WOOD PATEL

FINAL Basis of Design Report

☑ APPROVED

☐ APPROVED AS NOTED

☐ REVISE AND RESUBMIT

CITY OF SCOTTSDALE

SCOTTSDALE WATER

9379 E San Salvador Dr.
Scottsdale, AZ 85258

Disclaimer: If approved; the approval is granted under the condition that the final construction documents submitted for city review will match the information herein. Any subsequent changes in the water or sewer design that materially impact design criteria or standards will require re-analysis, re-submittal, and approval of a revised basis of design report prior to the plan review submission.; this approval is not a guarantee of construction document acceptance.
For questions or clarifications contact the Water Resources Planning and Engineering Department at 480-312-5685.

BY ugrossthal **DATE** 8/20/2025

FINAL WATER DISTRIBUTION SYSTEM BASIS OF DESIGN REPORT FOR FAIRMONT SCOTTSDALE PRINCESS SUNSET VILLAS AND BUNGALOWS

Review 1 – October 21, 2022
Review 2 – June 9, 2023
Review 3 – July 12, 2024
Review 4 – January 17, 2025
Review 5 – May 23, 2025

July 18, 2025
WP# 215319.10

COS# 38-DR-2022

Prepared by
Andrew Sanchez, EIT

Registered Professional Engineer (Civil)
CERTIFICATE NO.
36382
DARIN L.
MOORE
Date Signed 07/18/25
ARIZONA, U.S.A.

EXPIRES 06-30-28

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1.0 INTRODUCTION

The Fairmont Scottsdale Princess Sunset Villas and Bungalows (Site) includes nine (9) proposed resort/hotel buildings on approximately 3.7-acres of an approximate 38-acre parcel of the Fairmont Scottsdale Princess in the City of Scottsdale (APN#215-08-695). The project will include hardscape, landscape, and utility improvements to support the development. The Site is located approximately 1,330-feet to the east of Scottsdale Road and directly south of East Hacienda Way within Section 35, Township 4 North, Range 4 East of the Gila and Salt River Base and Meridian, Maricopa County, Arizona. Refer to Exhibit 1 – *Vicinity Map* for the project location. The existing property, currently zoned C-2, is primarily developed with a parking lot, pool, sidewalks, and a variety of landscaping (desert and grass).

The design criteria used to estimate water demands and evaluate system hydraulics are based on Wood, Patel & Associates, Inc.'s (WOODPATEL's) understanding of the requirements listed in the *City of Scottsdale Design Standards and Policies Manual, 2018*.

The following is a summary of the primary design criteria utilized:

Average Day Water Demand, Resort Hotel: ..... 446 gpd/DU
Maximum Day Demand Factor: ..... 2 x ADD
Peak Hour Factor: ..... 3.5 x ADD
Abbreviations: gpd = gallons per day; sf = square feet; ADD = average day demand; MDD = Maximum Day Demand; PH = Peak Hour Demand
*Includes both inside and outside use, per Figure 6-1.2, City of Scottsdale *Design Standards and Policies Manual*

2.0 EXISTING WATER INFRASTRUCTURE

Existing water infrastructure adjacent to the Site includes an existing public 12-inch water main in Cottage Terrace, an existing public 8-inch water main in Hacienda Way that connects to existing public 12-inch water mains in Cottage Terrace and Princess Drive, and an existing public 6-inch water main which extends from Hacienda Way south along the west side of the existing Spa building through the property where it connects to the existing public 12-inch water main in Cottage Terrace. There are two (2) existing fire hydrants within Cottage Terrace and one (1) existing fire hydrant within Hacienda Way to serve the Site. Please refer to Exhibit 2 – *Water Layout* for a depiction of existing infrastructure.

3.0 PROPOSED WATER INFRASTRUCTURE

Water demands for the proposed project can be found in Appendix A – *Water Demand Calculations*. Average Day, Max Day, and Peak Hour demands were calculated according to their land use within the *City of Scottsdale Design Standards and Policies Manual* (COS DSPM) for Scenarios 1, 2, and 3 (Ref.1). The Scenario 4 WSFU provided by the plumbing engineer are 69.5 for Villa 4 and 25.6 for Bungalow 1, which equates to 35 gpm and 21.5 gpm respectively. Refer to Appendix B – *Plumbing Fixture Counts*, *FSP Sunset Beach Bungalows IMEG #22001753.00, by IMEG* for Fixtures contributing to the Fixture Flow of each building.

There are multiple projects being proposed in the area of the Site. The construction schedule for them will overlap at some point where all projects will be in construction at the same time. The changes to the water main infrastructure in particular for all the projects will be done together to avoid multiple shutdowns.

3.1 Onsite Water Infrastructure

A proposed 4-inch domestic service with master meter and vault per City of Scottsdale detail 2345 and backflow per City of Scottsdale detail 2351 connected to the existing public 8-inch water main in Hacienda Way will route through the Site to serve the nine (9) proposed buildings. The initial service line design according to City of Scottsdale DSPM Sec 6-1.461 can serve the Site with a 4-inch meter, vault, and backflow. This was determined by applying a 1.5 safety factor to the WSFU demands from all the proposed buildings of 344.1 which equates to a flow of 230.1 gpm which is 345.15 gpm. This is lower than the 600 gpm shown in Figure 6-1.4 of the COS DSPM (Ref. 1).

A proposed 8-inch distribution line within a proposed 20-foot easement will connect to the existing public 8-inch water main in Hacienda Way and to the existing 6-inch public water line along the east side of the Site. The existing public 6-inch water main between the proposed point of connection and its original connection to the existing 8-inch water main in Hacienda Way will be removed and corresponding easement will be abandoned. The nine (9) proposed buildings will each be served by a 2-inch domestic service from the 4-inch private line and a 6-inch fire service from the new public 8-inch water main. Lastly, a proposed fire hydrant will be added along Hacienda Way to serve the Site. (Refer to Exhibit 2 – *Water Layout*)

3.2 Water Demand Calculations

Bentley WaterCAD version 10i was used to analyze the proposed water system. The existing water infrastructure was calibrated using the results of a fire hydrant flow test. (Refer to Appendix C - *Fire Hydrant Flow Test Results and Calculations*)

The modeling results show the average day water demand for the proposed Site is approximately 27 gallons per minute (gpm) with resulting pressures ranging from 61 to 72 psi, a maximum day demand of 53 gpm with resulting pressures ranging from 59 to 71 psi, and Peak Hour demands of 93 gpm with resulting pressures ranging from 54 to 67 psi. (Refer to Appendix A - *Water Demand Calculations*) All results fall within the upper and lower pressure limits of 50 psi and 120 psi, respectively, as outlined by the City of Scottsdale (Ref. 1). Refer to Appendix E - *WaterCAD Modeling Results* and Exhibit 3 - *WaterCAD Modeling Map* for the modeling layout and results. The following junctions are excluded from the results as they only apply to Scenarios 3 and 4:

- Scenario 3 – J-77, J-81, J-83, J-85, J-86, J-87, and J-88
- Scenario 4 (Villa 4) – J-77
- Scenario 4 (Bungalow 1) – J-83

Based on this information there is sufficient supply to meet the demands for the Site. Refer to Appendix C – *Fire Hydrant Flow Test Results and Calculations* for existing fire hydrant flow data.

The fire flow required for the Site is 1,500 gpm at a minimum of 30 psi for the largest proposed building with an approximate area of 30,682 sf, including a fire sprinkler, and a building type of V-B. Since a fire sprinkler system is being utilized, the reduction of 68.3% was applied to the required fire flow rate of 4,750 gpm. Refer to Appendix A – *Water Demand Calculations* for fire flow demands for each building. Modeling results determined that each building meets the 1,500 gpm minimum Fire Flow requirement at or above the minimum pressure required of 30 psi. (Refer to Appendix E - *WaterCAD Modeling Results*)

A 3rd Scenario has been modeled by analyzing the max day flow in conjunction with the required fire flow at the “"worst hydraulic case domestic demand node", junction J-81 and J-77 at 24 feet above the finished floor of Villa 4 (Ref.1). Junctions J-77 is the domestic demand node and junction J-81 is the fire flow node that were modeled at the highest finished floor. Modeling results show pressures above 28 psi at all domestic demand nodes and pressures above 43 psi at the fire flow node and all applicable fire hydrant locations adjacent to the Site. The resulting pressures exceed the minimum requirements of 15 psi and 30 psi for domestic demand nodes and fire hydrant nodes, respectively, according to the COS DSPM (Ref.1). Refer to Appendix E – *WaterCAD Modeling Results* for modeling results.

Lastly, a 4th Scenario has been modeled by analyzing the WSFU demand at the highest finished floor of the “worst hydraulic case domestic demand node” according to the COS DSPM (Ref.1). Villa 4 and Bungalow 1 were determined to be the worst hydraulic nodes. Villa 4 is a 3-story building and Bungalow 1 is the farthest building from the water main. The WSFU demands applied to the buildings incorporated a 1.5 safety factor resulting in a Fixture Demand of 52.5 and 32.25 for Villa 4 and Bungalow 1, respectively. The WSFU demand for Villa 4 was applied 24 feet above its finished floor (3rd floor of the building) and the WSFU for Bungalow 1 was applied 12 feet above its finished floor (2nd floor of the building). Resulting modeling pressures of 42 psi and 47 psi were observed when modeling Scenario 4 at Villa 4 and Bungalow 1, respectively. The resulting pressure for both buildings is under the required 50 psi requirement. The City of Scottsdale will require a private booster pump to increase water pressure at the upper levels of the building. Refer to Exhibit 2 – *Water Layout* for the layout of the proposed water infrastructure, Appendix E – *WaterCAD Modeling Results* for modeling results and Exhibit 3 – *WaterCAD Modeling Map* for a map of the modeling done for the overall Fairmont Scottsdale Princess Development.

4.0 CONCLUSIONS

Based on our analysis of the Site, the following conclusions can be made:

1. The design criteria used to estimate potable water demands and evaluate system hydraulics are based on the design criteria listed in the *City of Scottsdale Design Standards and Policies Manual, 2018*.

2. The proposed water infrastructure described is adequate to serve the domestic and fire flow requirements for the Site.

3. The minimum required pressure of 30 psi has been achieved for the fire flow at each building per City of Scottsdale requirements.

4. The combined average day demand, of 27 gpm or 19,193 gpd at a minimum of 61 psi for the proposed Site exceeds the minimum pressure requirement of 50 psi and does not exceed the maximum of 120 psi per the City of Scottsdale standards.

5. The combined maximum day demand, of 53 gpm or 38,386 gpd at a minimum of 59 psi for the proposed Site exceeds the minimum of 50 psi and does not exceed the maximum of 120 psi per the City of Scottsdale standards.

6. The combined peak hour demand, of 93 gpm or 67,179 gpd at a minimum of 54 psi for the proposed Site exceeds the minimum of 50 psi and does not exceed the maximum of 120 psi per the City of Scottsdale standards.

7. The minimum required pressures of 15 psi and 30 psi for all domestic demand nodes and fire hydrant nodes, respectfully, has been met for Scenario 3.

8. Modeling for Scenario 4 analyzed the WSFU at Villa 4 and Bungalow 1 with the following results.

    a. Villa 4 - Pressure under the required 50 psi. The City of Scottsdale will require a private booster pump to increase water pressures at the upper building levels.

    b. Bungalow 1 - Pressure under the required 50 psi. The City of Scottsdale will require a private booster pump to increase water pressures at the upper building levels.

5.0 REFERENCES

1. City of Scottsdale Design Standards and Policies Manual, 2018
2. International Fire Code, by International Code Council, 2021
3. *Master Water Report for Fairmont Scottsdale Princess*, by Wood, Patel & Associates Inc., dated March 29, 2024.

APPENDIX A – WATER DEMAND CALCULATIONS

WOOD PATEL

TABLE 1
WATER DISTRIBUTION SYSTEM DESIGN CRITERIA

Project	Fairmont Scottsdale Princess - Sunset Villas & Bungalows
Location	Scottsdale AZ
Project Number	215319.1
Project Engineer	Andrew J. Sanchez, EIT
References	City of Scottsdale Design and Policies Manual (2018)

RESIDENTIAL WATER DEMANDS			
LAND USE	**AVERAGE DAILY DEMAND (ADD)**		**NOTES**
	VALUE	**UNITS**	
High Density Condominium	185	gpd/DU	Note 1
Resort Hotel	446	gpd/DU	Note 1

NON-RESIDENTIAL WATER DEMANDS			
LAND USE	**AVERAGE DAILY DEMAND (ADD)**		**NOTES**
	VALUE	**UNITS**	
Restaurant	1.3	gpd/sf	Note 1
Commercial/Retail	0.8	gpd/sf	Note 1
Commercial High Rise	0.6	gpd/sf	Note 1
Office	0.6	gpd/sf	Note 1
Institutional	1340	gpd/acre	Note 1
Industrial	1027	gpd/acre	Note 1
Research and Development	1284	gpd/acre	Note 1

HYDRAULIC MODELING CRITERIA				
DESCRIPTION		**VALUE**	**UNITS**	**NOTES**
PEAK FLOW				
	Peak Hour = Peaking Factor (PF) x ADD	3.5 x ADD	gpd	Note 1
	Max Day = Peaking Factor x ADD	2.0 x ADD	gpd	Note 1
MODELED FIRE HYDRANT FLOW WITH 50% FIRE SPRINKLER REDUCTION (MINIMUM)				
☐	Residential, 0 - 3,600 sf fire-flow calculation area	1,000	gpm	Note 3
☑	Residential, 3,601 - 4,800 sf fire-flow calculation area	1,750	gpm	Note 4
☐	Residential, 4,801 - 6,200 sf fire-flow calculation area	2,000	gpm	Note 4
☐	Residential, 6,201 - 7,700 sf fire-flow calculation area	2,250	gpm	Note 4
☐	Residential, 7,701 - 9,400 sf fire-flow calculation area	2,500	gpm	Note 4
☐	Residential, 9,401 - 11,300 sf fire-flow calculation area	2,750	gpm	Note 4
☐	Multi-Family Residential	-	gpm	Note 2
☐	Commercial	-	gpm	Note 2
HYDRAULICS				
	Residual Pressure Range, Peak Flow	50-120	psi	Note 1
	Minimum Residual Pressure, Peak Flow + Fire Flow	30	psi	Note 1
	Maximum Velocity, Peak Flow	5	ft/sec	Note 1
	Maximum Velocity, Peak Day + Fire Flow	10	ft/sec	Note 1
	Minimum Pipe Diameter, Looped System	8	in	Note 1
	Hazen-Williams C-value	120	-	Note 1

Notes

1. Per City of Scottsdale Design and Policies Manual (2018)
2. Per 2018 International Fire Code
3. Residential limited to one- and two-family dwellings, assumes Type V-B construction, and has a 1-hour fire duration, with 50% sprinkler reduction
4. Residential limited to one- and two-family dwellings, assumes Type V-B construction, and has a 2-hour fire duration, with 50% sprinkler reduction

WOOD PATEL

WATER DEMAND DESIGN FLOWS

Project Fairmont Scottsdale Princess - Sunset Villas & Bungalows
Location Scottsdale AZ
Project Number 215319.1
Project Engineer Andrew J. Sanchez, EIT
References City of Scottsdale Design and Policies Manual (2021)

LAND USE AND DWELLING UNIT BREAKDOWN BY JUNCTION														FIRE FLOW			
BUILDING	HYDRAULIC MODEL NODE	LAND USE	DEMAND NODE	DWELLING UNITS	AREA (SF)	DEMAND VALUE	UNITS	AVERAGE DAY		MAX DAY		PEAK HOUR		BUILDING AREA	CONSTRUCTION TYPE	FIRE FLOW	FIRE FLOW w/ SPRINKLER
								(gpm)	(gpd)	(gpm)	(gpd)	(gpm)	(gpd)	(sf)		(gpm)	(gpm)
A	Villa 1	Resort Hotel	J-VILLA 1&2	3	3,124	446.3	gpd/DU	1.9	1,339	3.8	2,678	6.7	4,687	30,682	V-B	4,750	1,500
	Villa 2	Resort Hotel	J-VILLA 1&2	5	6,052	446.3	gpd/DU	3.1	2,232	6.2	4,464	10.9	7,812				
	Villa 3	Resort Hotel	J-VILLA 3&4	10	10,074	446.3	gpd/DU	6.2	4,463	12.4	8,926	21.7	15,621				
	Villa 4	Resort Hotel	J-VILLA 3&4	10	11,432	446.3	gpd/DU	6.2	4,463	12.4	8,926	21.7	15,621				
B	Villa 5	Resort Hotel	J-VILLA 5	3	2,832	446.3	gpd/DU	1.9	1,339	3.8	2,678	6.7	4,687	8,467	V-B	2,500	1,500*
	Villa 6	Resort Hotel	J-VILLA 6	6	5,635	446.3	gpd/DU	3.7	2,678	7.4	5,356	13.0	9,373				
C	Bungalow 1	Resort Hotel	J-BUNGALOW 1	2	4,896	446.3	gpd/DU	1.2	893	2.4	1,786	4.2	3,126	14,688	V-B	3,250	1,500*
	Bungalow 2	Resort Hotel	J-BUNGALOW 2&3	2	4,896	446.3	gpd/DU	1.2	893	2.4	1,786	4.2	3,126				
	Bungalow 3	Resort Hotel	J-BUNGALOW 2&3	2	4,896	446.3	gpd/DU	1.2	893	2.4	1,786	4.2	3,126				
Total				**43**	**53,837**			**26.6**	**19,193**	**53.2**	**38,386**	**93.3**	**67,179**				

Note:
Fire flow required reduced by maximum of 68.3% to get a fire flow required of 1,500 gpm
* = This is the minimum Fire Flow allowed per the International Fire Code and the City of Scottsdale.

APPENDIX B – PLUMBING FIXTURE COUNTS, FSP SUNSET BEACH BUNGALOWS IMEG #22001753.00, BY IMEG

July 14, 2025

Robert Saunders
Wood Patel
2051 West Northern Ave, Suite 100
Phoenix, Arizona 85021

RE: Plumbing Fixture Counts
FSP - Sunset Beach Bungalows
IMEG #22001753.00

Dear Robert Saunders:

In response to the City of Scottsdale's request for updated total GPM values for each building, IMEG conducted a detailed analysis to determine the total water demand. The summary below outlines the methodology used to arrive at this figure. This approach adheres to the guidelines set forth in the 2015 edition of the International Plumbing Code. Fixture demand was first established using Appendix E – Table E103.3(2), which provides values in Water Supply Fixture Units (WSFU). These values were then converted to GPM using Appendix E – Table E103.3(3), based on the assumption that the project primarily utilizes flush tank fixtures.

VILLA 1			
Fixture	**QTY**	**Total Water Supply Fixture Units (Private Occupancy)**	**Fixture Unit Total**
Bathtub	3	1.4	4.2
Hose Bib	1	2.5	2.5
Lavatory	6	0.7	4.2
Mop Sink	1	3	3.0
Shower	3	1.4	4.2
Water Closet (Flush Tank)	3	2.2	6.6
		Total	24.7
		GPM Equivalent	21.5

VILLA 2			
Fixture	**QTY**	**Total Water Supply Fixture Units (Private Occupancy)**	**Fixture Unit Total**
Bathtub	5	1.4	7.0
Lavatory	10	0.7	7.0
Mop Sink	1	3	3.0
Shower	5	1.4	7.0
Water Closet (Flush Tank)	5	2.2	11.0
		Totals	35.0
		GPM Equivalent	24.9

VILLA 3			
Fixture	**QTY**	**Total Water Supply Fixture Units (Private Occupancy)**	**Fixture Unit Total**
Bathtub	10	1.4	14.0
Lavatory	20	0.7	14.0
Mop Sink	1	3	3.0
Shower	10	1.4	14.0
Water Closet (Flush Tank)	10	2.2	22.0
		Totals	67.0
		GPM Equivalent	34.1

VILLA 4			
Fixture	**QTY**	**Total Water Supply Fixture Units (Private Occupancy)**	**Fixture Unit Total**
Bathtub	10	1.4	14.0
Hose Bib	1	2.5	2.5
Lavatory	20	0.7	14.0
Mop Sink	1	3	3.0
Shower	10	1.4	14.0
Water Closet (Flush Tank)	10	2.2	22.0
		Totals	69.5
		GPM Equivalent	35.0

VILLA 5			
Fixture	**QTY**	**Total Water Supply Fixture Units (Private Occupancy)**	**Fixture Unit Total**
Bathtub	3	1.4	4.2
Hose Bib	1	2.5	2.5
Lavatory	6	0.7	4.2
Shower	3	1.4	4.2
Water Closet (Flush Tank)	3	2.2	6.6
		Totals	21.7
		GPM Equivalent	20.2

VILLA 6			
Fixture	**QTY**	**Total Water Supply Fixture Units (Private Occupancy)**	**Fixture Unit Total**
Bathtub	6	1.4	8.4
Hose Bib	1	2.5	2.5
Lavatory	12	0.7	8.4
Mop Sink	1	3	3.0
Shower	6	1.4	8.4
Water Closet (Flush Tank)	6	2.2	13.2
		Totals	43.9
		GPM Equivalent	27.7

BUNGALOW 1			
Fixture	**QTY**	**Total Water Supply Fixture Units (Private Occupancy)**	**Fixture Unit Total**
Bathtub	2	1.4	2.8
Lavatory	8	0.7	5.6
Kitchen Sink	2	1.4	2.8
Shower	4	1.4	5.6
Water Closet (Flush Tank)	4	2.2	8.8
		Totals	25.6
		GPM Equivalent	21.5

BUNGALOW 2			
Fixture	**QTY**	**Total Water Supply Fixture Units (Private Occupancy)**	**Fixture Unit Total**
Bathtub	2	1.4	2.8
Hose Bib	1	2.5	2.5
Lavatory	8	0.7	5.6
Mop Sink	1	3	3.0
Kitchen Sink	2	1.4	2.8
Shower	4	1.4	5.6
Water Closet (Flush Tank)	4	2.2	8.8
		Totals	31.1
		GPM Equivalent	23.7

BUNGALOW 3			
Fixture	**QTY**	**Total Water Supply Fixture Units (Private Occupancy)**	**Fixture Unit Total**
Bathtub	2	1.4	2.8
Lavatory	8	0.7	5.6
Kitchen Sink	2	1.4	2.8
Shower	4	1.4	5.6
Water Closet (Flush Tank)	4	2.2	8.8
		Totals	25.6
		GPM Equivalent	21.5

Please feel free to contact us should you need any additional information or clarification.

Sincerely,

Jonathan Fernandez

Jonathan Fernandez
Mechanical Engineering Graduate - Designer 2
Jonathan.Fernandez@imegcorp.com

JF/admin_initials
Document4

APPENDIX C – FIRE HYDRANT FLOW TEST RESULTS AND CALCULATIONS

Arizona Flow Testing LLC

HYDRANT FLOW TEST REPORT 1

Project Name:	Fairmont Scottsdale Princess
Project Address:	7575 East Princess Blvd., Scottsdale, Arizona 85255
Client Project No.:	Not Provided
Arizona Flow Testing Project No.:	24990
Flow Test Permit No.:	C77219
Date and time flow test conducted:	December 9, 2024 at 6:50 AM
Data is current and reliable until:	June 9, 2025
Conducted by:	Floyd Vaughan – Arizona Flow Testing, LLC (480-250-8154)
Witnessed by:	Chris Mendez – City of Scottsdale-Inspector (602-9028-9046)

Raw Test Data

Static Pressure: **92.0 PSI**
(Measured in pounds per square inch)

Residual Pressure: **70.0 PSI**
(Measured in pounds per square inch)

Pitot Pressure: **42.0 PSI**
(Measured in pounds per square inch)

Diffuser Orifice Diameter: One 4-inch Pollard Diffuser
(Measured in inches)

Coefficient of Diffuser: 0.9

Flowing GPM: **2,785 GPM**
(Measured in gallons per minute)

GPM @ 20 PSI: **5,282 GPM**

Data with 20 PSI Safety Factor

Static Pressure: **72.0 PSI**
(Measured in pounds per square inch)

Scottsdale requires a maximum Static Pressure of 72 PSI for AFES Design.

Residual Pressure: **50.0 PSI**
(Measured in pounds per square inch)

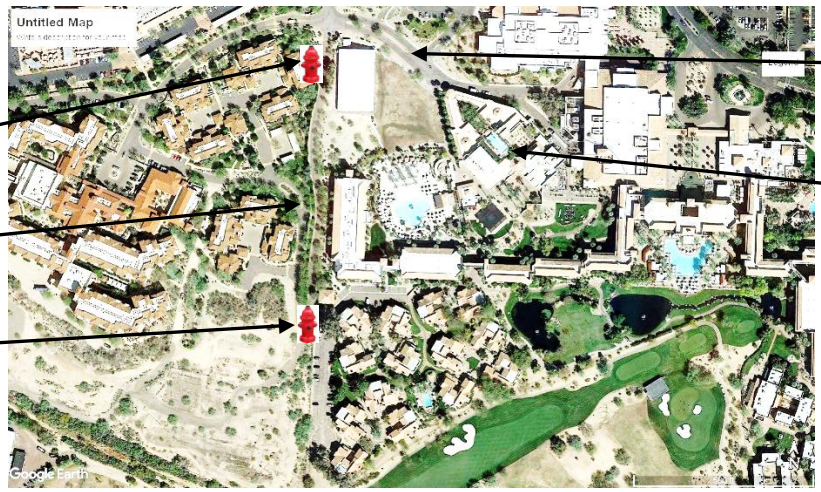
Approx distance between hydrants: 810 Feet

Main size: Not Provided

Flowing GPM: **2,785 GPM**

GPM @ 20 PSI**:** **4,431 GPM**

Flow Test Location **North**



Flow Fire Hydrant

North Cottage Terrace

Pressure Fire Hydrant

East Hacienda Way

Project Site
7575 East Princess Blvd.

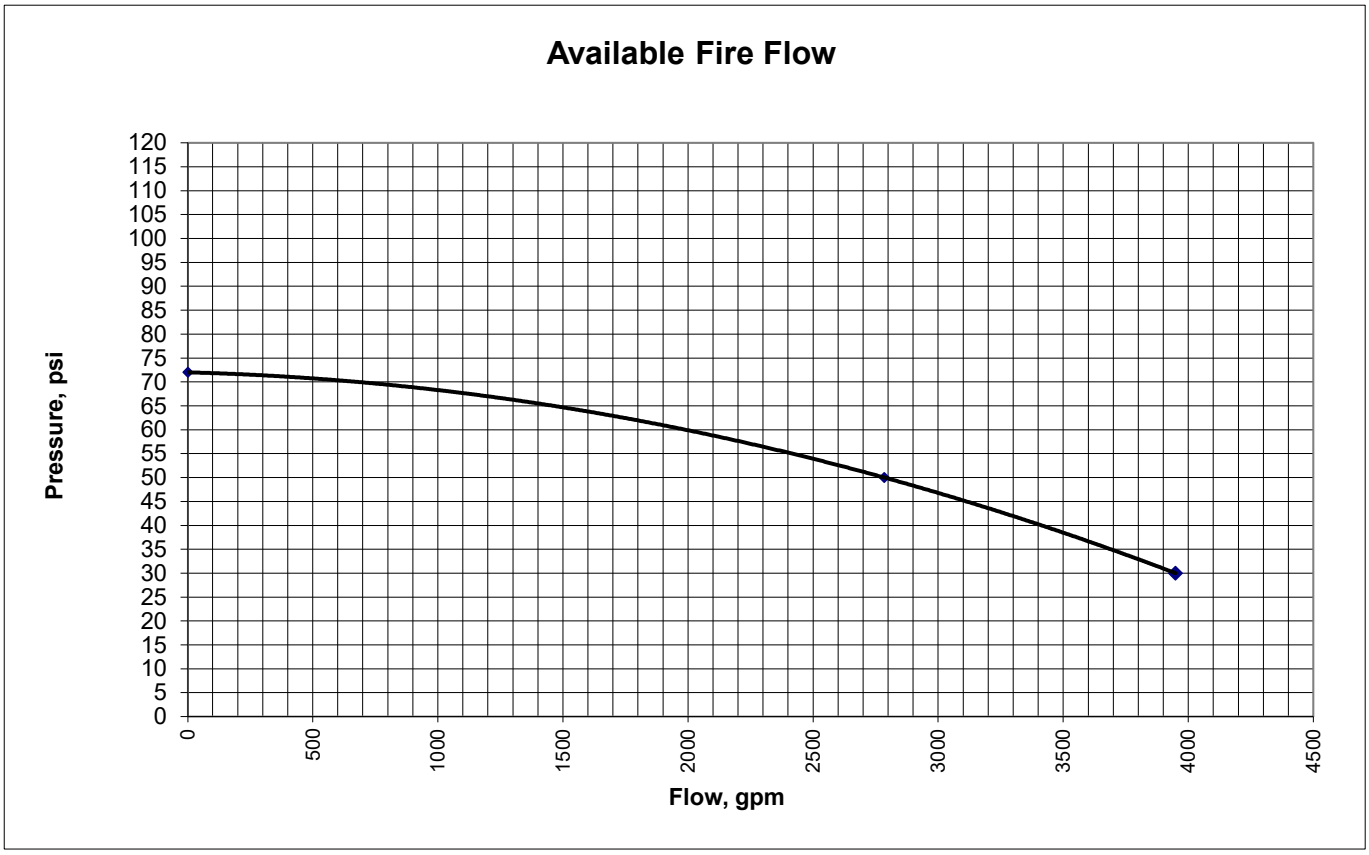
WOOD PATEL

EXISTING WATER SYSTEM PRESSURES

Project	Fairmont Scottsdale Princess - Sunset Villas & Bungalows
Location	Scottsdale AZ
Project Number	215319.1
Project Engineer	Andrew J. Sanchez, EIT

Flow Test Location
Date of Flow Test

Pressure Hydrant		**Flow Hydrant**	
Static Pressure (psi)	72.0		
Residual Pressure (psi)	50.0	Flow (gpm)	2785
Calculated Flow at 30 psi	3949 gpm	Calculated Flow at	30 psi



Discharge (gpm)	Pressure (psi)	Head (ft)
0	72	166.2
2785	50	115.5
3949	30	69.3

Notes
1. Values provided from a hydrant flow test by Arizona Flow Testing LLC

APPENDIX D – FAIRMONT SCOTTSDALE PRINCESS SUNSET VILLAS AND BUNGALOWS PRELIMINARY IMPROVEMENT PLAN PREPARED BY WOOD, PATEL & ASSOCIATES INC., DATED MAY 9, 2025

FAIRMONT SCOTTSDALE PRINCESS
SUNSET VILLAS AND BUNGALOWS
PRELIMINARY IMPROVEMENT PLAN
SCOTTSDALE, ARIZONA
A PORTION OF SECTION 35, TOWNSHIP 4 NORTH, RANGE 4 EAST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA

ENGINEER'S NOTES

1. MARICOPA ASSOCIATION OF GOVERNMENTS (M.A.G.) UNIFORM STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS CONSTRUCTION (LATEST EDITION INCLUDING LATEST REVISION AND CURRENT SUPPLEMENTALS THEREOF PER THE LOCAL TOWN OR CITY) ARE INCORPORATED INTO THIS PLAN IN THEIR ENTIRETY.
2. ALL WORK REQUIRED TO COMPLETE THE CONSTRUCTION COVERED BY THIS PLAN SHALL BE IN ACCORDANCE WITH THE M.A.G. STANDARD SPECIFICATIONS AND DETAILS AND CURRENT SUPPLEMENTS THEREOF PER THE LOCAL CITY OR TOWN UNLESS SPECIFIED OTHERWISE IN THESE PLANS OR ELSEWHERE IN THE CONTRACT DOCUMENTS. CONTRACTORS SHALL FAMILIARIZE THEMSELVES WITH ALL REQUIRED STANDARD SPECIFICATIONS, DETAILS AND SUPPLEMENTS PRIOR TO BIDDING THE WORK FOR THE CONSTRUCTION COVERED BY THIS PLAN.
3. THE CONTRACTOR IS RESPONSIBLE FOR ALL METHODS, SEQUENCING, AND SAFETY CONCERNS ASSOCIATED WITH THIS PROJECT DURING CONSTRUCTION, UNLESS SPECIFICALLY ADDRESSED OTHERWISE IN THIS PLAN OR ELSEWHERE IN THE CONTRACT.
4. THE CONTRACTOR IS TO COMPLY WITH ALL LOCAL, STATE, AND FEDERAL LAWS AND REGULATIONS APPLICABLE TO THE CONSTRUCTION COVERED BY THIS PLAN.
5. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND COMPLYING WITH ALL PERMITS REQUIRED TO COMPLETE ALL WORK COVERED BY THIS PLAN.
6. THE QUANTITIES AND SITE CONDITIONS DEPICTED IN THESE PLANS ARE FOR GENERAL INFORMATIONAL PURPOSES ONLY AND MIGHT NOT REFLECT ACTUAL QUANTITIES AND SITE CONDITIONS. CONTRACTORS SHALL SATISFY THEMSELVES AS TO ACTUAL QUANTITIES AND SITE CONDITIONS PRIOR TO BIDDING THE WORK FOR THE CONSTRUCTION COVERED BY THIS PLAN.
7. A REASONABLE EFFORT HAS BEEN MADE TO SHOW THE LOCATIONS OF EXISTING UNDERGROUND FACILITIES AND UTILITIES IN THE CONSTRUCTION AREA. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO UTILITIES AND/OR FACILITIES CAUSED DURING THEIR CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL CALL 48 HOURS IN ADVANCE FOR BLUE STAKE (1-800-STAKE-IT) PRIOR TO ANY EXCAVATION.
8. THE CONTRACTOR IS RESPONSIBLE FOR ALL COORDINATION OF CONSTRUCTION AFFECTING UTILITIES AND THE COORDINATION OF ANY NECESSARY UTILITY RELOCATION WORK.
9. ALL PAVING, GRADING, EXCAVATION, TRENCHING, PIPE BEDDING, CUT FILL AND BACKFILL SHALL COMPLY WITH THE RECOMMENDATIONS SET FORTH IN THE SOILS (GEOTECHNICAL) REPORT FOR THIS PROJECT IN ADDITION TO THE REFERENCED REQUIRED SPECIFICATIONS AND DETAILS. THE CONTRACTOR SHALL BE AWARE THAT CERTAIN UTILITIES REQUIRE PROPER ATTENTION AND CAREFUL PLANNING DURING SITE CONSTRUCTION. PLEASE NOTE THAT UTILITIES ON THESE PLANS MAY NOT EXHIBIT THE FULL PROTECTIVE COVER REQUIRED DURING THE SUBGRADE PREPARATION PHASE OF THE CONSTRUCTION. IN SUCH INSTANCES, THE CONTRACTOR SHALL PROVIDE ADDITIONAL PROTECTION (SUCH AS RAMPING) OR INCREASED PIPE STRENGTH TO PROVIDE THE NECESSARY PROTECTION REQUIRED TO PREVENT DAMAGE DURING THE CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL HOLD THE ENGINEER HARMLESS IN ALL CASES FOR DAMAGES TO UTILITIES WHERE INADEQUATE PROTECTIVE MEASURES OCCUR.
10. THE CONTRACTOR IS TO VERIFY THE LOCATION AND THE ELEVATIONS OF ALL EXISTING UTILITIES AT POINTS OF TIE-IN PRIOR TO COMMENCING ANY NEW CONSTRUCTION. SHOULD ANY LOCATION OR ELEVATION DIFFER FROM THAT SHOWN ON THESE PLANS, THE CONTRACTOR SHALL CONTACT THE OWNER'S AGENT.
11. CONTRACTOR TO VERIFY AND COORDINATE ALL DIMENSIONS AND SITE LAYOUT WITH ARCHITECT'S FINAL SITE PLAN AND FINAL BUILDING DIMENSIONS BEFORE STARTING WORK. REPORT DISCREPANCIES TO OWNER'S AGENT.
12. COORDINATION BETWEEN ALL PARTIES IS ESSENTIAL PART OF CONTRACT.
13. CONTRACTOR IS RESPONSIBLE FOR PROJECT AND SITE CONDITIONS, AND TO WORK WITH WEATHER CONDITIONS AS THE PROJECT SITE MAY BE LOCATED IN A FLOOD PRONE AREA AND SUBJECT TO FLOODING AND ITS HAZARDS.
14. THE CONTRACTOR IS TO VERIFY THE LOCATION, ELEVATION, CONDITION, AND PAVEMENT CROSS-SLOPE OF ALL EXISTING SURFACES AT POINTS OF TIE-IN AND MATCHING, PRIOR TO COMMENCEMENT OF GRADING, PAVING, CURB AND GUTTER, OR OTHER SURFACE CONSTRUCTION. SHOULD EXISTING LOCATIONS, ELEVATIONS, CONDITION, OR PAVEMENT CROSS-SLOPE DIFFER FROM THAT SHOWN ON THESE PLANS, RESULTING IN THE DESIGN INTENT REFLECTED ON THESE PLANS NOT ABLE TO BE CONSTRUCTED, THE CONTRACTOR SHALL NOTIFY THE OWNER'S AGENT IMMEDIATELY FOR DIRECTION ON HOW TO PROCEED PRIOR TO COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR ACCEPTS RESPONSIBILITY FOR ALL COSTS ASSOCIATED WITH CORRECTIVE ACTION IF THESE PROCEDURES ARE NOT FOLLOWED.
15. CONTRACTOR IS RESPONSIBLE TO COORDINATE UTILITY CROSSINGS AT CULVERT CROSSINGS BEFORE STARTING WORK ON CULVERT. COORDINATE WITH OWNER REPRESENTATIVE. VERIFY UTILITY LINES AND/OR CONDUITS ARE IN PLACE BEFORE STARTING CULVERT WORK.
16. CONSTRUCT RETENTION BASIN AS SHOWN. CONTRACTOR TO SCARIFY BOTTOM OF BASIN TWO FEET DEEP AND NOT ALLOW COMPACTION OVER 80%.
17. THIS PROJECT REQUIRES A REGULAR ONGOING MAINTENANCE PROGRAM FOR THE DESIGNED DRAINAGE SYSTEM(S) TO PRESERVE THE DESIGN INTEGRITY AND THE ABILITY TO PERFORM ITS OPERATIONAL INTENT. FAILURE TO PROVIDE MAINTENANCE WILL JEOPARDIZE THE DRAINAGE SYSTEM(S)' PERFORMANCE AND MAY LEAD TO IT'S INABILITY TO PERFORM PROPERLY AND/OR CAUSE DAMAGE ELSEWHERE IN THE PROJECT.
18. SEWER LINES DESIGNED IN PROFILE AND PUBLIC WATER LINES ARE REQUIRED TO BE ASBUILT AND THE INSTALLATION AND TESTING WITNESSED BY A PROFESSIONAL ENGINEER IN ACCORDANCE WITH ARIZONA ADMINISTRATIVE CODES R18-9-E301 "4.01 GENERAL PERMIT: SEWAGE COLLECTIONS SYSTEMS" AND R18-5-507 AND 508 "APPROVAL OF CONSTRUCTION" AND "RECORD DRAWINGS", RESPECTIVELY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY OWNER 72 HOURS IN ADVANCE WHEN THOSE SYSTEMS ARE READY TO BE WITNESSED.
19. THE WORK PRODUCT PRESENTED IS BELIEVED TO BE COMPLIANT WITH THE INTENT OF THE CURRENT AMERICANS DISABILITIES ACT (ADA) REQUIREMENTS AS INTERPRETED BY THE REVIEWING AGENCY(S), IF CONSTRUCTION OF THE PROJECT IS DELAYED, THIS WORK PRODUCT SHOULD BE UPDATED TO ACCOUNT FOR ANY RELEVANT ADA UPDATES BEFORE CONSTRUCTION BEGINS.
20. LOWEST FLOOR (LF) REFERS TO EITHER FLOOR/SLAB ELEVATION OR TOP OF BASEMENT SLAB. LF ELEVATIONS ON THE GRADING AND DRAINAGE PLANS FOR RESIDENTIAL UNITS REFLECT SLAB ON GRADE CONDITIONS AND CANNOT BE LOWERED WITHOUT AGENCY APPROVAL IN LOCATIONS WHERE 'SPECIAL FLOOD HAZARD AREAS' EXIST. IN NON-FLOOD HAZARD LOCATIONS, TO ENSURE THAT ADEQUATE RESIDENTIAL LOT DRAINAGE CAN BE ACHIEVED, A PROFESSIONAL ENGINEER SHOULD BE CONSULTED IF THE LF FOR THE SLAB IS PROPOSED TO BE LOWERED, OR IF A BASEMENT IS TO BE CONSTRUCTED.

EARTHWORK QUANTITIES (ESTIMATED)

RAW CUT:	687	CY
RAW FILL:	6,689	CY

QUANTITIES ARE ESTIMATED IN PLACE. NO PRECOMPACTION, SHRINK OR SWELL IS ASSUMED.

CITY OF SCOTTSDALE NOTES

PLEASE REFER TO SHEET C2 FOR CITY OF SCOTTSDALE NOTES.

QUANTITIES

PLEASE REFER TO SHEET C2 FOR ESTIMATED QUANTITIES FOR WORK IN PUBLIC RIGHTS-OF-WAY AND EASEMENTS.

LEGEND

PLEASE REFER TO SHEET C2 FOR LEGEND AND LIST OF ABBREVIATIONS.

FINISH FLOOR ELEVATION CALCULATION

FEMA SUMMARY TABLE				
NAME	LF_{88}	HAG	LAG	RFD
BUILDINGS				
VILLA 1	1,554.00	1,551.08	1,550.06	1,553.08
VILLA 2	1,554.00	1,551.08	1,550.06	1,553.08
VILLA 3	1,554.00	1,550.51	1,549.47	1,552.51
VILLA 4	1,555.30	1,549.6	1,548.45	1,551.60
VILLA 5	1,553.20	1,549.75	1,548.97	1,551.75
VILLA 6	1,553.30	1,549.37	1,548.35	1,551.37
BUNGALOW 1	1,552.80	1,548.07	1,547.16	1,550.07
BUNGALOW 2	1,554.00	1,548.29	1,547.39	1,550.29
BUNGALOW 3	1,555.10	1,548.31	1,547.41	1,550.31

ALL ELECTROMECHANICAL EQUIPMENT SHALL BE ELEVATED TO RFD ELEVATION.

ENGINEER'S CERTIFICATION

ENGINEER'S CERTIFICATION: THE LOWEST FLOOR ELEVATION(S) AND/OR FLOOD PROOFING ELEVATION(S) ON THIS PLAN ARE SUFFICIENTLY HIGH TO PROVIDE PROTECTION FROM FLOODING CAUSED BY A ONE-HUNDRED YEAR STORM, AND ARE IN ACCORDANCE WITH CITY OF SCOTTSDALE REVISED CODE, CHAPTER 37-FLOODPLAIN AND STORMWATER REGULATIONS.

"THE ENGINEER OF RECORD ON THESE PLANS HAS RECEIVED A COPY OF THE APPROVED STIPULATIONS FOR THIS PROJECT AND HAS DESIGNED THESE PLANS IN CONFORMANCE WITH THE APPROVED STIPULATIONS."

ENGINEER SIGNATURE — DATE 05/09/2025

FEMA FIRM NOTE (ZONE AO)

ACCORDING TO FEMA FLOOD INSURANCE RATE MAPPING, THE SUBJECT PROPERTY IS LOCATED IN 'SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD' "ZONE AO". ZONE AO IS DESCRIBED AS: "FLOOD DEPTHS OF 1 TO 3 FEET (USUALLY SHEET FLOW ON SLOPING TERRAIN); AVERAGE DEPTHS DETERMINED. FOR AREAS OF ALLUVIAL FAN FLOODING, VELOCITIES ALSO DETERMINED."

FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

COMMUNITY NUMBER	PANEL NUMBER	SUFFIX	DATE OF FIRM	INDEX DATE	FIRM ZONE	BASE FLOOD ELEVATION (IN AO ZONE, USE DEPTH)
04013C	1320	L	10/16/2013	07/20/2021	AO	1

PARCEL DESCRIPTION

PARCEL NO. 2: (TENNIS COTTAGES PARCEL)
THAT PORT OF THE SOUTHWEST ONE-QUARTER OF SECTION 35, TOWNSHIP 4 NORTH, RANGE 4 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, DESCRIBED AS FOLLOWS:
COMMENCING AT THE SOUTH ONE-QUARTER CORNER OF SAID SECTION 35;
THENCE NORTH 00 DEGREES 08 MINUTES 41 SECONDS EAST, ALONG THE NORTH-SOUTH MED-SECTION LINE OF SAID SECTION 35, A DISTANCE OF 1486.58 FEET;
THENCE NORTH 89 DEGREES 49 MINUTES 06 SECONDS WEST, 840.00 FEET OF THE POINT OF BEGINNING;
THENCE SOUTH 27 DEGREES 44 MINUTES 13 SECONDS EAST, 177.75 FEET;
THENCE SOUTH 83 DEGREES 46 MINUTES 19 SECONDS EAST, 39.13 FEET;
THENCE SOUTH 26 DEGREES 47 MINUTES 27 SECONDS EAST, 26.35 FEET;
THENCE SOUTH 58 DEGREES 07 MINUTES 53 SECONDS EAST, 43.04 FEET;
THENCE SOUTH 88 DEGREES 18 MINUTES 25 SECONDS EAST, 29.86 FEET;
THENCE SOUTH 07 DEGREES 07 MINUTES 02 SECONDS EAST, 47.49 FEET;
THENCE SOUTH 66 DEGREES 38 MINUTES 00 SECONDS WEST, 275.66 FEET TO THE BEGINNING OF A CURVE CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 150.00 FEET;
THENCE SOUTH WESTERLY ALONG SAID CURVE THOUGH A CENTRAL ANGLE OF 12 DEGREES 08 MINUTES 15 SECONDS, AN ARCH DISTANCE OF 31.78 FEET;
THENCE SOUTH 54 DEGREES 29 MINUTES 46 SECONDS WEST, 446.31 FEET;
THENCE NORTH 84 DEGREES 49 MINUTES 13 SECONDS WEST, 43.57 FEET;
THENCE NORTH 00 DEGREES 01 MINUTES 45 SECONDS EAST, 619.54 FEET;
THENCE SOUTH 89 DEGREES 49 MINUTES 06 SECONDS EAST, 377.78;
THENCE NORTH 00 DEGREES 01 MINUTES 45 SECONDS EAST, 18.00 FEET;
THENCE SOUTH 89 DEGREES 49 MINUTES 06 SECONDS EAST, 103.52 FEET TO THE POINT OF BEGINNING.
EXCEPT ONE-HALF OF ALL OIL AND MINERAL RIGHTS AS RESERVED IN INSTRUMENT RECORDED IN BOOK 124, PAGE 39, RECORDS OF MARICOPA COUNTY, ARIZONA; AND ALSO
EXCEPT ALL OIL GAS, OTHER HYDROCARBON SUBSTANCES, HELIUM OR OTHER SUBSTANCES OF A GASEOUS NATURE, COAL, METALS, MINERALS, FOSSILS, FERTILIZER OF EVERY NAME AND DESCRIPTION; AND ALSO
EXCEPT ALL URANIUM, THORIUM OR ANY OTHER MATERIAL WHICH IS OR MAY BE DETERMINED TO BE PECULIARLY ESSENTIAL TO THE PRODUCTION OF FISSIONABLE MATERIALS WHETHER OR NOT OF COMMERCIAL VALUE, AS SET FORTH IN SECTION 37-231, ARIZONA REVISED STATUTES.

SOILS REPORT NOTE

A SOILS GEOTECHNICAL REPORT HAS BEEN PREPARED FOR THIS PROJECT TITLED FAIRMONT CASITAS ADDITION BY ALPHA GEOTECHNICAL & MATERIALS, INC. DATED DECEMBER 15, 2021. REPORT NO. 21-G-12692.

STIPULATION CONFORMANCE STATEMENT

"THE ENGINEER OF RECORD ON THESE PLANS HAS RECEIVED A COPY OF THE APPROVED STIPULATIONS FOR THIS PROJECT AND HAS DESIGNED THESE PLANS IN CONFORMANCE WITH THE APPROVED STIPULATIONS."

ENGINEER SIGNATURE — DATE 05/09/2025

NO CONFLICT SIGNATURE BLOCK

UTILITY	UTILITY COMPANY	NAME OF COMPANY REPRESENTATIVE	TELEPHONE NUMBER	DATE CONTACTED	DATE SIGNED
ELECTRIC	ARIZONA PUBLIC SERVICE	HAILEY PARKS	602-493-4401	08/22/2022	
TELEPHONE	LUMEN	JEANETTE DEBOARD	480-221-7810	08/22/2022	
NATURAL GAS	SOUTHWEST GAS	ANDY SAKS	480-730-3857	08/22/2022	
CABLE TV	COX COMMUNICATIONS	JACOB HORSMAN	-	08/22/2022	
OTHER	MCI	RICHARD YOUNG	602-615-8995	08/22/2022	

ENGINEER'S CERTIFICATION

I DARIN L. MOORE, P.E. , AS THE ENGINEER OF RECORD FOR THIS DEVELOPMENT, HEREBY CERTIFY THAT ALL UTILITY COMPANIES LISTED ABOVE HAVE BEEN PROVIDED FINAL IMPROVEMENT PLANS FOR REVIEW, AND THAT ALL CONFLICTS IDENTIFIED BY THE UTILITIES HAVE BEEN RESOLVED. IN ADDITION, "NO CONFLICT" FORMS HAVE BEEN OBTAINED FROM EACH UTILITY COMPANY AND ARE INCLUDED IN THIS SUBMITTAL. 01/30/2023

SIGNATURE — DATE 05/09/2025

SHEET INDEX

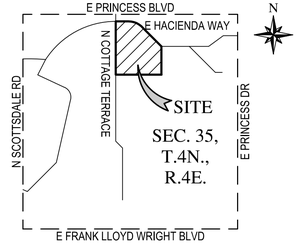
BENCHMARK

CITY OF SCOTTSDALE BRASS CAP FLUSH 450'± NORTH OF PRINCESS DRIVE ON SCOTTSDALE ROAD, BEING THE WEST QUARTER CORNER OF SECTION 35, TOWNSHIP 4 NORTH, RANGE 4 EAST.
CITY OF SCOTTSDALE DATUM, NAVD88 DATUM
ELEVATION=1553.22'.

I HEREBY CERTIFY THAT ALL ELEVATIONS REPRESENTED ON THIS PLAN ARE BASED ON NAVD 1988, MCDOT, AND MEET THE FEMA BENCHMARK MAINTENANCE (BMM) CRITERIA.

PUBLIC UTILITIES

WATER	CITY OF SCOTTSDALE
SEWER	CITY OF SCOTTSDALE
ELECTRIC	APS
TELEPHONE	CENTURYLINK
NATURAL GAS	SOUTHWEST GAS
CABLE TV	COX COMMUNICATIONS



VICINITY MAP
N.T.S.

CITY OF SCOTTSDALE CIVIL APPROVAL

REVIEW & RECOMMENDED APPROVAL BY:

PAVING		SIGNS & MARKINGS	
GRADING & DRAINAGE		PLANNING	
WATER & SEWER		FIRE	
RETAINING WALLS		SIGNALS & STREET	

ENGINEERING DEPARTMENT MANAGER — DATE

OWNER / DEVELOPER

STRATEGIC HOTELS & RESORTS
150 NORTH RIVERSIDE PLAZA, SUITE 4270
CHICAGO, IL 60606
CONTACT: TIMOTHY TAYLOR
PHONE: (312) 658-6038

ENGINEER

WOOD, PATEL & ASSOCIATES, INC.
2051 WEST NORTHERN AVENUE, SUITE 100
PHOENIX, ARIZONA 85021
CONTACT: DARIN MOORE, P.E.
PHONE: (602) 335-8500
FAX: (602) 335-8580

ARCHITECT

KOLLIN ALTOMARE ARCHITECTS
4265 E. CONANT STREET, SUITE 101
LONG BEACH, CA 90808
CONTACT: PAUL ALTOMARE
PHONE: (562) 597-8760

PROJECT SITE DATA

ASSESSOR PARCEL NUMBER(S):
215-08-695
PROJECT SITE ADDRESS:
7505 EAST PRINCESS BOULEVARD
SCOTTSDALE, ARIZONA
PROJECT SITE AREA(S):
NET AREA = 6.09 AC
DISTURBED AREA = 1.96± AC
ZONING:
C2

WOOD PATEL

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

Call at least two full working days before you begin excavation.
ARIZONA811 Arizona Blue Stake, Inc.
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In Maricopa County: (602) 263-1100

FAIRMONT SCOTTSDALE PRINCESS
SUNSET VILLAS AND BUNGALOWS
PRELIMINARY IMPROVEMENT PLAN
COVER SHEET

REV	DESCRIPTION	DATE

Registered Professional Engineer — CERTIFICATE NO. 36382 — DARIN L. MOORE — ARIZONA, U.S.A. — EXPIRES 06-30-28

SCALE (HORIZ.) N/A
SCALE (VERT.) N/A
DATE 05/09/2025
JOB NUMBER 215319.10
SHEET C1 OF 18

CHECKED BY: DM DESIGNED BY: RS DRAFTED BY: JRS

Z:\2021\215319\Dwg\Imp\5319.10 - Sunset Bungalows\5319.10-CV SB.dwg

CITY OF SCOTTSDALE NOTES

GENERAL CONSTRUCTION NOTES FOR CAPITAL PROJECTS

1. ALL IMPROVEMENT CONSTRUCTION SHALL COMPLY WITH THE 2020 MARICOPA COUNTY ASSOCIATION OF GOVERNMENTS STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS CONSTRUCTION AS AMENDED BY THE LATEST VERSION OF THE CITY OF SCOTTSDALE SUPPLEMENTAL STANDARD SPECIFICATIONS AND DETAILS AND CITY OF SCOTTSDALE'S DESIGN STANDARDS & POLICIES MANUAL (DS&PM). IF THERE IS A CONFLICT, THE LATTER SHALL APPLY. ALL FACILITIES CONSTRUCTION SHALL COMPLY WITH THE LATEST BUILDING CODES AS AMENDED AND ADOPTED BY THE CITY OF SCOTTSDALE.
2. THE ENGINEERING DESIGNS ON THESE PLANS ARE APPROVED BY THE CITY IN SCOPE AND NOT IN DETAIL. IF CONSTRUCTION QUANTITIES ARE SHOWN ON THESE PLANS, THEY ARE NOT VERIFIED BY THE CITY.
3. BASED ON THE INFORMATION SUBMITTED ON THE PLANS AND ASSOCIATED DOCUMENTS, THE CITY HAS REVIEWED AND FOUND THEM TO BE IN ACCORDANCE WITH THE SCOTTSDALE REVISED CODE AND ARE ACCEPTABLE FOR PERMIT ISSUANCE. THIS ACCEPTANCE BY THE CITY DOES NOT AUTHORIZE VIOLATIONS OF ANY APPLICABLE CODE, ORDINANCE OR STANDARD AS ADOPTED BY THE SCOTTSDALE REVISED CODE.
4. APPROVAL OF THE PLANS BY THE CITY IS VALID FOR SIX MONTHS. IF A PERMIT FOR THE CONSTRUCTION HAS NOT BEEN ISSUED WITHIN SIX MONTHS OF REVIEW, THE PLANS SHALL BE RESUBMITTED TO THE CITY FOR REAPPROVAL.
5. ANY DEVIATION FROM THE APPROVED PLANS SHALL BE REVIEWED AND APPROVED BY THE CITY PRIOR TO THAT CHANGE BEING INCORPORATED INTO THE PROJECT.
6. A CITY CAPITAL PROJECTS INSPECTOR WILL INSPECT ALL WORK WITHIN THE CITY RIGHTS-OF-WAY, EASEMENTS AND FACILITIES.
7. ANY SPECIAL INSPECTION REQUIRED SHALL BE IN ADDITION TO ANY ROUTINE INSPECTION BY THE CITY.
8. CITY ENCROACHMENT AND BUILDING PERMITS ARE REQUIRED FOR WORK IN PUBLIC RIGHTS-OF-WAY, EASEMENTS GRANTED FOR PUBLIC PURPOSES AND FACILITIES. PERMITS WILL BE ISSUED BY THE CITY THROUGH THE CITY'S ONE STOP SHOP. COPIES OF ALL PERMITS SHALL BE RETAINED ON-SITE AND SHALL BE AVAILABLE FOR INSPECTION AT ALL TIMES. FAILURE TO PRODUCE THE REQUIRED PERMITS WILL RESULT IN IMMEDIATE WORK STOPPAGE UNTIL THE PROPER PERMIT DOCUMENTATION IS OBTAINED.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FOR SALVAGING PROTECTED NATIVE PLANTS PRIOR TO THE START OF CONSTRUCTION.
10. CONTRACTOR SHALL CONTACT AZ 811 TWO FULL WORKING DAYS PRIOR TO BEGINNING EXCAVATION.
11. ALL EXCAVATION AND GRADING WHICH IS NOT IN PUBLIC RIGHTS-OF-WAY OR IN EASEMENTS GRANTED FOR PUBLIC PURPOSES MUST CONFORM TO SECTION 1803 AND APPENDIX J OF THE LATEST INTERNATIONAL CODE COUNCIL AS ADOPTED AND AMENDED BY THE CITY OF SCOTTSDALE. A PERMIT FOR THIS GRADING MUST BE SECURED FROM THE CITY.
12. THRUST RESTRAINT, WHERE REQUIRED, ON ALL CITY WATER LINES SHALL BE PROVIDED USING MEGALUG MECHANICAL JOINT RESTRAINTS OR CITY-APPROVED EQUAL.
13. ANY ASPHALT MIX DESIGN USED ON CITY PROJECTS SHALL HAVE BEEN APPROVED FOR THAT USE PER SECTION 5-10 OF THE CITY'S DS&PM AND APPEAR ON THE "APPROVED LIST OF ASPHALT MIXES" AS DISTRIBUTED BY THE EAST VALLEY ASPHALT COMMITTEE (EVAC).
14. THE CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE AND REPLACE, AT NO ADDITIONAL COST TO THE CITY, ANY AND ALL PAVEMENT, SIDEWALK, CURB AND GUTTER, DRAINAGE STRUCTURES, ETC. OUTSIDE THE PAY LIMIT THAT ARE DAMAGED DUE TO THEIR ACTIVITIES ON THE PROJECT. THIS INCLUDES, BUT IS NOT LIMITED TO, THE REMOVAL AND REPLACEMENT OF NEWLY CRACKED ROADWAY INFRASTRUCTURE, THE REMOVAL AND REPLACEMENT OF EXISTING CRACKED ROADWAY INFRASTRUCTURE WHERE THE CRACKS HAVE BEEN ENLARGED DUE TO THE CONTRACTOR'S OPERATIONS, THE REMOVAL AND REPLACEMENT OF DEFORMED ROADWAY INFRASTRUCTURE. ALL SAWCUTS USED FOR THE REMOVAL OF THESE ITEMS SHALL BE PERPENDICULAR AND PARALLEL TO THE CENTERLINE CONTROLLING THAT ITEM, OR AT THE DIRECTION OF THE CITY'S CAPITAL PROJECTS INSPECTOR.
15. ALL CAPITAL IMPROVEMENT PROJECTS SHALL MEET THE PROCEDURES AND STANDARDS FOR THE USE OF TEMPORARY/SECURITY FENCING AROUND THE PERIMETER OF CONSTRUCTION SITES, AS DEFINED IN THE CITY'S ZONING ORDINANCE, ARTICLE VII, SECTION 7.700.

GENERAL NOTES FOR PUBLIC WORKS CONSTRUCTION

1. ALL CONSTRUCTION IN THE PUBLIC RIGHTS-OF-WAY OR IN EASEMENTS GRANTED FOR PUBLIC USE MUST CONFORM TO THE LATEST MAG UNIFORM STANDARD SPECIFICATIONS AND UNIFORM STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION AS AMENDED BY THE LATEST VERSION OF THE CITY OF SCOTTSDALE SUPPLEMENTAL STANDARD SPECIFICATIONS AND SUPPLEMENTAL STANDARD DETAILS. IF THERE IS A CONFLICT, THE CITY'S SUPPLEMENTAL STANDARD DETAILS WILL GOVERN.
2. THE CITY ONLY APPROVES THE SCOPE, NOT THE DETAIL, OF ENGINEERING DESIGNS; THEREFORE, IF CONSTRUCTION QUANTITIES ARE SHOWN ON THESE PLANS, THEY ARE NOT VERIFIED BY THE CITY.
3. THE APPROVAL OF PLANS IS VALID FOR SIX (6) MONTHS. IF A RIGHT-OF-WAY PERMIT FOR THE CONSTRUCTION HAS NOT BEEN ISSUED WITHIN THIS TIME FRAME, THE PLANS MUST BE RESUBMITTED TO THE CITY FOR REAPPROVAL.
4. A CITY INSPECTOR WILL INSPECT ALL WORKS WITHIN THE CITY OF SCOTTSDALE. NOTIFY INSPECTION SERVICES 72 HOURS BEFORE BEGINNING WORK.
5. WHENEVER EXCAVATION IS NECESSARY, CALL THE BLUE STAKE CENTER, 811, TWO WORKING DAYS BEFORE EXCAVATION BEGINS.
6. PERMISSION TO WORK IN THE RIGHT-OF-WAY (PWR) PERMITS ARE REQUIRED FOR ALL WORKS WITHIN THE RIGHTS-OF-WAY AND EASEMENTS GRANTED FOR PUBLIC PURPOSES. COPIES OF ALL PERMITS MUST BE RETAINED ON-SITE AND BE AVAILABLE FOR INSPECTION AT ALL TIMES. FAILURE TO PRODUCE THE REQUIRED PERMITS WILL RESULT IN IMMEDIATE SUSPENSION OF ALL WORK UNTIL THE PROPER PERMIT DOCUMENTATION IS OBTAINED.

FIRE NOTE:

1. ALL PRIVATE STREETS AND DRIVES SHALL CONFORM TO THE FIRE DEPARTMENT GUIDELINES FOR EMERGENCY VEHICLE ACCESS.

SEWER NOTE:

1. THE ONSITE SEWER SYSTEM CONSTRUCTED BY THIS PLAN SET IS A PRIVATE SYSTEM AND WILL NOT BE MAINTAINED BY THE CITY OF SCOTTSDALE.
2. MAINTENANCE OF THE ONSITE SEWER SYSTEM IS THE RESPONSIBILITY OF THE OWNER.

WATER NOTE:

1. THE WATER SYSTEM SHOWN HEREIN HAS BEEN DESIGNED TO ADEQUATELY SUPPLY WATER IN SUFFICIENT QUANTITY AND PRESSURE TO MEET LOCAL FIRE REQUIREMENTS.

PAVING QUANTITIES WITHIN PUBLIC RIGHT-OF-WAY (ESTIMATED)

3" A.C. OVER 5" A.B.C.	858	SY
8" P.C.C. OVER 4" A.B.C.	19	SY
6" VERTICAL CURB & GUTTER	349	LF
MOUNTABLE CURB	29	LF
6" SINGLE CURB	13	LF
CONCRETE SIDEWALK	10,605	SF
CURB TRANSITION	2	EA
SIDEWALK RAMP	1	EA

PUBLIC WATER QUANTITIES (ESTIMATED)

4" DIP WATER LINE	406	LF
3" WATER LINE	169	LF
4" DOMESTIC WATER SERVICE & METER	1	EA
4" DOUBLE CHECK VALVE BACKFLOW	1	EA
CONNECT TO EXISTING WATERLINE	3	EA

PUBLIC SEWER QUANTITIES (ESTIMATED)

CONNECT TO EXISTING SEWER LINE	1	EA

LEGEND

EXISTING SURVEY

- SECTION LINE
- RIGHT OF WAY
- PROPERTY LINE
- ROAD CENTERLINE
- EASEMENT
- SURVEY MARKER
- E — UG ELECTRIC (BURIED CABLE)
- E (CONDUIT) — UG ELECTRIC (CONDUIT)
- E (DUCT BANK) — UG ELECTRIC (DUCT BANK)
- OHE — OVERHEAD ELECTRIC
- OHT — OVERHEAD TELEPHONE
- T — UG TELEPHONE
- TV — CABLE TELEVISION
- OHTV — OVERHEAD CABLE TELEVISION
- T (DUCT BANK) — TELEPHONE DUCT BANK
- BARBED WIRE FENCE
- CHAIN LINK FENCE
- WOOD FENCE
- BLOCK WALL
- 4"G (MATERIAL) — GAS LINE
- 8"S (MATERIAL) — SEWER LINE
- STORM DRAIN PIPE
- 4"IRR (MATERIAL) — IRRIGATION LINE
- 8"W (MATERIAL) — WATER LINE
- CURB
- SIDEWALK
- -1300- — MAJOR CONTOUR
- -1299- — MINOR CONTOUR
- VEGETATION
- BUILDING
- (S) — SEWER MANHOLE
- (D) — STORM DRAIN MANHOLE
- (T) — TELEPHONE MANHOLE
- P 0.00 — SPOT ELEVATION
- SIGN
- JUNCTION BOX/RISER
- FIRE HYDRANT
- WATER VALVE
- STREET/PARKING LIGHT
- UTILITY POLE
- CATCH BASIN

PROPOSED GRADING, DRAINAGE & PAVING

- 1300 — MAJOR CONTOUR
- 1299 — MINOR CONTOUR
- C 0.00 / P 0.00 — SPOT ELEVATIONS
- STORM DRAIN PIPE
- STORM DRAIN CATCH BASIN
- 1.0% — SLOPE ARROW
- GB / RIDGE — GRADE BREAK/RIDGE
- RIP RAP
- TW 0.00 / TF 0.00 — WALL ELEVATION
- ROOF DRAIN/DRAIN ARROW
- DRYWELL
- OUTFALL ELEVATION EL:XX.XX — SITE ULTIMATE OUTFALL LOCATION & ELEVATION
- WALL
- CONCRETE SIDEWALK
- CONCRETE PAVEMENT
- LIGHT DUTY ASPHALT PAVEMENT
- HEAVY DUTY ASPHALT PAVEMENT
- STREET/PARKING LIGHT

PROPOSED WATER & SEWER

- WATER LINE
- WATER LINE FITTINGS
- BACKFLOW PREVENTION DEVICE
- WATER VALVE
- FIRE DEPARTMENT CONNECTION
- FIRE HYDRANT
- WATER METER
- PLUG
- REDUCER
- TAPPING SLEEVE & VALVE
- CURB STOP
- PRESSURE RELEASE VALVE
- AIR/VACUUM RELEASE VALVE
- SEWER LINE
- SEWER MANHOLE
- CLEANOUT

ABBREVIATIONS

A.L.	AREA LIGHT
C	CONCRETE ELEVATION
CO	CURB OPENING
E.O.	ELECTRICAL OUTLET
E.S.V.A.E.	EMERGENCY VEHICLE ACCESS EASEMENT
FH	FIRE HYDRANT
G	GUTTER ELEVATION
INV	INVERT ELEVATION
I.V.	IRRIGATION VALVE
I.V.B.	IRRIGATION VALVE BOX
NG	NATURAL GROUND ELEVATION
P	PAVEMENT ELEVATION
RIM	RIM ELEVATION
TB	TOP OF BANK
TC	TOP OF CURB

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FAIRMONT SCOTTSDALE PRINCESS
SUNSET VILLAS AND BUNGALOWS
PRELIMINARY IMPROVEMENT PLAN
NOTES & QUANTITIES

REV	DESCRIPTION	DATE

Registered Professional Engineer, Civil
CERTIFICATE NO.
36382
DARIN L. MOORE
ARIZONA U.S.A.
EXPIRES 06-30-28

SCALE (HORIZ.)	N/A
SCALE (VERT.)	N/A
DATE	05/09/2025
JOB NUMBER	215319.10
SHEET	C2 OF 18

CHECKED BY: DM DESIGNED BY: RS DRAFTED BY: JRS

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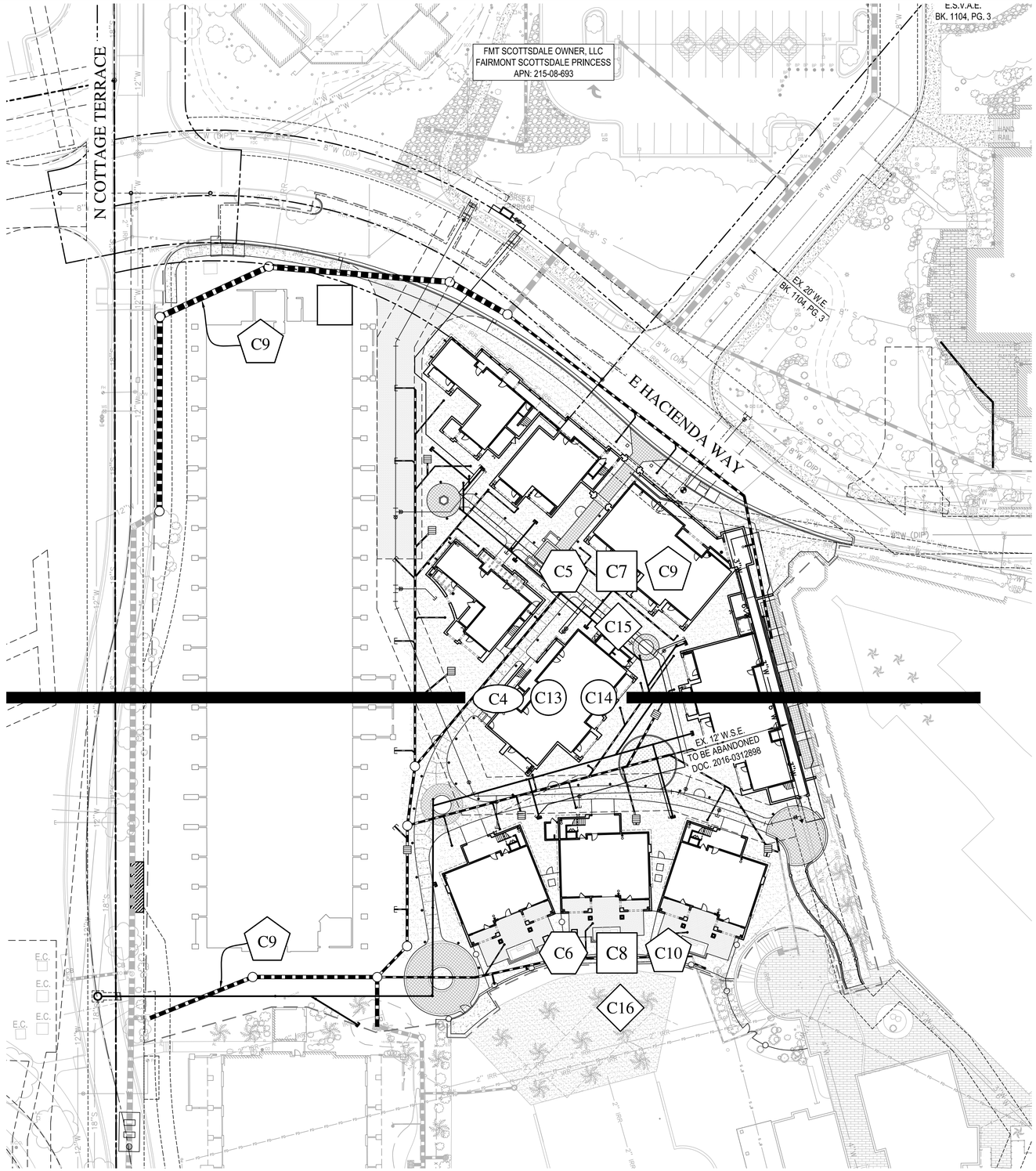


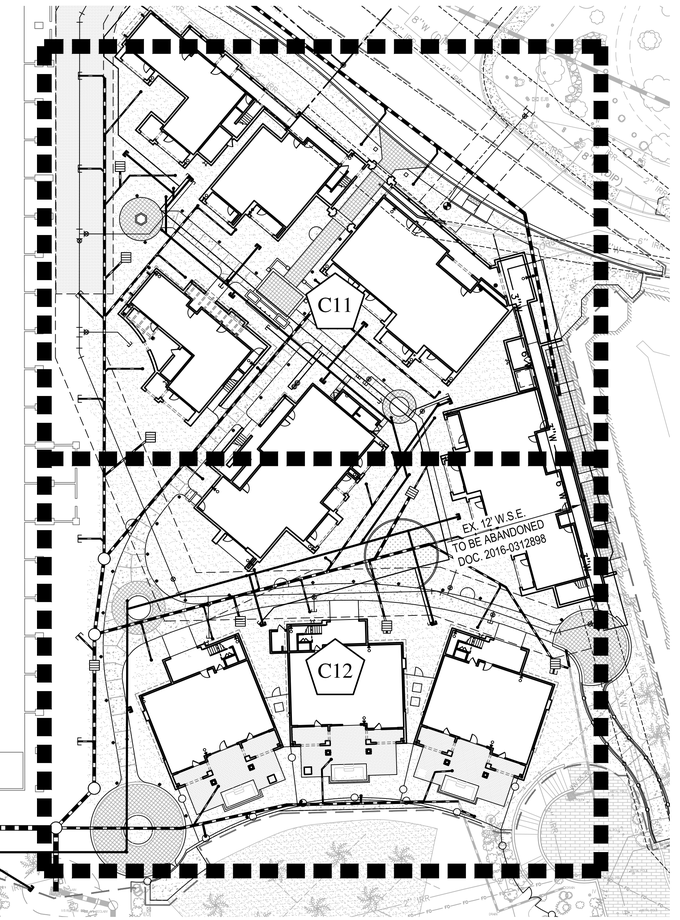
INDEX MAP LEGEND

- CX — DEMOLITION
- CX — GRADING & DRAINAGE
- CX — PAVING
- CX — STORM DRAIN
- CX — WATER & FIRE LINE
- CX — SEWER

N

0 30 60

Horz. 1 in. = 30 ft.



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FAIRMONT SCOTTSDALE PRINCESS
SUNSET VILLAS AND BUNGALOWS
PRELIMINARY IMPROVEMENT PLAN
INDEX MAP

REV	DESCRIPTION	DATE

Registered Professional Engineer (Civil)
CERTIFICATE NO. 36382
DARIN L. MOORE
Date Signed 05/09/25
ARIZONA, U.S.A.

EXPIRES 06-30-28

SCALE (HORIZ.)	1" = 30'
SCALE (VERT.)	N/A
DATE	05/09/2025
JOB NUMBER	215319.10
SHEET	C3 OF 18

CHECKED BY: DM DESIGNED BY: RS DRAFTED BY: JRS

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PRINCESS MXD MERCER INSTITUTE TRACT 26

PARCEL 'A'

FMT SCOTTSDALE OWNER, LLC
FAIRMONT SCOTTSDALE PRINCESS
APN: 215-08-693

EX. 47' I.E.E. & U.E.
DOC 2006-0523599

EX. 70' I.E.E., U.E. & E.V.A.E.
DOC 1986-0664160

30' I.E.E. & U.E.
DOC 2006-0523599

EX 15' CASITA R.E. AREA
DOC 2006-523599, MCR

EX. 8' E.E.
DOC 2016-0236361

EX. 8' W.E.
DOC 2015-0524453

EX. 30' I.E.E. & U.E.
DOC 2006-0523599

EX. 31' C.A.E. & E.S.V.A.E.
BK. 1104, PG. 3

EX. 20' W.E.
EX. 20' W.E.
BK. 1104, PG. 3

EX. 8' E.E.
DOC 2016-0236365

EX. 20' W.E.
BK. 1104, PG. 3

EX. CAE. & E.S.V.A.E.
BK 1104, PG 3

EX 12' W.S.E.
TO BE ABANDONED
DOC. 2016-0312898

EX 12' WSE
DOC 2016-0312898

E HACIENDA WAY

N COTTAGE TERRACE

REMOVAL LIMITS

EX. CB
GRATE=1551.02'
INV=1548.27'

EX. CB
GRATE=1552.89'
INV=1548.71'

EX. CB
GRATE=1550.88'
INV=1544.76'

EX. CB
GRATE=RIM=1553.00
INV=1544
INV 18"(N)=1544.22
INV 24"(E)=1544.18
INV 24"(S)=1544.16

RIM=1552.79
INV 36" (N)=1541.39
INV 36" (S)=1541.53
INV 36" (E)=1541.70

RIM=1551.37
INV 8" (E)=1542.61
INV 8" (W)=1542.57
INV 8" (N)=1542.57

RIM=1551.38
INV 12"? (N)=1536.08
INV 12"? (S)=1536.08
FLOWS SOUTH

RIM=1552.39
INV (NE)=1545.24
INV (W)=1545.09

RIM=1552.49
INV 36" (W)=1543.17
INV 36" (N)=1543.17
INV 18" (SE)=1547.39

RIM=1553.61
INV 36" (N)=1545.61
INV 18"? (E)=1545.56
INV 18"? (W)=1545.56

RIM=1554.54
INV 18"? (W)=1546.64
INV 12"? (SE)=1547.44
INV 12"? (S)=1547.44

RIM=1548.77
INV 18" (E)=1540.47
INV 24" (S)=1540.57
INV 30" (W)=1540.37

EX. CB
GRATE=1549.50
INV 2.5" (E)=1547.03

GRATE=1548.55
INV 12" (SE)=1544.13

DMH RIM = 1549.72
INV (NE) = 1538.93
INV (S) = 1538.92

DMH RIM = 1547.54
INV (N) = 1538.12
INV (S) = 1538.14
INV (W) = 1538.26
LID=1547.71

CATCH BASIN BOX=1538.36

LID=1547.71
CATCH BASIN BOX=1536.26
RIM=1547.11
INV 12"? (N)=1534.36
INV 12"? (S)=1534.36
INV (NW)=1535.21

GRATE=1545.95
INV 24" (E)=1538.70

GRATE=1545.95
INV 24" (W)=1538.74

EX. BUILDING
FF=1550.41

EX. SDMH
GRATE=1547.96
INV 24"? (NE)=1541.19
INV 24"? (SE)=1541.21

EX. BUILDING
FF=1561.26

DMH
RIM=1553.61
INV (S)=1547.53
INV (N)=1548.20

GRATE=1556.87
INV =1552.75

EX. CB
GRATE=1550.68
INV =1548.06

EX. POOL

EX. BUILDING

CABANAS

HAND RAIL

RECYCLE CAN

99'

6" IRR

2" IRR

N

0 30 60

Horz. 1 in. = 30 ft.

DEMOLITION NOTES

(2) REMOVE EXISTING ASPHALT PAVEMENT.

(3) REMOVE EXISTING CURB OR CURB & GUTTER.

(4) REMOVE EXISTING SIDEWALK.

(5) EXISTING CURB OR CURB & GUTTER TO REMAIN AND PROTECTED IN-PLACE.

(8) REMOVE EXISTING LANDSCAPE. CONTRACTOR TO COORDINATE WITH LANDSCAPE ARCHITECT PRIOR TO REMOVAL TO CONFIRM REMOVAL OR PROTECT IN-PLACE.

(11) EXISTING FENCE TO BE SALVAGED. CONTRACTOR TO COORDINATE WITH ARCHITECT FOR PLACEMENT.

(12) EXISTING ELECTRICAL LINE AND EQUIPMENT TO BE REMOVED. CONTRACTOR TO COORDINATE WITH APS PRIOR TO REMOVALS.

(13) EXISTING IRRIGATION LINE AND EQUIPMENT TO BE RELOCATED. SEE LANDSCAPE PLAN FOR DETAILS.

(16) EXISTING LIGHT POLE TO BE SALVAGED FOR RELOCATION.

(22) REMOVE EXISTING WALL.

(23) EXISTING DATE PALM TO BE SALVAGED. SEE LANDSCAPE PLAN FOR DETAILS.

(24) EXISTING ELECTRICAL TO REMAIN AND PROTECTED IN-PLACE.

(25) EXISTING ASPHALT PAVEMENT TO REMAIN AND PROTECTED IN-PLACE.

(26) EXISTING CATCH BASIN TO REMAIN AND PROTECTED IN-PLACE.

(27) EXISTING WATER LINE TO BE RELOCATED. SEE WATER AND SEWER PLAN ON SHEET C13-C16 FOR LIMITS.

(28) EXISTING STORM DRAIN LINE TO BE REMOVED. REMOVAL TO BE COORDINATED WITH OWNER AS THIS IS PART OF AN ACTIVE DRAINAGE SYSTEM.

(29) EXISTING STORM DRAIN MANHOLE TO BE REMOVED. REMOVAL TO BE COORDINATED WITH OWNER AS THIS IS PART OF AN ACTIVE DRAINAGE SYSTEM.

(30) EXISTING CATCH BASIN TO BE REMOVED.

(31) EXISTING POOL EQUIPMENT BUILDING TO BE REMOVED.

(32) EXISTING TREE TO REMAIN AND PROTECTED IN-PLACE.

(39) EXISTING RETAINING WALL TO REMAIN AND PROTECTED IN-PLACE.

(40) EXISTING CABANAS TO BE REMOVED AND RETURNED TO OWNERSHIP.

(41) EXTENT OF POOL DECK REMOVAL FOR STORM WATER SYSTEM INSTALLATION AND LANDSCAPING. SEE LANDSCAPE PLANS.

(42) EXISTING SPLASH PAD AND ASSOCIATED PLUMBING TO BE REMOVED.

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FAIRMONT SCOTTSDALE PRINCESS
SUNSET VILLAS AND BUNGALOWS
PRELIMINARY IMPROVEMENT PLAN
DEMOLITION PLAN

REV	DESCRIPTION	DATE

Registered Professional Engineer
CERTIFICATE NO. 36382
DARIN L. MOORE
Date Signed 05/09/2025
ARIZONA U.S.A.

EXPIRES 06-30-28

SCALE (HORIZ.)	1" = 30'
SCALE (VERT.)	N/A
DATE	05/09/2025
JOB NUMBER	215319.10
SHEET	C4 OF 18

CHECKED BY: DM DESIGNED BY: RS DRAFTED BY: JRS

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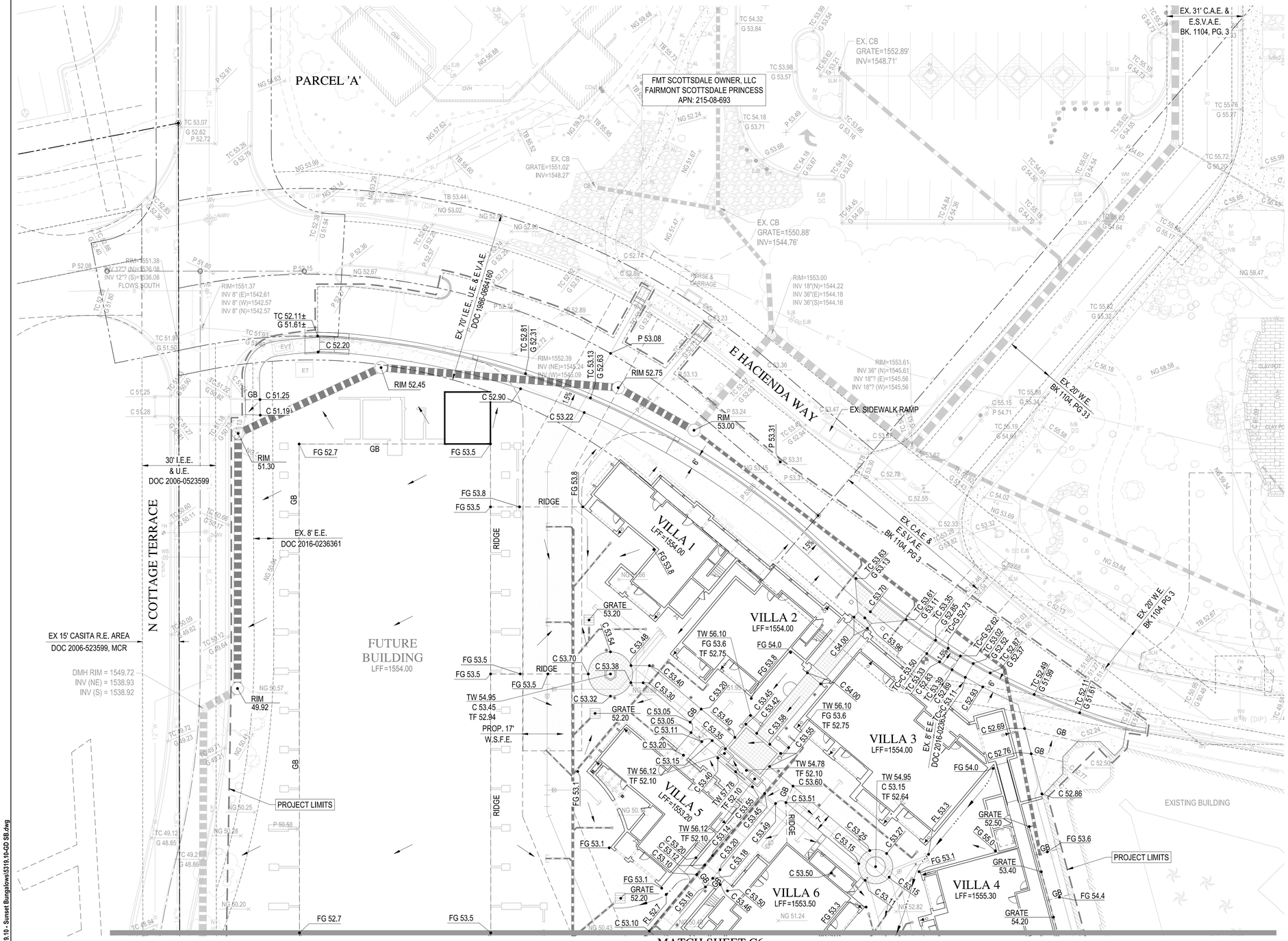

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FAIRMONT SCOTTSDALE PRINCESS
SUNSET VILLAS AND BUNGALOWS
PRELIMINARY IMPROVEMENT PLAN
GRADING & DRAINAGE PLAN

REV	DESCRIPTION	DATE

Registered Professional Engineer
CERTIFICATE NO. 36382
DARIN L. MOORE
Date Signed 05/09/25
ARIZONA U.S.A.
EXPIRES 06-30-28

SCALE (HORIZ.)	1" = 20'
SCALE (VERT.)	N/A
DATE	05/09/2025
JOB NUMBER	215319.10
SHEET	C5 OF 18

CHECKED BY: DM DESIGNED BY: RS DRAFTED BY: JRS

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MATCH SHEET C5

N

0 20 40

Horz. 1 in. = 20 ft.

N COTTAGE TERRACE

EX W.E.
DOC 2009-952326, MCR

EX 15' CASITA R.E. AREA
DOC 2006-523599, MCR

PROJECT LIMITS

FUTURE BUILDING
LFF=1554.00

VILLA 6
LFF=1553.50

VILLA 4
LFF=1555.30

BUNGALOW 1
LFF=1552.80

BUNGALOW 2
LFF=1554.00

BUNGALOW 3
LFF=1555.10

EXISTING BUILDING

EX. 12" W.S.E.
DOC 2016-0312898
TO BE ABANDONED

PROP. 12" W.S.F.E.

EX. 8" W.E.
DOC 2015-0524453

EX. 30' I.E.E.
& U.E.
DOC 2006-0523599

EX. CB
GRATE=1545.95
INV 24" (W)=1538.74
INV 24" (E)=1538.70

EXISTING BUILDING
FF=1550.41

EX. CB
GRATE=1547.96
INV 24"? (NE)=1541.19
INV 24"? (SE)=1541.21

EX. SDMH
RIM=1549.15±
INV=1541.38±

EX. POOL

RIM=1552.36±
INV 8"(N&W)=1557.55±

GRATE=1551.30±
INV 8"(W)=1547.82±

DMH RIM = 1547.54
INV (N) = 1538.12
INV (S) = 1538.14
INV (W) = 1538.26

LID=1547.71
CATCH BASIN BOX=1538.36

LID=1547.71
CATCH BASIN BOX=1536.26

RIM=1547.11
INV 12"? (N)=1534.36
INV 12"? (S)=1534.36
INV (NW)=1535.21

EX. 8" SWR STUB
INV=1535.42

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FAIRMONT SCOTTSDALE PRINCESS
SUNSET VILLAS AND BUNGALOWS
PRELIMINARY IMPROVEMENT PLAN
GRADING & DRAINAGE PLAN

REV	DESCRIPTION	DATE

Registered Professional Engineer (Civil)
CERTIFICATE NO.
36382
DARIN L. MOORE
Date Signed 05/09/2025
ARIZONA U.S.A.

EXPIRES 06-30-28

SCALE (HORIZ.)	1" = 20'
SCALE (VERT.)	N/A
DATE	05/09/2025
JOB NUMBER	215319.10
SHEET	C6 OF 18

CHECKED BY: DM DESIGNED BY: RS DRAFTED BY: JRS

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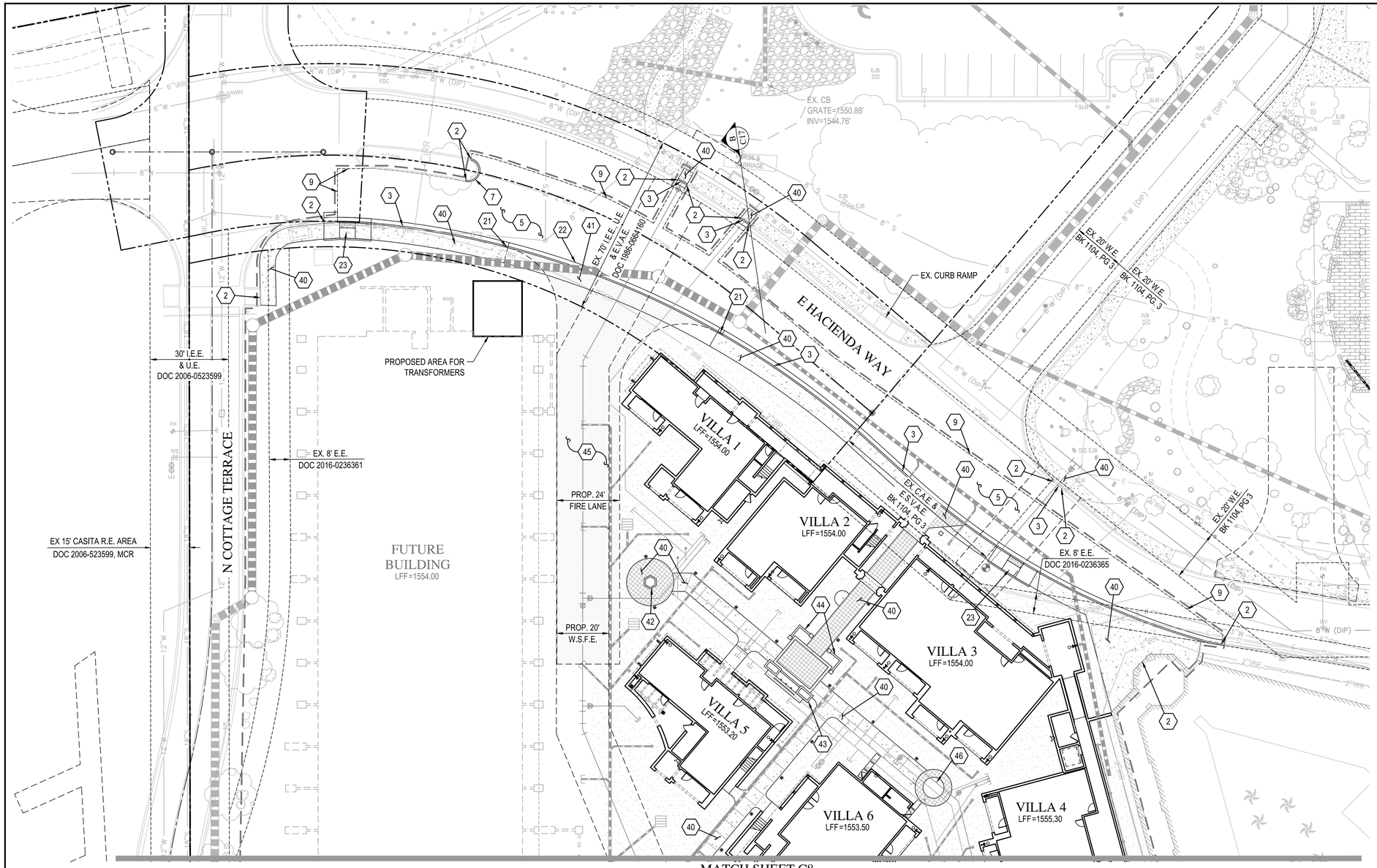

N

0 20 40

Horz. 1 in. = 20 ft.

PAVING NOTES

2. MATCH EXISTING ELEVATIONS. CONTRACTOR TO NOTIFY ENGINEER OF ANY DISCREPANCIES.
3. CONSTRUCT 6" CURB & GUTTER PER M.A.G. STD. DET. 220, TYPE A.
5. INSTALL HEAVY DUTY PAVEMENT, 3" A.C. PAVEMENT OVER 11" A.B.C. PER GEOTECHNICAL REPORT.
7. CONSTRUCT 6" SINGLE CURB PER MAG STD. DET. 222, TYPE A.
9. MATCH NEW PAVEMENT TO EXISTING PAVEMENT AT SAWCUT LINE
21. CONSTRUCT CURB TRANSITION TYPE 'E' TO TYPE 'A' PER M.A.G. STD. DETAIL 220-2.
22. CONSTRUCT MOUNTABLE CURB, TYPE 'E', PER M.A.G. STD. DETAIL 220-2
23. CONSTRUCT SIDEWALK RAMP PER M.A.G. STD. DET. 238-2, WITH DETECTABLE WARNING STRIP PER C.O.S. STD. DETAIL 2231.
40. CONSTRUCT SIDEWALK PER M.A.G. STD. DET. 230. SEE L-201 AND L-202 OF THE LANDSCAPE PLAN FOR COLOR, FINISH, AND TYPE.
41. CONSTRUCT HEAVY DUTY RIGID PAVEMENT, 8" PCC OVER 4" ABC PER THE GEOTECHNICAL REPORT.
42. CONSTRUCT FIRE PIT PER DETAIL 1A & 1B ON SHEET L-106 OF THE LANDSCAPE PLANS.
43. CONSTRUCT WATER FEATURE PER DETAILS 1A THROUGH 1E ON SHEET L-105 OF THE LANDSCAPE PLANS.
44. CONSTRUCT WALL PER DETAILS 3A & 3B ON SHEET L-105 OF THE LANDSCAPE PLANS.
45. CONSTRUCT FIRE LANE PER DETAIL 8 ON SHEET L-103 OF THE LANDSCAPE PLANS.
46. CONSTRUCT WATER POT FEATURE PER DETAILS 2A THROUGH 2C ON SHEET L-105 OF THE LANDSCAPE PLANS.

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FAIRMONT SCOTTSDALE PRINCESS
SUNSET VILLAS AND BUNGALOWS
PRELIMINARY IMPROVEMENT PLAN
PAVING PLAN

REV	DESCRIPTION	DATE

Registered Professional Engineer (Civil)
CERTIFICATE NO.
36382
DARIN L. MOORE
Date Signed 05/09/2025
ARIZONA U.S.A.
EXPIRES 06-30-28

SCALE (HORIZ.)	1" = 20'
SCALE (VERT.)	N/A
DATE	05/09/2025
JOB NUMBER	215319.10
SHEET	C7 OF 18

CHECKED BY: DM DESIGNED BY: RS DRAFTED BY: JRS

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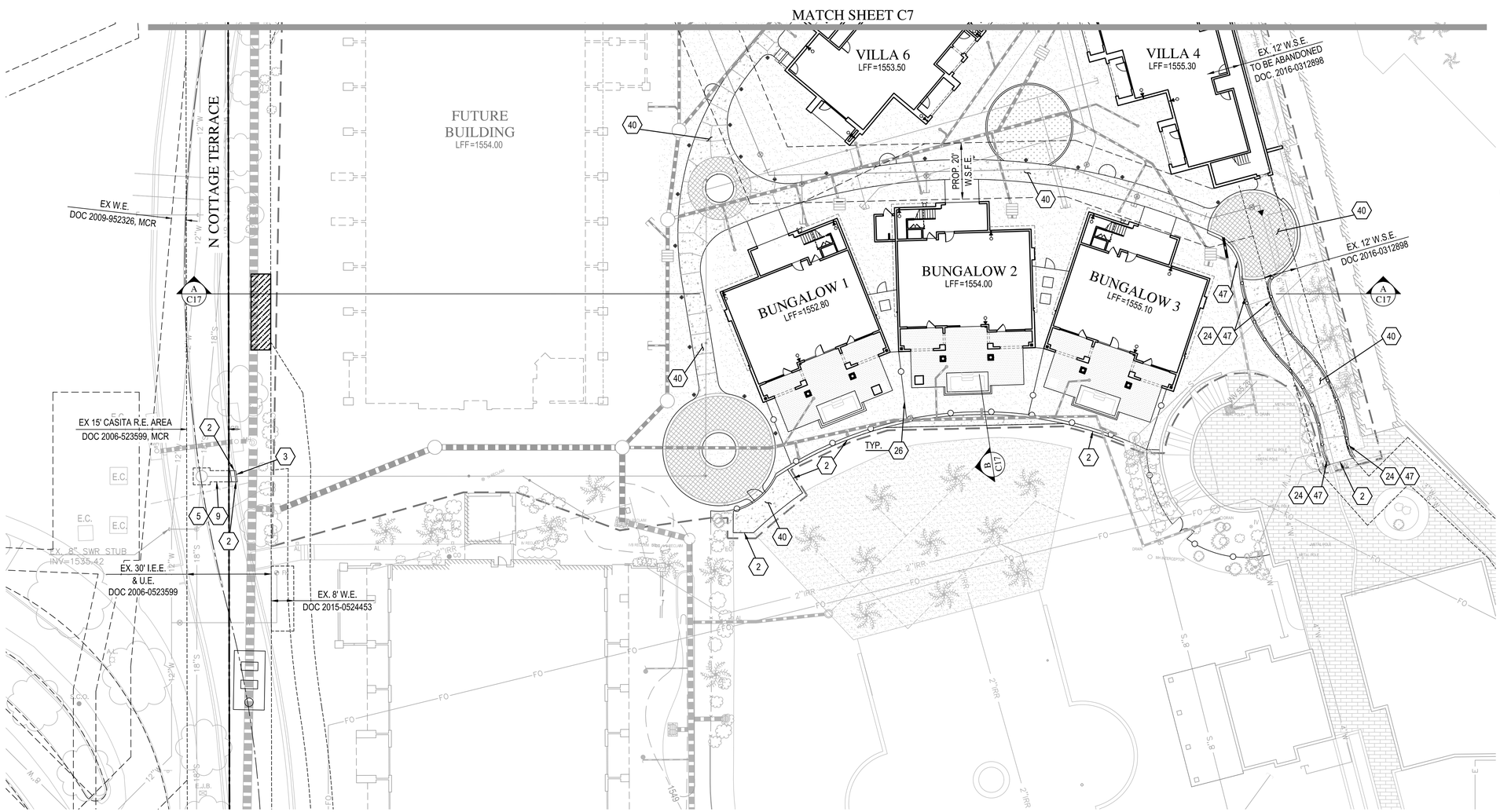

PAVING NOTES

2. MATCH EXISTING ELEVATIONS. CONTRACTOR TO NOTIFY ENGINEER OF ANY DISCREPANCIES.
3. CONSTRUCT 6" CURB & GUTTER PER M.A.G. STD. DET. 220, TYPE A.
5. INSTALL HEAVY DUTY PAVEMENT, 3" A.C. PAVEMENT OVER 11" A.B.C. PER GEOTECHNICAL REPORT.
9. MATCH NEW PAVEMENT TO EXISTING PAVEMENT AT SAWCUT LINE
24. INSTALL HANDRAILS PER DETAILS 1 THROUGH 2 ON SHEET L-104 OF THE LANDSCAPE PLANS.
26. INSTALL VIEW FENCE. SEE ARCHITECTURAL PLAN FOR DETAILS.
40. CONSTRUCT SIDEWALK PER M.A.G. STD. DET. 230. SEE L-201 AND L-202 OF THE LANDSCAPE PLAN FOR COLOR, FINISH, AND TYPE.
47. CONSTRUCT 6" SINGLE CURB PER MAG STD. DET. 222, TYPE A. MODIFIED TO A TOP WIDTH OF 12".

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FAIRMONT SCOTTSDALE PRINCESS
SUNSET VILLAS AND BUNGALOWS
PRELIMINARY IMPROVEMENT PLAN
PAVING PLAN

REV	DESCRIPTION	DATE

Registered Professional Engineer (Civil)
CERTIFICATE NO.
36382
DARRYL
MOORE
ARIZONA U.S.A.
EXPIRES 06-30-28

SCALE (HORIZ.)	1" = 20'
SCALE (VERT.)	N/A
DATE	05/09/2025
JOB NUMBER	215319.10
SHEET	C8 OF 18

CHECKED BY: DM DESIGNED BY: RS DRAFTED BY: JRS

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FMT SCOTTSDALE OWNER, LLC
FAIRMONT SCOTTSDALE PRINCESS
APN: 215-08-693

EX. CB
GRATE=1551.02'
INV=1548.27'

EX. CB
GRATE=1550.88'
INV=1544.76'

EX. 70' I.E.E., U.E. & E.V.A.E.
DOC 1986-0604160

RIM=1551.38
INV 12"Z (N)=1536.08
INV 12"Z (S)=1536.08
FLOWS SOUTH

RIM=1551.37
INV 8" (E)=1542.61
INV 8" (W)=1542.57
INV 8" (N)=1542.57

RIM=1552.39
INV (NE)=1542.24
INV (W)=1542.09

RIM=1553.00
INV 18"(N)=1544.22
INV 36"(E)=1544.18
INV 36"(S)=1544.16

RIM=1553.61
INV 36" (N)=1546.61
INV 18"? (E)=1545.56
INV 18"? (W)=1545.56

EX. 20' W.E.
BK 1104, PG 3

EX. 20' W.E.
BK 1104, PG 3

EX. CAE. & E.V.A.E.
BK 1104, PG 3

EX. 20' W.E.
BK 1104, PG 3

EX. 8' E.E.,
DOC 2016-0236365

30' I.E.E.
& U.E.
DOC 2006-0523599

N COTTAGE TERRACE

EX. 8' E.E.
DOC 2016-0236361

EX 15' CASITA R.E. AREA
DOC 2006-523599, MCR

DMH RIM = 1549.72
INV (NE) = 1538.93
INV (S) = 1538.92

FUTURE BUILDING
LFF=1554.00

VILLA 1
LFF=1554.00

VILLA 2
LFF=1554.00

VILLA 3
LFF=1554.00

VILLA 4
LFF=1555.30

VILLA 5
LFF=1550.20

VILLA 6
LFF=1553.50

E HACIENDA WAY

SEE SHEET C11 FOR STORM DRAIN INFORMATION IN THIS AREA

97.2 LF S=1.55%
64.2 LF S=1.55%
104.1 LF S=1.55%
1.3 LF S=16.32%
10.1 LF S=15.20%
23.9 LF S=1.00%
14.1 LF S=1.01%
11.0 LF S=10.91%
30.8 LF S=1.00%
15.9 LF S=1.00%
15.5 LF S=10.01%
11.0 LF S=8.36%
32.3 LF S=1.00%
25.3 LF S=8.18%
35.4 LF S=1.55%
159.7 LF S=2.00%
15.5 LF S=0.99%
8.5 LF S=2.00%
10.2 LF S=14.71%
12.8 LF S=4.32%
12.5 LF S=1.00%
20.7 LF S=1.00%
1.5 LF S=5.00%
77.7 LF S=3.50%
2.3 LF S=10.00%
19.1 LF S=1.00%
19.2 LF S=1.00%

N 962622.7
E 698700.6
RIM 1547.81
INV 1540.56

N 962649.6
E 698758.9
RIM 1552.45
INV 1541.56

N 962584.6
E 698836.4
INV 1545.67
45°

N 962583.7
E 698837.3
INV 1545.45
45°

N 962584.6
E 698826.3
INV 1547.20

N 962559.8
E 698837.3
INV 1545.21 (N)
INV 1545.21 (S)
INV 1545.47 (NE)

N 962545.7
E 698826.3
INV 1546.72

N 962545.7
E 698837.3
INV 1545.07
45°

N 962546.5
E 698843.8
RIM 1553.35
INV 1546.84

N 962538.0
E 698843.8
INV 1546.67

N 962530.2
E 698837.3
INV 1544.92(N)
INV 1544.92(S)
INV 1545.16(NE)

N 962518.6
E 698700.3
RIM 1546.20
INV 1538.95±

N 962499.4
E 698837.2
INV 1544.61 (N)
INV 1544.61 (S)
INV 1544.86 (NE)

N 962493.5
E 698826.2
INV 1546.42

N 962482.5
E 698837.2
INV 1544.44 (N)
INV 1544.44 (S)
INV 1544.86 (NW)

N 962461.8
E 698837.2
INV 1544.23 (N)
INV 1544.23 (S)
INV 1544.06 (E)
45°

N 962449.2
E 698826.2
INV 1545.28

N 962483.4
E 698837.2
INV 1544.45(N)
INV 1544.45(S)
INV 1544.69(NE)

N 962449.2
E 698837.2
INV 1544.11(N)
INV 1544.11(S)
INV 1544.36(W)

N 962433.1
E 698856.6
RIM 1552.50
INV 1545.10

N 962508.4
E 698846.3
RIM 1552.20
INV 1545.41

N 962624.0
E 698886.7
RIM 1550.86
INV 1543.61±

N 962641.4
E 698855.8
RIM 1552.75
INV 1543.06

N 962570.6
E 698956.3
INV 1545.37(NW)
INV 1545.37(SW)
45°

N 962553.8
E 698978.1
INV 1545.92
45°

N 962526.8
E 699013.4
INV 1546.80
45°

N 962462.2
E 699023.5
RIM 1552.50
INV 1550.16

N 962462.5
E 699025.7
INV 1549.09
INV 1549.09

N 962500.7
E 699016.9
RIM 1553.81
INV 1547.80

N 962500.9
E 699018.4
INV 1547.72 (N)
INV 1547.72 (S)
INV 1547.72 (W)

N 962425.3
E 699033.4
RIM 1554.20
INV 1550.55

N 962450.5
E 699028.1
INV 1549.52(N)

N 962443.8
E 699028.4
RIM 1553.40
INV 1550.35

MATCH SHEET C10

STORM DRAIN NOTES

1. INSTALL 8" ADS N-12 H.D.P.E. PIPE WITH WATER TIGHT JOINTS PER C.O.S. SPEC. 738 OR APPROVED EQUAL.
2. INSTALL 12" ADS N-12 H.D.P.E. PIPE WITH WATER TIGHT JOINTS PER C.O.S. SPEC. 738 OR APPROVED EQUAL.
3. INSTALL 15" ADS N-12 H.D.P.E. PIPE WITH WATER TIGHT JOINTS PER C.O.S. SPEC. 738 OR APPROVED EQUAL.
5. INSTALL 36" ADS N-12 H.D.P.E. PIPE WITH WATER TIGHT JOINTS PER C.O.S. SPEC. 738 OR APPROVED EQUAL.
7. INSTALL 8" INLINE DRAIN WITH PEDESTRIAN RATED GRATE (ADS OR APPROVED EQUAL) PER DETAIL ON SHEET C17.
9. CONNECT TO EXISTING STORM DRAIN PIPE. CONTRACTOR TO VERIFY HORIZONTAL LOCATION AND VERTICAL ELEVATION. NOTIFY ENGINEER OF ANY DISCREPANCY.
10. CONSTRUCT STORM DRAIN MANHOLE PER M.A.G. STD. DETAIL 520 & 522 WHERE NECESSARY, CONTRACTOR TO ROTATE COVER TO PREVENT CONFLICT WITH ADJACENT SIDEWALK.
11. INSTALL 12" INLINE DRAIN WITH LOCKING GRATE (ADS OR APPROVED EQUAL) PER DETAIL ON SHEET C17.
15. INSTALL WYE, SIZE PER ADJOINING PIPE DIAMETER.
17. INSTALL H.D.P.E. CAP, SIZE PER ADJOINING PIPE DIAMETER.
18. INSTALL BEND. SIZE PER ADJOINING PIPE DIAMETER. ANGLE PER PLAN.
19. INSTALL 6" ADS N-12 H.D.P.E. PIPE WITH WATER TIGHT JOINTS PER C.O.S. SPEC. 738 OR APPROVED EQUAL.
21. INSTALL 18" ADS N-12 H.D.P.E. PIPE WITH WATER TIGHT JOINTS PER C.O.S. SPEC. 738 OR APPROVED EQUAL.
23. INSTALL AIRBRAKE PER DETAIL ON SHEET C17.
24. INSTALL TEE, SIZE PER ADJOINING PIPE DIAMETER.
25. INSTALL 4" ADS N-12 H.D.P.E. PIPE WITH WATER TIGHT JOINTS PER C.O.S. SPEC. 738 OR APPROVED EQUAL.

N

0 20 40
Horz. 1 in. = 20 ft.

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FAIRMONT SCOTTSDALE PRINCESS
SUNSET VILLAS AND BUNGALOWS
PRELIMINARY IMPROVEMENT PLAN
STORM DRAIN PLAN

REV	DESCRIPTION	DATE

Registered Professional Engineer (Civil)
CERTIFICATE NO.
36382
DARIN L. MOORE
ARIZONA
EXPIRES 06-30-28

SCALE (HORIZ.)	1" = 20'
SCALE (VERT.)	N/A
DATE	05/09/2025
JOB NUMBER	215319.10
SHEET	C9 OF 18

CHECKED BY: DM DESIGNED BY: RS DRAFTED BY: JRS

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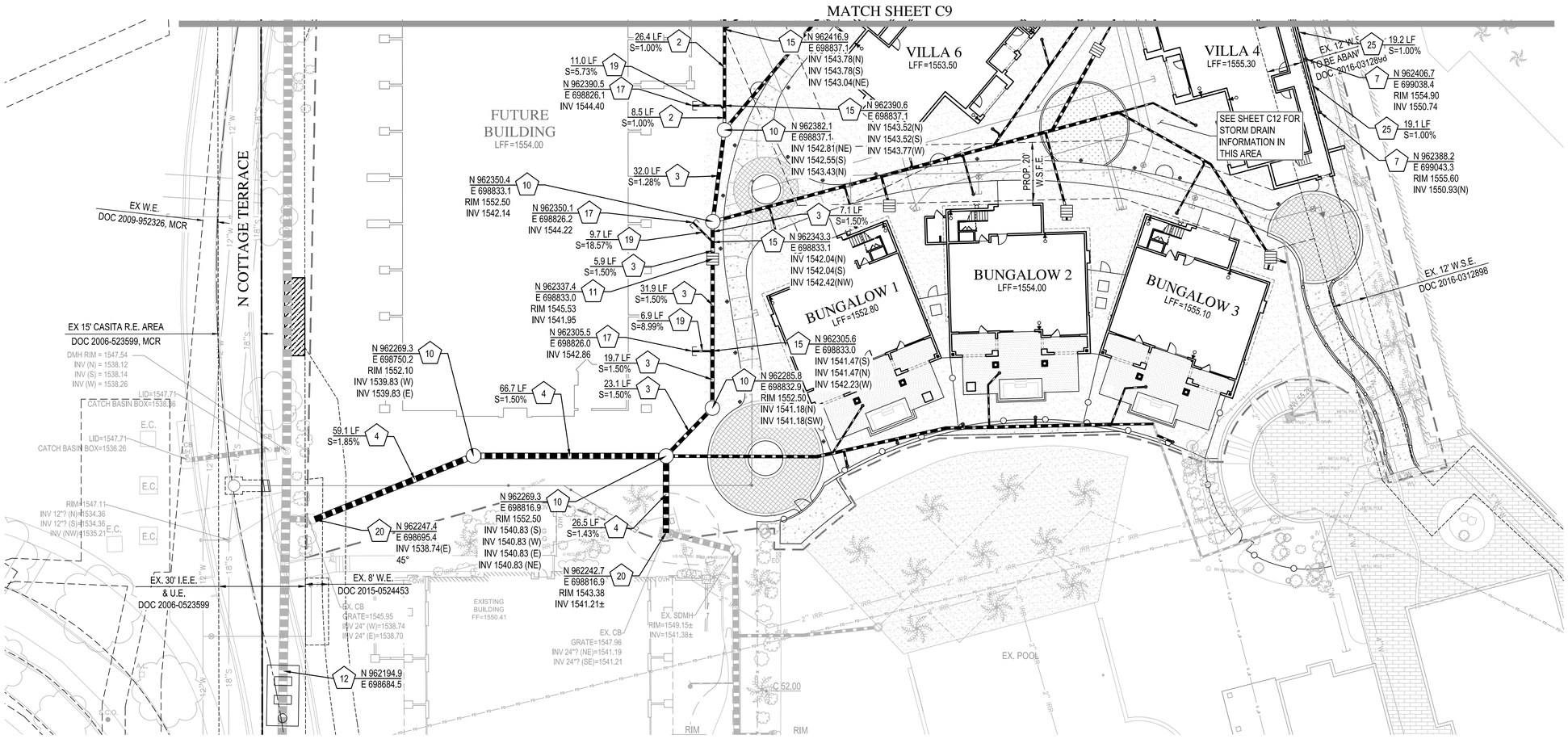

N

0 20 40

Horz. 1 in. = 20 ft.

STORM DRAIN NOTES

1. INSTALL 8" ADS N-12 H.D.P.E. PIPE WITH WATER TIGHT JOINTS PER C.O.S. SPEC. 738 OR APPROVED EQUAL.
2. INSTALL 12" ADS N-12 H.D.P.E. PIPE WITH WATER TIGHT JOINTS PER C.O.S. SPEC. 738 OR APPROVED EQUAL.
3. INSTALL 15" ADS N-12 H.D.P.E. PIPE WITH WATER TIGHT JOINTS PER C.O.S. SPEC. 738 OR APPROVED EQUAL.
4. INSTALL 24" ADS N-12 H.D.P.E. PIPE WITH WATER TIGHT JOINTS PER C.O.S. SPEC. 738 OR APPROVED EQUAL.
7. INSTALL 8" INLINE DRAIN WITH PEDESTRIAN RATED GRATE (ADS OR APPROVED EQUAL) PER DETAIL ON SHEET C17.
10. CONSTRUCT STORM DRAIN MANHOLE PER M.A.G. STD. DETAIL 520 & 522 WHERE NECESSARY, CONTRACTOR TO ROTATE COVER TO PREVENT CONFLICT WITH ADJACENT SIDEWALK.
11. INSTALL 12" INLINE DRAIN WITH LOCKING GRATE (ADS OR APPROVED EQUAL) PER DETAIL ON SHEET C17.
12. INSTALL COMTECH MODEL DSBB-10-108 PER THE DETAIL ON SHEET C17 AND THE MANUFACTURER SPECIFICATIONS.
15. INSTALL WYE, SIZE PER ADJOINING PIPE DIAMETER.
17. INSTALL H.D.P.E. CAP, SIZE PER ADJOINING PIPE DIAMETER.
19. INSTALL 6" ADS N-12 H.D.P.E. PIPE WITH WATER TIGHT JOINTS PER C.O.S. SPEC. 738 OR APPROVED EQUAL.
20. CONNECT TO EXISTING CATCH BASIN. CONTRACTOR TO VERIFY HORIZONTAL LOCATION AND VERTICAL ELEVATION. NOTIFY ENGINEER OF ANY DISCREPANCY.
25. INSTALL 4" ADS N-12 H.D.P.E. PIPE WITH WATER TIGHT JOINTS PER C.O.S. SPEC. 738 OR APPROVED EQUAL.

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FAIRMONT SCOTTSDALE PRINCESS
SUNSET VILLAS AND BUNGALOWS
PRELIMINARY IMPROVEMENT PLAN
STORM DRAIN PLAN

REV	DESCRIPTION	DATE

Registered Professional Engineer (Civil)
CERTIFICATE NO. 36382
DARIN L. MOORE
ARIZONA U.S.A.

EXPIRES 06-30-28

SCALE (HORIZ.)	1" = 20'
SCALE (VERT.)	N/A
DATE	05/09/2025
JOB NUMBER	215319.10
SHEET	C10 OF 18

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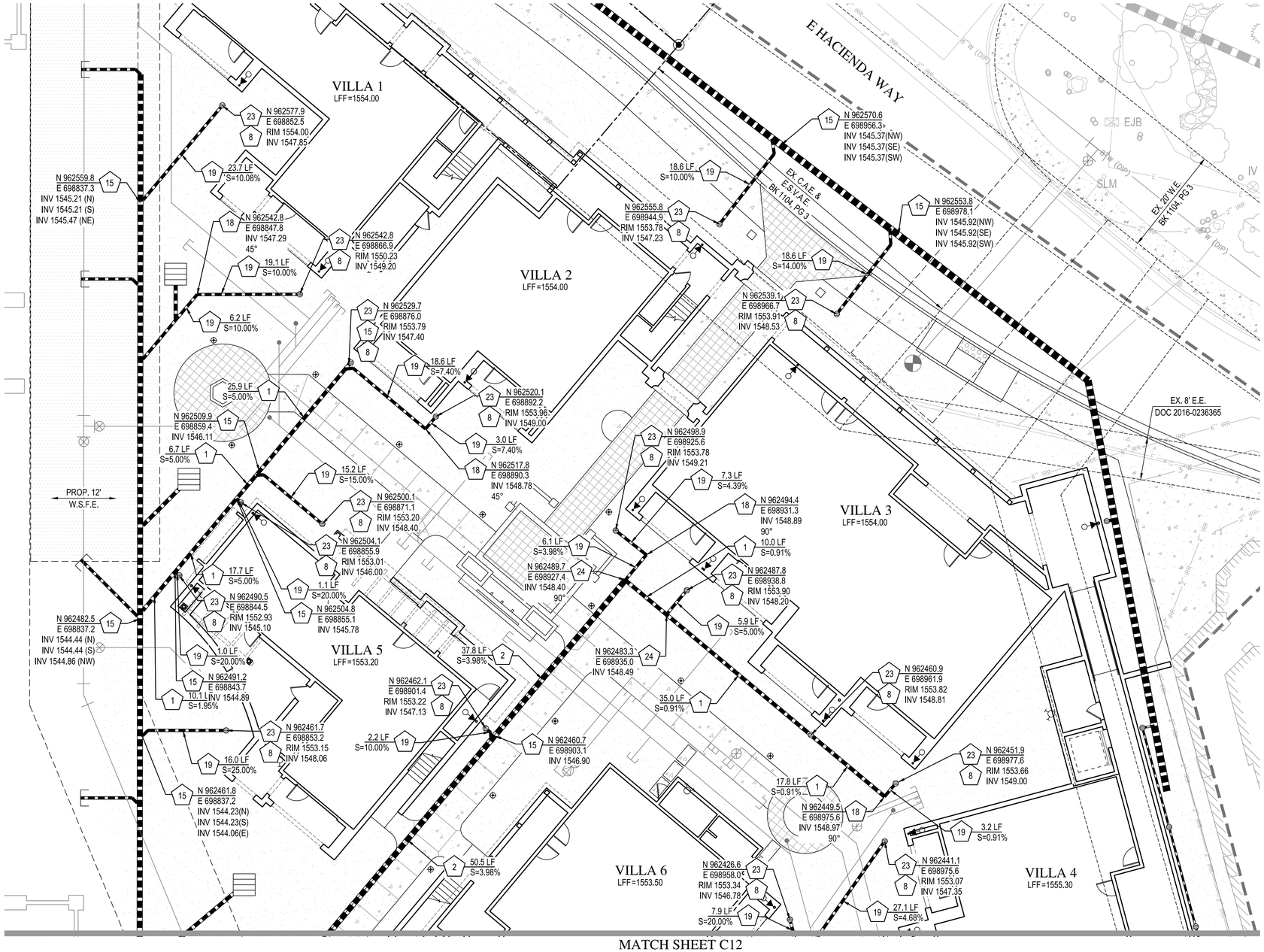

MATCH SHEET C12

N

0 10 20

Horz. 1 in. = 10 ft.

STORM DRAIN NOTES

1. INSTALL 8" ADS N-12 H.D.P.E. PIPE WITH WATER TIGHT JOINTS PER C.O.S. SPEC. 738 OR APPROVED EQUAL.
2. INSTALL 12" ADS N-12 H.D.P.E. PIPE WITH WATER TIGHT JOINTS PER C.O.S. SPEC. 738 OR APPROVED EQUAL.
8. SEE PLUMBING PLANS FOR CONTINUATION. SIZE PER ADJOINING PIPE DIAMETER. CONTRACTOR TO FIELD VERIFY EXACT HORIZONTAL AND VERTICAL LOCATION WITH PLUMBING PLANS PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
15. INSTALL WYE, SIZE PER ADJOINING PIPE DIAMETER.
18. INSTALL BEND. SIZE PER ADJOINING PIPE DIAMETER. ANGLE PER PLAN.
19. INSTALL 6" ADS N-12 H.D.P.E. PIPE WITH WATER TIGHT JOINTS PER C.O.S. SPEC. 738 OR APPROVED EQUAL.
23. INSTALL AIRBRAKE PER DETAIL ON SHEET C17.
24. INSTALL TEE, SIZE PER ADJOINING PIPE DIAMETER.

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FAIRMONT SCOTTSDALE PRINCESS
SUNSET VILLAS AND BUNGALOWS
PRELIMINARY IMPROVEMENT PLAN
STORM DRAIN PLAN

REV	DESCRIPTION	DATE

Registered Professional Engineer (Civil)
CERTIFICATE NO. 36382
DARIN L. MOORE
Date Signed 6/30/25
ARIZONA U.S.A.

EXPIRES 06-30-28

SCALE (HORIZ.)	1" = 10'
SCALE (VERT.)	N/A
DATE	05/09/2025
JOB NUMBER	215319.10
SHEET	C11 OF 18

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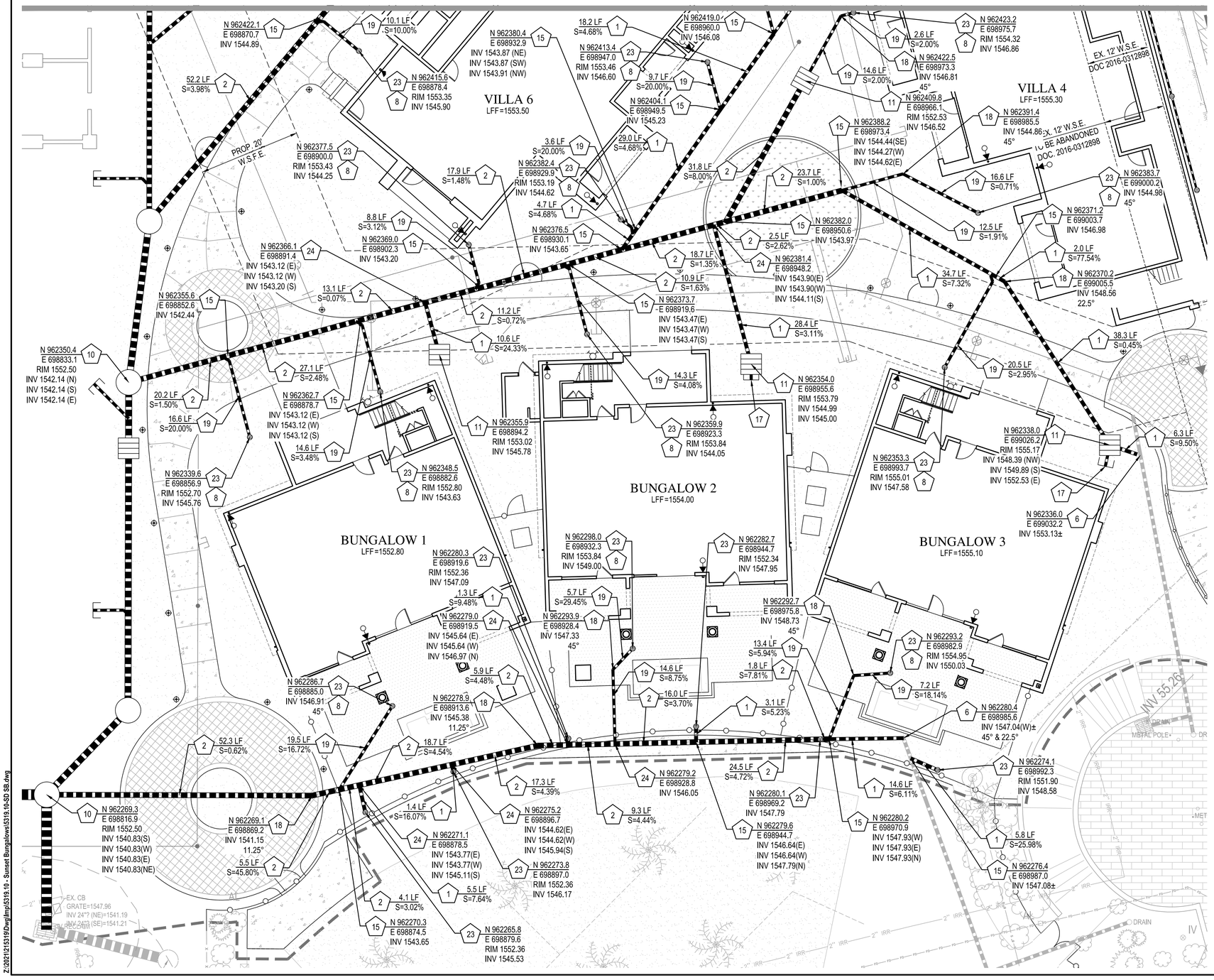
MATCH SHEET C11



N

0 10 20

Horz. 1 in. = 10 ft.

STORM DRAIN NOTES

1. INSTALL 8" ADS N-12 H.D.P.E. PIPE WITH WATER TIGHT JOINTS PER C.O.S. SPEC. 738 OR APPROVED EQUAL.
2. INSTALL 12" ADS N-12 H.D.P.E. PIPE WITH WATER TIGHT JOINTS PER C.O.S. SPEC. 738 OR APPROVED EQUAL.
6. CONNECT TO EXISTING 8" STORM DRAIN PIPE. CONTRACTOR TO VERIFY HORIZONTAL LOCATION AND VERTICAL ELEVATION. NOTIFY ENGINEER OF ANY DISCREPANCY.
8. SEE PLUMBING PLANS FOR CONTINUATION. SIZE PER ADJOINING PIPE DIAMETER. CONTRACTOR TO FIELD VERIFY EXACT HORIZONTAL AND VERTICAL LOCATION WITH PLUMBING PLANS PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
10. CONSTRUCT STORM DRAIN MANHOLE PER M.A.G. STD. DETAIL 520 & 522 WHERE NECESSARY, CONTRACTOR TO ROTATE COVER TO PREVENT CONFLICT WITH ADJACENT SIDEWALK.
11. INSTALL 12" INLINE DRAIN WITH LOCKING GRATE (ADS OR APPROVED EQUAL) PER DETAIL ON SHEET C17.
15. INSTALL WYE, SIZE PER ADJOINING PIPE DIAMETER.
17. INSTALL H.D.P.E. CAP, SIZE PER ADJOINING PIPE DIAMETER.
18. INSTALL BEND. SIZE PER ADJOINING PIPE DIAMETER. ANGLE PER PLAN.
19. INSTALL 6" ADS N-12 H.D.P.E. PIPE WITH WATER TIGHT JOINTS PER C.O.S. SPEC. 738 OR APPROVED EQUAL.
23. INSTALL AIRBRAKE PER DETAIL ON SHEET C17.
24. INSTALL TEE, SIZE PER ADJOINING PIPE DIAMETER.

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FAIRMONT SCOTTSDALE PRINCESS
SUNSET VILLAS AND BUNGALOWS
PRELIMINARY IMPROVEMENT PLAN
STORM DRAIN PLAN

REV	DESCRIPTION	DATE

Registered Professional Engineer (Civil)
CERTIFICATE NO. 36382
DARIN L. MOORE
ARIZONA
EXPIRES 06-30-28

SCALE (HORIZ.)	1" = 10'
SCALE (VERT.)	N/A
DATE	05/09/2025
JOB NUMBER	215319.10
SHEET	C12 OF 18

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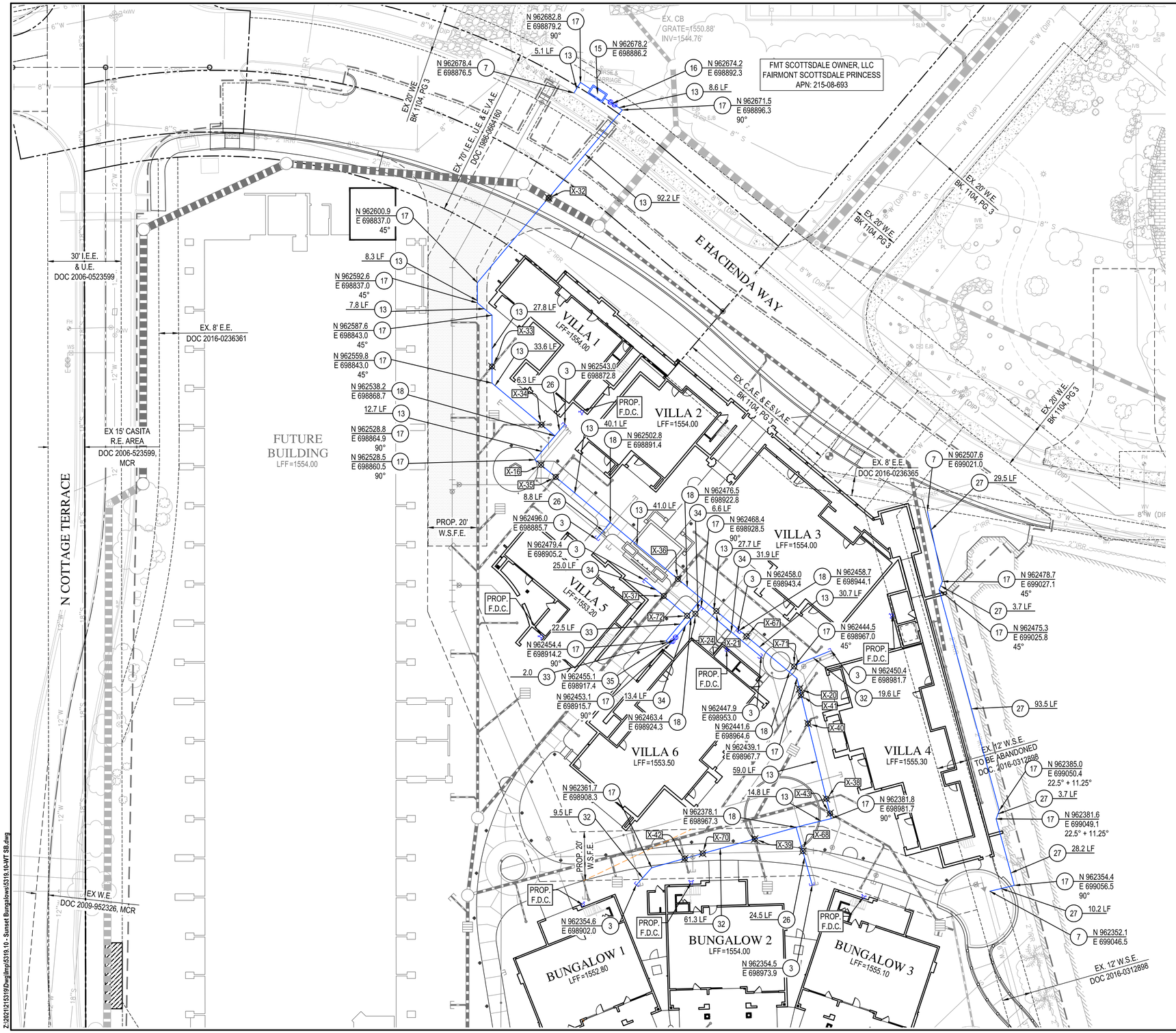

N

0 20 40

Horz. 1 in. = 20 ft.

WATER NOTES

3. SEE PLUMBING PLANS FOR CONTINUATION. CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
7. CONNECT TO EXISTING WATER LINE. CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
13. INSTALL 4" POLYWRAPPED D.I.P. PRESSURE CLASS 350 WATERLINE PER M.A.G. SPEC. SECTION 610. 3' MINIMUM COVER UNLESS NOTED ON PLAN.
15. INSTALL 4" WATER METER PER C.O.S. STD. DTL. 2345.
16. INSTALL 4" REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY PER C.O.S. STD. DTL. 2353.
17. INSTALL BEND WITH JOINT RESTRAINT PER M.A.G. STD. DETAILS 302 AND 303 OR APPROVED EQUAL. SIZE PER ADJOINING PIPE DIAMETERS. ANGLE(S) PER PLAN.
18. INSTALL TEE WITH JOINT RESTRAINT PER M.A.G. STD. DETAILS 302 AND 303 OR APPROVED EQUAL. SIZE PER ADJOINING PIPE DIAMETERS.
26. INSTALL 2" TYPE K, HARD COPPER WATER LINE.
27. INSTALL 3" WATER LINE. PIPE MATERIAL TO MATCH EXISTING.
32. INSTALL 2.5" TYPE K, HARD COPPER WATER LINE.
33. INSTALL 3/4" SCH 40, SOFT COPPER WATER LINE.
34. INSTALL 3/4" PVC WATER LINE.
35. INSTALL 3/4" REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY PER C.O.S. STD. DETAIL 2354.

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SUNSET VILLAS AND BUNGALOWS
PRELIMINARY IMPROVEMENT PLAN
WATER PLAN

REV	DESCRIPTION	DATE

Registered Professional Engineer Civil
CERTIFICATE NO.
36382
DARIN L.
MOORE
05/09/2025
ARIZONA
EXPIRES 06-30-28

SCALE (HORIZ.)	1" = 20'
SCALE (VERT.)	N/A
DATE	05/09/2025
JOB NUMBER	215319.10
SHEET	C13 OF 18

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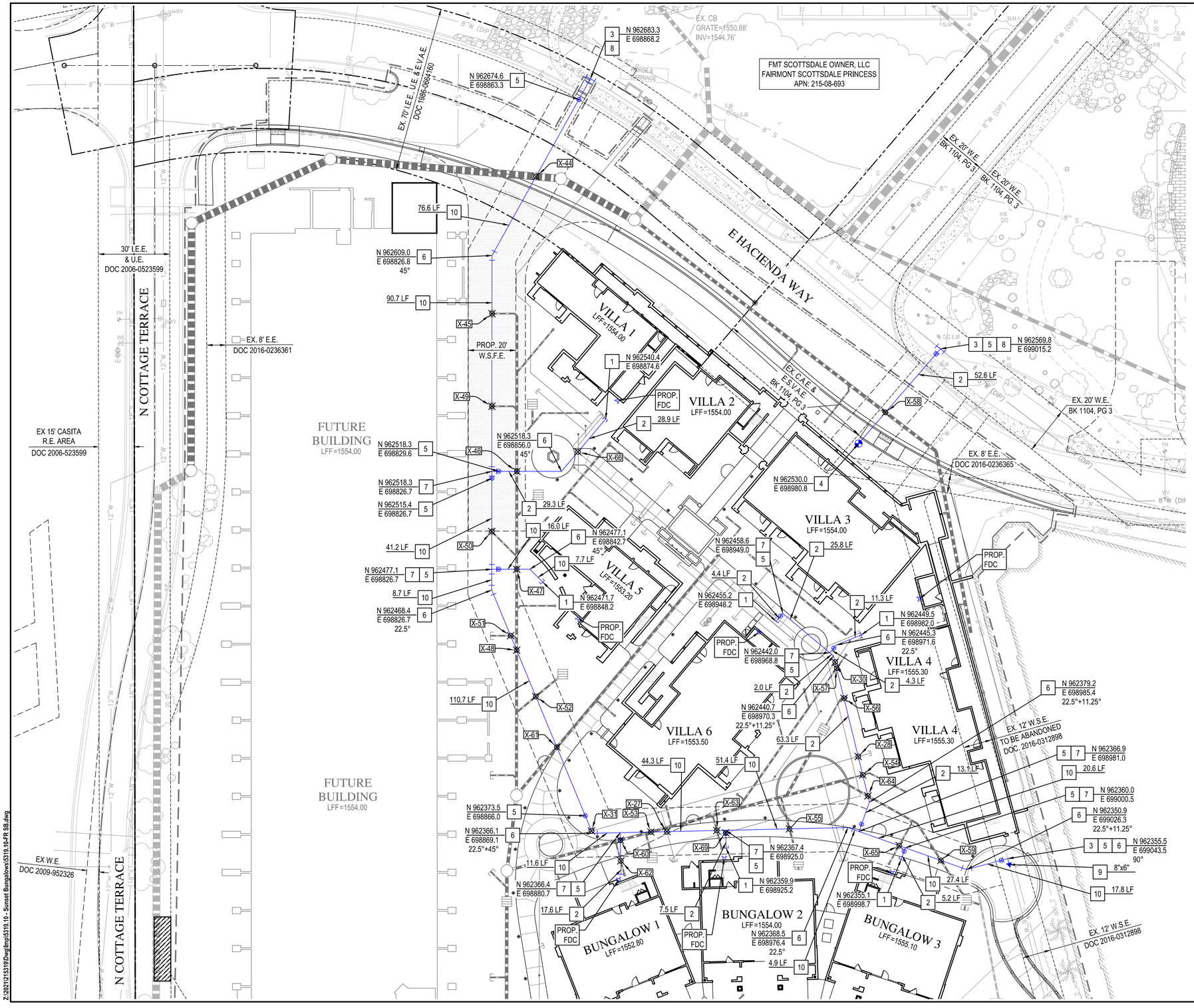

FIRELINE NOTES

1. SEE PLUMBING PLANS FOR CONTINUATION. CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
2. INSTALL 6" POLYWRAPPED D.I.P. PRESSURE CLASS 350 WATERLINE PER M.A.G. SPEC. SECTION 610. 3' MINIMUM COVER UNLESS NOTED ON PLAN.
3. CONNECT TO EXISTING WATER LINE. CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
4. INSTALL FIRE HYDRANT COMPLETE PER M.A.G. STD. DETAIL 360.1.
5. INSTALL GATE VALVE WITH FLANGES, VALVE BOX, AND COVER PER M.A.G. STD. DETAIL 391-1 (VALVE TO MATCH WATERLINE SIZE).
6. INSTALL BEND WITH JOINT RESTRAINT PER M.A.G. STD. DETAILS 302 AND 303 OR APPROVED EQUAL. SIZE PER ADJOINING PIPE DIAMETERS. ANGLE(S) PER PLAN.
7. INSTALL TEE WITH JOINT RESTRAINT PER M.A.G. STD. DETAILS 302 AND 303 OR APPROVED EQUAL. SIZE PER ADJOINING PIPE DIAMETERS.
8. INSTALL TEE WITH THRUST BLOCKS PER M.A.G. STD. DETAILS 380 OR APPROVED EQUAL. SIZE PER ADJOINING PIPE DIAMETERS.
9. INSTALL REDUCER. SIZE PER PLAN.
10. INSTALL 8" POLYWRAPPED D.I.P. PRESSURE CLASS 350 WATERLINE PER M.A.G. SPEC. SECTION 610. 3' MINIMUM COVER UNLESS NOTED ON PLAN.

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FAIRMONT SCOTTSDALE PRINCESS
SUNSET VILLAS AND BUNGALOWS
PRELIMINARY IMPROVEMENT PLAN
FIRE LINE PLAN

REV	DESCRIPTION	DATE

Registered Professional Engineer (Civil)
CERTIFICATE NO. 36382
DARIN L. MOORE
Date Registered 05/09/2025
ARIZONA U.S.A.
EXPIRES 06-30-28

SCALE (HORIZ.)	1" = 20'
SCALE (VERT.)	N/A
DATE	05/09/2025
JOB NUMBER	215319.10
SHEET	C14 OF 18

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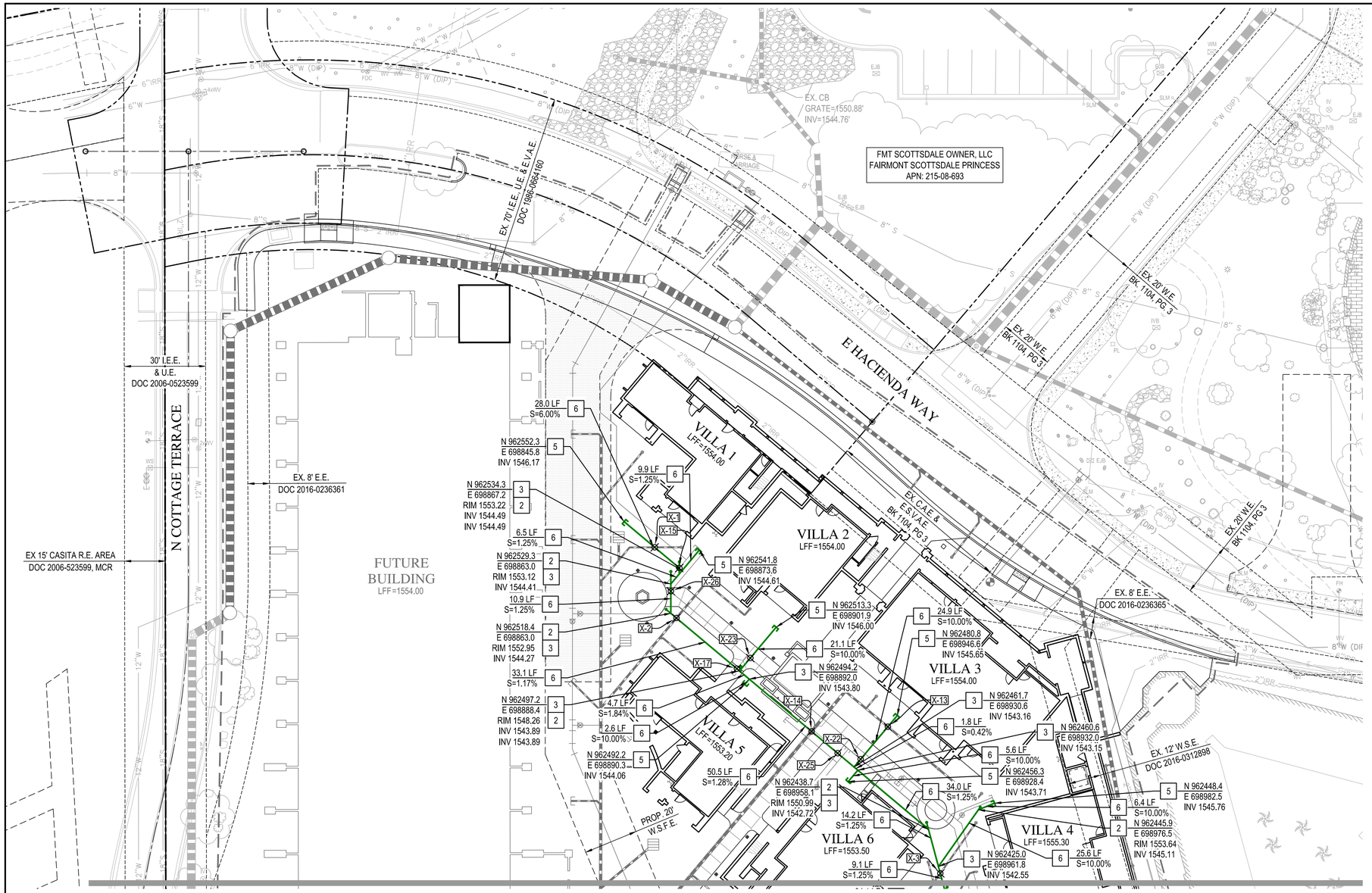

MATCH SHEET C16

SEWER NOTES

2 INSTALL SANITARY SEWER CLEANOUT PER M.A.G. STD. DTL. 441.

3 INSTALL WYE OR WYE WITH 45° BEND AS APPLICABLE, SIZE PER ADJOINING PIPE DIAMETER.

5 SEE PLUMBING PLAN FOR CONTINUATION. CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION WITH PLUMBING PLAN PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.

6 INSTALL 6" SDR 35 PVC SANITARY SEWER PIPE.

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FAIRMONT SCOTTSDALE PRINCESS
SUNSET VILLAS AND BUNGALOWS
PRELIMINARY IMPROVEMENT PLAN
SANITARY SEWER PLAN

REV	DESCRIPTION	DATE

Registered Professional Engineer (not R.L.S.)
CERTIFICATE NO.
36382
DARIN L. MOORE
05/09/2025
ARIZONA, U.S.A.
EXPIRES 06-30-28

SCALE (HORIZ.)	1" = 20'
SCALE (VERT.)	N/A
DATE	05/09/2025
JOB NUMBER	215319.10
SHEET	C15 OF 18

CHECKED BY: DM DESIGNED BY: RS DRAFTED BY: JRS

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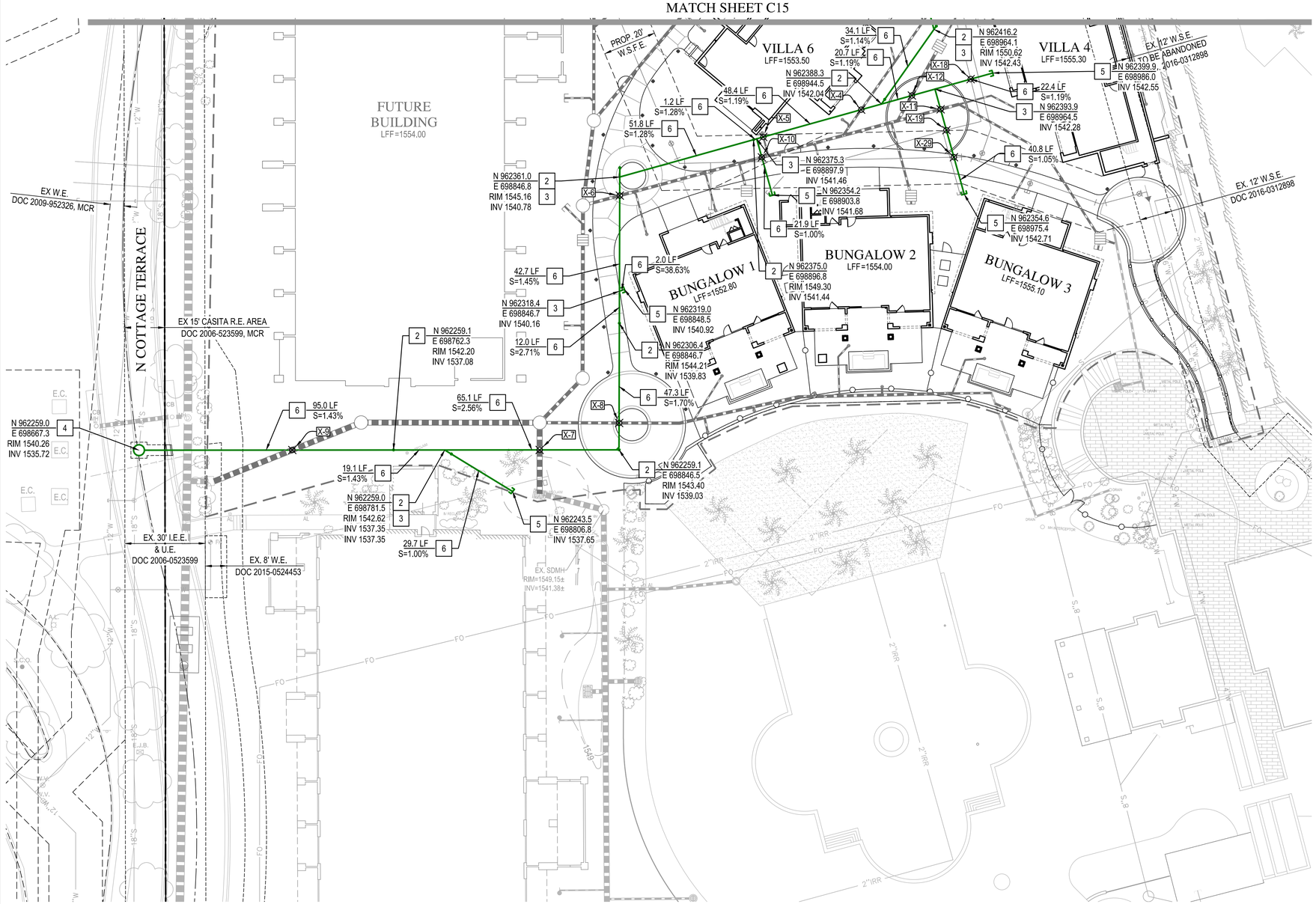

SEWER NOTES

2. INSTALL SANITARY SEWER CLEANOUT PER M.A.G. STD. DTL. 441.
3. INSTALL WYE OR WYE WITH 45° BEND AS APPLICABLE, SIZE PER ADJOINING PIPE DIAMETER.
4. INSTALL 48" SANITARY SEWER MANHOLE PER M.A.G. STD. DTL. 419-1 WITH COVER PER COS STD. DTL. 2421. CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION WITH PLUMBING PLAN PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
5. SEE PLUMBING PLAN FOR CONTINUATION. CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION WITH PLUMBING PLAN PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
6. INSTALL 6" SDR 35 PVC SANITARY SEWER PIPE.

N

0 20 40

Horz. 1 in. = 20 ft.

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FAIRMONT SCOTTSDALE PRINCESS
SUNSET VILLAS AND BUNGALOWS
PRELIMINARY IMPROVEMENT PLAN
SANITARY SEWER PLAN

REV	DESCRIPTION	DATE

Registered Professional Engineer (Civil)
CERTIFICATE NO. 36382
DARIN L. MOORE
ARIZONA U.S.A.

EXPIRES 06-30-28

SCALE (HORIZ.)	1" = 20'
SCALE (VERT.)	N/A
DATE	05/09/2025
JOB NUMBER	215319.10
SHEET	C16 OF 18

CHECKED BY: DM DESIGNED BY: RS DRAFTED BY: JRS

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SITE SPECIFIC DATA*

PROJECT NUMBER	742047
PROJECT NAME	FAIRMONT SCOTTSDALE PRINCESS
PROJECT LOCATION	SCOTTSDALE, AZ
STRUCTURE ID	025
WATER QUALITY FLOW RATE (CFS)	1.70
PROVIDED TREATMENT FLOW RATE (CFS)	25.79
PEAK FLOW RATE (CFS)	66.80
PEAK STORM DURATION (YEARS)	10.00

PIPE DATA	I.E.	MATERIAL	DIAMETER
INFLOW PIPE 1	1546.5	HDPE	36
OUTFLOW PIPE 1	1546.5	HDPE	36
RIM ELEVATION	1537.9		

SURFACE LOADING REQUIREMENT	HS20
FRAME AND COVER	(2) 36"x72" (1) 36"ø
CORROSIVE SOIL CONDITIONS	NA
KNOWN GROUNDWATER ELEVATION	NA

NOTES:

*PER ENGINEER OF RECORD

DSBB PERFORMANCE DATA

TREATMENT FLOW RATE (CFS)	1.70
FULL CAPTURE TRASH FLOW RATE (CFS)	0.00
SETTLING AREA (SF)	200.00
LOADING RATE (GPM/SF)	3.81
SCREEN SYSTEM STORAGE CAPACITY (CF)	163.88
SEDIMENT STORAGE CAPACITY (CF)	580.00
80% TSS REMOVAL @ 231 MICRON	

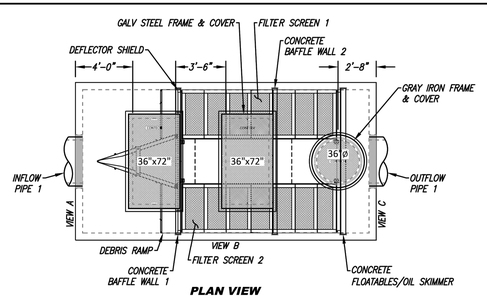
DSBB STORAGE CAPACITIES

CAGE SCREEN CAPACITY

	LENGTH (FT)	WIDTH (FT)	HEIGHT (FT)	TOTAL (CF)
SCREEN 1	11.50	3.17	2.25	81.94
SCREEN 2	11.50	3.17	2.25	81.94

SEDIMENT CHAMBER CAPACITY

CHAMBER 1	6.50	10.00	3.00	195.00
CHAMBER 2	6.42	10.00	3.00	192.50
CHAMBER 3	6.42	10.00	3.00	192.50



PLAN VIEW

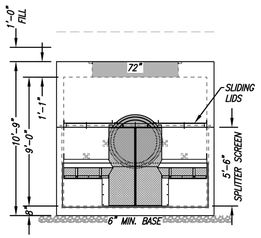
GENERAL NOTES

1. CONTECH TO PROVIDE ALL MATERIALS UNLESS OTHERWISE NOTED.
2. ALL DIMENSIONS, ELEVATIONS, SPECIFICATIONS, AND CAPACITIES ARE SUBJECT TO CHANGE. FOR PROJECT SPECIFIC DRAWINGS DETAILING EXACT DIMENSIONS, WEIGHTS, AND ACCESSORIES PLEASE CONTACT CONTECH.

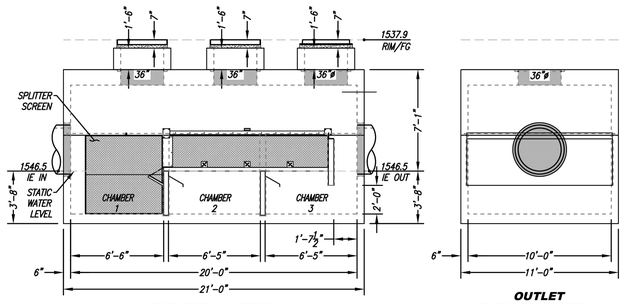
INSTALLATION NOTES

1. CONTRACTOR TO PROVIDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS REQUIRED TO OFFLOAD AND INSTALL THE DEBRIS SEPARATING BAFFLE BOX AND APPURTENANCES IN ACCORDANCE WITH THIS DRAWING AND THE MANUFACTURER'S SPECIFICATIONS, UNLESS OTHERWISE STATED IN MANUFACTURER'S CONTRACT.
2. MANUFACTURER RECOMMENDS A 6" LEVEL ROCK BASE UNLESS SPECIFIED BY THE PROJECT ENGINEER. CONTRACTOR IS RESPONSIBLE FOR VERIFYING PROJECT ENGINEER'S RECOMMENDED BASE SPECIFICATIONS.
3. ALL PIPES MUST BE FLUSH WITH INSIDE SURFACE OF CONCRETE (PIPES CANNOT INTRUDE BEYOND FLUSH).
4. ALL GAPS AROUND PIPES SHALL BE SEALED WATERTIGHT WITH A NON-SHRINK GROUT PER MANUFACTURER'S STANDARD CONNECTION DETAIL AND SHALL MEET OR EXCEED REGIONAL PIPE CONNECTION STANDARDS.
5. CONTRACTOR RESPONSIBLE FOR INSTALLATION OF ALL PIPES, RISERS AND COVERS. ALL COVERS SHALL BE SHIPPED LOOSE. CONTRACTOR TO USE GROUT AND/OR BRICKS TO MATCH COVERS WITH FINISHED SURFACE UNLESS SPECIFIED OTHERWISE.

1:60 SCALE



INLET ELEVATION VIEW A



ELEVATION VIEW B

OUTLET ELEVATION VIEW C

CONTECH® ENGINEERED SOLUTIONS LLC
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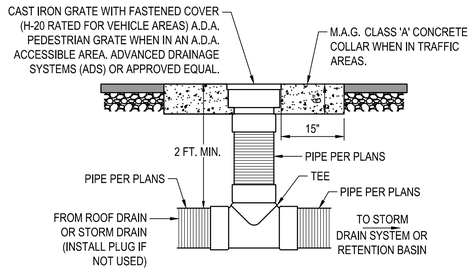
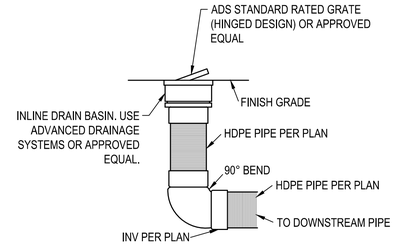
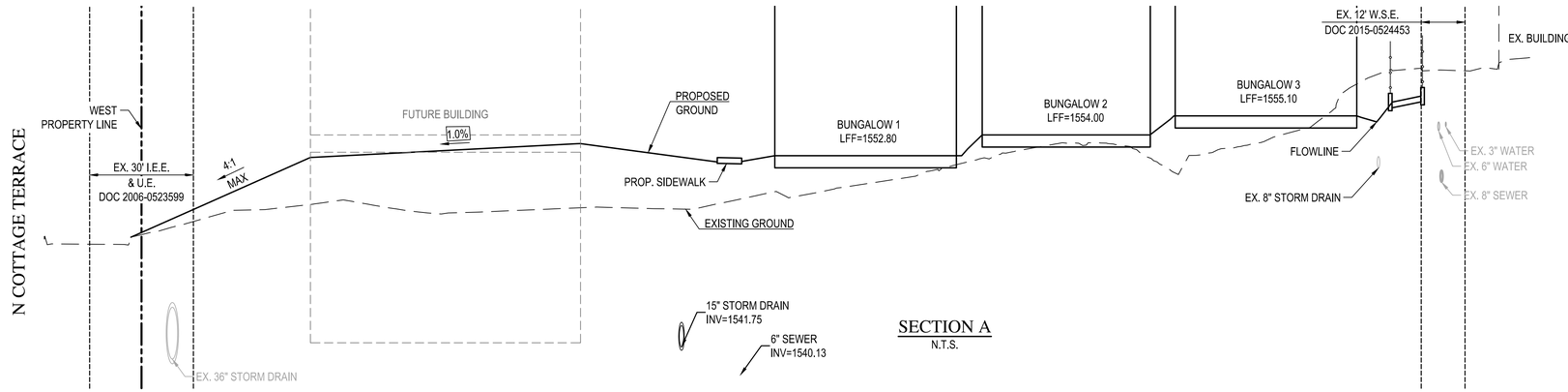
DSBB-10-20-108
DUAL STAGE HYDRODYNAMIC SEPARATOR
STANDARD DETAIL



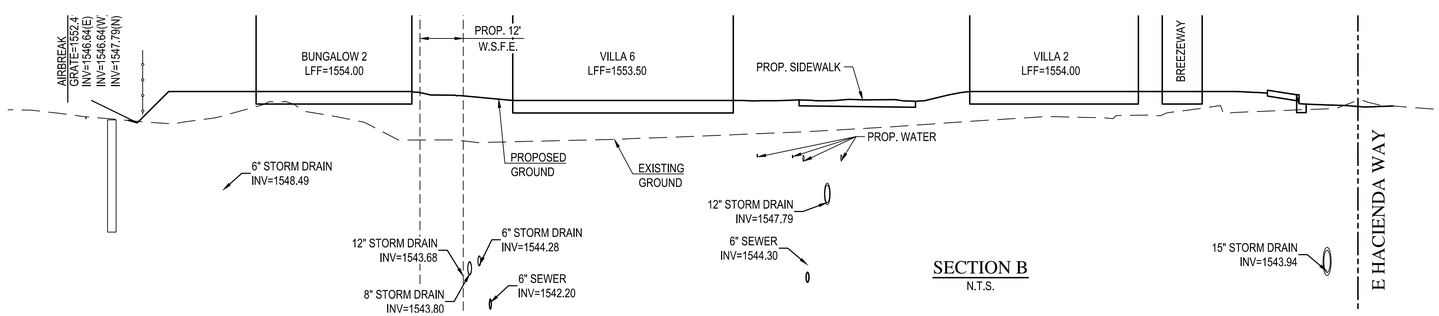
STORM DRAIN AIR BREAK
(N.T.S.)



INLINE DRAIN DETAIL
N.T.S.



SECTION A
N.T.S.



SECTION B
N.T.S.

WOOD PATEL

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Land Survey
Construction Management
602.335.8500
www.woodpatel.com

FAIRMONT SCOTTSDALE PRINCESS
SUNSET VILLAS AND BUNGALOWS
PRELIMINARY IMPROVEMENT PLAN
DETAIL

REV	DESCRIPTION	DATE

EXPIRES 06-30-28

SCALE (HORIZ.)	N/A
SCALE (VERT.)	N/A
DATE	05/09/2025
JOB NUMBER	215319.10
SHEET	C17 OF 18

CHECKED BY: DM DESIGNED BY: RS DRAFTED BY: JRS

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UTILITY CROSSINGS					
X - #	BOT OF PIPE	PIPE TYPE	TOP OF PIPE	PIPE TYPE	SEPARATION
1	1548.17	STORM DRAIN	1545.83	SEWER	2.35
2	1546.51	STORM DRAIN	1544.78	SEWER	1.72
3	1546.24	STORM DRAIN	1543.05	SEWER	3.19
4	1544.16	STORM DRAIN	1542.48	SEWER	1.67
5	1544.16	STORM DRAIN	1542.03	SEWER	2.13
6	1542.25	STORM DRAIN	1541.22	SEWER	1.03
7	1540.81	STORM DRAIN	1538.80	SEWER	2.01
8	1540.91	STORM DRAIN	1539.74	SEWER	1.17
9	1539.16	STORM DRAIN	1537.08	SEWER	2.08
10	1543.08	STORM DRAIN	1542.07	SEWER	1.01
11	1544.09	STORM DRAIN	1542.90	SEWER	1.19
12	1544.73	STORM DRAIN	1542.72	SEWER	2.01
13	1548.54	STORM DRAIN	1545.64	SEWER	2.90
14	1547.53	STORM DRAIN	1543.96	SEWER	3.57
15	1550.80	DOMESTIC	1545.12	SEWER	5.69
16	1550.60	DOMESTIC	1544.91	SEWER	5.69
17	1549.82	DOMESTIC	1544.44	SEWER	5.37
18	1551.03	DOMESTIC	1542.99	SEWER	8.04
19	1550.15	DOMESTIC	1542.99	SEWER	7.16
20	1550.30	DOMESTIC	1544.30	SEWER	6.01
21	1549.69	DOMESTIC	1544.34	SEWER	5.35
22	1549.71	DOMESTIC	1544.08	SEWER	5.63
23	1550.49	DOMESTIC	1545.05	SEWER	5.44
24	1549.41	DOMESTIC	1543.77	SEWER	5.63
25	1549.89	DOMESTIC	1543.80	SEWER	6.09
26	1548.88	DISTRIBUTION	1544.92	SEWER	3.96
27	1548.55	DISTRIBUTION	1542.09	SEWER	6.46
28	1550.40	DISTRIBUTION	1543.03	SEWER	7.37
29	1549.49	DISTRIBUTION	1543.10	SEWER	6.39
30	1548.66	DISTRIBUTION	1544.70	SEWER	3.96
31	1548.15	DISTRIBUTION	1541.61	SEWER	6.53
32	1550.57	DOMESTIC	1546.50	STORM DRAIN	4.07
33	1550.81	DOMESTIC	1546.90	STORM DRAIN	3.91
34	1550.85	DOMESTIC	1549.37	STORM DRAIN	1.48
35	1550.58	DOMESTIC	1547.57	STORM DRAIN	3.01
36	1549.98	DOMESTIC	1548.98	STORM DRAIN	1.00

UTILITY CROSSINGS					
X - #	BOT OF PIPE	PIPE TYPE	TOP OF PIPE	PIPE TYPE	SEPARATION
37	1549.55	DOMESTIC	1548.55	STORM DRAIN	1.00
38	1551.18	DOMESTIC	1545.28	STORM DRAIN	5.90
39	1550.37	DOMESTIC	1545.08	STORM DRAIN	5.29
40	1550.58	DOMESTIC	1547.31	STORM DRAIN	3.28
41	1550.36	DOMESTIC	1547.38	STORM DRAIN	2.98
42	1550.77	DOMESTIC	1544.36	STORM DRAIN	6.41
43	1551.30	DOMESTIC	1545.80	STORM DRAIN	5.50
44	1548.62	DISTRIBUTION	1546.15	STORM DRAIN	2.47
45	1548.75	DISTRIBUTION	1547.66	STORM DRAIN	1.09
46	1548.70	DISTRIBUTION	1545.90	STORM DRAIN	2.80
47	1549.50	DISTRIBUTION	1545.49	STORM DRAIN	4.01
48	1548.35	DISTRIBUTION	1545.15	STORM DRAIN	3.20
49	1548.64	DISTRIBUTION	1547.20	STORM DRAIN	1.43
50	1548.48	DISTRIBUTION	1546.88	STORM DRAIN	1.60
51	1548.36	DISTRIBUTION	1545.11	STORM DRAIN	3.25
52	1548.30	DISTRIBUTION	1544.61	STORM DRAIN	3.68
53	1548.47	DISTRIBUTION	1544.24	STORM DRAIN	4.22
54	1550.74	DISTRIBUTION	1545.34	STORM DRAIN	5.40
55	1549.23	DISTRIBUTION	1545.25	STORM DRAIN	3.98
56	1549.32	DISTRIBUTION	1547.38	STORM DRAIN	1.94
57	1548.77	DISTRIBUTION	1547.56	STORM DRAIN	1.21
58	1548.77	DISTRIBUTION	1547.69	STORM DRAIN	1.08
59	1550.23	DISTRIBUTION	1549.19	STORM DRAIN	1.04
60	1548.38	DISTRIBUTION	1544.22	STORM DRAIN	4.16
61	1548.24	DISTRIBUTION	1544.96	STORM DRAIN	3.27
62	1548.31	DISTRIBUTION	1543.95	STORM DRAIN	4.36
63	1548.83	DISTRIBUTION	1544.28	STORM DRAIN	4.55
64	1551.12	DISTRIBUTION	1546.10	STORM DRAIN	5.02
65	1549.92	DISTRIBUTION	1547.87	STORM DRAIN	2.06
66	1550.60	DOMESTIC	1549.43	DISTRIBUTION	1.17
67	1549.59	DOMESTIC	1548.43	DISTRIBUTION	1.16
68	1551.22	DOMESTIC	1550.19	DISTRIBUTION	1.03
69	1550.72	DOMESTIC	1549.62	DISTRIBUTION	1.11
70	1550.67	DOMESTIC	1549.65	DISTRIBUTION	1.01
71	1550.44	DOMESTIC	1548.97	DISTRIBUTION	1.47
72	1549.88	DOMESTIC	1549.30	DOMESTIC	0.57

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FAIRMONT SCOTTSDALE PRINCESS
SUNSET VILLAS AND BUNGALOWS
PRELIMINARY IMPROVEMENT PLAN
DETAIL

REV	DESCRIPTION	DATE

EXPIRES 06-30-28

SCALE (HORIZ.)	N/A
SCALE (VERT.)	N/A
DATE	05/09/2025
JOB NUMBER	215319.10
SHEET	C18 OF 18

CHECKED BY: DM DESIGNED BY: RS DRAFTED BY: JRS

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APPENDIX E – WATERCAD MODELING RESULTS

Fairmont Scottsdale Princess Water Master Plan - WaterCAD
FlexTable: Reservoir Table
Active Scenario: Calibration Static Model 1

ID	Label	Elevation (ft)	Hydraulic Grade (ft)
284	R-1	1,543.25	1,543.25

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Pump Table

Active Scenario: Calibration Static Model 1

ID	Label	Elevation (ft)	Hydraulic Grade (Suction) (ft)	Hydraulic Grade (Discharge) (ft)	Flow (Total) (gpm)	Pump Head (ft)
283	PMP-1	1,543.20	1,543.25	1,709.45	0	166.20

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Junction Table

Active Scenario: Calibration Static Model 1

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
Domestic (Conference Center)	1,553.33	0	68	1,709.45
Domestic (Guest Room Addition)	1,550.00	0	69	1,709.45
Domestic (Italian)	1,556.30	0	66	1,709.45
Domestic (Roasterie)	1,560.25	0	65	1,709.45
EX FH-1	1,547.30	0	70	1,709.45
EX FH-2 (TEST 1)	1,543.00	0	72	1,709.45
EX FH-3 (FLOW 1)	1,549.00	0	69	1,709.45
EX FH-4	1,557.29	0	66	1,709.45
EX FH-5	1,558.03	0	66	1,709.45
EX FH-6 (TEST 2)	1,559.33	0	65	1,709.45
EX FH-7 (FLOW 2)	1,556.86	0	66	1,709.45
EX FH-8	1,556.95	0	66	1,709.45
EX FH-9	1,554.65	0	67	1,709.45
EX FH-11	1,557.90	0	66	1,709.45
EX FH-12	1,552.10	0	68	1,709.45
EX J-10	1,552.00	0	68	1,709.45
EX J-20	1,553.00	0	68	1,709.45
EX J-30	1,553.00	0	68	1,709.45
EX J-34	1,553.36	0	68	1,709.45
EX J-40	1,552.55	0	68	1,709.45
EX J-50	1,552.03	0	68	1,709.45
EX J-54	1,555.20	0	67	1,709.45
EX J-70	1,542.85	0	72	1,709.45
EX J-80	1,542.85	0	72	1,709.45
EX J-90	1,547.00	0	70	1,709.45
EX J-100	1,550.00	0	69	1,709.45
EX J-110	1,556.50	0	66	1,709.45
EX J-120	1,556.34	0	66	1,709.45
EX J-130	1,558.03	0	66	1,709.45
EX J-140	1,560.63	0	64	1,709.45
EX J-141	1,563.47	0	63	1,709.45
EX J-150	1,557.41	0	66	1,709.45
EX J-160	1,554.89	0	67	1,709.45
EX J-170	1,558.93	0	65	1,709.45
EX J-190	1,556.35	0	66	1,709.45
EX J-194	1,556.60	0	66	1,709.45
EX J-200	1,555.17	0	67	1,709.45
FH-1	1,552.65	0	68	1,709.45
FH-2	1,553.15	0	68	1,709.45
FH-7	1,557.87	0	66	1,709.45
FH-8	1,552.10	0	68	1,709.45
Fire (Garage)	1,554.70	0	67	1,709.45
Fire (Guest Room Addition)	1,550.00	0	69	1,709.45
Fire (Italian)	1,556.30	0	66	1,709.45
Fire (Roasterie)	1,559.64	0	65	1,709.45
J-20	1,552.46	0	68	1,709.45

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Junction Table

Active Scenario: Calibration Static Model 1

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-70	1,553.30	0	68	1,709.45

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Pump Table

Active Scenario: Calibration Residual Model 1

ID	Label	Elevation (ft)	Hydraulic Grade (Suction) (ft)	Hydraulic Grade (Discharge) (ft)	Flow (Total) (gpm)	Pump Head (ft)
283	PMP-1	1,543.20	1,543.25	1,658.75	2,785	115.50

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Junction Table

Active Scenario: Calibration Residual Model 1

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
Domestic (Conference Center)	1,553.33	0	32	1,628.23
Domestic (Guest Room Addition)	1,550.00	0	35	1,631.04
Domestic (Italian)	1,556.30	0	31	1,627.73
Domestic (Roasterie)	1,560.25	0	33	1,636.96
EX FH-1	1,547.30	0	37	1,631.95
EX FH-2 (TEST 1)	1,543.00	0	50	1,658.75
EX FH-3 (FLOW 1)	1,549.00	2,785	34	1,627.57
EX FH-4	1,557.29	0	30	1,627.77
EX FH-5	1,558.03	0	30	1,627.79
EX FH-6 (TEST 2)	1,559.33	0	30	1,627.89
EX FH-7 (FLOW 2)	1,556.86	0	31	1,628.00
EX FH-8	1,556.95	0	31	1,628.18
EX FH-9	1,554.65	0	32	1,628.40
EX FH-11	1,557.90	0	30	1,627.92
EX FH-12	1,552.10	0	33	1,629.08
EX J-10	1,552.00	0	33	1,627.68
EX J-20	1,553.00	0	32	1,627.91
EX J-30	1,553.00	0	32	1,628.04
EX J-34	1,553.36	0	32	1,628.22
EX J-40	1,552.55	0	33	1,628.62
EX J-50	1,552.03	0	33	1,629.08
EX J-54	1,555.20	0	34	1,634.49
EX J-70	1,542.85	0	47	1,651.56
EX J-80	1,542.85	0	41	1,636.54
EX J-90	1,547.00	0	37	1,632.93
EX J-100	1,550.00	0	34	1,627.69
EX J-110	1,556.50	0	31	1,627.71
EX J-120	1,556.34	0	31	1,627.75
EX J-130	1,558.03	0	30	1,627.80
EX J-140	1,560.63	0	29	1,627.87
EX J-141	1,563.47	0	28	1,627.87
EX J-150	1,557.41	0	31	1,627.92
EX J-160	1,554.89	0	32	1,627.92
EX J-170	1,558.93	0	30	1,627.90
EX J-190	1,556.35	0	31	1,628.08
EX J-194	1,556.60	0	31	1,628.04
EX J-200	1,555.17	0	32	1,628.50
FH-1	1,552.65	0	33	1,628.91
FH-2	1,553.15	0	33	1,628.33
FH-7	1,557.87	0	37	1,643.74
FH-8	1,552.10	0	33	1,629.08
Fire (Garage)	1,554.70	0	32	1,627.92
Fire (Guest Room Addition)	1,550.00	0	35	1,630.98
Fire (Italian)	1,556.30	0	31	1,627.73
Fire (Roasterie)	1,559.64	0	33	1,636.66
J-20	1,552.46	0	33	1,628.96

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Junction Table

Active Scenario: Calibration Residual Model 1

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-70	1,553.30	0	32	1,628.25

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Pump Table

Active Scenario: Calibration Flow@20 Model 1

ID	Label	Elevation (ft)	Hydraulic Grade (Suction) (ft)	Hydraulic Grade (Discharge) (ft)	Flow (Total) (gpm)	Pump Head (ft)
283	PMP-1	1,543.20	1,543.25	1,589.50	4,431	46.25

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Junction Table

Active Scenario: Calibration Flow@20 Model 1

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
Domestic (Conference Center)	1,553.33	0	-16	1,517.38
Domestic (Guest Room Addition)	1,550.00	0	-11	1,524.03
Domestic (Italian)	1,556.30	0	-17	1,516.19
Domestic (Roasterie)	1,560.25	0	-10	1,538.00
EX FH-1	1,547.30	0	-9	1,526.16
EX FH-2 (TEST 1)	1,543.00	0	20	1,589.50
EX FH-3 (FLOW 1)	1,549.00	4,431	-14	1,515.82
EX FH-4	1,557.29	0	-18	1,516.29
EX FH-5	1,558.03	0	-18	1,516.34
EX FH-6 (TEST 2)	1,559.33	0	-18	1,516.58
EX FH-7 (FLOW 2)	1,556.86	0	-17	1,516.82
EX FH-8	1,556.95	0	-17	1,517.25
EX FH-9	1,554.65	0	-16	1,517.77
EX FH-11	1,557.90	0	-18	1,516.65
EX FH-12	1,552.10	0	-14	1,519.38
EX J-10	1,552.00	0	-16	1,516.09
EX J-20	1,553.00	0	-16	1,516.63
EX J-30	1,553.00	0	-16	1,516.92
EX J-34	1,553.36	0	-16	1,517.35
EX J-40	1,552.55	0	-15	1,518.30
EX J-50	1,552.03	0	-14	1,519.38
EX J-54	1,555.20	0	-10	1,532.16
EX J-70	1,542.85	0	13	1,572.52
EX J-80	1,542.85	0	-3	1,537.01
EX J-90	1,547.00	0	-8	1,528.47
EX J-100	1,550.00	0	-15	1,516.09
EX J-110	1,556.50	0	-17	1,516.15
EX J-120	1,556.34	0	-17	1,516.23
EX J-130	1,558.03	0	-18	1,516.35
EX J-140	1,560.63	0	-19	1,516.52
EX J-141	1,563.47	0	-20	1,516.52
EX J-150	1,557.41	0	-18	1,516.65
EX J-160	1,554.89	0	-17	1,516.65
EX J-170	1,558.93	0	-18	1,516.60
EX J-190	1,556.35	0	-17	1,517.01
EX J-194	1,556.60	0	-17	1,516.92
EX J-200	1,555.17	0	-16	1,518.02
FH-1	1,552.65	0	-15	1,518.98
FH-2	1,553.15	0	-15	1,517.60
FH-7	1,557.87	0	-2	1,554.02
FH-8	1,552.10	0	-14	1,519.38
Fire (Garage)	1,554.70	0	-16	1,516.65
Fire (Guest Room Addition)	1,550.00	0	-11	1,523.87
Fire (Italian)	1,556.30	0	-17	1,516.20
Fire (Roasterie)	1,559.64	0	-10	1,537.29
J-20	1,552.46	0	-14	1,519.10

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Junction Table

Active Scenario: Calibration Flow@20 Model 1

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-70	1,553.30	0	-16	1,517.42

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Pump Table

Active Scenario: Average Daily Demand - Sunset Bungalows and Villas

Label	Elevation (ft)	Hydraulic Grade (Suction) (ft)	Hydraulic Grade (Discharge) (ft)	Flow (Total) (gpm)	Pump Head (ft)
PMP-1	1,543.20	1,543.25	1,708.72	282	165.47

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Junction Table

Active Scenario: Average Daily Demand - Sunset Bungalows and Villas

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
Domestic (Conference Center)	1,553.33	111	67	1,708.28
Domestic (Guest Room Addition)	1,550.00	96	69	1,708.35
Domestic (Italian)	1,556.30	30	66	1,708.32
Domestic (Roasterie)	1,560.25	19	64	1,708.33
EX FH-1	1,547.30	0	70	1,708.36
EX FH-2 (TEST 1)	1,543.00	0	72	1,708.72
EX FH-3 (FLOW 1)	1,549.00	0	69	1,708.33
EX FH-4	1,557.29	0	65	1,708.32
EX FH-5	1,558.03	0	65	1,708.32
EX FH-6 (TEST 2)	1,559.33	0	64	1,708.32
EX FH-7 (FLOW 2)	1,556.86	0	66	1,708.32
EX FH-10	1,563.50	0	63	1,708.32
EX FH-11	1,557.90	0	65	1,708.32
EX FH-12	1,552.10	0	68	1,708.28
EX J-10	1,552.00	0	68	1,708.32
EX J-20	1,553.00	0	67	1,708.30
EX J-30	1,553.00	0	67	1,708.29
EX J-34	1,553.36	0	67	1,708.28
EX J-40	1,552.55	0	67	1,708.28
EX J-50	1,552.03	0	68	1,708.28
EX J-54	1,555.20	0	66	1,708.31
EX J-70	1,542.85	0	72	1,708.62
EX J-80	1,542.85	0	72	1,708.42
EX J-90	1,547.00	0	70	1,708.37
EX J-100	1,550.00	0	69	1,708.33
EX J-110	1,556.50	0	66	1,708.32
EX J-120	1,556.34	0	66	1,708.32
EX J-130	1,558.03	0	65	1,708.32
EX J-140	1,560.63	0	64	1,708.32
EX J-141	1,563.47	0	63	1,708.32
EX J-150	1,557.41	0	65	1,708.32
EX J-160	1,554.89	0	66	1,708.32
EX J-170	1,558.93	0	65	1,708.32
EX J-190	1,556.35	0	66	1,708.32
EX J-194	1,556.60	0	66	1,708.32
FH-1	1,552.65	0	67	1,708.28
FH-2	1,553.15	0	67	1,708.28
FH-3	1,556.46	0	66	1,708.32
FH-4	1,556.42	0	66	1,708.32
FH-5	1,556.39	0	66	1,708.32
FH-6	1,556.95	0	65	1,708.32
FH-7	1,557.87	0	65	1,708.45
FH-8	1,552.10	0	68	1,708.28
Fire (Conf. Center)	1,556.46	0	66	1,708.32
Fire (Garage)	1,554.70	0	66	1,708.32
Fire (Guest Room Addition)	1,550.00	0	69	1,708.35

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Junction Table

Active Scenario: Average Daily Demand - Sunset Bungalows and Villas

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
Fire (Italian)	1,556.30	0	66	1,708.32
Fire (Roasterie)	1,559.64	0	64	1,708.33
Fire (Villas and Bungalows)	1,553.13	0	67	1,708.31
J-10	1,550.14	0	68	1,708.30
J-20	1,552.46	0	67	1,708.28
J-66	1,556.22	0	66	1,708.32
J-70	1,553.30	0	67	1,708.28
J-77	1,579.30	0	50	1,695.78
J-81	1,579.30	0	56	1,708.31
J-83	1,567.10	0	56	1,695.78
J-85	1,566.00	0	56	1,695.84
J-86	1,565.20	0	57	1,695.81
J-87	1,567.10	0	56	1,695.78
J-88	1,565.50	0	56	1,695.79
J-BUNGALOW 1	1,552.30	1	62	1,695.78
J-BUNGALOW 2&3	1,554.15	2	61	1,695.78
J-VILLA 1&2	1,553.50	5	62	1,695.84
J-VILLA 3&4	1,553.15	12	62	1,695.78
J-VILLA 5	1,553.20	2	62	1,695.81
J-VILLA 6	1,553.50	4	62	1,695.79

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Pipe Table

Active Scenario: Average Daily Demand - Sunset Bungalows and Villas

Label	Start Node	Stop Node	Length (ft)	Diameter (in)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
EX P-15	EX J-20	EX J-10	80	8.0	130.0	-93	0.59
EX P-25	EX J-30	EX J-20	43	8.0	130.0	-93	0.59
EX P-33	EX J-34	EX J-30	63	8.0	130.0	-93	0.59
EX P-35(1)	J-70	Domestic (Conference Center)	5	8.0	130.0	-27	0.17
EX P-35(2)	Domestic (Conference Center)	EX J-34	5	8.0	130.0	-137	0.88
EX P-37	FH-2	J-70	27	8.0	130.0	0	0.00
EX P-39	EX J-40	FH-2	103	8.0	130.0	0	0.00
EX P-45	FH-1	EX J-40	46	8.0	130.0	0	0.00
EX P-47(1)	EX J-50	J-20	19	8.0	130.0	0	0.00
EX P-47(2)	J-20	FH-1	9	8.0	130.0	0	0.00
EX P-53	Fire (Roasterie)	EX J-54	85	6.0	130.0	44	0.50
EX P-55	Domestic (Roasterie)	Fire (Roasterie)	12	6.0	130.0	44	0.50
EX P-57(1)	EX FH-2 (TEST 1)	FH-7	603	6.0	130.0	63	0.72
EX P-57(2)	FH-7	Domestic (Roasterie)	272	6.0	130.0	63	0.72
EX P-58	EX J-50	EX FH-12	89	8.0	130.0	0	0.00
EX P-59	EX FH-12	FH-8	37	8.0	130.0	0	0.00
EX P-65	EX J-70	EX FH-2 (TEST 1)	22	6.0	130.0	-219	2.49
EX P-75	EX J-80	EX J-70	46	6.0	130.0	-219	2.49
EX P-85	EX J-90	EX J-80	323	12.0	130.0	-219	0.62
EX P-93	EX FH-1	EX J-90	87	12.0	130.0	-219	0.62
EX P-95	Domestic (Guest Room Addition)	EX FH-1	81	12.0	130.0	-219	0.62
EX P-97	Fire (Guest Room Addition)	Domestic (Guest Room Addition)	6	12.0	130.0	-123	0.35
EX P-99	EX J-100	Fire (Guest Room Addition)	294	12.0	130.0	-123	0.35
EX P-105	EX FH-3 (FLOW 1)	EX J-100	10	12.0	130.0	-123	0.35
EX P-107	EX J-10	EX FH-3 (FLOW 1)	133	12.0	130.0	-123	0.35
EX P-109	EX J-110	EX J-10	231	12.0	130.0	-30	0.08
EX P-113	Domestic (Italian)	EX J-110	171	12.0	130.0	-27	0.08
EX P-115	Fire (Italian)	Domestic (Italian)	13	12.0	130.0	3	0.01
EX P-117	EX J-120	Fire (Italian)	130	12.0	130.0	3	0.01
EX P-125	EX FH-4	EX J-120	245	12.0	130.0	3	0.01

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Pipe Table

Active Scenario: Average Daily Demand - Sunset Bungalows and Villas

Label	Start Node	Stop Node	Length (ft)	Diameter (in)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
EX P-127	EX FH-5	EX FH-4	190	12.0	130.0	3	0.01
EX P-129	EX J-130	EX FH-5	9	12.0	130.0	3	0.01
EX P-135	EX J-140	EX J-130	649	12.0	130.0	3	0.01
EX P-145	EX J-141	EX J-140	403	12.0	130.0	0	0.00
EX P-147	EX FH-10	EX J-141	91	6.0	130.0	0	0.00
EX P-147(1)	EX J-150	EX FH-10	802	6.0	130.0	0	0.00
EX P-155	Fire (Garage)	EX J-150	268	12.0	130.0	0	0.00
EX P-157	EX J-160	Fire (Garage)	189	12.0	130.0	0	0.00
EX P-165	EX J-160	EX J-170	191	12.0	130.0	3	0.01
EX P-175	EX J-170	EX FH-6 (TEST 2)	67	12.0	130.0	3	0.01
EX P-177	EX FH-6 (TEST 2)	EX J-140	221	12.0	130.0	3	0.01
EX P-191	EX J-160	EX FH-7 (FLOW 2)	93	8.0	130.0	-3	0.02
EX P-193	EX FH-7 (FLOW 2)	EX J-194	50	8.0	130.0	-3	0.02
P-5	J-10	EX J-34	336	8.0	130.0	44	0.28
P-15	Fire (Villas and Bungalows)	J-10	107	8.0	130.0	44	0.28
P-17	EX J-54	Fire (Villas and Bungalows)	71	8.0	130.0	44	0.28
P-21	EX J-194	J-66	44	8.0	130.0	-3	0.02
P-23	J-66	EX J-190	16	8.0	130.0	-3	0.02
P-25	FH-5	EX J-190	267	8.0	130.0	3	0.02
P-27	FH-4	FH-5	243	8.0	130.0	3	0.02
P-29	Fire (Conf. Center)	FH-4	222	8.0	130.0	3	0.02
P-31	FH-3	Fire (Conf. Center)	51	8.0	130.0	3	0.02
P-50	FH-3	EX J-110	302	8.0	130.0	-3	0.02
P-55	FH-6	J-66	125	8.0	130.0	0	0.00
P-58	R-1	PMP-1	1	48.0	130.0	282	0.05
P-59	PMP-1	EX FH-2 (TEST 1)	1	48.0	130.0	282	0.05
P-60	J-70	GPV-1	14	4.0	130.0	27	0.68
P-61	GPV-1	J-VILLA 1&2	182	4.0	130.0	27	0.68
P-62	J-VILLA 1&2	J-VILLA 5	53	4.0	130.0	22	0.55
P-63	J-VILLA 5	J-VILLA 6	69	4.0	130.0	20	0.50

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Pipe Table

Active Scenario: Average Daily Demand - Sunset Bungalows and Villas

Label	Start Node	Stop Node	Length (ft)	Diameter (in)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-64	J-VILLA 6	J-VILLA 3&4	27	4.0	130.0	16	0.41
P-65	J-VILLA 3&4	J-BUNGALOW 2&3	78	4.0	130.0	4	0.09
P-66	J-BUNGALOW 2&3	J-BUNGALOW 1	71	2.5	130.0	1	0.08
P-67	J-VILLA 3&4	J-77	67	2.5	130.0	0	0.00
P-75	Fire (Villas and Bungalows)	J-81	132	6.0	130.0	0	0.00
P-77	J-BUNGALOW 1	J-83	31	2.0	130.0	0	0.00
P-79	J-VILLA 1&2	J-85	29	2.5	130.0	0	0.00
P-80	J-VILLA 5	J-86	31	2.5	130.0	0	0.00
P-81	J-BUNGALOW 2&3	J-87	47	2.5	130.0	0	0.00
P-82	J-VILLA 6	J-88	23	2.5	130.0	0	0.00
P-EX FH-11	EX J-150	EX FH-11	23	12.0	130.0	0	0.00

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Pump Table

Active Scenario: Max Day - Sunset Bungalows and Villas

Label	Elevation (ft)	Hydraulic Grade (Suction) (ft)	Hydraulic Grade (Discharge) (ft)	Flow (Total) (gpm)	Pump Head (ft)
PMP-1	1,543.20	1,543.25	1,706.82	565	163.57

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Junction Table

Active Scenario: Max Day - Sunset Bungalows and Villas

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
Domestic (Conference Center)	1,553.33	221	66	1,705.22
Domestic (Guest Room Addition)	1,550.00	192	67	1,705.46
Domestic (Italian)	1,556.30	60	64	1,705.37
Domestic (Roasterie)	1,560.25	38	63	1,705.41
EX FH-1	1,547.30	0	68	1,705.51
EX FH-2 (TEST 1)	1,543.00	0	71	1,706.82
EX FH-3 (FLOW 1)	1,549.00	0	68	1,705.40
EX FH-4	1,557.29	0	64	1,705.37
EX FH-5	1,558.03	0	64	1,705.37
EX FH-6 (TEST 2)	1,559.33	0	63	1,705.37
EX FH-7 (FLOW 2)	1,556.86	0	64	1,705.37
EX FH-10	1,563.50	0	61	1,705.37
EX FH-11	1,557.90	0	64	1,705.37
EX FH-12	1,552.10	0	66	1,705.22
EX J-10	1,552.00	0	66	1,705.38
EX J-20	1,553.00	0	66	1,705.31
EX J-30	1,553.00	0	66	1,705.28
EX J-34	1,553.36	0	66	1,705.23
EX J-40	1,552.55	0	66	1,705.22
EX J-50	1,552.03	0	66	1,705.22
EX J-54	1,555.20	0	65	1,705.33
EX J-70	1,542.85	0	71	1,706.47
EX J-80	1,542.85	0	70	1,705.73
EX J-90	1,547.00	0	69	1,705.55
EX J-100	1,550.00	0	67	1,705.41
EX J-110	1,556.50	0	64	1,705.38
EX J-120	1,556.34	0	64	1,705.37
EX J-130	1,558.03	0	64	1,705.37
EX J-140	1,560.63	0	63	1,705.37
EX J-141	1,563.47	0	61	1,705.37
EX J-150	1,557.41	0	64	1,705.37
EX J-160	1,554.89	0	65	1,705.37
EX J-170	1,558.93	0	63	1,705.37
EX J-190	1,556.35	0	64	1,705.37
EX J-194	1,556.60	0	64	1,705.37
FH-1	1,552.65	0	66	1,705.22
FH-2	1,553.15	0	66	1,705.22
FH-3	1,556.46	0	64	1,705.38
FH-4	1,556.42	0	64	1,705.37
FH-5	1,556.39	0	64	1,705.37
FH-6	1,556.95	0	64	1,705.37
FH-7	1,557.87	0	64	1,705.85
FH-8	1,552.10	0	66	1,705.22
Fire (Conf. Center)	1,556.46	0	64	1,705.38
Fire (Garage)	1,554.70	0	65	1,705.37
Fire (Guest Room Addition)	1,550.00	0	67	1,705.46

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Junction Table

Active Scenario: Max Day - Sunset Bungalows and Villas

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
Fire (Italian)	1,556.30	0	64	1,705.37
Fire (Roasterie)	1,559.64	0	63	1,705.40
Fire (Villas and Bungalows)	1,553.13	0	66	1,705.32
J-10	1,550.14	0	67	1,705.30
J-20	1,552.46	0	66	1,705.22
J-66	1,556.22	0	65	1,705.37
J-70	1,553.30	0	66	1,705.22
J-77	1,579.30	0	48	1,689.25
J-81	1,579.30	0	55	1,705.32
J-83	1,567.10	0	53	1,689.24
J-85	1,566.00	0	53	1,689.45
J-86	1,565.20	0	54	1,689.37
J-87	1,567.10	0	53	1,689.25
J-88	1,565.50	0	54	1,689.27
J-BUNGALOW 1	1,552.30	2	59	1,689.24
J-BUNGALOW 2&3	1,554.15	5	58	1,689.25
J-VILLA 1&2	1,553.50	10	59	1,689.45
J-VILLA 3&4	1,553.15	25	59	1,689.25
J-VILLA 5	1,553.20	4	59	1,689.37
J-VILLA 6	1,553.50	7	59	1,689.27

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Pipe Table

Active Scenario: Max Day - Sunset Bungalows and Villas

Label	Start Node	Stop Node	Length (ft)	Diameter (in)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
EX P-15	EX J-20	EX J-10	80	8.0	130.0	-186	1.19
EX P-25	EX J-30	EX J-20	43	8.0	130.0	-186	1.19
EX P-33	EX J-34	EX J-30	63	8.0	130.0	-186	1.19
EX P-35(1)	J-70	Domestic (Conference Center)	5	8.0	130.0	-53	0.34
EX P-35(2)	Domestic (Conference Center)	EX J-34	5	8.0	130.0	-275	1.75
EX P-37	FH-2	J-70	27	8.0	130.0	0	0.00
EX P-39	EX J-40	FH-2	103	8.0	130.0	0	0.00
EX P-45	FH-1	EX J-40	46	8.0	130.0	0	0.00
EX P-47(1)	EX J-50	J-20	19	8.0	130.0	0	0.00
EX P-47(2)	J-20	FH-1	9	8.0	130.0	0	0.00
EX P-53	Fire (Roasterie)	EX J-54	85	6.0	130.0	88	1.00
EX P-55	Domestic (Roasterie)	Fire (Roasterie)	12	6.0	130.0	88	1.00
EX P-57(1)	EX FH-2 (TEST 1)	FH-7	603	6.0	130.0	126	1.43
EX P-57(2)	FH-7	Domestic (Roasterie)	272	6.0	130.0	126	1.43
EX P-58	EX J-50	EX FH-12	89	8.0	130.0	0	0.00
EX P-59	EX FH-12	FH-8	37	8.0	130.0	0	0.00
EX P-65	EX J-70	EX FH-2 (TEST 1)	22	6.0	130.0	-438	4.97
EX P-75	EX J-80	EX J-70	46	6.0	130.0	-438	4.97
EX P-85	EX J-90	EX J-80	323	12.0	130.0	-438	1.24
EX P-93	EX FH-1	EX J-90	87	12.0	130.0	-438	1.24
EX P-95	Domestic (Guest Room Addition)	EX FH-1	81	12.0	130.0	-438	1.24
EX P-97	Fire (Guest Room Addition)	Domestic (Guest Room Addition)	6	12.0	130.0	-246	0.70
EX P-99	EX J-100	Fire (Guest Room Addition)	294	12.0	130.0	-246	0.70
EX P-105	EX FH-3 (FLOW 1)	EX J-100	10	12.0	130.0	-246	0.70
EX P-107	EX J-10	EX FH-3 (FLOW 1)	133	12.0	130.0	-246	0.70
EX P-109	EX J-110	EX J-10	231	12.0	130.0	-60	0.17
EX P-113	Domestic (Italian)	EX J-110	171	12.0	130.0	-54	0.15
EX P-115	Fire (Italian)	Domestic (Italian)	13	12.0	130.0	6	0.02
EX P-117	EX J-120	Fire (Italian)	130	12.0	130.0	6	0.02
EX P-125	EX FH-4	EX J-120	245	12.0	130.0	6	0.02

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Pipe Table

Active Scenario: Max Day - Sunset Bungalows and Villas

Label	Start Node	Stop Node	Length (ft)	Diameter (in)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
EX P-127	EX FH-5	EX FH-4	190	12.0	130.0	6	0.02
EX P-129	EX J-130	EX FH-5	9	12.0	130.0	6	0.02
EX P-135	EX J-140	EX J-130	649	12.0	130.0	6	0.02
EX P-145	EX J-141	EX J-140	403	12.0	130.0	1	0.00
EX P-147	EX FH-10	EX J-141	91	6.0	130.0	1	0.01
EX P-147(1)	EX J-150	EX FH-10	802	6.0	130.0	1	0.01
EX P-155	Fire (Garage)	EX J-150	268	12.0	130.0	1	0.00
EX P-157	EX J-160	Fire (Garage)	189	12.0	130.0	1	0.00
EX P-165	EX J-160	EX J-170	191	12.0	130.0	5	0.01
EX P-175	EX J-170	EX FH-6 (TEST 2)	67	12.0	130.0	5	0.01
EX P-177	EX FH-6 (TEST 2)	EX J-140	221	12.0	130.0	5	0.01
EX P-191	EX J-160	EX FH-7 (FLOW 2)	93	8.0	130.0	-6	0.04
EX P-193	EX FH-7 (FLOW 2)	EX J-194	50	8.0	130.0	-6	0.04
P-5	J-10	EX J-34	336	8.0	130.0	88	0.56
P-15	Fire (Villas and Bungalows)	J-10	107	8.0	130.0	88	0.56
P-17	EX J-54	Fire (Villas and Bungalows)	71	8.0	130.0	88	0.56
P-21	EX J-194	J-66	44	8.0	130.0	-6	0.04
P-23	J-66	EX J-190	16	8.0	130.0	-6	0.04
P-25	FH-5	EX J-190	267	8.0	130.0	6	0.04
P-27	FH-4	FH-5	243	8.0	130.0	6	0.04
P-29	Fire (Conf. Center)	FH-4	222	8.0	130.0	6	0.04
P-31	FH-3	Fire (Conf. Center)	51	8.0	130.0	6	0.04
P-50	FH-3	EX J-110	302	8.0	130.0	-6	0.04
P-55	FH-6	J-66	125	8.0	130.0	0	0.00
P-58	R-1	PMP-1	1	48.0	130.0	565	0.10
P-59	PMP-1	EX FH-2 (TEST 1)	1	48.0	130.0	565	0.10
P-60	J-70	GPV-1	14	4.0	130.0	53	1.36
P-61	GPV-1	J-VILLA 1&2	182	4.0	130.0	53	1.36
P-62	J-VILLA 1&2	J-VILLA 5	53	4.0	130.0	43	1.10
P-63	J-VILLA 5	J-VILLA 6	69	4.0	130.0	39	1.01

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Pipe Table

Active Scenario: Max Day - Sunset Bungalows and Villas

Label	Start Node	Stop Node	Length (ft)	Diameter (in)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-64	J-VILLA 6	J-VILLA 3&4	27	4.0	130.0	32	0.82
P-65	J-VILLA 3&4	J-BUNGALOW 2&3	78	4.0	130.0	7	0.18
P-66	J-BUNGALOW 2&3	J-BUNGALOW 1	71	2.5	130.0	2	0.16
P-67	J-VILLA 3&4	J-77	67	2.5	130.0	0	0.00
P-75	Fire (Villas and Bungalows)	J-81	132	6.0	130.0	0	0.00
P-77	J-BUNGALOW 1	J-83	31	2.0	130.0	0	0.00
P-79	J-VILLA 1&2	J-85	29	2.5	130.0	0	0.00
P-80	J-VILLA 5	J-86	31	2.5	130.0	0	0.00
P-81	J-BUNGALOW 2&3	J-87	47	2.5	130.0	0	0.00
P-82	J-VILLA 6	J-88	23	2.5	130.0	0	0.00
P-EX FH-11	EX J-150	EX FH-11	23	12.0	130.0	0	0.00

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Pump Table

Active Scenario: Peak Hour Dmeand - Sunset Bungalows and Villas

Label	Elevation (ft)	Hydraulic Grade (Suction) (ft)	Hydraulic Grade (Discharge) (ft)	Flow (Total) (gpm)	Pump Head (ft)
PMP-1	1,543.20	1,543.25	1,700.02	1,124	156.77

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Junction Table

Active Scenario: Peak Hour Dmeand - Sunset Bungalows and Villas

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
Domestic (Conference Center)	1,553.33	402	61	1,694.33
Domestic (Guest Room Addition)	1,550.00	336	63	1,695.19
Domestic (Italian)	1,556.30	179	60	1,694.81
Domestic (Roasterie)	1,560.25	114	58	1,694.80
EX FH-1	1,547.30	0	64	1,695.35
EX FH-2 (TEST 1)	1,543.00	0	68	1,700.02
EX FH-3 (FLOW 1)	1,549.00	0	63	1,694.95
EX FH-4	1,557.29	0	59	1,694.81
EX FH-5	1,558.03	0	59	1,694.81
EX FH-6 (TEST 2)	1,559.33	0	59	1,694.81
EX FH-7 (FLOW 2)	1,556.86	0	60	1,694.81
EX FH-10	1,563.50	0	57	1,694.81
EX FH-11	1,557.90	0	59	1,694.81
EX FH-12	1,552.10	0	62	1,694.33
EX J-10	1,552.00	0	62	1,694.84
EX J-20	1,553.00	0	61	1,694.63
EX J-30	1,553.00	0	61	1,694.52
EX J-34	1,553.36	0	61	1,694.35
EX J-40	1,552.55	0	61	1,694.33
EX J-50	1,552.03	0	62	1,694.33
EX J-54	1,555.20	0	60	1,694.61
EX J-70	1,542.85	0	67	1,698.77
EX J-80	1,542.85	0	66	1,696.15
EX J-90	1,547.00	0	64	1,695.52
EX J-100	1,550.00	0	63	1,694.96
EX J-110	1,556.50	0	60	1,694.82
EX J-120	1,556.34	0	60	1,694.81
EX J-130	1,558.03	0	59	1,694.81
EX J-140	1,560.63	0	58	1,694.81
EX J-141	1,563.47	0	57	1,694.81
EX J-150	1,557.41	0	59	1,694.81
EX J-160	1,554.89	0	61	1,694.81
EX J-170	1,558.93	0	59	1,694.81
EX J-190	1,556.35	0	60	1,694.81
EX J-194	1,556.60	0	60	1,694.81
FH-1	1,552.65	0	61	1,694.33
FH-2	1,553.15	0	61	1,694.33
FH-3	1,556.46	0	60	1,694.82
FH-4	1,556.42	0	60	1,694.82
FH-5	1,556.39	0	60	1,694.81
FH-6	1,556.95	0	60	1,694.81
FH-7	1,557.87	0	60	1,696.42
FH-8	1,552.10	0	62	1,694.33
Fire (Conf. Center)	1,556.46	0	60	1,694.82
Fire (Garage)	1,554.70	0	61	1,694.81
Fire (Guest Room Addition)	1,550.00	0	63	1,695.19

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Junction Table

Active Scenario: Peak Hour Dmeand - Sunset Bungalows and Villas

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
Fire (Italian)	1,556.30	0	60	1,694.81
Fire (Roasterie)	1,559.64	0	58	1,694.78
Fire (Villas and Bungalows)	1,553.13	0	61	1,694.57
J-10	1,550.14	0	62	1,694.52
J-20	1,552.46	0	61	1,694.33
J-66	1,556.22	0	60	1,694.81
J-70	1,553.30	0	61	1,694.33
J-77	1,579.30	0	42	1,675.99
J-81	1,579.30	0	50	1,694.57
J-83	1,567.10	0	47	1,675.96
J-85	1,566.00	0	48	1,676.55
J-86	1,565.20	0	48	1,676.31
J-87	1,567.10	0	47	1,675.97
J-88	1,565.50	0	48	1,676.05
J-BUNGALOW 1	1,552.30	4	54	1,675.96
J-BUNGALOW 2&3	1,554.15	8	53	1,675.97
J-VILLA 1&2	1,553.50	18	53	1,676.55
J-VILLA 3&4	1,553.15	43	53	1,675.99
J-VILLA 5	1,553.20	7	53	1,676.31
J-VILLA 6	1,553.50	13	53	1,676.05

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Pipe Table

Active Scenario: Peak Hour Dmeand - Sunset Bungalows and Villas

Label	Start Node	Stop Node	Length (ft)	Diameter (in)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
EX P-15	EX J-20	EX J-10	80	8.0	130.0	-353	2.25
EX P-25	EX J-30	EX J-20	43	8.0	130.0	-353	2.25
EX P-33	EX J-34	EX J-30	63	8.0	130.0	-353	2.25
EX P-35(1)	J-70	Domestic (Conference Center)	5	8.0	130.0	-93	0.60
EX P-35(2)	Domestic (Conference Center)	EX J-34	5	8.0	130.0	-495	3.16
EX P-37	FH-2	J-70	27	8.0	130.0	0	0.00
EX P-39	EX J-40	FH-2	103	8.0	130.0	0	0.00
EX P-45	FH-1	EX J-40	46	8.0	130.0	0	0.00
EX P-47(1)	EX J-50	J-20	19	8.0	130.0	0	0.00
EX P-47(2)	J-20	FH-1	9	8.0	130.0	0	0.00
EX P-53	Fire (Roasterie)	EX J-54	85	6.0	130.0	142	1.62
EX P-55	Domestic (Roasterie)	Fire (Roasterie)	12	6.0	130.0	142	1.62
EX P-57(1)	EX FH-2 (TEST 1)	FH-7	603	6.0	130.0	256	2.91
EX P-57(2)	FH-7	Domestic (Roasterie)	272	6.0	130.0	256	2.91
EX P-58	EX J-50	EX FH-12	89	8.0	130.0	0	0.00
EX P-59	EX FH-12	FH-8	37	8.0	130.0	0	0.00
EX P-65	EX J-70	EX FH-2 (TEST 1)	22	6.0	130.0	-868	9.85
EX P-75	EX J-80	EX J-70	46	6.0	130.0	-868	9.85
EX P-85	EX J-90	EX J-80	323	12.0	130.0	-868	2.46
EX P-93	EX FH-1	EX J-90	87	12.0	130.0	-868	2.46
EX P-95	Domestic (Guest Room Addition)	EX FH-1	81	12.0	130.0	-868	2.46
EX P-97	Fire (Guest Room Addition)	Domestic (Guest Room Addition)	6	12.0	130.0	-532	1.51
EX P-99	EX J-100	Fire (Guest Room Addition)	294	12.0	130.0	-532	1.51
EX P-105	EX FH-3 (FLOW 1)	EX J-100	10	12.0	130.0	-532	1.51
EX P-107	EX J-10	EX FH-3 (FLOW 1)	133	12.0	130.0	-532	1.51
EX P-109	EX J-110	EX J-10	231	12.0	130.0	-179	0.51
EX P-113	Domestic (Italian)	EX J-110	171	12.0	130.0	-162	0.46
EX P-115	Fire (Italian)	Domestic (Italian)	13	12.0	130.0	17	0.05
EX P-117	EX J-120	Fire (Italian)	130	12.0	130.0	17	0.05
EX P-125	EX FH-4	EX J-120	245	12.0	130.0	17	0.05

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Pipe Table

Active Scenario: Peak Hour Dmeand - Sunset Bungalows and Villas

Label	Start Node	Stop Node	Length (ft)	Diameter (in)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
EX P-127	EX FH-5	EX FH-4	190	12.0	130.0	17	0.05
EX P-129	EX J-130	EX FH-5	9	12.0	130.0	17	0.05
EX P-135	EX J-140	EX J-130	649	12.0	130.0	17	0.05
EX P-145	EX J-141	EX J-140	403	12.0	130.0	2	0.01
EX P-147	EX FH-10	EX J-141	91	6.0	130.0	2	0.02
EX P-147(1)	EX J-150	EX FH-10	802	6.0	130.0	2	0.02
EX P-155	Fire (Garage)	EX J-150	268	12.0	130.0	2	0.01
EX P-157	EX J-160	Fire (Garage)	189	12.0	130.0	2	0.01
EX P-165	EX J-160	EX J-170	191	12.0	130.0	15	0.04
EX P-175	EX J-170	EX FH-6 (TEST 2)	67	12.0	130.0	15	0.04
EX P-177	EX FH-6 (TEST 2)	EX J-140	221	12.0	130.0	15	0.04
EX P-191	EX J-160	EX FH-7 (FLOW 2)	93	8.0	130.0	-17	0.11
EX P-193	EX FH-7 (FLOW 2)	EX J-194	50	8.0	130.0	-17	0.11
P-5	J-10	EX J-34	336	8.0	130.0	142	0.91
P-15	Fire (Villas and Bungalows)	J-10	107	8.0	130.0	142	0.91
P-17	EX J-54	Fire (Villas and Bungalows)	71	8.0	130.0	142	0.91
P-21	EX J-194	J-66	44	8.0	130.0	-17	0.11
P-23	J-66	EX J-190	16	8.0	130.0	-17	0.11
P-25	FH-5	EX J-190	267	8.0	130.0	17	0.11
P-27	FH-4	FH-5	243	8.0	130.0	17	0.11
P-29	Fire (Conf. Center)	FH-4	222	8.0	130.0	17	0.11
P-31	FH-3	Fire (Conf. Center)	51	8.0	130.0	17	0.11
P-50	FH-3	EX J-110	302	8.0	130.0	-17	0.11
P-55	FH-6	J-66	125	8.0	130.0	0	0.00
P-58	R-1	PMP-1	1	48.0	130.0	1,124	0.20
P-59	PMP-1	EX FH-2 (TEST 1)	1	48.0	130.0	1,124	0.20
P-60	J-70	GPV-1	14	4.0	130.0	93	2.38
P-61	GPV-1	J-VILLA 1&2	182	4.0	130.0	93	2.38
P-62	J-VILLA 1&2	J-VILLA 5	53	4.0	130.0	76	1.93
P-63	J-VILLA 5	J-VILLA 6	69	4.0	130.0	69	1.76

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Pipe Table

Active Scenario: Peak Hour Dmeand - Sunset Bungalows and Villas

Label	Start Node	Stop Node	Length (ft)	Diameter (in)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-64	J-VILLA 6	J-VILLA 3&4	27	4.0	130.0	56	1.43
P-65	J-VILLA 3&4	J-BUNGALOW 2&3	78	4.0	130.0	13	0.32
P-66	J-BUNGALOW 2&3	J-BUNGALOW 1	71	2.5	130.0	4	0.27
P-67	J-VILLA 3&4	J-77	67	2.5	130.0	0	0.00
P-75	Fire (Villas and Bungalows)	J-81	132	6.0	130.0	0	0.00
P-77	J-BUNGALOW 1	J-83	31	2.0	130.0	0	0.00
P-79	J-VILLA 1&2	J-85	29	2.5	130.0	0	0.00
P-80	J-VILLA 5	J-86	31	2.5	130.0	0	0.00
P-81	J-BUNGALOW 2&3	J-87	47	2.5	130.0	0	0.00
P-82	J-VILLA 6	J-88	23	2.5	130.0	0	0.00
P-EX FH-11	EX J-150	EX FH-11	23	12.0	130.0	0	0.00

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

Fire Flow Node FlexTable: Fire Flow Results Table

Active Scenario: MD+FF Bungalows/The Roasterie (Model 1)

Label	Elevation (ft)	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Hydraulic Grade (ft)
Domestic (Conference Center)	1,553.33	True	1,721	1,968	40	1,705.22
Domestic (Guest Room Addition)	1,550.00	True	1,692	2,104	42	1,705.46
Domestic (Italian)	1,556.30	True	1,560	1,923	38	1,705.37
Domestic (Roasterie)	1,560.25	True	1,538	1,689	35	1,705.41
EX FH-1	1,547.30	True	1,500	1,924	43	1,705.51
EX FH-2 (TEST 1)	1,543.00	True	1,500	2,466	46	1,706.82
EX FH-3 (FLOW 1)	1,549.00	True	1,500	1,877	42	1,705.40
EX FH-4	1,557.29	True	1,500	1,863	36	1,705.37
EX FH-5	1,558.03	True	1,500	1,863	36	1,705.37
EX FH-6 (TEST 2)	1,559.33	True	1,500	1,863	34	1,705.37
EX FH-7 (FLOW 2)	1,556.86	True	1,500	1,863	34	1,705.37
EX FH-10	1,563.50	True	1,500	1,727	30	1,705.37
EX FH-11	1,557.90	True	1,500	1,863	33	1,705.37
EX FH-12	1,552.10	True	1,500	1,747	34	1,705.22
EX J-10	1,552.00	True	1,500	1,863	41	1,705.38
EX J-20	1,553.00	True	1,500	1,809	40	1,705.31
EX J-30	1,553.00	True	1,500	1,783	40	1,705.28
EX J-34	1,553.36	True	1,500	1,747	40	1,705.23
EX J-40	1,552.55	True	1,500	1,747	37	1,705.22
EX J-50	1,552.03	True	1,500	1,747	36	1,705.22
EX J-54	1,555.20	True	1,500	1,596	40	1,705.33
EX J-70	1,542.85	True	1,500	2,266	46	1,706.47
EX J-80	1,542.85	True	1,500	1,986	45	1,705.73
EX J-90	1,547.00	True	1,500	1,936	43	1,705.55
EX J-100	1,550.00	True	1,500	1,878	42	1,705.41
EX J-110	1,556.50	True	1,500	1,863	38	1,705.38
EX J-120	1,556.34	True	1,500	1,863	37	1,705.37
EX J-130	1,558.03	True	1,500	1,863	36	1,705.37
EX J-140	1,560.63	True	1,500	1,863	33	1,705.37
EX J-141	1,563.47	True	1,500	1,863	31	1,705.37

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

Fire Flow Node FlexTable: Fire Flow Results Table

Active Scenario: MD+FF Bungalows/The Roasterie (Model 1)

Label	Elevation (ft)	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Hydraulic Grade (ft)
EX J-150	1,557.41	True	1,500	1,863	33	1,705.37
EX J-160	1,554.89	True	1,500	1,863	35	1,705.37
EX J-170	1,558.93	True	1,500	1,863	34	1,705.37
EX J-190	1,556.35	True	1,500	1,863	33	1,705.37
EX J-194	1,556.60	True	1,500	1,863	34	1,705.37
FH-1	1,552.65	True	1,500	1,747	36	1,705.22
FH-2	1,553.15	True	1,500	1,747	39	1,705.22
FH-3	1,556.46	True	1,500	1,863	34	1,705.38
FH-4	1,556.42	True	1,500	1,863	33	1,705.37
FH-5	1,556.39	True	1,500	1,863	33	1,705.37
FH-6	1,556.95	True	1,500	1,863	30	1,705.37
FH-7	1,557.87	True	1,500	1,803	31	1,705.85
FH-8	1,552.10	True	1,500	1,747	33	1,705.22
Fire (Conf. Center)	1,556.46	True	1,500	1,863	34	1,705.38
Fire (Garage)	1,554.70	True	1,500	1,863	35	1,705.37
Fire (Guest Room Addition)	1,550.00	True	1,500	1,911	42	1,705.46
Fire (Italian)	1,556.30	True	1,500	1,863	38	1,705.37
Fire (Roasterie)	1,559.64	True	1,500	1,644	35	1,705.40
Fire (Villas and Bungalows)	1,553.13	True	1,500	1,586	41	1,705.32
J-10	1,550.14	True	1,500	1,620	42	1,705.30
J-20	1,552.46	True	1,500	1,747	36	1,705.22
J-66	1,556.22	True	1,500	1,863	34	1,705.37
J-70	1,553.30	True	1,500	1,747	40	1,705.22
J-BUNGALOW 1	1,552.30	False	1,502	288	30	1,689.24
J-BUNGALOW 2&3	1,554.15	False	1,505	431	30	1,689.25
J-VILLA 1&2	1,553.50	False	1,510	563	30	1,689.45
J-VILLA 3&4	1,553.15	False	1,525	485	30	1,689.25
J-VILLA 5	1,553.20	False	1,504	518	30	1,689.37
J-VILLA 6	1,553.50	False	1,507	481	30	1,689.27

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Junction Table

Active Scenario: Scenario 3 - Villa 4

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
Domestic (Conference Center)	1,553.33	221	46	1,660.70
Domestic (Guest Room Addition)	1,550.00	192	51	1,667.43
Domestic (Italian)	1,556.30	60	47	1,665.64
Domestic (Roasterie)	1,560.25	38	41	1,656.12
EX FH-1	1,547.30	0	52	1,667.85
EX FH-2 (TEST 1)	1,543.00	0	59	1,680.35
EX FH-3 (FLOW 1)	1,549.00	0	51	1,666.18
EX FH-4	1,557.29	0	47	1,665.64
EX FH-5	1,558.03	0	47	1,665.64
EX FH-6 (TEST 2)	1,559.33	0	46	1,665.64
EX FH-7 (FLOW 2)	1,556.86	0	47	1,665.64
EX FH-10	1,563.50	0	44	1,665.64
EX FH-11	1,557.90	0	47	1,665.64
EX FH-12	1,552.10	0	47	1,660.69
EX J-10	1,552.00	0	49	1,665.65
EX J-20	1,553.00	0	48	1,663.52
EX J-30	1,553.00	0	47	1,662.38
EX J-34	1,553.36	0	46	1,660.70
EX J-40	1,552.55	0	47	1,660.69
EX J-50	1,552.03	0	47	1,660.69
EX J-54	1,555.20	0	43	1,653.75
EX J-70	1,542.85	0	58	1,677.00
EX J-80	1,542.85	0	55	1,669.99
EX J-90	1,547.00	0	52	1,668.31
EX J-100	1,550.00	0	50	1,666.22
EX J-110	1,556.50	0	47	1,665.64
EX J-120	1,556.34	0	47	1,665.64
EX J-130	1,558.03	0	47	1,665.64
EX J-140	1,560.63	0	45	1,665.64
EX J-141	1,563.47	0	44	1,665.64
EX J-150	1,557.41	0	47	1,665.64
EX J-160	1,554.89	0	48	1,665.64
EX J-170	1,558.93	0	46	1,665.64
EX J-190	1,556.35	0	47	1,665.64
EX J-194	1,556.60	0	47	1,665.64
FH-1	1,552.65	0	47	1,660.69
FH-2	1,553.15	0	47	1,660.69
FH-3	1,556.46	0	47	1,665.64
FH-4	1,556.42	0	47	1,665.64
FH-5	1,556.39	0	47	1,665.64
FH-6	1,556.95	0	47	1,665.64
FH-7	1,557.87	0	46	1,663.65
FH-8	1,552.10	0	47	1,660.69
Fire (Conf. Center)	1,556.46	0	47	1,665.64
Fire (Garage)	1,554.70	0	48	1,665.64
Fire (Guest Room Addition)	1,550.00	0	51	1,667.41

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Junction Table

Active Scenario: Scenario 3 - Villa 4

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
Fire (Italian)	1,556.30	0	47	1,665.64
Fire (Roasterie)	1,559.64	0	42	1,655.82
Fire (Villas and Bungalows)	1,553.13	0	43	1,653.32
J-10	1,550.14	0	45	1,655.11
J-20	1,552.46	0	47	1,660.69
J-66	1,556.22	0	47	1,665.64
J-70	1,553.30	0	46	1,660.69
J-77	1,579.30	25	28	1,644.35
J-81	1,579.30	1,500	23	1,632.54
J-83	1,567.10	2	34	1,644.71
J-85	1,566.00	10	34	1,644.90
J-86	1,565.20	4	34	1,644.84
J-87	1,567.10	5	34	1,644.71
J-88	1,565.50	7	34	1,644.74
J-BUNGALOW 1	1,552.30	0	40	1,644.72
J-BUNGALOW 2&3	1,554.15	0	39	1,644.72
J-VILLA 1&2	1,553.50	0	40	1,644.93
J-VILLA 3&4	1,553.15	0	40	1,644.73
J-VILLA 5	1,553.20	0	40	1,644.84
J-VILLA 6	1,553.50	0	39	1,644.75

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Junction Table

Active Scenario: Scenario 4 - Villa 4

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
Domestic (Conference Center)	1,553.33	402	61	1,693.51
Domestic (Guest Room Addition)	1,550.00	336	63	1,694.47
Domestic (Italian)	1,556.30	179	60	1,694.05
Domestic (Roasterie)	1,560.25	114	58	1,694.03
EX FH-1	1,547.30	0	64	1,694.63
EX FH-2 (TEST 1)	1,543.00	0	68	1,699.53
EX FH-3 (FLOW 1)	1,549.00	0	63	1,694.20
EX FH-4	1,557.29	0	59	1,694.05
EX FH-5	1,558.03	0	59	1,694.05
EX FH-6 (TEST 2)	1,559.33	0	58	1,694.05
EX FH-7 (FLOW 2)	1,556.86	0	59	1,694.05
EX FH-10	1,563.50	0	56	1,694.05
EX FH-11	1,557.90	0	59	1,694.05
EX FH-12	1,552.10	0	61	1,693.51
EX J-10	1,552.00	0	61	1,694.09
EX J-20	1,553.00	0	61	1,693.85
EX J-30	1,553.00	0	61	1,693.72
EX J-34	1,553.36	0	61	1,693.53
EX J-40	1,552.55	0	61	1,693.51
EX J-50	1,552.03	0	61	1,693.51
EX J-54	1,555.20	0	60	1,693.81
EX J-70	1,542.85	0	67	1,698.22
EX J-80	1,542.85	0	66	1,695.47
EX J-90	1,547.00	0	64	1,694.81
EX J-100	1,550.00	0	62	1,694.21
EX J-110	1,556.50	0	60	1,694.07
EX J-120	1,556.34	0	60	1,694.05
EX J-130	1,558.03	0	59	1,694.05
EX J-140	1,560.63	0	58	1,694.05
EX J-141	1,563.47	0	56	1,694.05
EX J-150	1,557.41	0	59	1,694.05
EX J-160	1,554.89	0	60	1,694.05
EX J-170	1,558.93	0	58	1,694.05
EX J-190	1,556.35	0	60	1,694.05
EX J-194	1,556.60	0	59	1,694.05
FH-1	1,552.65	0	61	1,693.51
FH-2	1,553.15	0	61	1,693.51
FH-3	1,556.46	0	60	1,694.06
FH-4	1,556.42	0	60	1,694.06
FH-5	1,556.39	0	60	1,694.06
FH-6	1,556.95	0	59	1,694.05
FH-7	1,557.87	0	60	1,695.74
FH-8	1,552.10	0	61	1,693.51
Fire (Conf. Center)	1,556.46	0	60	1,694.06
Fire (Garage)	1,554.70	0	60	1,694.05
Fire (Guest Room Addition)	1,550.00	0	63	1,694.46

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Junction Table

Active Scenario: Scenario 4 - Villa 4

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
Fire (Italian)	1,556.30	0	60	1,694.05
Fire (Roasterie)	1,559.64	0	58	1,694.00
Fire (Villas and Bungalows)	1,553.13	0	61	1,693.78
J-10	1,550.14	0	62	1,693.72
J-20	1,552.46	0	61	1,693.51
J-66	1,556.22	0	60	1,694.05
J-70	1,553.30	0	61	1,693.51
J-77	1,579.30	53	42	1,675.96
J-81	1,579.30	0	50	1,693.78
J-83	1,567.10	0	48	1,677.45
J-85	1,566.00	0	49	1,678.59
J-86	1,565.20	0	49	1,678.14
J-87	1,567.10	0	48	1,677.46
J-88	1,565.50	0	49	1,677.63
J-BUNGALOW 1	1,552.30	4	54	1,677.45
J-BUNGALOW 2&3	1,554.15	8	53	1,677.46
J-VILLA 1&2	1,553.50	18	54	1,678.59
J-VILLA 3&4	1,553.15	22	54	1,677.47
J-VILLA 5	1,553.20	7	54	1,678.14
J-VILLA 6	1,553.50	13	54	1,677.63

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Junction Table

Active Scenario: Scenario 4 - Bungalow 1

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
Domestic (Conference Center)	1,553.33	402	61	1,693.58
Domestic (Guest Room Addition)	1,550.00	336	63	1,694.53
Domestic (Italian)	1,556.30	179	60	1,694.12
Domestic (Roasterie)	1,560.25	114	58	1,694.10
EX FH-1	1,547.30	0	64	1,694.70
EX FH-2 (TEST 1)	1,543.00	0	68	1,699.58
EX FH-3 (FLOW 1)	1,549.00	0	63	1,694.27
EX FH-4	1,557.29	0	59	1,694.12
EX FH-5	1,558.03	0	59	1,694.12
EX FH-6 (TEST 2)	1,559.33	0	58	1,694.12
EX FH-7 (FLOW 2)	1,556.86	0	59	1,694.12
EX FH-10	1,563.50	0	57	1,694.12
EX FH-11	1,557.90	0	59	1,694.12
EX FH-12	1,552.10	0	61	1,693.58
EX J-10	1,552.00	0	62	1,694.16
EX J-20	1,553.00	0	61	1,693.92
EX J-30	1,553.00	0	61	1,693.79
EX J-34	1,553.36	0	61	1,693.61
EX J-40	1,552.55	0	61	1,693.58
EX J-50	1,552.03	0	61	1,693.58
EX J-54	1,555.20	0	60	1,693.89
EX J-70	1,542.85	0	67	1,698.27
EX J-80	1,542.85	0	66	1,695.53
EX J-90	1,547.00	0	64	1,694.87
EX J-100	1,550.00	0	62	1,694.28
EX J-110	1,556.50	0	60	1,694.13
EX J-120	1,556.34	0	60	1,694.12
EX J-130	1,558.03	0	59	1,694.12
EX J-140	1,560.63	0	58	1,694.12
EX J-141	1,563.47	0	57	1,694.12
EX J-150	1,557.41	0	59	1,694.12
EX J-160	1,554.89	0	60	1,694.12
EX J-170	1,558.93	0	58	1,694.12
EX J-190	1,556.35	0	60	1,694.12
EX J-194	1,556.60	0	60	1,694.12
FH-1	1,552.65	0	61	1,693.58
FH-2	1,553.15	0	61	1,693.58
FH-3	1,556.46	0	60	1,694.13
FH-4	1,556.42	0	60	1,694.13
FH-5	1,556.39	0	60	1,694.13
FH-6	1,556.95	0	59	1,694.12
FH-7	1,557.87	0	60	1,695.80
FH-8	1,552.10	0	61	1,693.58
Fire (Conf. Center)	1,556.46	0	60	1,694.13
Fire (Garage)	1,554.70	0	60	1,694.12
Fire (Guest Room Addition)	1,550.00	0	63	1,694.53

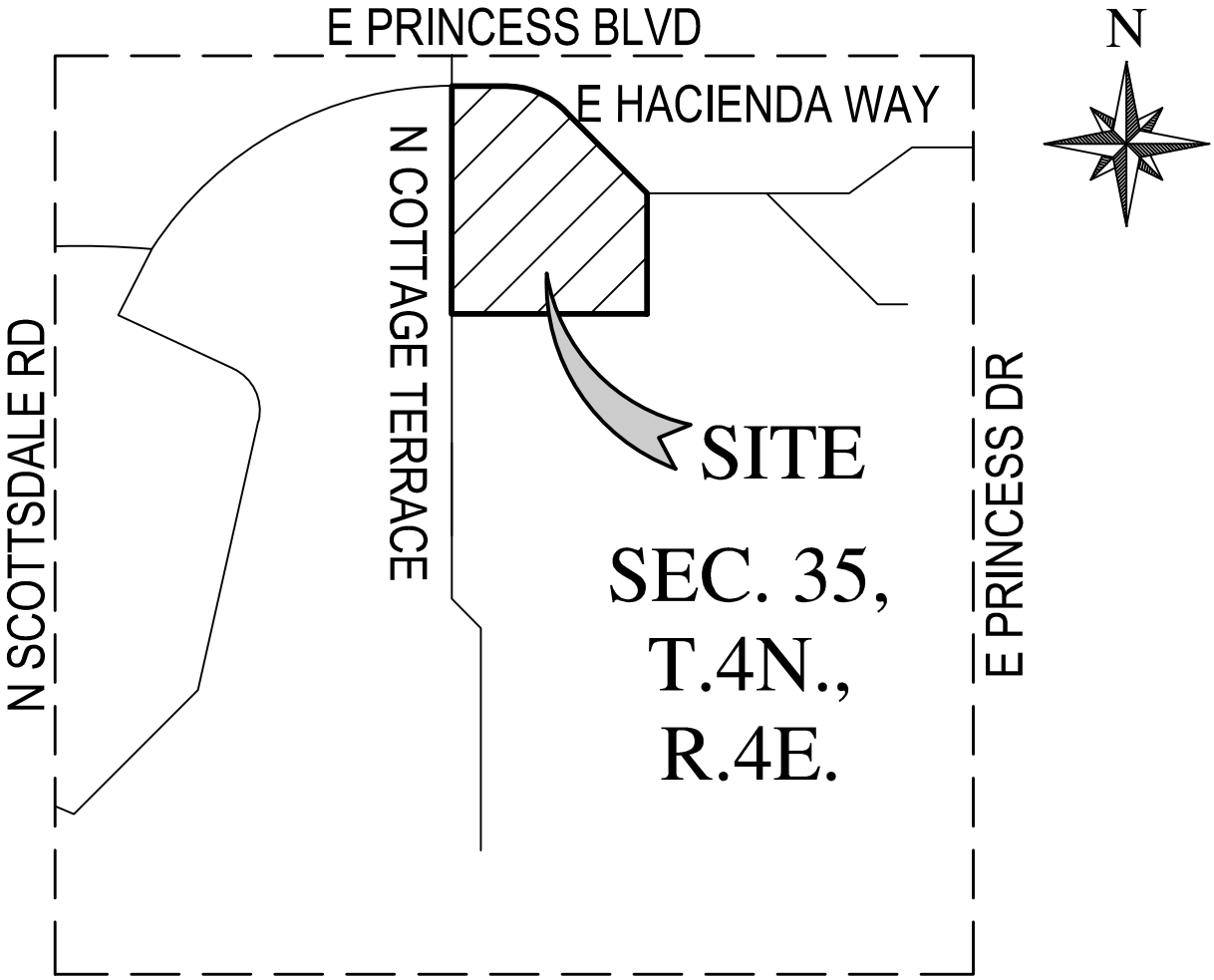
Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Junction Table

Active Scenario: Scenario 4 - Bungalow 1

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
Fire (Italian)	1,556.30	0	60	1,694.12
Fire (Roasterie)	1,559.64	0	58	1,694.07
Fire (Villas and Bungalows)	1,553.13	0	61	1,693.85
J-10	1,550.14	0	62	1,693.79
J-20	1,552.46	0	61	1,693.58
J-66	1,556.22	0	60	1,694.12
J-70	1,553.30	0	61	1,693.58
J-77	1,579.30	0	42	1,677.30
J-81	1,579.30	0	50	1,693.85
J-83	1,567.10	32	47	1,675.71
J-85	1,566.00	0	49	1,678.36
J-86	1,565.20	0	49	1,677.93
J-87	1,567.10	0	48	1,677.19
J-88	1,565.50	0	48	1,677.45
J-BUNGALOW 1	1,552.30	0	54	1,676.54
J-BUNGALOW 2&3	1,554.15	8	53	1,677.19
J-VILLA 1&2	1,553.50	18	54	1,678.36
J-VILLA 3&4	1,553.15	43	54	1,677.30
J-VILLA 5	1,553.20	7	54	1,677.93
J-VILLA 6	1,553.50	13	54	1,677.45

EXHIBIT 1 – VICINITY MAP



VICINITY MAP

N.T.S.

NOT
FOR
CONSTRUCTION
OR RECORDING

WOOD PATEL

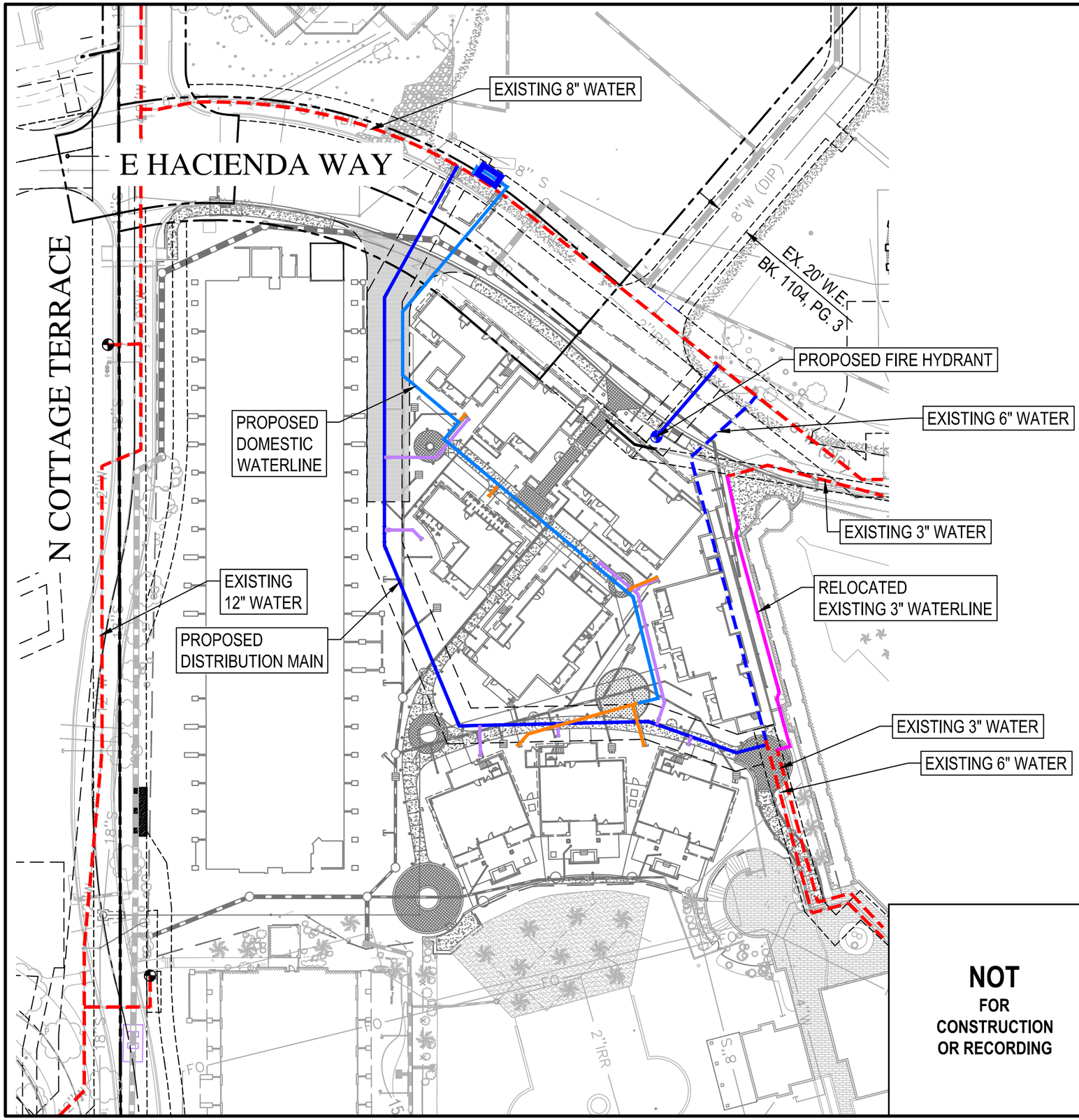
FAIRMONT SCOTTSDALE PRINCESS

VICINITY MAP EXHIBIT

DATE	07/18/2025	SCALE	N.T.S	SHEET	1 OF 1
JOB NO.	215319.10	DESIGN	AJS	CHECK	RS
		DRAWN	AJS	RFI #	

Z:\2021\215319\Project Support\Reports\5319.10 - Sunset Bungalows\Drainage\Exhibits\5319.10-EXH1-VM.dwg

EXHIBIT 2 – WATER LAYOUT



N

0 30 60

Horz. 1 in. = 60 ft.

LEGEND

- PROPOSED FIRE HYDRANT
- EXISTING FIRE HYDRANT
- PROPOSED 4" WATER METER AND VAULT
- EXISTING WATER LINE
- EXISTING WATER LINE TO BE REMOVED
- RELOCATED EXISTING 3" WATER LINE
- PROPOSED 8" DISTRIBUTION MAIN
- PROPOSED 6" FIRE SERVICE
- PROPOSED 4" DOMESTIC WATER SERVICE
- PROPOSED 2" DOMESTIC WATER SERVICE
- PROPERTY BOUNDARY

NOT
FOR
CONSTRUCTION
OR RECORDING

WOOD PATEL

FAIRMONT SCOTTSDALE PRINCESS

SUNSET VILLAS & BUNGALOWS
WATER LAYOUT - EXHIBIT 2

DATE	07/18/2025	SCALE	1" = 60'	SHEET	1 OF 1
JOB NO.	215319.10	DESIGN	AJS	DRAWN	AJS

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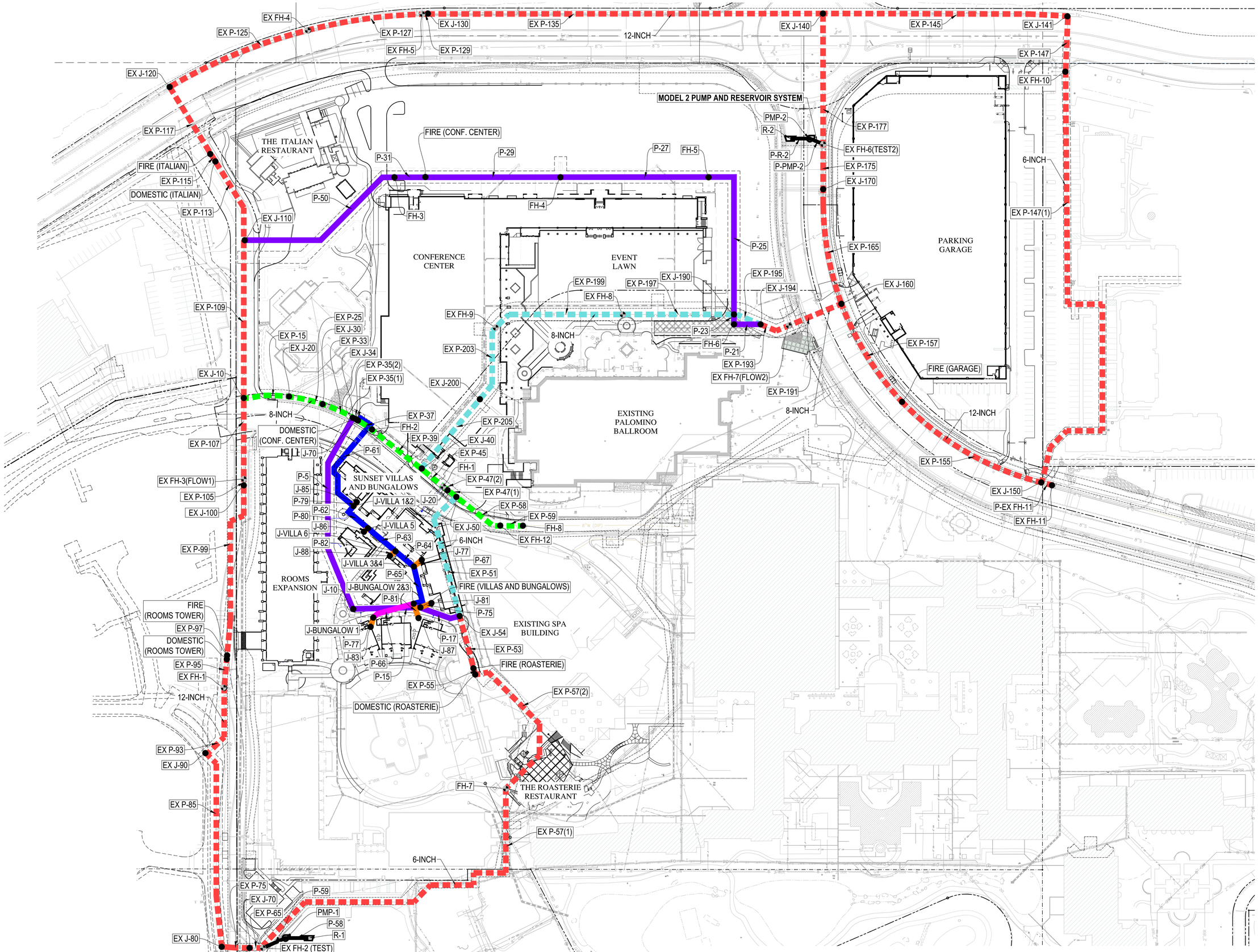
EXHIBIT 3 – WATERCAD MODELING MAP



N

0 50 100

Horz. 1 in. = 50 ft.

LEGEND

- PROPOSED 2.5" WATER SERVICE
- PROPOSED 4" WATER SERVICE
- PROPOSED 8" WATER MAIN
- PROPOSED WATER SERVICE
- EXISTING WATER MAIN
- EXISTING WATER MAIN TO BE REMOVED

R-XX RESERVOIR NODE AND LABEL

PMP-XX PUMP NODE AND LABEL

J-XX JUNCTION NODE AND LABEL

P-XX PIPE LABEL

FH-XX FIRE HYDRANT LABEL

NOT FOR CONSTRUCTION OR RECORDING

WOOD PATEL

FAIRMONT SCOTTSDALE PRINCESS

WATERCAD MODELING MAP

DATE	07/18/2025	SCALE	1" = 50'	SHEET	1 OF 1
JOB NO	215319	DESIGN	AJS	CHECK	RS
		DRAWN	DLH / JRS		

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