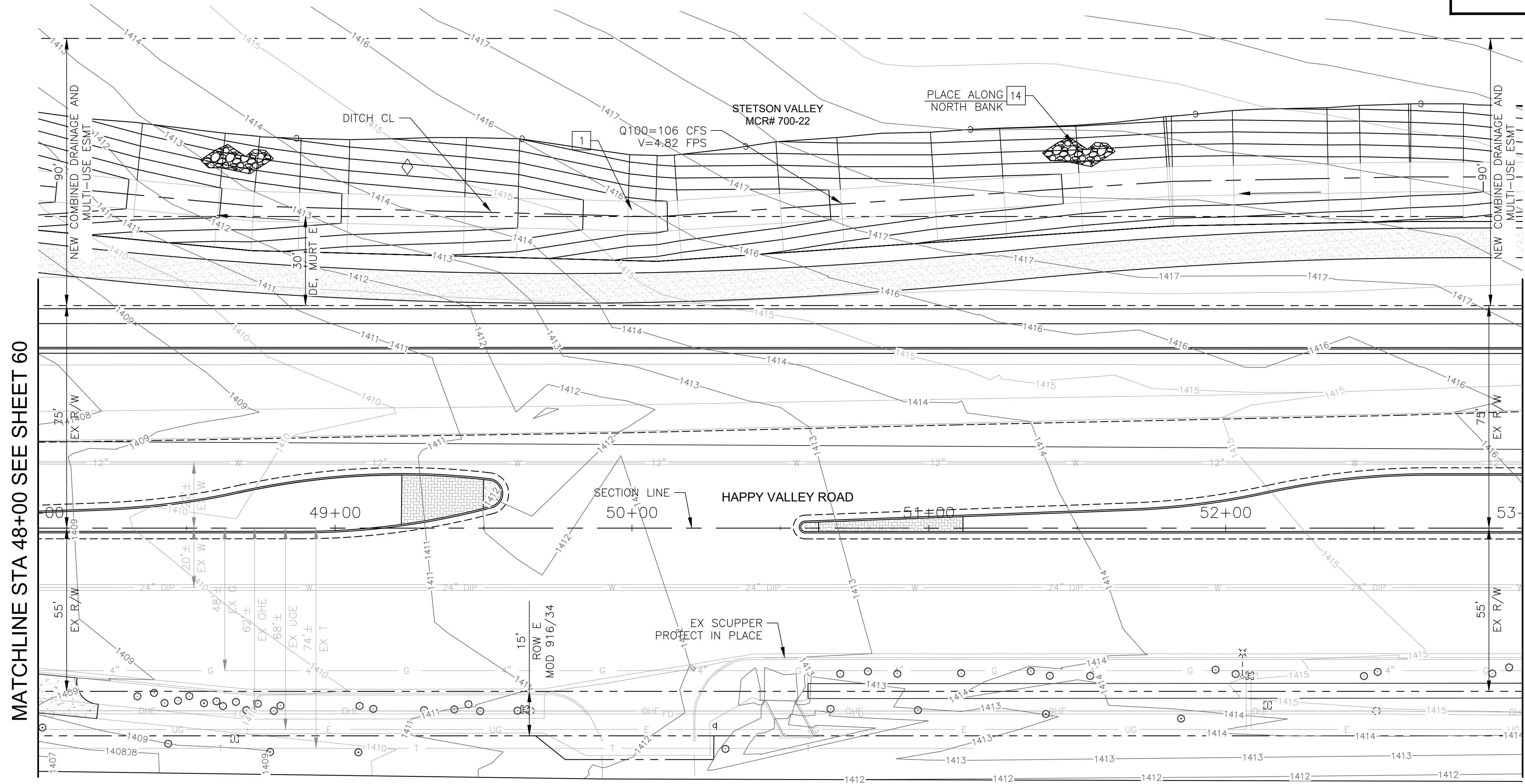
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	61	95	
DATE: 06/20		AZTEC			
DRAWN: JER	DESIGN: JER	CHECKED: TMM			

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

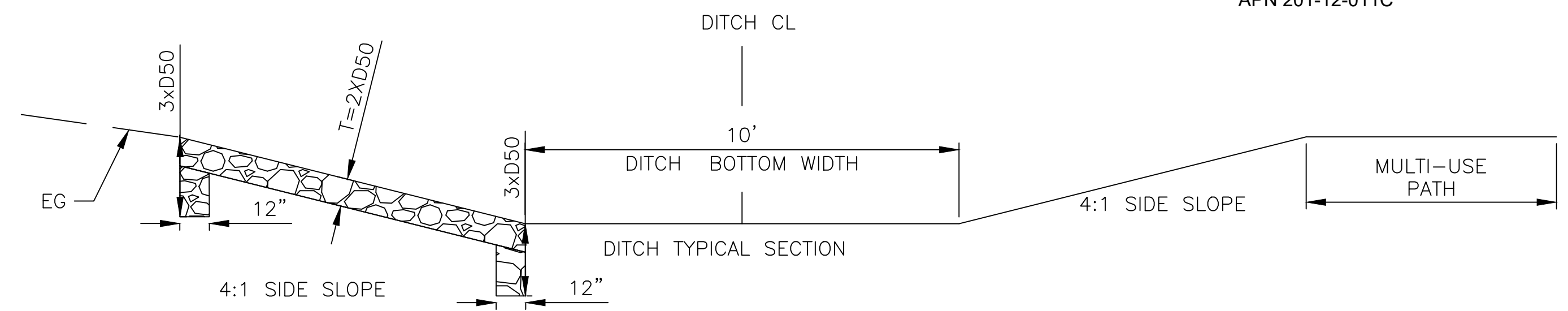
CONSTRUCTION NOTES				
NO	DESCRIPTION	UNIT	QTY	
1	EARTHEN TRAPEZOIDAL DITCH 4:1 SIDE SLOPES, 10' BOTTOM WIDTH	CY	1516	
14	RIPRAP, D50=6", T=1'	CY	352	



MATCHLINE STA 48+00 SEE SHEET 60

MATCHLINE STA 53+00 SEE SHEET 62

MARICOPA COUNTY COMMUNITY
COLLEGE DISTRICT
APN 201-12-011C



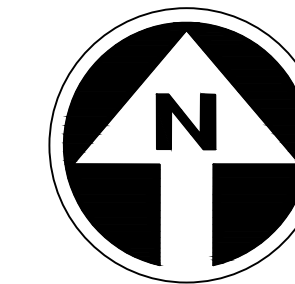
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DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-1.09
DATE: 06/20	DATE: 06/20	DATE: 06/20	61 OF 95
SCALE: 1"=20' HORIZ.			

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



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Review
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CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	62	95	
DATE: 06/20		AZTEC			
DRAWN: JER	DESIGN: JER	CHECKED: TMM			
CONSTRUCTION NOTES					
NO	DESCRIPTION	UNIT	QTY		
1	EARTHEN TRAPEZOIDAL DITCH 4:1 SIDE SLOPES, 10' BOTTOM WIDTH	CY	252		
4	EARTHEN TRAPEZOIDAL DITCH 4:1 SIDE SLOPES, 10' BOTTOM WIDTH	CY	1381		
14	RIPRAP, D50=6", T=1'	CY	386		

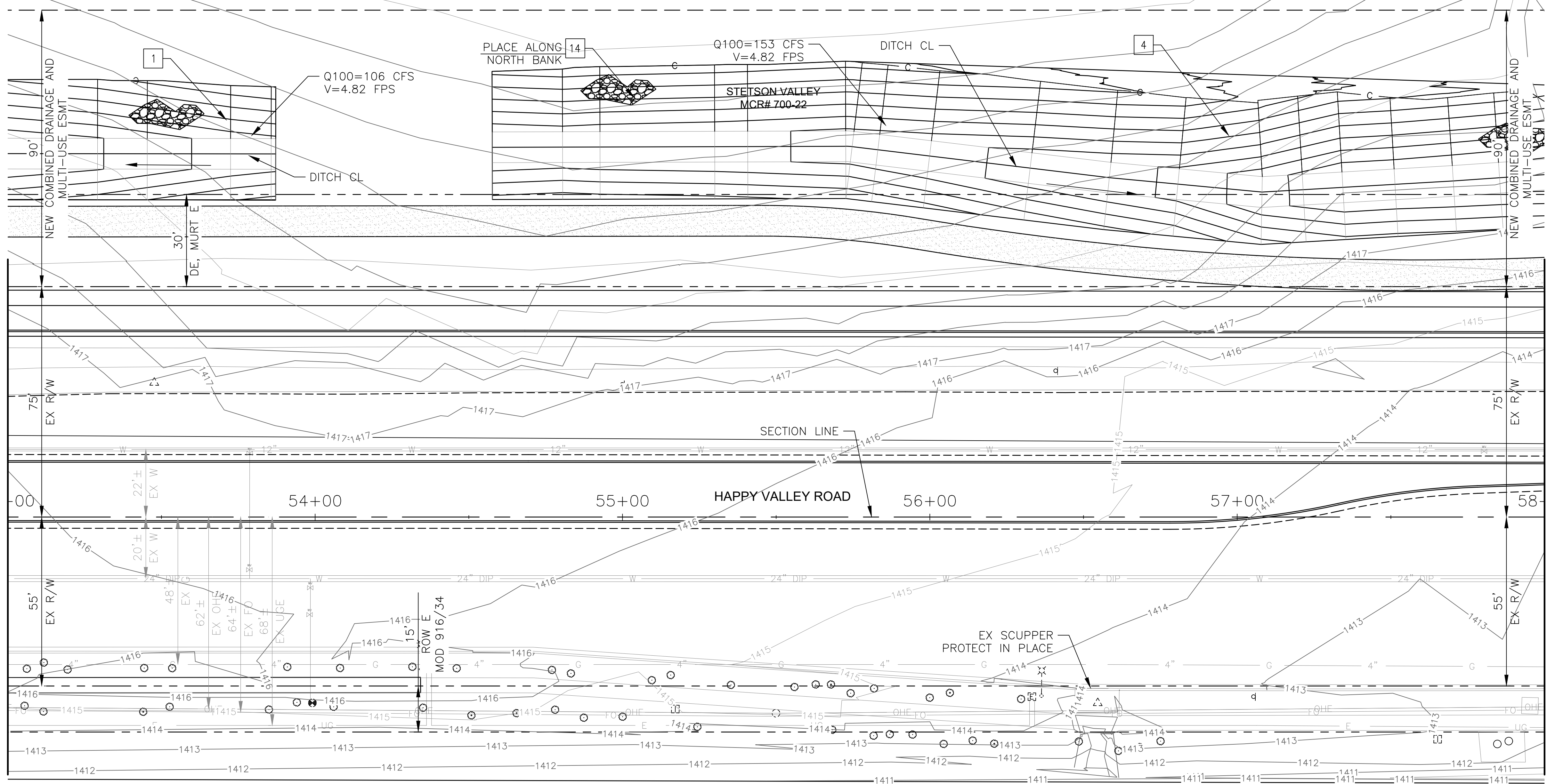
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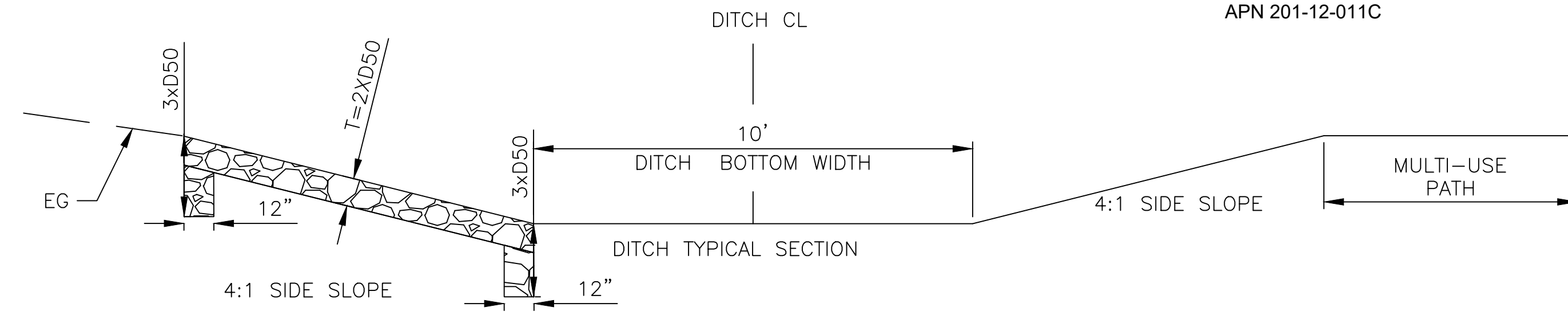
NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE STA 53+00 SEE SHEET 61

MATCHLINE STA 58+00 SEE SHEET 63



MARICOPA COUNTY COMMUNITY
COLLEGE DISTRICT
APN 201-12-011C



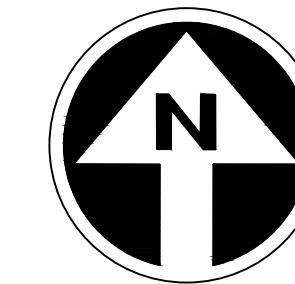
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SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE
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AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE
CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-1.10
DATE: 06/20	DATE: 06/20	DATE: 06/20	62 OF 95
SCALE: 1"=20' HORIZ.			

HAPPY VALLEY ROAD
 63TH AVENUE TO 67TH AVENUE
 PHOENIX STREETS - MARICOPA CO.



FINAL
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 OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	63	95	
DATE: 08/20		AZTEC			
DRAWN: BGR		DESIGN: BGR	CHECKED: DM		

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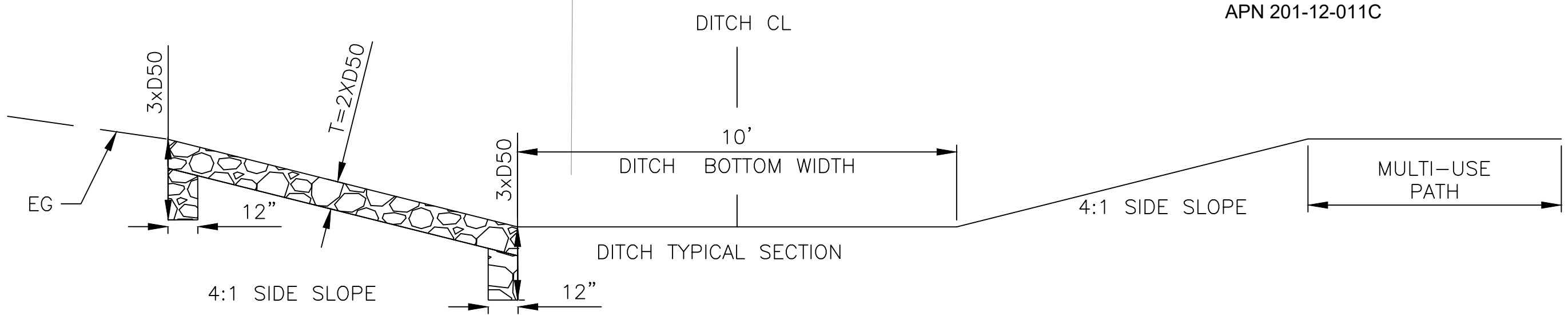
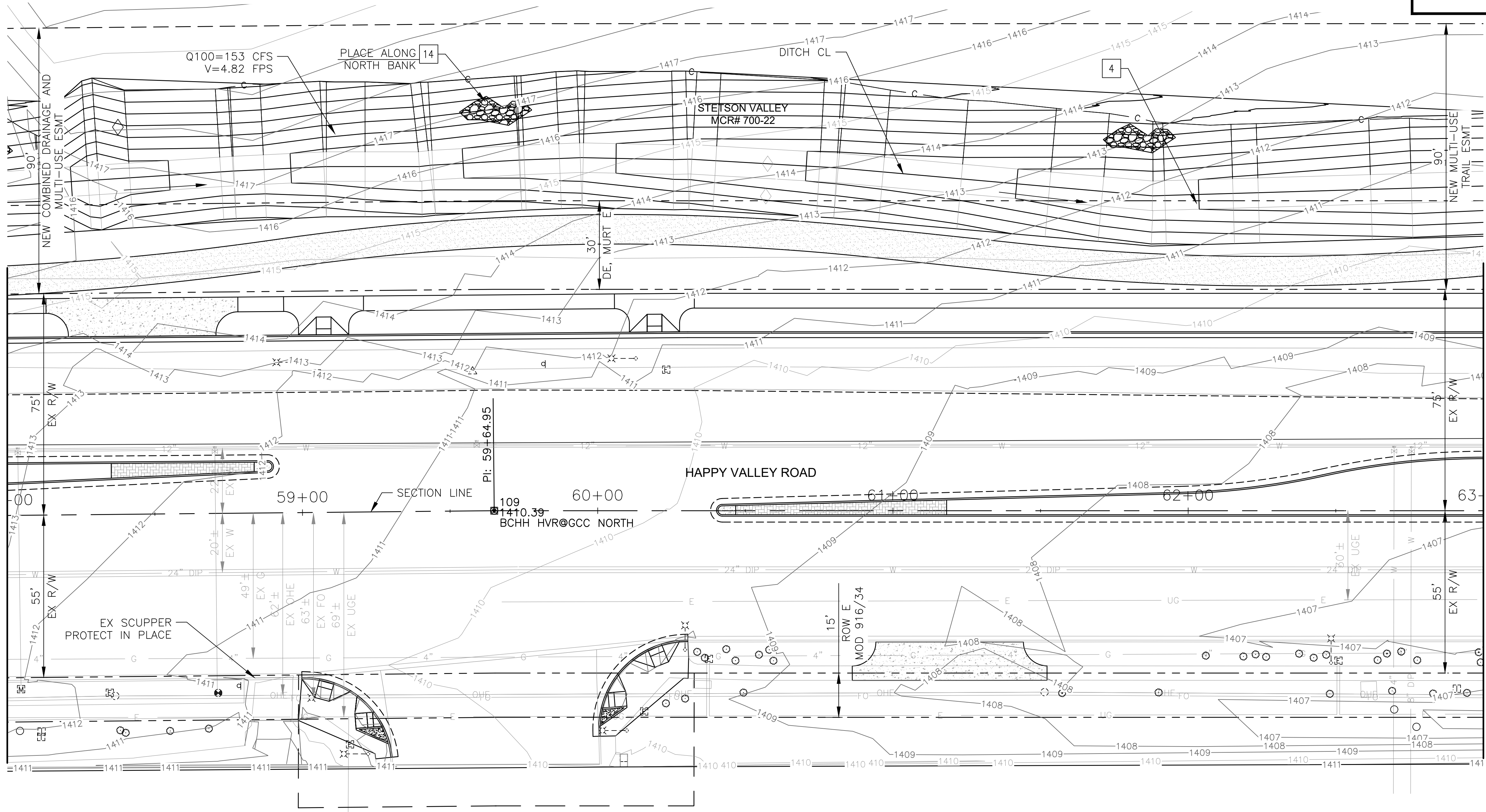
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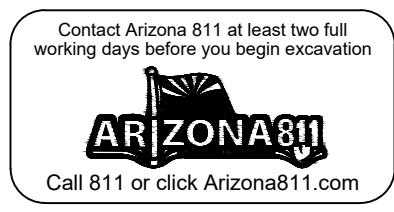
CONSTRUCTION NOTES				
NO	DESCRIPTION	UNIT	QTY	
4	EARTHEN TRAPEZOIDAL DITCH 4:1 SIDE SLOPES, 10' BOTTOM WIDTH	CY	1989	
14	RIPRAP, D50=6", T=1'	CY	454	

MATCHLINE STA 58+00 SEE SHEET 62

MATCHLINE STA 63+00 SEE SHEET 64



MARICOPA COUNTY COMMUNITY
 COLLEGE DISTRICT
 APN 201-12-011C



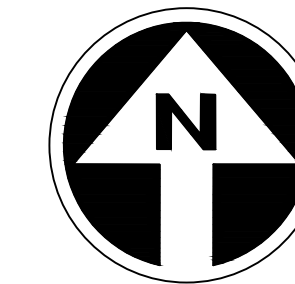
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DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
63TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: BGR	DES: BGR	CK: DM	DWG. NO. DR-1.11
DATE: 08/20	DATE: 08/20	DATE: 08/20	63 OF 95
SCALE: 1"=20' HORIZ.			

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



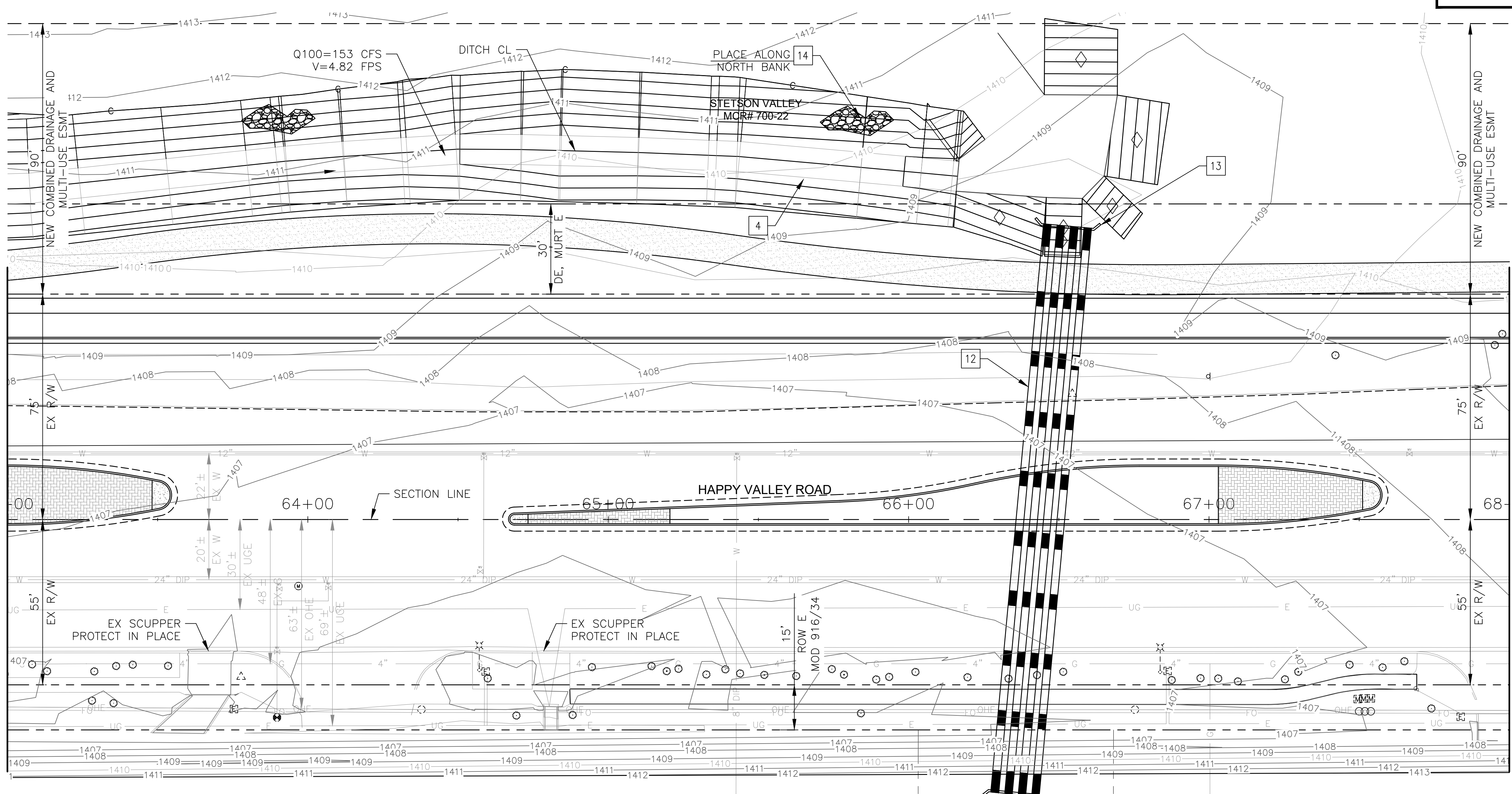
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CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	64	95	
DATE: 06/20		AZTEC			
DRAWN: JER		DESIGN: JER	CHECKED: TMM		

CONSTRUCTION NOTES					
NO	DESCRIPTION	UNIT	QTY		
4	EARTHEN TRAPEZOIDAL DITCH 4:1 SIDE SLOPES, 10' BOTTOM WIDTH	CY	1335		
12	INSTALL 30" STORM SEWER PIPE	LF	760		
13	HEADWALL PER MAG STD DET 501 TYPE U W/ SAFETY RAIL PER MAG STD DET 145	EA	2		
14	RIPRAP, D50=6", T=1'	CY	275		

MATCHLINE STA 63+00 SEE SHEET 63

MATCHLINE STA 68+00 SEE SHEET 65

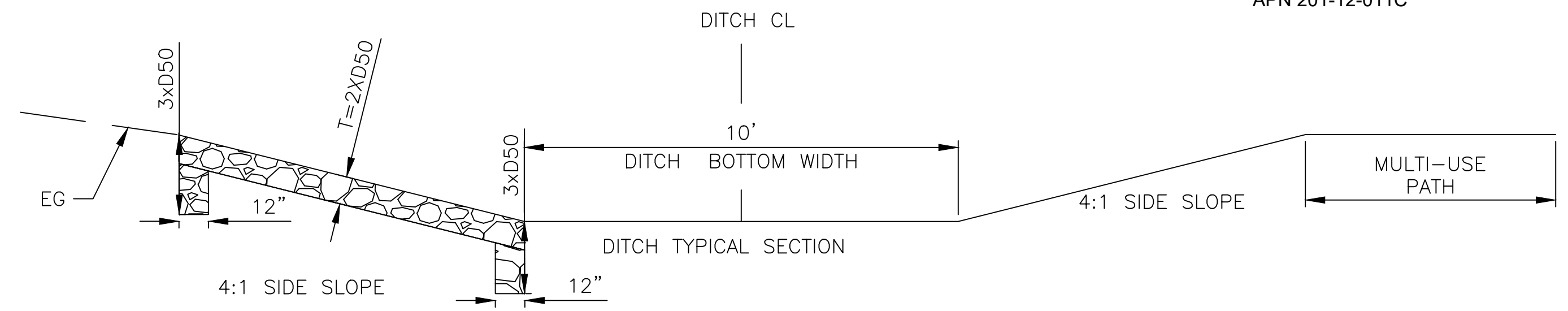


NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

MARICOPA COUNTY COMMUNITY
COLLEGE DISTRICT
APN 201-12-011C



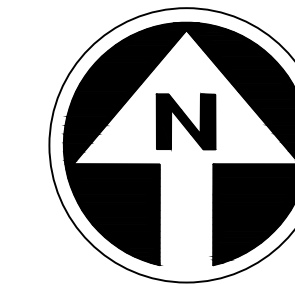
"PER CITY OF PHOENIX CITY CODE CHAPTER 2,
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AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE
CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-1.12
DATE: 06/20			64 OF 95
SCALE: 1"=20' HORIZ.			

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



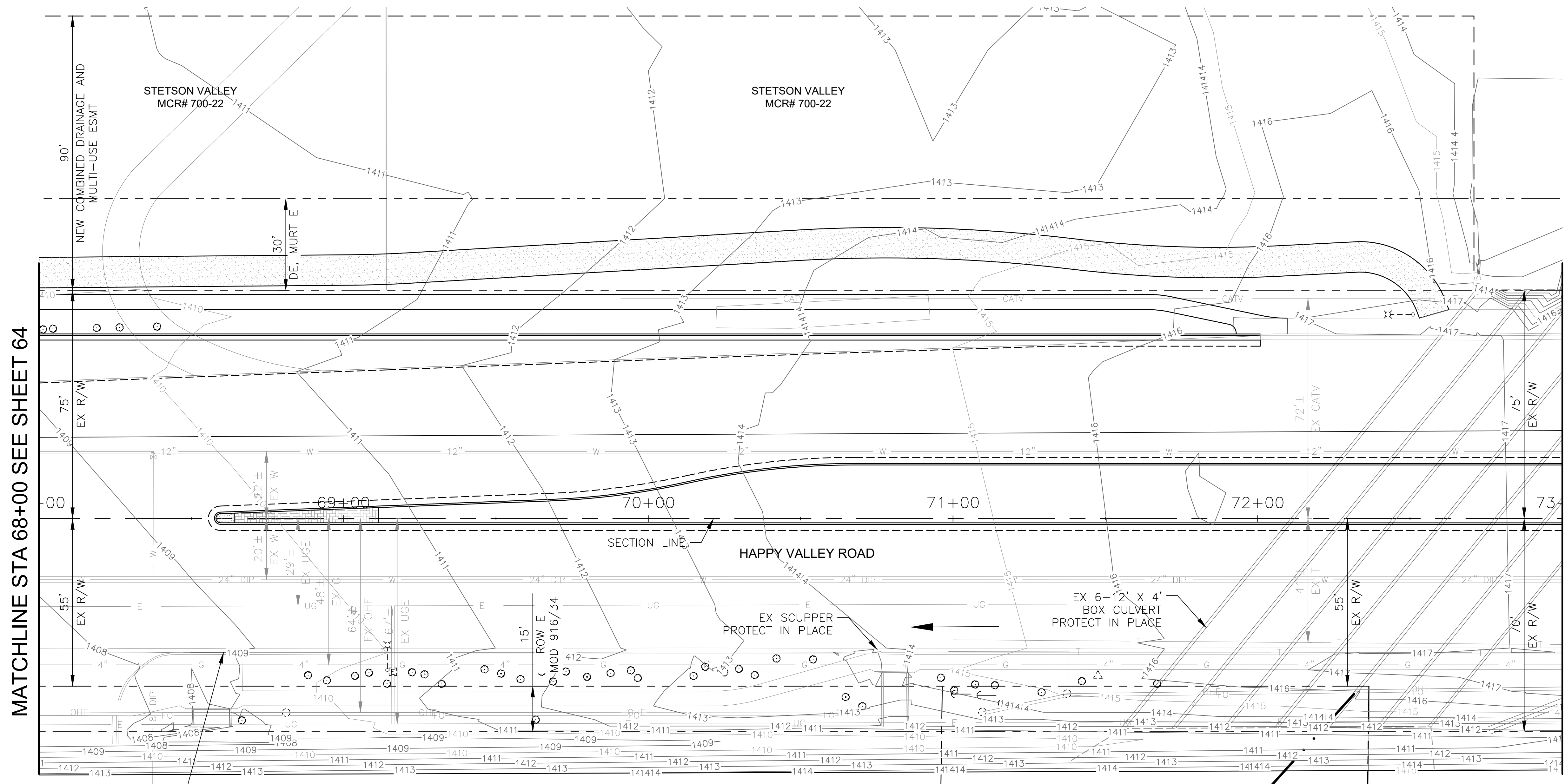
FINAL
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	65	95	
DATE: 06/20		AZTEC			
DRAWN: JER	DESIGN: JER	CHECKED: TMM			
CONSTRUCTION NOTES					
NO	DESCRIPTION	UNIT	QTY		

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



MATCHLINE STA 68+00 SEE SHEET 64

MATCHLINE STA 73+00 SEE SHEET 66

MARICOPA COUNTY COMMUNITY
COLLEGE DISTRICT
APN 201-12-011C

PINNACLE HEIGHTS IV
MCR# 401-39

NO PROPOSED DRAINAGE
WORK ON THIS SHEET

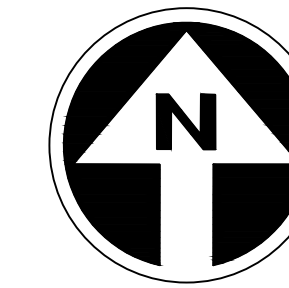
"PER CITY OF PHOENIX CITY CODE CHAPTER 2,
SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE
ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT
AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE
CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-1.13
DATE: 06/20	DATE: 06/20	DATE: 06/20	65 OF 95
SCALE: 1"=20' HORIZ.			

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



FINAL
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	66	95	

06/20
DATE: 06/20
DRAWN: JER DESIGN: JER CHECKED: TMM

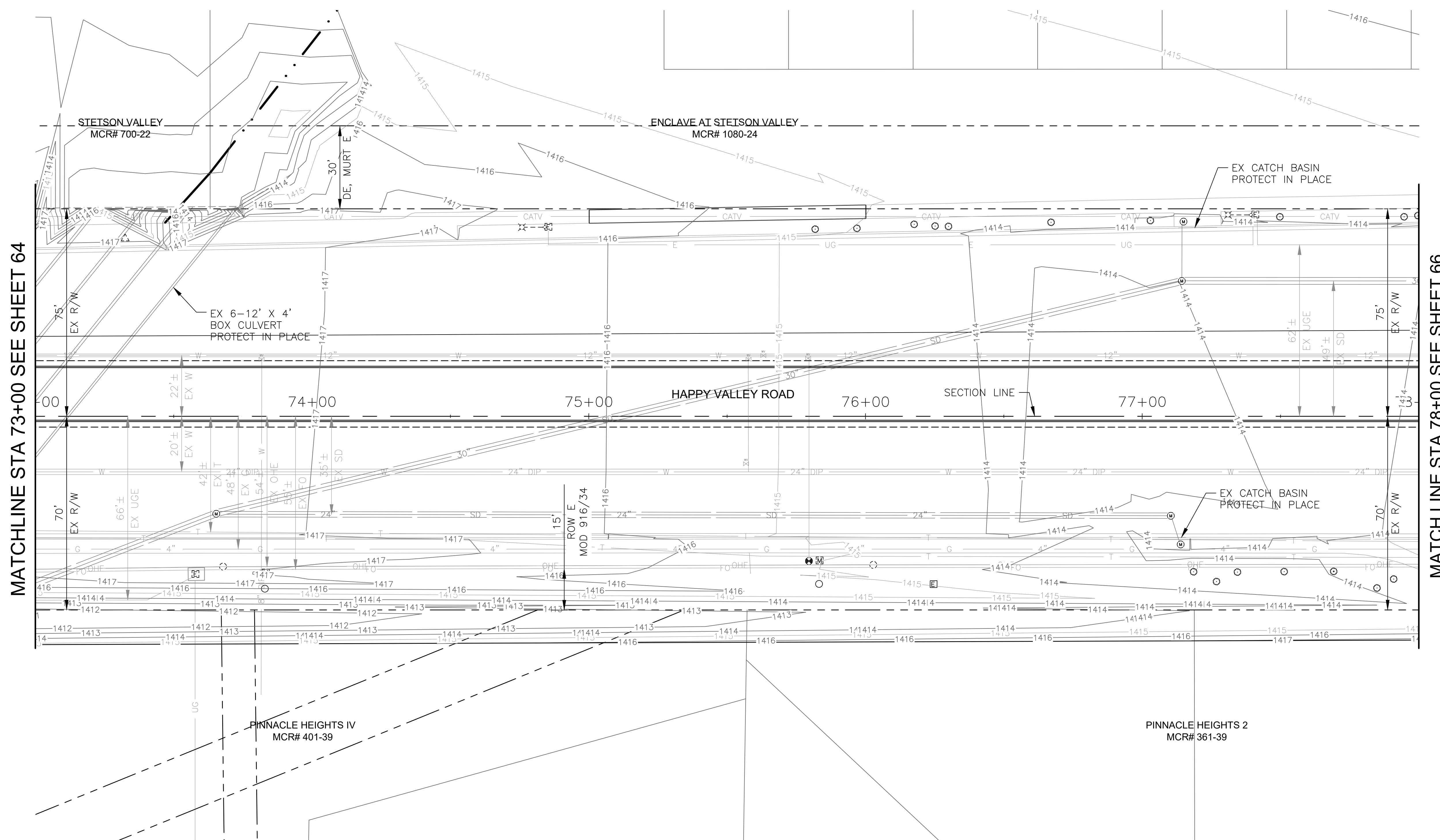
AZTEC
Civil & Survey
Phoenix, AZ 85008-4505
704/952-5141
704/952-5142
704/952-5143
704/952-5144

CONSTRUCTION NOTES

REVISION BY	DESCRIPTION	DATE

REVISION BY	DESCRIPTION	DATE

REVISION BY	DESCRIPTION	DATE



MATCHLINE STA 73+00 SEE SHEET 64

MATCHLINE STA 78+00 SEE SHEET 66

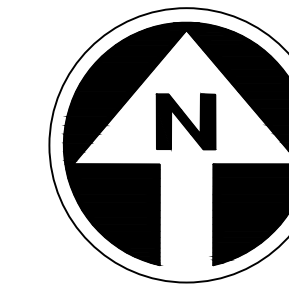
NO PROPOSED DRAINAGE
WORK ON THIS SHEET

"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."

DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-1.14
DATE: 06/20	DATE: 06/20	DATE: 06/20	66 OF 95
SCALE: 1"=20' HORIZ.			

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



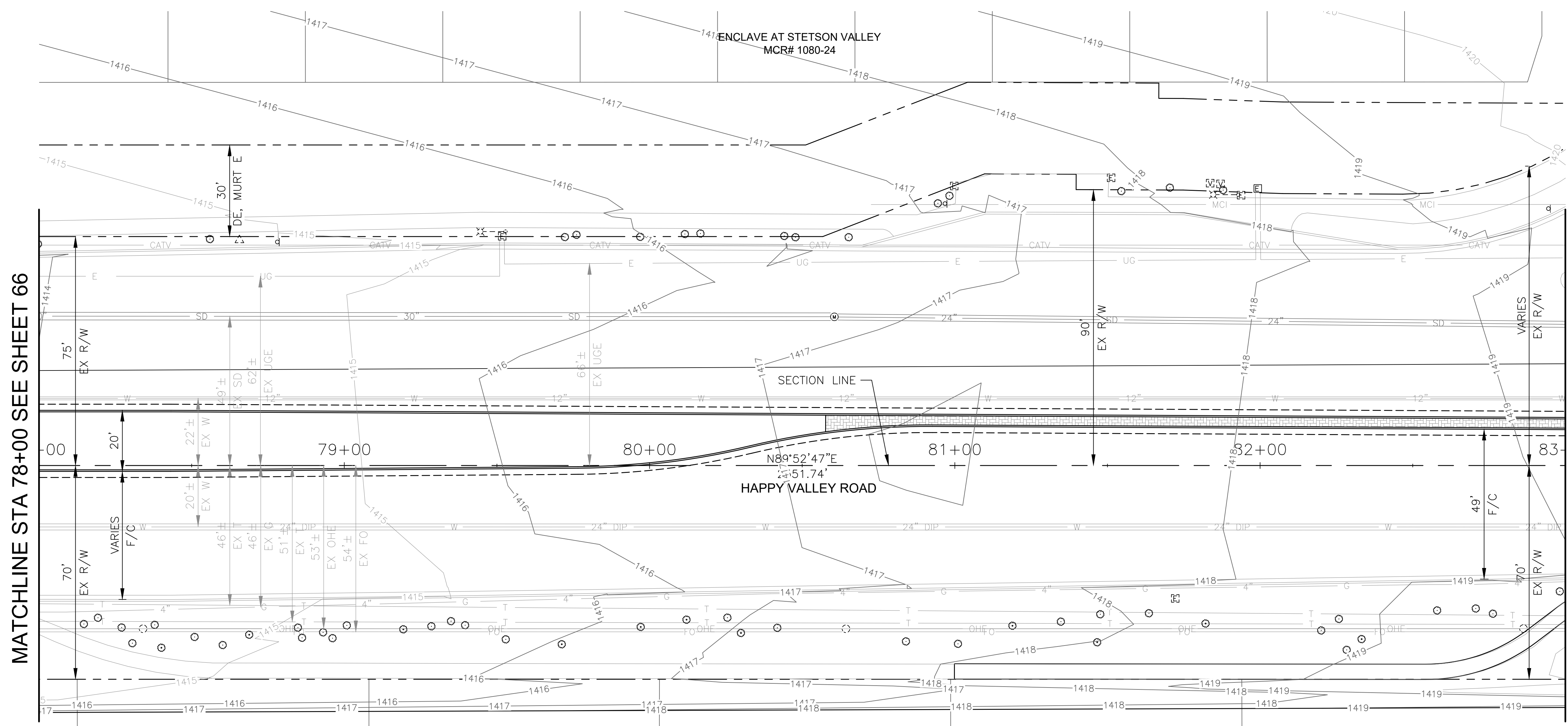
FINAL
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	67	95	
DATE: 06/20		AZTEC			
DRAWN: JER	DESIGN: JER	CHECKED: TMM			
CONSTRUCTION NOTES					

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



MATCHLINE STA 78+00 SEE SHEET 66

MATCHLINE STA 83+00 SEE SHEET 68

PINNACLE HEIGHTS 2
MCR# 361-39

NO PROPOSED DRAINAGE
WORK ON THIS SHEET

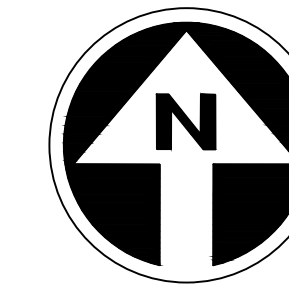
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AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE
CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-1.15
DATE: 06/20	DATE: 06/20	DATE: 06/20	67 OF 95
SCALE: 1"=20' HORIZ.			

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



FINAL
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
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DATE: 06/20		AZTEC			
DRAWN: JER	DESIGN: JER	CHECKED: TMM			

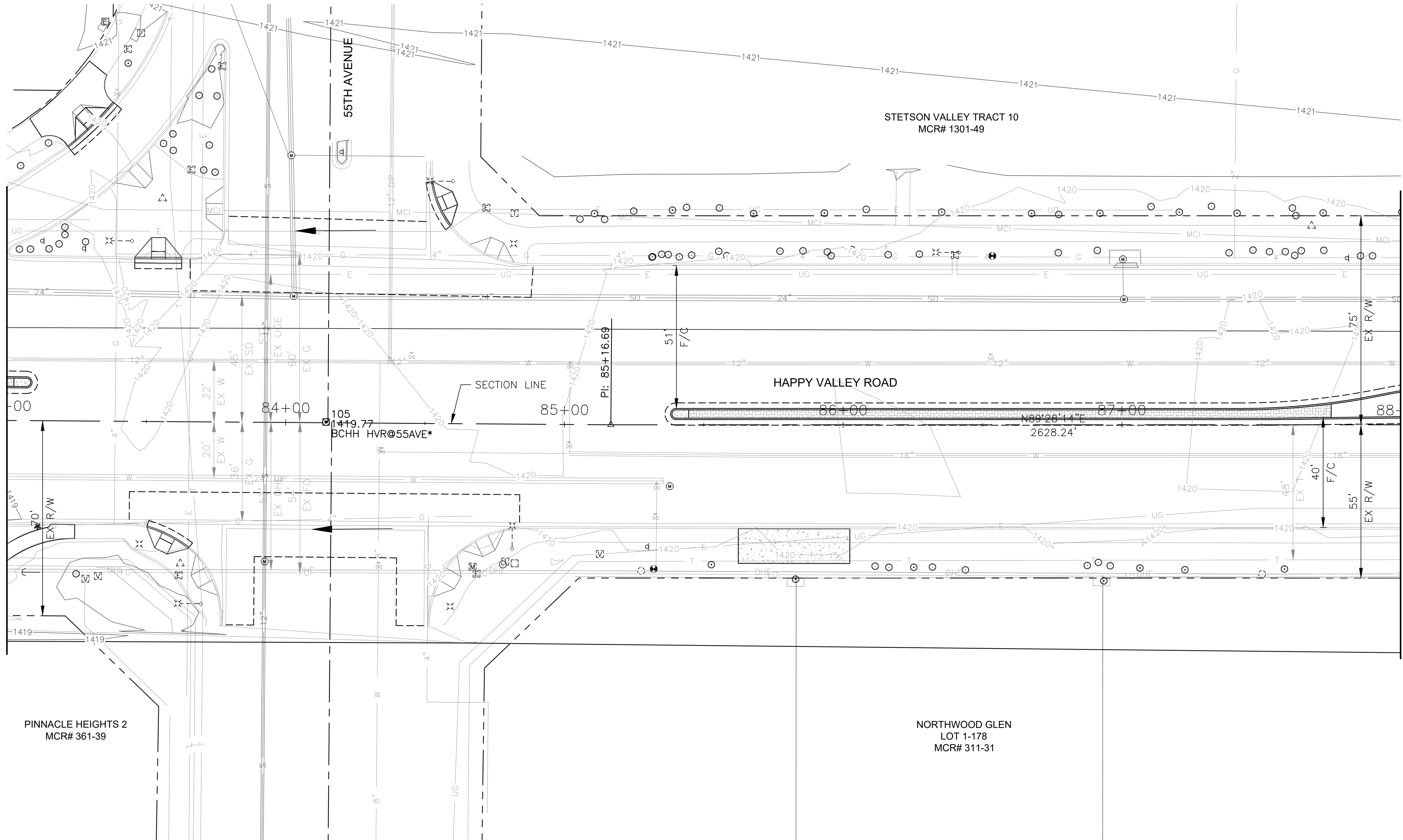
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE STA 83+00 SEE SHEET 67

MATCHLINE STA 88+00 SEE SHEET 69



NO PROPOSED DRAINAGE
WORK ON THIS SHEET

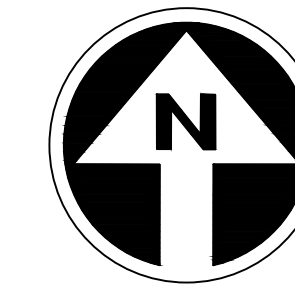
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DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-1.16
DATE: 06/20	DATE: 06/20	DATE: 06/20	68 OF 95
SCALE: 1"=20' HORIZ.			

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



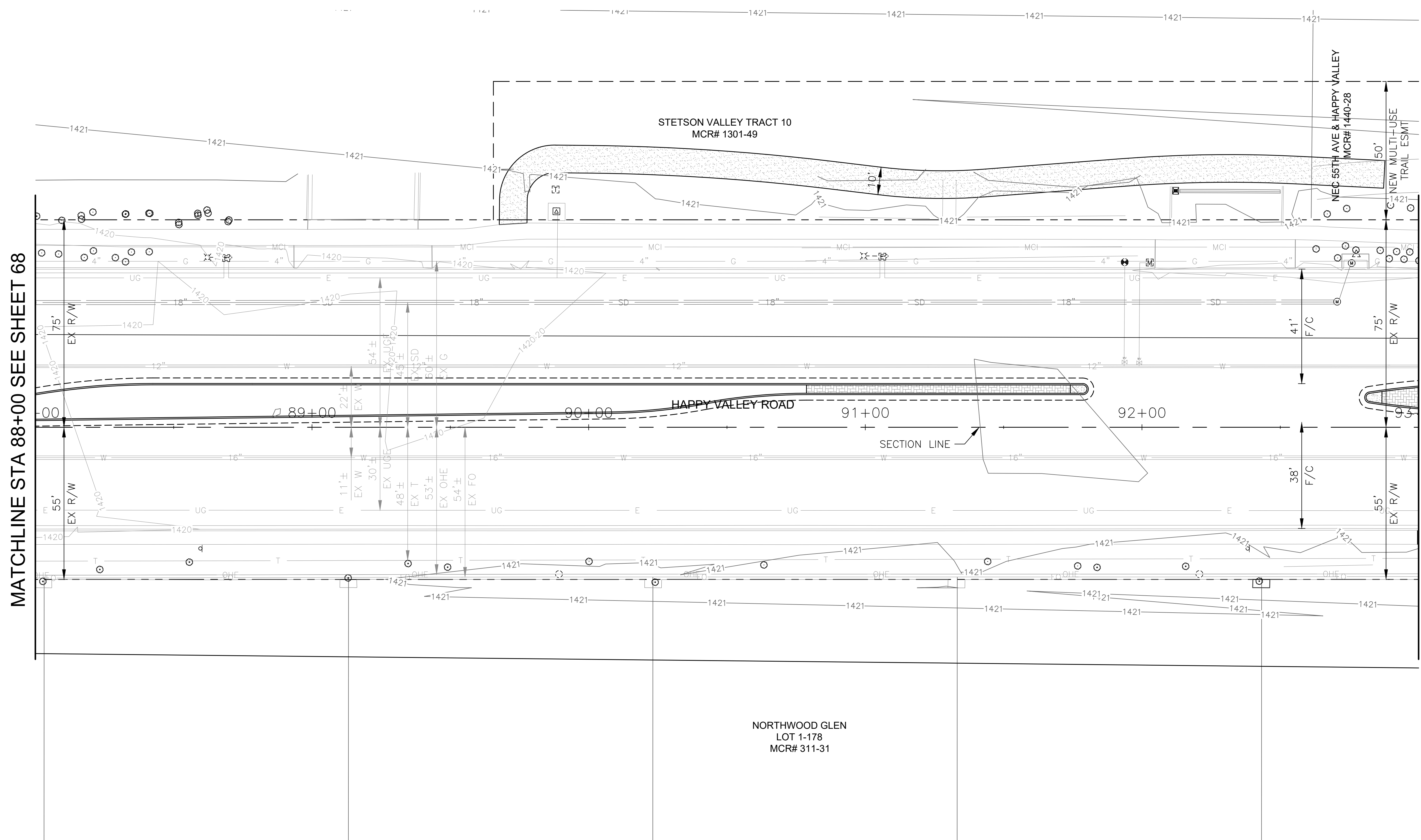
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30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
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DATE: 06/20		AZTEC			
DRAWN: JER	DESIGN: JER	CHECKED: TMM			
CONSTRUCTION NOTES					

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



MATCHLINE STA 88+00 SEE SHEET 68

MATCHLINE STA 93+00 SEE SHEET 70

NORTHWOOD GLEN
LOT 1-178
MCR# 311-31

NO PROPOSED DRAINAGE
WORK ON THIS SHEET

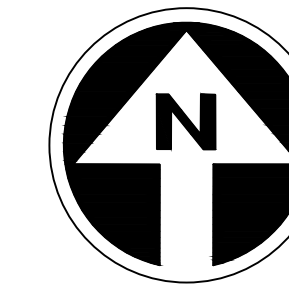
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AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE
CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-1.17
DATE: 06/20	DATE: 06/20	DATE: 06/20	69 OF 95
SCALE: 1"=20' HORIZ.			

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



FINAL
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	70	95	
DATE: 06/20		AZTEC			
DRAWN: JER	DESIGN: JER	CHECKED: TMM			
CONSTRUCTION NOTES					

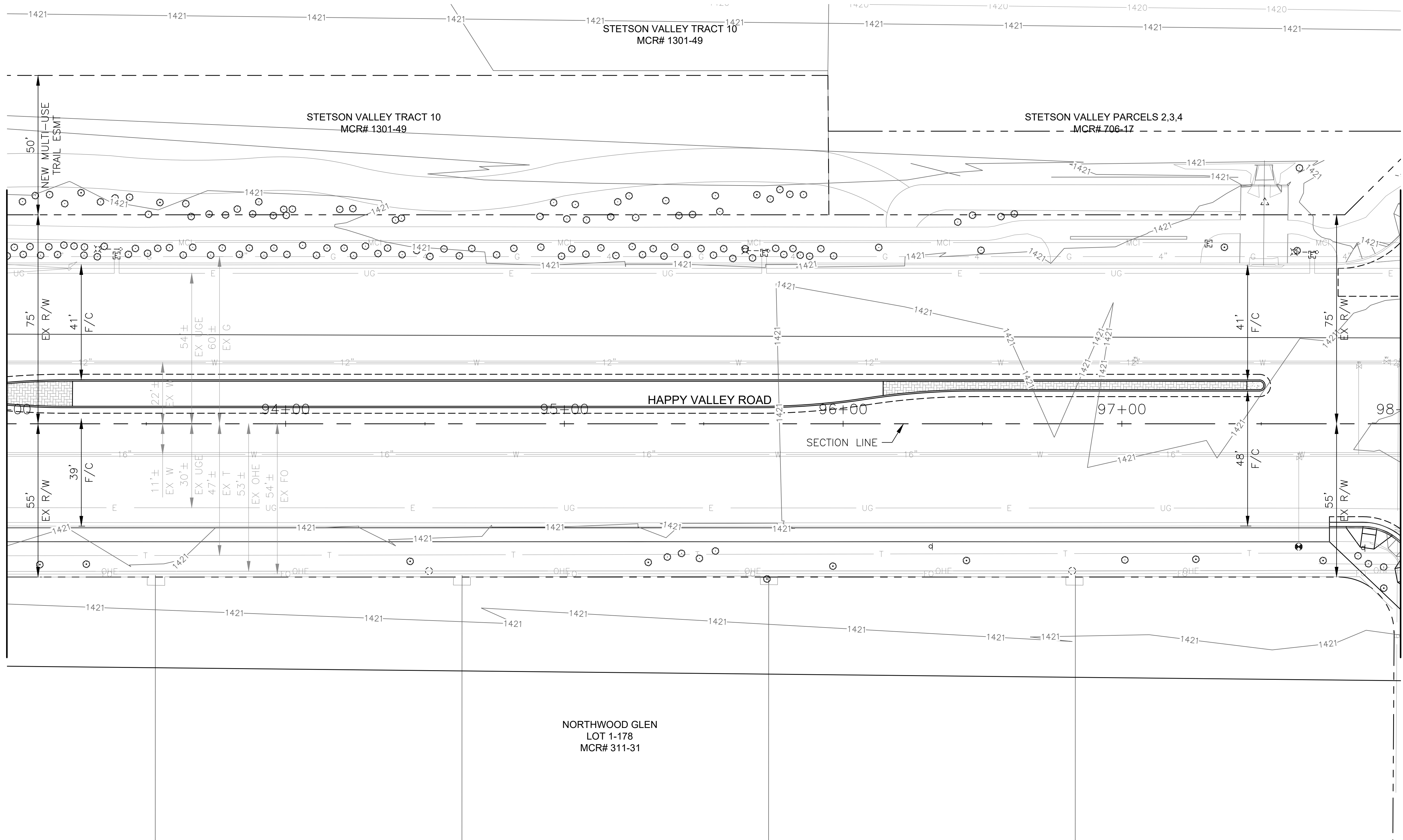
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE STA 93+00 SEE SHEET 69

MATCHLINE STA 98+00 SEE SHEET 71



NO PROPOSED DRAINAGE
WORK ON THIS SHEET

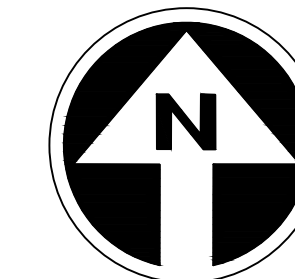
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-1.18
DATE: 06/20	DATE: 06/20	DATE: 06/20	70 OF 95
SCALE: 1"=20' HORIZ.			

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



FINAL
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

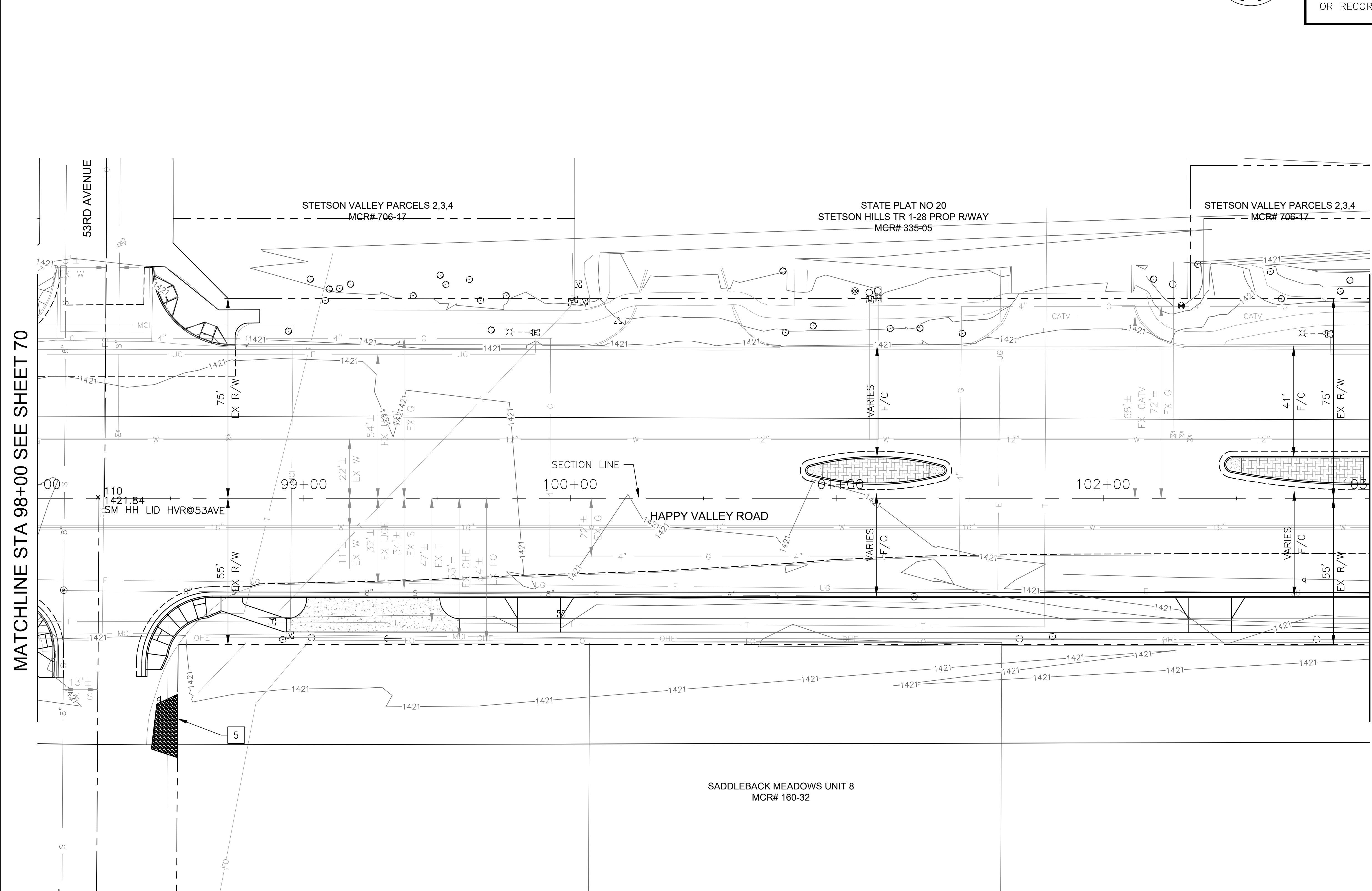
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	71	95	

DATE: 06/20

AZTEC
401 E. McDowell Road
Phoenix, AZ 85006-4505
Tel: (602) 995-9400
Fax: (602) 995-9403
www.aztec.com

DRAWN:	DESIGN:	CHECKED:
JER	JER	TMM

CONSTRUCTION NOTES		
NO	DESCRIPTION	UNIT QTY
5	GRAVEL MULCH, 4" THICK	CY 3



MATCHLINE STA 98+00 SEE SHEET 70

MATCH LINE STA 103+00 SEE SHEET 72

"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."

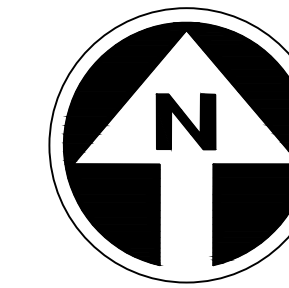
DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-1.19
DATE: 06/20	DATE: 06/20	DATE: 06/20	
SCALE: 1"=20' HORIZ.			71 OF 95

REVISION BY CITY OF PHOENIX	
NO.	DESCRIPTION

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



FINAL
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
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DATE: 06/20		AZTEC			
DRAWN: JER		DESIGN: JER	CHECKED: TMM		
CONSTRUCTION NOTES					

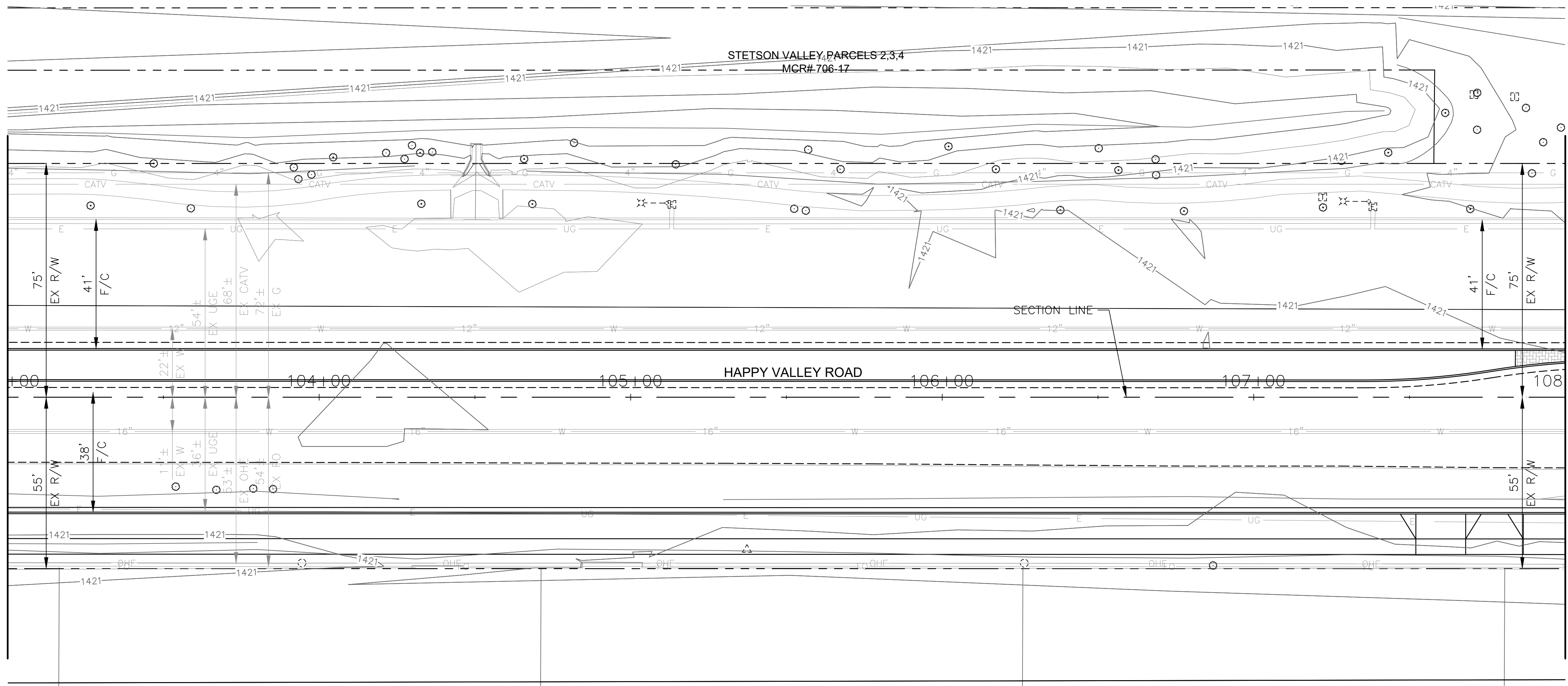
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE STA 103+00 SEE SHEET 71

MATCHLINE STA 108+00 SEE SHEET 73



SADDLEBACK MEADOWS UNIT 8
MCR# 160-32

NO PROPOSED DRAINAGE
WORK ON THIS SHEET

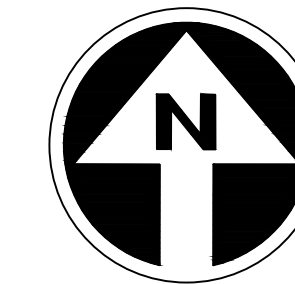
"PER CITY OF PHOENIX CITY CODE CHAPTER 2,
SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE
ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT
AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE
CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-1.20
DATE: 06/20	DATE: 06/20	DATE: 06/20	72 OF 95
SCALE: 1"=20' HORIZ.			

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



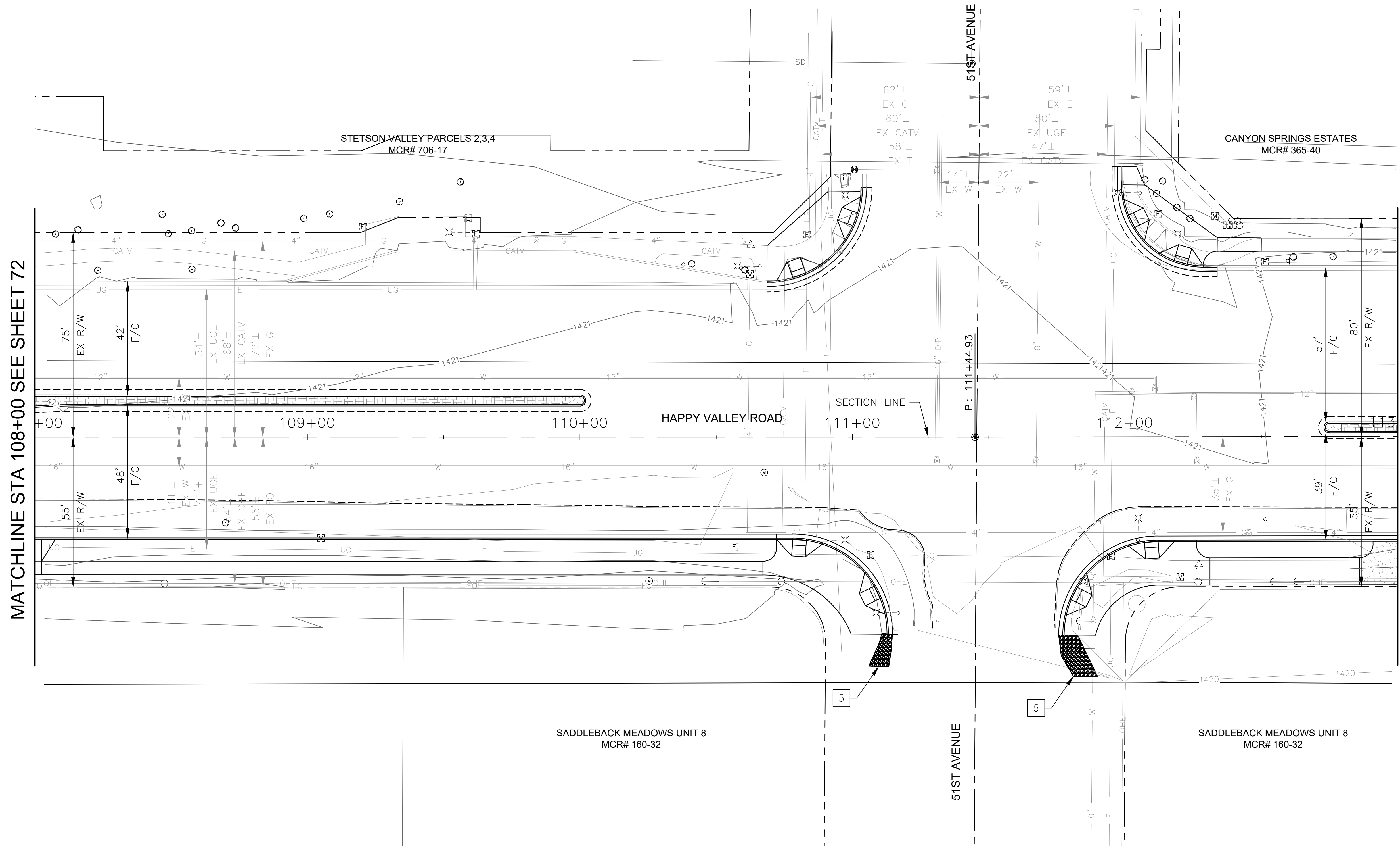
FINAL
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
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DATE: 06/20		AZTEC			
DRAWN: JER	DESIGN: JER	CHECKED: TMM			
CONSTRUCTION NOTES					
NO	DESCRIPTION	UNIT	QTY		
5	GRAVEL MULCH, 4" THICK	CY	3		

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



MATCHLINE STA 108+00 SEE SHEET 72

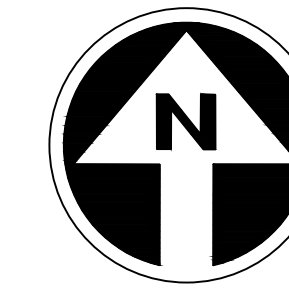
MATCHLINE STA 113+00 SEE SHEET 74

"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."

DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-1.21
DATE: 06/20	DATE: 06/20	DATE: 06/20	73 OF 95
SCALE: 1"=20' HORIZ.			

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



FINAL
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	74	95	
DATE: 06/20		AZTEC			
DRAWN: JER	DESIGN: JER	CHECKED: TMM			

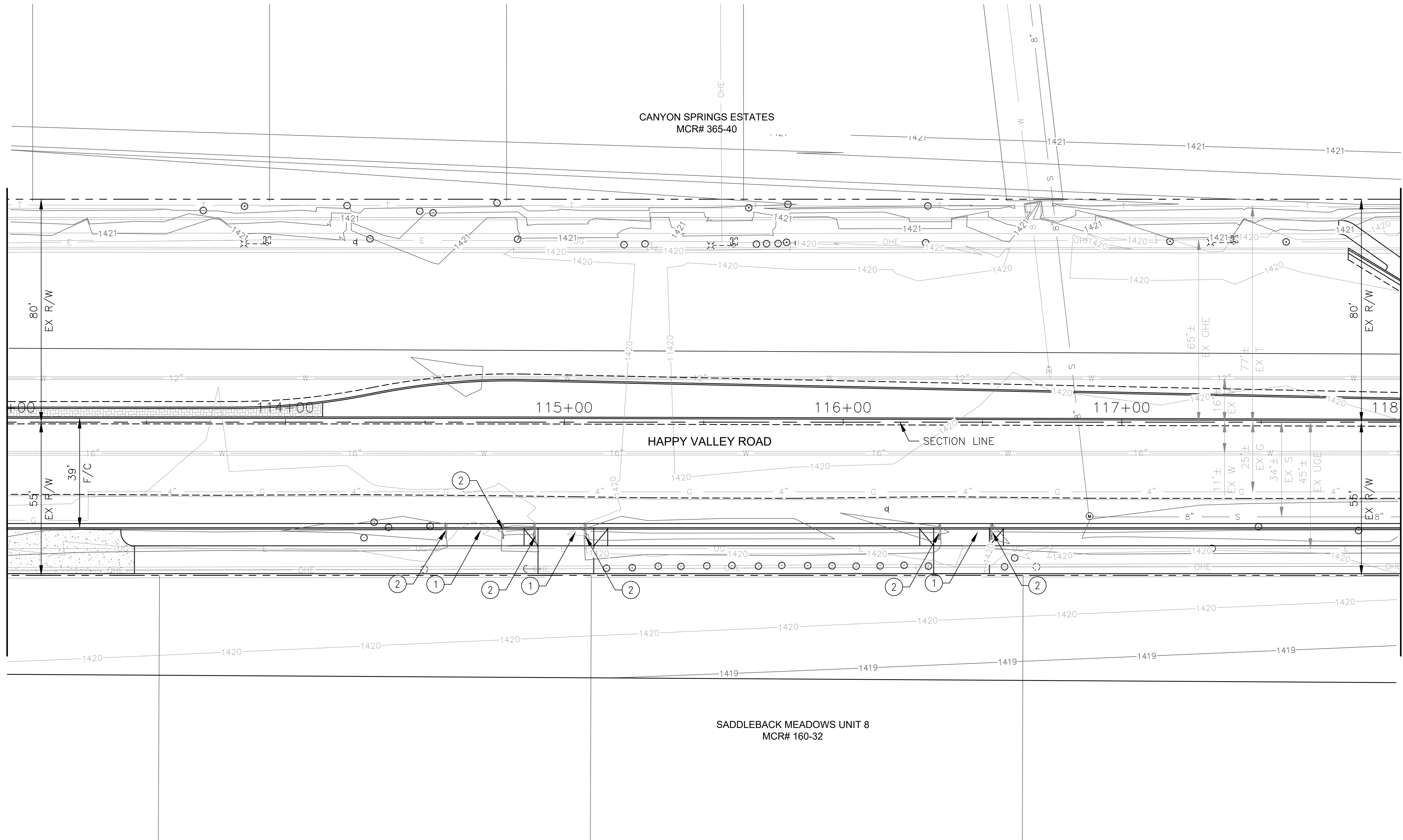
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE STA 113+00 SEE SHEET 73

MATCHLINE STA 118+00 SEE SHEET 75



NO	DESCRIPTION	UNIT	QTY
1	REMOVE PIPE	LF	57
2	REMOVE HEADWALL	EA	6

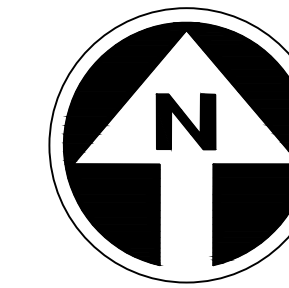
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DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-1.22
DATE: 06/20	DATE: 06/20	DATE: 06/20	74 OF 95
SCALE: 1"=20' HORIZ.			

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



FINAL
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	75	95	
DATE: 06/20		AZTEC			
DRAWN: JER		DESIGN: JER	CHECKED: TMM		

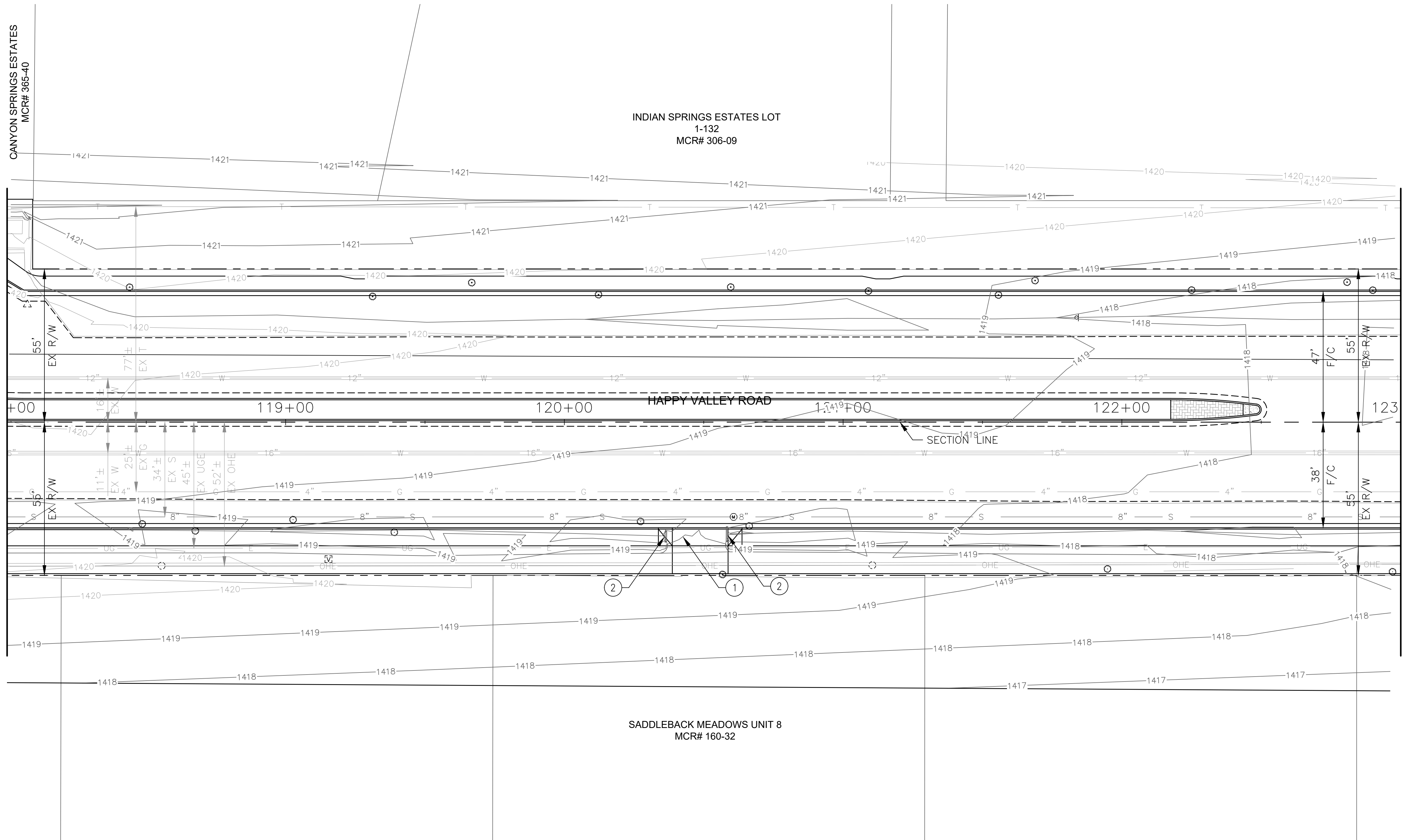
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE STA 118+00 SEE SHEET 74

MATCH LINE STA 123+00 SEE SHEET 76



NO	DESCRIPTION	UNIT	QTY
①	REMOVE PIPE	LF	22
②	REMOVE HEADWALL	EA	2

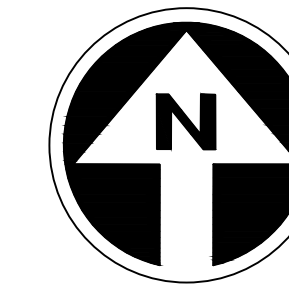
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DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-1.23
DATE: 06/20	DATE: 06/20	DATE: 06/20	SCALE: 1"=20' HORIZ.
			75 OF 95

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



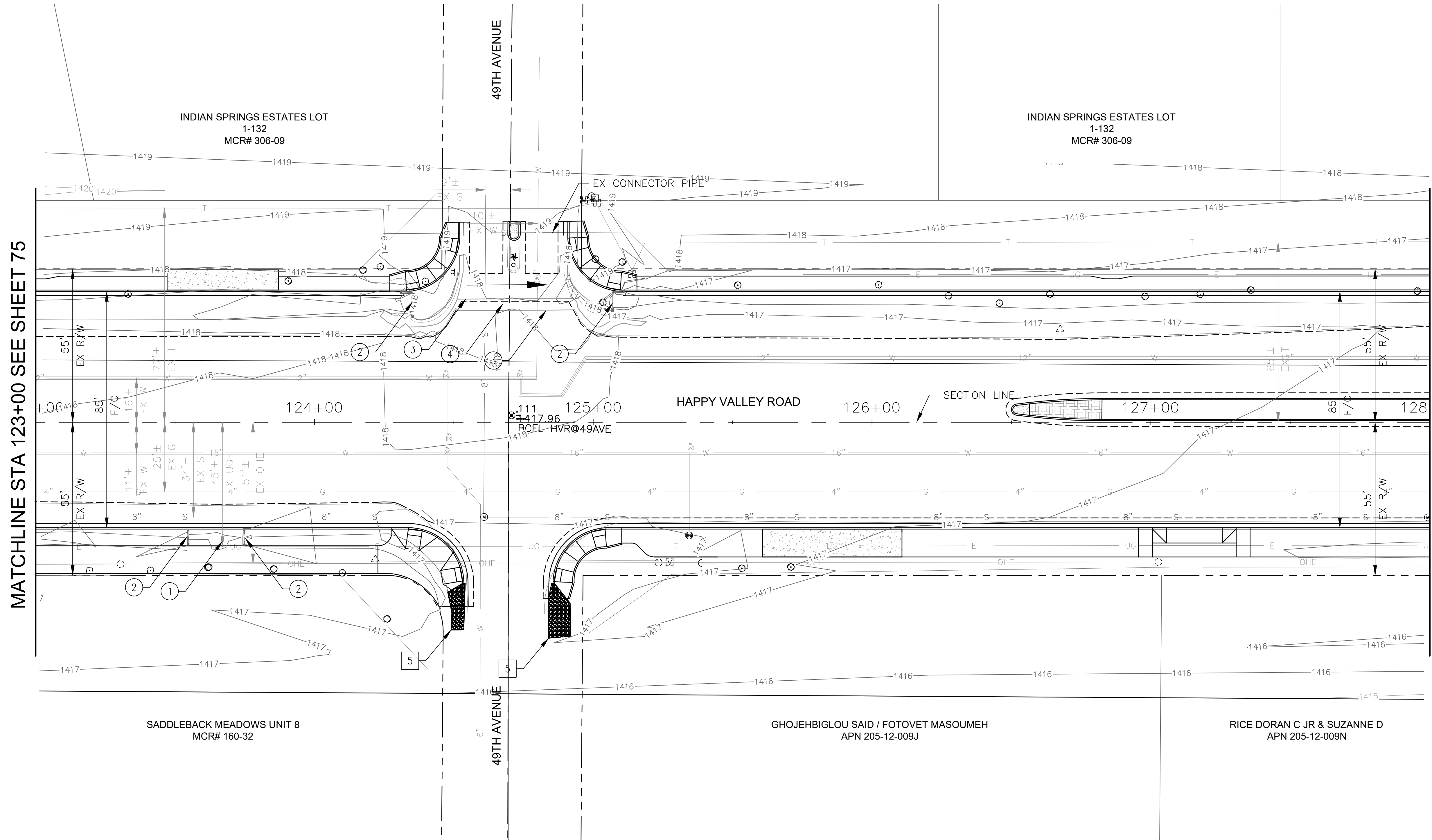
FINAL
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Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	76	95	
DATE: 06/20		AZTEC			
DRAWN: JER	DESIGN: JER	CHECKED: TMM			
CONSTRUCTION NOTES					
NO	DESCRIPTION	UNIT	QTY		
5	GRAVEL MULCH, 4" THICK	CY	3		

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



MATCHLINE STA 123+00 SEE SHEET 75

MATCHLINE STA 128+00 SEE SHEET 77

REMOVAL NOTES			
NO	DESCRIPTION	UNIT	QTY
1	REMOVE PIPE	LF	20
2	REMOVE HEADWALL	EA	4
3	REMOVE PIPE, SLURRY BACKFILL AND COMPACT	LF	144
4	REMOVE CATCH BASIN, BACKFILL AND COMPACT	EA	1

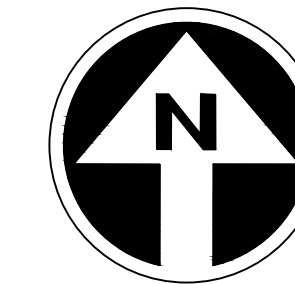
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-1.24
DATE: 06/20	DATE: 06/20	DATE: 06/20	76 OF 95
SCALE: 1"=20' HORIZ.			

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



FINAL
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	77	95	
DATE: 06/20		AZTEC			
DRAWN: JER	DESIGN: JER	CHECKED: TMM			

NO.	DESCRIPTION	REV BY	CHK BY	DATE

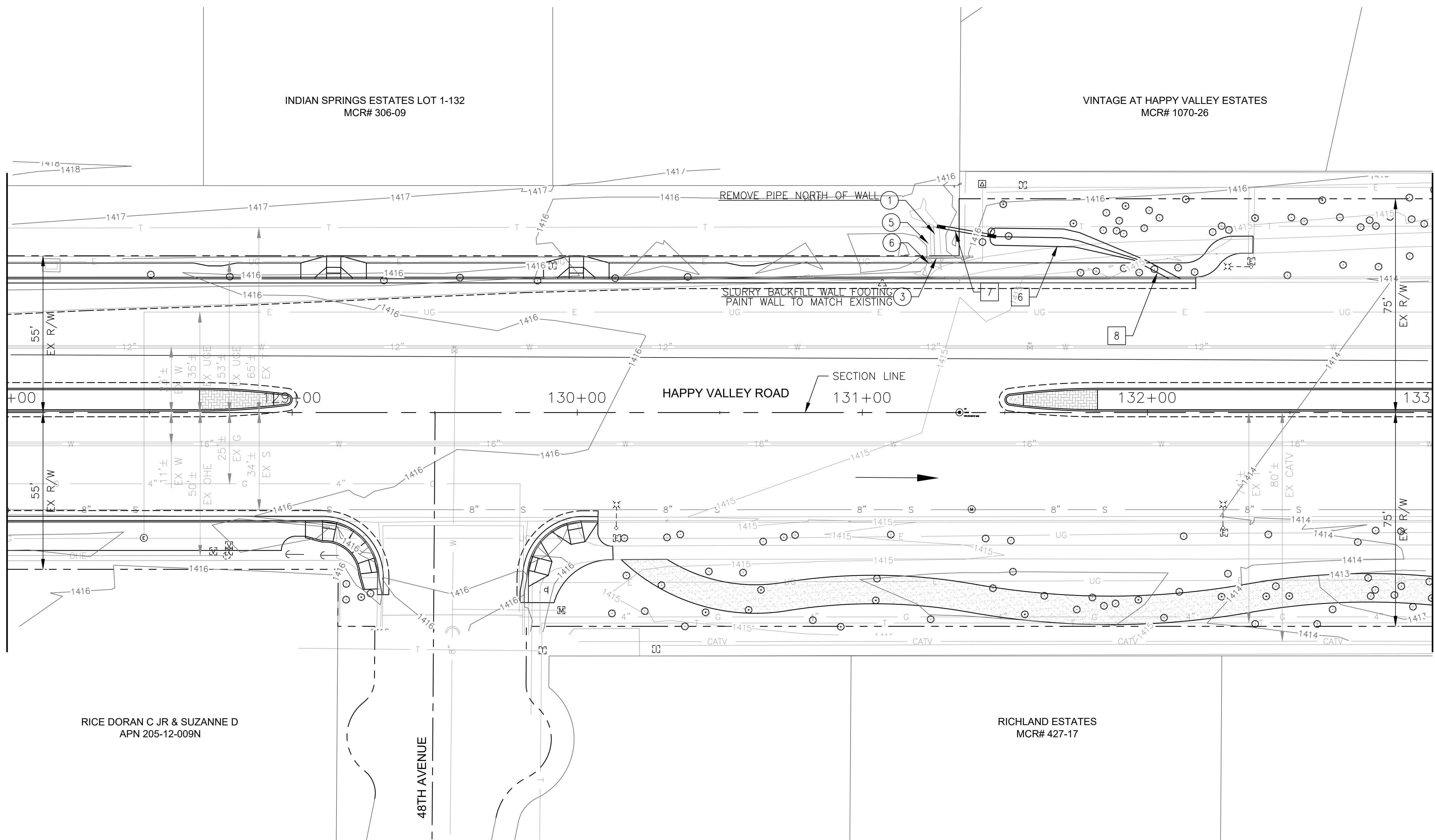
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

CONSTRUCTION NOTES				
NO	DESCRIPTION	UNIT	QTY	
6	EARTHEN V-DITCH, 1.75' DEEP 4:1 SIDE SLOPES	CY	24	
7	12" CMP	LF	20	
8	MODIFIED CONCRETE SCUPPER MAG STD DET 206	EA	1	

MATCHLINE STA 128+00 SEE SHEET 76

MATCHLINE STA 133+00 SEE SHEET 78



REMOVAL NOTES				
NO	DESCRIPTION	UNIT	QTY	
1	REMOVE PIPE	LF	3	
3	REMOVE PIPE, SLURRY BACKFILL AND COMPACT	LF	22	
5	REPLACE GROUTED RIP RAP PER MAG SECTION 220	SF	54	
6	SAWCUT AND REMOVE GROUTED RIP RAP	SF	26	

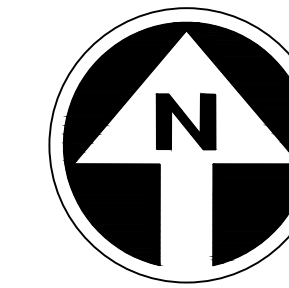
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SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE
ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT
AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE
CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-1.25
DATE: 06/20	DATE: 06/20	DATE: 06/20	77 OF 95
SCALE: 1"=20' HORIZ.			

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



FINAL
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	78	95	
DATE: 06/20					
DRAWN: JER	DESIGN: JER				
CONSTRUCTION NOTES					

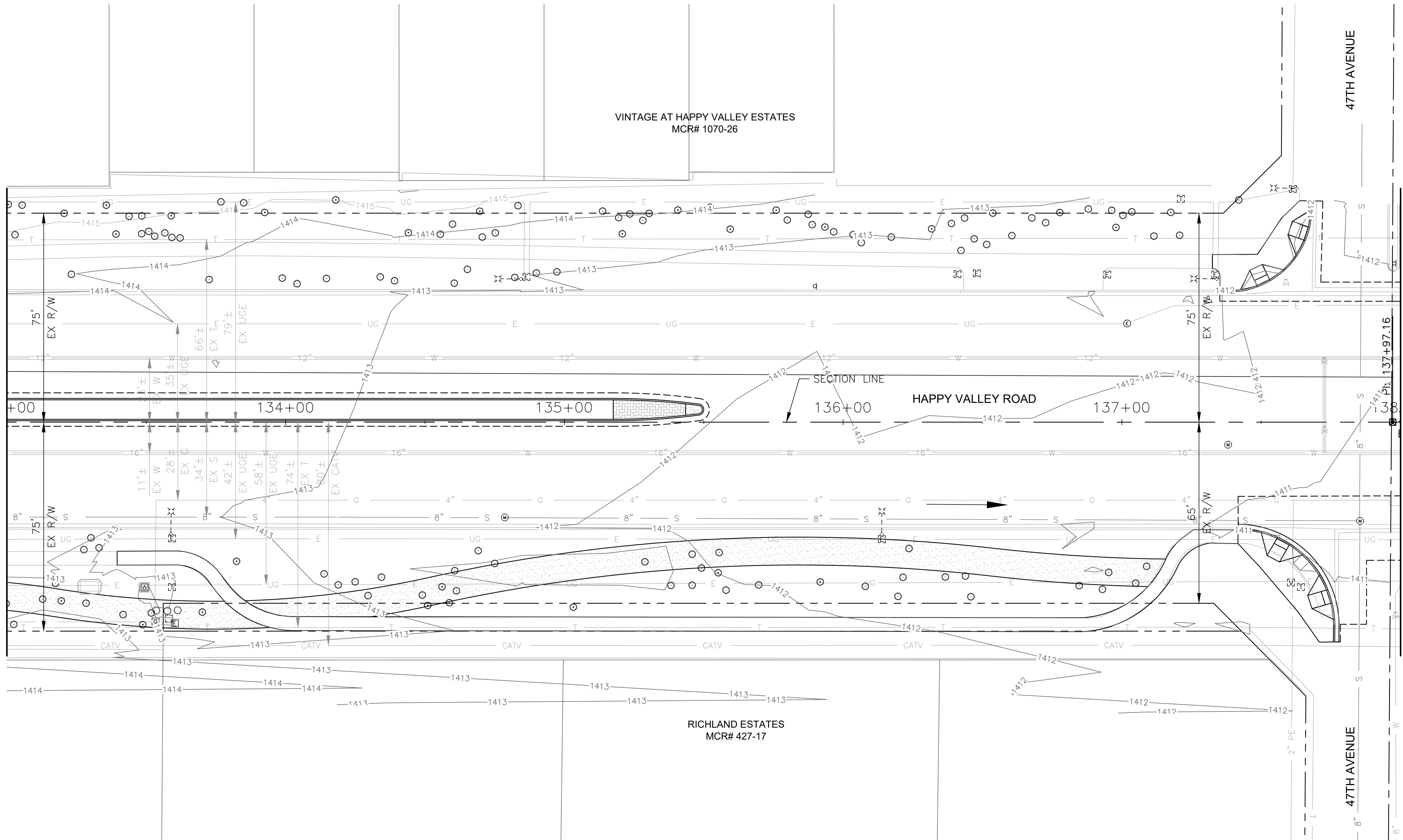
NO.	REVISION BY	DESCRIPTION	DATE

NO.	REVISION BY	DESCRIPTION	DATE

NO.	REVISION BY	DESCRIPTION	DATE

MATCHLINE STA 133+00 SEE SHEET 77

MATCHLINE STA 138+00 SEE SHEET 79



NO PROPOSED DRAINAGE
WORK ON THIS SHEET

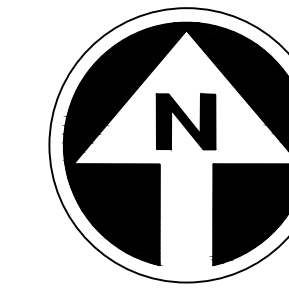
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-1.26
DATE: 06/20	DATE: 06/20	DATE: 06/20	78 OF 95
SCALE: 1"=20' HORIZ.			


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



FINAL
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	79	95	

DATE: 06/20

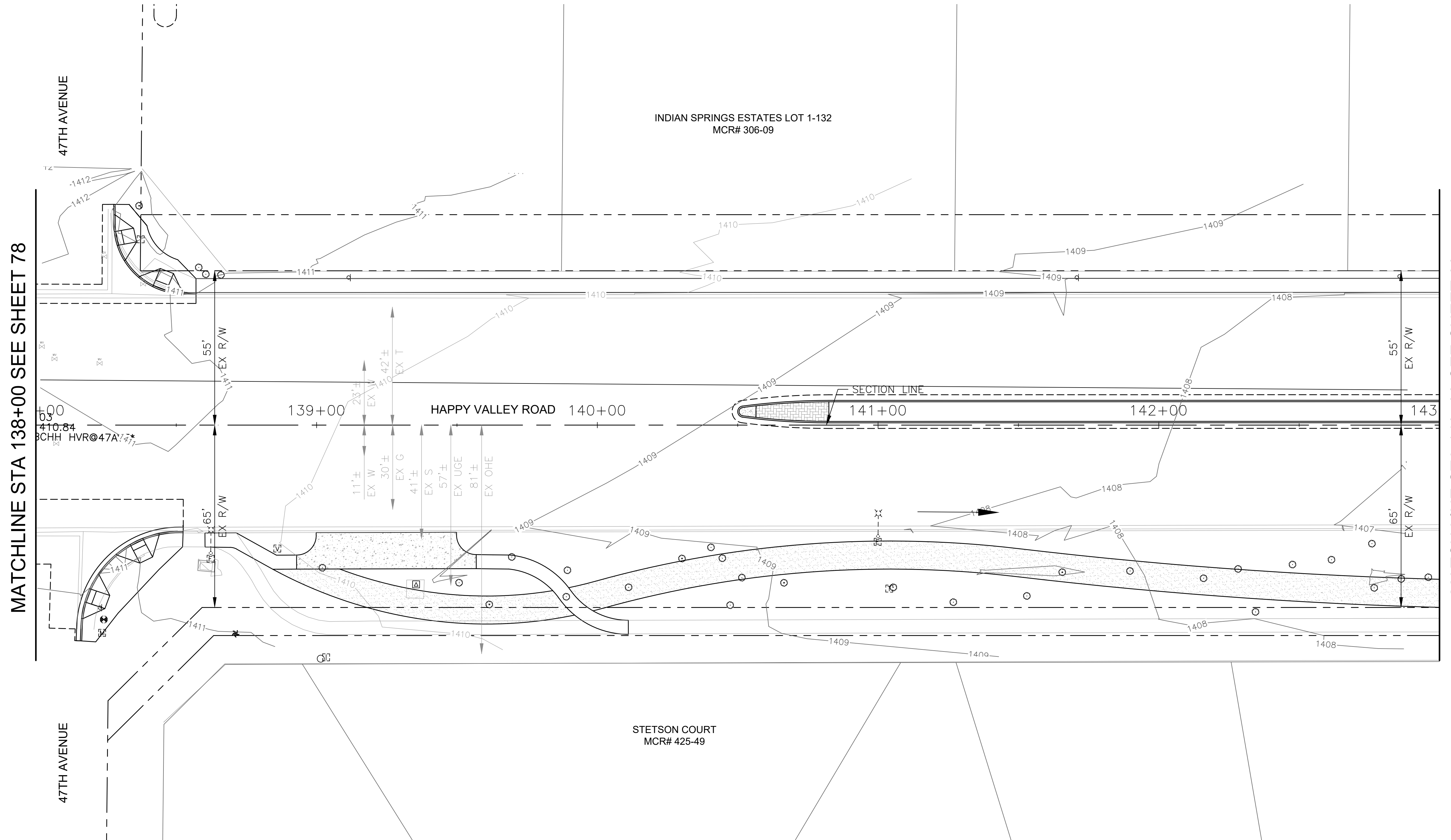

 AZTEC
 450 E. McDowell Road
 Phoenix, AZ 85006-4505
 TEL: 602-995-9400
 FAX: 602-995-9403
 www.aztec.com

DRAWN: JER	DESIGN: JER	CHECKED: TMM
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NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



MATCHLINE STA 138+00 SEE SHEET 78

MATCHLINE STA 143+00 SEE SHEET 80

NO PROPOSED DRAINAGE
WORK ON THIS SHEET

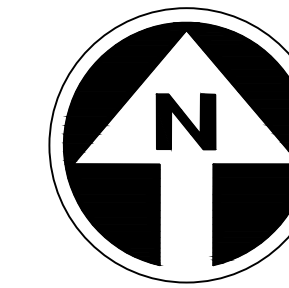
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CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-1.27
DATE: 06/20	DATE: 06/20	DATE: 06/20	
SCALE: 1"=20' HORIZ.			79 OF 95

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



FINAL
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	80	95	
DATE: 04/20		AZTEC			
DRAWN: RJR	DESIGN: RJR	CHECKED: G.G.			

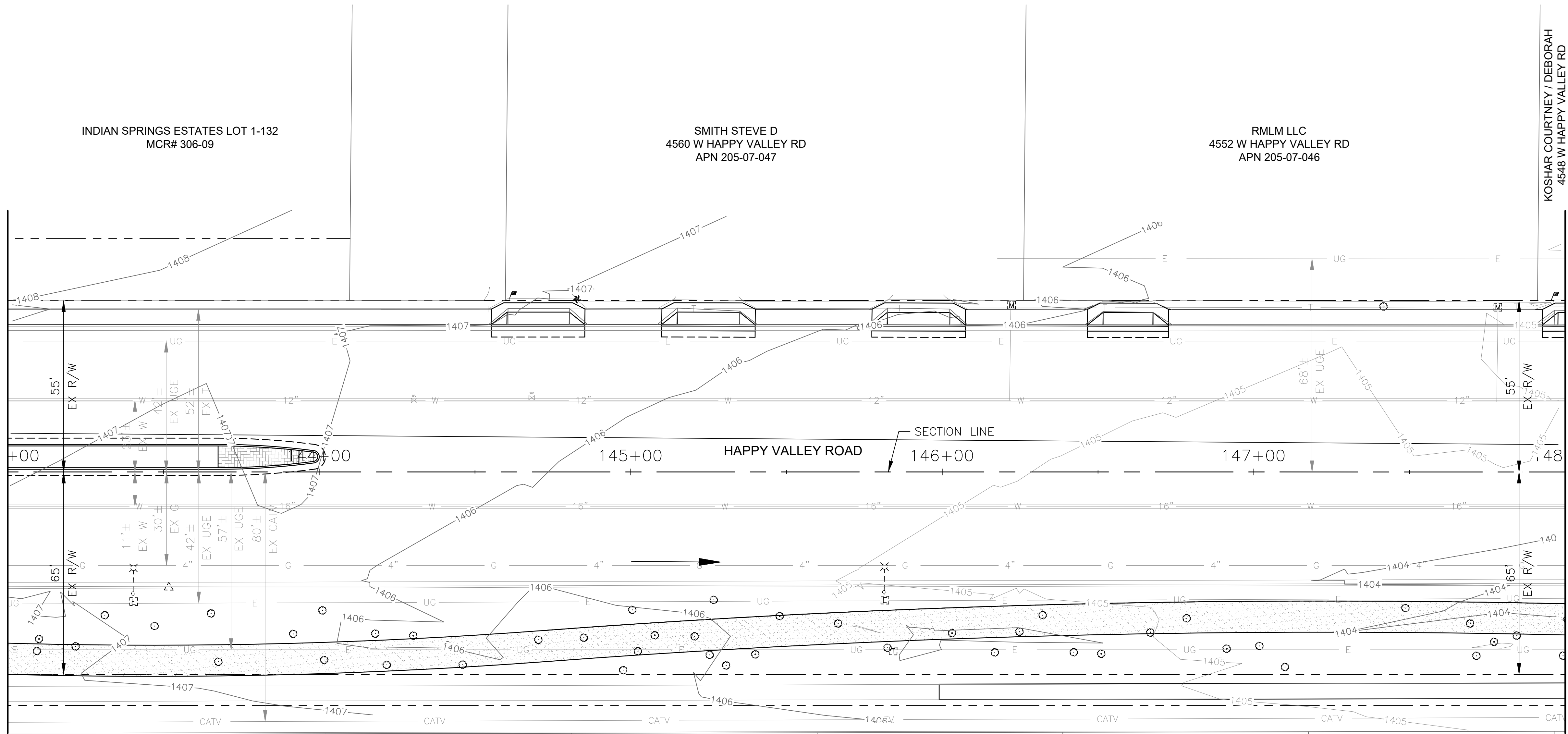
NO.	REVISION BY	DESCRIPTION	DATE

NO.	REVISION BY	DESCRIPTION	DATE

NO.	REVISION BY	DESCRIPTION	DATE

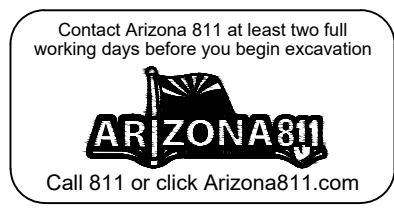
MATCHLINE STA 143+00 SEE SHEET 79

MATCHLINE STA 148+00 SEE SHEET 81



STETSON COURT
MCR# 425-49

NO PROPOSED DRAINAGE
WORK ON THIS SHEET



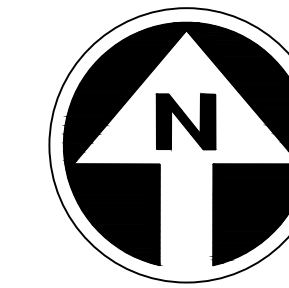
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DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. DR-1.28
DATE: 04/20	DATE: 04/20	DATE: 04/20	80 OF 95
SCALE: 1"=20' HORIZ.			

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



FINAL
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	81	95	
DATE: 06/20		AZTEC			
DRAWN: JER	DESIGN: JER	CHECKED: TMM			

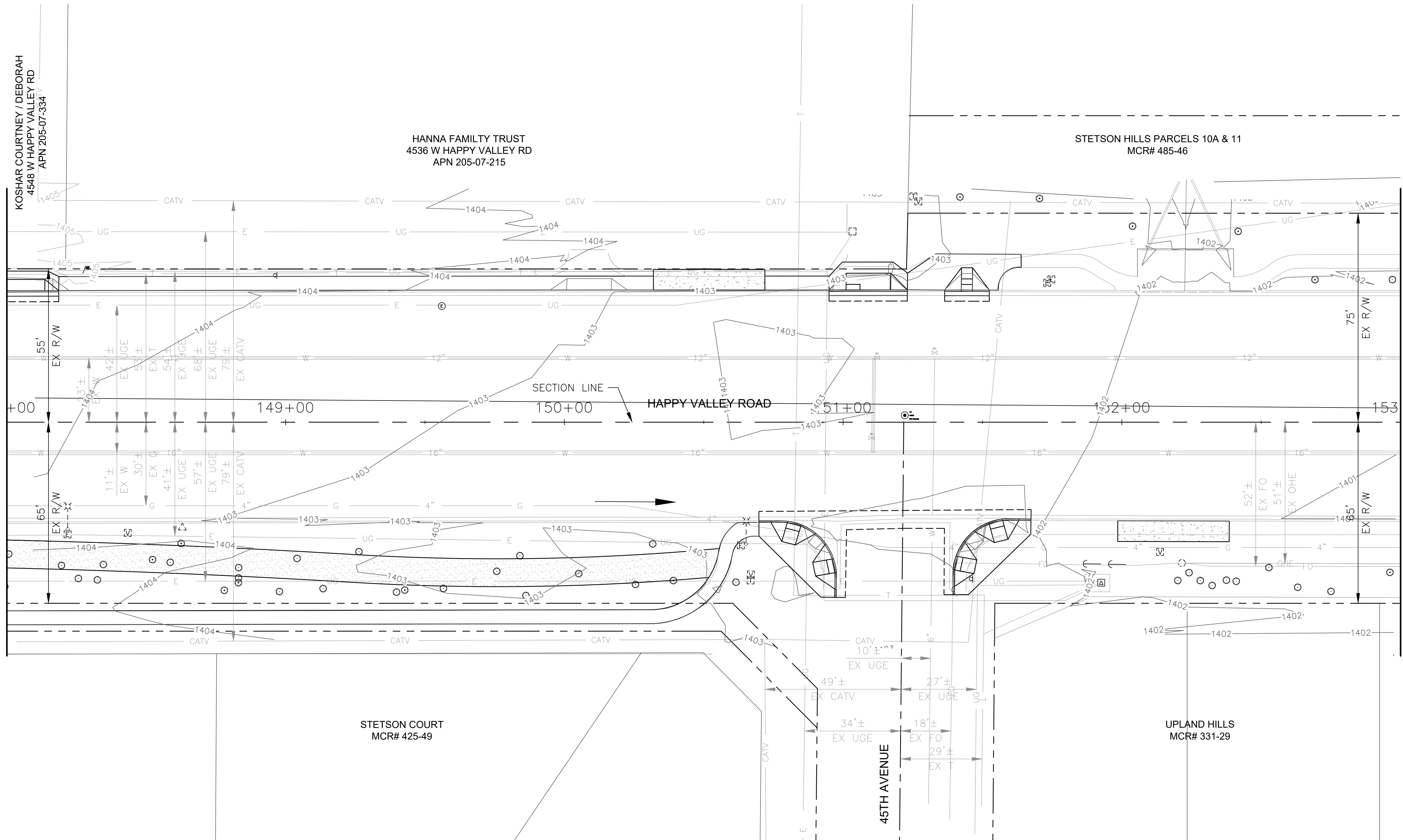
NO.	REVISION BY	DESCRIPTION	DATE

NO.	REVISION BY	DESCRIPTION	DATE

NO.	REVISION BY	DESCRIPTION	DATE

MATCHLINE STA 148+00 SEE SHEET 80

MATCH LINE STA 153+00 SEE SHEET 82



NO PROPOSED DRAINAGE
WORK ON THIS SHEET

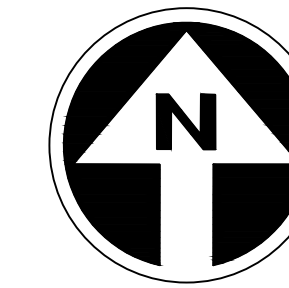
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CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-1.29
DATE: 06/20	DATE: 06/20	DATE: 06/20	81 OF 95
SCALE: 1"=20' HORIZ.			

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



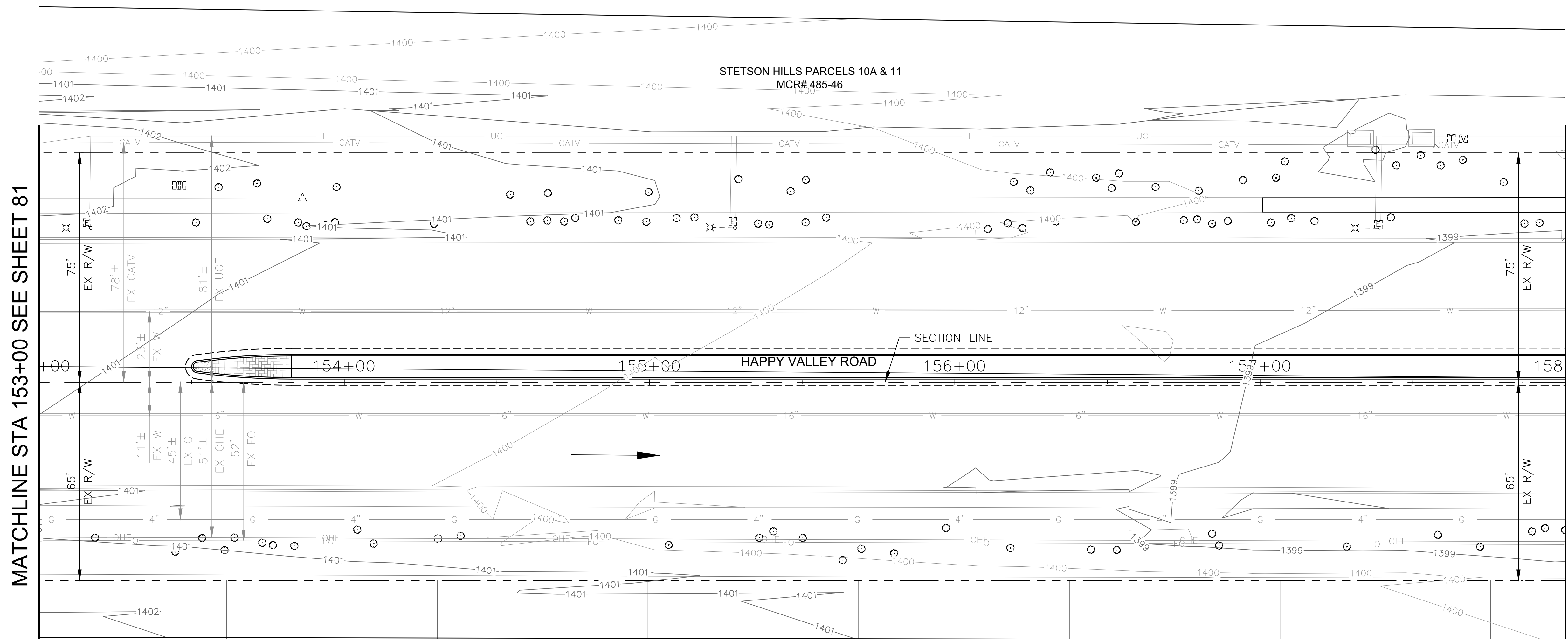
FINAL
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	82	95	
DATE: 06/20		AZTEC			
DRAWN: JER	DESIGN: JER	CHECKED: TMM			

NO.	REVISION BY	DESCRIPTION	DATE

NO.	REVISION BY	DESCRIPTION	DATE

NO.	REVISION BY	DESCRIPTION	DATE



MATCHLINE STA 153+00 SEE SHEET 81

MATCHLINE STA 158+00 SEE SHEET 83

NO PROPOSED DRAINAGE
WORK ON THIS SHEET

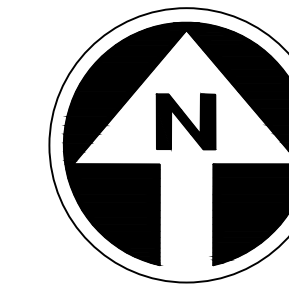
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CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-1.30
DATE: 06/20	DATE: 06/20	DATE: 06/20	82 OF 95
SCALE: 1"=20' HORIZ.			

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



FINAL
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	83	95	
DATE: 06/20		AZTEC			
DRAWN: JER	DESIGN: JER	CHECKED: TMM			

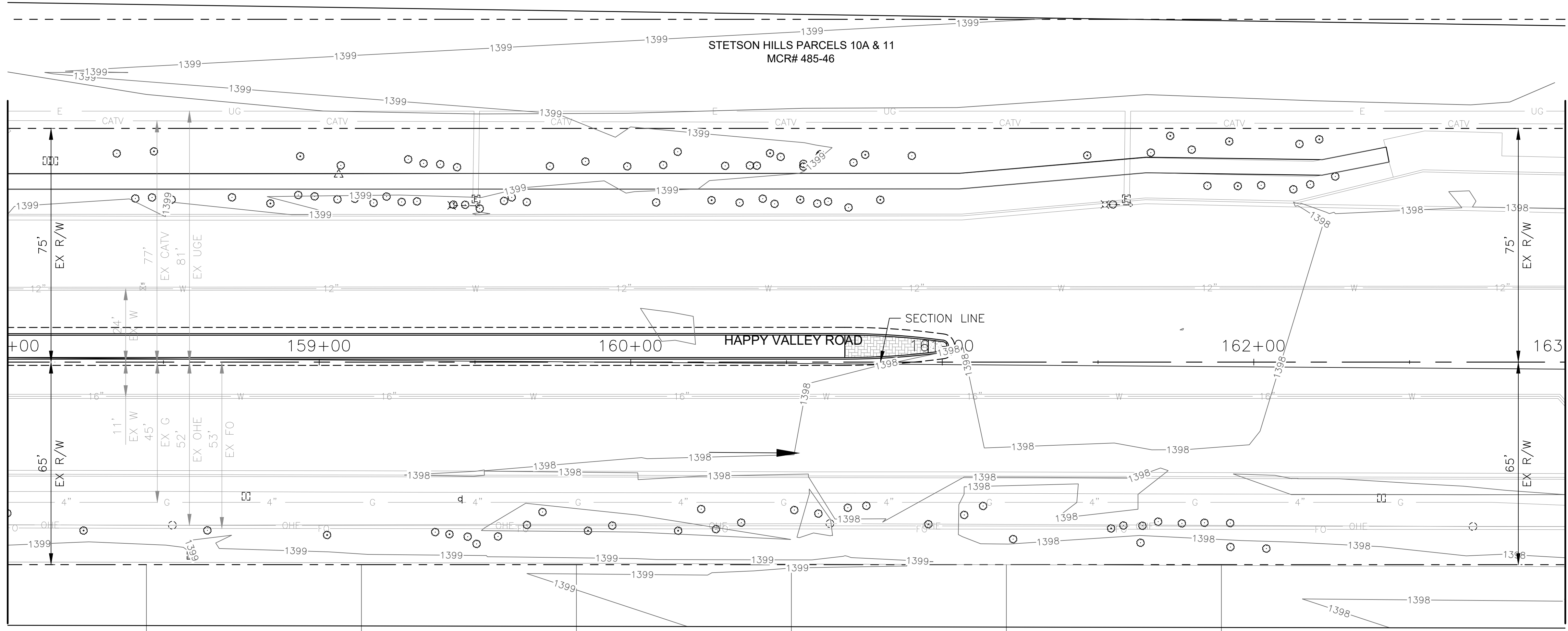
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE STA 158+00 SEE SHEET 82

MATCHLINE STA 163+00 SEE SHEET 84



NO PROPOSED DRAINAGE
WORK ON THIS SHEET

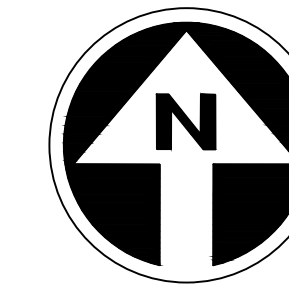
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DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-1.31
DATE: 06/20	DATE: 06/20	DATE: 06/20	
SCALE: 1"=20' HORIZ.			83 OF 95

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



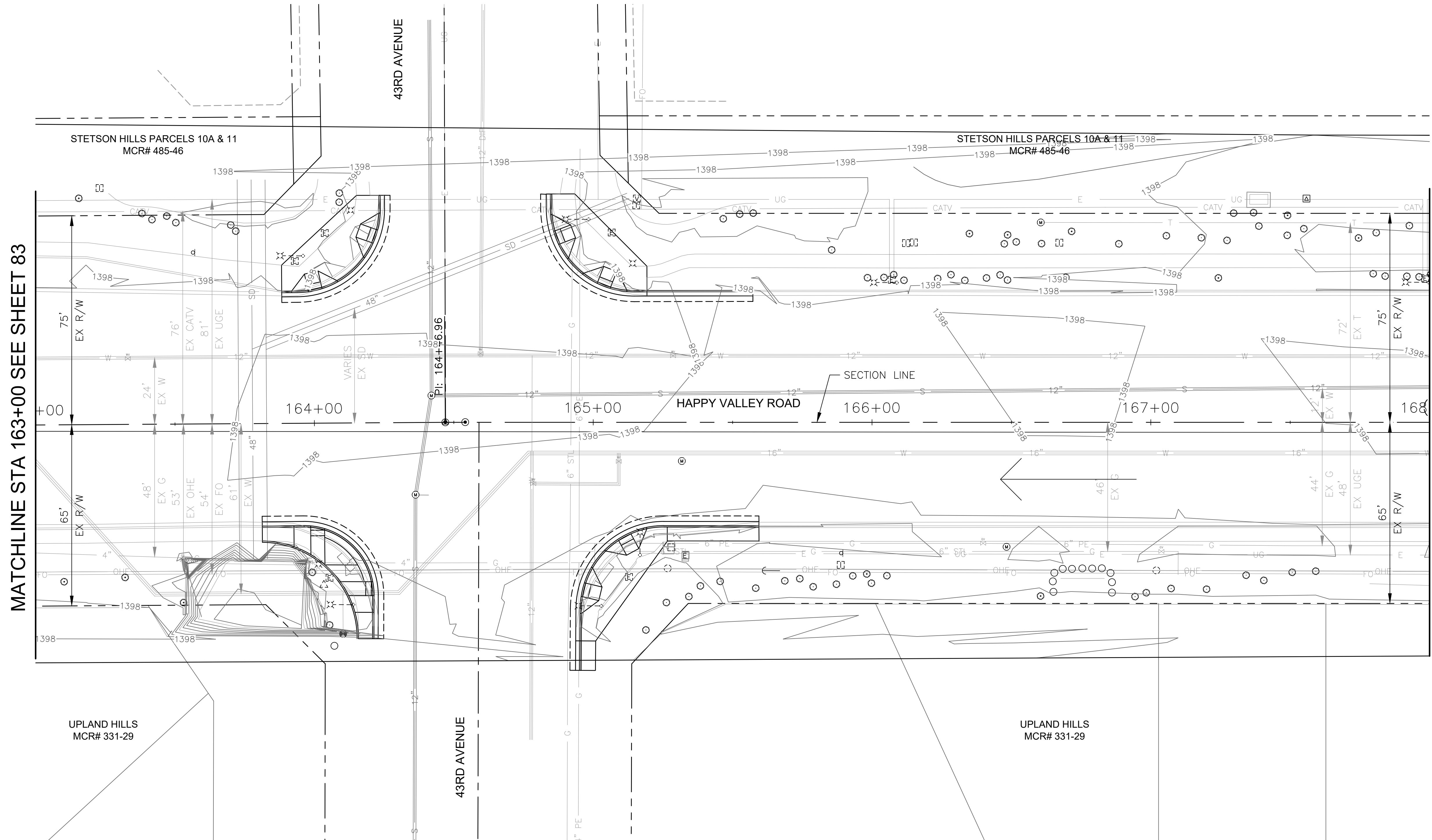
FINAL
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	84	95	
DATE: 06/20		AZTEC			
DRAWN: JER	DESIGN: JER	CHECKED: TMM			

NO.	REVISION BY	DESCRIPTION	DATE

NO.	REVISION BY	DESCRIPTION	DATE

NO.	REVISION BY	DESCRIPTION	DATE



MATCHLINE STA 163+00 SEE SHEET 83

MATCHLINE STA 168+00 SEE SHEET 85

NO PROPOSED DRAINAGE
WORK ON THIS SHEET

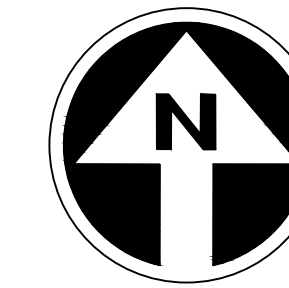
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CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-1.32
DATE: 06/20	DATE: 06/20	DATE: 06/20	
SCALE: 1"=20' HORIZ.			84 OF 95

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



FINAL
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
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DATE: 06/20		AZTEC			
DRAWN: JER	DESIGN: JER	CHECKED: TMM			

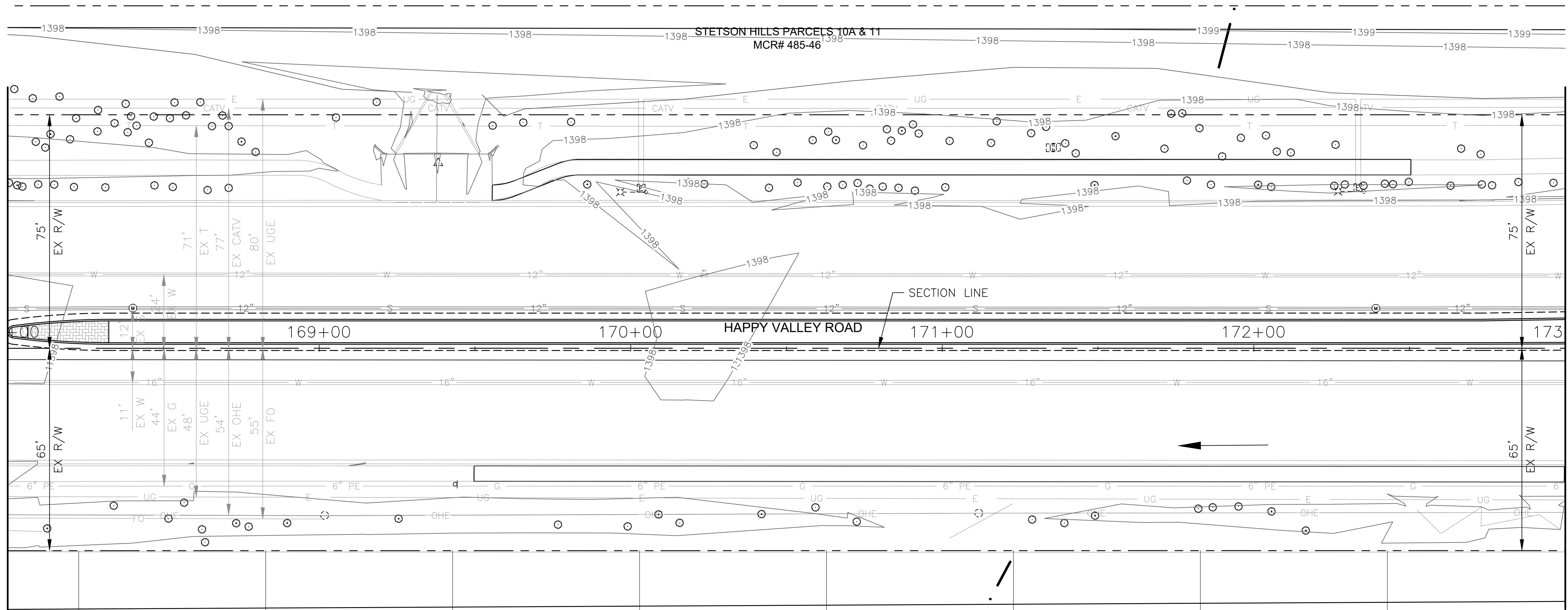
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE STA 168+00 SEE SHEET 84

MATCHLINE STA 173+00 SEE SHEET 86



NO PROPOSED DRAINAGE
WORK ON THIS SHEET

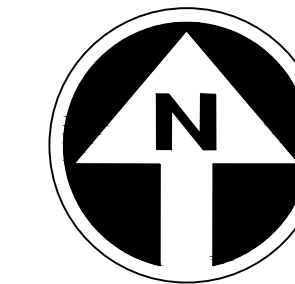
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CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-1.33
DATE: 06/20	DATE: 06/20	DATE: 06/20	
SCALE: 1"=20' HORIZ.			85 OF 95

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



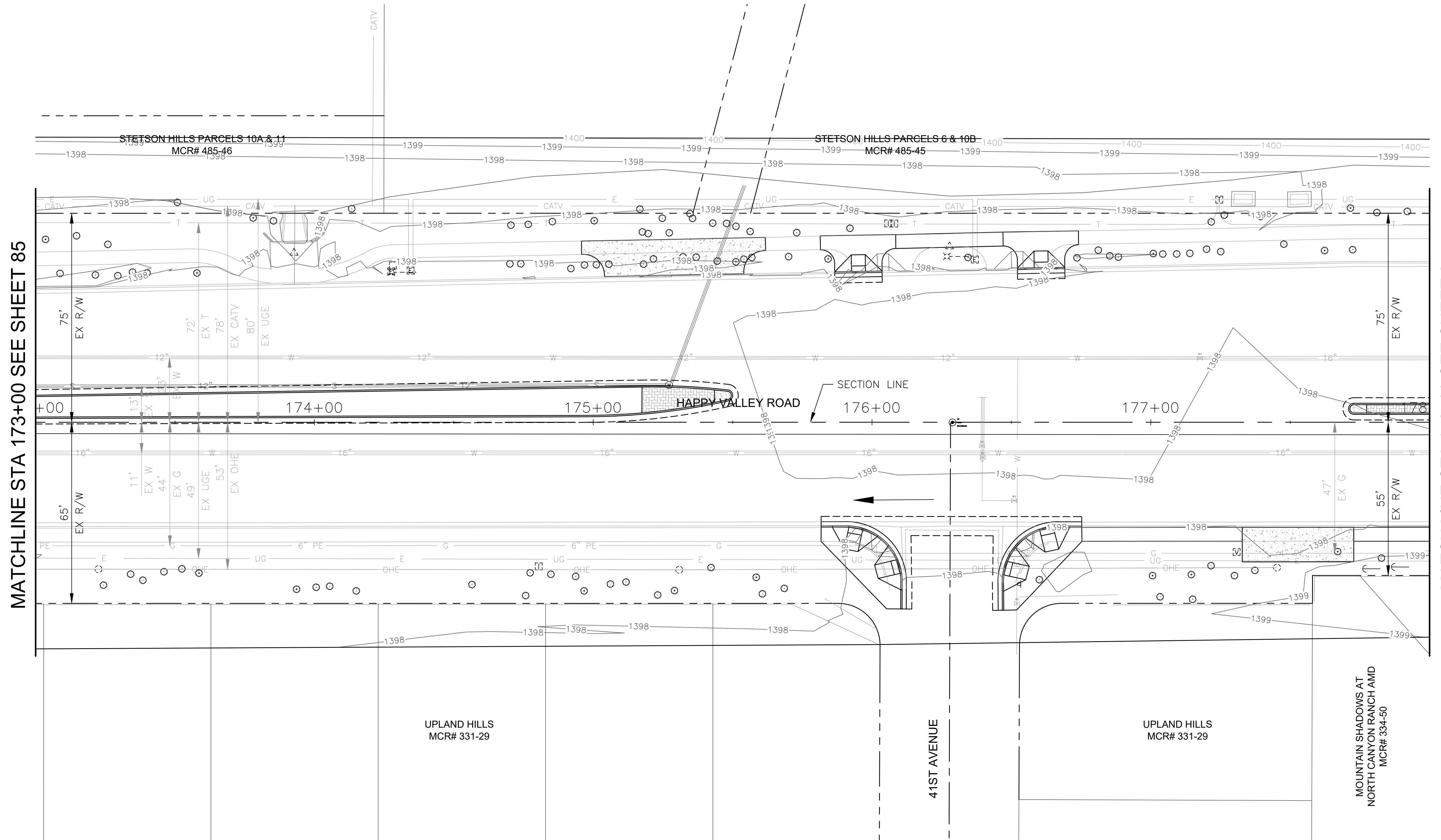
FINAL
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	86	95	
DATE: 06/20		AZTEC			
DRAWN: JER	DESIGN: JER	CHECKED: TMM			

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



MATCHLINE STA 173+00 SEE SHEET 85

MATCHLINE STA 178+00 SEE SHEET 87

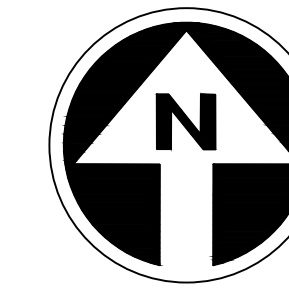
NO PROPOSED DRAINAGE
WORK ON THIS SHEET

"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."

DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-1.34
DATE: 06/20	DATE: 06/20	DATE: 06/20	86 OF 95
SCALE: 1"=20' HORIZ.			

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



FINAL
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	87	95	
DATE: 06/20		AZTEC			
DRAWN: JER	DESIGN: JER	CHECKED: TMM			

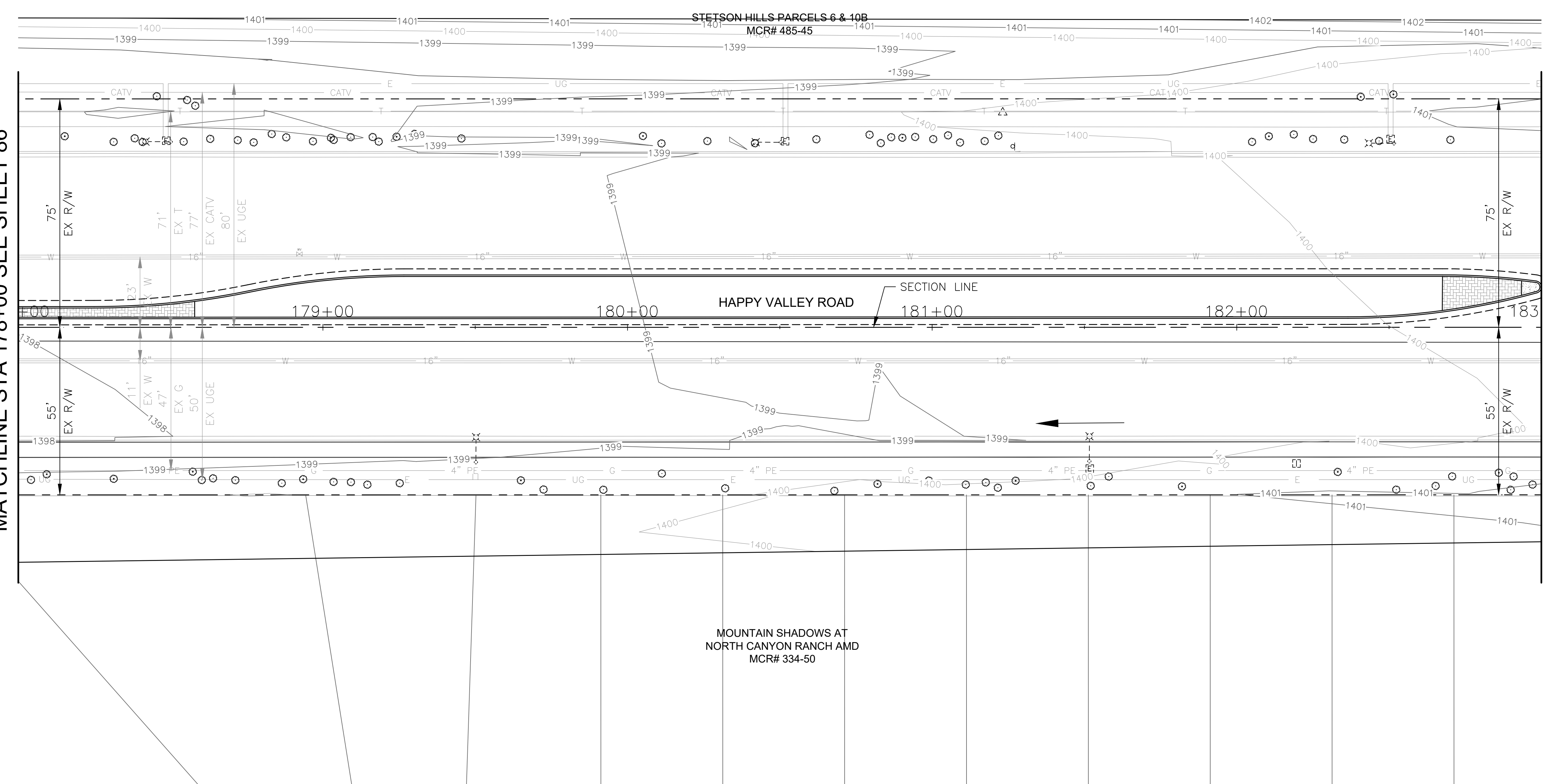
NO.	DESCRIPTION	REV BY	CHKD BY	DATE

NO.	DESCRIPTION	REV BY	CHKD BY	DATE

NO.	DESCRIPTION	REV BY	CHKD BY	DATE

MATCHLINE STA 178+00 SEE SHEET 86

MATCH LINE STA 183+00 SEE SHEET 88



MOUNTAIN SHADOWS AT
NORTH CANYON RANCH AMD
MCR# 334-50

STETSON HILLS PARCELS 6 & 10B
MCR# 485-45

NO PROPOSED DRAINAGE
WORK ON THIS SHEET

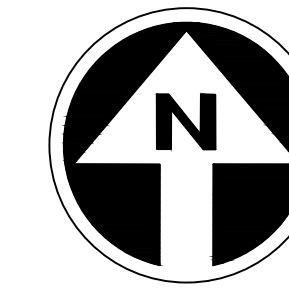
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AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE
CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-1.35
DATE: 06/20	DATE: 06/20	DATE: 06/20	
SCALE: 1"=20' HORIZ.			87 OF 95

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



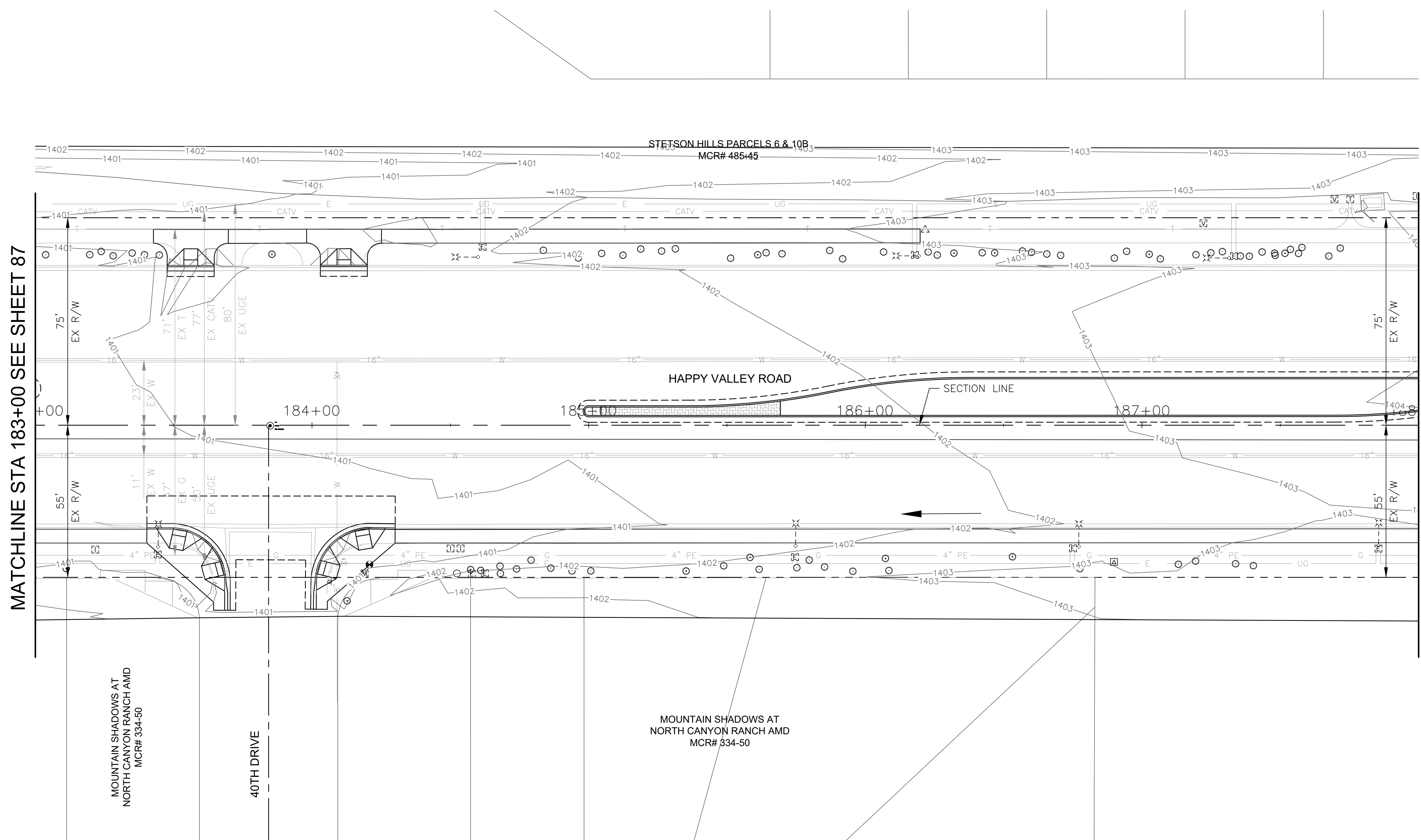
FINAL
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	88	95	
DATE: 06/20		AZTEC			
DRAWN: JER	DESIGN: JER	CHECKED: TMM			

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



MATCHLINE STA 183+00 SEE SHEET 87

MATCHLINE STA 188+00 SEE SHEET 89

NO PROPOSED DRAINAGE
WORK ON THIS SHEET

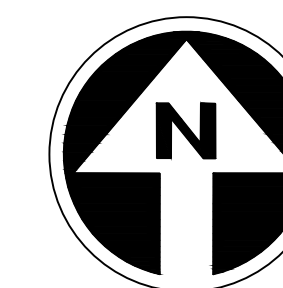
"PER CITY OF PHOENIX CITY CODE CHAPTER 2,
SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE
ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT
AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE
CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-1.36
DATE: 06/20	DATE: 06/20	DATE: 06/20	
SCALE: 1"=20' HORIZ.	88 OF 95		

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



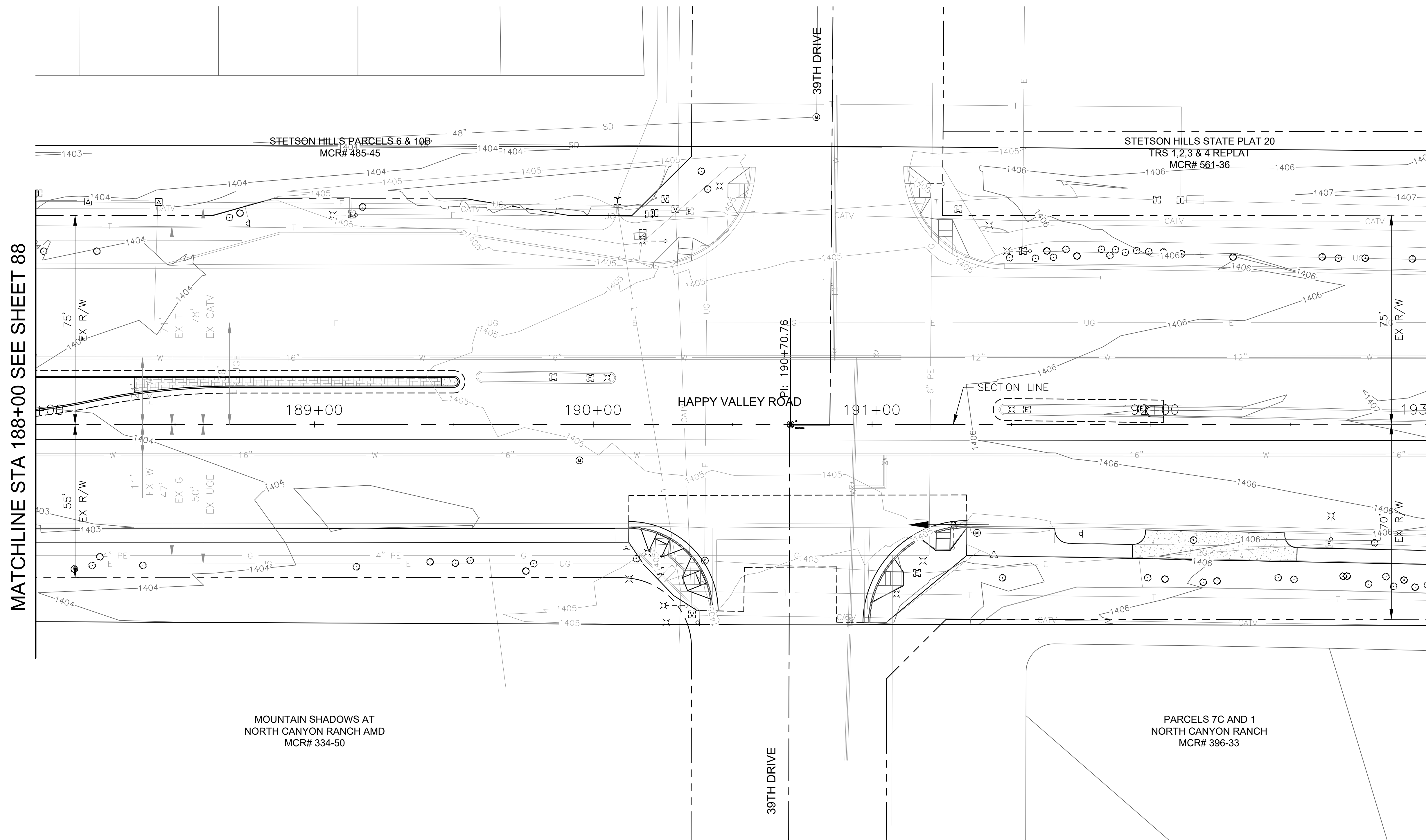
FINAL
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	89	95	
DATE: 04/20		AZTEC			
DRAWN: RJR	DESIGN: RJR	CHECKED: G.G.			

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

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

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



MATCHLINE STA 188+00 SEE SHEET 88

MATCHLINE STA 193+00 SEE SHEET 90



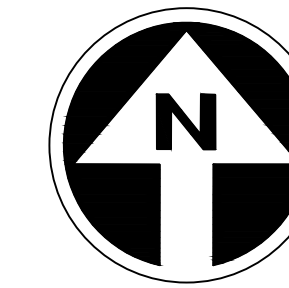
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. DR-1.37
DATE: 04/20	DATE: 04/20	DATE: 04/20	89 OF 95
SCALE: 1"=20' HORIZ.			

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



FINAL
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	90	95	
DATE: 06/20		AZTEC			
DRAWN: JER	DESIGN: JER	CHECKED: TMM			

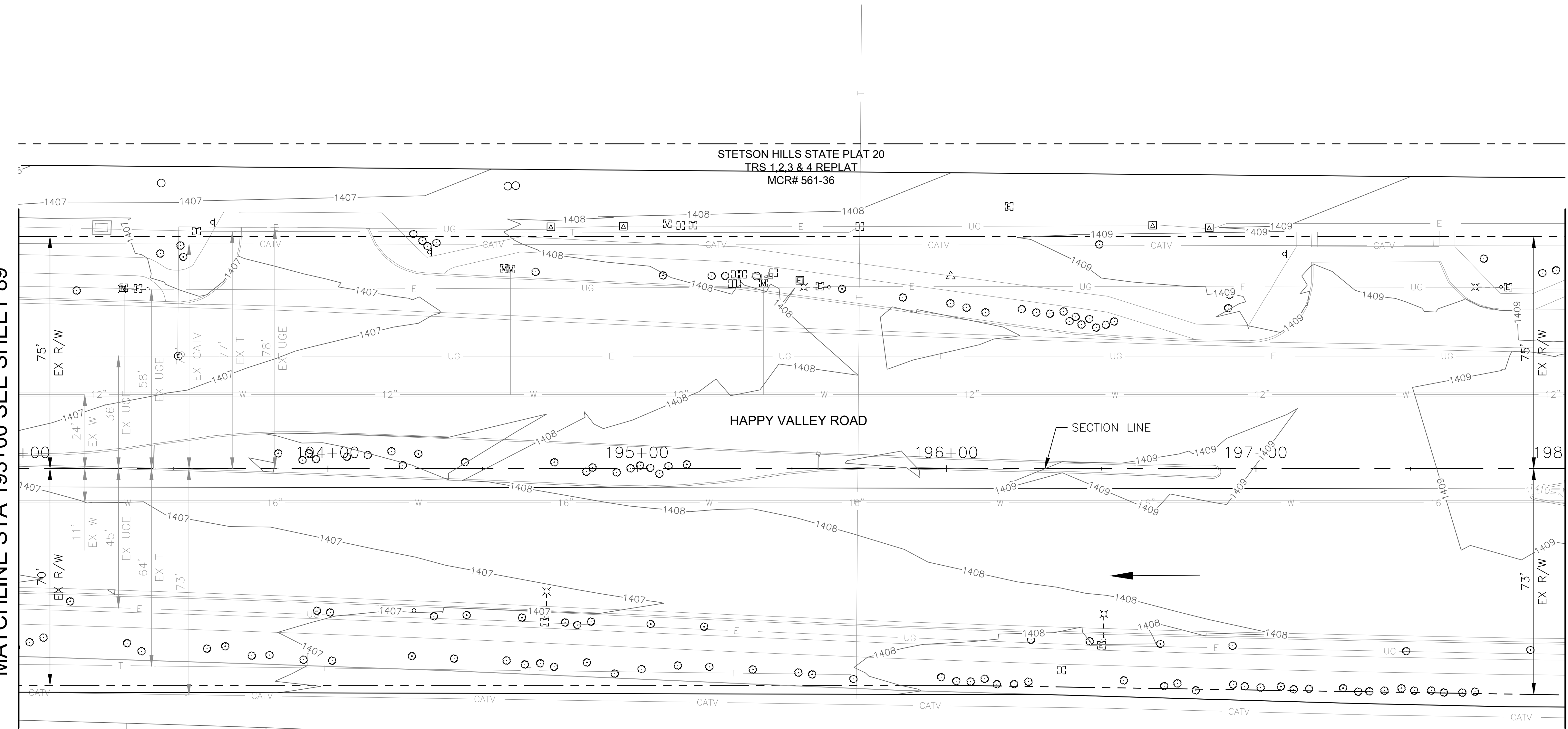
NO.	REVISION BY CITY OF PHOENIX DESCRIPTION	REV BY	CHK BY	DATE

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

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

MATCHLINE STA 193+00 SEE SHEET 89

MATCHLINE STA 198+00 SEE SHEET 91



PARCELS 7C AND 1
NORTH CANYON RANCH
MCR# 396-33

NO PROPOSED DRAINAGE
WORK ON THIS SHEET

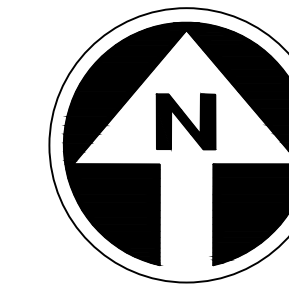
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-1.38
DATE: 06/20	DATE: 06/20	DATE: 06/20	90 OF 95
SCALE: 1"=20' HORIZ.			

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



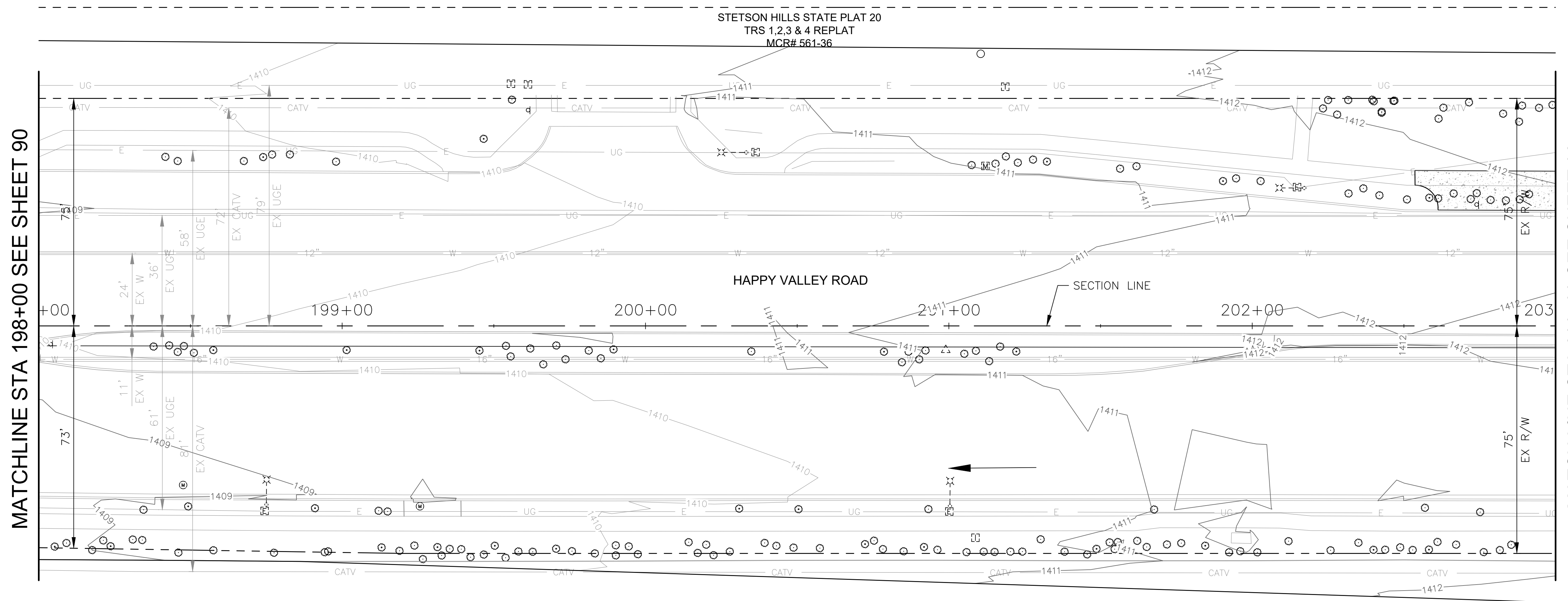
FINAL
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Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	91	95	
DATE: 06/20		AZTEC			
DRAWN: JER	DESIGN: JER	CHECKED: TMM			

NO.	REVISION BY	DESCRIPTION	DATE

NO.	REVISION BY	DESCRIPTION	DATE

NO.	REVISION BY	DESCRIPTION	DATE



MATCHLINE STA 198+00 SEE SHEET 90

MATCHLINE STA 203+00 SEE SHEET 92

PARCELS 7C AND 1
NORTH CANYON RANCH
MCR# 396-33

NO PROPOSED DRAINAGE
WORK ON THIS SHEET

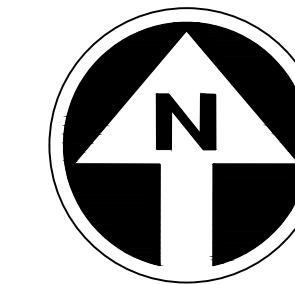
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CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-1.39
DATE: 06/20	DATE: 06/20	DATE: 06/20	91 OF 95
SCALE: 1"=20' HORIZ.			

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



FINAL
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	92	95	
DATE: 06/20		AZTEC			
DRAWN: JER	DESIGN: JER	CHECKED: TMM			

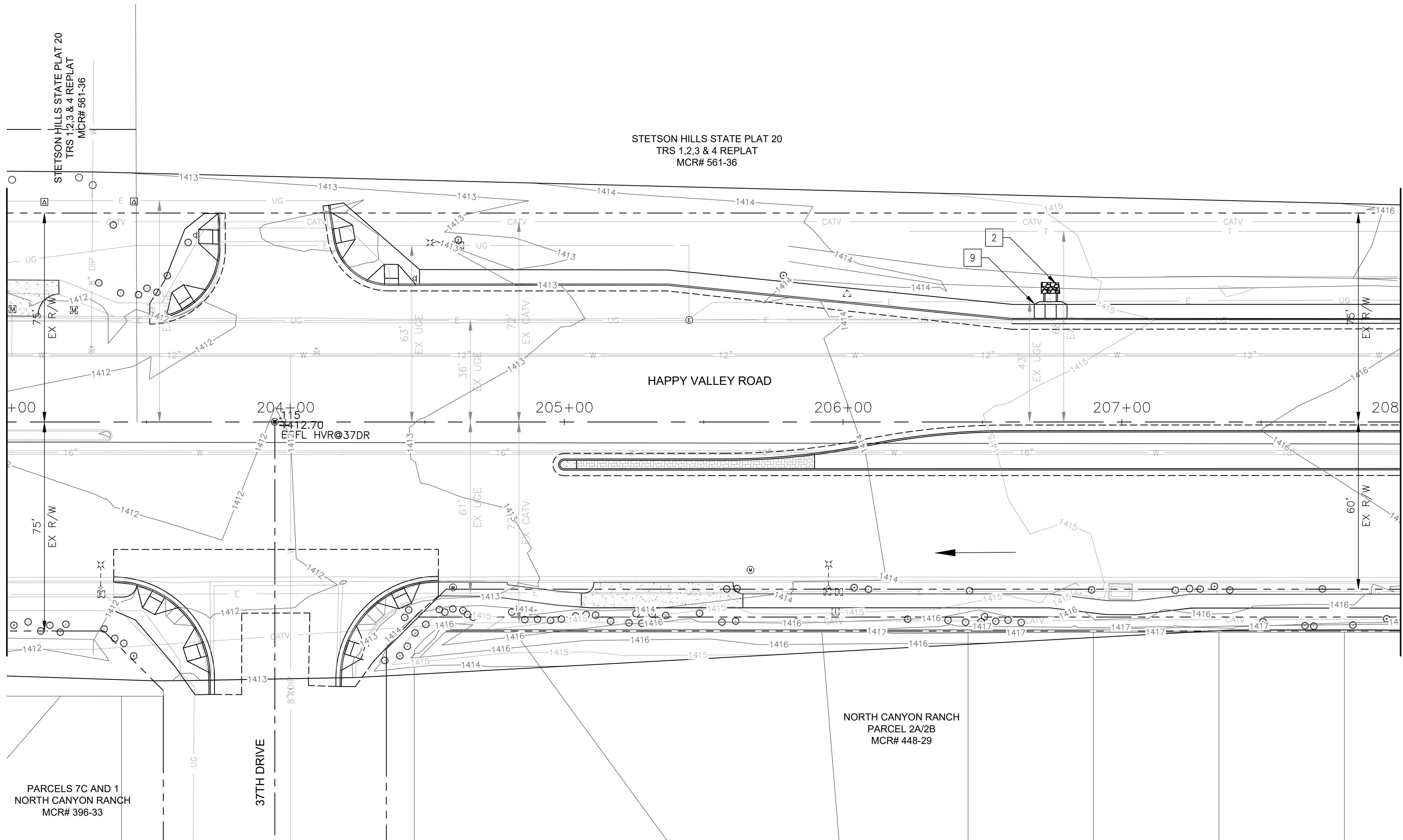
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE STA 203+00 SEE SHEET 91

MATCH LINE STA 208+00 SEE SHEET 93



NO	DESCRIPTION	UNIT	QTY
5	RIP RAP, D50=12"	CY	2
9	SINGLE CONCRETE SCUPPER, MAG STD DET 206	EA	1

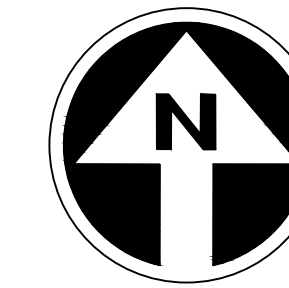
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DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-1.40
DATE: 06/20	DATE: 06/20	DATE: 06/20	92 OF 95
SCALE: 1"=20' HORIZ.			

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



FINAL
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	93	95	
DATE: 06/20		AZTEC			
DRAWN: JER		DESIGN: JER	CHECKED: TMM		

NO.	DESCRIPTION	REV BY	CHK BY	DATE

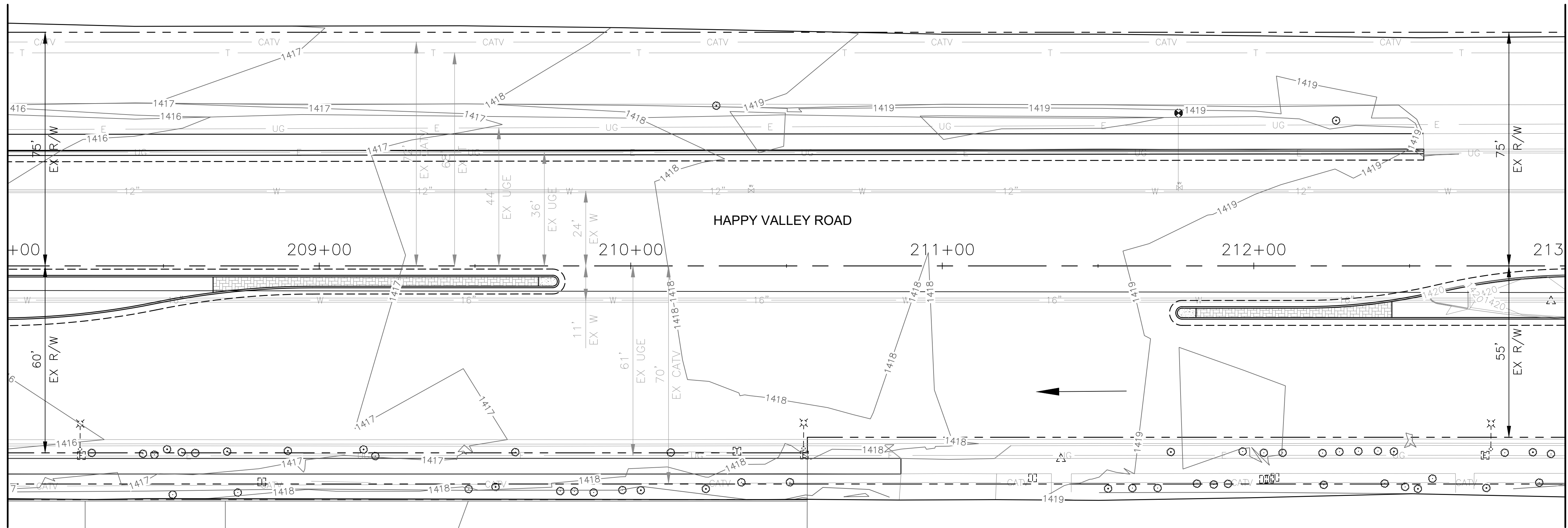
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

STETSON HILLS STATE PLAT 20
TRS 1,2,3 & 4 REPLAT
MCR# 561-36

MATCHLINE STA 208+00 SEE SHEET 92

MATCHLINE STA 213+00 SEE SHEET 94



NORTH CANYON RANCH
PARCEL 2A/2B
MCR# 448-29

CHURCH OF JESUS CHRIST
APN 205-11-005J

NO PROPOSED DRAINAGE
WORK ON THIS SHEET

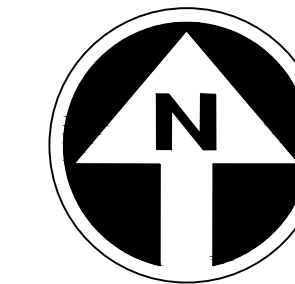
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CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-1.41
DATE: 06/20	DATE: 06/20	DATE: 06/20	93 OF 95
SCALE: 1"=20' HORIZ.			

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



FINAL
30%
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CONSTRUCTION
OR RECORDING

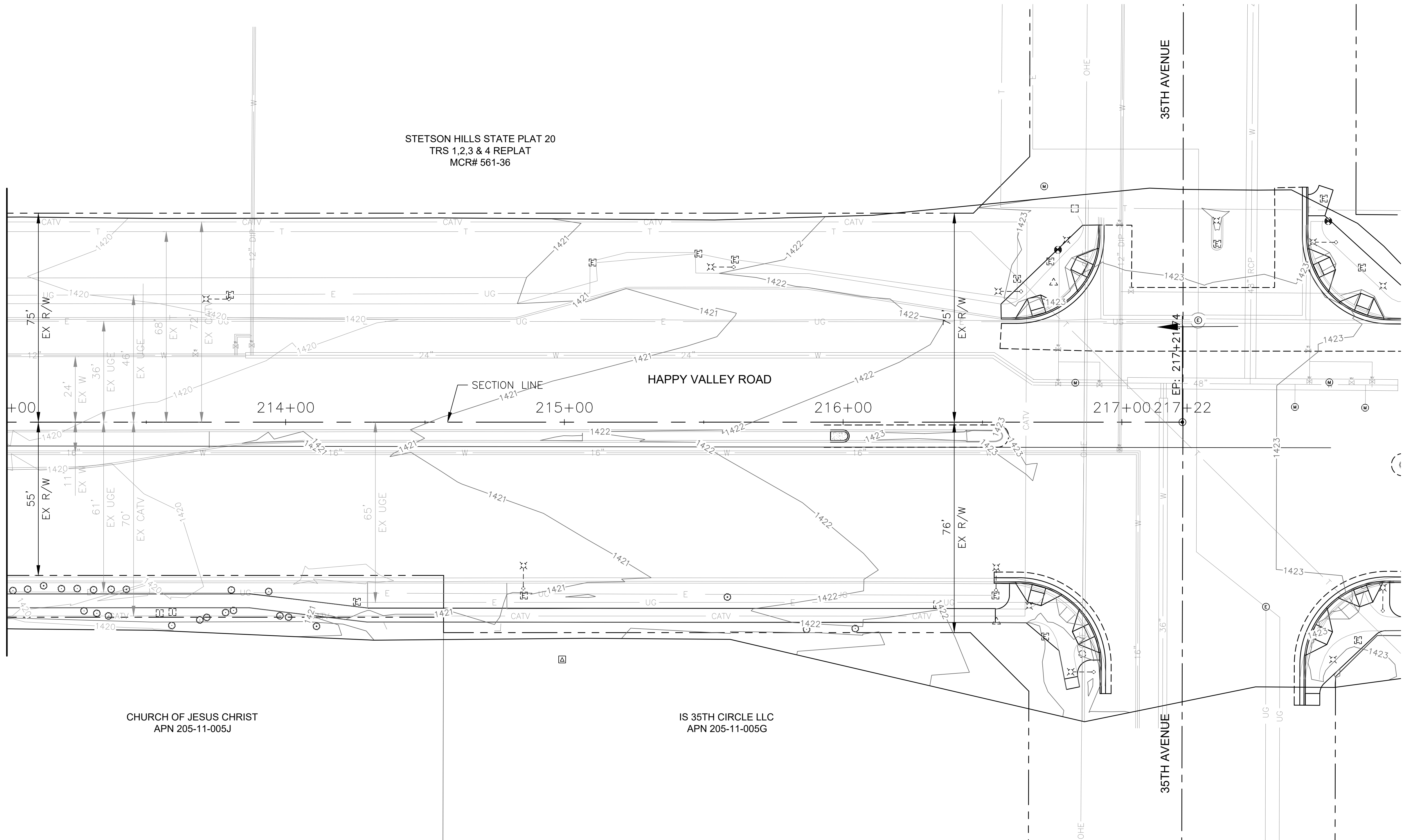
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	94	95	
DATE: 06/20		AZTEC			
DRAWN: JER	DESIGN: JER	CHECKED: TMM			

NO.	REVISION BY	DESCRIPTION	DATE

NO.	REVISION BY	DESCRIPTION	DATE

NO.	REVISION BY	DESCRIPTION	DATE

MATCHLINE STA 213+00 SEE SHEET 93



NO PROPOSED DRAINAGE
WORK ON THIS SHEET

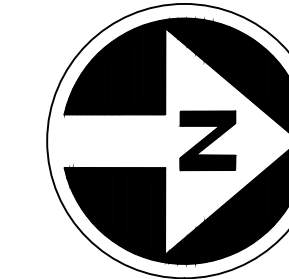
"PER CITY OF PHOENIX CITY CODE CHAPTER 2,
SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE
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AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE
CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

DRAINAGE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-1.42
DATE: 06/20	DATE: 06/20	DATE: 06/20	94 OF 95
SCALE: 1"=20' HORIZ.			

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



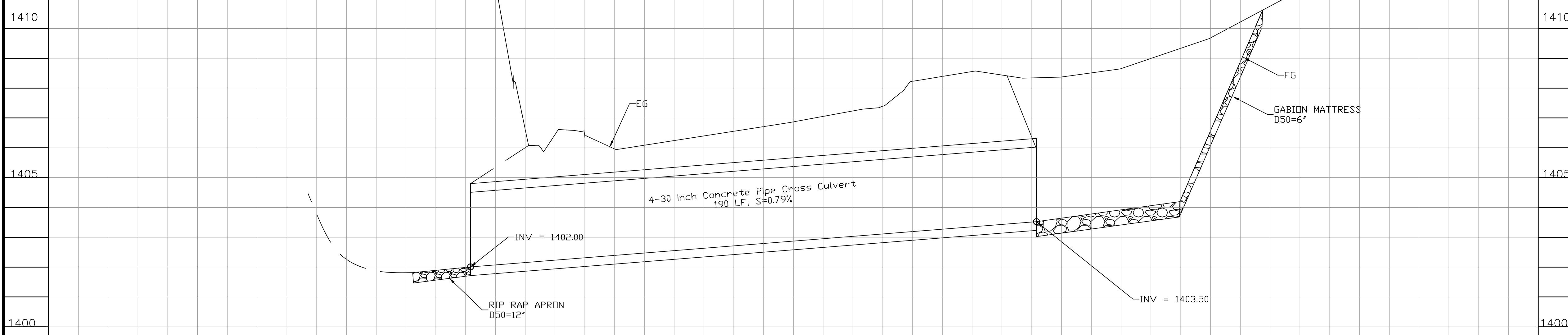
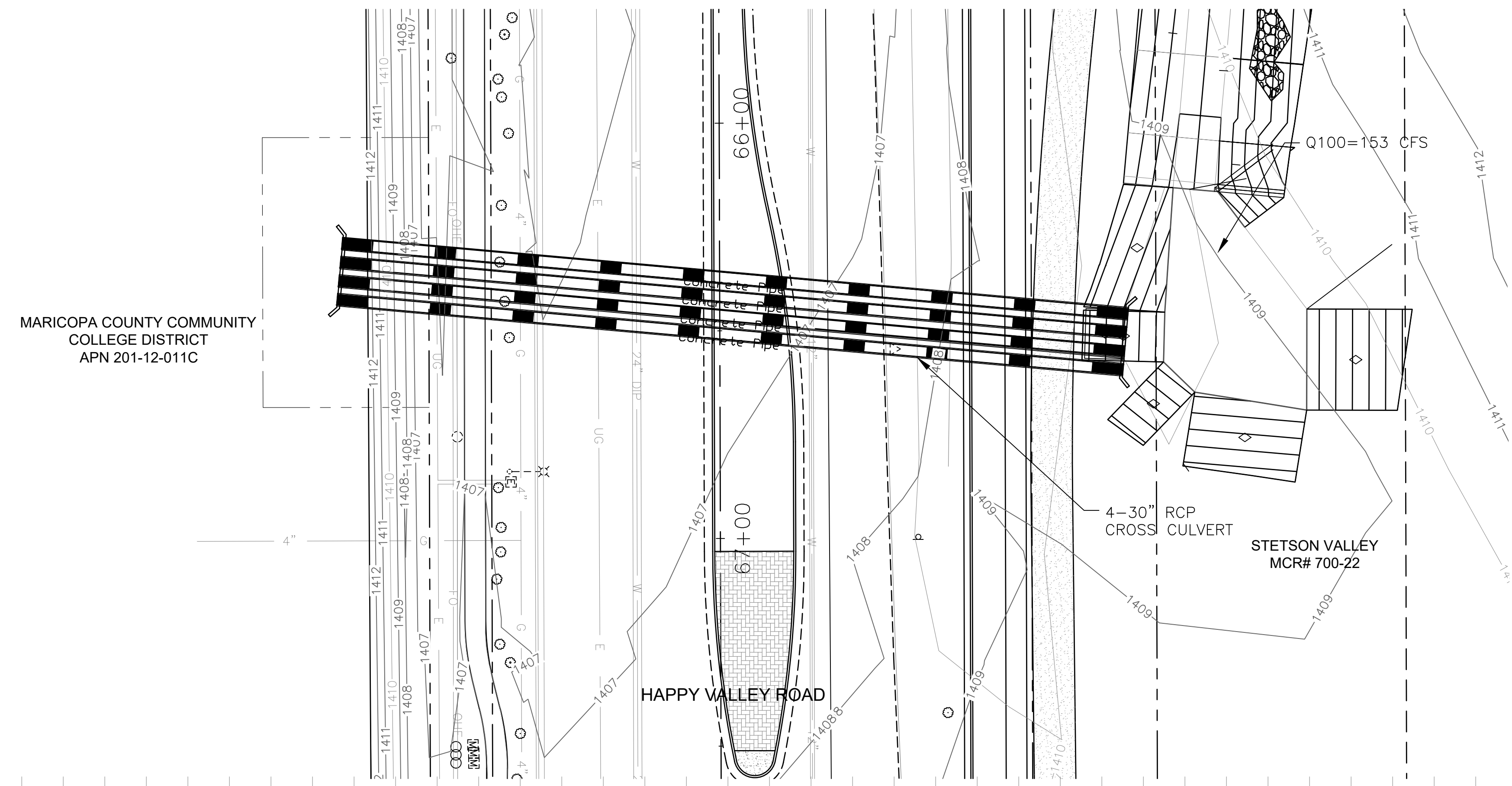
FINAL
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	95	95	
DATE: 06/20		AZTEC			
DRAWN: JER	DESIGN: JER	CHECKED: TMM			
CONSTRUCTION NOTES					
NO	DESCRIPTION				UNIT QTY

REVISION BY CITY OF PHOENIX	
NO.	DESCRIPTION

REVISION BY CITY OF PHOENIX	
NO.	DESCRIPTION

REVISION BY CITY OF PHOENIX	
NO.	DESCRIPTION



"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."

CROSS CULVERT DETAIL
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
HAPPY VALLEY ROAD
67TH AVENUE TO 35TH AVENUE
ST85100437-2

DR: JER	DES: JER	CK: TMM	DWG. NO. DR-2.01
DATE: 06/20	DATE: 06/20	DATE: 06/20	95 OF 95
SCALE: 1"=20' HORIZ. 1"=5' VERT.			

Appendix B – Cost Estimate



Happy Valley Road - 67th Avenue to 35th Avenue
 Project No. ST85100437-2
 MAG TIP No. PHX20-106DZ
 Federal ID No. PHX-0(0363)D
 ADOT Project No. T0239
 AZTEC Project No. AZMUN1809-04



COP ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
1	M1042005 Allowance for Extra Work	Job	1	\$987,062.30	\$987,062.30
2	M1042007 Landscape Allowance	Job	1	\$810,029.00	\$810,029.00
3	M1058000 Construction Surveying And Layout	Job	1	\$197,412.46	\$197,412.46
4	M1081000 Mobilization	Job	1	\$987,062.30	\$987,062.30
5	M2152001 Channel Excavation	Cu. Yd.	9661	\$35.00	\$338,135.00
6	M2200007 Rip-Rap, D50=6"	Cu. Yd.	2146	\$50.00	\$107,300.00
7	M2200012 Rip Rap, D50= 12"	Cu. Yd.	83	\$80.00	\$6,640.00
8	M2205005 Replace Grouted Rip Rap per MAG Section 220	Sq. Ft.	54	\$25.00	\$1,350.00
9	M2205010 Sawcut and Remove Grouted Rip Rap	Sq. Ft.	26	\$6.00	\$156.00
10	M3000051 Asphalt Concrete Pavement Milling (1" depth)	Sq. Yd.	183370	\$3.00	\$550,110.00
11	M3010001 Subgrade Preparation	Sq. Yd.	37443	\$10.00	\$374,430.00
12	M3210117 Asphalt Concrete Surface Course, Type D 1/2, 1" Thick	Ton	10086	\$90.00	\$907,740.00
13	M3210325 Asphalt Concrete Base Course, Type A 1-1/2, 2-1/2" Thick	Ton	5172	\$90.00	\$465,480.00
14	M3210350 Asphalt Concrete Base Course, Type A 1-1/2, 5" Thick	Ton	10372	\$90.00	\$933,480.00
15	M3290100 Emulsified Asphalt For Tack Coat, Type SS-1h	Ton	46.09	\$2,000.00	\$92,180.00
16	M3400000 Concrete Median Nose	Sq. Ft.	915	\$10.00	\$9,150.00
17	M3400009 Decorative Brick Pavers	Sq. Ft.	12949	\$13.00	\$168,337.00
18	M3400240 Concrete Valley Gutter & Apron, MAG Std. Detail 240	Sq. Ft.	2282	\$12.00	\$27,384.00
19	M3400400 Concrete Sidewalk, COP Std. Detail P-1230	Sq. Ft.	89550	\$8.00	\$716,400.00
20	M3400415 Truncated Domes for Sidewalk Ramps, Std. Detail P-1232	Sq. Ft.	0	\$35.00	\$0.00
21	M3400485 Concrete Curb Ramp, Std Details P-1233, P-1234, P-1235, P-1236, P-1237, P-1238, P-1239, P-1240 or P-1241 (6" Thick)	Sq. Ft.	25728	\$12.00	\$308,736.00
22	M3400492 Concrete Sidewalk Ramp, COP Std Detail P1241-2	Sq. Ft.	3912	\$10.00	\$39,120.00
23	M3400553 Concrete Driveway Entrance, Std. Detail P-1244	Sq. Ft.	1093	\$10.00	\$10,930.00
24	M3400555 Concrete Driveway Entrance, COP Std. Detail P-1255-1	Sq. Ft.	2432	\$10.00	\$24,320.00
25	M3401262 Parkway Bus Shelter/Accessory Pad, Std. Detail P-1262	Sq. Ft.	11859	\$10.00	\$118,590.00
26	M3402201 Concrete Curb and Gutter, MAG Std. Detail 220, Type "A", H=6"	Lin. Ft.	12031	\$20.00	\$240,620.00
27	M3402221 Concrete Single Curb, Std. Detail 222, Type "A"	Lin. Ft.	24118	\$15.00	\$361,770.00
28	M3450020 Adjust Existing Manhole Frame and Cover, MAG Std Detail 422 and COP Detail P1430	Each	43	\$750.00	\$32,250.00
29	M3453006 Adjust Existing Utility Valve, MAG Std Detail 391-1 and 391-2	Each	3	\$500.00	\$1,500.00
30	M3453008 Adjust Water Valve, Type "A" Standard Detail P-1391 and P-1391-1	Each	131	\$500.00	\$65,500.00

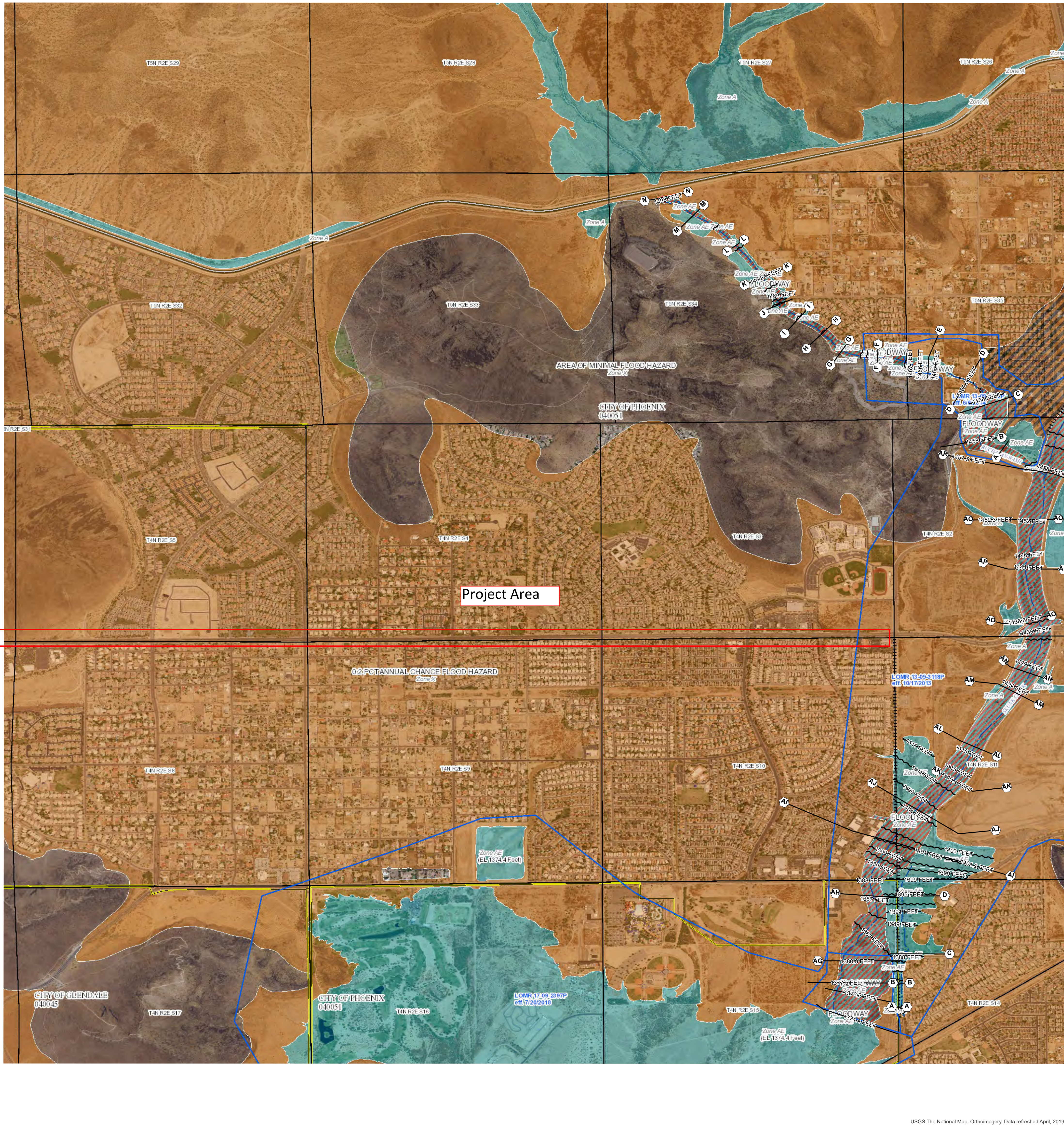
31	M3500010	Remove Portland Cement Concrete Single Curb; Curb and Gutter; Header Curb or Embankment Curb	Lin. Ft.	3552	\$6.00	\$21,312.00
32	M3500020	Remove Portland Cement Concrete Sidewalk, Driveway, Valley Gutter & Slab	Sq. Ft.	66411	\$6.00	\$398,466.00
33	M3500036	Remove Catch Basin, Backfill & Compact	Each	1	\$2,000.00	\$2,000.00
34	M3500037	Remove Headwall	Each	12	\$1,000.00	\$12,000.00
35	M3500040	Remove Pipe, Backfill & Compact	Lin. Ft.	166	\$40.00	\$6,640.00
36	M3500041	Remove Pipe	Lin. Ft.	102	\$20.00	\$2,040.00
37	M3500060	Remove Asphalt Concrete Pavement	Sq. Yd.	21964	NPI	
38	M3505026A	#12 THHN Wire	Lin. Ft.	3800	\$3.00	\$11,400.00
39	M3505027	#10 Bond Wire	Lin. Ft.	1900	\$1.50	\$2,850.00
40	M3513111	1" PVC Sch 40 Conduit	Lin. Ft.	100	\$20.00	\$2,000.00
41	M3513125A	2-1/2" SCH 40 PVC Conduit (Trench)	Lin. Ft.	350	\$20.00	\$7,000.00
42	M3513125B	2-1/2" SCH 40 PVC Conduit (Directional Bore)	Lin. Ft.	6740	\$40.00	\$269,600.00
43	M3513250	No. 5 Junction Box, APS	Each	38	\$600.00	\$22,800.00
44	M3513500	Type A Signal Pole Foundation	Each	2	\$649.00	\$1,298.00
45	M3513511	Pole Foundation (Type G) (Standard Base)	Each	1	\$2,474.00	\$2,474.00
46	M3513516	Utility Company Relocations	Job	1	\$100,000.00	\$100,000.00
47	M3515045	Remove Existing Light Poles Standard, Per Plan	Each	2	\$700.00	\$1,400.00
48	M3515052A	Furnish and Install 38'-6" Street Light Pole w/ 6' Mast Arm	Each	38	\$3,600.00	\$136,800.00
49	M3515052C	Furnish and Install Street Light Mast Arm Onto Existing Utility Pole	Each	2	\$1,000.00	\$2,000.00
50	M3515071	Furnish and Install 9,250 Lumen LED Street Light per COP Street Lighting Procedures, Standards, and Specifications Manual, Latest Edition (Gray)	Each	32	\$800.00	\$25,600.00
51	M3515075	Furnish and Install 63 Watt LED Street Light per COP Street Lighting Procedures, Standards and Specifications Manual, Latest Edition	Each	2	\$750.00	\$1,500.00
52	M3515076	Furnish and Install 4,700 Lumen LED Street Light per COP Street Lighting Procedures, Standards, and Specifications Manual, Latest Edition (Gray)	Each	9	\$700.00	\$6,300.00
53	M3515384	Remove Existing Junction Box per Plan	Each	2	\$250.00	\$500.00
54	M4004110	Miscellaneous Work for Signs	Job	1	\$10,000.00	\$10,000.00
55	M4004505	Pavement Marking (Yellow Paint) (15 mils) 4"	Lin. Ft.	10468	\$1.00	\$10,468.00
56	M4004506	Pavement Marking (White Paint) (15 mils) 4"	Lin. Ft.	184470	\$1.00	\$184,470.00
57	M4004503	Pavement Marking (White Thermoplastic) (90 Mils) 10"	Lin. Ft.	1562	\$2.00	\$3,124.00
58	M4004570	Pavement Marking, Preformed, Single Arrow (Left Turn)	Each	39	\$100.00	\$3,900.00
59	M4004575	Pavement Marking, Preformed, Single Arrow (Right Turn)	Each	4	\$100.00	\$400.00
60	M4004557	Pavement Marking (Paint, Legend) 8-Foot Bike	Each	78	\$100.00	\$7,800.00
61	M4004560	Pavement Marking (Paint, Stencil Legend) (15 mils) Stop	Each	1	\$100.00	\$100.00
62	M4004565	Pavement Marking, Preformed, Single Arrow (14-Foot U-Turn)	Each	3	\$100.00	\$300.00
63	M4012000	Traffic Control Devices	Job	1	\$690,943.61	\$690,943.61
64	M4013000	Allowance for Uniformed, Off-duty Law Enforcement Officer	Job	1	\$100,000.00	\$100,000.00

65	M4153105	Safety Rail, MAG Detail 145	Each	2	\$60.00	\$120.00
66	M4258008	Gravel Mulch, 4" Thick	Sq. Yd.	9	\$15.00	\$135.00
67	M4304007	Decomposed Granite, Stabilized for MultiPurpose Trail, 1/4" Minus, 4" Thick	Sq. Ft.	61261	\$15.00	\$918,915.00
69	M4400004	Modify Existing Irrigation System and Restore Landscaping Per Plans	Lump Sum	1	\$25,000.00	\$25,000.00
70	M4711001	2" SCH 40 PVC Conduit Under Existing Pavement	Lin. Ft.	750	\$20.00	\$15,000.00
71	M4711003	2 1/2" SCH 40 PVC Conduit Under Existing Pavement	Lin. Ft.	5000	\$20.00	\$100,000.00
72	M4712002	Traffic Signal, No. 5 Junction Box	Each	15	\$27.00	\$405.00
73	M4712003	Traffic Signal, No. 7 Junction Box	Each	2	\$437.00	\$874.00
74	M4721001	Foundation for Type A Pole	Each	2	\$649.00	\$1,298.00
75	M4721003	Foundation for Type LM Pole	Each	17	\$636.00	\$10,812.00
76	M4721004	Foundation for Type SM Pole	Each	1	\$2,474.00	\$2,474.00
77	M4721005	Foundation for Type SR Pole	Each	4	\$2,170.00	\$8,680.00
78	M4721006	Foundation for Type SQ Pole	Each	12	\$2,702.00	\$32,424.00
79	M4722001	Foundation for Power Pedestal	Each	5	\$3,500.00	\$17,500.00
80	M4722002	Foundation for Controller Cabinet	Each	5	\$2,332.00	\$11,660.00
81	M4732002	Pedestrian Push Button	Each	38	\$975.00	\$37,050.00
82	M4733001	EVP Detector and Confirmation Light	Each	15	\$5,000.00	\$75,000.00
83	M4741001	Type A Pole	Each	4	\$1,045.00	\$4,180.00
84	M4741003	Type LM Pole	Each	13	\$1,000.00	\$13,000.00
85	M4741025	Type G Pole	Each	1	\$1,500.00	\$1,500.00
86	M4741004	Type SM Pole	Each	1	\$1,500.00	\$1,500.00
87	M4741002	Pedestrian Pole (or Modified Type A Pole)	Each	4	\$6,500.00	\$26,000.00
88	M4741009	30' Mast Arm for SR/SM Pole	Each	2	\$7,500.00	\$15,000.00
89	M4741010	35' Mast Arm for SR/SM Pole	Each	1	\$2,561.00	\$2,561.00
90	M4741011	40' Mast Arm for SR/SM Pole	Each	2	\$2,393.00	\$4,786.00
91	M4741012	45' Mast Arm for SR/SM Pole	Each	3	\$2,300.00	\$6,900.00
92	M4741013	50' Mast Arm for SQ Pole	Each	5	\$3,000.00	\$15,000.00
93	M4741014	Luminaire Mast Arm	Each	27	\$1,500.00	\$40,500.00
94	M4741021	60' Mast Arm for SQ Pole	Each	3	\$3,500.00	\$10,500.00
95	M4741022	65' Mast Arm for SQ Pole	Each	1	\$3,500.00	\$3,500.00
96	M4741023	70' Mast Arm for SQ Pole	Each	1	\$3,500.00	\$3,500.00
97	M4741024	55' Mast Arm for SQ Pole	Each	3	\$3,500.00	\$10,500.00
98	M4741027	5' Riser for LM/SM/SR/SQ Pole	Each	31	\$1,500.00	\$46,500.00
99	M4751001	Electrical Power Service Pedestal Cabinet (120/240 Volt) (Meyers MEUGL-W/TB)	Each	5	\$8,000.00	\$40,000.00

100	M4751010	Traffic Signal Controller and Cabinet	Each	5	\$5,000.00	\$25,000.00
101	M4761001	Type F Signal Head	Each	17	\$750.00	\$12,750.00
102	M4761002	Type F1 Signal Head	Each	46	\$1,000.00	\$46,000.00
103	M4761039	Type FA Signal Head, 4 Section Flashing Yellow	Each	18	\$14,750.00	\$265,500.00
104	M4761040	Type FA1 Signal Head, 4 Section Flashing Yellow	Each	18	\$2,855.00	\$51,390.00
105	M4761007	Type R Signal Head	Each	8	\$1,100.00	\$8,800.00
106	M4761008	Type R1 Signal Head	Each	12	\$1,500.00	\$18,000.00
107	M4762001	Pedestrian Signal Head (LED)	Each	36	\$5,500.00	\$198,000.00
108	M4771001	LED Traffic Signal Luminaire	Each	37	\$2.00	\$74.00
109	M4781001	Single Conductor Wire #10 AWG White	Lin. Ft.	2050	\$2.00	\$4,100.00
110	M4781005	Single Conductor Wire #10 Bare Copper	Lin. Ft.	1075	\$2.00	\$2,150.00
111	M4781006	Single Conductor Wire #8 (Power)	Lin. Ft.	500	\$2.00	\$1,000.00
112	M4781010	Single Conductor Wire #10 AWG Black	Lin. Ft.	150	\$2.00	\$300.00
113	M4781011	Single Conductor Wire #10 AWG Green	Lin. Ft.	150	\$5.00	\$750.00
114	M4782000	3C IMSA Cable	Lin. Ft.	1850	\$14.00	\$25,900.00
115	M4782001	5C IMSA Cable	Lin. Ft.	1600	\$10.00	\$16,000.00
116	M4782005	25C IMSA Cable	Lin. Ft.	405	\$5.00	\$2,025.00
117	M4782003	42C IMSA Cable	Lin. Ft.	3100	\$4.00	\$12,400.00
118	M4784002	CCTV Cable	Lin. Ft.	650	\$4.00	\$2,600.00
119	M4784003	ITS Cable	Lin. Ft.	650	\$5.00	\$3,250.00
120	M4784004	EVP Cable	Lin. Ft.	1500	\$5.00	\$7,500.00
121	M4784005	Video Detection Cable	Lin. Ft.	2075	\$5.00	\$10,375.00
122	M5051545	Concrete Catch Basin, Type "M-1, L=17-ft", Phx Supp. Detail P-1569	Each	1	\$2,000.00	\$2,000.00
123	M5052062	Concrete Scupper, MAG Standard Detail 206	Each	7	\$4,000.00	\$28,000.00
124	M5052063	Concrete Scupper, MAG Standard Detail 206, Modified	Each	1	\$4,500.00	\$4,500.00
125	M5055014	Headwall for 4-30" Pipe, MAG Standard Detail 501-1 and 501-2	Each	2	\$4,000.00	\$8,000.00
126	M6180030	30" Storm Sewer Pipe	Lin. Ft.	760	\$200.00	\$152,000.00
127	M6181015	15" Catch Basin Connector Pipe	Lin. Ft.	41	\$120.00	\$4,920.00
128	M6210012	12" C.M.P.	Lin. Ft.	20	\$55.00	\$1,100.00
129	E6992000	"Allowance For Stormwater Pollution Prevention Best Management Practices (BMP'S)"	Job	1	\$197,412.46	\$197,412.46
130	M9021000	Video Detection Camera System	Job	5	\$47,000.00	\$235,000.00
131	M9001001	LED Illuminated Street Sign	Each	17	\$1,600.00	\$27,200.00
132	M9011001	Wireless Network Radio	Each	5	\$1,575.00	\$7,875.00
133	M9021001	PTZ CCTV Camera	Each	5	\$7,700.00	\$38,500.00

134	M9021005	20' Riser For Observation Camera	Each	5	\$47,000.00	\$235,000.00
SUB-TOTAL CONSTRUCTION						\$14,088,805.13
CONTINGENCY (10%)						\$1,408,880.51
TOTAL CONSTRUCTION (FA) FOR PROJECT ST85100437-2						\$15,497,685.64

Appendix C – FEMA Flood Maps



FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee See Notes, Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
		20.2 Cross Sections with 1% Annual Chance
		17.5 Water Surface Elevation
		8 Coastal Transect
		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
OTHER FEATURES		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary

NOTES TO USERS

For information and questions about this Flood Insurance Rate Map (FIRM), available products associated with this FIRM, including historic versions, the current map date for each FIRM panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2827) or visit the FEMA Flood Map Service Center website at <http://msc.fema.gov>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Flood Map Service Center at the number listed above.

For community and countywide map dates refer to the Flood Insurance Study Report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Basemap information shown on this FIRM was provided in digital format by USDA, Farm Service Agency (FSA). This information was derived from NAIP, dated April 11, 2018.

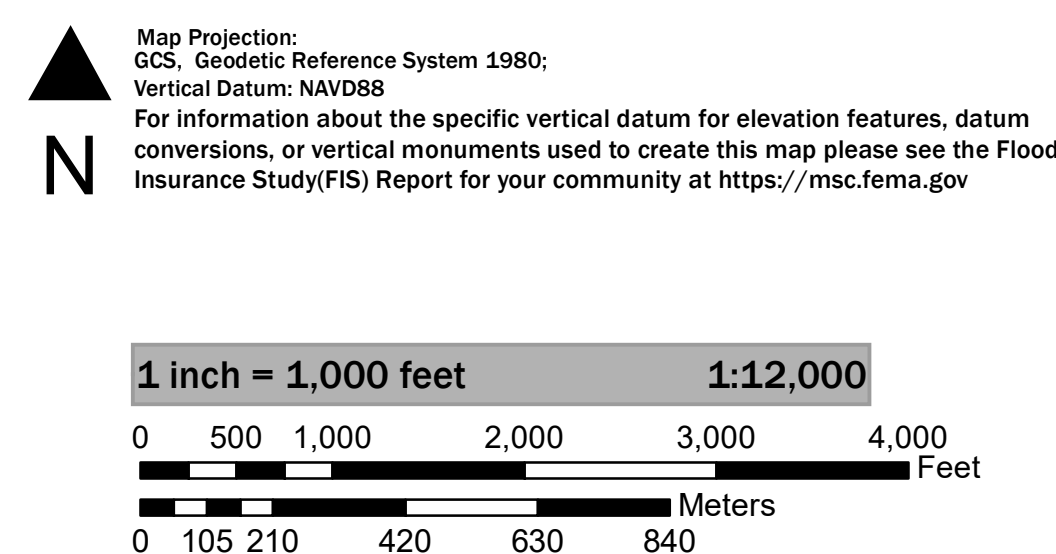
This map was exported from FEMA's National Flood Hazard Layer (NFHL) on 1/24/2020 11:29:52 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time. For additional information, please see the Flood Hazard Mapping Updates Overview Fact Sheet at <https://www.fema.gov/media-library/assets/documents/118418>.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date.

ATTENTION: The levee, dike, or other structure that impacts flood hazards inside this boundary has not been shown to comply with Section 65.10 of the NFIP Regulations. As such, this FIRM panel will be revised at a later date to update the flood hazard information associated with this structure. The flood hazard data inside this boundary on the FIRM panel has been republished from the previous effective (historic) FIRM for this area, after being converted from NGVD 29 to NAVD 88.

SCALE



National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

MARICOPA COUNTY, ARIZONA AND INCORPORATED AREAS
PANEL 1260 OF 3705

Panel Contains:

COMMUNITY	NUMBER	PANEL
MARICOPA COUNTY ARIZONA	040037	1260
CITY OF PHOENIX ARIZONA	040051	1260
CITY OF GLENDALE ARIZONA	040045	1260

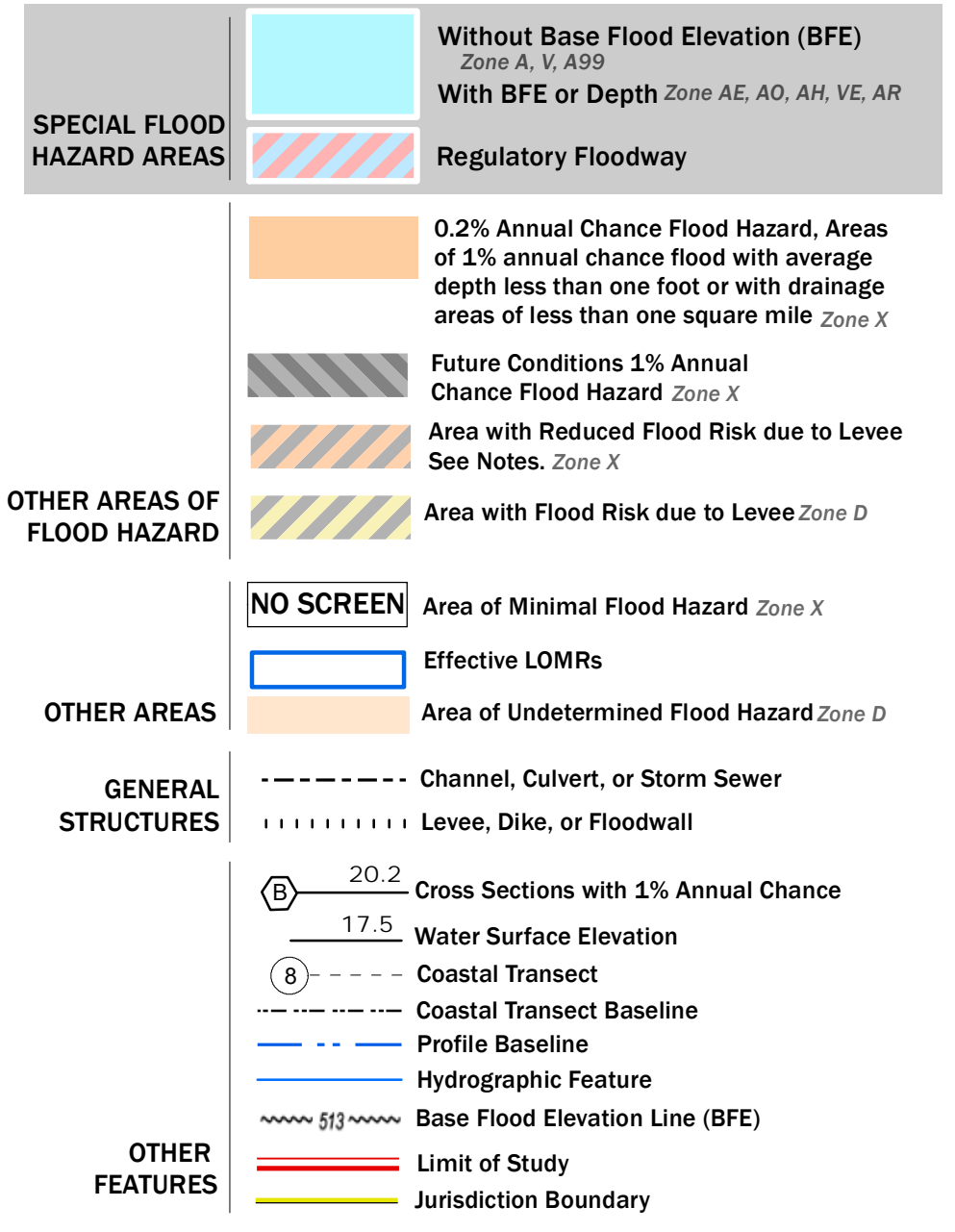
MAP NUMBER
04013C1260L
EFFECTIVE DATE
10/16/2013



Project Area

FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT



NOTES TO USERS

For information and questions about this Flood Insurance Rate Map (FIRM), available products associated with this FIRM, including historic versions, the current map date for each FIRM panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Flood Map Service Center website at <http://msc.fema.gov>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Flood Map Service Center at the number listed above.

For community and countywide map dates refer to the Flood Insurance Study Report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

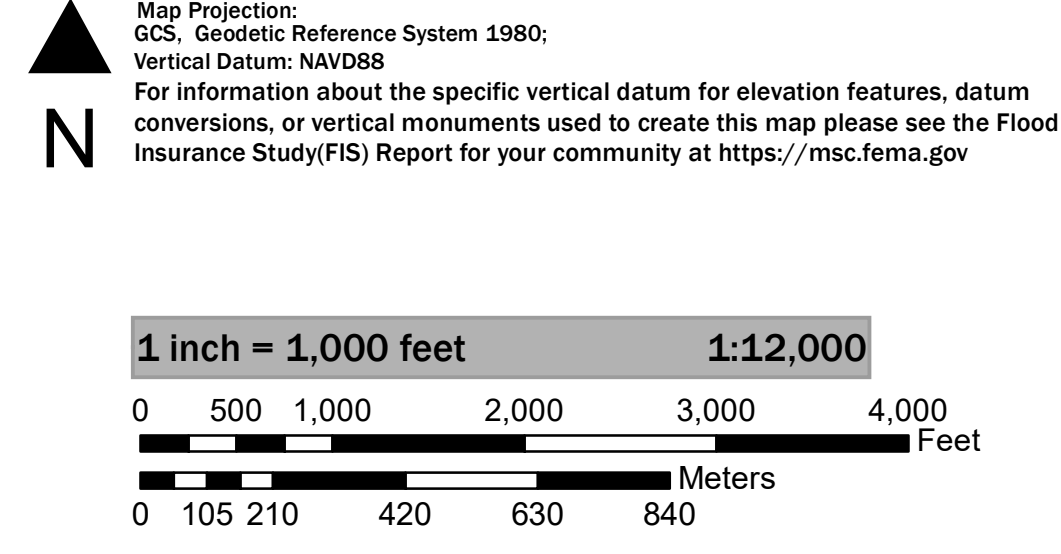
Basemap information shown on this FIRM was provided in digital format by USDA, Farm Service Agency (FSA). This information was derived from NAIP, dated April 11, 2018.

This map was exported from FEMA's National Flood Hazard Layer (NFHL) on 1/24/2020 12:17:22 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time. For additional information, please see the Flood Hazard Mapping Updates Overview Fact Sheet at <https://www.fema.gov/media-library/assets/documents/118418>.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date.

SCALE



NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

MARICOPA COUNTY, ARIZONA AND INCORPORATED AREAS
PANEL 1255 OF 3705

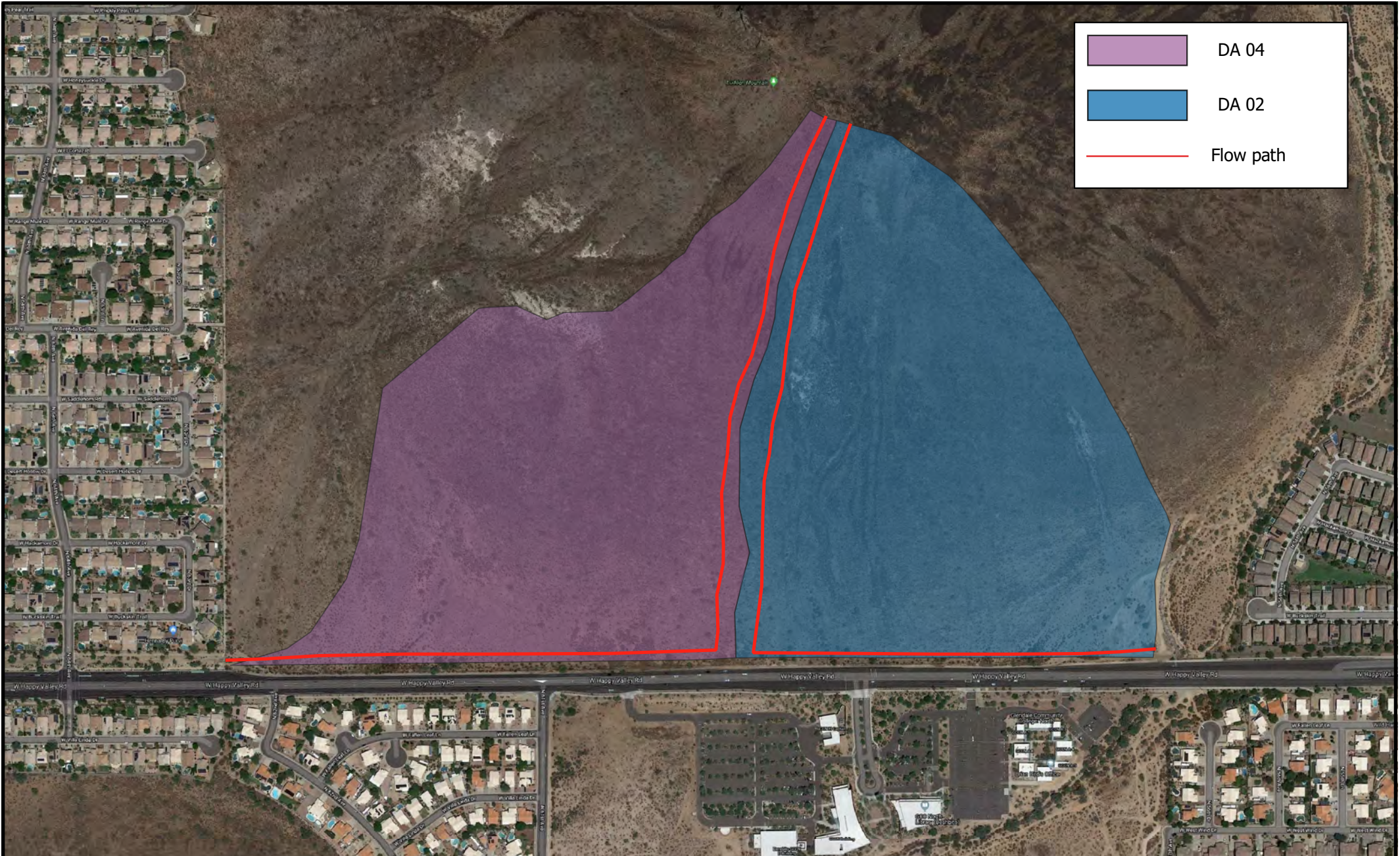
Panel Contains:




COMMUNITY	NUMBER	PANEL
MARICOPA COUNTY ARIZONA	040037	1255
CITY OF PHOENIX ARIZONA	040051	1255
CITY OF GLENDALE ARIZONA	040045	1255
CITY OF PEORIA ARIZONA	040050	1255

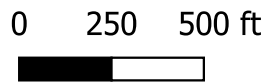
FEMA
National Flood Insurance Program

MAP NUMBER
04013C1255L
EFFECTIVE DATE
10/16/2013

Appendix D – Off-Site Drainage Area Maps



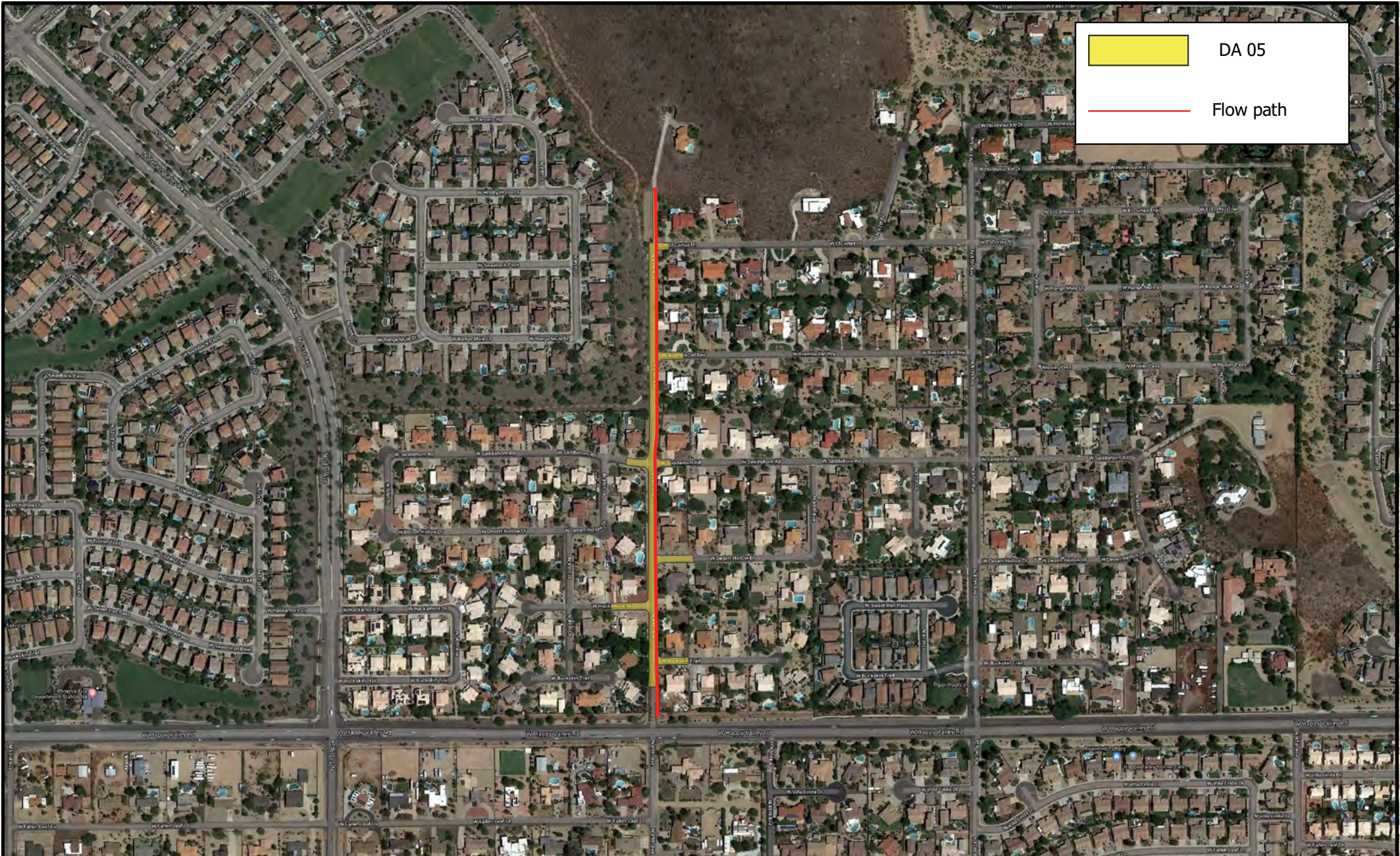
	DA 04
	DA 02
	Flow path





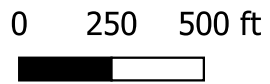
Off-site Drainage Areas
Sheet 1

Drawn By: Jose Rodriguez
Checked By: Tim Mahon

Date: 1/29/20



	DA 05
	Flow path



Off-site Drainage Areas
Sheet 1

Drawn By: Jose Rodriguez
Checked By: Tim Mahon

Date: 1/29/20

Appendix E – FlowMaster Results

Worksheet for Trapezoidal Channel - STA 54+30-33+50 100yr

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Roughness Coefficient	0.040	
Channel Slope	0.01670	ft/ft
Left Side Slope	4.00	ft/ft (H:V)
Right Side Slope	4.00	ft/ft (H:V)
Bottom Width	10.00	ft
Discharge	104.30	ft ³ /s

Results

Normal Depth	1.39	ft
Flow Area	21.62	ft ²
Wetted Perimeter	21.46	ft
Hydraulic Radius	1.01	ft
Top Width	21.12	ft
Critical Depth	1.26	ft
Critical Slope	0.02426	ft/ft
Velocity	4.82	ft/s
Velocity Head	0.36	ft
Specific Energy	1.75	ft
Froude Number	0.84	
Flow Type	Subcritical	

GVF Input Data

Downstream Depth	0.00	ft
Length	0.00	ft
Number Of Steps	0	

GVF Output Data

Upstream Depth	0.00	ft
Profile Description		
Profile Headloss	0.00	ft
Downstream Velocity	Infinity	ft/s
Upstream Velocity	Infinity	ft/s
Normal Depth	1.39	ft
Critical Depth	1.26	ft
Channel Slope	0.01670	ft/ft

Worksheet for Trapezoidal Channel - STA 54+30-33+50 100yr

GVF Output Data

Critical Slope 0.02426 ft/ft

Worksheet for Trapezoidal Channel - STA 54+60-66+50 100yr

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Roughness Coefficient	0.040	
Channel Slope	0.01230	ft/ft
Left Side Slope	4.00	ft/ft (H:V)
Right Side Slope	4.00	ft/ft (H:V)
Bottom Width	10.00	ft
Discharge	153.00	ft ³ /s

Results

Normal Depth	1.83	ft
Flow Area	31.76	ft ²
Wetted Perimeter	25.11	ft
Hydraulic Radius	1.26	ft
Top Width	24.66	ft
Critical Depth	1.56	ft
Critical Slope	0.02291	ft/ft
Velocity	4.82	ft/s
Velocity Head	0.36	ft
Specific Energy	2.19	ft
Froude Number	0.75	
Flow Type	Subcritical	

GVF Input Data

Downstream Depth	0.00	ft
Length	0.00	ft
Number Of Steps	0	

GVF Output Data

Upstream Depth	0.00	ft
Profile Description		
Profile Headloss	0.00	ft
Downstream Velocity	Infinity	ft/s
Upstream Velocity	Infinity	ft/s
Normal Depth	1.83	ft
Critical Depth	1.56	ft
Channel Slope	0.01230	ft/ft

Worksheet for Trapezoidal Channel - STA 54+60-66+50 100yr

GVF Output Data

Critical Slope 0.02291 ft/ft

Appendix F – Involvement Matrix



INVOLVEMENT MATRIX

PROJECT NUMBER: ST85100437-2
 PROJECT NAME: Happy Valley Road Scoping: 67th Avenue
 to 35th Avenue

6/30/2020

Discipline	Name	Organization	Phone	Email	Attend Project Meetings	Involvement				Comments
						Significant	Minimum	None	Unknown	
City Engineer	Eric Forberg	City of Phoenix	602-534-3177	eric.froberg@phoenix.gov	X		X			
PM	Leticia Vargas	City of Phoenix	602-534-5692	leticia.vargas@phoenix.gov	X	X				
Roadway	Jose Rodriguez	City of Phoenix	602-262-4054	jose.m.rodriguez@phoenix.gov	X		X			
Roadway	Chris Manno	City of Phoenix	602-262-5622	chris.manno@phoenix.gov	X		X			
Roadway	John Dickson	City of Phoenix	602-495-3697	john.dickson@phoenix.gov	X		X			
Utility	Marina Smith	City of Phoenix	602-256-3341	marina.smith@phoenix.gov			X			
Real Estate	George Banuelos	City of Phoenix	602-262-6038	george.banuelos@phoenix.gov			X			
Environmental	Greta Halle	City of Phoenix	602-534-6030	greta.halle@phoenix.gov	X					
Utility	David Nieto	City of Phoenix	602-262-4976	david.nieto@phoenix.gov	X		X			
Transit	Herb Muñoz	City of Phoenix	602-534-1818	herb.munoz@phoenix.gov			X			
Water Services	Jami Erickson	City of Phoenix	602-261-8229	jami.erickson@phoenix.gov			X			
Water Services	Matthew Bryant	City of Phoenix	602-261-8363	matthew.bryant@phoenix.gov	X		X			
Development	Chris Kowalsky	City of Phoenix	602-534-7105	chris.kowalsky@phoenix.gov			X			
Trails	Natasha Hughes	City of Phoenix	602-534-1089	natasha.hughes@phoenix.gov			X			
Parks	Chris Taylor	City of Phoenix	602-261-8076	john.taylor@pheonix.gov				X		
Traffic Signals	Bruce Littleton	City of Phoenix	602-262-4690	bruce.littleton@phoenix.gov				X		
Maintenance	Rubben Lolly	City of Phoenix	602-495-7945	rubben.lolly@phoenix.gov			X			
Pedestrian Improvements	Mailen Pankiewicz	City of Phoenix	602-261-8771	mailen.pankiewicz@phoenix.gov			X			
Public Involvement	Laurie Smith	City of Phoenix	602-256-3519	laurie.smith@phoenix.gov	X		X			
Public Involvement	Heather Murphey	City of Phoenix	602-495-7271	heather.murphey@phoenix.gov	X		X			
Municipal Contact	Dan Nissen	City of Peoria	623-773-7214	Dan.Nissen@peoriaaz.gov				X		
Federal Aid	Jennifer Acuña	ADOT	602-712-8336	iacuna@azdot.gov			X			
Contract Management	Mark Gilliland	AZTEC	602-659-9351	mgilliland@aztec.us	X	X				
PM	Jack Fleming	AZTEC	602-458-7469	jfleming@aztec.us	X	X				
Roadway	Robert Rappleyea	AZTEC	602-659-9313	rrappleyea@aztec.us		X				
Drainage	Tim Mahon	AZTEC	602-659-9323	tmahon@aztec.us	X	X				
Traffic	Heide Young	AZTEC	602-659-9334	hyoung@aztec.us	X	X				
Lighting	Andrew Moreno	AZTEC	602-659-9303	amoreno@aztec.us		X				
Public Involvement/ Environmental	Homaira Parveen	AZTEC	602-458-7481	hparveen@aztec.us	X	X				

Appendix G – Utility Company Comments

UTILITY CLEARANCE FORM

**HAPPY VALLEY RD-35TH AVE TO 67TH AVE
PROJECT NO. ST85100437-2
30% SUBMITTAL**

EST. BID DATE: OCTOBER, 2020 CONSTRUCTION DATE: NOVEMBER, 2020

- *1. Name of Utility Company APS
- *2. Facilities within the project: Yes No
- *3. Are facilities shown correctly on plans? Yes No If NO, provide "as built" drawings
- *4. Are facilities in conflict? Yes No
- *a) If yes, describe: _____
- Don't Know these plans are too Preliminary and don't have enough details.
- *b) Date when conflicts will begin to be relocated _____
- *c) Date when relocations will be complete _____
5. Will some facilities require minor relocations/adjustments during construction (i.e., manhole or valve covers, cable relocations for each basin, etc.)? Yes No
- a) If yes, describe: _____

- b) Name of person to be contacted Bobby Garza _____
- c) Phone Number 602-361-6840
- d) Email address Baldemar.garza@aps.com
- e) Advance notice required _____

PLEASE PROVIDE TO THIS OFFICE IN WRITING ANY INFORMATION RELATING TO THIS PROJECT

Signed: _____

Print name: _____ Date: _____

Email address _____ Phone: _____

**Please return this form to: City of Phoenix Street Transportation Department
200 W. Washington St, Phoenix, AZ 85003-1611, Attention: Veronica Alvarez by APRIL 4, 2020
PHONE: 602-534-6136 FAX: 602-732-2758 EMAIL: veronica.alvarez@phoenix.gov
* Required fields (must have relocation dates at 60% submittal)**



CenturyLink™ Conflict Memorandum

Date: April 10, 20

To: David Nieto (City of Phoenix)
david.nieto@phoenix.gov

From: Kevin Wagner, Terra Technologies LLC

Subject: CenturyLink™ – Conflict Memo – Project No. ST85100437 – City of Phoenix – Street Transportation Department Design & Construction Management Division – Happy Valley Road – 35th Avenue to 67th Avenue – 30%

Terra Technologies is in receipt of the 30% plans. Below you will see an overview of CenturyLink™ facilities within the project limits, and a brief project overview along with comments regarding any CenturyLink™ facilities with respect to the proposed project.

Inventory of CenturyLink™ Facilities

CenturyLink™ has facilities within the project limits. Terra Technologies anticipates that due to the proposed roadway improvements that the CenturyLink™ facilities (ducts, buried cables, pedestals, manhole & handholes) may be impacted. Plan markups have been attached showing approximate locations of CenturyLink™ facilities.

Project Overview

The design intent of this project appears to be a roadway improvement project.

Facility Locations and Impacts

CenturyLink™ underground facility mapping provided is based on NDS mapping and accuracy of vertical and horizontal location is only a representation of the exact field location. Any additional utility information gathered by CenturyLink™ will be promptly coordinated with City of Phoenix and/or its representative. Please notify Terra Technologies LLC and CenturyLink™ with additional utility locating information if acquired.

Based on CenturyLink™ mapping, street view imagery and the construction drawings the following conflicts and/or potential conflicts should be addressed as part of this construction project.



CenturyLink™ Conflict Memorandum

(Note: Stations and Offsets are approximate)

PROBABILITY OF CONFLICT (POC)

L = Low M = Medium H = High K = Known (100%)

No.	LINE	STATION	OFFSET	FACILITY	CONFLICT	POC	ACTION
1	Happy Valley Rd	98+90	RT	Handhole	Proposed Sidewalk	L	Recommend City contractor adjust handhole to grade per MAG Standards or meander sidewalk. Protect in place.

Please notify Terra Technologies LLC and CenturyLink™ when further milestone coordination or a Preconstruction Meeting will take place so a representative can be in attendance.

As previously noted, design appears to be at the 30% stage. Terra Technologies and CenturyLink™ request to review the updated plans for any conflicts prior to disbursement for advertising.

In accordance with state law, Blue Staking for location of CenturyLink™ facilities must be completed prior to any construction. When crossing CenturyLink™ facilities you will be required to pothole to determine depth and maintain a minimum of 12 inch vertical and horizontal separation from facilities.

Pursuant to state law, support and protection is required for all CenturyLink™ facilities during construction.

Should the Contractor locate or expose an unknown CenturyLink™ facility, please contact CenturyLink™ as soon as possible.

Acquisition of required public Rights-of-Way, and removal of encumbrances from those Rights-of-Way, is the responsibility of the municipality or their agent prior to CenturyLink™ excavation in, or relocation to, the newly acquired Rights-of-Way.



CenturyLink™ Conflict Memorandum

In the event CenturyLink™ facilities need to be removed or relocated, some or all cost may be at the expense of the sponsoring agency.

If you have any questions or concerns regarding this review feel free to contact me immediately, either by phone or email at the number/address provided below. The contractor is also responsible for contacting CenturyLink™ prior to construction around the CenturyLink™ facilities.

If you have any further questions, please contact Kevin Wagner with Terra Technologies or another CenturyLink™ representative at the contact listed in the table at the end of this document.

Notification List

Terra Technologies LLC Kevin Wagner, Project Manager kwagner@terratechllc.net 815-245-9640	Terra Technologies LLC Jason Jensen, P.E. jjensen@terratechllc.net 801-735-2464
CenturyLink™ (Senior Engineer) Andy Andrade Andrew.Andrade@centurylink.com 5025 N Black Canyon Hwy Phoenix, AZ 85015 Cell: 602-630-5093	

CITY OF PHOENIX
 STREET TRANSPORTATION DEPARTMENT
 DESIGN & CONSTRUCTION MANAGEMENT DIVISION
 PAVING AND STORM DRAIN

HAPPY VALLEY ROAD
 35TH AVENUE TO 67TH AVENUE
 ST85100437-2



2020

CenturyLink Markups

Wire Center:
 AGFIAZSR
 DRVYAZNO

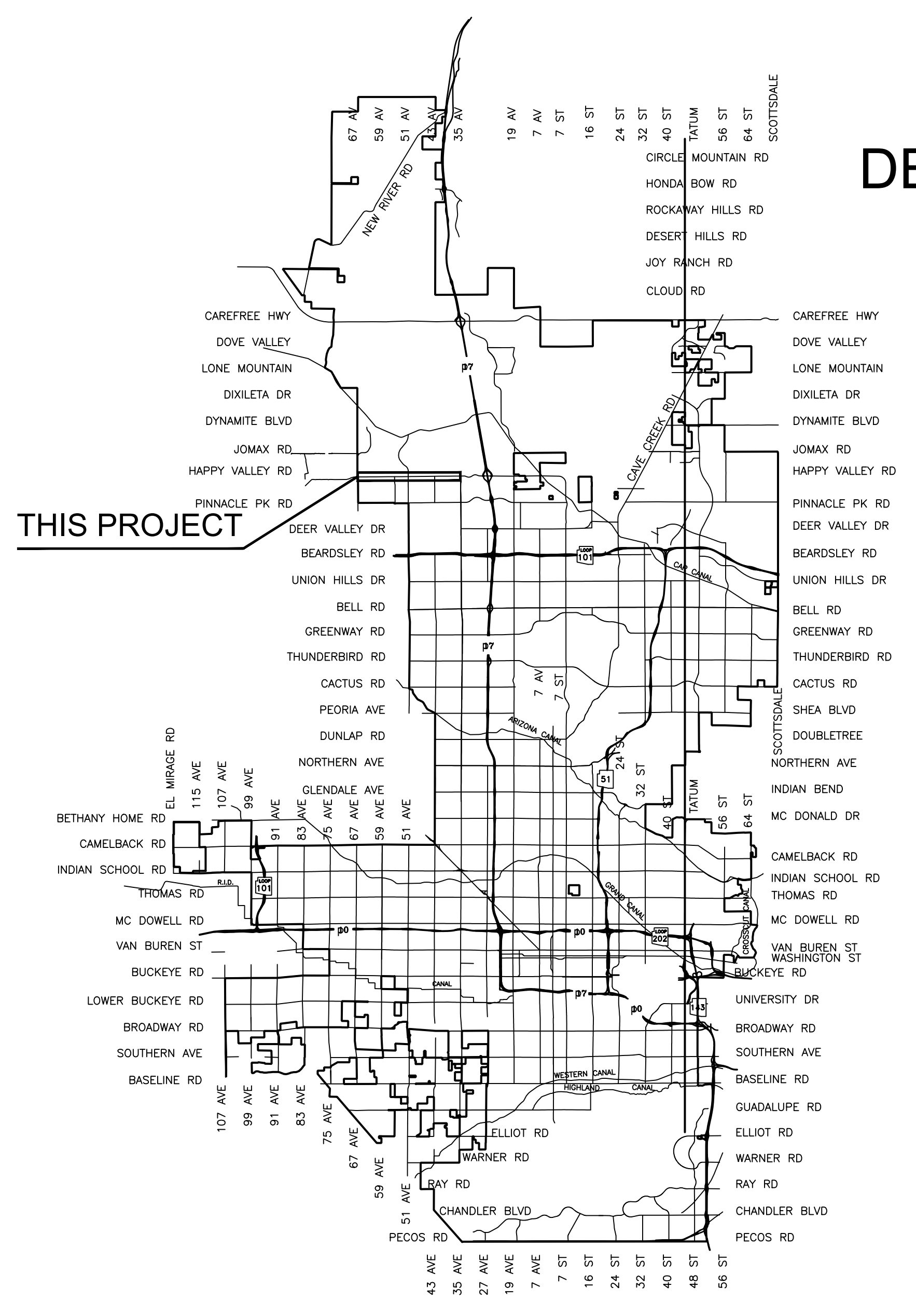
PRELIMINARY 30% Review NOT FOR CONSTRUCTION OR RECORDING	F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
	9	ARIZ.	ST85100437-2	1	92	
AZTEC						
DRAWN: RJR DESIGN: RJR CHECKED: G.G. DATE: 02/20						

MAYOR
 KATE GALLEGO
 CITY MANAGER
 ED ZUERCHER
 CITY COUNCIL

DISTRICT NO 1.	THELDA WILLIAMS
DISTRICT NO 2.	JIM WARING
DISTRICT NO 3.	DEBRA STARK
DISTRICT NO 4.	LAURA PASTOR
DISTRICT NO 5.	BETTY GUARDADO
DISTRICT NO 6.	SAL DICICCIO
DISTRICT NO 7.	MICHAEL NOWAKOWSKI
DISTRICT NO 8.	CARLOS GARCIA

INDEX OF SHEETS

SHEET NO.	DWG. SERIES NO.	SHEET TITLE
1	G-1.01	COVER
2	G-1.02	LEGEND AND GENERAL NOTES
3-4	G-1.03-G-1.04	KEY MAP
5-6	G-2.01-G-2.02	QUANTITY SUMMARY SHEETS
7	G-3.01	TYPICAL SECTIONS
8-49	P-1.01- P-1.42	HAPPY VALLEY ROADWAY PLANS
50	SDS-1.01	STORM DRAIN DESIGN SUMMARY
51-92	DR-1.01-DR-1.42	STORM DRAIN PLANS



CITY BENCHMARKS

- ▲ C.O.P BM 6086: FD 3" PHOENIX BC IN HH 0.4' DN NO STAMPING (INTERSECTION OF HAPPY VALLEY & 35TH AVE)
ELEV: 1424.87 (NAD83 DATUM)
- ▲ C.O.P BM 3404: FD 3" PHOENIX BC IN HH 0.2' DN NO STAMPING ((INTERSECTION OF HAPPY VALLEY & 35TH AVE)
ELEV: 1422.13 (NAD83 DATUM)
- ▲ C.O.P BM 8324: FD 3" PHOENIX BC IN HH 0.45' DN NO STAMPING ((INTERSECTION OF HAPPY VALLEY & 35TH AVE)
ELEV: 1381.72 (NAD83 DATUM)

APPROVED _____ DATE _____
 ASSISTANT STREET TRANSPORTATION DIRECTOR

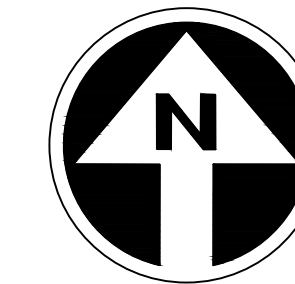
APPROVED _____ DATE _____
 DEPUTY STREET TRANSPORTATION DIRECTOR



"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."

ST85100437-2: HAPPY VALLEY ROAD 35TH AVENUE TO 67TH AVENUE DESIGN SERVICES 30% SUBMITTAL Q.S. 4-5

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



PRELIMINARY
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	8	92	

02/20
DATE: 02/20

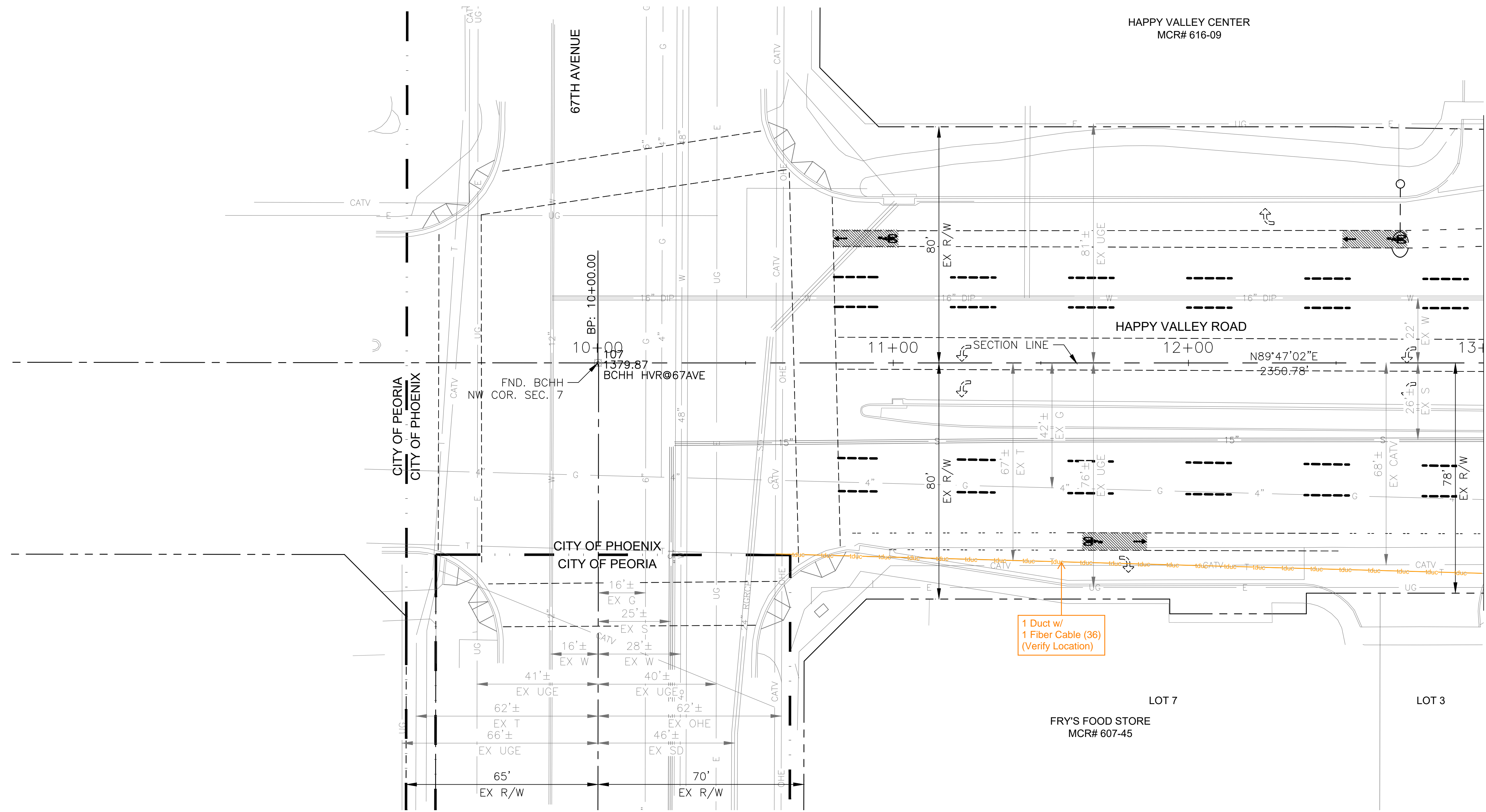
AZTEC
Civil & Survey
Phoenix, AZ 85008-4505
704/942-5141
Fax: 704/942-5143
www.aztec.com

DRAWN: RJR | DESIGN: RJR | CHECKED: G.G.

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



MATCH LINE STA 13+00 SEE SHEET 9

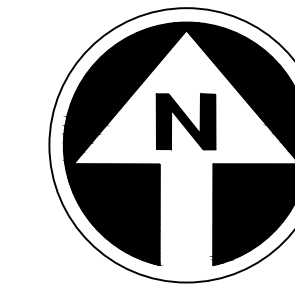
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.01
DATE: 02/20	DATE: 02/20	DATE: 02/20	8 OF 92
SCALE: 1"=20' HORIZ.			

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



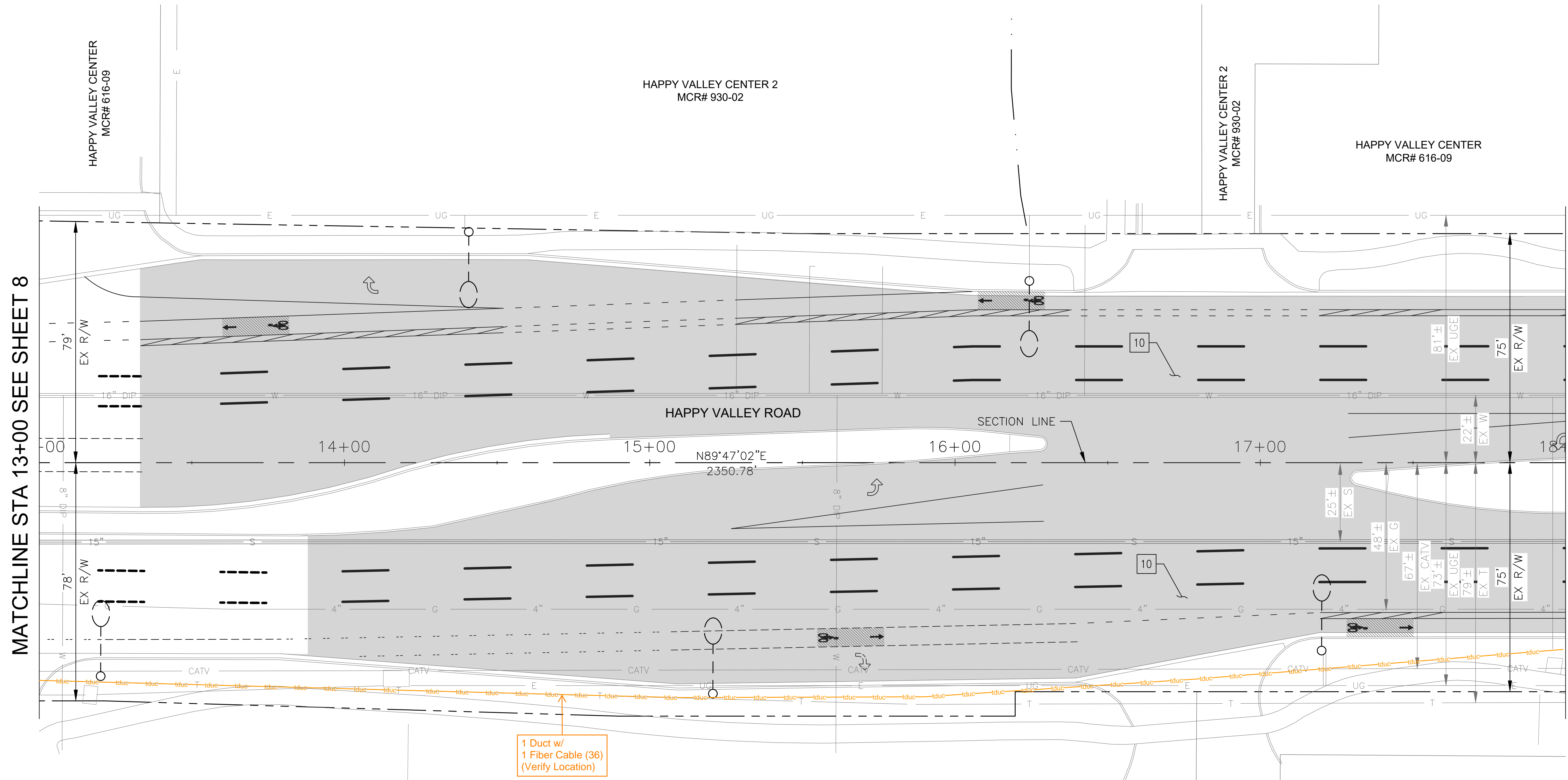
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Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	9	92	
DATE: 02/20		AZTEC			
DRAWN: RJR	DESIGN: RJR	CHECKED: G.G.			
CONSTRUCTION NOTES					
NO	DESCRIPTION	UNIT	QTY		
10	MICROSEAL COAT	SY	5701		

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



MATCHLINE STA 13+00 SEE SHEET 8

MATCHLINE STA 18+00 SEE SHEET 10

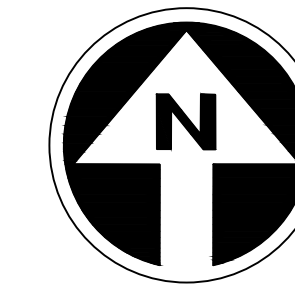
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.02
DATE: 02/20	DATE: 02/20	DATE: 02/20	9 OF 92
SCALE: 1"=20' HORIZ.			

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



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CONSTRUCTION
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F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	10	92	
DATE: 02/20		AZTEC			
DRAWN: RJR	DESIGN: RJR	CHECKED: G.G.			

NO.	DESCRIPTION	REV BY	CHK BY	DATE

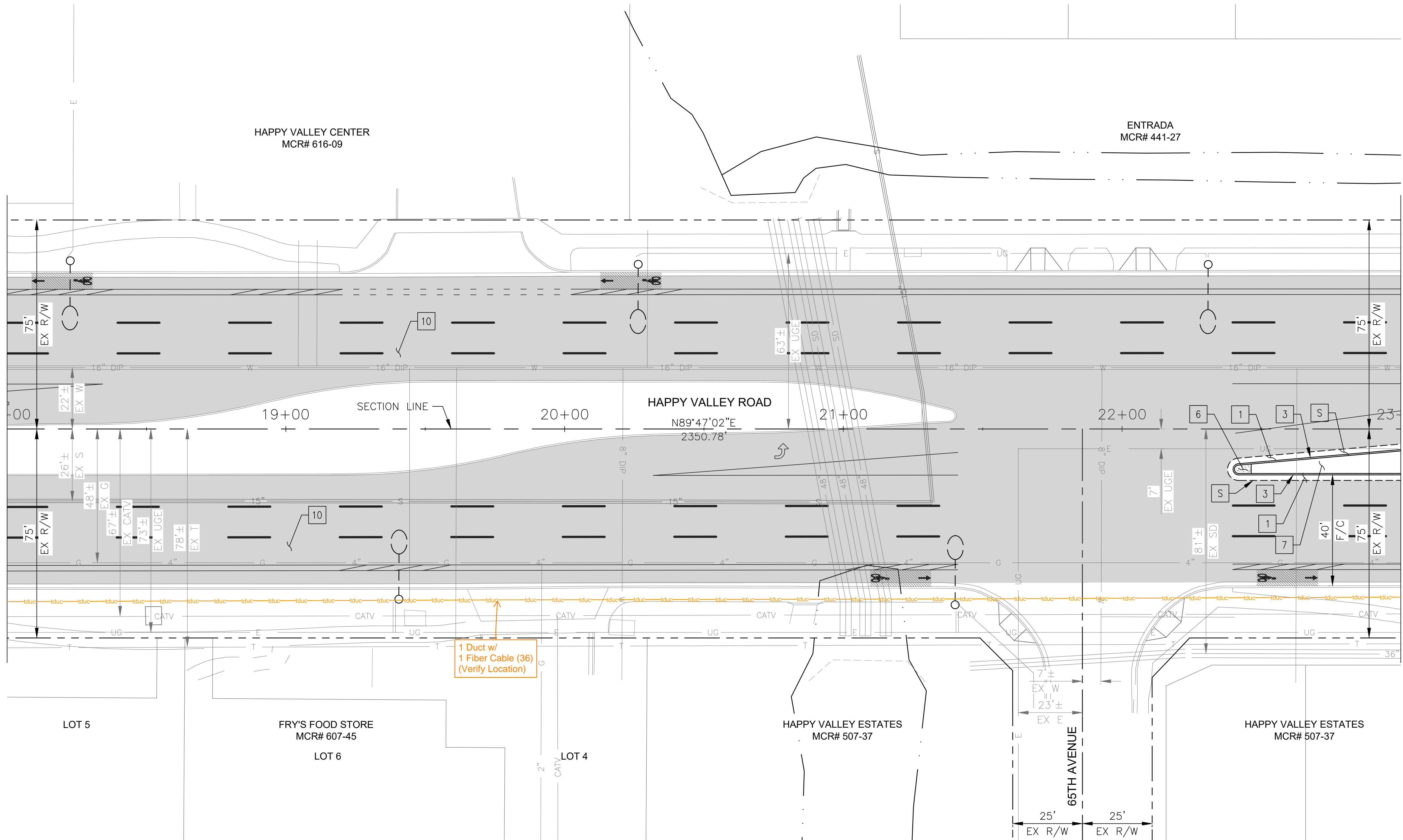
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

CONSTRUCTION NOTES		
NO	DESCRIPTION	UNIT QTY
PAVEMENT STRUCTURAL SECTION NO. 1		
1	SUBGRADE PREPARATION	SY 71
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON 10
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON 20
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON 0.02
3	CONCRETE SINGLE CURB MAG STD DET 222, TYPE A	LF 117
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF 18
7	DECOMPOSED GRANITE. 3/4" MINUS FOR GENERAL LANDSCAPE (GOLD)	SY 34
10	MICROSEAL COAT	SY 5248

MATCHLINE STA 18+00 SEE SHEET 9

MATCHLINE STA 23+00 SEE SHEET 11



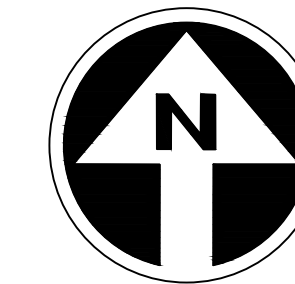
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.03
DATE: 02/20	DATE: 02/20	DATE: 02/20	10 OF 92
SCALE: 1"=20' HORIZ.			

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



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OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	11	92	

02/20
DATE: 02/20
DRAWN: RJR DESIGN: RJR CHECKED: G.G.

AZTEC
Civil & Survey Dept
Phoenix, AZ 85008-4555
704-527-5142
Fax: 602-454-5443
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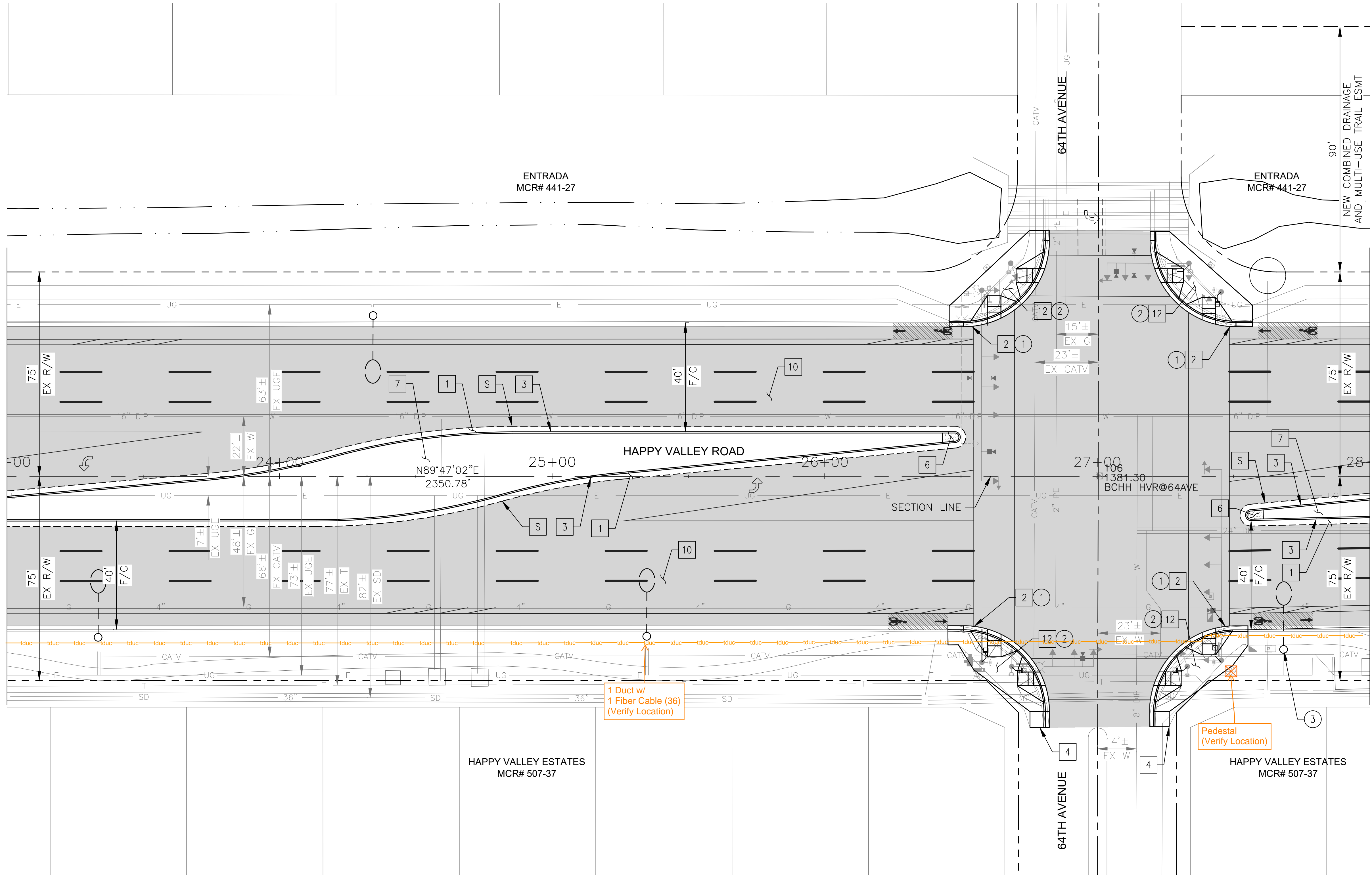
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE STA 23+00 SEE SHEET 10

MATCHLINE STA 28+00 SEE SHEET 12



CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	809
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	112
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	225
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.20
2	CONCRETE CURB & GUTTER, MAG STD DET 220-1, TYPE A, H=6"	LF	229
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF	769
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	58
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	36
7	DECOMPOSED GRANITE, 3/4" MINUS FOR GENERAL LANDSCAPE (GOLD)	SY	582
10	MICROSEAL COAT	SY	5861
12	CONCRETE SIDEWALK RAMP, COP STD DET P1241-2	SF	2130

REMOVAL/RELOCATION

NO	DESCRIPTION	UNIT	QTY
1	REMOVE PCC SINGLE CURB, CURB & GUTTER	LF	219
2	REMOVE PCC SIDEWALK, DRIVEWAY VALLEY GUTTER & SLAB	SF	1506
3	REMOVE AND SALVAGE LIGHT POLE	EA	1

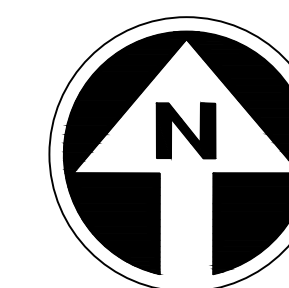
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ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.04
DATE: 02/20	DATE: 02/20	DATE: 02/20	SCALE: 1"=20' HORIZ.
			11 OF 92

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



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CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	12	92	
DATE: 02/20		AZTEC			
DRAWN: RJR	DESIGN: RJR	CHECKED: G.G.			

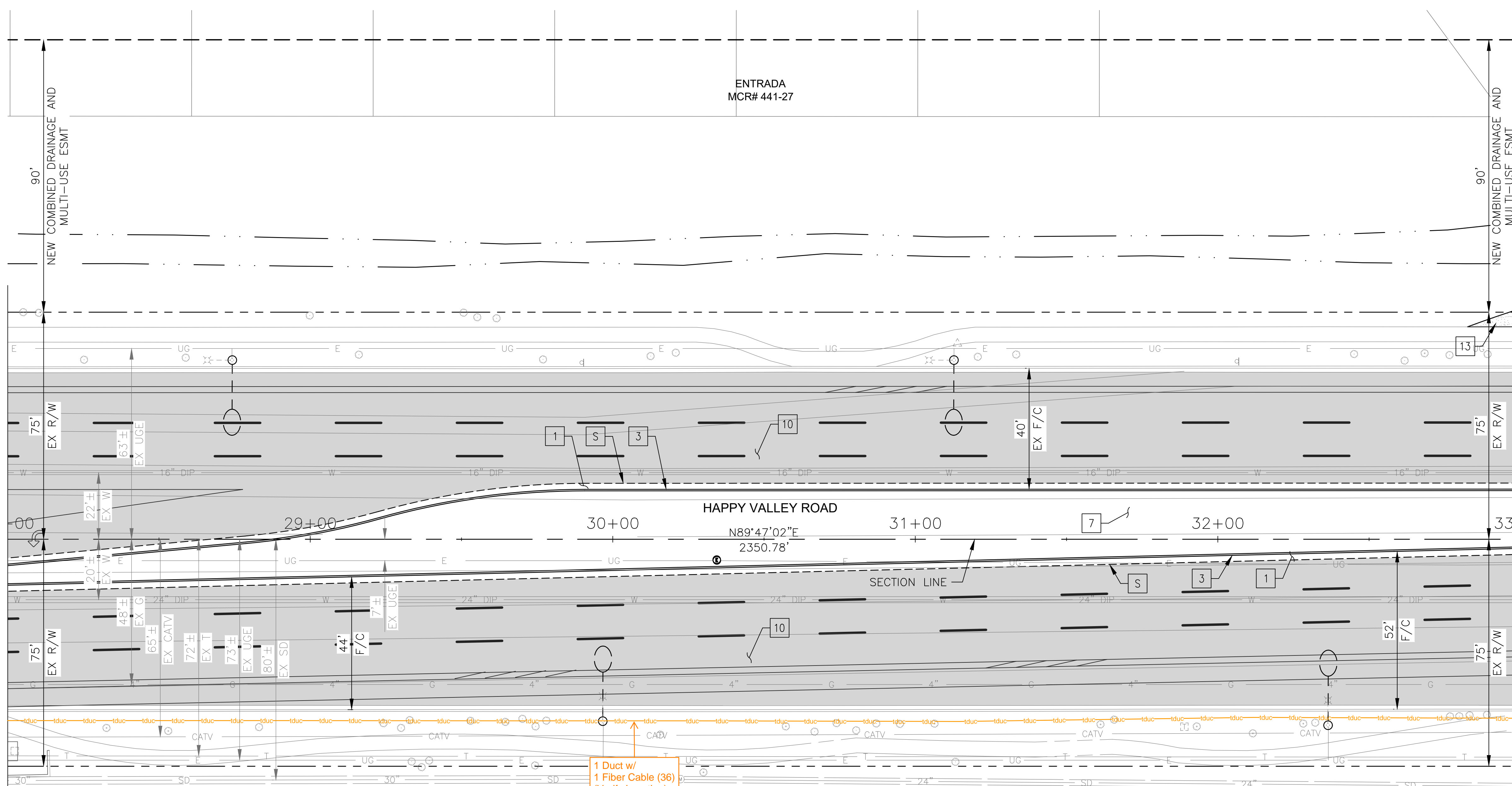
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE STA 28+00 SEE SHEET 11

MATCHLINE STA 33+00 SEE SHEET 13



CONSTRUCTION NOTES			
NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	1369
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	189
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	381
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.34
3	CONCRETE SINGLE CURB MAG STD DET 222, TYPE A	LF	1002
7	DECOMPOSED GRANITE, 3/4" MINUS FOR GENERAL LANDSCAPE (GOLD)	SY	1091
10	MICROSEAL COAT	SY	4964
13	DECOMPOSED GRANITE, STABILIZED FOR MULTIPURPOSE TRAIL, 1/4" MINUS, 4" THICK	SF	53

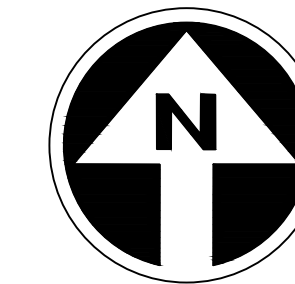
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ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.05
DATE: 02/20	DATE: 02/20	DATE: 02/20	SCALE: 1"=20' HORIZ.

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



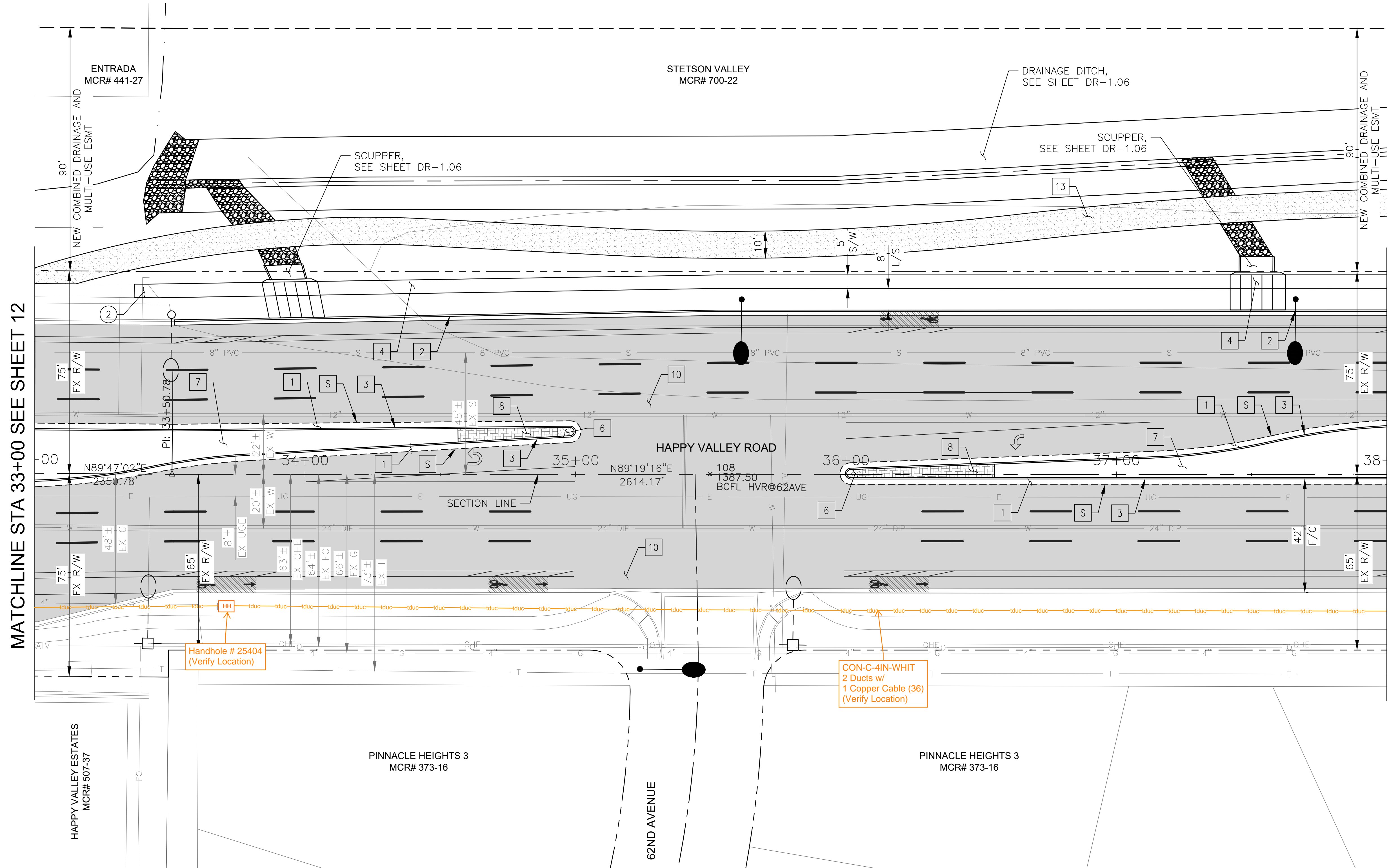
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F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	13	92	
DATE: 02/20		AZTEC			
DRAWN: RJR	DESIGN: RJR	CHECKED: G.G.			

REVISION BY	DESCRIPTION	DATE

REVISION BY	DESCRIPTION	DATE

REVISION BY	DESCRIPTION	DATE



MATCHLINE STA 33+00 SEE SHEET 12

MATCHLINE STA 38+00 SEE SHEET 14

CONSTRUCTION NOTES		
NO	DESCRIPTION	UNIT QTY
PAVEMENT STRUCTURAL SECTION NO. 1		
1	SUBGRADE PREPARATION	SY 1862
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON 257
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON 518
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON 0.47
2	CONCRETE CURB & GUTTER, MAG STD DET 220-1, TYPE A, H=6"	LF 449
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF 776
4	CONCRETE SIDEWALK, COP STD DET P1230	SF 2316
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF 49
7	DECOMPOSED GRANITE, 3/4" MINUS FOR GENERAL LANDSCAPE (GOLD)	SY 343
8	DECORATIVE BRICK PAVERS, MAG STD DET. 225	SF 351
10	MICROSEAL COAT	SY 5163
13	DECOMPOSED GRANITE, STABILIZED FOR MULTIPURPOSE TRAIL, 1/4" MINUS, 4" THICK	SF 4997

REMOVAL/RELOCATION		
NO	DESCRIPTION	UNIT QTY
2	REMOVE PCC SIDEWALK, DRIVEWAY VALLEY GUTTER & SLAB	SF 35

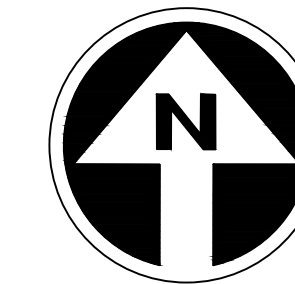
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ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.06
DATE: 02/20	DATE: 02/20	DATE: 02/20	13 OF 92
SCALE: 1"=20' HORIZ.			

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



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OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	14	92	
DATE: 02/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

NO.	DESCRIPTION	REV BY	CHK BY	DATE

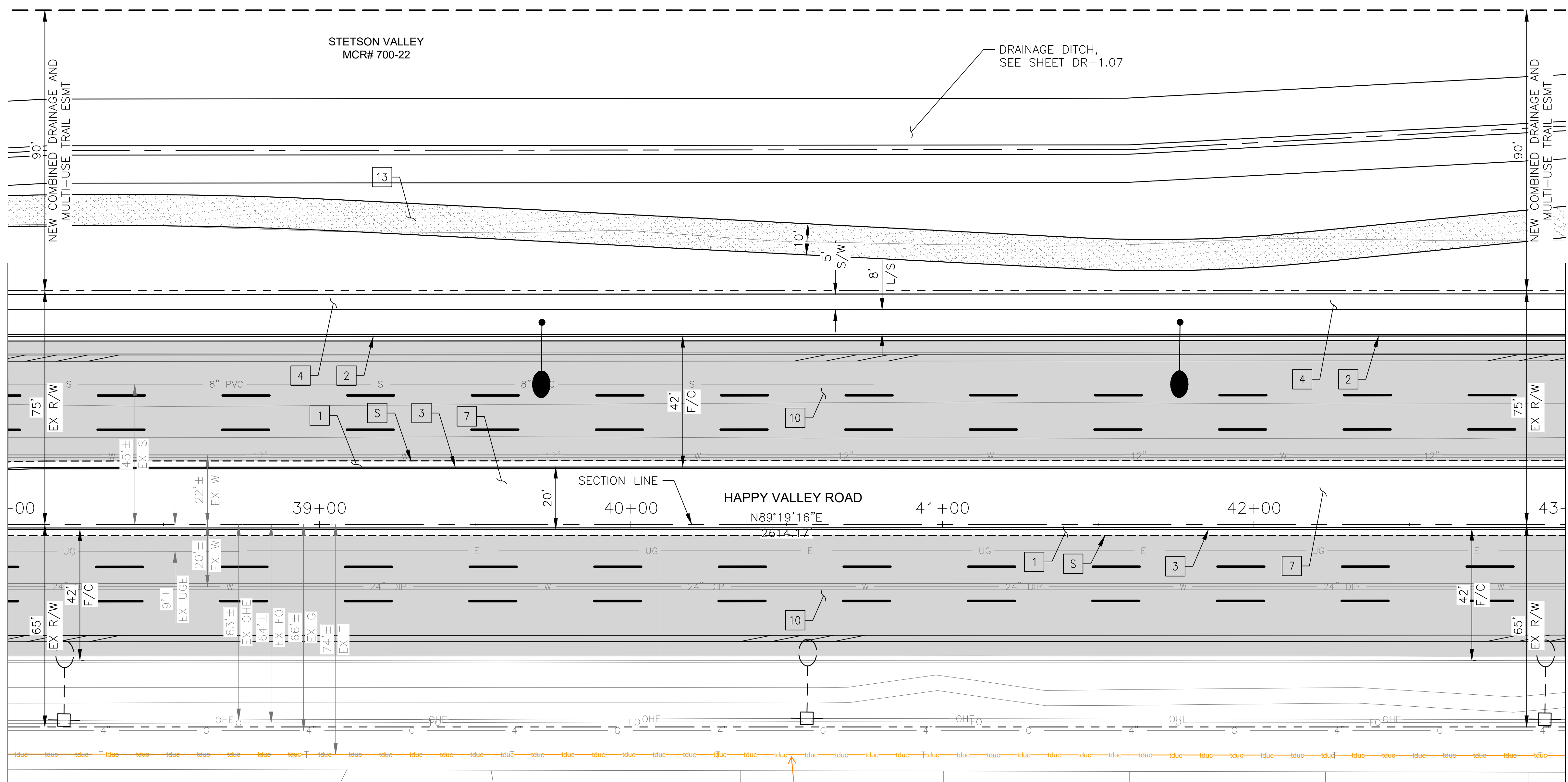
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

CONSTRUCTION NOTES			
NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	3062
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	423
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	851
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.77
2	CONCRETE CURB & GUTTER, MAG STD DET 220-1, TYPE A, H=6"	LF	500
3	CONCRETE SINGLE CURB MAG STD DET 222, TYPE A	LF	1000
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	2500
7	DECOMPOSED GRANITE. 3/4" MINUS FOR GENERAL LANDSCAPE (GOLD)	SY	1055
10	MICROSEAL COAT	SY	4511
13	DECOMPOSED GRANITE, STABILIZED FOR MULTIPURPOSE TRAIL, 1/4" MINUS, 4" THICK	SF	5008

MATCHLINE STA 38+00 SEE SHEET 13

MATCH LINE STA 43+00 SEE SHEET 15



CON-C-4IN-WHIT
2 Ducts w/
1 Copper Cable (36)
(Verify Location)

PINNACLE HEIGHTS 3
MCR# 373-16

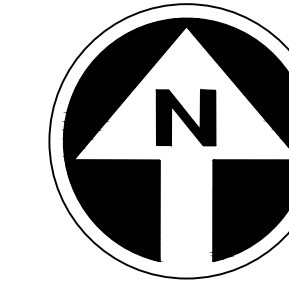
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ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.07
DATE: 02/20	DATE: 02/20	DATE: 02/20	
SCALE: 1"=20' HORIZ.			14 OF 92

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



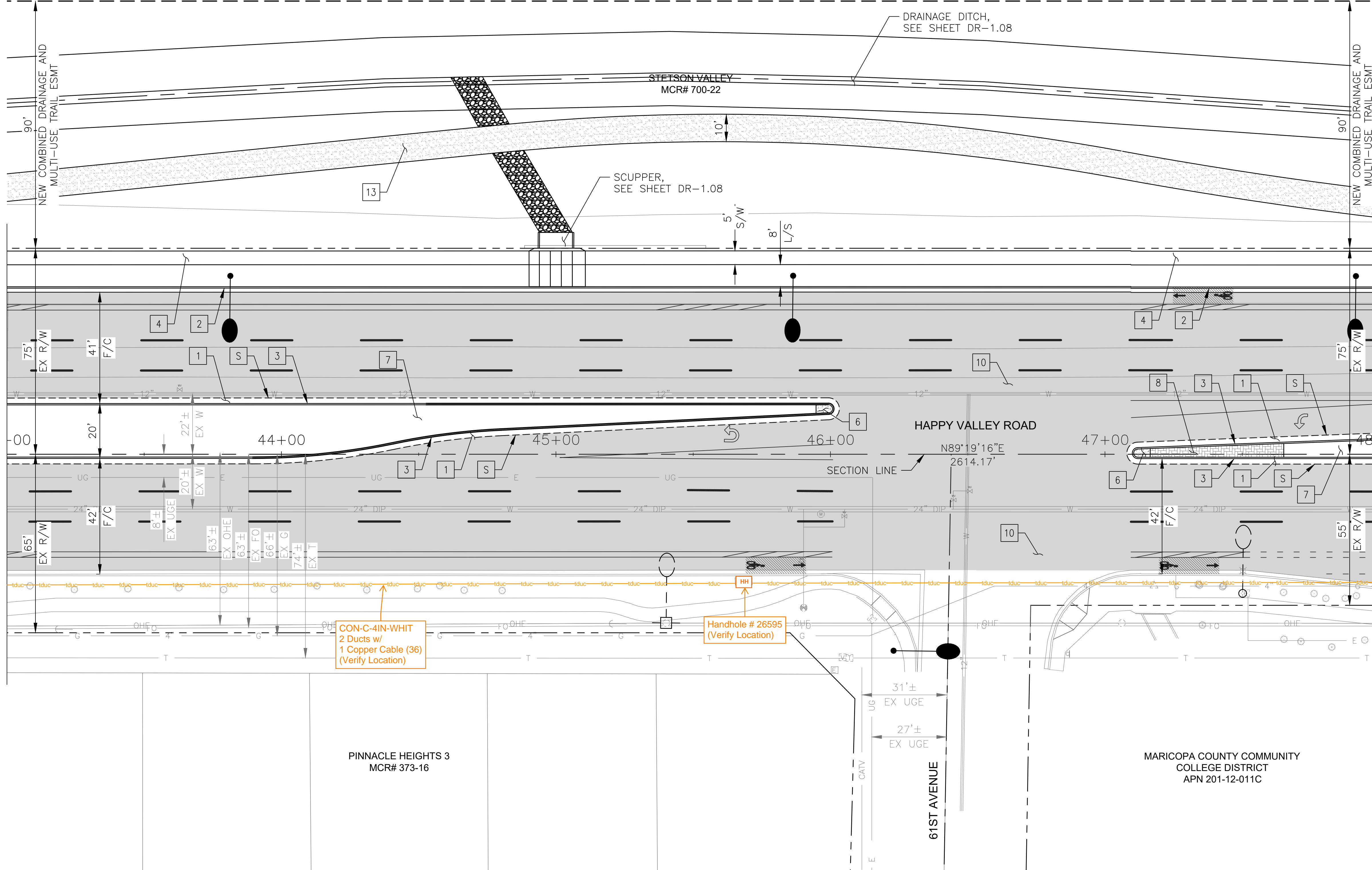
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CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	15	92	
DATE: 02/20					
DRAWN: RJR					

CONSTRUCTION NOTES		
NO	DESCRIPTION	UNIT QTY
PAVEMENT STRUCTURAL SECTION NO. 1		
	SUBGRADE PREPARATION	SY 2398
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON 330
	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON 665
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON 0.60
2	CONCRETE CURB & GUTTER, MAG STD DET 220-1, TYPE A, H=6"	LF 500
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF 757
4	CONCRETE SIDEWALK, COP STD DET P1230	SF 2500
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF 35
7	DECOMPOSED GRANITE, 3/4" MINUS FOR GENERAL LANDSCAPE (GOLD)	SY 432
8	DECORATIVE BRICK PAVERS, MAG STD DET. 225	SF 199
10	MICROSEAL COAT	SY 4947
13	DECOMPOSED GRANITE, STABILIZED FOR MULTIPURPOSE TRAIL, 1/4" MINUS, 4" THICK	SF 5029

MATCHLINE STA 43+00 SEE SHEET 14

MATCHLINE STA 48+00 SEE SHEET 16



NO.	DESCRIPTION	REV BY	CHK BY	DATE

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NO.	DESCRIPTION	REV BY	CHK BY	DATE

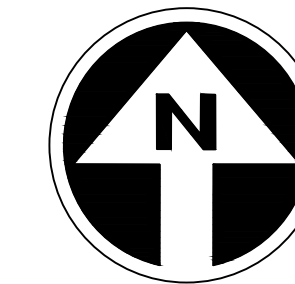
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ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.08
DATE: 02/20	DATE: 02/20	DATE: 02/20	SCALE: 1"=20' HORIZ.
			15 OF 92

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



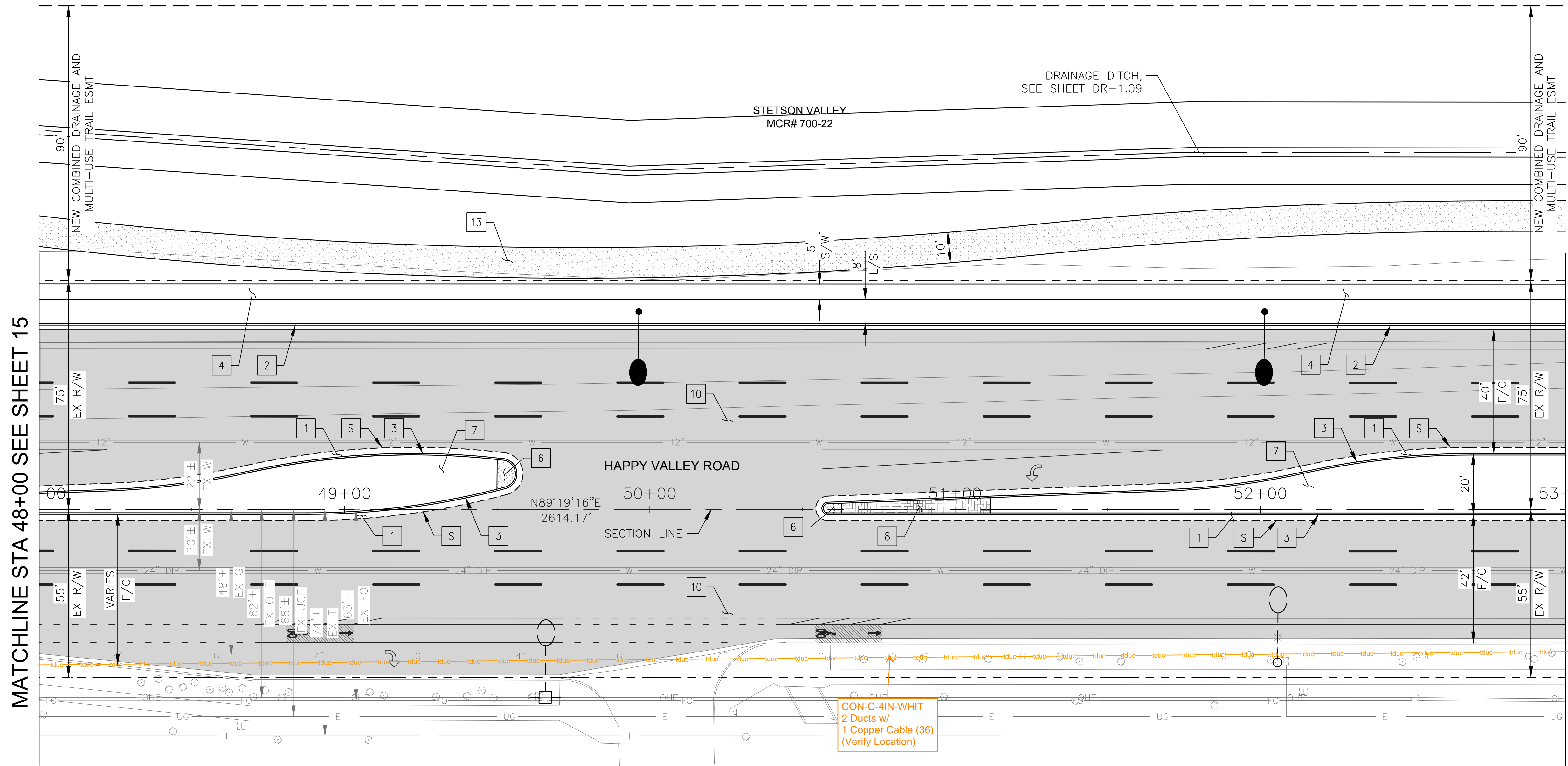
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CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	16	92	
DATE: 02/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



MATCHLINE STA 48+00 SEE SHEET 15

MATCHLINE STA 53+00 SEE SHEET 17

CONSTRUCTION NOTES		
NO	DESCRIPTION	UNIT QTY
PAVEMENT STRUCTURAL SECTION NO. 1		
1	SUBGRADE PREPARATION	SY 2088
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON 288
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON 580
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON 0.52
2	CONCRETE CURB & GUTTER, MAG STD DET 220-1, TYPE A, H=6"	LF 500
3	CONCRETE SINGLE CURB MAG STD DET 222, TYPE A	LF 777
4	CONCRETE SIDEWALK, COP STD DET P1230	SF 2500
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF 64
7	DECOMPOSED GRANITE. 3/4" MINUS FOR GENERAL LANDSCAPE (GOLD)	SY 461
8	DECORATIVE BRICK PAVERS, MAG STD DET. 225	SF 199
10	MICROSEAL COAT	SY 5333
13	DECOMPOSED GRANITE, STABILIZED FOR MULTIPURPOSE TRAIL, 1/4" MINUS, 4" THICK	SF 5010

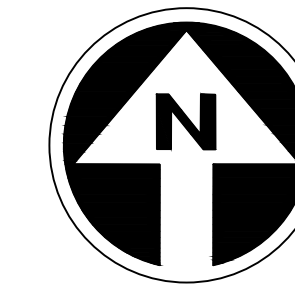
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ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.09
DATE: 02/20	DATE: 02/20	DATE: 02/20	SCALE: 1"=20' HORIZ.
			16 OF 92

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



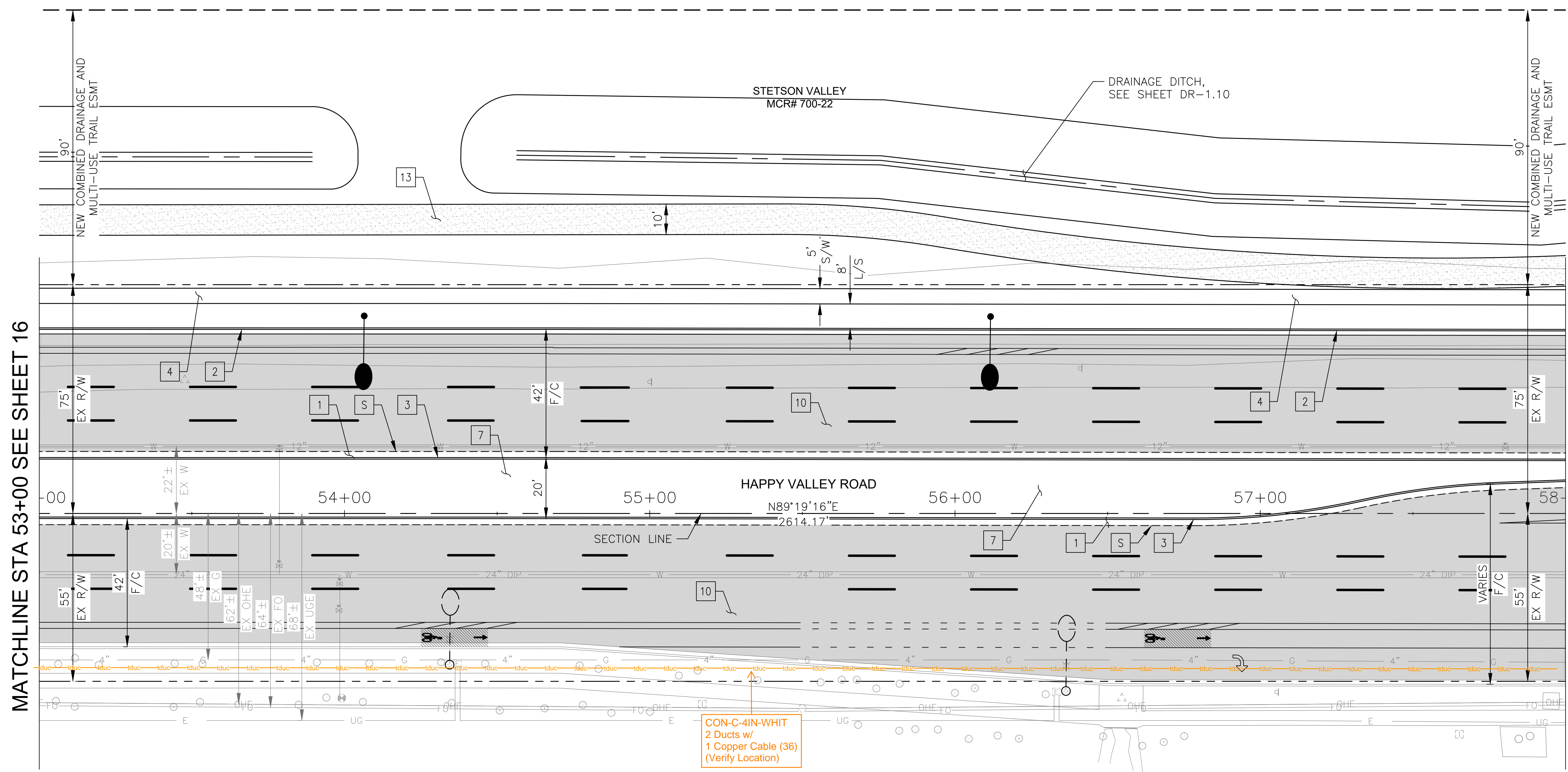
PRELIMINARY
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OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	17	92	
DATE: 02/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



MATCHLINE STA 53+00 SEE SHEET 16

MATCHLINE STA 58+00 SEE SHEET 18

CONSTRUCTION NOTES			
NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	2228
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	307
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	619
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.56
2	CONCRETE CURB & GUTTER, MAG STD DET 220-1, TYPE A, H=6"	LF	500
3	CONCRETE SINGLE CURB MAG STD DET 222, TYPE A	LF	1001
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	2500
7	DECOMPOSED GRANITE. 3/4" MINUS FOR GENERAL LANDSCAPE (GOLD)	SY	964
10	MICROSEAL COAT	SY	4908
13	DECOMPOSED GRANITE, STABILIZED FOR MULTIPURPOSE TRAIL, 1/4" MINUS, 4" THICK	SF	5009

"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 PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

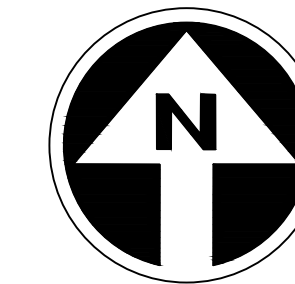
HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.10
DATE: 02/20	DATE: 02/20	DATE: 02/20	SCALE: 1"=20' HORIZ.
			17 OF 92

MARICOPA COUNTY COMMUNITY
COLLEGE DISTRICT
APN 201-12-011C

CON-C-4IN-WHIT
2 Ducts w/
1 Copper Cable (36)
(Verify Location)

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



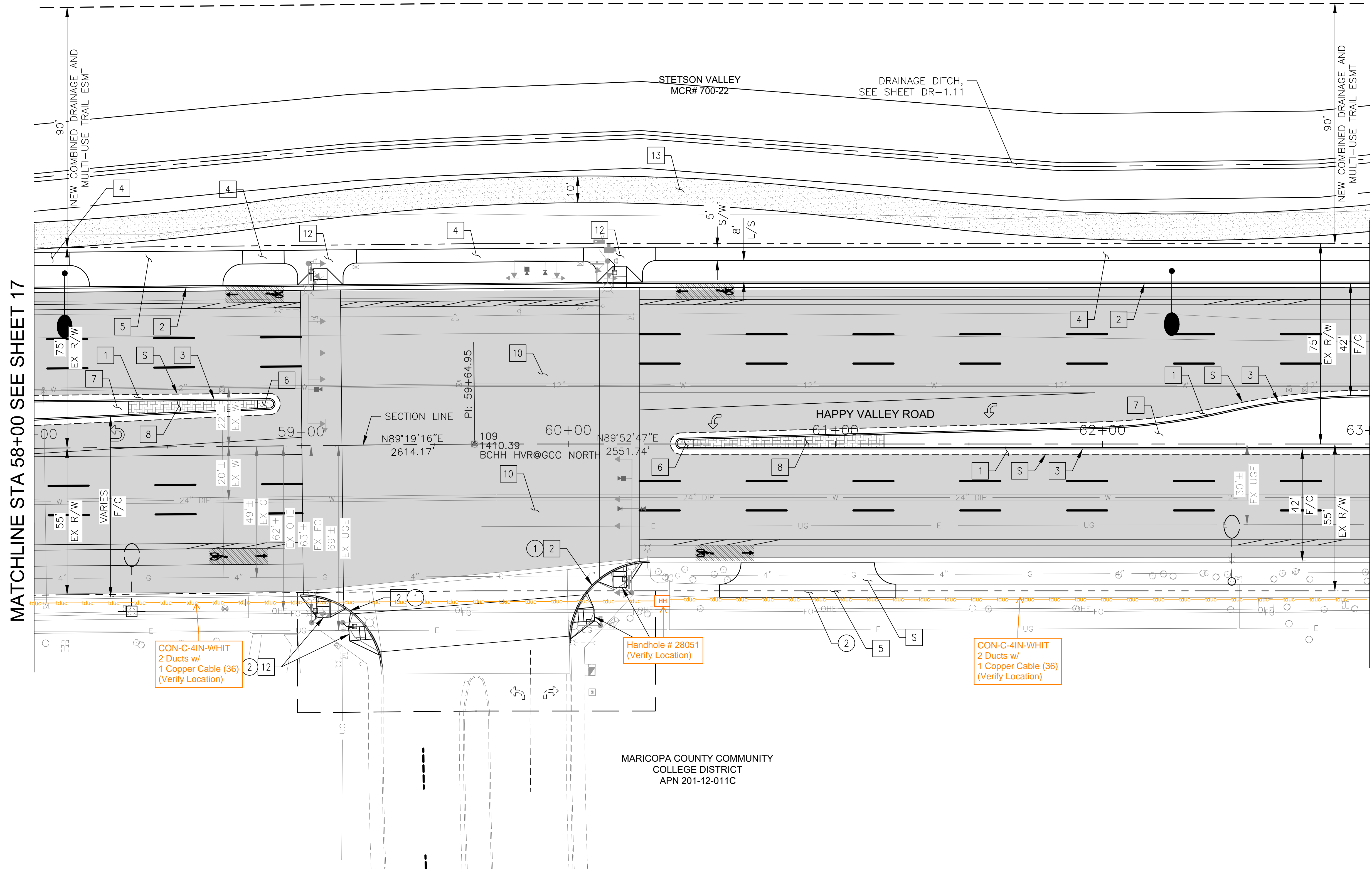
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CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	18	92	
DATE: 02/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

NO.	REVISION BY	DESCRIPTION	DATE

NO.	REVISION BY	DESCRIPTION	DATE

NO.	REVISION BY	DESCRIPTION	DATE



MATCHLINE STA 58+00 SEE SHEET 17

MATCHLINE STA 63+00 SEE SHEET 19

CONSTRUCTION NOTES			
NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	1453
	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	201
	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	404
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.36
2	CONCRETE CURB & GUTTER, MAG STD DET 220-1, TYPE A, H=6"	LF	684
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF	675
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	1904
5	BUS SHELTER/ACCESSORY PAD, COP STD DET P1262	SF	1504
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	35
7	DECOMPOSED GRANITE, 3/4" MINUS FOR GENERAL LANDSCAPE (GOLD)	SY	228
8	DECORATIVE BRICK PAVERS, MAG STD DET. 225	SF	448
10	MICROSEAL COAT	SY	5479
12	CONCRETE SIDEWALK RAMP, COP STD DET P1241-2	SF	916
13	DECOMPOSED GRANITE, STABILIZED FOR MULTIPURPOSE TRAIL, 1/4" MINUS, 4" THICK	SF	4998

REMOVAL/RELOCATION			
NO	DESCRIPTION	UNIT	QTY
1	REMOVE PCC SINGLE CURB, CURB & GUTTER	LF	184
2	REMOVE PCC SIDEWALK, DRIVEWAY VALLEY GUTTER & SLAB	SF	656

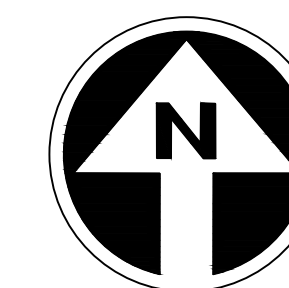
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.11
DATE: 02/20	DATE: 02/20	DATE: 02/20	SCALE: 1"=20' HORIZ.
			18 OF 92

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



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OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	19	92	

02/20
DATE: 02/20
DRAWN: RJR DESIGN: RJR CHECKED: G.G.

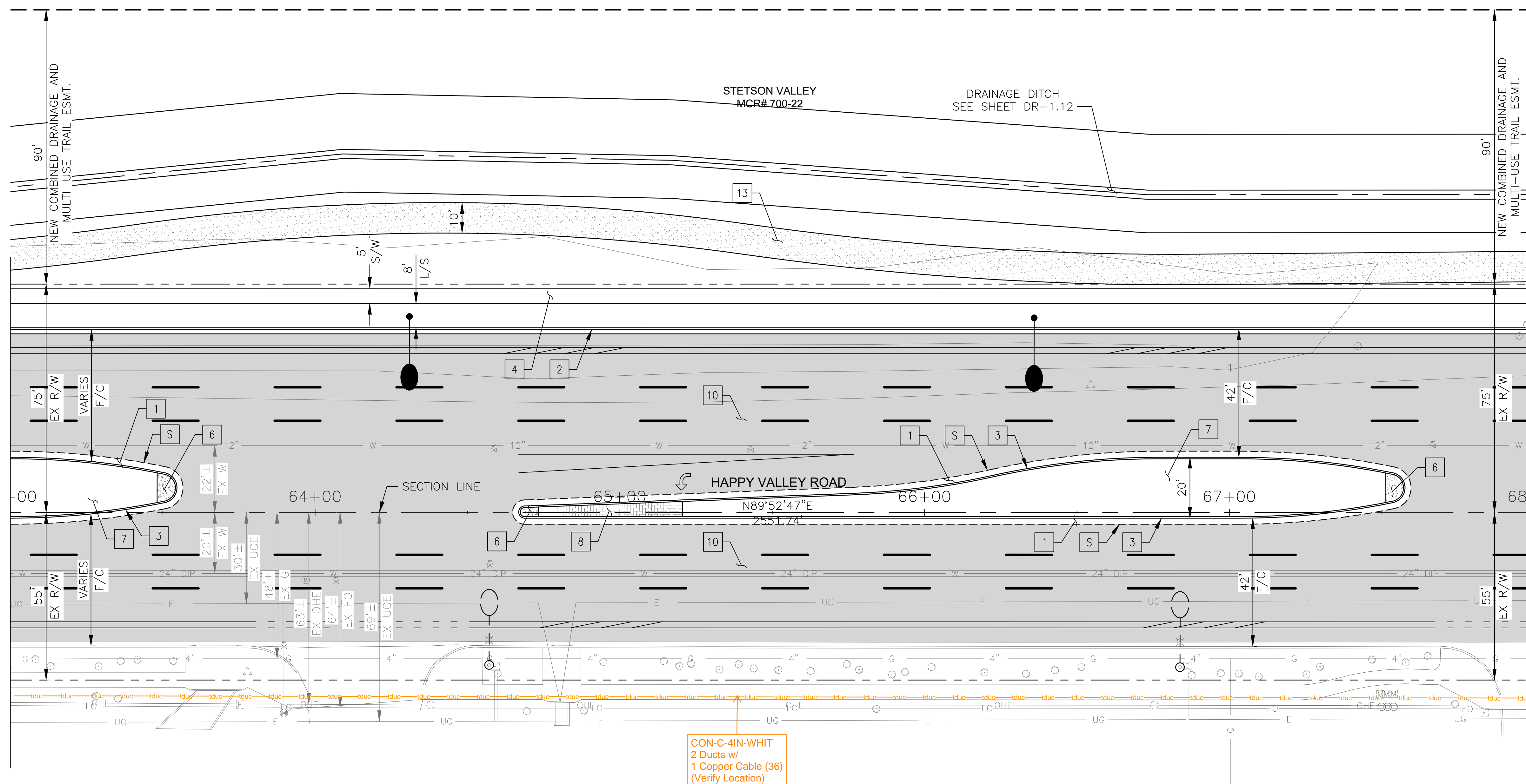
AZTEC
Civil & Survey
Phoenix, AZ 85008-4555
704/527-5142
Fax: 704/527-5143
www.aztec.com

CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
	SUBGRADE PREPARATION	SY	1746
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	241
	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	485
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.44
2	CONCRETE CURB & GUTTER, MAG STD DET 220-1, TYPE A, H=6"	LF	500
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF	654
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	2500
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	64
7	DECOMPOSED GRANITE, 3/4" MINUS FOR GENERAL LANDSCAPE (GOLD)	SY	414
8	DECORATIVE BRICK PAVERS, MAG STD DET. 225	SF	193
10	MICROSEAL COAT	SY	5132
13	DECOMPOSED GRANITE, STABILIZED FOR MULTIPURPOSE TRAIL, 1/4" MINUS, 4" THICK	SF	5015

MATCHLINE STA 63+00 SEE SHEET 18

MATCHLINE STA 68+00 SEE SHEET 20



CON-C-4IN-WHIT
2 Ducts w/
1 Copper Cable (36)
(Verify Location)

MARICOPA COUNTY COMMUNITY
COLLEGE DISTRICT
APN 201-12-011C

"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."

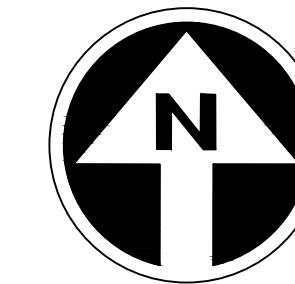
ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.12
DATE: 02/20	DATE: 02/20	DATE: 02/20	19 OF 92

NO.	REVISION BY	DESCRIPTION	DATE

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



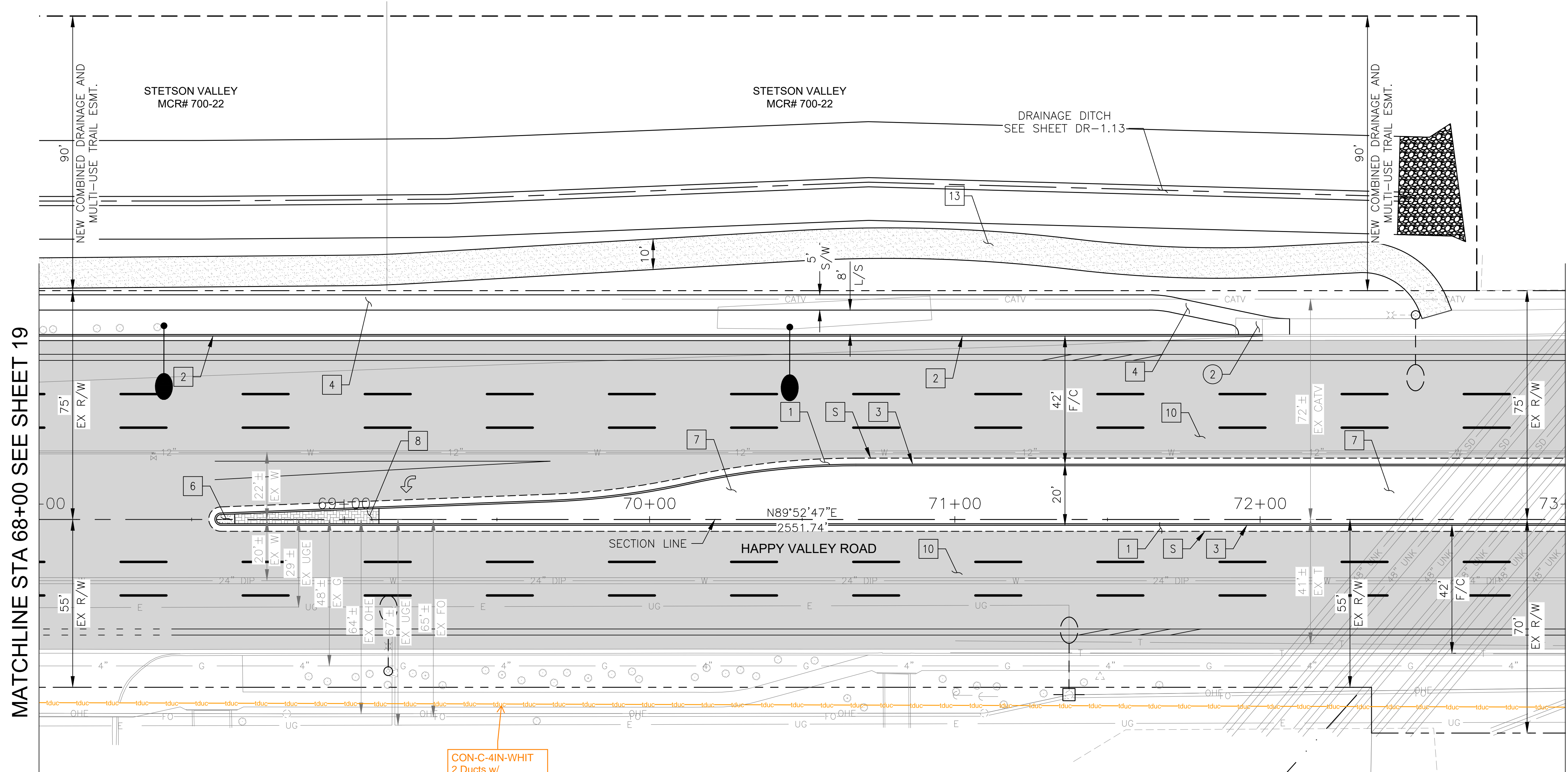
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CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	20	92	
DATE: 02/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



CON-C-4IN-WHIT
2 Ducts w/
1 Copper Cable (36)
(Verify Location)

MARICOPA COUNTY COMMUNITY
COLLEGE DISTRICT
APN 201-12-011C

PINNACLE HEIGHTS IV
MCR# 401-39

CONSTRUCTION NOTES		
NO	DESCRIPTION	UNIT QTY
PAVEMENT STRUCTURAL SECTION NO. 1		
1	SUBGRADE PREPARATION	SY 1225
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON 169
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON 341
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON 0.31
2	CONCRETE CURB & GUTTER, MAG STD DET 220-1, TYPE A, H=6"	LF 401
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF 873
4	CONCRETE SIDEWALK, COP STD DET P1230	SF 2004
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF 17
7	DECOMPOSED GRANITE. 3/4" MINUS FOR GENERAL LANDSCAPE (GOLD)	SY 679
8	DECORATIVE BRICK PAVERS, MAG STD DET. 225	SF 193
10	MICROSEAL COAT	SY 4868
13	DECOMPOSED GRANITE, STABILIZED FOR MULTIPURPOSE TRAIL, 1/4" MINUS, 4" THICK	SF 4656

REMOVAL/RELOCATION		
NO	DESCRIPTION	UNIT QTY
2	REMOVE PCC SIDEWALK, DRIVEWAY VALLEY GUTTER & SLAB	SF 98

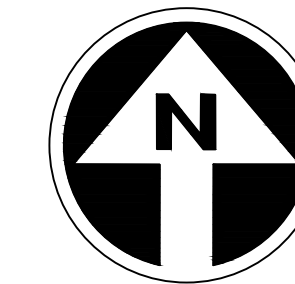
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.13
DATE: 02/20	DATE: 02/20	DATE: 02/20	20 OF 92
SCALE: 1"=20' HORIZ.			

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



PRELIMINARY
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CONSTRUCTION
OR RECORDING

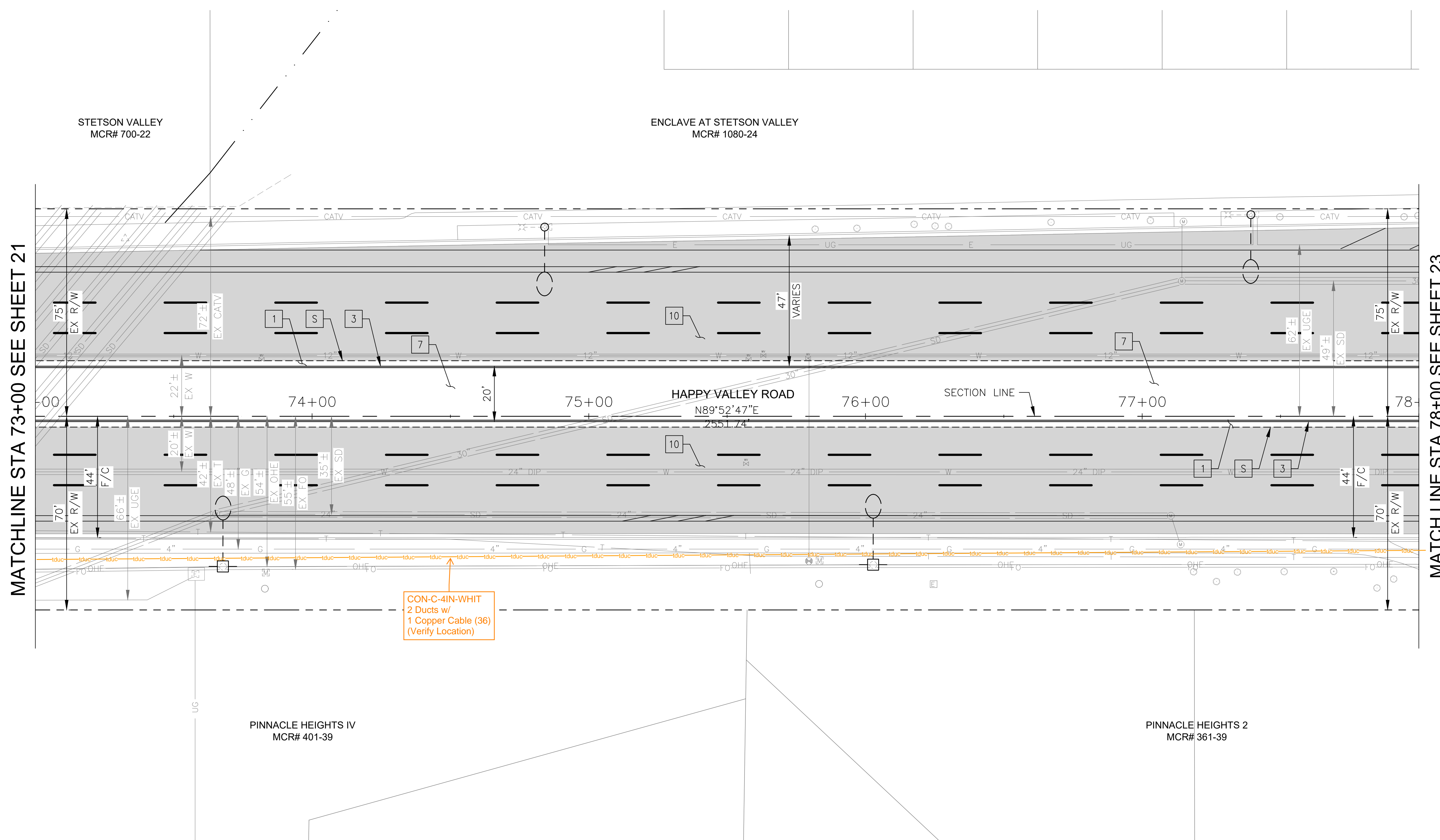
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	21	92	
DATE: 02/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

CONSTRUCTION NOTES		
NO	DESCRIPTION	UNIT QTY
PAVEMENT STRUCTURAL SECTION NO. 1		
	SUBGRADE PREPARATION	SY 1333
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON 184
	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON 371
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON 0.33
3	CONCRETE SINGLE CURB MAG STD DET 222, TYPE A	LF 1000
7	DECOMPOSED GRANITE. 3/4" MINUS FOR GENERAL LANDSCAPE (GOLD)	SY 1056
10	MICROSEAL COAT	SY 4781

NO.	DESCRIPTION	REV BY	CHK BY	DATE

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NO.	DESCRIPTION	REV BY	CHK BY	DATE



MATCHLINE STA 73+00 SEE SHEET 21

MATCHLINE STA 78+00 SEE SHEET 23

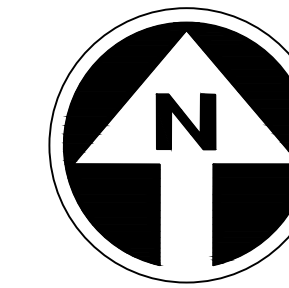
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ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.14
DATE: 02/20	DATE: 02/20	DATE: 02/20	
SCALE: 1"=20' HORIZ.			21 OF 92

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



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OR RECORDING

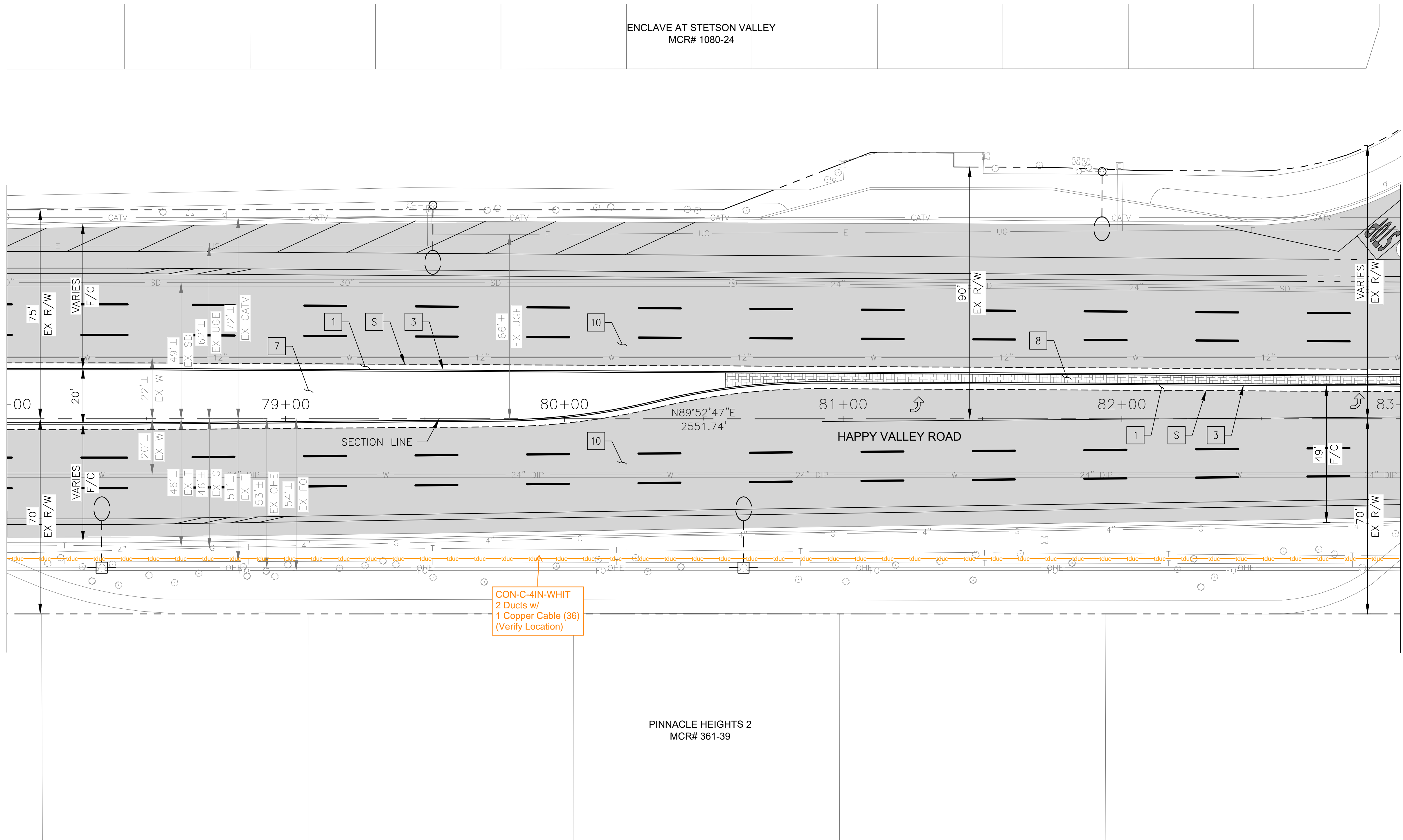
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	22	92	
DATE: 02/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE STA 78+00 SEE SHEET 21



MATCHLINE STA 83+00 SEE SHEET 23

CONSTRUCTION NOTES		
NO	DESCRIPTION	UNIT QTY
PAVEMENT STRUCTURAL SECTION NO. 1		
1	SUBGRADE PREPARATION	SY 835
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON 115
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON 232
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON 0.21
3	CONCRETE SINGLE CURB MAG STD DET 222, TYPE A	LF 1001
7	DECOMPOSED GRANITE. 3/4" MINUS FOR GENERAL LANDSCAPE (GOLD)	SY 468
8	DECORATIVE BRICK PAVERS, MAG STD DET. 225	SF 755
10	MICROSEAL COAT	SY 5486

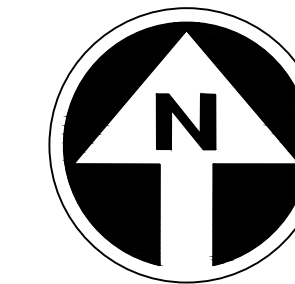
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ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.15
DATE: 02/20	DATE: 02/20	DATE: 02/20	22 OF 92

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



PRELIMINARY
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OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
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DATE: 02/20		AZTEC			
DRAWN: RJR	DESIGN: RJR	CHECKED: G.G.			

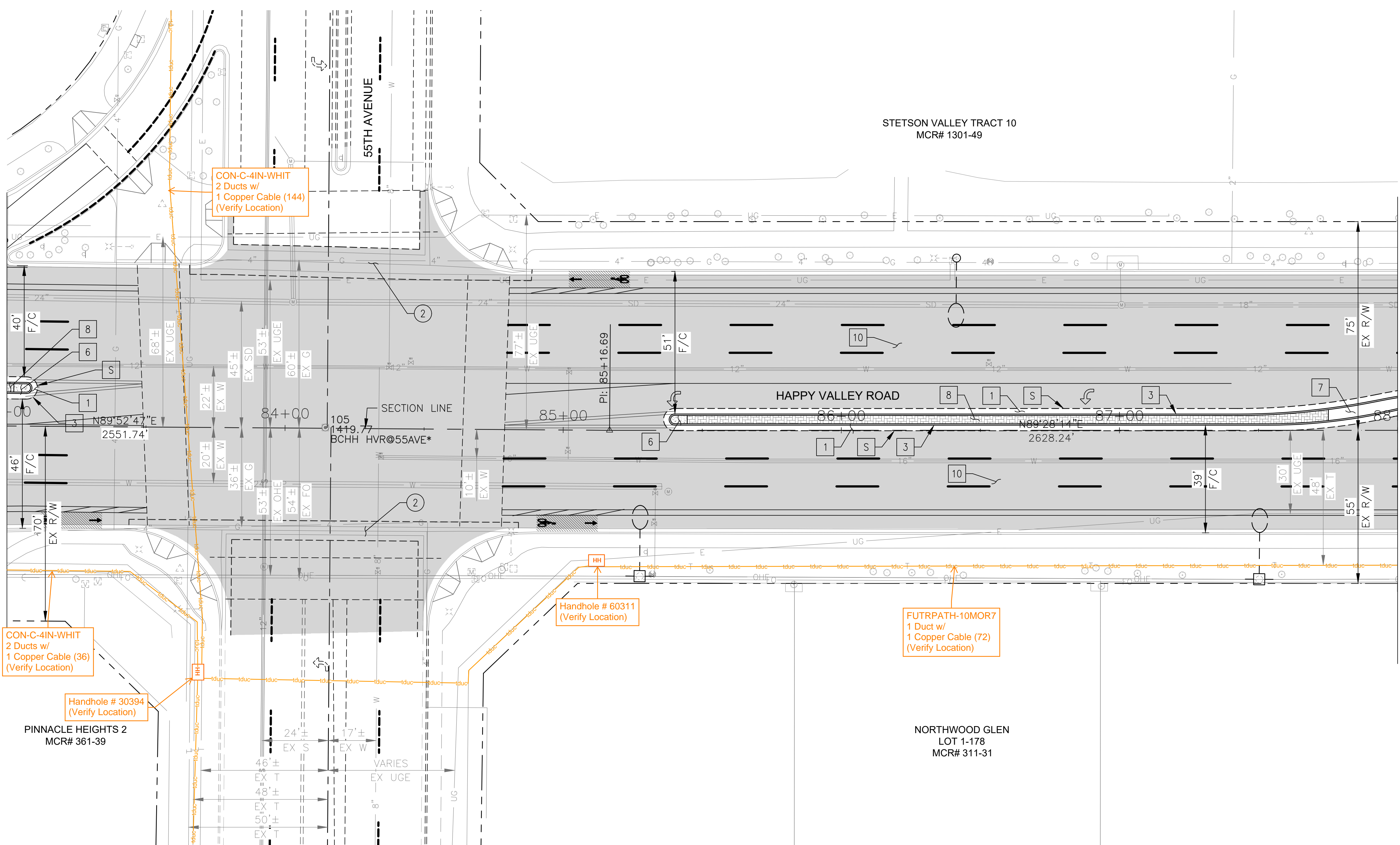
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE STA 83+00 SEE SHEET 22

MATCHLINE STA 88+00 SEE SHEET 24



CONSTRUCTION NOTES				
NO	DESCRIPTION	UNIT	QTY	
PAVEMENT STRUCTURAL SECTION NO. 1				
1	SUBGRADE PREPARATION	SY	568	
	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	78	
	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	158	
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.14	
3	CONCRETE SINGLE CURB MAG STD DET 222, TYPE A	LF	517	
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	34	
7	DECOMPOSED GRANITE. 3/4" MINUS FOR GENERAL LANDSCAPE (GOLD)	SY	11	
8	DECORATIVE BRICK PAVERS, MAG STD DET. 225	SF	713	
10	MICROSEAL COAT	SY	4933	

REMOVAL/RELOCATION				
NO	DESCRIPTION	UNIT	QTY	
2	REMOVE PCC SIDEWALK, DRIVEWAY VALLEY GUTTER & SLAB	SF	1855	

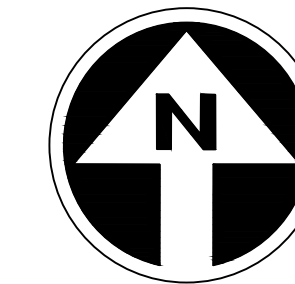
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ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.16
DATE: 02/20	DATE: 02/20	DATE: 02/20	23 OF 92
SCALE: 1"=20' HORIZ.			

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



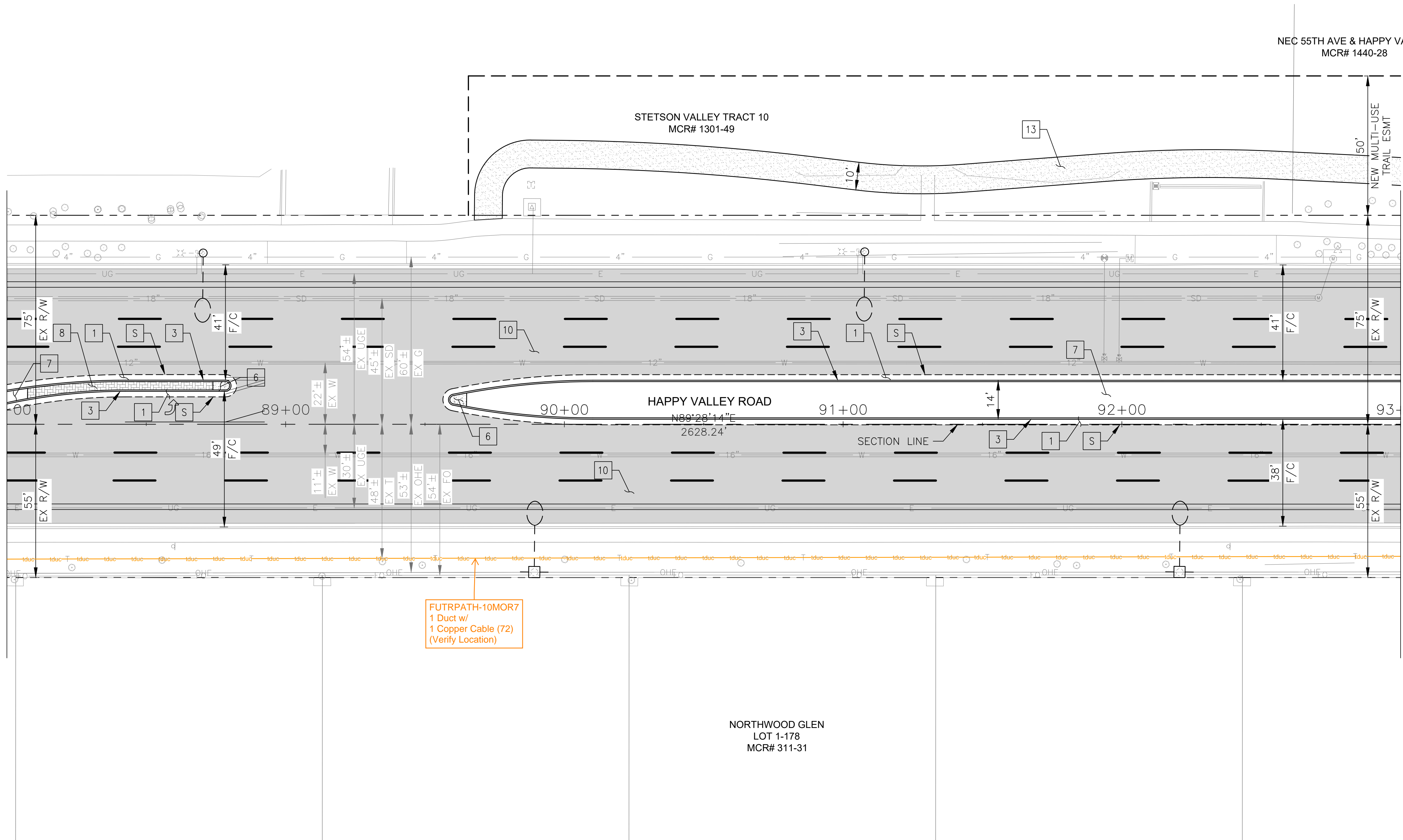
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CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	24	92	
DATE: 02/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

CONSTRUCTION NOTES		
NO	DESCRIPTION	UNIT QTY
PAVEMENT STRUCTURAL SECTION NO. 1		
	SUBGRADE PREPARATION	SY 738
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON 102
	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON 205
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON 0.18
3	CONCRETE SINGLE CURB MAG STD DET 222, TYPE A	LF 819
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF 38
7	DECOMPOSED GRANITE, 3/4" MINUS FOR GENERAL LANDSCAPE (GOLD)	SY 474
8	DECORATIVE BRICK PAVERS, MAG STD DET. 225	SF 207
10	MICROSEAL COAT	SY 4523
13	DECOMPOSED GRANITE, STABILIZED FOR MULTIPURPOSE TRAIL, 1/4" MINUS, 4" THICK	SF 3454

MATCHLINE STA 88+00 SEE SHEET 23

MATCHLINE STA 93+00 SEE SHEET 25



NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

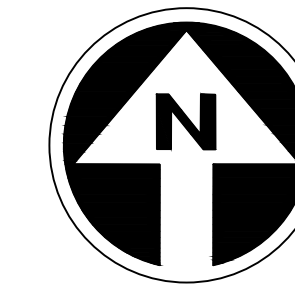
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ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.17
DATE: 02/20	DATE: 02/20	DATE: 02/20	SCALE: 1"=20' HORIZ.
			24 OF 92

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



PRELIMINARY
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Review
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CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	25	92	
DATE: 02/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

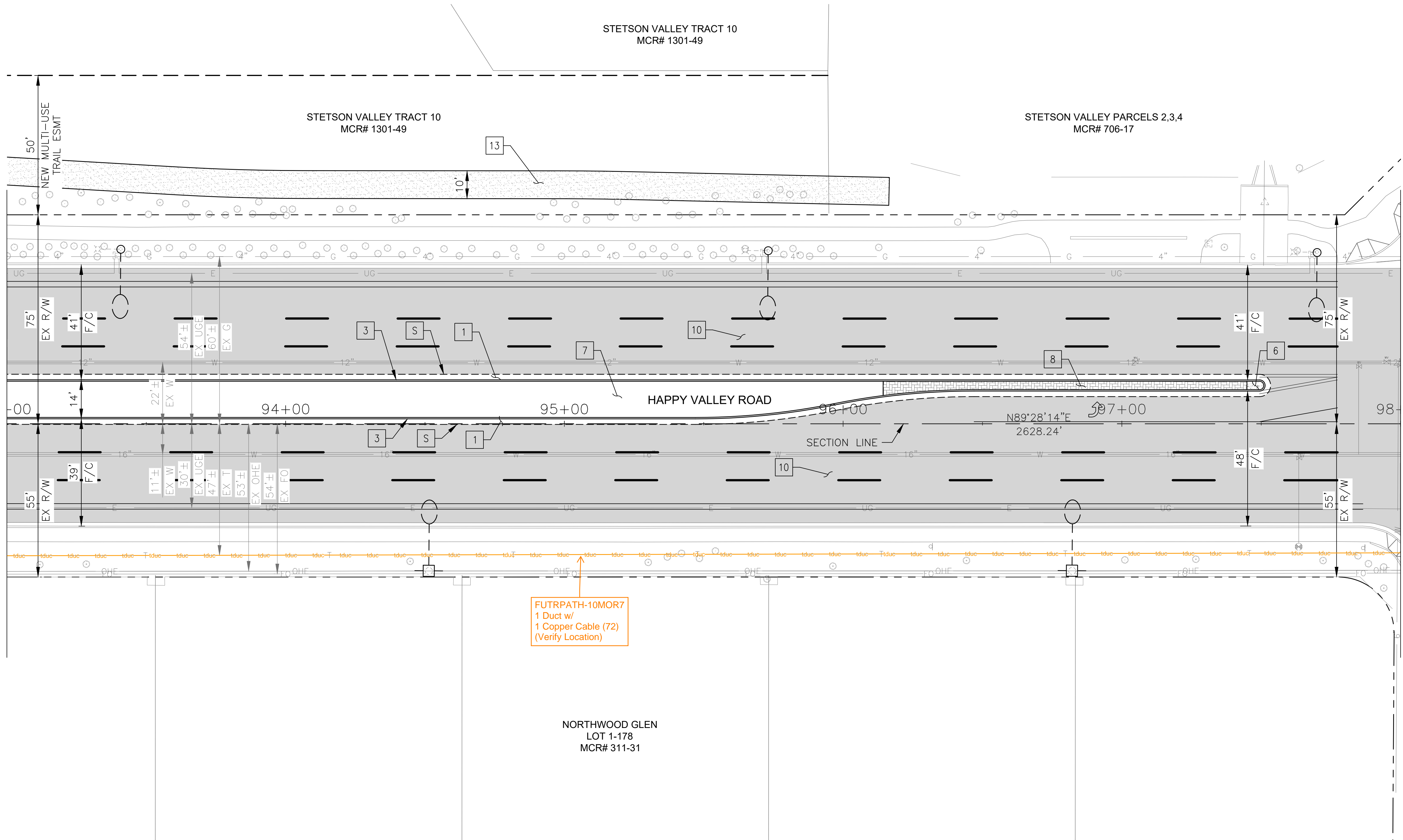
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NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE STA 93+00 SEE SHEET 24

MATCHLINE STA 98+00 SEE SHEET 26



CONSTRUCTION NOTES			
NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	732
	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	101
	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	204
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.18
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF	890
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	24
7	DECOMPOSED GRANITE. 3/4" MINUS FOR GENERAL LANDSCAPE (GOLD)	SY	432
8	DECORATIVE BRICK PAVERS, MAG STD DET. 225	SF	547
10	MICROSEAL COAT	SY	4542
13	DECOMPOSED GRANITE, STABILIZED FOR MULTIPURPOSE TRAIL, 1/4" MINUS, 4" THICK	SF	3166

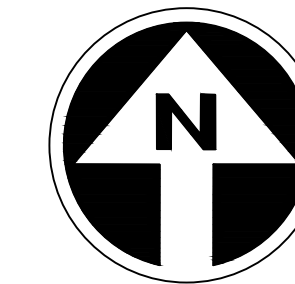
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.18
DATE: 02/20	DATE: 02/20	DATE: 02/20	SCALE: 1"=20' HORIZ.
			25 OF 92

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



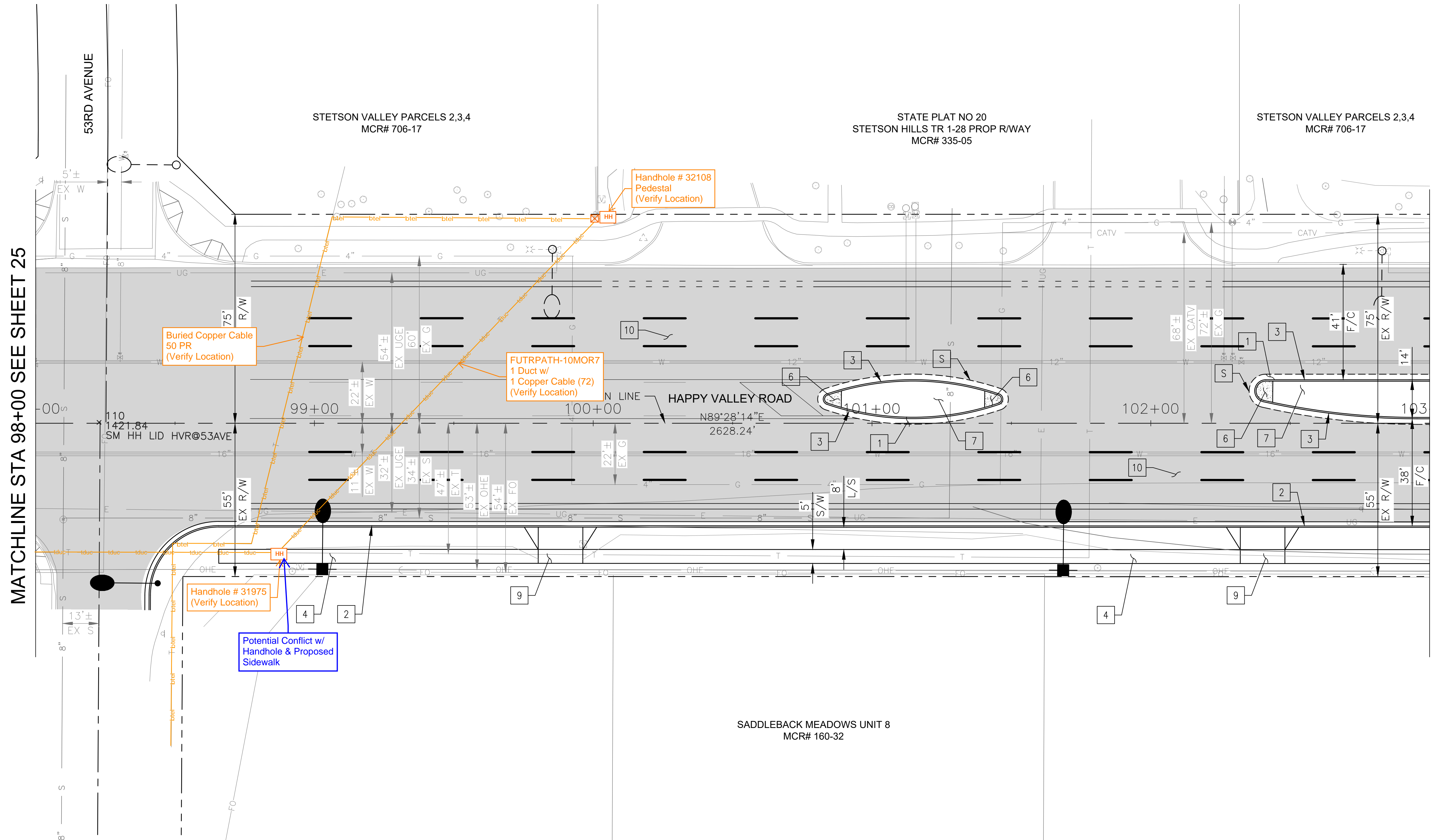
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Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	26	92	
DATE: 02/20		AZTEC			
DRAWN: RJR	DESIGN: RJR	CHECKED: G.G.			

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



CONSTRUCTION NOTES			
NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	672
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	93
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	187
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.17
2	CONCRETE CURB & GUTTER, MAG STD DET 220-1, TYPE A, H=6"	LF	480
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF	217
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	2016
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	86
7	DECOMPOSED GRANITE. 3/4" MINUS FOR GENERAL LANDSCAPE (GOLD)	SY	132
9	DRIVEWAY ENTRANCE - TYPE II COP STD DET P1255-2	SF	496
10	MICROSEAL COAT	SY	5036

MATCHLINE STA 98+00 SEE SHEET 25

MATCH LINE STA 103+00 SEE SHEET 27

"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."

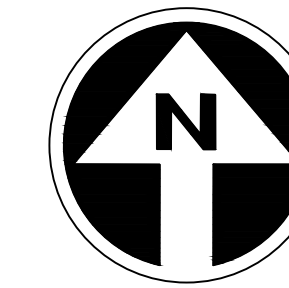
ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.19
DATE: 02/20	DATE: 02/20	DATE: 02/20	SCALE: 1"=20' HORIZ.
			26 OF 92

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

CenturyLink has no facilities this area



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F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	27	92	
DATE: 02/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

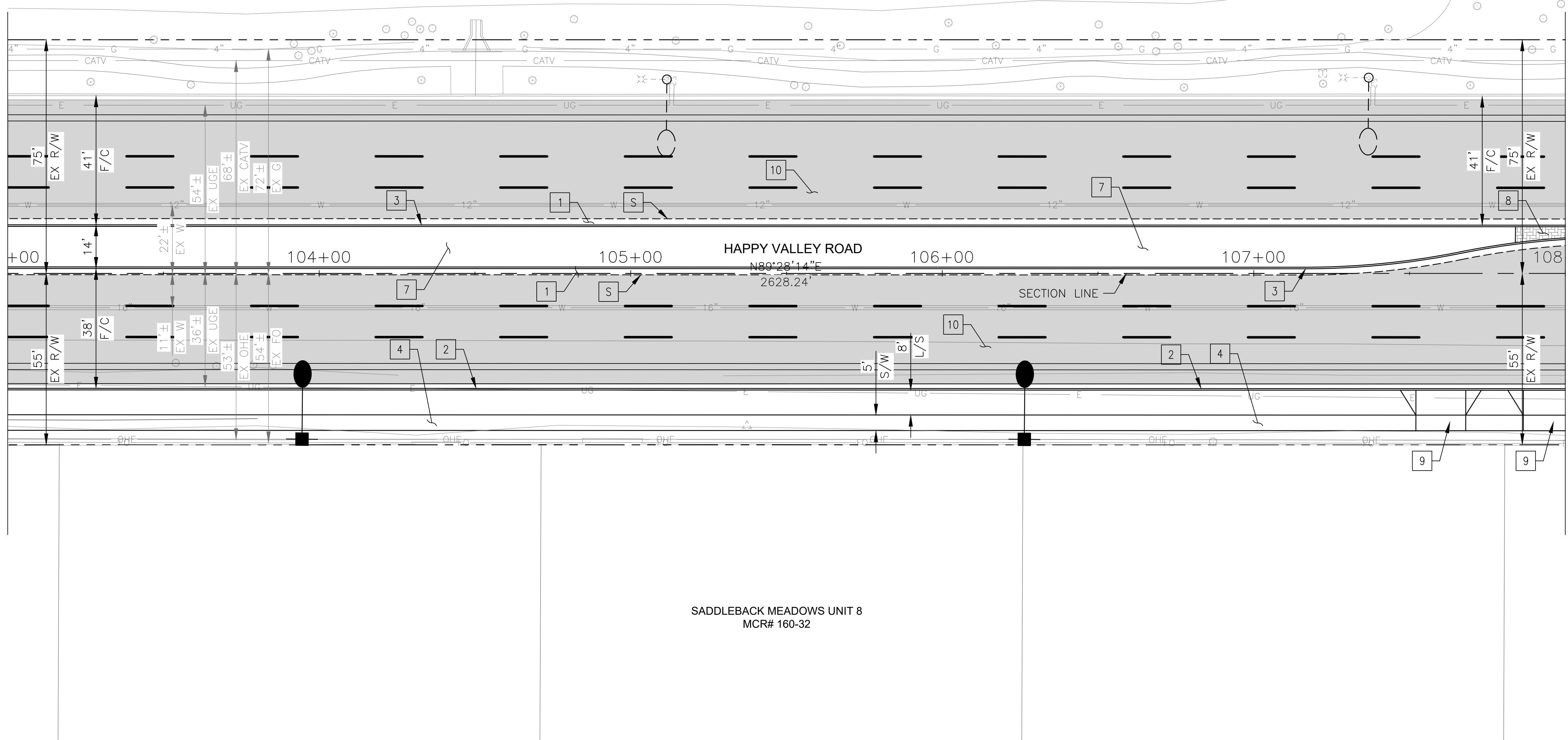
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NO.	DESCRIPTION	REV BY	CHK BY	DATE

CONSTRUCTION NOTES			
NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	1700
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	235
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	473
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.43
2	CONCRETE CURB & GUTTER, MAG STD DET 220-1, TYPE A, H=6"	LF	500
3	CONCRETE SINGLE CURB MAG STD DET 222, TYPE A	LF	1001
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	2353
7	DECOMPOSED GRANITE. 3/4" MINUS FOR GENERAL LANDSCAPE (GOLD)	SY	677
8	DECORATIVE BRICK PAVERS, MAG STD DET. 225	SF	85
9	DRIVEWAY ENTRANCE - TYPE II COP STD DET P1255-2	SF	441
10	MICROSEAL COAT	SY	4323

MATCHLINE STA 103+00 SEE SHEET 26



MATCHLINE STA 108+00 SEE SHEET 28

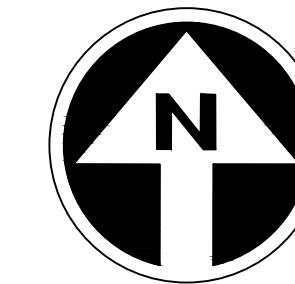
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.20
DATE: 02/20	DATE: 02/20	DATE: 02/20	27 OF 92
SCALE: 1"=20' HORIZ.			

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



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OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	28	92	
DATE: 02/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

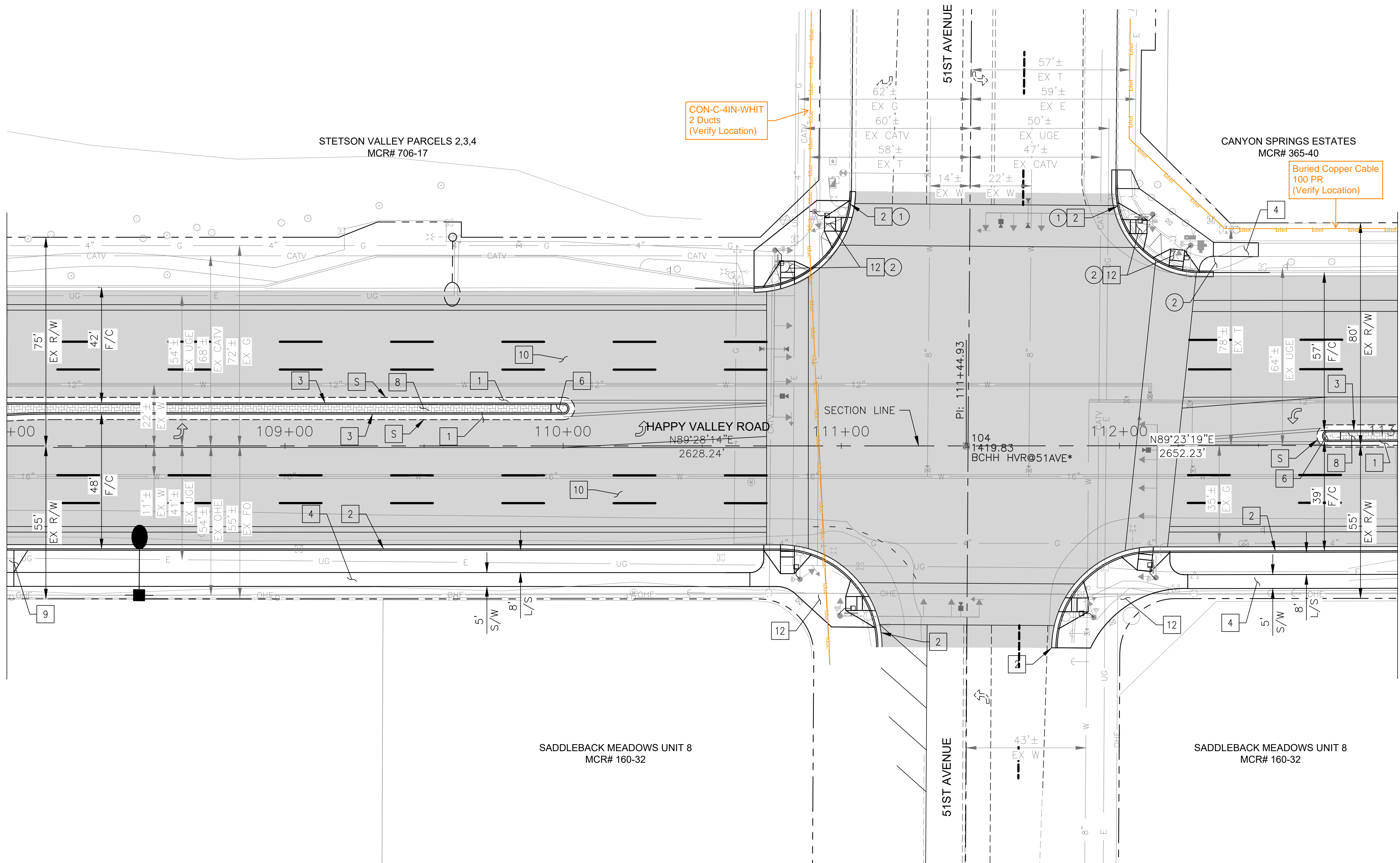
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE STA 108+00 SEE SHEET 27

MATCHLINE STA 113+00 SEE SHEET 29



CONSTRUCTION NOTES		
NO	DESCRIPTION	UNIT QTY
PAVEMENT STRUCTURAL SECTION NO. 1		
1	SUBGRADE PREPARATION	SY 898
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON 124
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON 250
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON 0.22
2	CONCRETE CURB & GUTTER MAG STD DET 220, TYPE A, H=6"	LF 590
3	CONCRETE SINGLE CURB MAG STD DET 222, TYPE A	LF 432
4	CONCRETE SIDEWALK, COP STD DET P1230	SF 1824
6	MEDIAN NOSE TRANSITION, MAG STD DET 223	SF 34
8	DECORATIVE BRICK PAVERS MAG STD DET. 225	SF 1147
9	DRIVEWAY ENTRANCE - TYPE II COP STD DET P1255-2	SF 55
10	MICROSEAL COAT	SY 5761
12	CONCRETE SIDEWALK RAMP, COP STD DET P1241-2	SF 2595

REMOVAL/RELOCATION		
NO	DESCRIPTION	UNIT QTY
1	REMOVE PCC SINGLE CURB, CURB & GUTTER	LF 88
2	REMOVE PCC SIDEWALK, DRIVEWAY VALLEY GUTTER & SLAB	SF 887

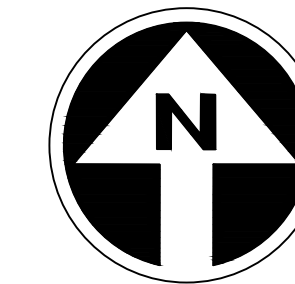
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.21
DATE: 02/20	DATE: 02/20	DATE: 02/20	28 OF 92

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



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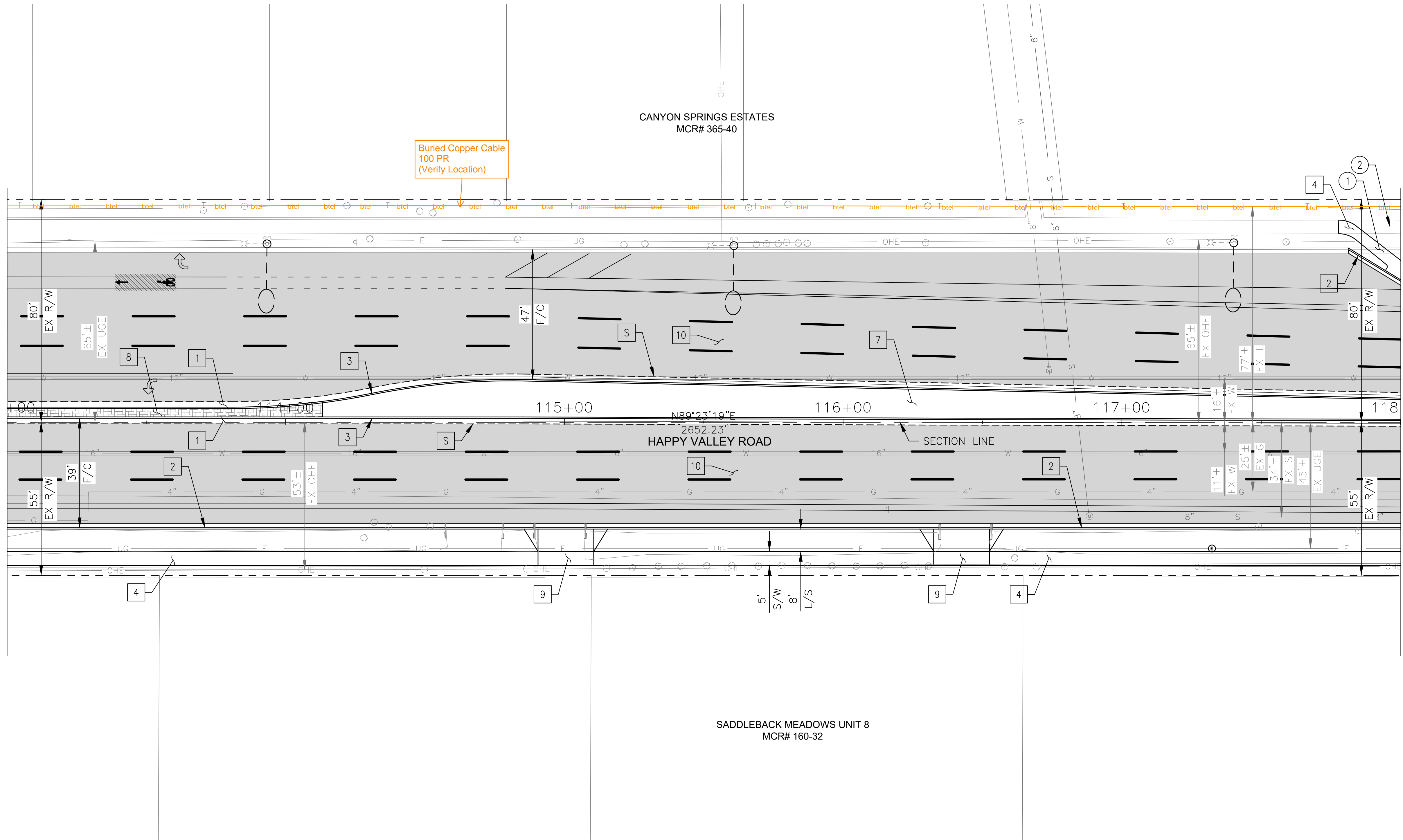
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	29	92	
DATE: 02/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE STA 113+00 SEE SHEET 28



MATCHLINE STA 118+00 SEE SHEET 30

CONSTRUCTION NOTES			
NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	1268
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	175
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	353
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.32
2	CONCRETE CURB & GUTTER, MAG STD DET 220-1, TYPE A, H=6"	LF	522
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF	1001
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	2429
7	DECOMPOSED GRANITE. 3/4" MINUS FOR GENERAL LANDSCAPE (GOLD)	SY	432
8	DECORATIVE BRICK PAVERS, MAG STD DET. 225	SF	477
9	DRIVEWAY ENTRANCE - TYPE II COP STD DET P1255-2	SF	600
10	MICROSEAL COAT	SY	4849

REMOVAL/RELOCATION			
NO	DESCRIPTION	UNIT	QTY
1	REMOVE PCC SINGLE CURB, CURB & GUTTER	LF	19
2	REMOVE PCC SIDEWALK, DRIVEWAY VALLEY GUTTER & SLAB	SF	256

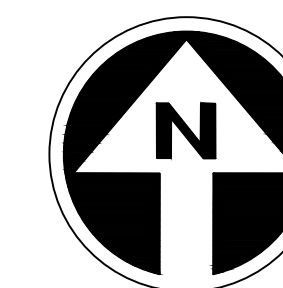
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ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.22
DATE: 02/20	DATE: 02/20	DATE: 02/20	29 OF 92
SCALE: 1"=20' HORIZ.			

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



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F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	30	92	
DATE: 02/20		AZTEC			
DRAWN: RJR	DESIGN: RJR	CHECKED: G.G.			

CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
	SUBGRADE PREPARATION	SY	1806
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	249
	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	502
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.45
2	CONCRETE CURB & GUTTER, MAG STD DET 220-1, TYPE A, H=6"	LF	1001
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF	876
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	4418
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	20
7	DECOMPOSED GRANITE. 3/4" MINUS FOR GENERAL LANDSCAPE (GOLD)	SY	342
9	DRIVEWAY ENTRANCE - TYPE II COP STD DET P1255-2	SF	300
10	MICROSEAL COAT	SY	4151

REMOVAL/RELOCATION

NO	DESCRIPTION	UNIT	QTY
1	REMOVE PCC SINGLE CURB, CURB & GUTTER	LF	6
2	REMOVE PCC SIDEWALK, DRIVEWAY VALLEY GUTTER & SLAB	SF	143

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ROADWAY PLAN

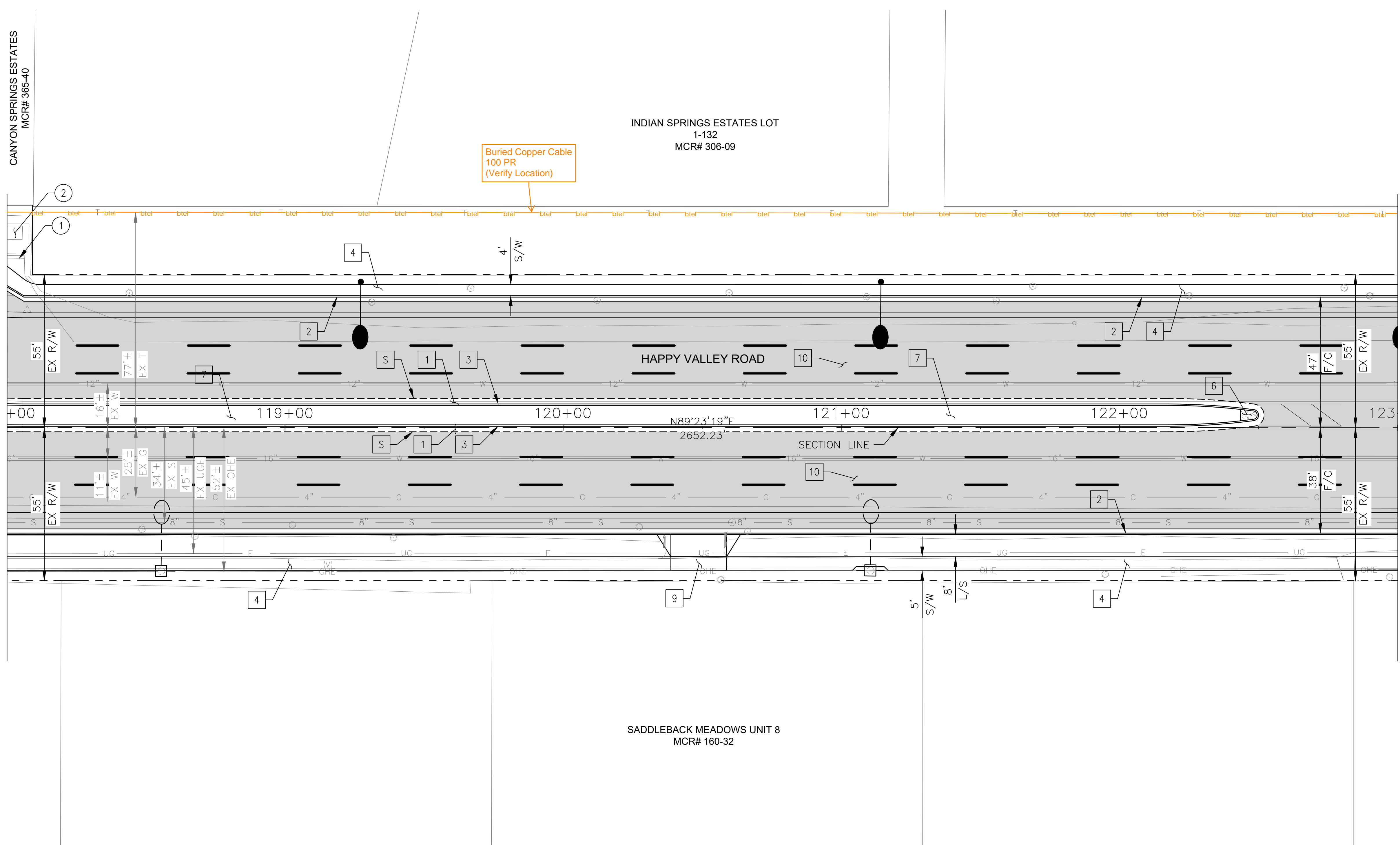
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.23
DATE: 02/20	DATE: 02/20	DATE: 02/20	SCALE: 1"=20' HORIZ.
			30 OF 92

MATCHLINE STA 118+00 SEE SHEET 29

MATCH LINE STA 123+00 SEE SHEET 31

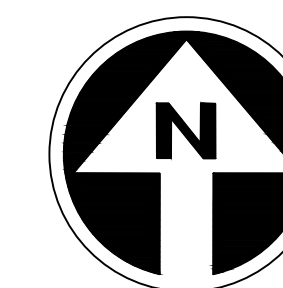


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NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

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



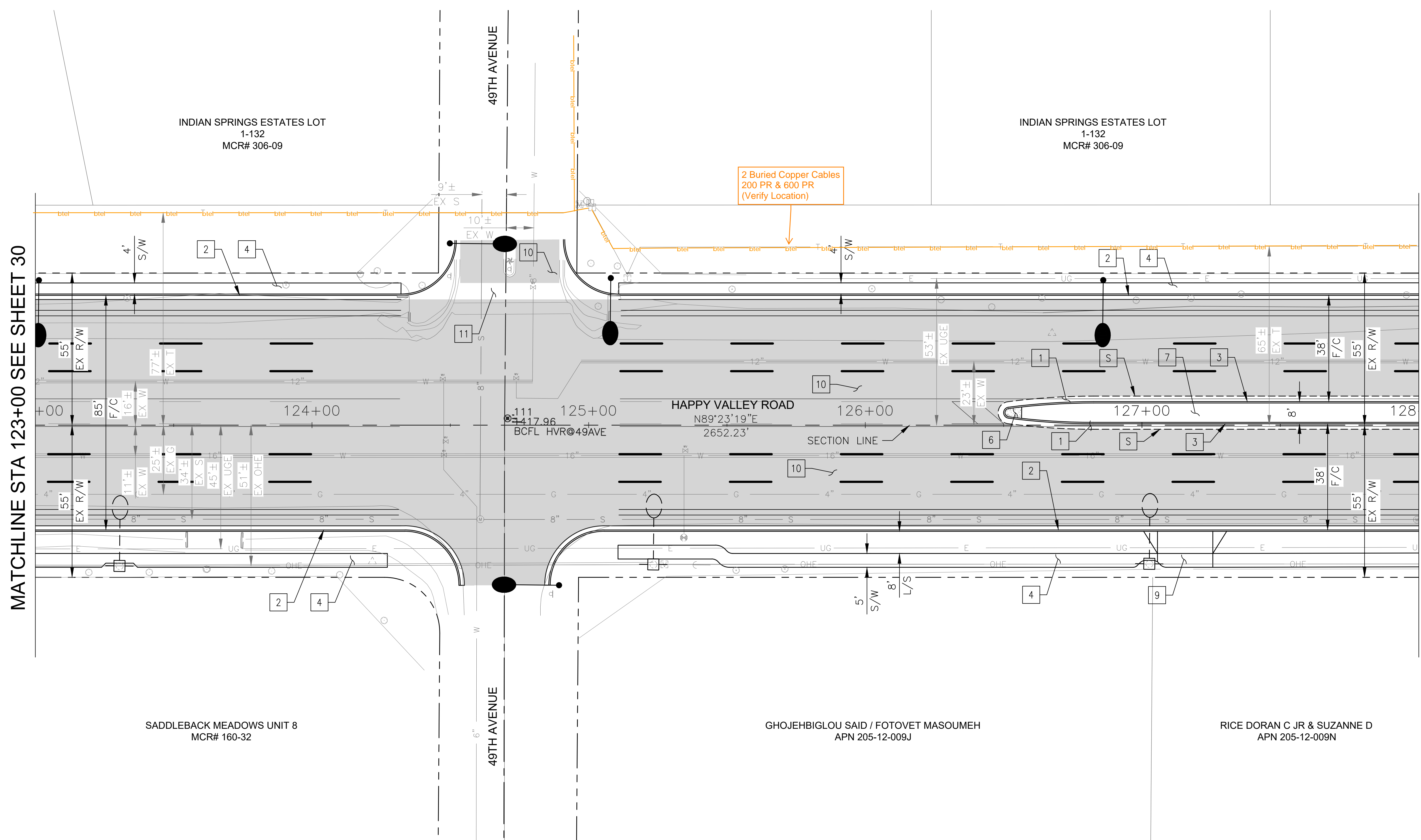
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F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	31	92	
DATE: 02/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		
CONSTRUCTION NOTES					
NO	DESCRIPTION	UNIT	QTY		

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



PAVEMENT STRUCTURAL SECTION NO. 1					
1	SUBGRADE PREPARATION	SY	1034		
	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	143		
	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	287		
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.26		
2	CONCRETE CURB & GUTTER, MAG STD DET 220-1, TYPE A, H=6"	LF	975		
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF	287		
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	2369		
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	20		
7	DECOMPOSED GRANITE. 3/4" MINUS FOR GENERAL LANDSCAPE (GOLD)	SY	109		
9	DRIVEWAY ENTRANCE - TYPE II COP STD DET P1255-2	SF	300		
10	MICROSEAL COAT	SY	4562		
11	CONCRETE VALLEY GUTTER/APRON MAG STD DET 240	SF	510		

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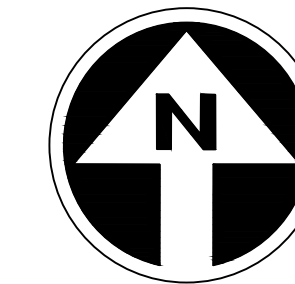
ROADWAY PLAN

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.24
DATE: 02/20	DATE: 02/20	DATE: 02/20	31 OF 92
SCALE: 1"=20' HORIZ.			

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



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CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	32	92	
DATE: 02/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

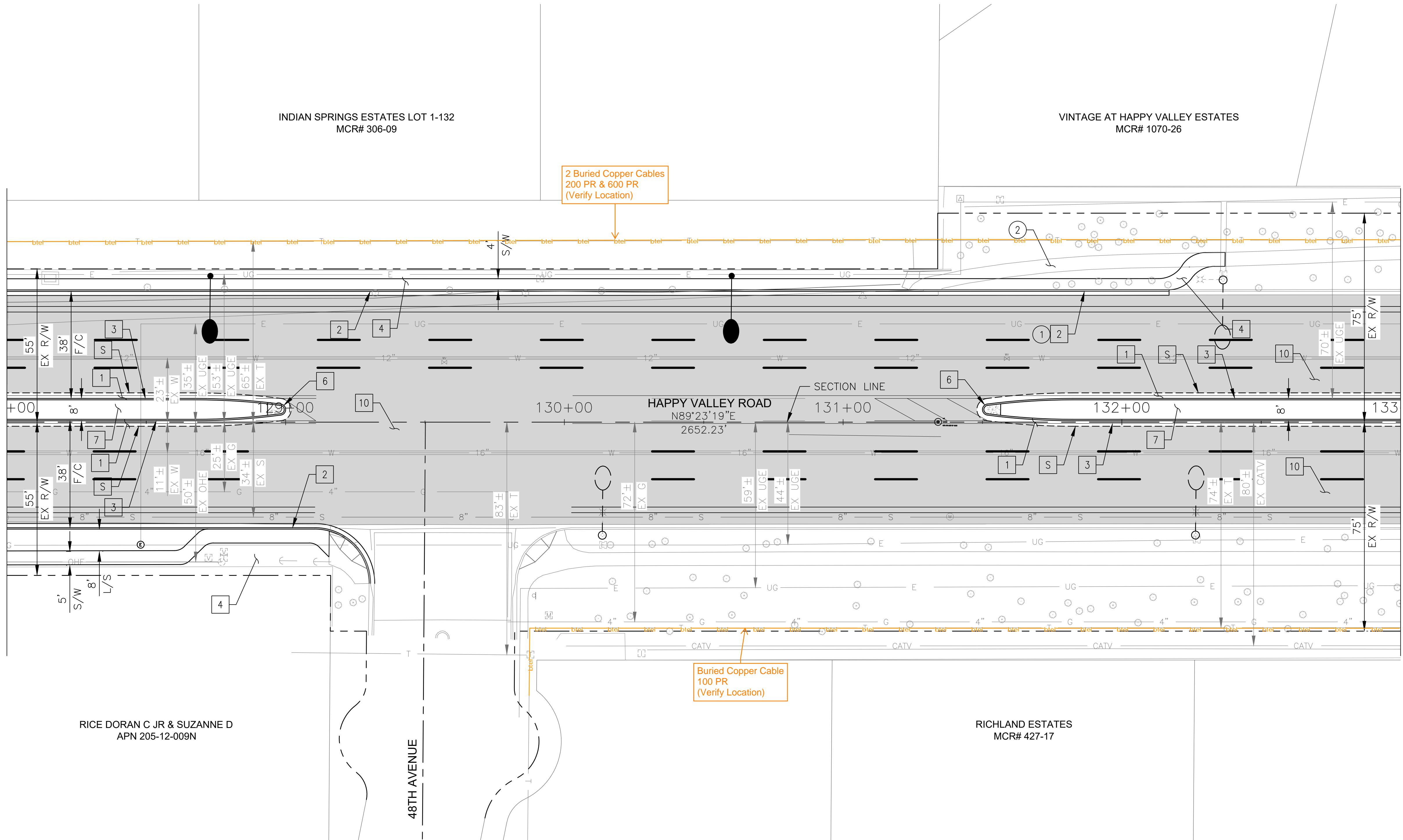
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NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE STA 128+00 SEE SHEET 31

MATCHLINE STA 133+00 SEE SHEET 33



CONSTRUCTION NOTES			
NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	475
	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	66
	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	132
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.12
2	CONCRETE CURB & GUTTER, MAG STD DET 220-1, TYPE A, H=6"	LF	476
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF	474
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	2369
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	40
7	DECOMPOSED GRANITE. 3/4" MINUS FOR GENERAL LANDSCAPE (GOLD)	SY	179
10	MICROSEAL COAT	SY	4347

REMOVAL/RELOCATION			
NO	DESCRIPTION	UNIT	QTY
1	REMOVE PCC SINGLE CURB, CURB & GUTTER	LF	88
2	REMOVE PCC SIDEWALK, DRIVEWAY VALLEY GUTTER & SLAB	SF	547

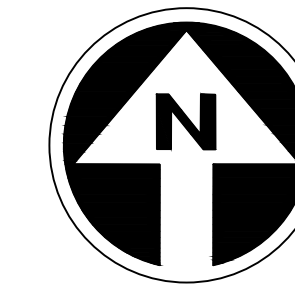
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ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.25
DATE: 02/20	DATE: 02/20	DATE: 02/20	SCALE: 1"=20' HORIZ.
			32 OF 92

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



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OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	33	92	
DATE: 02/20		AZTEC			
DRAWN: RJR	DESIGN: RJR	CHECKED: G.G.			

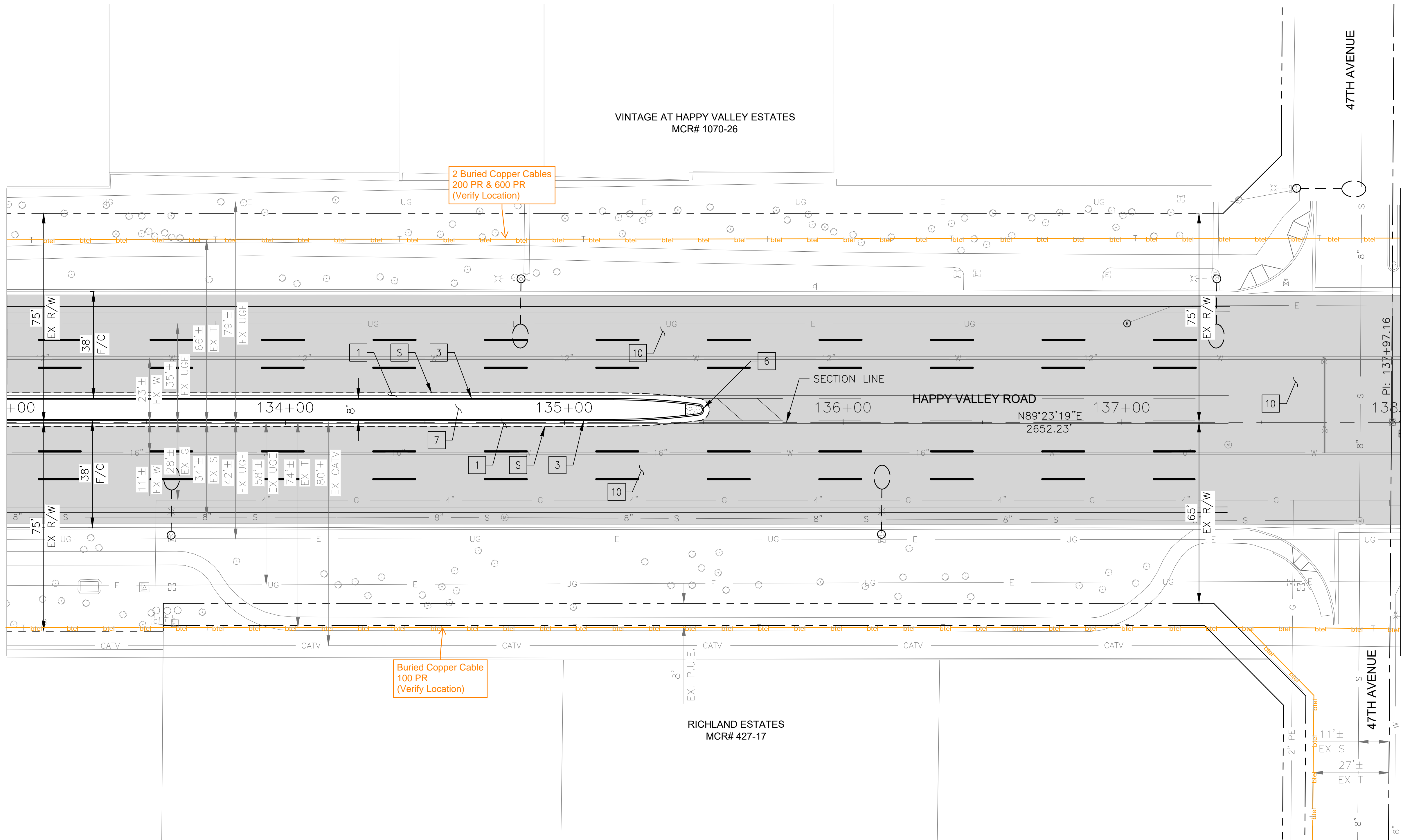
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE STA 133+00 SEE SHEET 32

MATCHLINE STA 138+00 SEE SHEET 34



CONSTRUCTION NOTES		
NO	DESCRIPTION	UNIT QTY
PAVEMENT STRUCTURAL SECTION NO. 1		
1	SUBGRADE PREPARATION	SY 329
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON 45
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON 92
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON 0.08
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF 487
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF 20
7	DECOMPOSED GRANITE. 3/4" MINUS FOR GENERAL LANDSCAPE (GOLD)	SY 187
10	MICROSEAL COAT	SY 4345

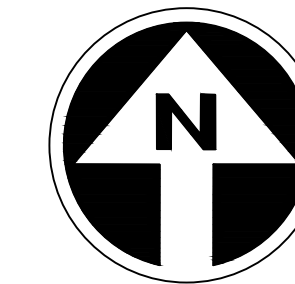
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ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.26
DATE: 02/20	DATE: 02/20	DATE: 02/20	SCALE: 1"=20' HORIZ.
			33 OF 92

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



PRELIMINARY
30%
Review
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CONSTRUCTION
OR RECORDING

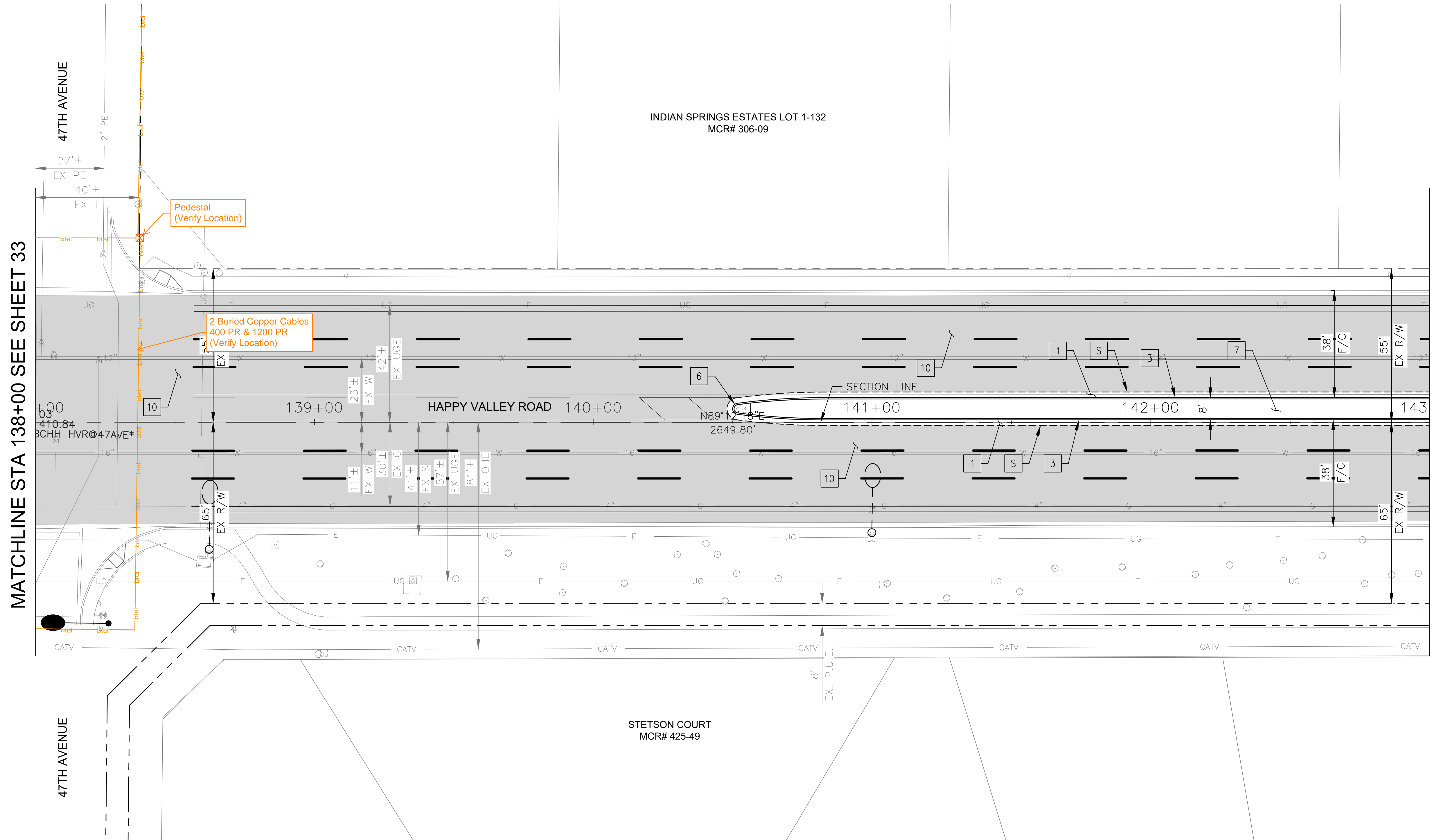
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	34	92	
DATE: 02/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

CONSTRUCTION NOTES			
NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	329
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	45
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	92
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.08
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF	487
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	20
7	DECOMPOSED GRANITE, 3/4" MINUS FOR GENERAL LANDSCAPE (GOLD)	SY	187
10	MICROSEAL COAT	SY	4308



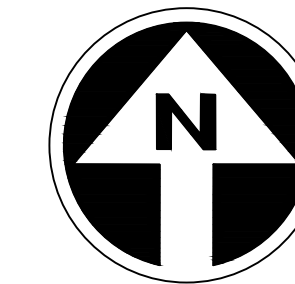
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.27
DATE: 02/20	DATE: 02/20	DATE: 02/20	SCALE: 1"=20' HORIZ.
			34 OF 92

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



PRELIMINARY
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	35	92	
DATE: 02/20		AZTEC			
DRAWN: RJR	DESIGN: RJR	CHECKED: G.G.			

NO.	REVISION BY	DESCRIPTION	DATE

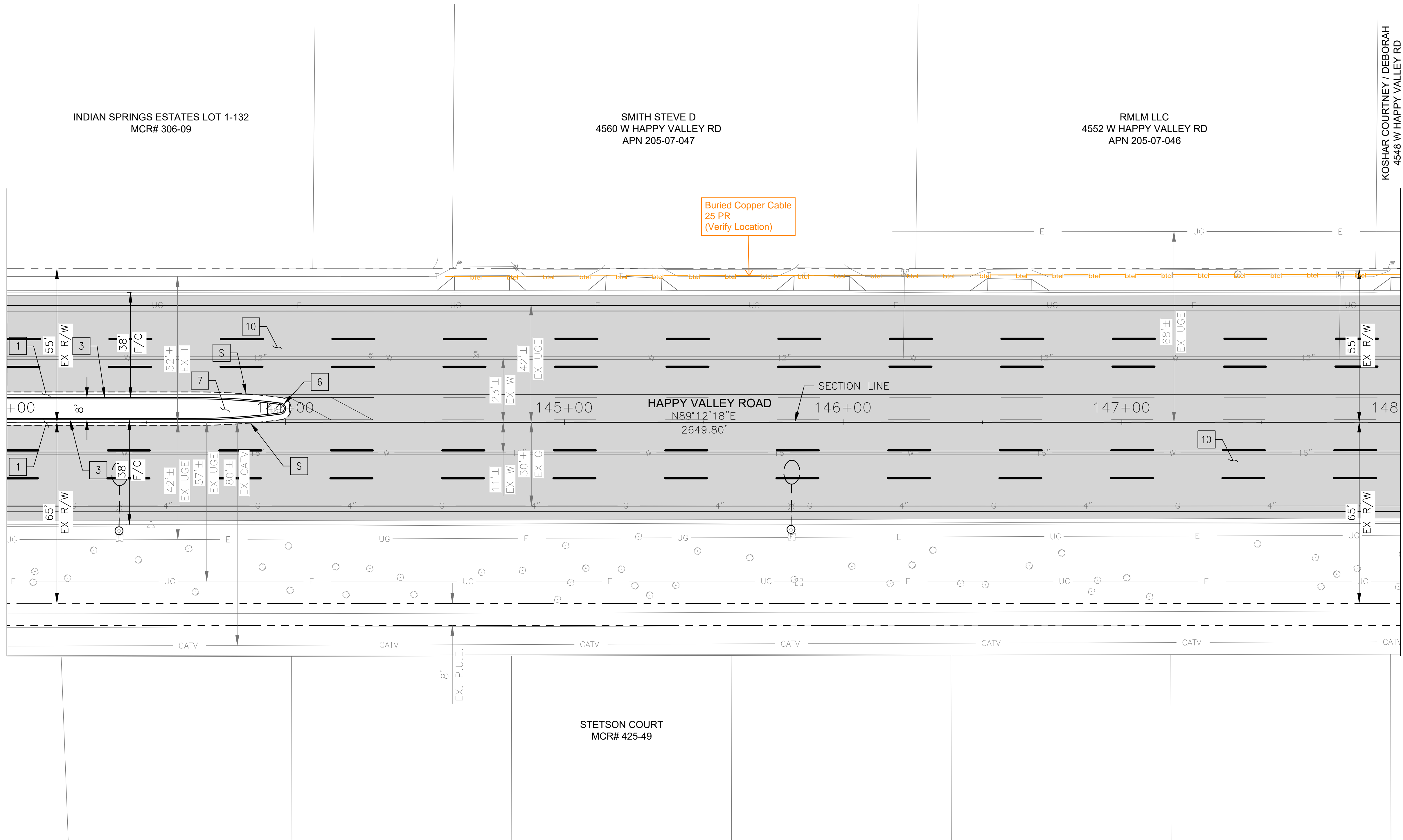
NO.	REVISION BY	DESCRIPTION	DATE

NO.	REVISION BY	DESCRIPTION	DATE

CONSTRUCTION NOTES			
NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	129
	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	18
	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	36
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.03
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF	187
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	20
7	DECOMPOSED GRANITE. 3/4" MINUS FOR GENERAL LANDSCAPE (GOLD)	SY	70
10	MICROSEAL COAT	SY	4379

MATCHLINE STA 143+00 SEE SHEET 34

MATCHLINE STA 148+00 SEE SHEET 36



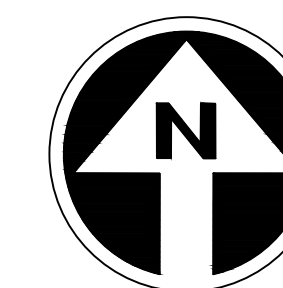
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.28
DATE: 02/20	DATE: 02/20	DATE: 02/20	
SCALE: 1"=20' HORIZ.			35 OF 92

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



PRELIMINARY
30%
Review
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CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	36	92	
DATE: 02/20		AZTEC			
DRAWN: RJR	DESIGN: RJR	CHECKED: G.G.			
CONSTRUCTION NOTES					
NO	DESCRIPTION	UNIT	QTY		
PAVEMENT STRUCTURAL SECTION NO. 1					
10	MICROSEAL COAT	SY	4404		

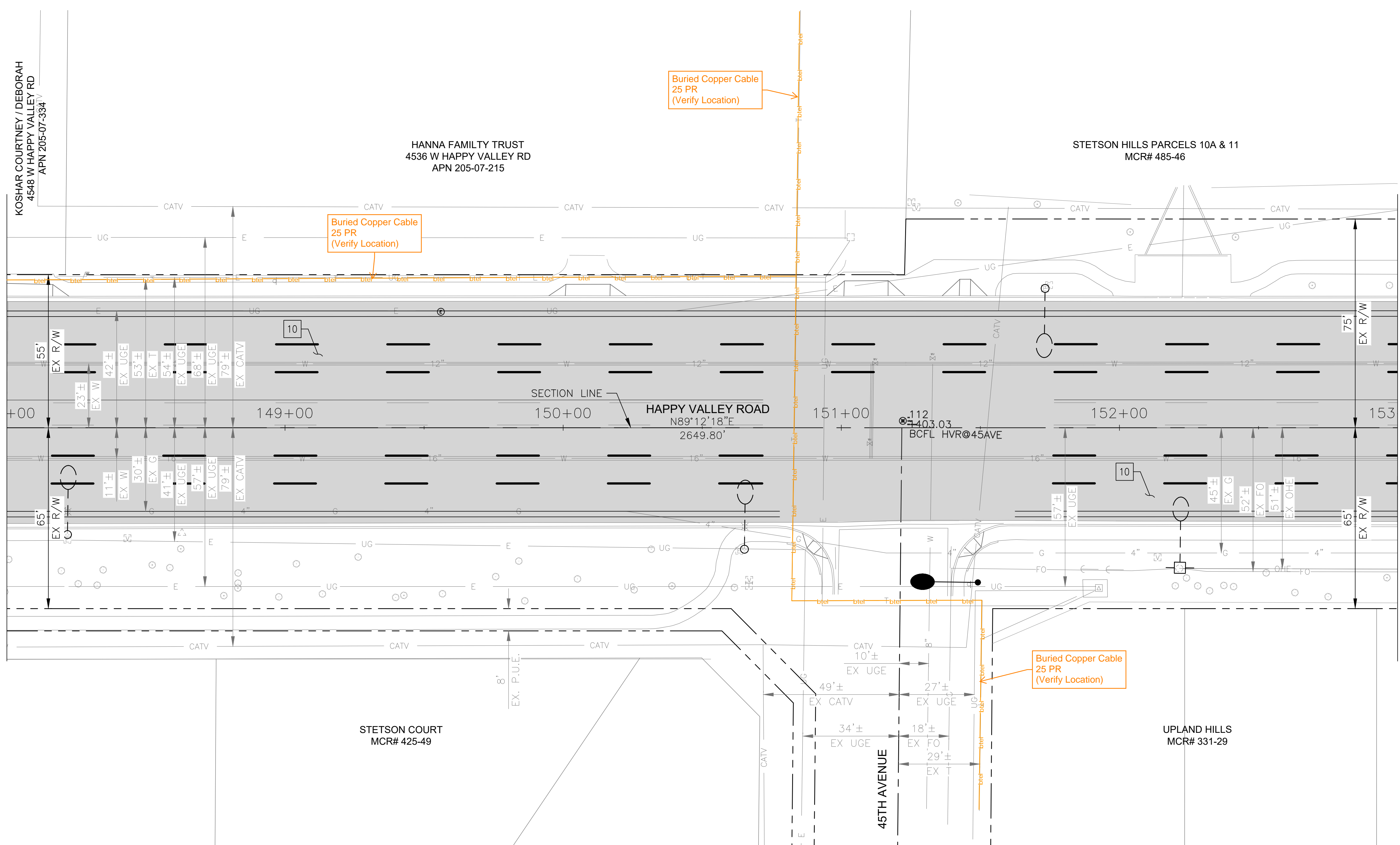
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE STA 148+00 SEE SHEET 35

MATCH LINE STA 153+00 SEE SHEET 37



"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."

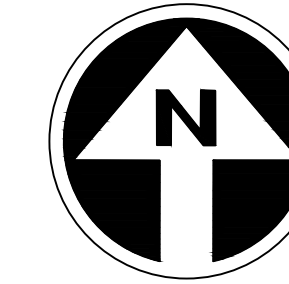
ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.29
DATE: 02/20	DATE: 02/20	DATE: 02/20	
SCALE: 1"=20' HORIZ.			36 OF 92

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

CenturyLink has no facilities this area



PRELIMINARY
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	37	92	
DATE: 02/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

NO.	DESCRIPTION	REV BY	CHK BY	DATE

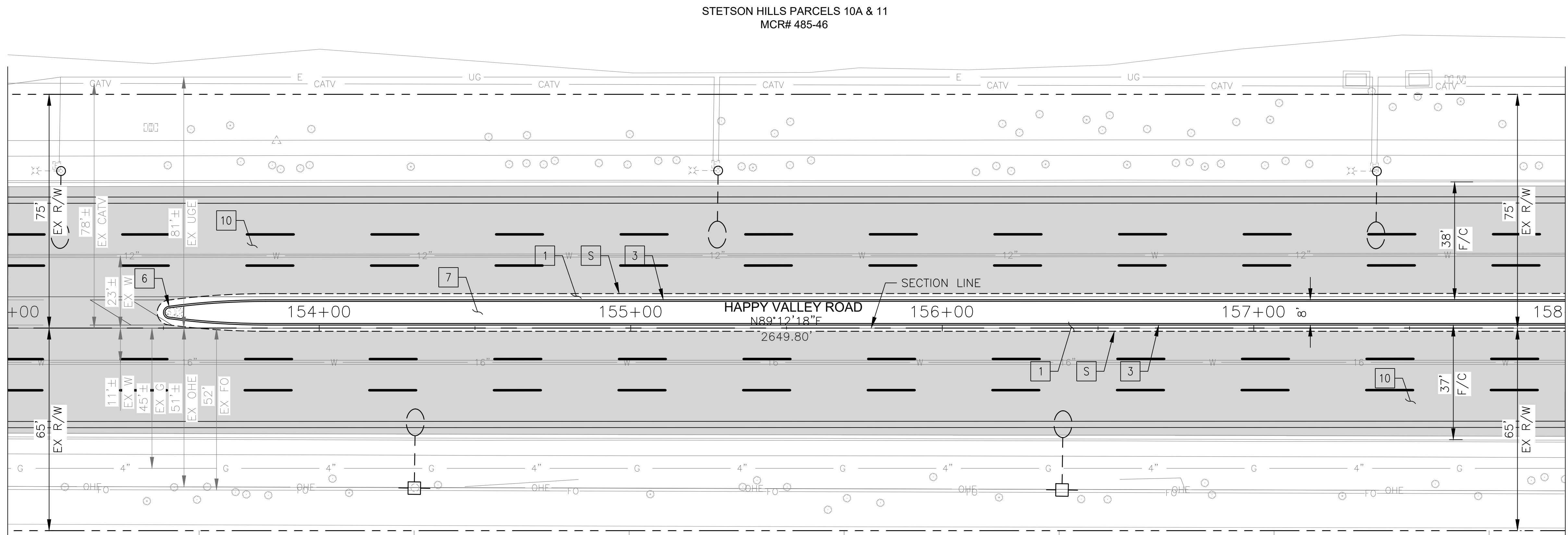
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

CONSTRUCTION NOTES			
NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	601
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	83
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	167
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.15
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF	887
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	20
7	DECOMPOSED GRANITE, 3/4" MINUS FOR GENERAL LANDSCAPE (GOLD)	SY	348
10	MICROSEAL COAT	SY	4027

MATCHLINE STA 153+00 SEE SHEET 36

MATCHLINE STA 158+00 SEE SHEET 38



STETSON HILLS PARCELS 10A & 11
MCR# 485-46

UPLAND HILLS
MCR# 331-29

"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."

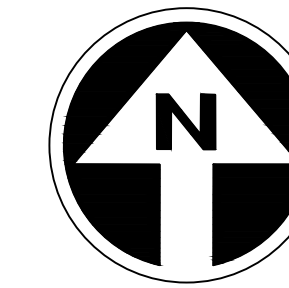
ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.30
DATE: 02/20	DATE: 02/20	DATE: 02/20	SCALE: 1"=20' HORIZ.
			37 OF 92

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

CenturyLink has no facilities this area



PRELIMINARY
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	38	92	
DATE: 02/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

NO.	DESCRIPTION	REV BY	CHK BY	DATE

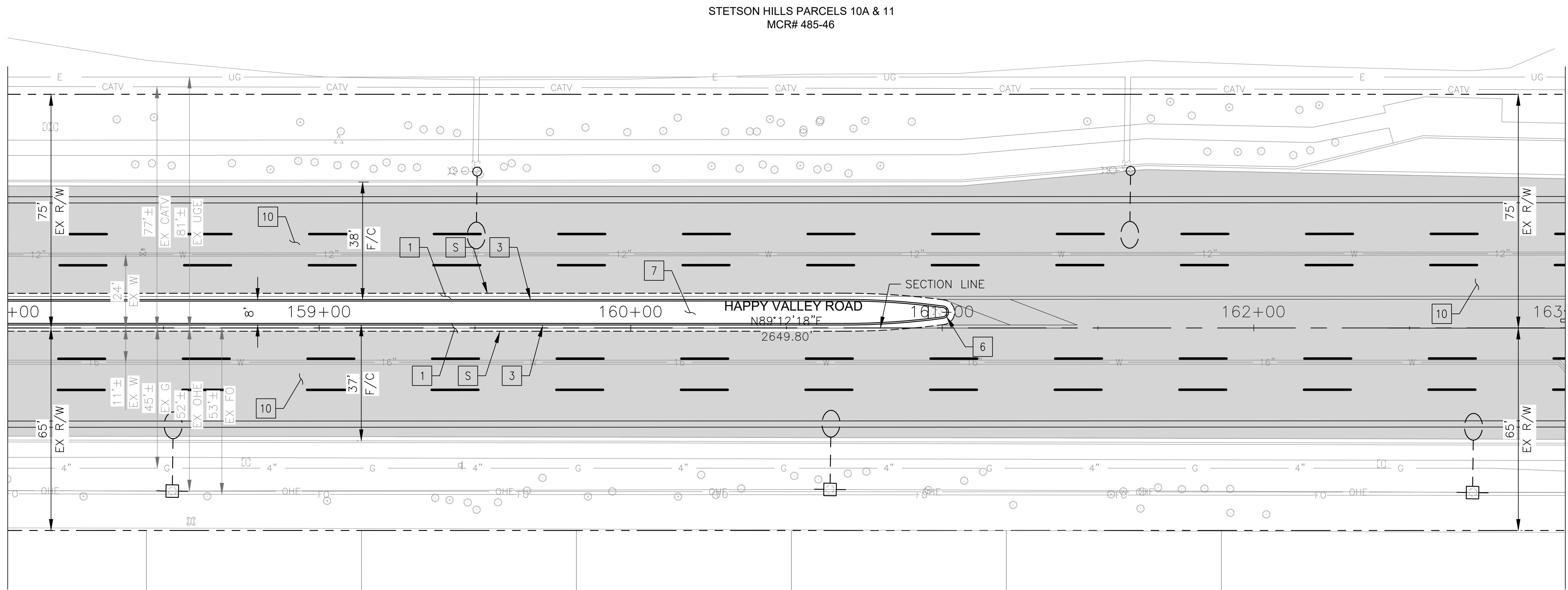
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

CONSTRUCTION NOTES			
NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	404
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	56
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	112
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.10
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF	591
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	20
7	DECOMPOSED GRANITE. 3/4" MINUS FOR GENERAL LANDSCAPE (GOLD)	SY	233
10	MICROSEAL COAT	SY	4297

MATCHLINE STA 158+00 SEE SHEET 37

MATCH LINE STA 163+00 SEE SHEET 39



STETSON HILLS PARCELS 10A & 11
MCR# 485-46

UPLAND HILLS
MCR# 331-29

"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."

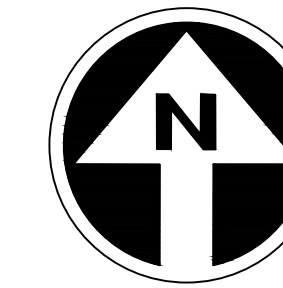
ROADWAY PLAN

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.31
DATE: 02/20	DATE: 02/20	DATE: 02/20	
SCALE: 1"=20' HORIZ.			38 OF 92

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



PRELIMINARY
 30%
 Review
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 CONSTRUCTION
 OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	39	92	
DATE: 02/20		AZTEC			
DRAWN: RJR	DESIGN: RJR	CHECKED: G.G.			

NO.	DESCRIPTION	REV BY	CHK BY	DATE

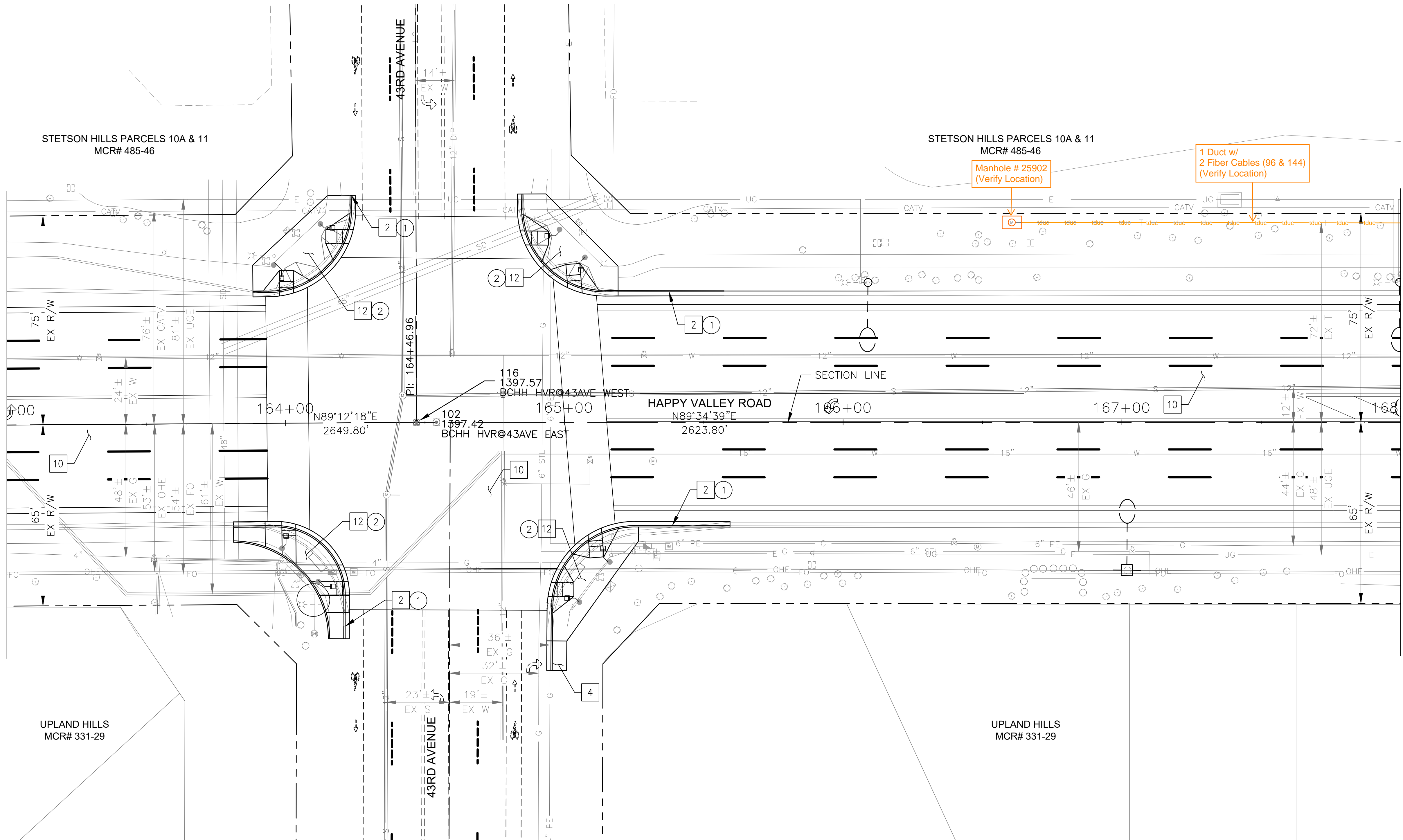
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

CONSTRUCTION NOTES				
NO	DESCRIPTION	UNIT	QTY	
2	CONCRETE CURB & GUTTER, MAG STD DET 220-1, TYPE A, H=6"	LF	325	
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	55	
10	MICROSEAL COAT	SY	5257	
12	CONCRETE SIDEWALK RAMP, COP STD DET P1241-2	SF	2606	

MATCHLINE STA 163+00 SEE SHEET 38

MATCH LINE STA 168+00 SEE SHEET 40



REMOVAL/RELOCATION				
NO	DESCRIPTION	UNIT	QTY	
1	REMOVE PCC SINGLE CURB, CURB & GUTTER	LF	231	
2	REMOVE PCC SIDEWALK, DRIVEWAY VALLEY GUTTER & SLAB	SF	188	

"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."

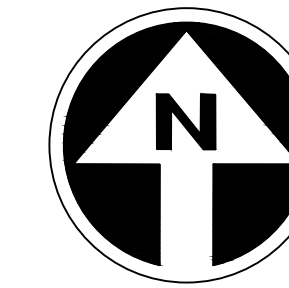
ROADWAY PLAN

CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
 35TH AVENUE TO 67TH AVENUE
 ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.32
DATE: 02/20	DATE: 02/20	DATE: 02/20	
SCALE: 1"=20' HORIZ.			39 OF 92

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



PRELIMINARY
30%
Review
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OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	40	92	
DATE: 02/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		
CONSTRUCTION NOTES					
NO	DESCRIPTION	UNIT	QTY		
PAVEMENT STRUCTURAL SECTION NO. 1					
	SUBGRADE PREPARATION	SY	670		
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	92		
	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	186		
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.17		
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF	988		
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	20		
7	DECOMPOSED GRANITE. 3/4" MINUS FOR GENERAL LANDSCAPE (GOLD)	SY	390		
10	MICROSEAL COAT	SY	4099		

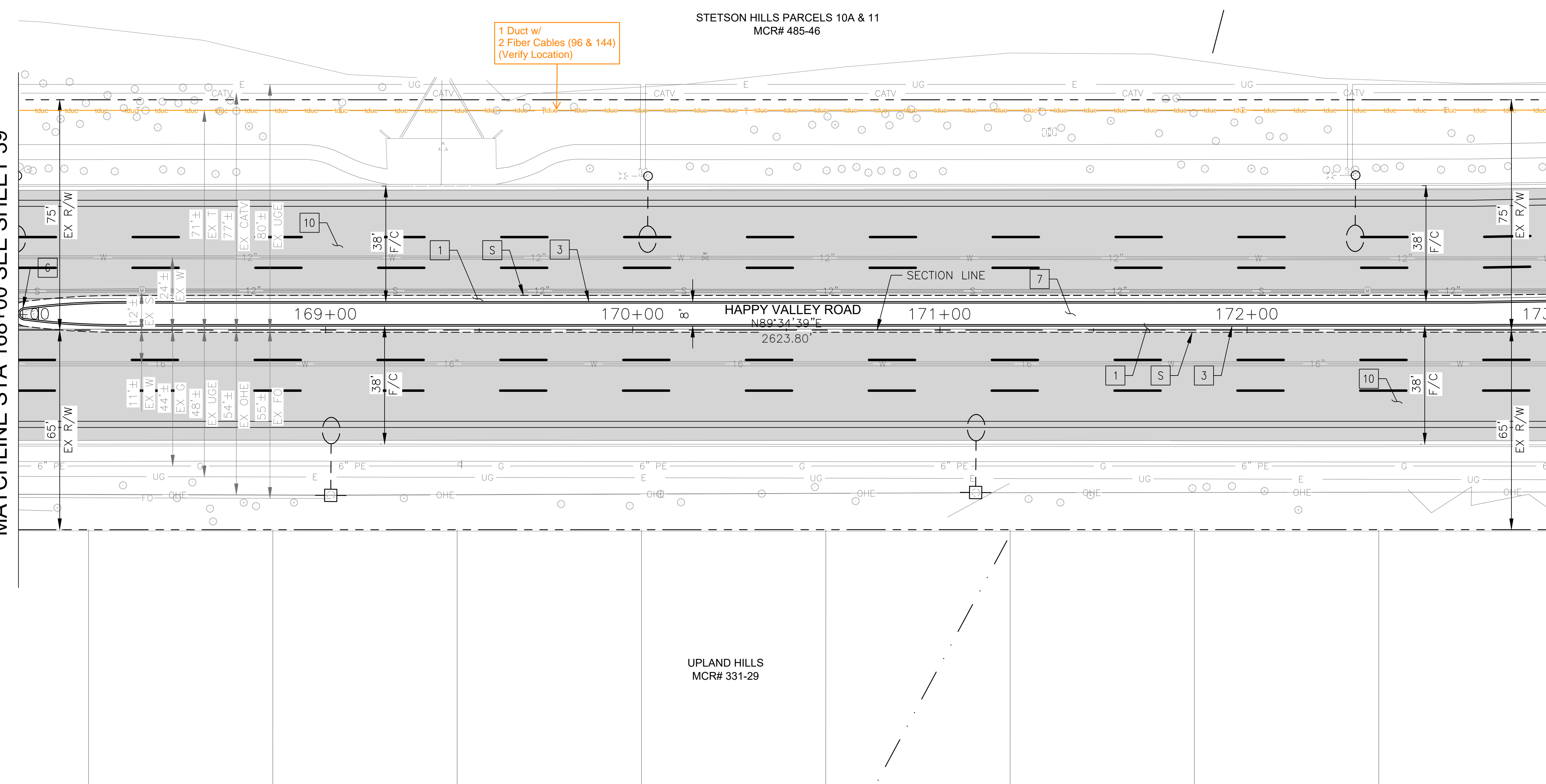
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE STA 168+00 SEE SHEET 39

MATCH LINE STA 173+00 SEE SHEET 41



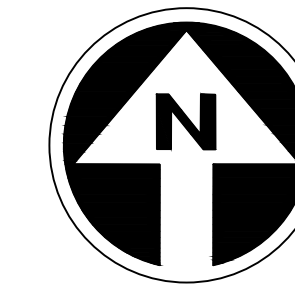
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.33
DATE: 02/20	DATE: 02/20	DATE: 02/20	SCALE: 1"=20' HORIZ.
			40 OF 92

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



PRELIMINARY
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	41	92	
DATE: 02/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

NO.	DESCRIPTION	REV BY	CHK BY	DATE

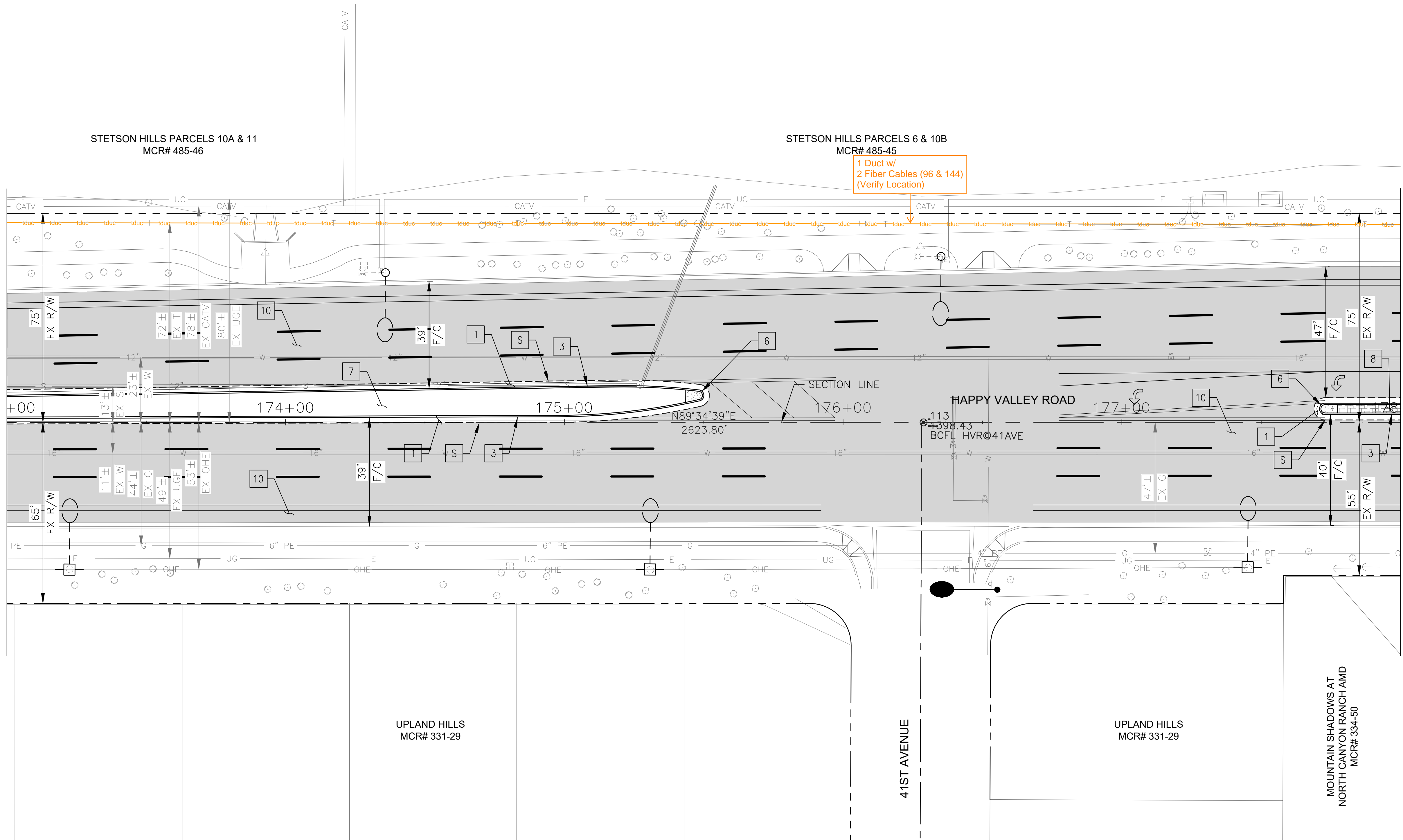
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

CONSTRUCTION NOTES			
NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	401
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	55
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	111
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.10
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF	533
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	38
7	DECOMPOSED GRANITE. 3/4" MINUS FOR GENERAL LANDSCAPE (GOLD)	SY	232
8	DECORATIVE BRICK PAVERS, MAG STD DET. 225	SF	68
10	MICROSEAL COAT	SY	4566

MATCHLINE STA 173+00 SEE SHEET 40

MATCHLINE STA 178+00 SEE SHEET 42



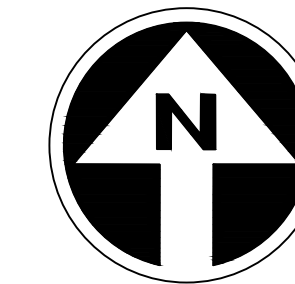
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.34
DATE: 02/20	DATE: 02/20	DATE: 02/20	41 OF 92
SCALE: 1"=20' HORIZ.			

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



PRELIMINARY
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	42	92	
DATE: 02/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

CONSTRUCTION NOTES		
NO	DESCRIPTION	UNIT
PAVEMENT STRUCTURAL SECTION NO. 1		
	SUBGRADE PREPARATION	SY 907
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON 125
	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON 252
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON 0.23
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF 988
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF 21
7	DECOMPOSED GRANITE. 3/4" MINUS FOR GENERAL LANDSCAPE (GOLD)	SY 605
8	DECORATIVE BRICK PAVERS, MAG STD DET. 225	SF 197
10	MICROSEAL COAT	SY 4406

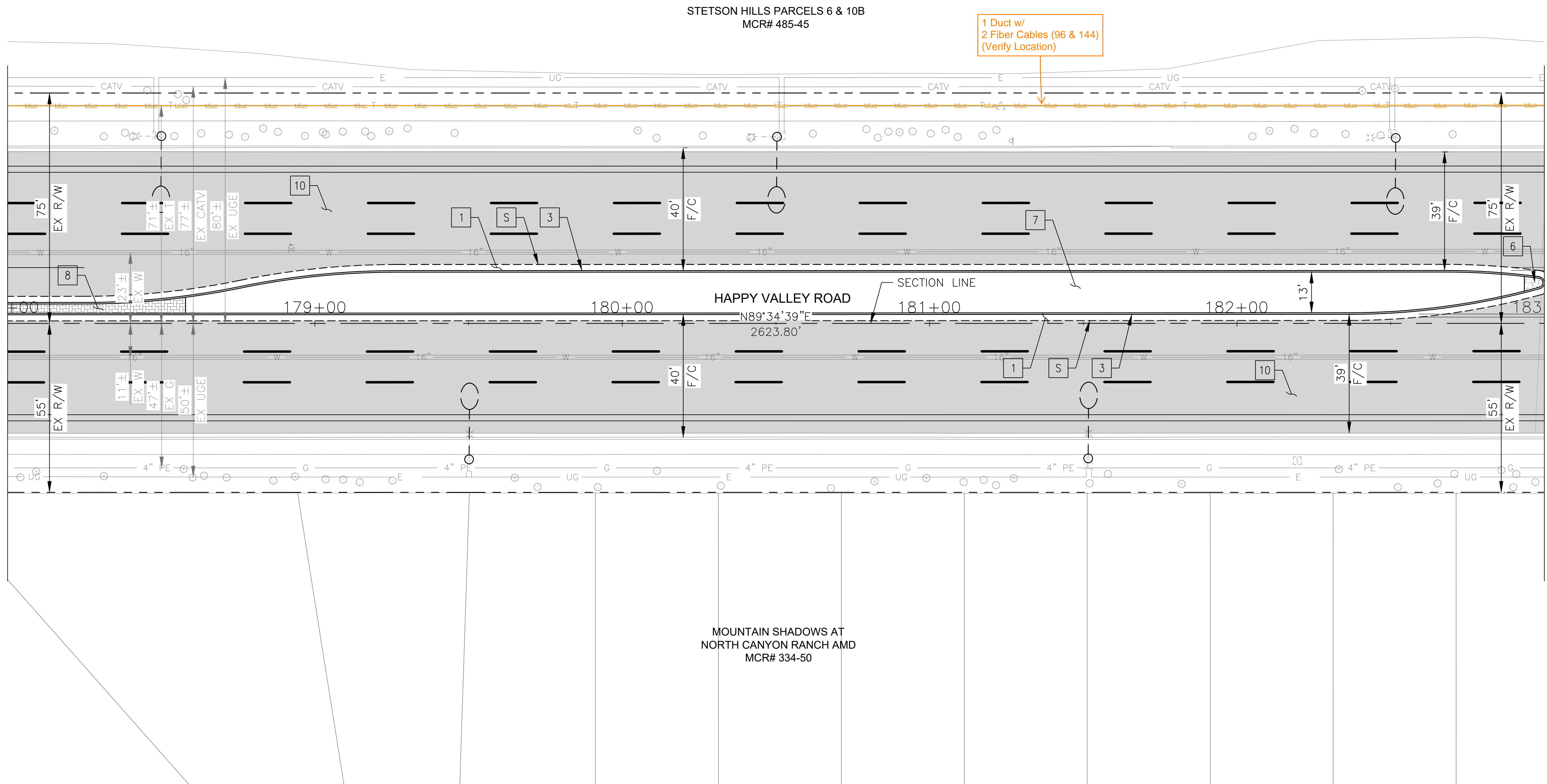
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE STA 178+00 SEE SHEET 41

MATCH LINE STA 183+00 SEE SHEET 43



STETSON HILLS PARCELS 6 & 10B
MCR# 485-45

1 Duct w/
2 Fiber Cables (96 & 144)
(Verify Location)

MOUNTAIN SHADOWS AT
NORTH CANYON RANCH AMD
MCR# 334-50

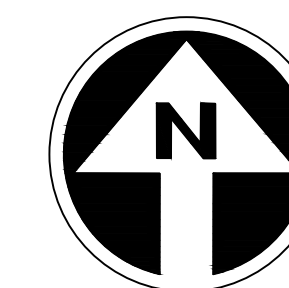
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.35
DATE: 02/20	DATE: 02/20	DATE: 02/20	SCALE: 1"=20' HORIZ.
			42 OF 92

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



PRELIMINARY
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	43	92	
DATE: 02/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

NO.	DESCRIPTION	REV BY	CHK BY	DATE

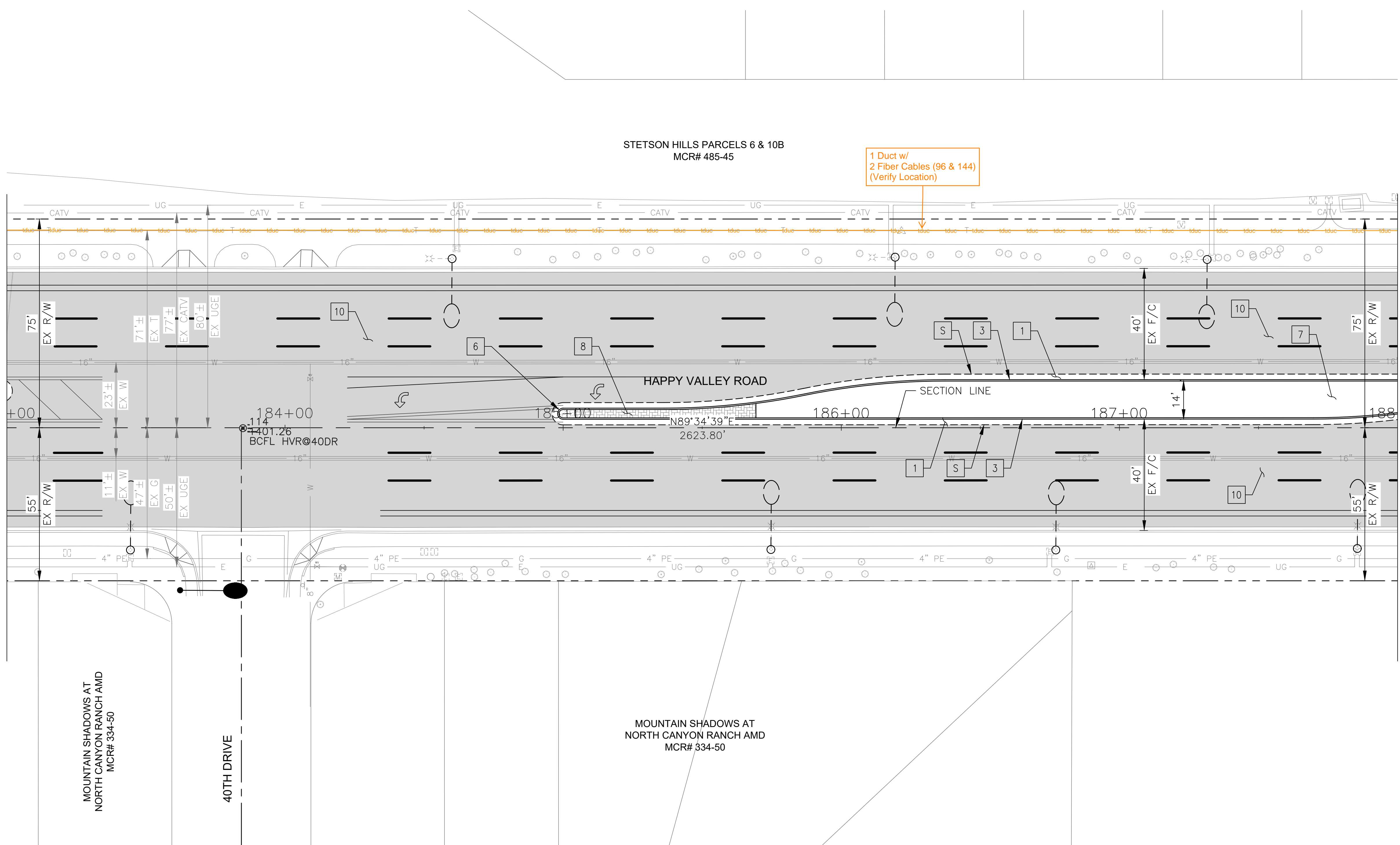
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

CONSTRUCTION NOTES			
NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	510
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	70
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	142
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.13
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF	592
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	17
7	DECOMPOSED GRANITE. 3/4" MINUS FOR GENERAL LANDSCAPE (GOLD)	SY	314
8	DECORATIVE BRICK PAVERS, MAG STD DET. 225	SF	218
10	MICROSEAL COAT	SY	4716

MATCHLINE STA 183+00 SEE SHEET 42

MATCHLINE STA 188+00 SEE SHEET 44



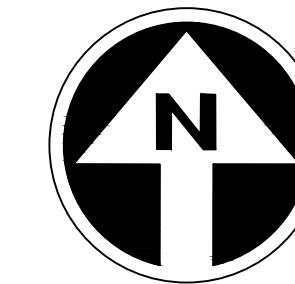
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.36
DATE: 02/20	DATE: 02/20	DATE: 02/20	SCALE: 1"=20' HORIZ.
			43 OF 92

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



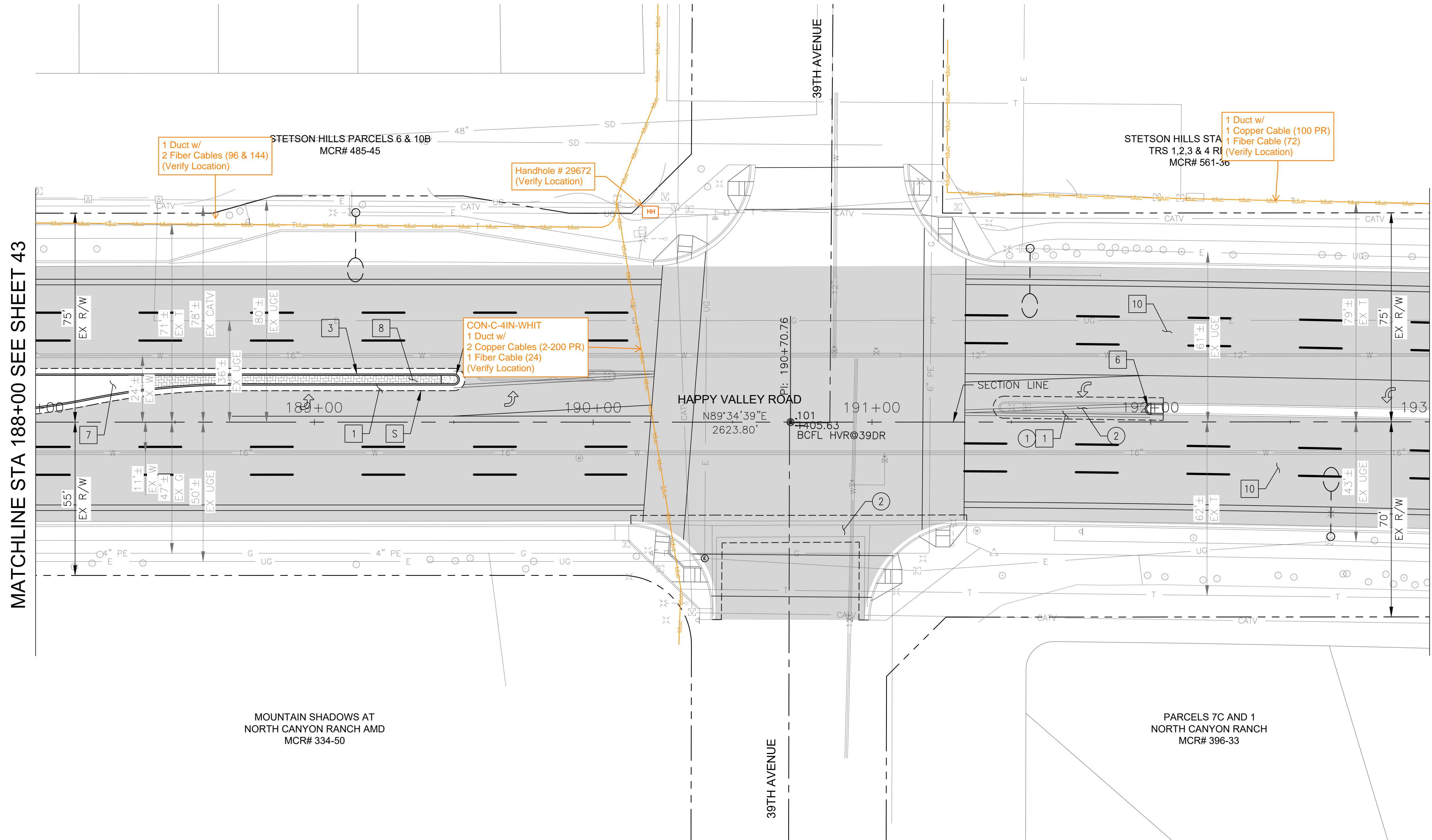
PRELIMINARY
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	44	92	
DATE: 02/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



MATCHLINE STA 188+00 SEE SHEET 43

MATCHLINE STA 193+00 SEE SHEET 45

CONSTRUCTION NOTES			
NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	343
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	47
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	95
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.09
3	CONCRETE SINGLE CURB, MAG STD DET 222, TYPE A	LF	291
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	35
7	DECOMPOSED GRANITE. 3/4" MINUS FOR GENERAL LANDSCAPE (GOLD)	SY	33
8	DECORATIVE BRICK PAVERS, MAG STD DET. 225	SF	358
10	MICROSEAL COAT	SY	4942

REMOVAL/RELOCATION			
NO	DESCRIPTION	UNIT	QTY
1	REMOVE PCC SINGLE CURB, CURB & GUTTER	LF	113
2	REMOVE PCC SIDEWALK, DRIVEWAY VALLEY GUTTER & SLAB	SF	1172

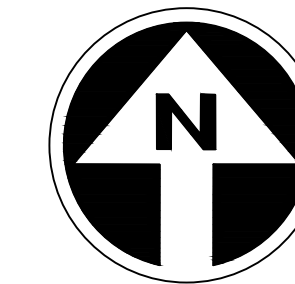
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ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.37
DATE: 02/20	DATE: 02/20	DATE: 02/20	44 OF 92
SCALE: 1"=20' HORIZ.			

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



PRELIMINARY
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT	
9	ARIZ	ST85100437-2	45	92		
DATE: 02/20		AZTEC				
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.			
CONSTRUCTION NOTES						
NO	DESCRIPTION				UNIT	QTY
10	MICROSEAL COAT				SY	4691

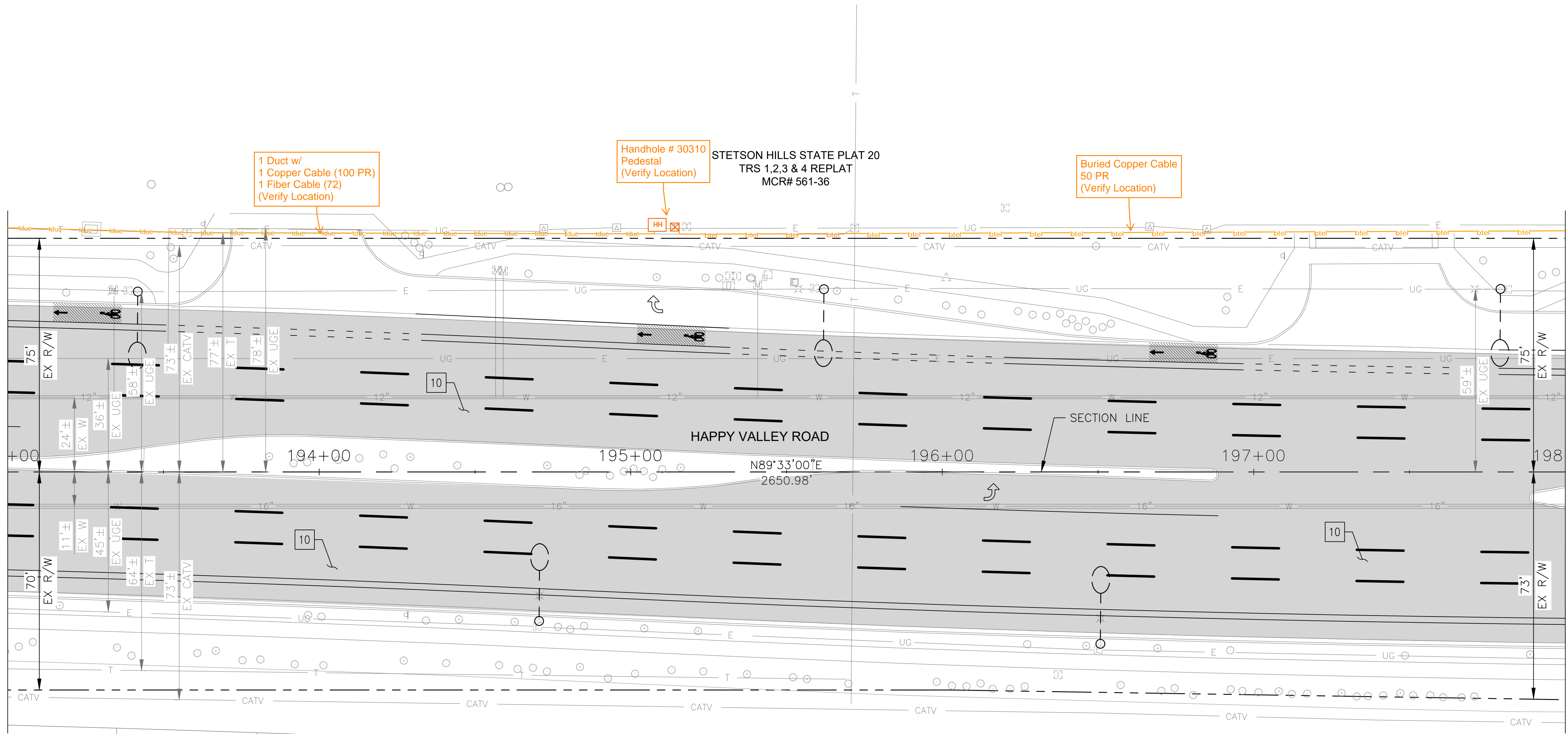
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE STA 193+00 SEE SHEET 44

MATCHLINE STA 198+00 SEE SHEET 46



PARCELS 7C AND 1
NORTH CANYON RANCH
MCR# 396-33

STETSON HILLS STATE PLAT 20
TRS 1,2,3 & 4 REPLAT
MCR# 561-36

1 Duct w/
1 Copper Cable (100 PR)
1 Fiber Cable (72)
(Verify Location)

Handhole # 30310
Pedestal
(Verify Location)

Buried Copper Cable
50 PR
(Verify Location)

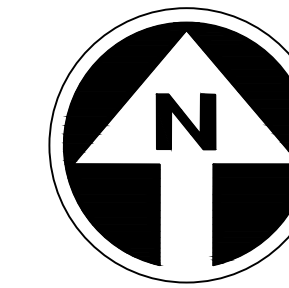
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SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE
ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT
AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE
CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.38
DATE: 02/20	DATE: 02/20	DATE: 02/20	
SCALE: 1"=20' HORIZ.			45 OF 92

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



PRELIMINARY
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT	
9	ARIZ	ST85100437-2	46	92		
DATE: 02/20		AZTEC				
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.			
CONSTRUCTION NOTES						
NO	DESCRIPTION				UNIT	QTY
10	MICROSEAL COAT				SY	4504

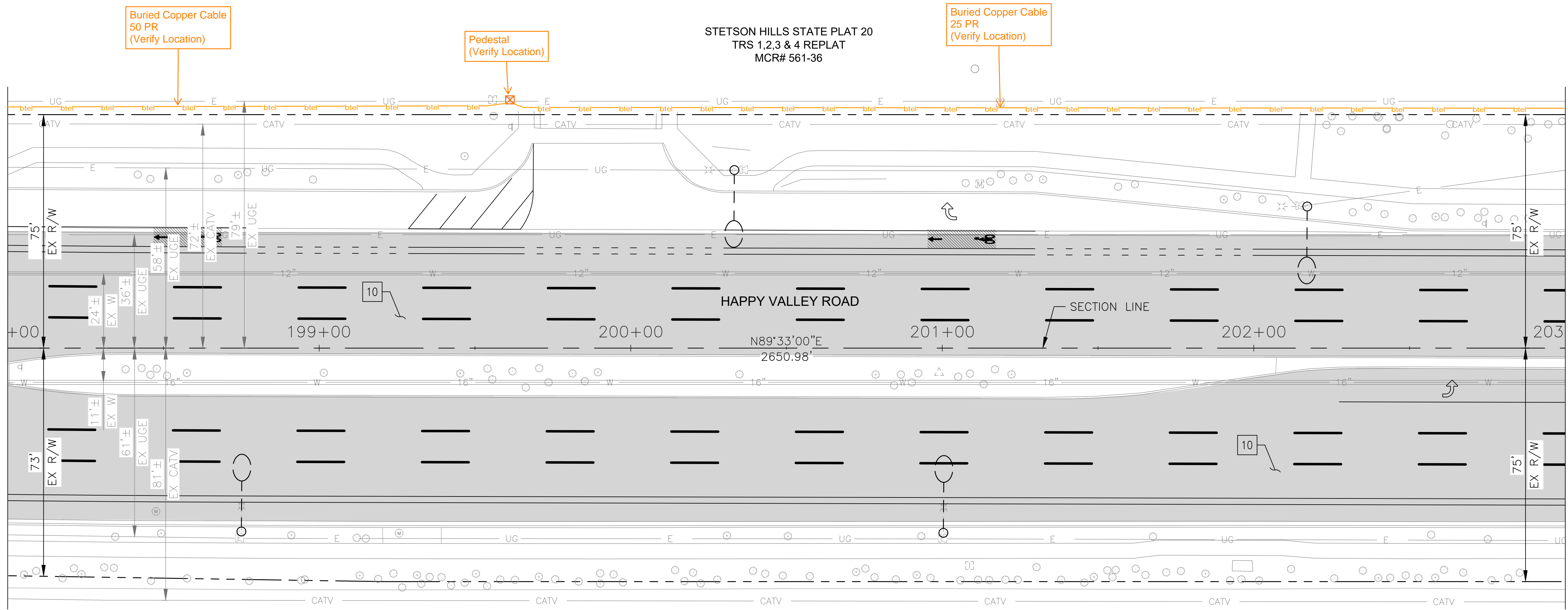
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE STA 198+00 SEE SHEET 45

MATCH LINE STA 203+00 SEE SHEET 47



PARCELS 7C AND 1
NORTH CANYON RANCH
MCR# 396-33

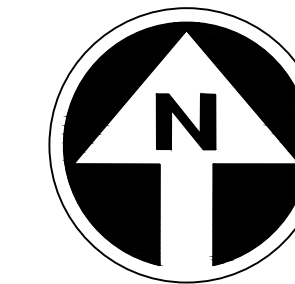
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.39
DATE: 02/20	DATE: 02/20	DATE: 02/20	46 OF 92
SCALE: 1"=20' HORIZ.			

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



PRELIMINARY
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	47	92	
DATE: 02/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

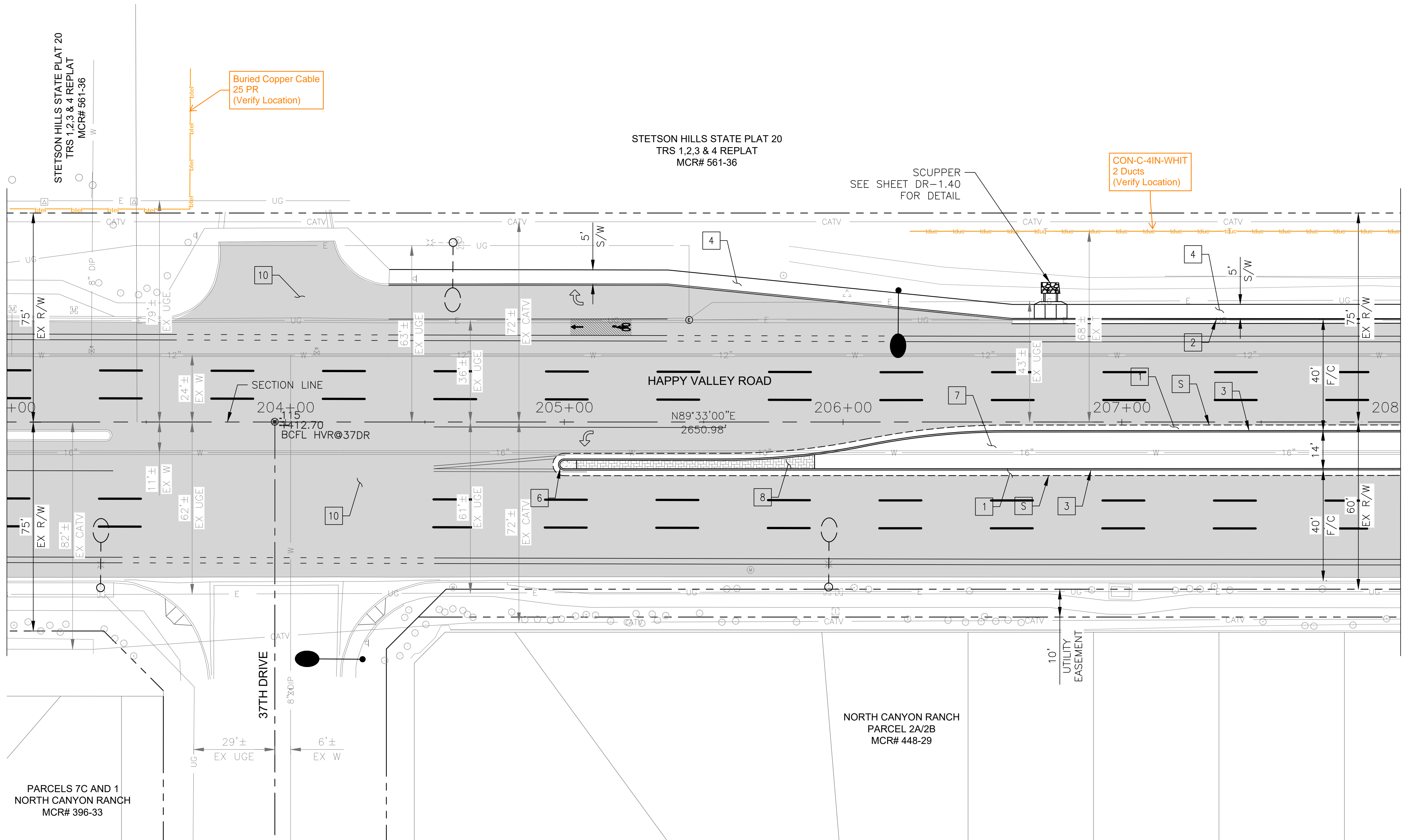
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE STA 203+00 SEE SHEET 46

MATCHLINE STA 208+00 SEE SHEET 48



CONSTRUCTION NOTES			
NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	486
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	67
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	135
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.12
2	CONCRETE CURB & GUTTER, MAG STD DET 220-1, TYPE A, H=6"	LF	364
3	CONCRETE SINGLE CURB MAG STD DET 222, TYPE A	LF	592
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	1838
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	17
7	DECOMPOSED GRANITE. 3/4" MINUS FOR GENERAL LANDSCAPE (GOLD)	SY	284
8	DECORATIVE BRICK PAVERS, MAG STD DET. 225	SF	278
10	MICROSEAL COAT	SY	5130

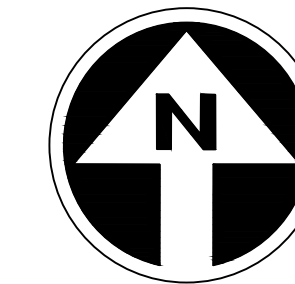
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.40
DATE: 02/20	DATE: 02/20	DATE: 02/20	47 OF 92
SCALE: 1"=20' HORIZ.			

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



PRELIMINARY
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	48	92	
DATE: 02/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

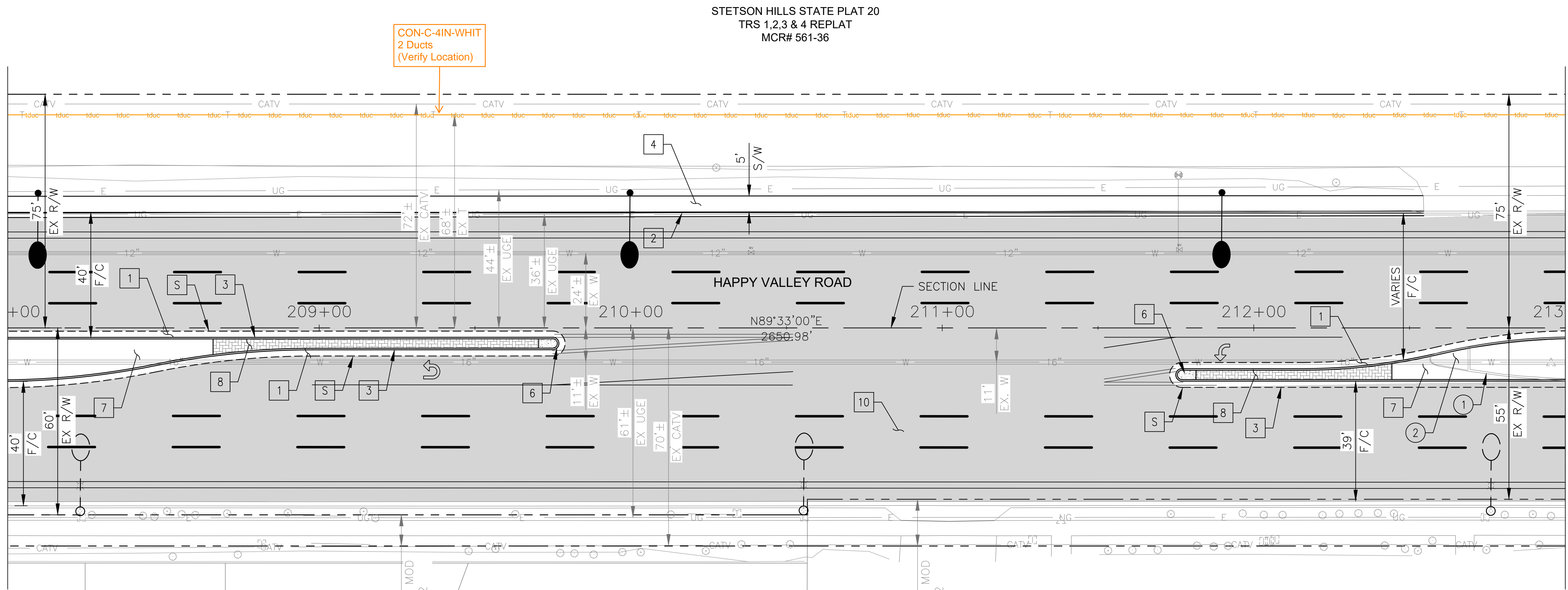
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE STA 208+00 SEE SHEET 47

MATCHLINE STA 213+00 SEE SHEET 49



STETSON HILLS STATE PLAT 20
TRS 1,2,3 & 4 REPLAT
MCR# 561-36

NORTH CANYON RANCH
PARCEL 2A/2B
MCR# 448-29

CHURCH OF JESUS CHRIST
APN 205-11-005J

CONSTRUCTION NOTES			
NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	370
	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	51
	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	103
	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.09
2	CONCRETE CURB & GUTTER, MAG STD DET 220-1, TYPE A, H=6"	LF	454
3	CONCRETE SINGLE CURB MAG STD DET 222, TYPE A	LF	579
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	2296
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	34
7	DECOMPOSED GRANITE. 3/4" MINUS FOR GENERAL LANDSCAPE (GOLD)	SY	135
8	DECORATIVE BRICK PAVERS, MAG STD DET. 225	SF	564
10	MICROSEAL COAT	SY	4824

REMOVAL/RELOCATION			
NO	DESCRIPTION	UNIT	QTY
1	REMOVE PCC SINGLE CURB, CURB & GUTTER	LF	62
2	REMOVE PCC SIDEWALK, DRIVEWAY VALLEY GUTTER & SLAB	SF	67

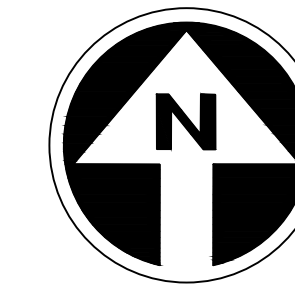
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.41
DATE: 02/20	DATE: 02/20	DATE: 02/20	48 OF 92
SCALE: 1"=20' HORIZ.			

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



PRELIMINARY
30%
Review
NOT FOR
CONSTRUCTION
OR RECORDING

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ	ST85100437-2	49	92	
DATE: 02/20		AZTEC			
DRAWN: RJR		DESIGN: RJR	CHECKED: G.G.		

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

CONSTRUCTION NOTES			
NO	DESCRIPTION	UNIT	QTY
PAVEMENT STRUCTURAL SECTION NO. 1			
1	SUBGRADE PREPARATION	SY	188
1	2.5" THICK ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	26
1	5" THICK ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	52
1	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS-1H	TON	0.05
2	CONCRETE CURB & GUTTER, MAG STD DET 220-1, TYPE A, H=6"	LF	257
4	CONCRETE SIDEWALK, COP STD DET P1230	SF	74
6	CONCRETE MEDIAN NOSE, MAG STD DET 223	SF	19
10	MICROSEAL COAT	SY	5133
12	CONCRETE SIDEWALK RAMP, COP STD DET P1241-2	SF	2568

REMOVAL/RELOCATION			
NO	DESCRIPTION	UNIT	QTY
1	REMOVE PCC SINGLE CURB, CURB & GUTTER	LF	221
2	REMOVE PCC SIDEWALK, DRIVEWAY VALLEY GUTTER & SLAB	SF	1561
3	REMOVE AND SALVAGE LIGHT POLE	EA	1

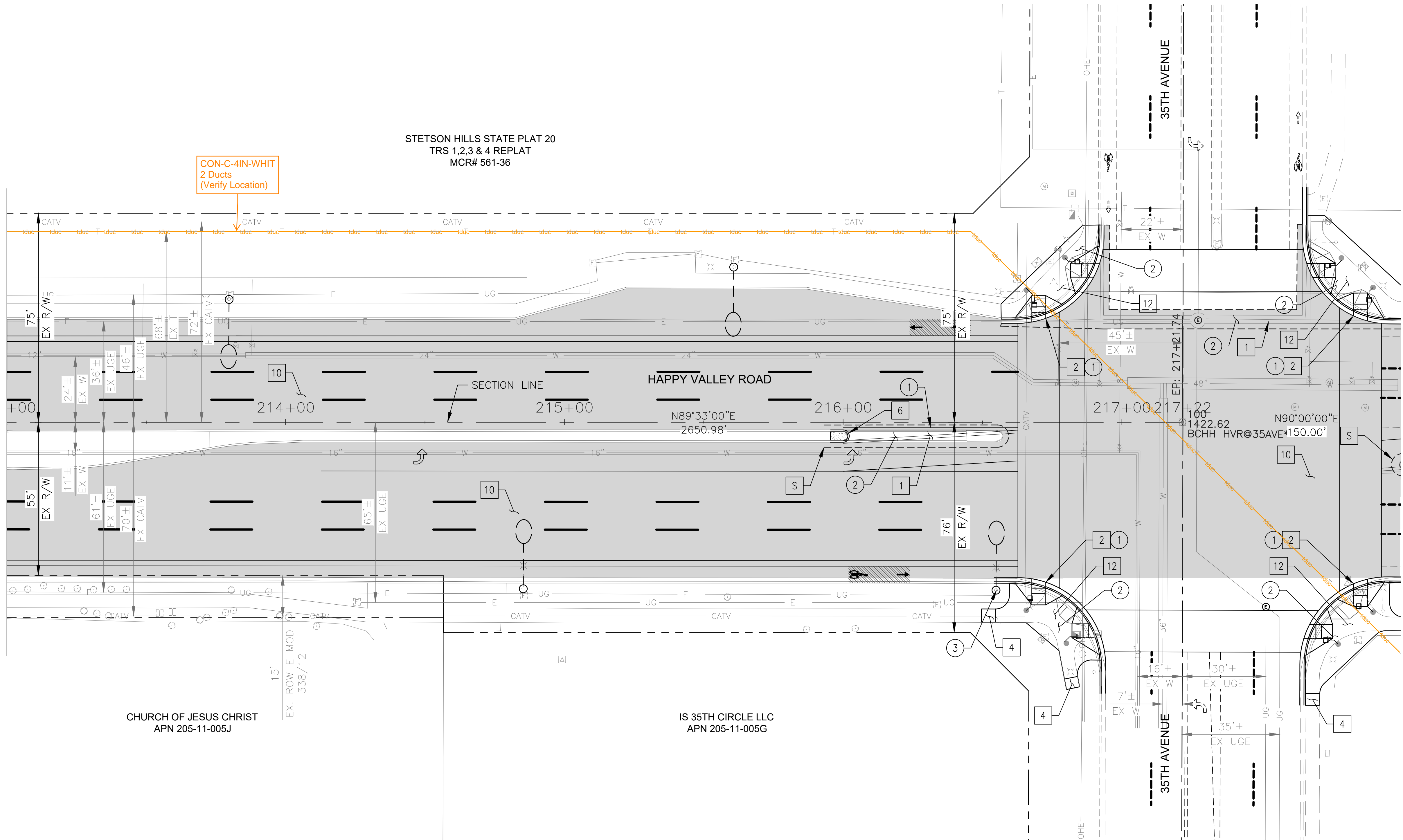
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ROADWAY PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

HAPPY VALLEY ROAD
35TH AVENUE TO 67TH AVENUE
ST85100437-2

DR: RJR	DES: RJR	CK: G.G.	DWG. NO. P-1.42
DATE: 02/20	DATE: 02/20	DATE: 02/20	49 OF 92
SCALE: 1"=20' HORIZ.			

MATCHLINE STA 213+00 SEE SHEET 48



City of Phoenix
Water Services Department
Water Engineering

Reviewer: Matthew Bryan

Contact Info: 602-261-8363

matthew.bryan@phoenix.gov

Date: February 24, 2020

Project: **ST85100437-2 – Happy Valley Road 35th Avenue to 67th Avenue – Paving
and Storm Drain - 30% Submittal**

Utility Conflict Review Comments:

Need to add note to construction notes - “Adjust Existing Water Valve Frame and Cover per COP STD Detail 1391, type A only. Revise this note throughout plans.

Need to add construction note for all Sewer manholes that will be raised to grade per City of Phoenix Design Standards. If sewer manholes are raised to grade due to conflict with project as-builts will need to be submitted at the end of project to the Water Services Department.

Sheet 5 of 92:

Need to indicate on sheet how many water valves and sewer manholes will be raised to grade throughout plan sheets.

Sheet 11 and 54 of 92:

Need to show existing Fire Hydrants on the NE and SE corners of 64th Ave and Happy Valley Road. Will these Fire Hydrants be in conflict? Will they need to be relocated? If the existing Fire Hydrants will remain in place need to indicate on plans “Protect Existing Fire Hydrant in Place”.

Sheet 13 and 56 of 92:

Need to show existing Fire Hydrants on the North side of Happy Valley Road between Stations 33+00 and 34+00. Will this Fire Hydrant be in conflict? Will this need to be relocated? If the existing Fire Hydrant will remain in place need to indicate on plans “Protect Existing Fire Hydrant in Place”.

Veronica Alvarez

From: Cody Gleason <Cody.Gleason@peoriaaz.gov>
Sent: Wednesday, March 4, 2020 2:59 PM
To: Veronica Alvarez
Subject: RE: ST85100437-2 HAPPY VALLEY RD-35TH AVE TO 67TH AVE

Veronica,
Was I intended to be copied on this? I'm not familiar with this project.

Thank you for your time.

Cody Gleason, MBA, AICP
Principal Planner
City of Peoria | Planning and Community Development
9875 N. 85th Avenue Peoria, AZ 85345
623.773.7645 | cody.gleason@peoriaaz.gov | peoriaaz.gov Office Hours are Monday through
Thursday, 7am to 6pm

-----Original Message-----

From: Veronica Alvarez <veronica.alvarez@phoenix.gov>
Sent: Wednesday, March 4, 2020 9:31 AM
To: alh@mail.maricopa.gov; baldemar.garza@aps.com; Cody Gleason <Cody.Gleason@peoriaaz.gov>;
chris.holland@phoenix.gov; jason.fernandez@phoenix.gov; richard.young1@verizon.com;
vdg1@swgas.com
Subject: ST85100437-2 HAPPY VALLEY RD-35TH AVE TO 67TH AVE

You have received access to a City of Phoenix Streets File Share from Veronica Alvarez. The link to transfer your file(s) will expire on Friday, April 3, 2020 9:14 AM.

<https://strsftp.phoenix.gov/?ShareToken=35BC1F97F0D81D320E3D61592791D48BCCDC3D62>

See attached 30% plan distribution, letter and clearance form.
JOC-estimated construction date 11/2020

Need help? See some troubleshooting tips at [https://urldefense.com/v3/__http://www.Serv-U.com/sharefiles_!!LkjWUF49MRd51_ry!NC24WOYxa-i9UjIas0L8ZL0evkc3ZjKgO4YNzXy3fAhLnPbILZvPSkyk2zjnP2PJA5CoJDMhVA\\$](https://urldefense.com/v3/__http://www.Serv-U.com/sharefiles_!!LkjWUF49MRd51_ry!NC24WOYxa-i9UjIas0L8ZL0evkc3ZjKgO4YNzXy3fAhLnPbILZvPSkyk2zjnP2PJA5CoJDMhVA$.).



SOUTHWEST GAS CORPORATION

March 25, 2020

City of Phoenix
Mrs. Veronica Alvarez
1034 E Madison St
Phoenix, AZ 85034

Subject: Paving and Storm Drain Plans
Happy Valley Rd 35th Ave to 67th Ave
ST85100437-2

Dear Mrs. Veronica Alvarez:

After reviewing the plans for the above referenced project, it has been determined that there are potential conflicts with the existing Southwest Gas facilities due to subgrade preparation. In order to avoid construction delays, we encourage you to carefully evaluate each location of potential conflict, including potholing to determine exact elevation.

Subgrade preparation is a concern to Southwest Gas due to the additional stress placed on gas pipes from inadequate cover combined with the weight of heavy machinery. Southwest Gas may need additional information to provide stress calculations to confirm that gas facilities are protected during the subgrade preparation.

Please note that only Southwest Gas Corporation personnel are allowed to adjust high pressure valveboxes due to high pressure sense lines and lubricating lines within the valvebox enclosure. The costs associated with such adjustments will be the responsibility of the developer.

Southwest Gas will paint yellow all protective valve box lids and vault manhole covers. It will be the responsibility of the public agency's contractor to make sure these are protected during construction. The public agency's contractor will be responsible for adjustments to all valve box lids and vault manhole covers due to grading and paving per MAG Details 391.1 and 391.2. Contact Southwest Gas Construction at 43rd Operations (602) 484-5350 for coordinating work and inspections. For emergencies, please call (602) 271-GASS (4277).



SOUTHWEST GAS CORPORATION

«Company»

March 25, 2020

Page 2

Please be aware that there may be abandoned steel gas lines within your project limits that are potentially coated or wrapped with unidentified materials. Southwest Gas treats its steel gas pipe with unidentified coating/wrapping materials as potentially containing asbestos. Extreme care must be taken when working near and exposing these lines, additionally, whenever such pipe is in direct conflict and requires removal, it must only be done so by a Southwest Gas NESHP certified contractor. The cost associated with such removal will be the responsibility of the developer. Please contact Southwest Gas in advance to coordinate any removal.

It is against Southwest Gas Corporation standards to locate meter sets and regulators within enclosed structures. We prohibit developers from creating such an environment due to the risks and potential hazards associated with the presence of a gas meter in a confined space. If the scope of your project includes the construction, addition, or remodeling of a facility resulting in the enclosure of a gas meter, please contact us immediately to coordinate the meter and/or regulator relocations.

Prior to beginning construction and for actual up to date utility locations, call Arizona 811 at 1-800-782-5348 or 811, pursuant to the "Blue Stake Law" (ARIZONA REVISED STATUTES (State Law), Chapter 2, Article 6.3, Sections 40-360.21 through 40-360.32). Minimum cover over mains is 36 inches. Any underground facility installed must have at least 12 inches face to face clearance at the point of crossing. If you have determined that your proposed construction requires the relocation or abandonment of our facilities, please identify these conflicts on your plans and resubmit them for final review. The arrangement and who will bear the cost of the relocation or abandonment will be determined under the current Franchise Agreement with the project's governing Agency.

This review is only valid for 90 days; if your project does not start within that time frame or if the scope of work changes, please resubmit plans for a subsequent review.

Note that it is ultimately the developer/owner's responsibility to determine if conflicts exist and to contact the appropriate Southwest Gas representative to initiate pipeline relocation. We require a minimum 16 week lead time from the date of your written notification and payment must be received prior to construction.



SOUTHWEST GAS CORPORATION

«Company»

March 25, 2020

Page 3

If a response is not received, it will be assumed that your project has been designed to avoid any conflicts. Thank you for your cooperation on this project. Please contact either Tyler Richards at (602) 484-5347 (tyler.richards@swgas.com) or me if you have any questions or require additional information.

Sincerely,

Arban Londo, PE
Supervisor / Engineering, Franchise
Mail Code: 420-586
(602) 484-5649

UTILITY CLEARANCE FORM

HAPPY VALLEY RD-35TH AVE TO 67TH AVE
PROJECT NO. ST85100437-2
30% SUBMITTAL

EST. BID DATE: OCTOBER, 2020 CONSTRUCTION DATE: NOVEMBER, 2020

- *1. Name of Utility Company Southwest Gas
- *2. Facilities within the project: Yes No
- *3. Are facilities shown correctly on plans? Yes No If NO, provide "as built" drawings
- *4. Are facilities in conflict? Yes No
- *a) If yes, describe: subgrade prep/depth concerns, Verify adequate depth at ADA ramps via potholing.
- *b) Date when conflicts will begin to be relocated Protect in place request
- *c) Date when relocations will be complete _____
5. Will some facilities require minor relocations/adjustments during construction (i.e., manhole or valve covers, cable relocations for each basin, etc.)? Yes No
- a) If yes, describe: Valves and test points will need to be kept accessible and adjusted to new pavement, High pressure valves require southwest gas adjustment at Valve boxes (43rd Ave)
- b) Name of person to be contacted Tyler Richards
- c) Phone Number 602-484-5347
- d) Email address tyler.richards@surgas.com
- e) Advance notice required 48 h

PLEASE PROVIDE TO THIS OFFICE IN WRITING ANY INFORMATION RELATING TO THIS PROJECT

Signed: Tyler Richards

Print name: Tyler Richards Date: 03/19/20

Email address Tyler.richards@surgas.com Phone: 602-484-5347

Please return this form to: City of Phoenix Street Transportation Department
200 W. Washington St, Phoenix, AZ 85003-1611, Attention: Veronica Alvarez by APRIL 3, 2020
PHONE: 602-534-6136 FAX: 602-732-2758 EMAIL: veronica.alvarez@phoenix.gov
* Required fields (must have relocation dates at 60% submittal)

Appendix H – Final Design & Construction Schedule

**Happy Valley Road:35th Avenue - 67th Avenue
Final Preliminary Engineering Report - Project Schedule**

	Months																																																										
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	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	47	48	49	50									
Pre Final Design*																																																											
Design Procurement	█	█																																																									
Final Design and Clearances																																																											
Field Survey/Base Mapping			█																																																								
Geotech Field Work/Lab Testing			█																																																								
40% PS&E (Submittal and Review)			█	█	█																																																						
70% PS&E (Submittal and Review)					█	█	█	█	█																																																		
90% PS&E (Submittal and Review)										█	█	█	█	█																																													
100% PS&E (Submittal and Review)															█	█	█	█																																									
Sealed Design Approval																			█	█																																							
Environmental/NEPA Clearance			█	█	█	█	█	█	█	█																																																	
ROW Clearance										█	█	█	█	█	█	█	█																																										
Utility Clearance			█	█	█	█	█	█	█	█	█	█	█	█	█	█																																											
Materials Report Clearance			█	█	█	█	█	█	█	█	█	█	█	█	█	█																																											
City of Phoenix ROW Acquisition																																																											
ROW Acquisition (Federal Milestone Timeline)											█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█			
Utilities																																																											
Utility Relocations (If Needed)																																																											
Construction Procurement*																																																											
Bid Package Prep/Advertisement																																																											
Negotiations																																																											
Construction Phase																																																											
Construction NTP/Mobilization																																																											
Mill Existing AC - ProjectWide																																																											
Demolish/Construct North Curb Improvements																																																											
Demolish/Construct South Curb Improvements																																																											
Construct Center Median Improvements																																																											
Construct Lighting/Traffic Signal Improvement																																																											
Construct Landscape Improvements																																																											
Install New Asphalt Concrete																																																											
Install Permanent Pavement Markings/Signing																																																											
City Acceptance																																																											

*9 month procurement deadline if using Federal Funds for final design or construction.

- █ - Design Procurement (2 Months)
- █ - Final Design and Clearances (16 Months)
- █ - ROW Acquisition (13 Months)
- █ - Utility Relocations, If Needed (3 Months)
- █ - Construction Procurement (6 Months)
- █ - Construction Duration (17 Months)

Total Duration - 48 Months

Appendix I – HY-8 Model & Report

HY-8 Analysis Results

Culvert Summary Table - 4 - 30

Culvert Crossing: GCC - 2

Total Discharge (cfs)	Culvert Discharge (cfs)	Headwater Elevation (ft)	Inlet Control Depth(ft)	Outlet Control Depth(ft)	Flow Type	Normal Depth (ft)	Critical Depth (ft)	Outlet Depth (ft)	Tailwater Depth (ft)	Outlet Velocity (ft/s)	Tailwater Velocity (ft/s)
100.00	100.00	1406.01	2.71	1.57	5-S2n	1.48	1.70	1.48	0.89	8.24	6.39
105.33	105.33	1406.13	2.83	1.75	5-S2n	1.54	1.75	1.54	0.91	8.33	6.50
110.66	110.66	1406.24	2.94	1.93	5-S2n	1.59	1.79	1.59	0.94	8.42	6.61
115.99	115.99	1406.36	3.06	2.11	5-S2n	1.64	1.84	1.64	0.97	8.50	6.71
121.32	121.32	1406.49	3.19	2.61	5-S2n	1.69	1.88	1.69	0.99	8.57	6.82
126.65	126.65	1406.62	3.32	2.79	5-S2n	1.75	1.92	1.75	1.02	8.63	6.91
131.98	131.98	1406.76	3.46	2.97	5-S2n	1.81	1.95	1.81	1.04	8.69	7.01
137.31	137.31	1406.90	3.60	3.15	5-S2n	1.87	1.99	1.87	1.06	8.73	7.10
142.64	142.64	1407.05	3.75	3.35	5-S2n	1.93	2.03	1.93	1.09	8.77	7.19
147.97	147.97	1407.21	3.91	3.54	5-S2n	2.00	2.06	2.00	1.11	8.78	7.28
153.30	153.30	1407.37	4.07	3.75	5-S2n	2.08	2.09	2.08	1.13	8.78	7.36

HY-8 Analysis Results

Culvert Summary Table - 6 - 24

Culvert Crossing: GCC - 4

Total Discharge (cfs)	Culvert Discharge (cfs)	Headwater Elevation (ft)	Inlet Control Depth(ft)	Outlet Control Depth(ft)	Flow Type	Normal Depth (ft)	Critical Depth (ft)	Outlet Depth (ft)	Tailwater Depth (ft)	Outlet Velocity (ft/s)	Tailwater Velocity (ft/s)
100.00	100.00	1405.51	2.46	2.51	7-M2c	1.50	1.47	1.47	1.21	6.73	7.14
105.33	105.33	1405.60	2.58	2.60	7-M2c	1.57	1.51	1.51	1.24	6.90	7.25
110.66	110.66	1405.70	2.70~	2.68	7-M2c	1.65	1.55	1.55	1.27	7.08	7.35
115.99	115.99	1405.84	2.84~	2.78	7-M2c	1.77	1.58	1.58	1.31	7.26	7.45
121.32	121.32	1405.97	2.97~	2.90	7-M2c	2.00	1.61	1.61	1.34	7.44	7.55
126.65	126.65	1406.12	3.12~	3.11	7-M2c	2.00	1.65	1.65	1.37	7.63	7.65
131.98	131.98	1406.38	3.27	3.38	7-M2c	2.00	1.67	1.67	1.40	7.83	7.74
137.31	137.31	1406.63	3.43	3.63	7-M2c	2.00	1.70	1.70	1.43	8.03	7.83
142.64	142.64	1406.87	3.59	3.87	7-M2c	2.00	1.73	1.73	1.46	8.24	7.91
147.97	147.97	1407.13	3.76	4.13	7-M2c	2.00	1.75	1.75	1.49	8.45	8.00
153.30	153.30	1407.38	3.94	4.38	7-M2c	2.00	1.78	1.78	1.51	8.67	8.08