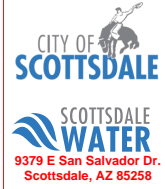




**FINAL Basis of Design Report**

- APPROVED**
- APPROVED AS NOTED**
- REVISE AND RESUBMIT**



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 GUEST ROOM ADDITION**

Review 1 - January 13, 2023  
Review 2 – June 24, 2024  
Review 3 – February 3, 2025  
Review 4 – May 23, 2025

July 18, 2025  
WP# 215319.50

COS #38-DR-2022#2

Prepared by  
Robert G. Saunders, EIT



EXPIRES 06-30-28

**TABLE OF CONTENTS**

**1.0 INTRODUCTION..... 1**

**2.0 EXISTING WATER INFRASTRUCTURE..... 1**

**3.0 PROPOSED WATER INFRASTRUCTURE..... 1**

    3.1 Onsite Water Infrastructure..... 2

    3.2 Water Demand Calculations..... 2

**4.0 CONCLUSIONS..... 3**

**5.0 REFERENCES..... 3**

**APPENDICES**

APPENDIX A Water Demand Calculations

APPENDIX B Plumbing Fixture Units, Princess Hotel 22010052-00 Permit Comment Response, by exp U.S. Services Inc.

APPENDIX C Fire Hydrant Flow Test Results and Calculations

APPENDIX D Fairmont Scottsdale Princess Guest Room Addition Grading, Drainage, Water & Sewer Plan prepared by Wood, Patel & Associates Inc., dated May 9, 2025

APPENDIX E WaterCAD Modeling Results

**EXHIBITS**

EXHIBIT 1 Vicinity Map

EXHIBIT 2 Water Exhibit

EXHIBIT 3 WaterCAD Modeling Map

se  
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EXPIRES 06-30-28

## 1.0 INTRODUCTION

The Fairmont Scottsdale Princess Guest Room Addition (Site) is a proposed resort/hotel with underground parking on approximately 0.89 acres of the approximate 34-acre parcel of the Fairmont Scottsdale Princess in the City of Scottsdale (APN#215-08-695). The project will include 155 rooms plus underground parking, hardscape, landscape, and utility improvements to support the development. The Site is located approximately 1,300-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 buildings, parking lots, pools, 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: .....446.3 gpd/DU  
Maximum Day Flow Factor: .....2 x ADD  
Peak Hour Factor: .....3.5 x ADD

Abbreviations: gpd = gallons per day; sf = square feet; ADD = average day 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 12-inch public water line in Cottage Terrace and an existing 8-inch public water line adjacent to East Hacienda Way. There are two (2) existing fire hydrants along Cottage Terrace to serve the Site. Please refer to Exhibit 2 – *Water Exhibit* for a depiction of the 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) (Ref. 1) for Scenarios 1, 2, and 3. For Scenario 4, the Water Service Fixture Units (WSFU) provided by the plumbing engineer is 666 which equates to a demand of 165 gpm which includes a safety factor of 10 gpm. Refer to Appendix B – Plumbing Fixture Units for fixture units and fixture unit demands from the plumbing engineer.

There are multiple projects being proposed in the area of the Site. The construction schedule for them will overlap at some point where all the 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. Refer to

Reference 6 & 7 for the Sunset Villas & Bungalows plans and water report, and Reference 4 & 5 for the Conference Center plans and water report.

### 3.1 Onsite Water Infrastructure

A proposed 3-inch domestic service with meter, vault, and backflow will connect to the existing 12-inch public water main in Cottage Terrace to serve the proposed building. The initial service line design according to COS DSPM Sec 6-1.416 can serve the Site with a 3-inch meter and backflow. This was determined by applying a 1.5 safety factor to the WSFU demand of 165 gpm, which is 247.5 gpm. This is lower than the limit of 350 gpm shown in Figure 6-1.4 of the COS DSPM (Ref. 1). Additionally, a 6-inch fire service and backflow will connect to the existing 12-inch water main in Cottage Terrace to serve the proposed building. Refer to Exhibit 2 – *Water Exhibit* for the layout of proposed water infrastructure.

### 3.2 Water Demand Calculations

The Average Day, Maximum Day, and Peak Hour demands for the proposed Site have been calculated to be 96.1 gallons per minute (gpm), 192.2 gpm, and 336.4 gpm, respectively (Refer to Appendix A - *Water Demand Calculations*). Modeling results, using the fire flow test done on Cottage Terrace (Appendix C - *Fire Hydrant Flow Test Results and Calculations*) determined that velocities for the Peak Hour Flow Condition are below 9.85 fps with pressures ranging from 53 to 68 psi. The modeling for the Max Day + Fire Flow results show velocities below 4.97-ft/s and pressures ranging from 30 to 42 psi. Refer to Exhibit 3 – *WaterCAD Layout* for water modeling layout. These results exclude junctions J-79 and J-80 as these only apply to Scenario 3 and 4 respectively. 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*)

The fire flow required for the Site is 1.750 gpm at a minimum 30 psi for a building with 151,086 sf, a fire sprinkler system, and a building type of V-A. Since a fire sprinkler system is being utilized, the maximum reduction allowed of 75% was applied to the required fire flow rate of 7,000 gpm. (Refer to Appendix A – *Water Demand Calculations*)

A 3rd Scenario analyzing the max day flow in conjunction with the required fire flow at the "worst hydraulic case domestic demand node", junctions J-79 and J-80 at 31-feet above the finished floor which is the fourth floor of the proposed building (Ref. 1). Junction J-79 is the domestic demand node and junction J-80 is the fire flow node that were modeled at the highest finished floor. Modeling results show pressures above 20 psi at all domestic demand nodes and pressures above 39 psi at the fire flow node and all applicable fire hydrant locations. This exceeds the minimum limits of 15 psi and 30 psi respectively, according to the COS DSPM (Ref. 1). Refer to Appendix E - *WaterCAD Modeling Results* for modeling results.

Lastly, a 4<sup>th</sup> Scenario has been modeled analyzing the WSFU demand (247.5 gpm) at the highest finished floor at the "worst hydraulic case domestic demand node". Modeling results show a pressure of 33-psi which is under the 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 Exhibit* for the

layout of the proposed water infrastructure, Appendix E – *WaterCAD Modeling Results* and Exhibit 3 – *WaterCAD Modeling Map* for map of 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 the building per City of Scottsdale requirements.
4. The combined average day demand, of 96.1 gpm or 69,177 gpd at a minimum of 61 psi for the proposed Site exceeds the minimum pressure requirements 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 192.2 gpm or 138,354 gpd at a minimum of 58 psi for the proposed Site exceeds the minimum pressure requirements 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 336.4 gpm or 242,120 gpd at a minimum of 53 psi for the proposed Site exceeds the minimum pressure requirements 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, respectively, has been met for Scenario 3.
8. The results of the analysis from Scenario 4 show the pressure at the highest finish floor is less than 50 psi. The City of Scottsdale will require a private booster pump to increase water pressures at the upper levels of the building.

#### **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 and Associates Inc., November 22, 2023

4. *Water Distribution System Preliminary basis of Design Report for Fairmont Scottsdale Princess Conference Center & Event Lawn* by Wood Patel and Associates Inc. March 29, 2024. (28-DR-2022#3)
5. *Fairmont Scottsdale Princess Conference Center & Event Lawn Improvement Plans* by Wood Patel & Associates, Inc., dated March 29, 2024. (28-DR-2022#3)
6. *Preliminary Water Distribution System Basis of Design Report for Fairmont Scottsdale Princess Sunset Villas & Bungalows* by Wood Patel & Associate, Inc.
7. *Fairmont Scottsdale Princess Sunset Villas & Bungalows Improvement Plans* by Wood Patel & Associates, Inc.

## **APPENDIX A – WATER DEMAND CALCULATIONS**



**TABLE 1**  
WATER DISTRIBUTION SYSTEM DESIGN CRITERIA

**Project** Fairmont Scottsdale Princess - Guest Room Addition  
**Location** Scottsdale AZ  
**Project Number** 215319.5  
**Project Engineer** Andrew J. Sanchez  
**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
<b>PEAKING FACTORS</b>			
Peak Flow = Peaking Factor (PF) x ADD	3.5 x ADD	gpd	Note 1
Max Flow = Peaking Factor (PF) x ADD	2.0 x ADD	gpd	Note 1
<b>MODELED FIRE HYDRANT FLOW WITH 50% FIRE SPRINKLER REDUCTION (MINIMUM)</b>			
<input type="checkbox"/> Residential, 0 - 3,600 sf fire-flow calculation area	1,000	gpm	Note 3
<input checked="" type="checkbox"/> Residential, 3,601 - 4,800 sf fire-flow calculation area	1,750	gpm	Note 4
<input type="checkbox"/> Residential, 4,801 - 6,200 sf fire-flow calculation area	2,000	gpm	Note 4
<input type="checkbox"/> Residential, 6,201 - 7,700 sf fire-flow calculation area	2,250	gpm	Note 4
<input type="checkbox"/> Residential, 7,701 - 9,400 sf fire-flow calculation area	2,500	gpm	Note 4
<input type="checkbox"/> Residential, 9,401 - 11,300 sf fire-flow calculation area	2,750	gpm	Note 4
<input type="checkbox"/> Multi-Family Residential	-	gpm	Note 2
<input type="checkbox"/> Commercial	-	gpm	Note 2
<b>HYDRAULICS</b>			
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



WATER DEMAND DESIGN FLOWS

**Project** Fairmont Scottsdale Princess - Guest Room Addition  
**Location** Scottsdale AZ  
**Project Number** 215319.5  
**Project Engineer** Andrew J. Sanchez  
**References** City of Scottsdale Design and Policies Manual (2018)

LAND USE AND DWELLING UNIT BREAKDOWN BY JUNCTION											FIRE FLOW		
HYDRAULIC MODEL NODE	LAND USE	DWELLING UNITS	DEMAND VALUE	UNITS	AVERAGE DAILY DEMAND		MAX FLOW		PEAK FLOW		BUILDING AREA (sf)	CONSTRUCTION TYPE	FIRE-FLOW (gpm)
					(gpm)	(gpd)	(gpm)	(gpd)	(gpm)	(gpd)			
Guest Tower	Resort Hotel	155	446.3	gpd/DU	96.1	69,177	192.2	138,354	336.4	242,120	151,086	V-A	1,750*
<b>Total</b>		<b>155</b>			<b>96.1</b>	<b>69,177</b>	<b>192.2</b>	<b>138,354</b>	<b>336.4</b>	<b>242,120</b>			

Note:  
 \* = Fire Flow required 7,000 gpm with 75% reduction

**APPENDIX B – PLUMBING FIXTURE UNITS, PRINCESS HOTEL 22010052-00 PERMIT  
COMMENT RESPONSE, BY EXP U.S. SERVICES INC.**



June 27, 2025

E-mail: [shunt@allenphilp.com](mailto:shunt@allenphilp.com)

Steve Hunt  
 Allen + Philp Partners  
 7514 East Stetson Drive  
 Scottsdale, AZ 85251

Re: Princess Hotel 22010052-00  
 Permit Comment Response

Dear Steve:

The City of Scottsdale requested information on the total GPM for the project. Below is a summary of the calculation on how EXP derived 165 GPM that is in question. This approach is based on the International Plumbing Code Appendix E – Table 103.3 (2). This table is in WSFU (Water Supply Fixture Units)

Based on 155 Bathroom groups + 155 Lavatories

155 Bathroom Groups = (155\*3.6) = 558 WSFU  
 155 Lavatories = (155\*.7) = 108.5 WSFU  
 Total WSFU = 666 WSFU  
 WSFU converted to GPM = 155 gpm  
 With consideration of a safety factor the total is at 165 GPM.

APPENDIX E—SIZING OF WATER PIPING SYSTEM

TABLE E103.3(2)  
 LOAD VALUES ASSIGNED TO FIXTURES\*

FIXTURE	OCCUPANCY	TYPE OF SUPPLY CONTROL	LOAD VALUES, IN WATER SUPPLY FIXTURE UNITS (wsfu)		
			Cold	Hot	Total
Bathroom group	Private	Flush tank	2.7	1.5	3.6
Bathroom group	Private	Flushometer valve	6.0	3.0	8.0
Bathtub	Private	Faucet	1.0	1.0	1.4
Bathtub	Public	Faucet	3.0	3.0	4.0
Bidet	Private	Faucet	1.5	1.5	2.0
Combination fixture	Private	Faucet	2.25	2.25	3.0
Dishwashing machine	Private	Automatic	—	1.4	1.4
Drinking fountain	Offices, etc.	<sup>3</sup> / <sub>8</sub> " valve	0.25	—	0.25
Kitchen sink	Private	Faucet	1.0	1.0	1.4
Kitchen sink	Hotel, restaurant	Faucet	3.0	3.0	4.0
Laundry trays (1 to 3)	Private	Faucet	1.0	1.0	1.4
Lavatory	Private	Faucet	0.5	0.5	0.7
Lavatory	Public	Faucet	1.5	1.5	2.0

If you require additional information or clarification or would like to discuss the project scope further, please do not hesitate to contact us.

Sincerely,

A handwritten signature in blue ink, appearing to read "Raymond L. Clark". The signature is fluid and cursive, with a large initial "R" and a stylized "L" and "C".

Raymond L. Clark  
Principal

**exp** U.S. Services Inc.

RLC/rlc

**APPENDIX C – FIRE HYDRANT FLOW TEST 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)

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**

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

### Flow Test Location

North ↑





EXISTING WATER SYSTEM PRESSURES

**Project** Fairmont Scottsdale Princess - Guest Room Addition  
**Location** Scottsdale AZ  
**Project Number** 215319.5  
**Project Engineer** Andrew J. Sanchez

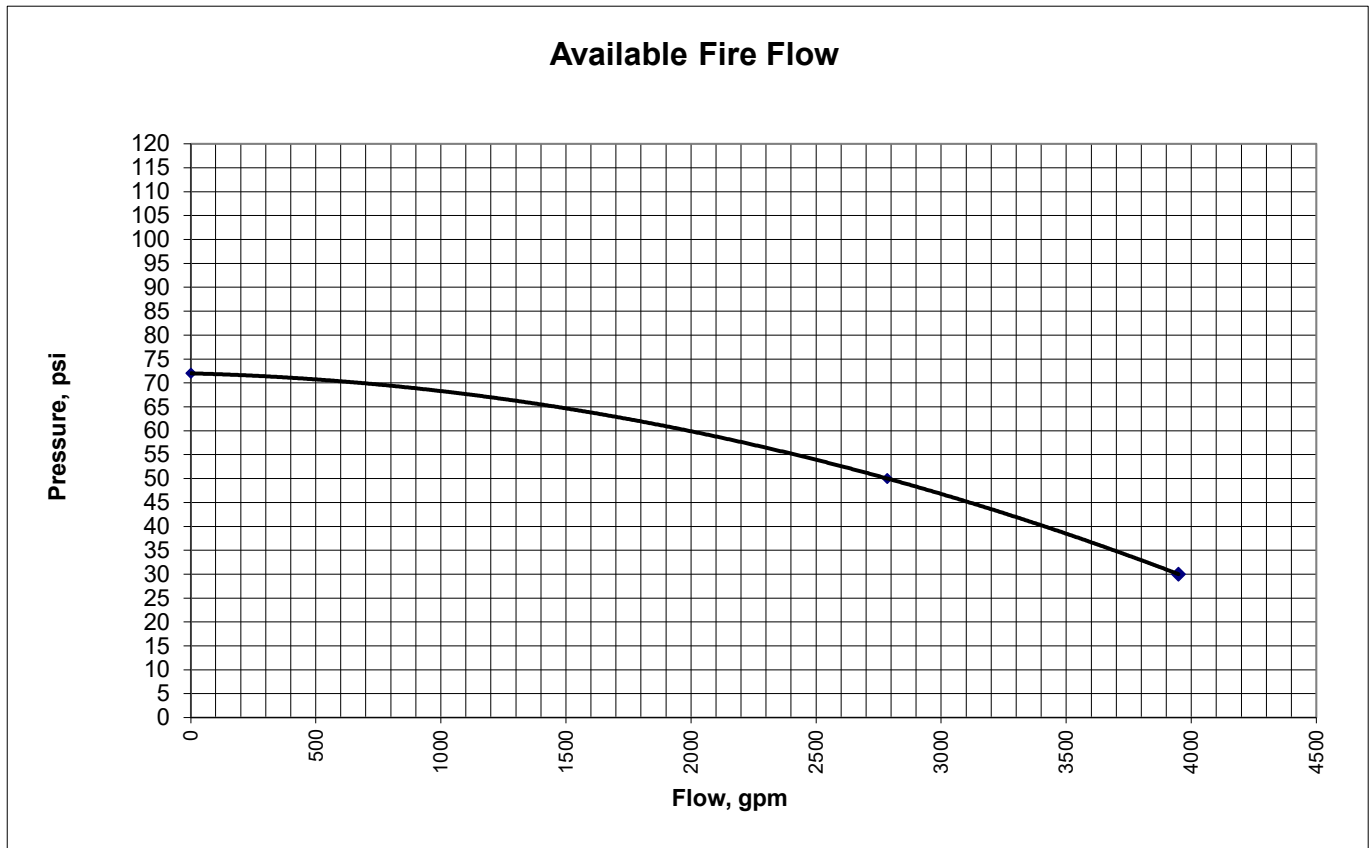
**Flow Test Location**  
**Date of Flow Test**

Pressure Hydrant

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

Flow Hydrant

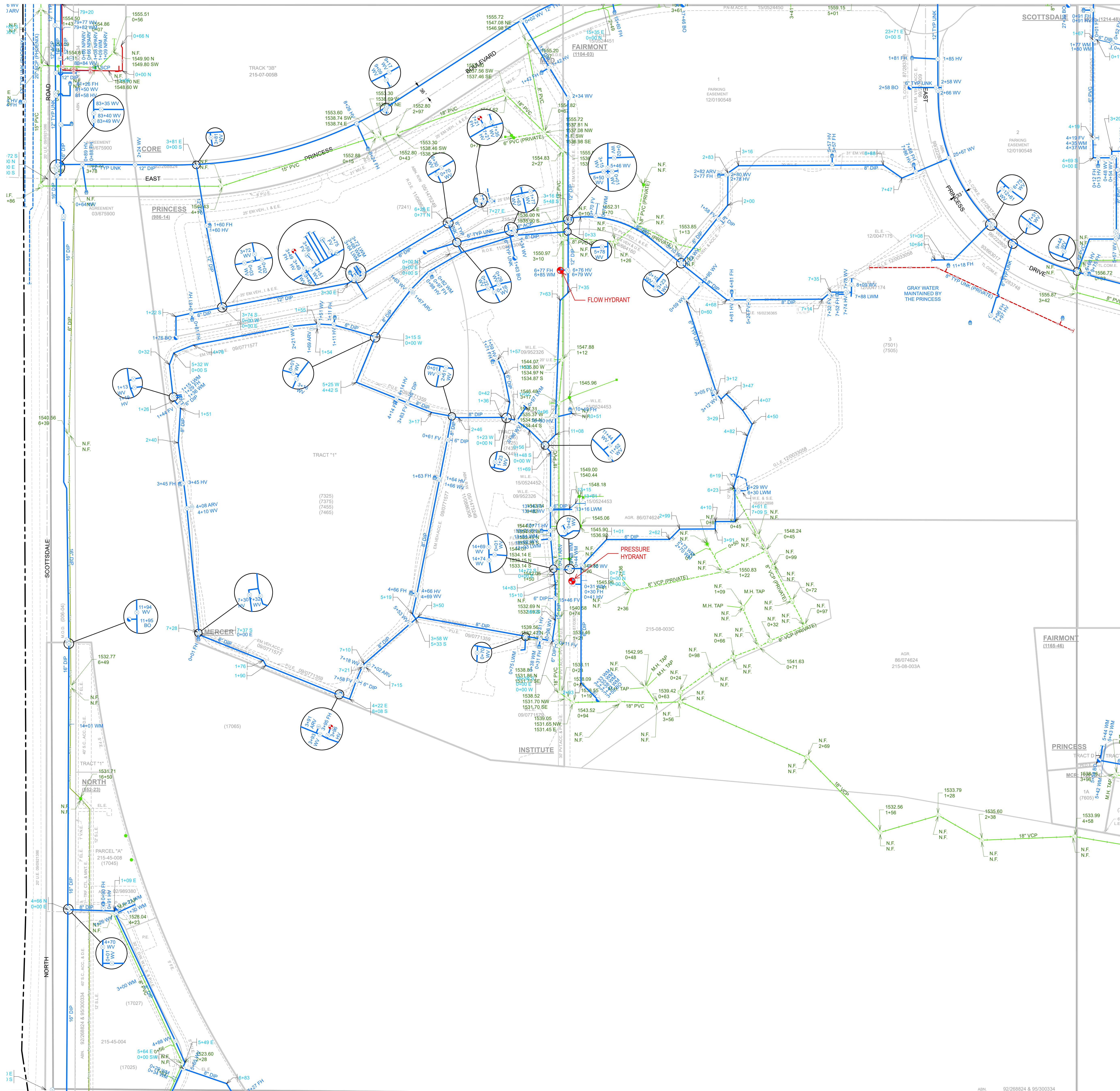
Flow (gpm) 2785  
 Calculated Flow at 30 psi



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

**Notes**

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

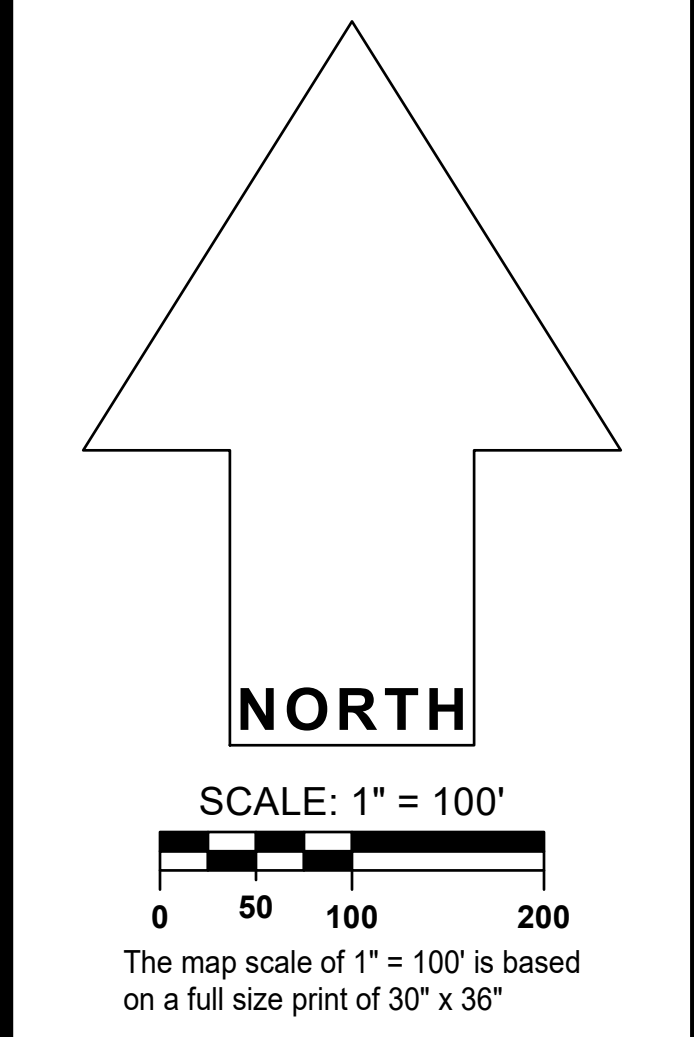
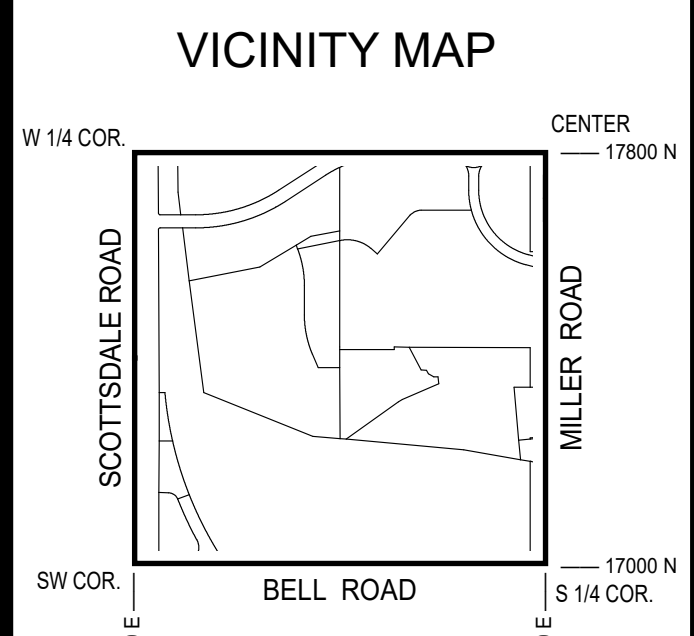


**GENERAL NOTES:**

- THIS IS A COMPUTER GENERATED DRAWING. FOR ANY REVISIONS PLEASE CONTACT THE CITY OF SCOTTSDALE GIS DEPARTMENT AT (480) 312-7792.
- THE SECTION LINE BEARING AND DISTANCES ARE BASED ON THE CITY OF SCOTTSDALE GPS SURVEY OF SEPTEMBER, 1991. BEARINGS ARE NAD 83 GRID AND DISTANCES ARE FLATTENED TO GROUND. WHERE NO CORNER WAS FOUND THE DIMENSIONS ARE GIVEN TO CALCULATED SECTION CORNERS AND ARE NOTED AS "CALCULATED" ON THE MAP.

**LEGEND:**

Water Valve	
Non-potable Water Valve	
Fire Hydrant	
Water Blowoff	
Water Main Reducer	
Water Sample Station	
Water Air Release Valve	
Non-potable Water Air Release Valve	
Water Pressure Reducing Valve	
Water Vault	
Water Manhole	
Non-Potable Water Manhole	
Water Pump	
Water Main	
Non-Potable Water Main	
Fire Line	
Water Service	
Non-Scottsdale Water Main	
Sewer Manhole	
Sewer Cleanout	
Sewer Lift Station	
Sewer Treatment Plant	
Sewer Main - Gravity	
Sewer Main - Force	
Non-Scottsdale Sewer Main	
Sewer Service	



**WATER & SEWER**  
 QUARTER SECTION MAP  
**37-45**  
 SW 1/4 SEC. 35 T4N R4E

**NOTICE**

THIS DOCUMENT IS PROVIDED FOR GENERAL INFORMATION PURPOSES ONLY. THE CITY OF SCOTTSDALE DOES NOT WARRANT ITS ACCURACY, COMPLETENESS OR SUITABILITY FOR ANY PARTICULAR PURPOSE. IT SHOULD NOT BE RELIED UPON WITHOUT FIELD VERIFICATION.

THE CITY OF SCOTTSDALE

37-44

37-46

22-MAY-22

**APPENDIX D – FAIRMONT SCOTTSDALE PRINCESS GUEST ROOM ADDITION GRADING, DRAINAGE, WATER  
& SEWER PLAN, PREPARED BY WOOD, PATEL & ASSOCIATES INC., DATED MAY 9, 2025**

**ENGINEER'S NOTES**

- 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.
- 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.
- 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.
- THE CONTRACTOR IS TO COMPLY WITH ALL LOCAL, STATE, AND FEDERAL LAWS AND REGULATIONS APPLICABLE TO THE CONSTRUCTION COVERED BY THIS PLAN.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND COMPLYING WITH ALL PERMITS REQUIRED TO COMPLETE ALL WORK COVERED BY THIS PLAN.
- 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.
- 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.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL COORDINATION OF CONSTRUCTION AFFECTING UTILITIES AND THE COORDINATION OF ANY NECESSARY UTILITY RELOCATION WORK.
- 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.
- 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.
- 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.
- COORDINATION BETWEEN ALL PARTIES IS ESSENTIAL PART OF CONTRACT.
- 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.
- 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.
- 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.
- CONSTRUCT RETENTION BASIN AS SHOWN. CONTRACTOR TO SCARIFY BOTTOM OF BASIN TWO FEET DEEP AND NOT ALLOW COMPACTION OVER 80%.
- 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 ITS INABILITY TO PERFORM PROPERLY AND/OR CAUSE DAMAGE ELSEWHERE IN THE PROJECT.
- 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.
- 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.
- 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.

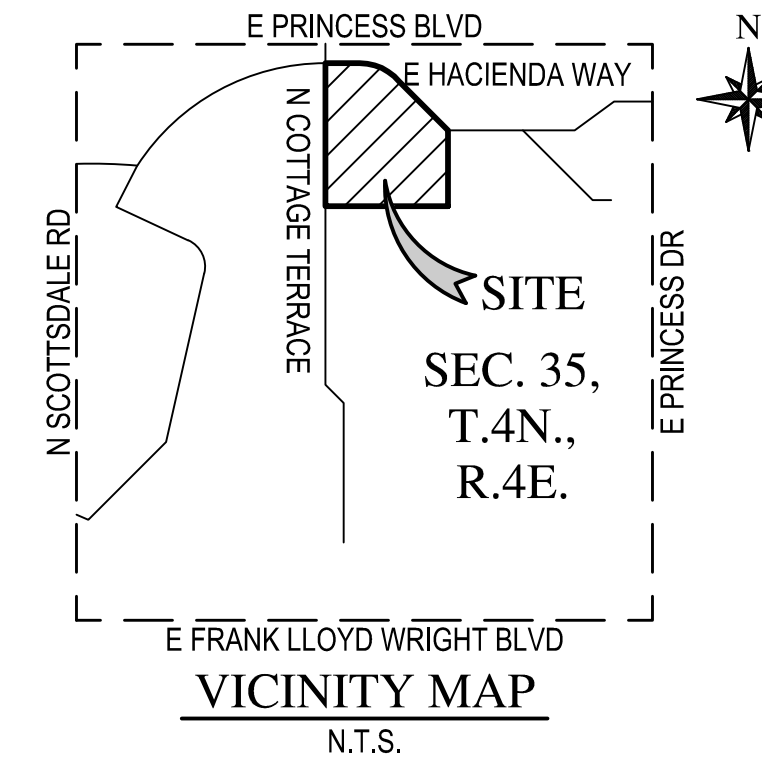
# FAIRMONT SCOTTSDALE PRINCESS

## GUEST ROOM ADDITION

### PRELIMINARY IMPROVEMENT PLANS

#### SCOTTSDALE, ARIZONA

A PORTION OF SECTION 35, TOWNSHIP 4 NORTH, RANGE 4 EAST  
OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA



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

**ARIZONA811**  
Arizona Blue Stakes, Inc.  
Dial 8-1-1 or 1-800-STAKE-IT (782-5241)  
In Maricopa County (602) 953-1100

**EARTHWORK QUANTITIES (ESTIMATED)**

RAW CUT:	11,351 CY
RAW FILL:	1,165 CY

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

**M.C.E.S.D. APPROVAL**

ALL POTABLE WATERLINES AND FITTINGS SHALL HAVE A NFS-PW SEAL. ALL MATERIALS AND PRODUCTS USED IN THE POTABLE WATER SYSTEM SHALL CONFORM TO NSF STANDARDS 60 AND 61 IN ACCORDANCE WITH AAC R18-4-213. ALL MATERIALS SHALL BE LEAD FREE AS DEFINED IN AAC R18-5-504 AND R18-4-101.

BY: \_\_\_\_\_ DATE \_\_\_\_\_  
MARICOPA COUNTY ENVIRONMENTAL SERVICES DEPT.

**SHEET INDEX**

C1	COVER SHEET
C2	DETAILS, NOTES AND QUANTITIES
C3	INDEX MAP
C4-C5	GRADING AND DRAINAGE PLAN
C6	WATER AND SEWER PLAN
C7-C9	SECTIONS & DETAILS

**PARCEL DESCRIPTION**

PLEASE REFER TO SHEET C2 FOR PARCEL DESCRIPTION.

**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	LUMEN
NATURAL GAS	SOUTHWEST GAS
CABLE TV	COX COMMUNICATIONS

**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."

*Darin L. Moore* 05/09/2025  
ENGINEER SIGNATURE DATE

**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.

**UTILITY NOTES**

- THESE PLANS HAVE BEEN SUBMITTED TO THE FOLLOWING UTILITY COMPANIES FOR APPROVAL WITHIN THEIR AREA OF INTEREST. THE SIZE AND LOCATIONS, AS SHOWN, OF THE GAS, TELEPHONE AND POWER LINES, AND CONNECTIONS AGREE WITH THE FURNISHED INFORMATION CONTAINED IN THE UTILITY COMPANY'S RECORDS. WHERE THE WORK TO BE DONE CONFLICTS WITH ANY OF THESE UTILITIES, THE CONFLICTS SHALL BE RESOLVED AS SPECIFIED IN THE SPECIAL PROVISIONS AND/OR AS OTHERWISE NOTED ON THESE PLANS. CONFLICTS ARISING DURING THE COURSE OF CONSTRUCTION FROM UNFORESEEN CIRCUMSTANCES SHALL BE REPORTED TO THE INTERESTED UTILITY COMPANY AND BE RESOLVED BY THEM AND THE DESIGN ENGINEER.
- THE CITY WILL NOT PARTICIPATE IN THE COST OF CONSTRUCTION OR UTILITY RELOCATION.

**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	FIRM ZONE	BASE FLOOD ELEVATION (IN AO ZONE, USE DEPTH)
04013C	1320	L	07/20/2021	AO	1

**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.

*Darin L. Moore* 05/09/2025  
ENGINEER SIGNATURE DATE

**AS-BUILT CERTIFICATION**

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

REGISTERED ENGINEER/ LAND SURVEYOR DATE

SEAL

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 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.

*Darin L. Moore* 05/09/2025  
SIGNATURE DATE

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	

**FAIRMONT SCOTTSDALE PRINCESS**  
**GUEST ROOM ADDITION**  
**PRELIMINARY IMPROVEMENT PLANS**  
 SCOTTSDALE, ARIZONA  
 COVER SHEET

DATE	DESCRIPTION	REV

Professional Engineer Seal: 3638 DARIN L. MOORE, State of Arizona, No. 36383, Expires 06-30-28

SCALE (HORIZ.) N/A  
SCALE (VERT.) N/A  
DATE 05/09/2025  
JOB NUMBER 215319.50  
SHEET C1 OF 9

Z:\2022\12153190\Drawings\319.50 - Guest Towers\319.50-CV-GT.dwg

**CITY OF SCOTTSDALE NOTES**

**GENERAL CONSTRUCTION NOTES FOR CAPITAL PROJECTS**

- 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.
- 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.
- 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.
- 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.
- ANY DEVIATION FROM THE APPROVED PLANS SHALL BE REVIEWED AND APPROVED BY THE CITY PRIOR TO THAT CHANGE BEING INCORPORATED INTO THE PROJECT.
- A CITY CAPITAL PROJECTS INSPECTOR WILL INSPECT ALL WORK WITHIN THE CITY RIGHTS-OF-WAY, EASEMENTS AND FACILITIES.
- ANY SPECIAL INSPECTION REQUIRED SHALL BE IN ADDITION TO ANY ROUTINE INSPECTION BY THE CITY.
- 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.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FOR SALVAGING PROTECTED NATIVE PLANTS PRIOR TO THE START OF CONSTRUCTION.
- CONTRACTOR SHALL CONTACT AZ 811 TWO FULL WORKING DAYS PRIOR TO BEGINNING EXCAVATION.
- 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.
- THRUST RESTRAINT, WHERE REQUIRED, ON ALL CITY WATER LINES SHALL BE PROVIDED USING MEGALUG MECHANICAL JOINT RESTRAINTS OR CITY-APPROVED EQUAL.
- 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).
- 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.
- 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**

- 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.
- 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.
- 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.
- A CITY INSPECTOR WILL INSPECT ALL WORKS WITHIN THE CITY OF SCOTTSDALE. NOTIFY INSPECTION SERVICES 72 HOURS BEFORE BEGINNING WORK.
- WHENEVER EXCAVATION IS NECESSARY, CALL THE BLUE STAKE CENTER, 811, TWO WORKING DAYS BEFORE EXCAVATION BEGINS.
- 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:**

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

**SEWER NOTE:**

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

**WATER NOTE:**

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

**PARCEL DESCRIPTION**

PARCEL NO. 1:  
(HOTEL PARCEL)  
LOT 3 AND A PORTION OF LOT 2, OF FAIRMONT SCOTTSDALE PRINCESS, ACCORDING TO BOOK 1104 OF MAPS, PAGE 3, RECORDS OF MARICOPA COUNTY, ARIZONA, TOGETHER WITH A PART OF THE SOUTHWEST QUARTER OF SECTION 35, TOWNSHIP 4 NORTH, RANGE 4 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, ALL BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTH ONE-QUARTER CORNER OF SECTION 35;  
THENCE NORTH 00 DEGREES 08 MINUTES 41 SECONDS EAST ALONG THE NORTH-SOUTH MIDSECTION LINE OF SECTION 35, 1206.58 FEET TO THE POINT OF BEGINNING;  
THENCE NORTH 89 DEGREES 51 MINUTES 19 SECONDS WEST, 111.62 FEET;  
THENCE NORTH 05 DEGREES 04 MINUTES 10 SECONDS WEST, 34.51 FEET TO THE BEGINNING OF A CURVE CONCAVE TO THE EAST HAVING A RADIUS OF 75.00 FEET;  
THENCE NORTHERLY ALONG THE CURVE THROUGH A CENTRAL ANGLE OF 60 DEGREES 29 MINUTES 58 SECONDS, 79.19 FEET TO A POINT OF REVERSE CURVATURE WITH A CURVE CONCAVE SOUTHWEST HAVING A RADIUS OF 75.00 FEET;  
THENCE NORTHEASTERLY, NORTHERLY AND SOUTHWESTERLY ALONG THE CURVE THROUGH A CENTRAL ANGLE OF 168 DEGREES 47 MINUTES 48 SECONDS, 220.95 FEET;  
THENCE SOUTH 66 DEGREES 38 MINUTES 00 SECONDS WEST, 521.45 FEET;  
THENCE NORTH 07 DEGREES 07 MINUTES 02 SECONDS WEST, 47.49 FEET;  
THENCE NORTH 88 DEGREES 18 MINUTES 25 SECONDS WEST, 29.86 FEET;  
THENCE NORTH 58 DEGREES 07 MINUTES 53 SECONDS WEST, 43.04 FEET;  
THENCE NORTH 83 DEGREES 46 MINUTES 19 SECONDS WEST, 39.13 FEET;  
THENCE NORTH 27 DEGREES 44 MINUTES 13 SECONDS WEST, 177.75 FEET;  
THENCE NORTH 89 DEGREES 49 MINUTES 06 SECONDS WEST, 103.52 FEET;  
THENCE SOUTH 00 DEGREES 01 MINUTES 45 SECONDS WEST, 18.00 FEET;  
THENCE NORTH 89 DEGREES 49 MINUTES 06 SECONDS WEST, 377.78 FEET;  
THENCE NORTH 00 DEGREES 01 MINUTE 45 SECONDS EAST, 756.50 FEET;  
THENCE NORTH 78 DEGREES 51 MINUTES 20 SECONDS EAST, 4.33 FEET TO THE BEGINNING OF A CURVE CONCAVE SOUTH HAVING A RADIUS OF 250.00 FEET;  
THENCE EASTERLY ALONG THE CURVE THROUGH A CENTRAL ANGLE OF 51 DEGREES 43 MINUTES 26 SECONDS, 225.69 FEET;  
THENCE SOUTH 49 DEGREES 25 MINUTES 14 SECONDS EAST, 59.77 FEET;  
THENCE NORTH 40 DEGREES 34 MINUTES 36 SECONDS EAST, 352.13 FEET TO THE BEGINNING OF A CURVE CONCAVE SOUTHEAST HAVING A RADIUS OF 100.00 FEET;  
THENCE NORTHEASTERLY ALONG THE CURVE THROUGH A CENTRAL ANGLE OF 49 DEGREES 35 MINUTES 38 SECONDS, 86.56 FEET;  
THENCE SOUTH 89 DEGREES 49 MINUTES 46 SECONDS EAST, 385.35 FEET TO THE BEGINNING OF A NON-TANGENT CURVE CONCAVE EAST HAVING A RADIUS OF 500.00 FEET, AND A RADIAL BEARING TO THE BEGINNING OF SOUTH 73 DEGREES 52 MINUTES 17 SECONDS WEST;  
THENCE NORTHERLY ALONG THE CURVE THROUGH A CENTRAL ANGLE OF 16 DEGREES 17 MINUTES 57 SECONDS, 142.24 FEET;  
THENCE SOUTH 89 DEGREES 49 MINUTES 46 SECONDS EAST, 55.5 FEET TO THE BEGINNING OF A NON-TANGENT CURVE CONCAVE NORTHEAST HAVING A RADIUS OF 444.50 FEET AND A RADIAL BEARING TO THE BEGINNING OF NORTH 89 DEGREES 46 MINUTES 46 SECONDS WEST;  
THENCE SOUTHEASTERLY ALONG THE CURVE THROUGH A CENTRAL ANGLE OF 75 DEGREES 09 MINUTES 12 SECONDS, 583.04 FEET;  
THENCE SOUTH 74 DEGREES 58 MINUTES 57 SECONDS EAST, 6.41 FEET TO THE NORTH-SOUTH MIDSECTION LINE OF SECTION 35;  
THENCE SOUTH 00 DEGREES 08 MINUTES 41 SECONDS WEST, ALONG THE MIDSECTION LINE, 57.42 FEET;  
THENCE SOUTH 74 DEGREES 58 MINUTES 57 SECONDS EAST, 337.32 FEET TO THE BEGINNING OF A CURVE CONCAVE SOUTHWEST HAVING A RADIUS OF 300.00 FEET;  
THENCE SOUTHEASTERLY ALONG THE CURVE THROUGH A CENTRAL ANGLE OF 35 DEGREES 25 MINUTES 14 SECONDS, 185.46 FEET;  
THENCE SOUTH 39 DEGREES 33 MINUTES 43 SECONDS EAST, 125.23 FEET TO THE BEGINNING OF A CURVE CONCAVE NORTHEAST HAVING A RADIUS OF 1000.00 FEET;  
THENCE SOUTHEASTERLY ALONG THE CURVE THROUGH A CENTRAL ANGLE OF 11 DEGREES 27 MINUTES 33 SECONDS, 200.00 FEET;  
THENCE SOUTH 38 DEGREES 58 MINUTES 44 SECONDS WEST, 55.50 FEET;  
THENCE SOUTH 16 DEGREES 17 MINUTES 23 SECONDS WEST, 211.79 FEET;  
THENCE NORTH 89 DEGREES 51 MINUTES 19 SECONDS WEST, 270.00 FEET;  
THENCE SOUTH 00 DEGREES 08 MINUTES 41 SECONDS WEST, 208.40 FEET;  
THENCE NORTH 89 DEGREES 51 MINUTES 19 SECONDS WEST, 148.26 FEET;  
THENCE SOUTH 00 DEGREES 08 MINUTES 41 SECONDS WEST, 14.66 FEET;  
THENCE NORTH 89 DEGREES 51 MINUTES 19 SECONDS WEST, 67.83 FEET;  
THENCE NORTH 00 DEGREES 08 MINUTES 41 SECONDS EAST, 10.06 FEET;  
THENCE NORTH 89 DEGREES 51 MINUTES 19 SECONDS WEST, 122.29 FEET TO THE POINT OF BEGINNING; EXCEPT ONE-HALF OF ALL OIL AND MINERAL RIGHTS AS RESERVED IN DOCKET 124, PAGE 39, RECORDS OF MARICOPA COUNTY, ARIZONA; AND 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 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.

**PAVING QUANTITIES (ESTIMATED)**

4" A.C. OVER 6" A.B.C.	119 SY
6" VERTICAL CURB & GUTTER	5 LF
6" SINGLE CURB	100 LF
CONCRETE SIDEWALK	2628 SF
CONCRETE APRON	1 SF
SAWCUT, REMOVE & REPLACE EXISTING PAVEMENT	23 SY

**PRIVATE WATER QUANTITIES (ESTIMATED)**

2" DOMESTIC WATER SERVICE & METER	1 EA
2" REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION	1 EA
4" DOUBLE CHECK BACK FLOW RETENTION	1 EA
6" GATE VALVE	1 EA
CONNECT TO EXISTING WATERLINE	1 EA

**PRIVATE SEWER QUANTITIES (ESTIMATED)**

CONNECT TO EXISTING SEWER LINE	1 EA
8" PVC SDR 35 SANITARY SEWER PIPE	35 LF
30" SANITARY SEWER MANHOLE	1 EA

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

ABBREVIATIONS	
BB	BOTTOM OF BANK
C	CONCRETE ELEVATION
COS	CITY OF SCOTTSDALE
E.S.V.A.E.	EMERGENCY VEHICLE ACCESS EASEMENT
EX	EXISTING
FG	FINISHED GROUND
FL	FLOW LINE ELEVATION
G	GUTTER ELEVATION
GB	GRADE BREAK
INV	INVERT ELEVATION
IRR	IRRIGATION
LF	LINEAR FEET
LFF	LOWEST FINISHED FLOOR ELEVATION
MIN	MINIMUM
NG	NATURAL GROUND ELEVATION
N.T.S.	NOT TO SCALE
P	PAVEMENT ELEVATION
PL	PROPERTY LINE
RIM	RIM ELEVATION
S	SLOPE
SD	STORM DRAIN
SE	SEWER EASEMENT
SS	SEWER SERVICE
STD	STANDARD
TB	TOP OF BANK
TC	TOP OF CURB
TF	TOP OF FOOTING ELEVATION
TW	TOP OF WALL ELEVATION
U.E.	UTILITY EASEMENT
UG	UNDERGROUND
W.I.	WROUGHT IRON



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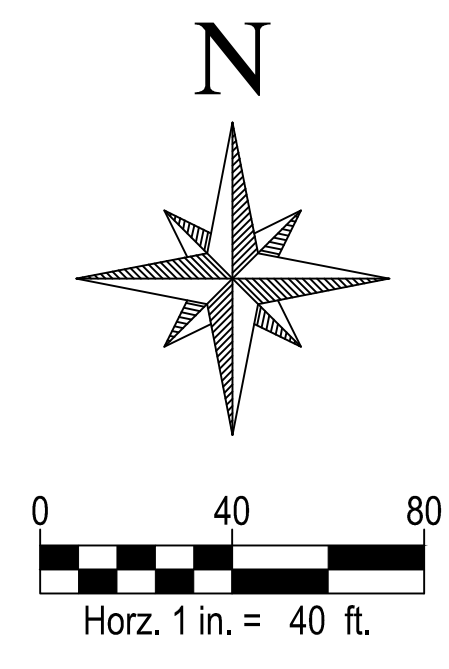
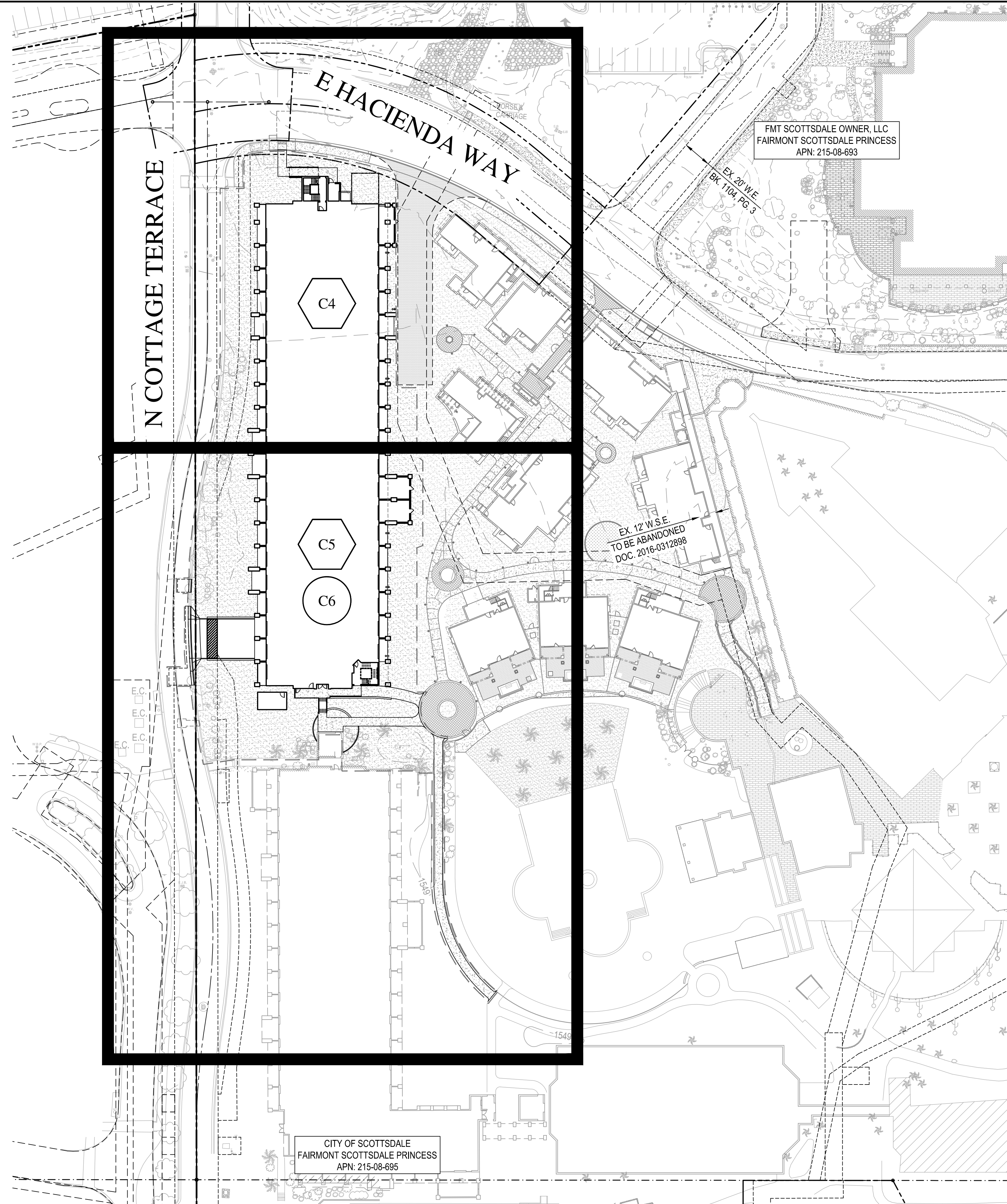
**FAIRMONT SCOTTSDALE PRINCESS GUEST ROOM ADDITION PRELIMINARY IMPROVEMENT PLANS**  
SCOTTSDALE, ARIZONA  
DETAILS, NOTES AND QUANTITIES

REV	DESCRIPTION	DATE





SCALE (HORIZ.) N/A  
SCALE (VERT.) N/A  
DATE 05/09/2025  
JOB NUMBER 215319.50  
SHEET  
**C2 OF 9**

Z:\2022\1215319\DWG\Imp\5319\_50\_Guest\_Tower\5319\_50\_NX.GT.dwg



**INDEX MAP LEGEND**

-  GRADING & DRAINAGE
-  WATER & SEWER

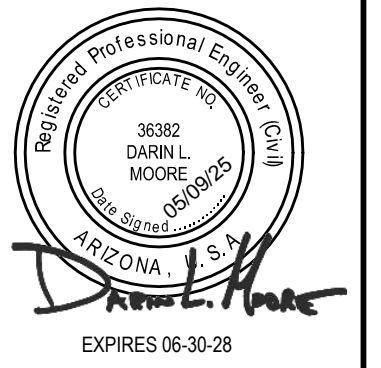


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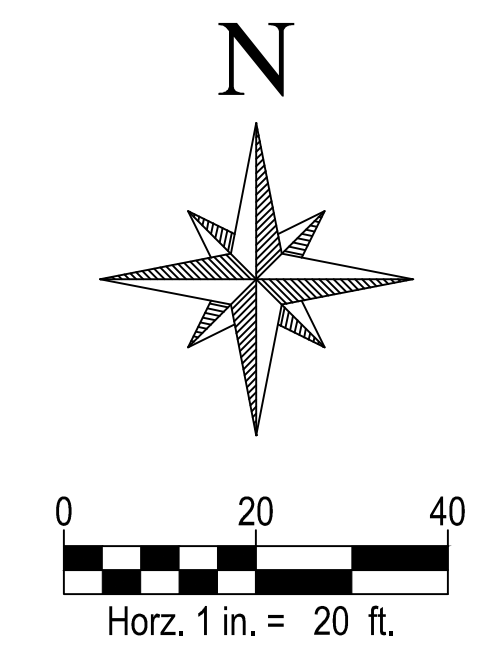
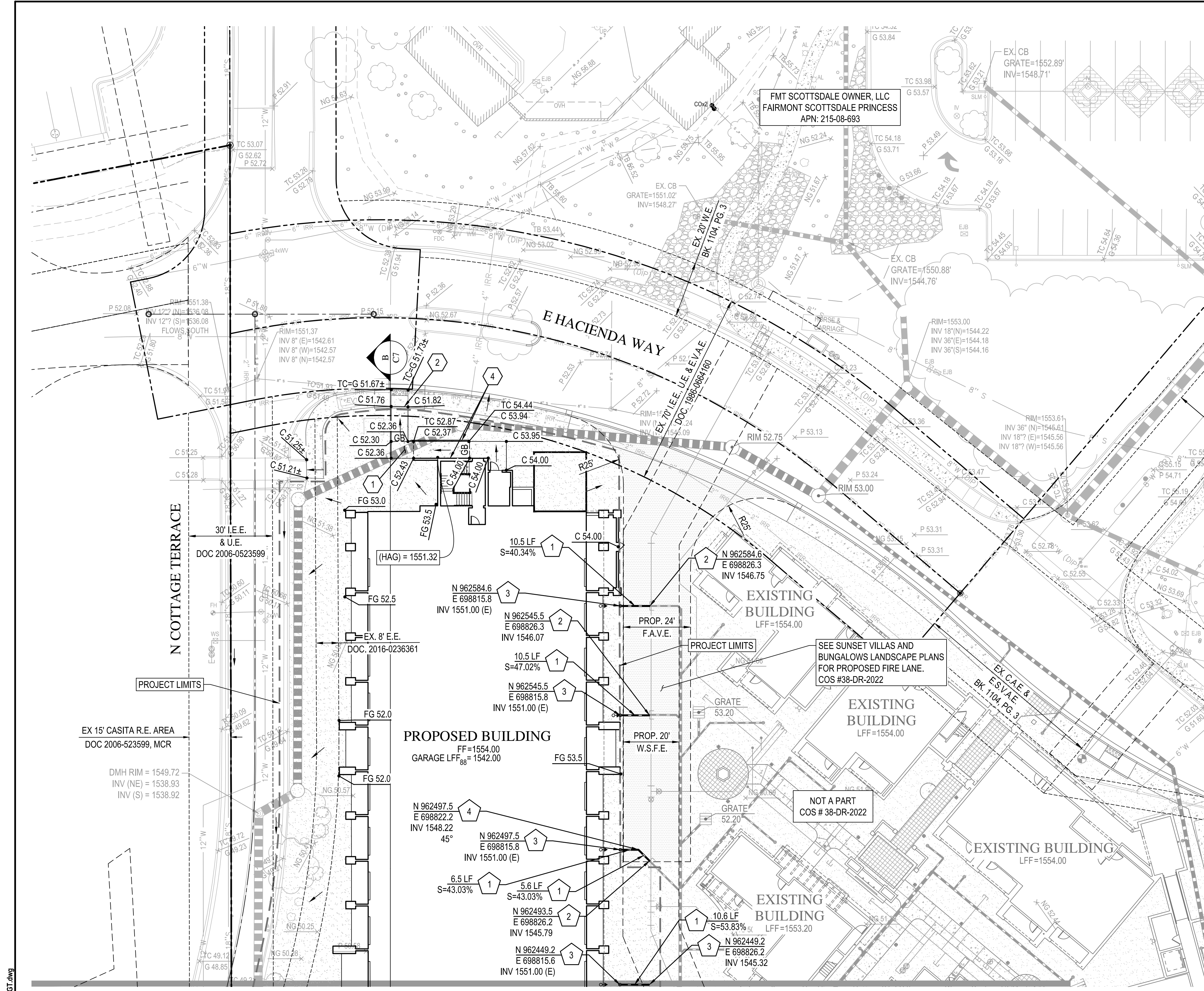


**FAIRMONT SCOTTSDALE PRINCESS  
 GUEST ROOM ADDITION  
 PRELIMINARY IMPROVEMENT PLANS  
 SCOTTSDALE, ARIZONA  
 INDEX MAP**

REV	DESCRIPTION	DATE



SCALE (HORIZ.) 1" = 40'  
 SCALE (VERT.) N/A  
 DATE 05/09/2025  
 JOB NUMBER 215319.50  
 SHEET C3 OF 9



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**ARIZONA**  
 Arizona State Board of Professional Engineers and Land Surveyors  
 License No. 36382  
 DARRIN L. MOORE  
 05/09/2025

**PAVING NOTES**

- 1 CONSTRUCT SIDEWALK PER M.A.G. STD. DET. 230. SEE LANDSCAPE PLANS FOR COLOR & FINISH.
- 2 MATCH EXISTING ELEVATIONS. CONTRACTOR TO NOTIFY ENGINEER OF ANY DISCREPANCIES.
- 4 INSTALL HANDRAIL. SEE LANDSCAPE PLANS FOR DETAILS.

**STORM DRAIN NOTES**

- 1 INSTALL 6" ADS N-12 H.D.P.E. PIPE WITH WATER TIGHT JOINTS PER C.O.S. SPEC. 738 OR APPROVED EQUAL.
- 2 CONNECT TO EXISTING 6" STORM DRAIN PIPE. CONTRACTOR TO VERIFY HORIZONTAL LOCATION AND VERTICAL ELEVATION. NOTIFY ENGINEER OF ANY DISCREPANCY.
- 3 INSTALL AIR BREAK. SEE DETAIL SHEET C5.
- 4 INSTALL BEND. SIZE PER ADJOINING PIPE DIAMETER. ANGLE PER PLAN.

**FAIRMONT SCOTTSDALE PRINCESS GUEST ROOM ADDITION PRELIMINARY IMPROVEMENT PLANS**  
 SCOTTSDALE, ARIZONA  
 GRADING AND DRAINAGE PLAN

REV	DESCRIPTION	DATE

**DARRIN L. MOORE**  
 Professional Engineer  
 License No. 36382  
 State of Arizona  
 Expires 06-30-28

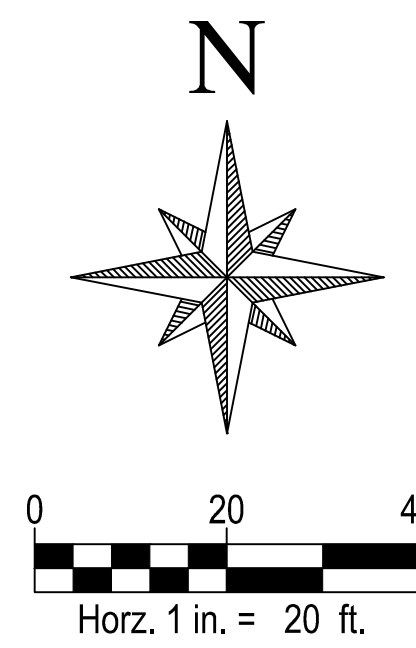
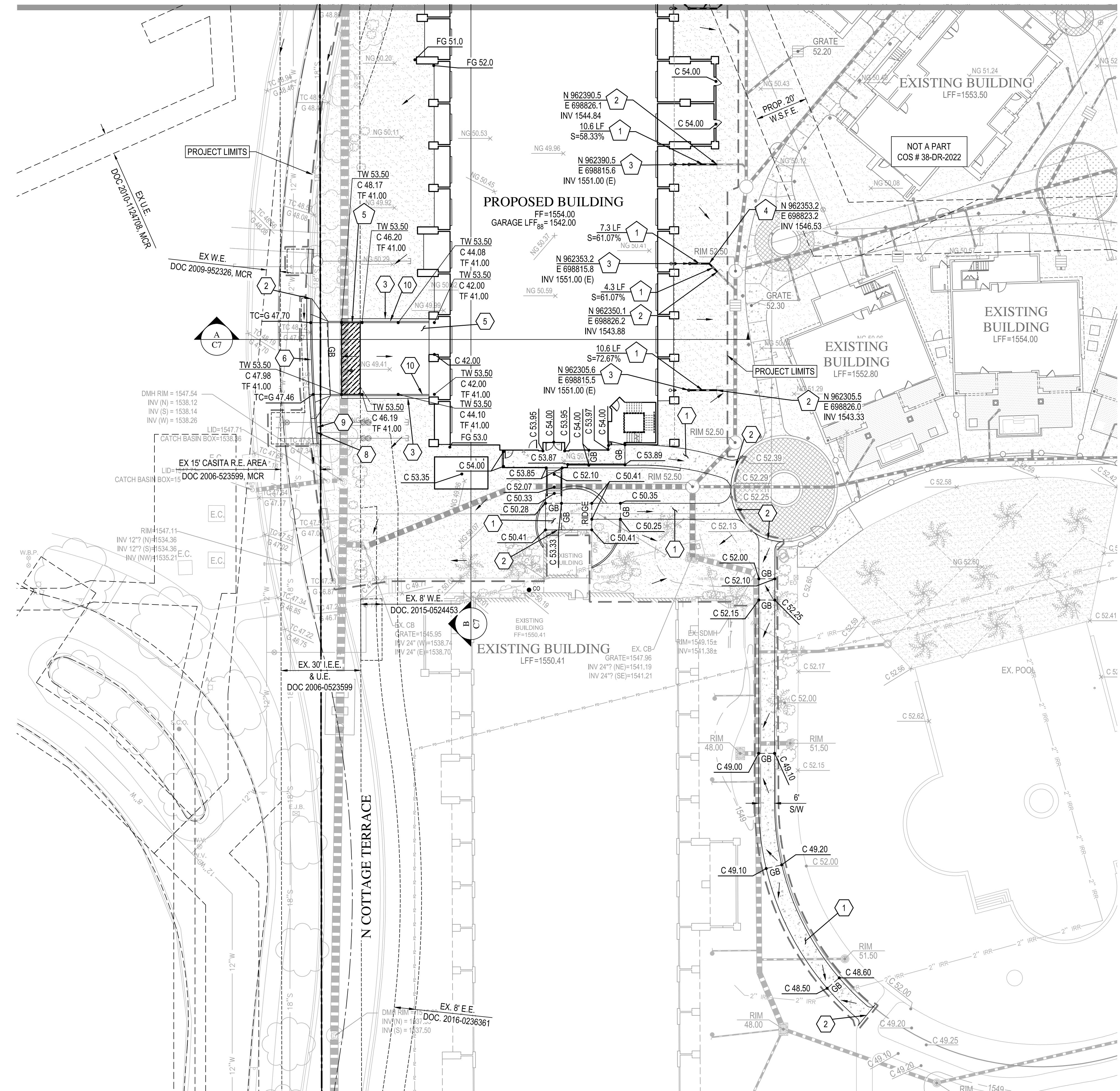
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 DATE 05/09/2025  
 JOB NUMBER 215319.50  
 SHEET C4 OF 9

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MATCH SHEET C5

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

MATCH SHEET C4



PAVING NOTES

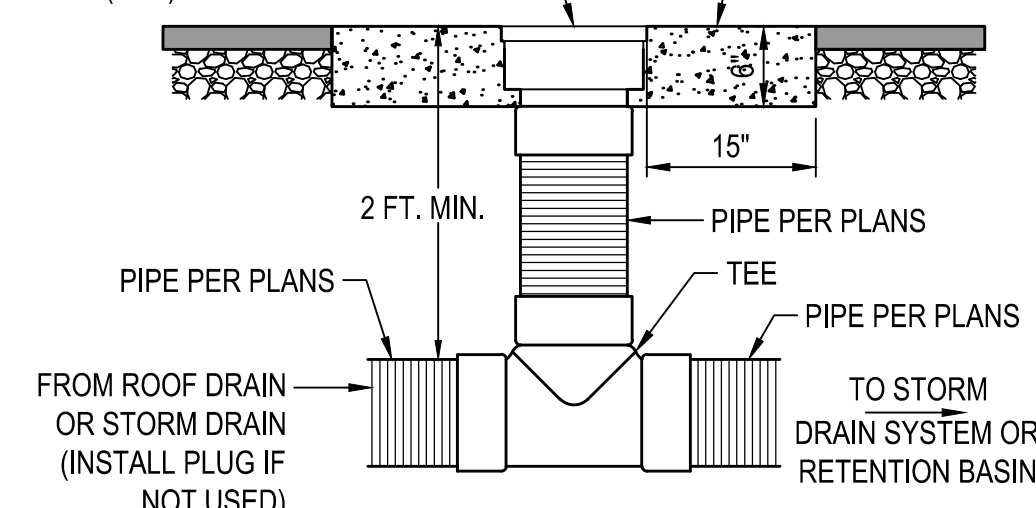
- 1 CONSTRUCT SIDEWALK PER M.A.G. STD. DET. 230. SEE LANDSCAPE PLANS FOR COLOR & FINISH.
- 2 MATCH EXISTING ELEVATIONS. CONTRACTOR TO NOTIFY ENGINEER OF ANY DISCREPANCIES.
- 3 CONSTRUCT 6" SINGLE CURB PER M.A.G. STD. DETAIL 222, TYPE 'B'.
- 5 INSTALL HEAVY DUTY PAVEMENT, 4" A.C. PAVEMENT OVER 6" A.B.C. PER GEOTECHNICAL REPORT.
- 6 CONSTRUCT DRIVEWAY PER C.O.S. STD. DETAIL 2257-1, CH3, MODIFIED TO HAVE 25' RADIUS CURB RETURNS AND 24' DRIVE LANES.
- 7 CONSTRUCT RETAINING WALL. SEE DETAIL X ON SHEET X OF THE ARCHITECTURAL PLANS.
- 8 SAWCUT, REMOVE & REPLACE EXISTING SINGLE CURB, CURB & GUTTER, AND CONCRETE SIDEWALK FOR PROPOSED UTILITY CONSTRUCTION TO THE NEAREST JOINT OF THE LIMITS SHOWN.
- 9 CONSTRUCT 6" CURB & GUTTER PER M.A.G. STD. DET. 220, TYPE A.
- 10 INSTALL SAFETY RAIL PER M.A.G. STD. DETAIL 145, TYPE 2.

STORM DRAIN NOTES

- 1 INSTALL 6" ADS N-12 H.D.P.E. PIPE WITH WATER TIGHT JOINTS PER C.O.S. SPEC. 738 OR APPROVED EQUAL.
- 2 CONNECT TO EXISTING 6" STORM DRAIN PIPE. CONTRACTOR TO VERIFY HORIZONTAL LOCATION AND VERTICAL ELEVATION. NOTIFY ENGINEER OF ANY DISCREPANCY.
- 3 INSTALL AIR BREAK. SEE DETAIL SHEET C5.
- 4 INSTALL BEND. SIZE PER ADJOINING PIPE DIAMETER, ANGLE PER PLAN.
- 5 INSTALL VEHICULAR FLOOD GATE BY FLOOD BREAK PER THE DETAILS ON SHEETS C8-C9.

CAST IRON GRATE WITH FASTENED COVER (H-20 RATED FOR VEHICLE AREAS) A.D.A. PEDESTRIAN GRATE WHEN IN AN A.D.A. ACCESSIBLE AREA. ADVANCED DRAINAGE SYSTEMS (ADS) OR APPROVED EQUAL.

M.A.G. CLASS 'A' CONCRETE COLLAR WHEN IN TRAFFIC AREAS.



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

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In Maricopa County: (602) 953-1100

**FAIRMONT SCOTTSDALE PRINCESS GUEST ROOM ADDITION PRELIMINARY IMPROVEMENT PLANS SCOTTSDALE, ARIZONA GRADING AND DRAINAGE PLAN**

DATE	DESCRIPTION

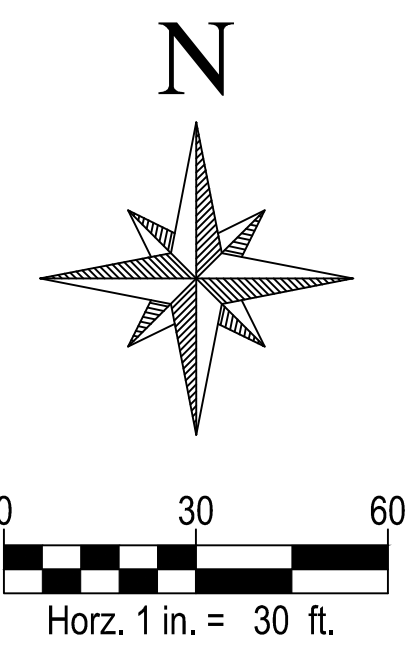
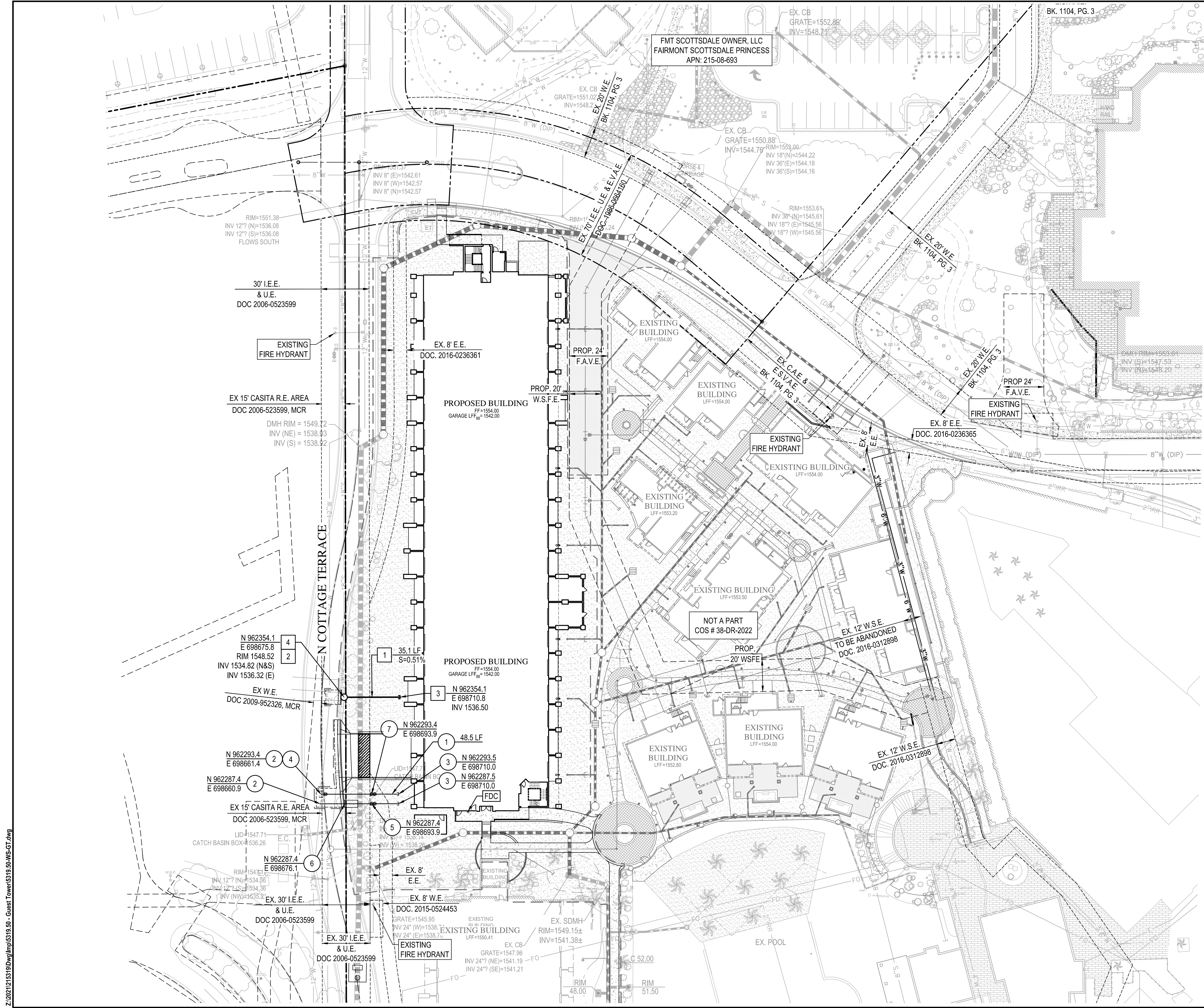
  

REV	DESCRIPTION

<p>Professional Engineer Seal for Darin Moore, License No. 36382, State of Arizona. The seal includes the text 'Professional Engineer Seal', '36382 DARIN MOORE', 'ARIZONA', and 'EXPIRES 06-30-28'.</p>	<p>SCALE (HORIZ.) 1" = 20' SCALE (VERT.) N/A DATE 05/09/2025 JOB NUMBER 215319.50 SHEET C5 OF 9</p>
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 ARIZONA811  
 Arizona Blue Stakes, Inc.  
 Dial 8-1-1 or 1-800-STAKE-11 (1-800-752-2841)  
 In Maricopa County (602) 953-1100

**FAIRMONT SCOTTSDALE PRINCESS  
 GUEST ROOM ADDITION  
 PRELIMINARY IMPROVEMENT PLANS  
 SCOTTSDALE, ARIZONA  
 WATER AND SEWER PLAN**

**WATER NOTES**

1. INSTALL 6" POLYWRAPPED D.I.P. PRESSURE CLASS 350 WATERLINE PER M.A.G. SPEC. SECTION 610. 3' MINIMUM COVER UNLESS NOTED ON PLAN.
2. CONNECT TO EXISTING WATER LINE. CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
3. SEE PLUMBING PLANS FOR CONTINUATION. CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
4. INSTALL GATE VALVE WITH FLANGES, VALVE BOX, AND COVER PER M.A.G. STD. DETAIL 391-1 (VALVE TO MATCH WATERLINE SIZE).
5. INSTALL 3" REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY PER C.O.S. STD. DTL. 2353.
6. INSTALL 3" DOMESTIC WATER METER & SERVICE. METER VAULT AND COVER PER COS STD DETAILS 2345-1 & 2345-2. ALL METERS TO BE INSTALLED BY COS AFTER PAYMENT OF ALL FEES.
7. INSTALL 6" REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY PER C.O.S. STD. DTL. 2353.

**SEWER NOTES**

1. INSTALL 8" POLYWRAPPED DIP PRESSURE CLASS 350 WITH EPOXY LINING FOR SANITARY SEWER PER MAG SPEC SECTION 615.
2. CONNECT TO EXISTING 18" SANITARY SEWER. CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
3. SEE PLUMBING PLAN FOR CONTINUATION. CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION WITH PLUMBING PLAN PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
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.

**CITY OF SCOTTSDALE FIRE  
 GENERAL NOTES:**

1. NFPA 13 COMPLIANT FIRE SPRINKLER SYSTEM SHALL BE REQUIRED.
2. KEY SWITCH/PRE-EMPTION SENSOR PER FIRE ORDINANCE 4562, SECTION 503.

REV	DATE	DESCRIPTION



SCALE (HORIZ.) 1" = 30'  
 SCALE (VERT.) N/A  
 DATE 05/09/2025  
 JOB NUMBER 215319.50  
 SHEET C6 OF 9

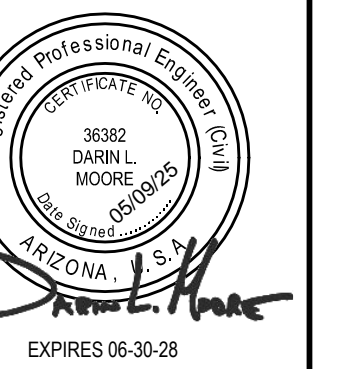
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CHECKED BY: DM DESIGNED BY: RS DRAFTED BY: JRS



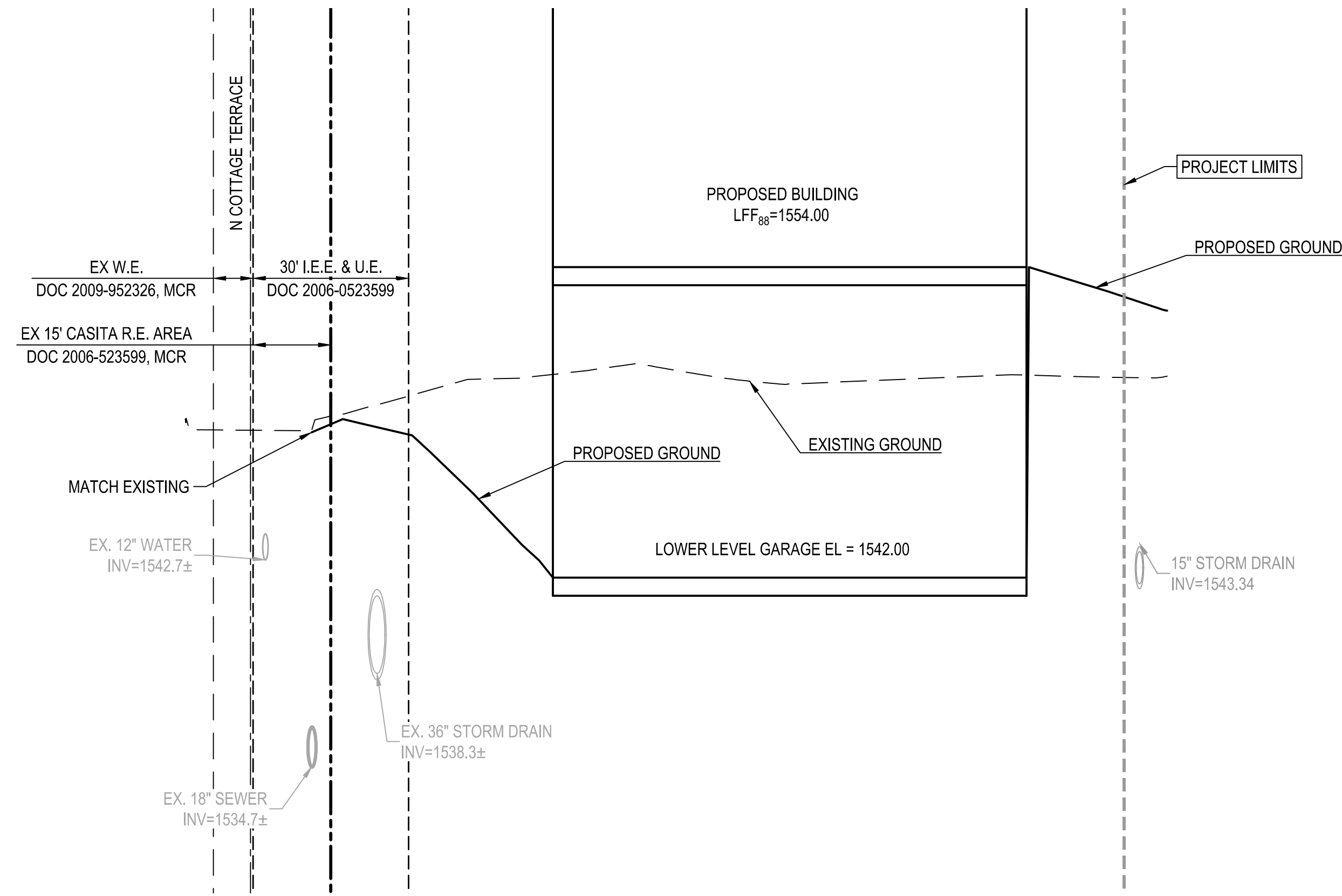
**FAIRMONT SCOTTSDALE PRINCESS  
GUEST ROOM ADDITION  
PRELIMINARY IMPROVEMENT PLANS**  
SCOTTSDALE, ARIZONA  
SECTIONS

REV	DESCRIPTION	DATE

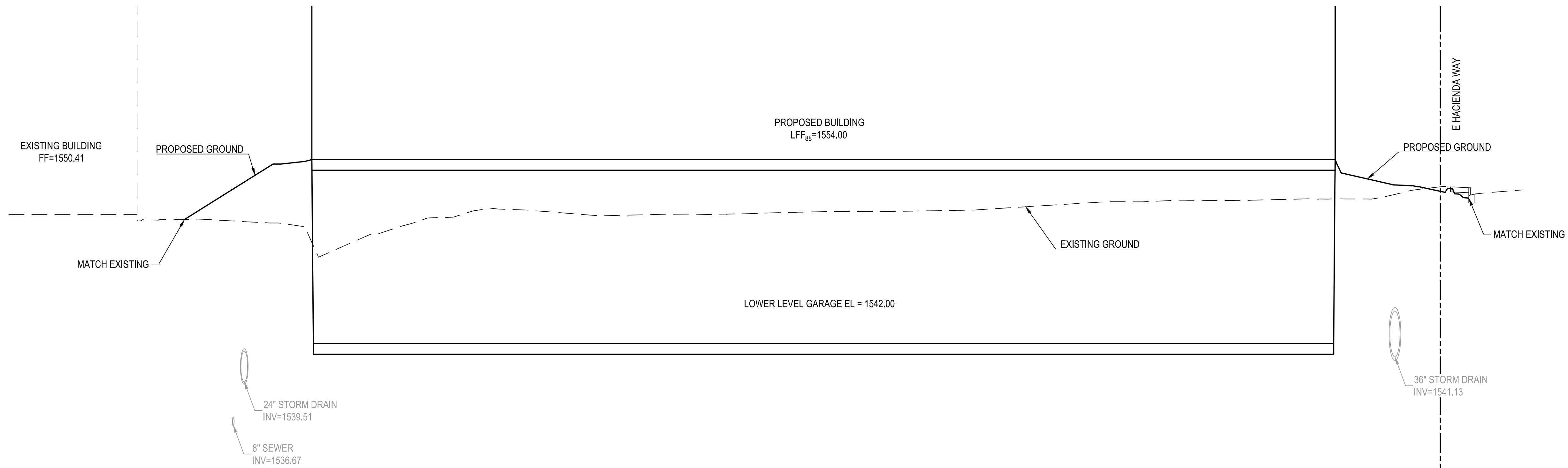


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SCALE (VERT.)	N/A
DATE	05/09/2025
JOB NUMBER	215319.50
SHEET	C7 OF 9

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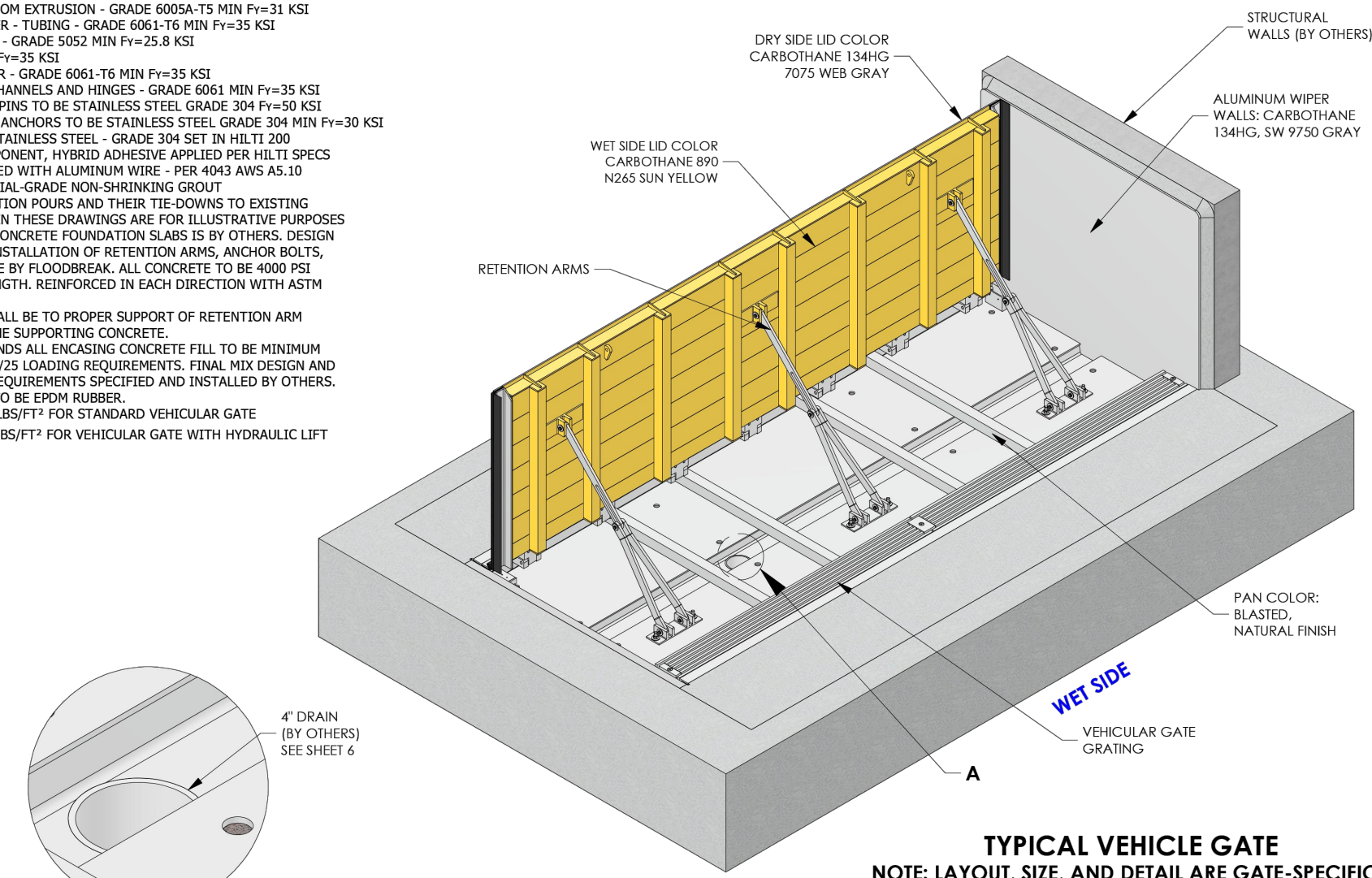
**SECTION A**  
N.T.S.



**SECTION B**  
N.T.S.

**STRUCTURAL SPECIFICATIONS:**

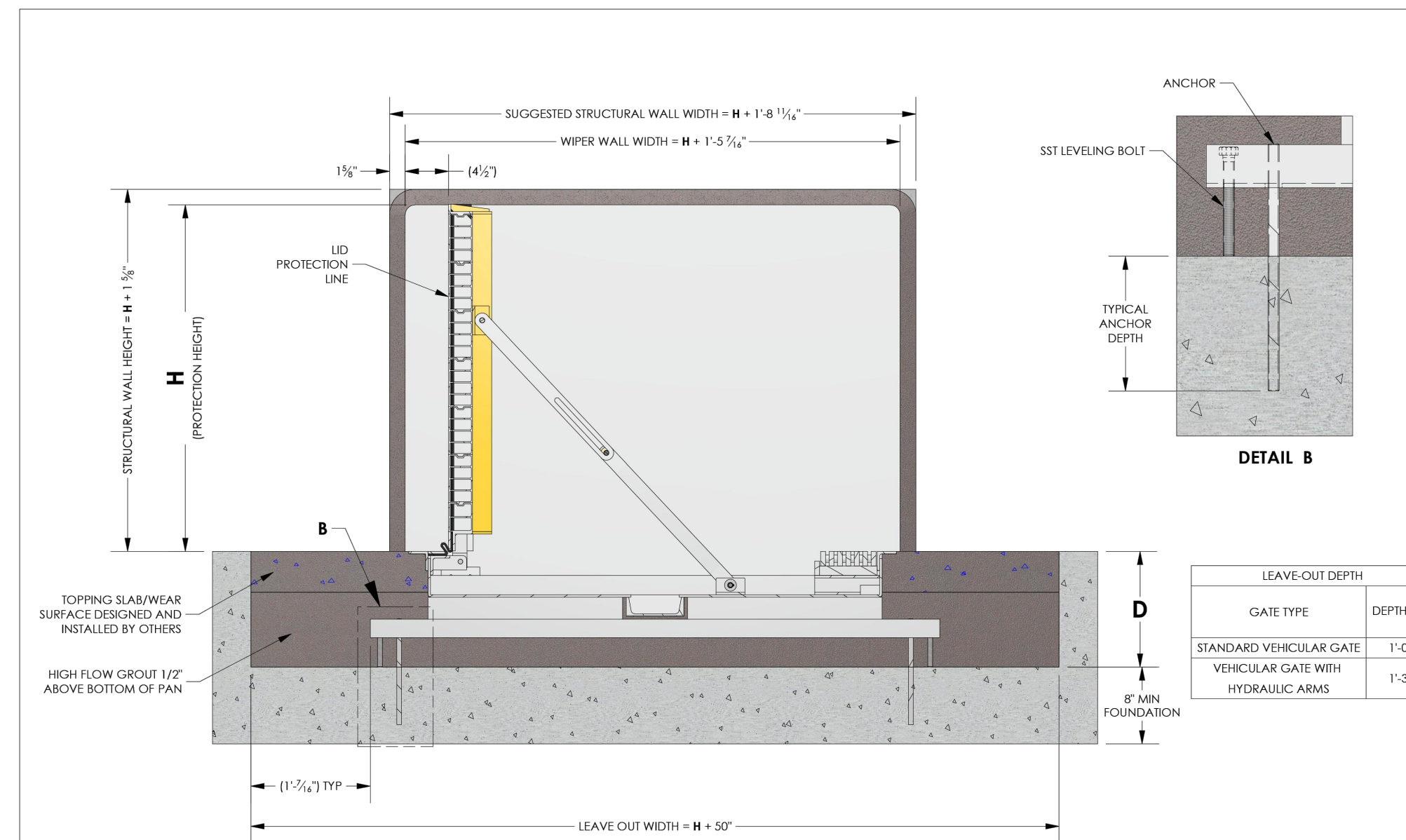
- FLOODGATE MATERIAL TO BE ALUMINUM AS FOLLOWS:
  - LID EXTRUSION - CUSTOM EXTRUSION - GRADE 6069A-T5 MIN F<sub>y</sub>=31 KSI
  - LID AND PAN STIFFENERS - TUBING - GRADE 6061-T6 MIN F<sub>y</sub>=35 KSI
  - SMOOTH SHEET/PATE - GRADE 5052 MIN F<sub>y</sub>=25.8 KSI AND GRADE 6061 MIN F<sub>y</sub>=35 KSI
- RETENTION ARMS - BAR - GRADE 6061-T6 MIN F<sub>y</sub>=35 KSI
- FLAT BARS, ANGLES, CHANNELS AND RINGS - GRADE 6061 MIN F<sub>y</sub>=35 KSI
- HEDGE AND RETENTION PINS TO BE STAINLESS STEEL GRADE 304 F<sub>y</sub>=50 KSI
- BOLTS, FASTENERS AND ANCHORS TO BE STAINLESS STEEL GRADE 304 F<sub>y</sub>=50 KSI
- ANCHOR BOLTS TO BE STAINLESS STEEL - GRADE 304 SET IN HDL11 200
- ALUMINUM TO BE WELDED WITH ALUMINUM WELD - PER 409 ASME AS 10
- INJECTABLE, TWO-COMPONENT, HYBRID ADHESIVE APPLIED PER HLT1 200
- ALUMINUM TO BE WELDED WITH ALUMINUM WELD - PER 409 ASME AS 10
- GROUT TO BE COMMERCIAL GRADE NON-SHRINKING GROUT
- ALL CONCRETE FOUNDATION POURS AND THEIR TIE-BARROWS TO EXISTING FOUNDATIONS SHOWN IN THESE DRAWINGS ARE FOR ILLUSTRATIVE PURPOSES ONLY. DESIGN OF THE CONCRETE FOUNDATION SLABS IS BY OTHERS. DESIGN AND SUPERVISION OF INSTALLATION OF RETENTION ARMS, ANCHOR BOLTS, AND GATE ANCHORS ARE BY FLOODBREAK. ALL CONCRETE TO BE 4000 PSI MINIMUM 28-DAY STRENGTH, REINFORCED IN EACH DIRECTION WITH ASTM A615 MIN F<sub>y</sub>=40 KSI. SPECIAL ATTENTION SHALL BE TO PROPER SUPPORT OF RETENTION ARM ANCHOR BOLTS INTO THE SUPPORTING CONCRETE.
- FLOODBREAK RECOMMENDS ALL ENCASED CONCRETE FILL TO BE MINIMUM 3000PSI TO MEET HS-20/25 LOADING REQUIREMENTS. FINAL MIX DESIGN AND ANY REINFORCEMENT REQUIREMENTS SPECIFIED AND INSTALLED BY OTHERS.
- ALL GASKET MATERIAL TO BE EPDM RUBBER.
- TOTAL WEIGHT: ~18.6 LBS/FT FOR STANDARD VEHICULAR GATE
- TOTAL WEIGHT: ~23.0 LBS/FT FOR VEHICULAR GATE WITH HYDRAULIC LIFT



DETAIL A

**TYPICAL VEHICLE GATE**  
NOTE: LAYOUT, SIZE, AND DETAIL ARE GATE-SPECIFIC  
LEFT WALL HIDDEN FOR CLARITY

FINISH	SEE WO	CONTRACT	TBD	PRODUCT	VEHICLE GATE
SERIAL	TBD	PRODUCT	VEHICLE GATE	NAME	DATE
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE INTELLECTUAL PROPERTY OF FLOODBREAK LLC, AND IS COVERED BY U.S. PATENTS AT PAT: <a href="http://floodbreak.com/patents/">HTTP://FLOODBREAK.COM/PATENTS/</a> AND PATENTS PENDING. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FLOODBREAK LLC IS PROHIBITED.					
DO NOT SCALE DRAWING					
A XXXXX-VGEX-00000-00 0					
N/A 1 OF 6					

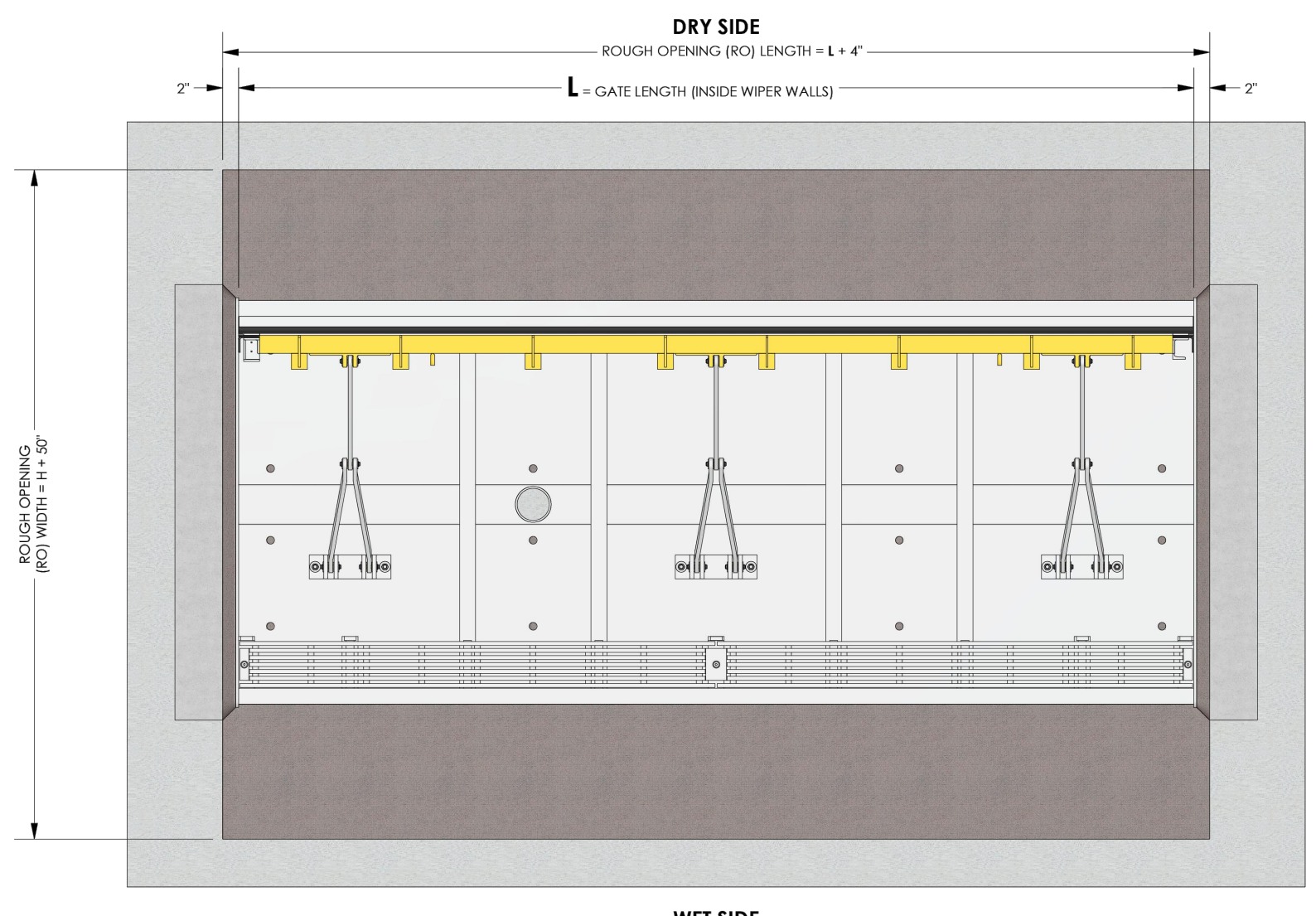


DETAIL B

LEAVE-OUT DEPTH	DEPTH (D)
GATE TYPE	DEPTH (D)
STANDARD VEHICULAR GATE	1'-0"
VEHICULAR GATE WITH HYDRAULIC ARMS	1'-3"

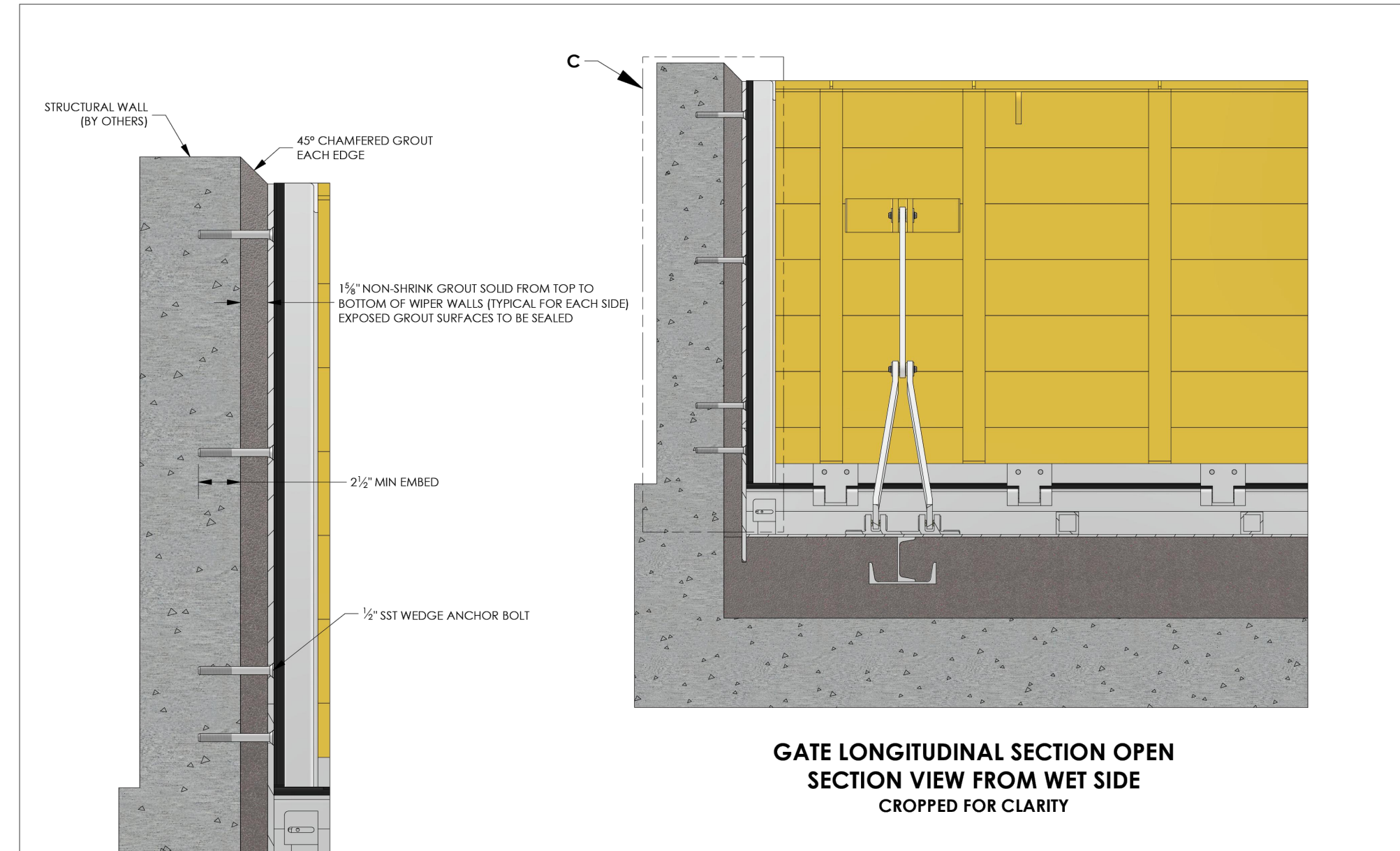
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SERIAL	TBD	PRODUCT	VEHICLE GATE	NAME	DATE
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE INTELLECTUAL PROPERTY OF FLOODBREAK LLC, AND IS COVERED BY U.S. PATENTS AT PAT: <a href="http://floodbreak.com/patents/">HTTP://FLOODBREAK.COM/PATENTS/</a> AND PATENTS PENDING. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FLOODBREAK LLC IS PROHIBITED.					
DO NOT SCALE DRAWING					
A XXXXX-VGEX-00000-00 0					
N/A 2 OF 6					

**PLAN VIEW RELATIVE TO LEAVE-OUT**



WET SIDE

FINISH	SEE WO	CONTRACT	TBD	PRODUCT	VEHICLE GATE
SERIAL	TBD	PRODUCT	VEHICLE GATE	NAME	DATE
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE INTELLECTUAL PROPERTY OF FLOODBREAK LLC, AND IS COVERED BY U.S. PATENTS AT PAT: <a href="http://floodbreak.com/patents/">HTTP://FLOODBREAK.COM/PATENTS/</a> AND PATENTS PENDING. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FLOODBREAK LLC IS PROHIBITED.					
DO NOT SCALE DRAWING					
A XXXXX-VGEX-00000-00 0					
N/A 3 OF 6					



**GATE LONGITUDINAL SECTION OPEN**  
SECTION VIEW FROM WET SIDE  
CROPPED FOR CLARITY

DETAIL C  
WIPER WALL FRONT SECTION

FINISH	SEE WO	CONTRACT	TBD	PRODUCT	VEHICLE GATE
SERIAL	TBD	PRODUCT	VEHICLE GATE	NAME	DATE
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DO NOT SCALE DRAWING					
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N/A 4 OF 6					

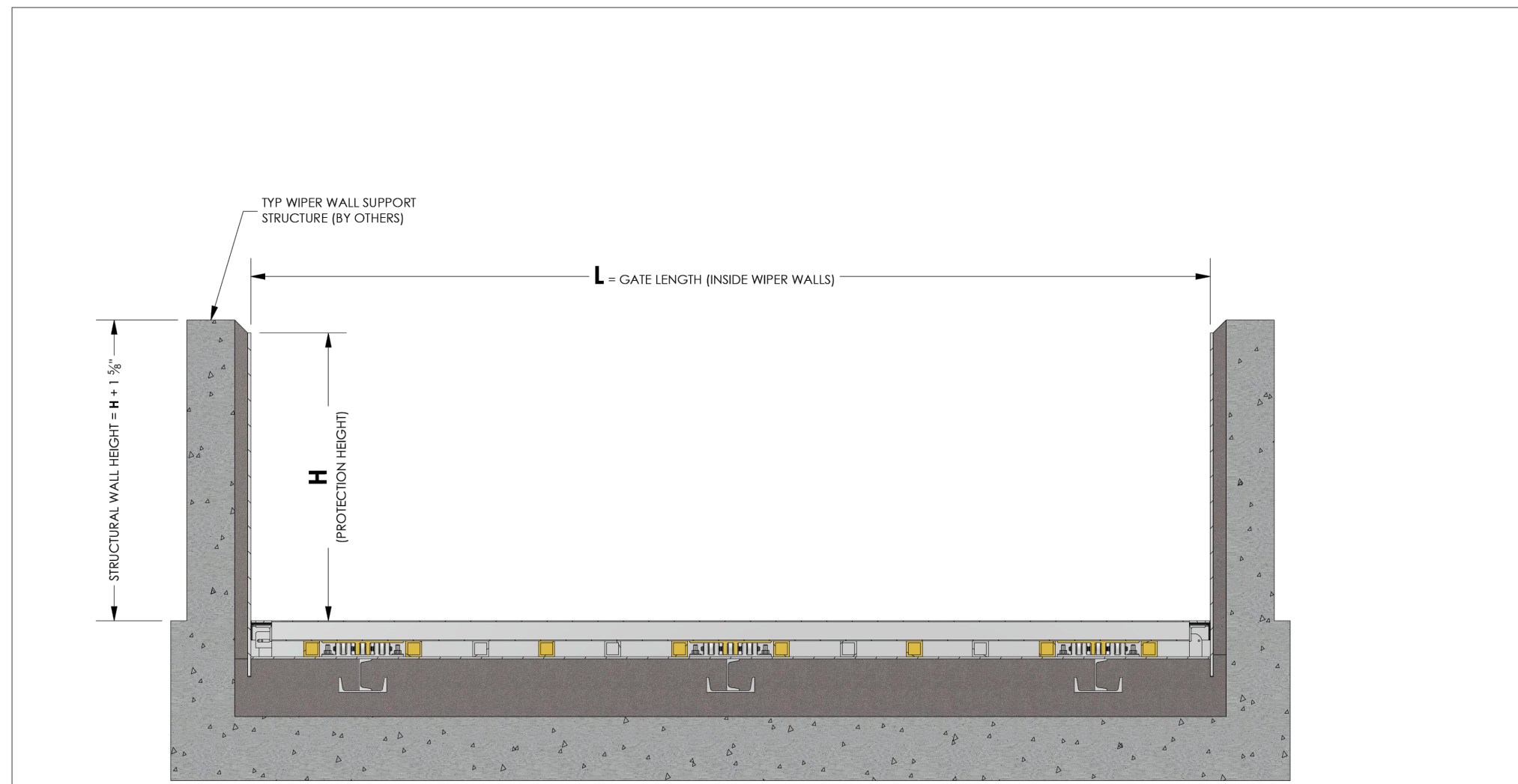
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**FAIRMONT SCOTTSDALE PRINCESS**  
**GUEST ROOM ADDITION**  
**PRELIMINARY IMPROVEMENT PLANS**  
SCOTTSDALE, ARIZONA  
DETAILS

REV	DESCRIPTION	DATE

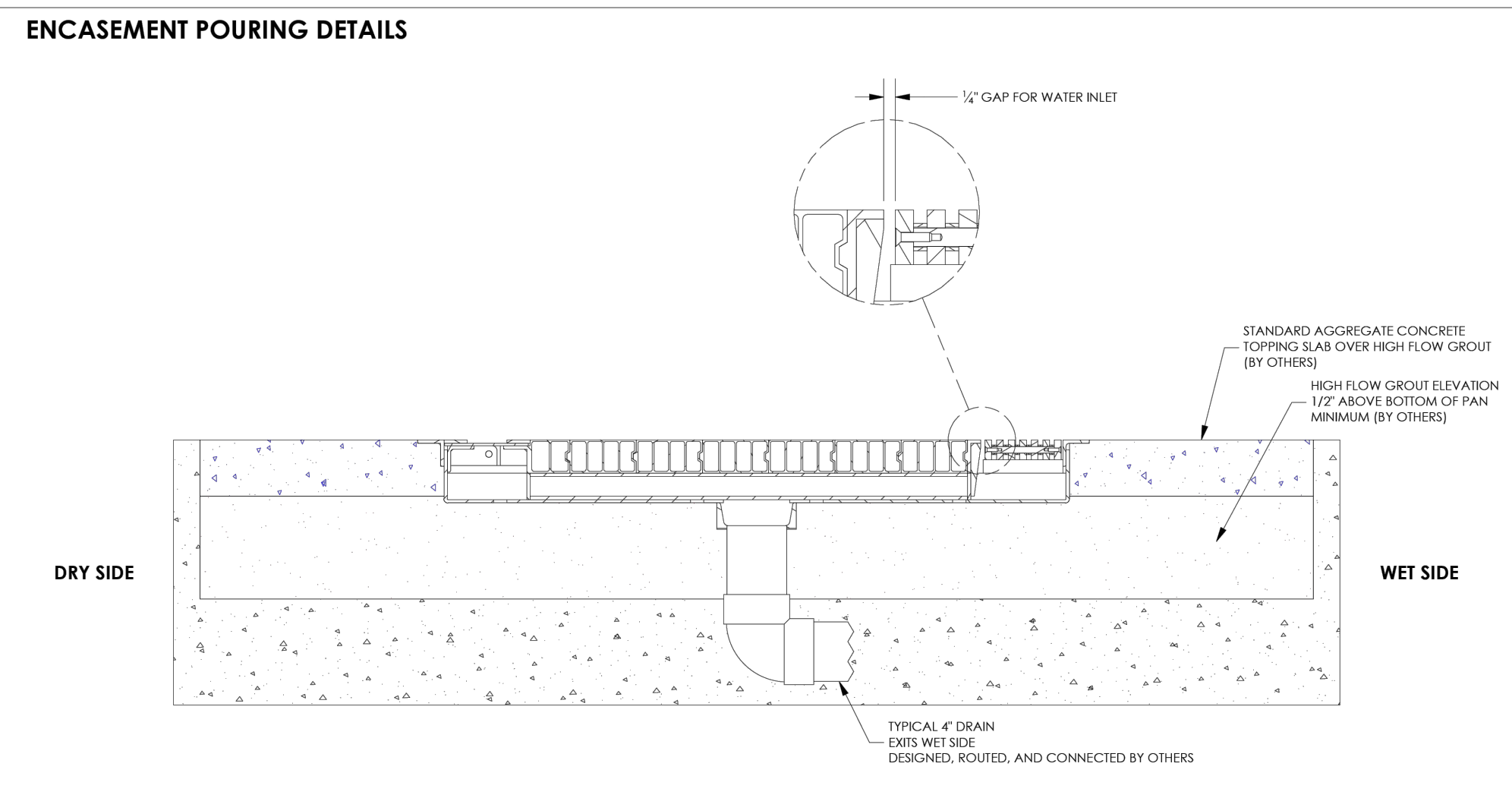


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SCALE (VERT.)	N/A
DATE	05/09/2025
JOB NUMBER	215319.50
SHEET	C8
OF	9



LONGITUDINAL SECTION IN CLOSED POSITION  
(VIEW FROM WET SIDE)

FINISH	SEE WO	CONTRACT	TBD	<b>FloodBreak</b>	
SERIAL	TBD	PRODUCT	VEHICLE GATE	REVOLUTIONARY FLOOD CONTROL <a href="http://floodbreak.com">http://floodbreak.com</a>	
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE INTELLECTUAL PROPERTY OF FLOODBREAK, LLC, AND IS COVERED BY U.S. PATENTS BY: <a href="http://floodbreak.com/patents/">HTTP://FLOODBREAK.COM/PATENTS/</a> AND PATENTS PENDING. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FLOODBREAK, LLC IS PROHIBITED.					
DRAWN		CHECKED		EXAMPLE VEHICULAR GATE	
APPROVED				DO NOT SCALE DRAWING	
A		XXXXX-VGEX-00000-00		0	
N/A				5 OF 6	



ENCASEMENT POURING DETAILS

FINISH	SEE WO	CONTRACT	TBD	<b>FloodBreak</b>	
SERIAL	TBD	PRODUCT	VEHICLE GATE	REVOLUTIONARY FLOOD CONTROL <a href="http://floodbreak.com">http://floodbreak.com</a>	
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE INTELLECTUAL PROPERTY OF FLOODBREAK, LLC, AND IS COVERED BY U.S. PATENTS BY: <a href="http://floodbreak.com/patents/">HTTP://FLOODBREAK.COM/PATENTS/</a> AND PATENTS PENDING. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FLOODBREAK, LLC IS PROHIBITED.					
DRAWN		CHECKED		EXAMPLE VEHICULAR GATE	
APPROVED				DO NOT SCALE DRAWING	
A		XXXXX-VGEX-00000-00		0	
N/A				6 OF 6	

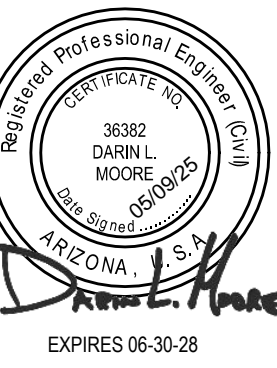


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**FAIRMONT SCOTTSDALE PRINCESS  
GUEST ROOM ADDITION  
PRELIMINARY IMPROVEMENT PLANS**  
SCOTTSDALE, ARIZONA  
DETAILS

REV	DESCRIPTION	DATE



SCALE (HORIZ.) N/A  
SCALE (VERT.) N/A  
DATE 05/09/2025  
JOB NUMBER 215319.50  
SHEET C9 OF 9

## **APPENDIX E – WATER CAD MODELING**

# 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 - Guest Room Addition

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 - Guest Room Addition

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 - Guest Room Addition

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-79	1,585.00	0	53	1,708.35
J-80	1,585.00	0	53	1,708.35
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	1,695.82
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 - Guest Room Addition

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 - Guest Room Addition

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 - Guest Room Addition

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-70	Domestic (Guest Room Addition)	J-79	224	3.0	130.0	0	0.00
P-71	Fire (Guest Room Addition)	J-80	229	6.0	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 - Guest Room Addition

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 - Guest Room Addition

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 - Guest Room Addition

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-79	1,585.00	0	52	1,705.46
J-80	1,585.00	0	52	1,705.46
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 - Guest Room Addition

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 - Guest Room Addition

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 - Guest Room Addition

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-70	Domestic (Guest Room Addition)	J-79	224	3.0	130.0	0	0.00
P-71	Fire (Guest Room Addition)	J-80	229	6.0	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 Demand - Guest Room Addition

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 Demand - Guest Room Addition

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	1,694.85
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 Demand - Guest Room Addition

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-79	1,585.00	0	48	1,695.19
J-80	1,585.00	0	48	1,695.19
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 Demand - Guest Room Addition

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 Demand - Guest Room Addition

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 Demand - Guest Room Addition

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-70	Domestic (Guest Room Addition)	J-79	224	3.0	130.0	0	0.00
P-71	Fire (Guest Room Addition)	J-80	229	6.0	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: Junction Table

### Active Scenario: Scenario 3 - Guest Room Addition

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
Domestic (Conference Center)	1,553.33	221	44	1,654.04
Domestic (Guest Room Addition)	1,550.00	0	45	1,653.96
Domestic (Italian)	1,556.30	60	42	1,653.93
Domestic (Roasterie)	1,560.25	38	42	1,657.53
EX FH-1	1,547.30	0	46	1,654.60
EX FH-2 (TEST 1)	1,543.00	0	56	1,673.48
EX FH-3 (FLOW 1)	1,549.00	0	45	1,653.93
EX FH-4	1,557.29	0	42	1,653.93
EX FH-5	1,558.03	0	41	1,653.93
EX FH-6 (TEST 2)	1,559.33	0	41	1,653.93
EX FH-7 (FLOW 2)	1,556.86	0	42	1,653.93
EX FH-10	1,563.50	0	39	1,653.93
EX FH-11	1,557.90	0	42	1,653.93
EX FH-12	1,552.10	0	44	1,654.04
EX J-10	1,552.00	0	44	1,653.94
EX J-20	1,553.00	0	44	1,653.98
EX J-30	1,553.00	0	44	1,654.01
EX J-34	1,553.36	0	44	1,654.05
EX J-40	1,552.55	0	44	1,654.04
EX J-50	1,552.03	0	44	1,654.04
EX J-54	1,555.20	0	44	1,656.02
EX J-70	1,542.85	0	54	1,668.42
EX J-80	1,542.85	0	50	1,657.83
EX J-90	1,547.00	0	47	1,655.29
EX J-100	1,550.00	0	45	1,653.93
EX J-110	1,556.50	0	42	1,653.93
EX J-120	1,556.34	0	42	1,653.93
EX J-130	1,558.03	0	41	1,653.93
EX J-140	1,560.63	0	40	1,653.93
EX J-141	1,563.47	0	39	1,653.93
EX J-150	1,557.41	0	42	1,653.93
EX J-160	1,554.89	0	43	1,653.93
EX J-170	1,558.93	0	41	1,653.93
EX J-190	1,556.35	0	42	1,653.93
EX J-194	1,556.60	0	42	1,653.93
FH-1	1,552.65	0	44	1,654.04
FH-2	1,553.15	0	44	1,654.04
FH-3	1,556.46	0	42	1,653.93
FH-4	1,556.42	0	42	1,653.93
FH-5	1,556.39	0	42	1,653.93
FH-6	1,556.95	0	42	1,653.93
FH-7	1,557.87	0	45	1,662.49
FH-8	1,552.10	0	44	1,654.04
Fire (Conf. Center)	1,556.46	0	42	1,653.93
Fire (Garage)	1,554.70	0	43	1,653.93
Fire (Guest Room Addition)	1,550.00	0	45	1,653.92

# Fairmont Scottsdale Princess Water Master Plan - WaterCAD

## FlexTable: Junction Table

### Active Scenario: Scenario 3 - Guest Room Addition

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
Fire (Italian)	1,556.30	0	42	1,653.93
Fire (Roasterie)	1,559.64	0	42	1,657.34
Fire (Villas and Bungalows)	1,553.13	0	44	1,655.75
J-10	1,550.14	0	46	1,655.34
J-20	1,552.46	0	44	1,654.04
J-66	1,556.22	0	42	1,653.93
J-70	1,553.30	0	44	1,654.04
J-79	1,585.00	192	20	1,631.04
J-80	1,585.00	1,750	9	1,605.95
J-BUNGALOW 1	1,552.30	2	37	1,638.06
J-BUNGALOW 2&3	1,554.15	5	36	1,638.06
J-VILLA 1&2	1,553.50	10	37	1,638.27
J-VILLA 3&4	1,553.15	25	37	1,638.07
J-VILLA 5	1,553.20	4	37	1,638.19
J-VILLA 6	1,553.50	7	37	1,638.09

# Fairmont Scottsdale Princess Water Master Plan - WaterCAD

## FlexTable: Junction Table

### Active Scenario: Scenario 4 - Guest Room Addition

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
Domestic (Conference Center)	1,553.33	402	62	1,696.33
Domestic (Guest Room Addition)	1,550.00	0	64	1,697.26
Domestic (Italian)	1,556.30	179	61	1,696.85
Domestic (Roasterie)	1,560.25	114	59	1,696.71
EX FH-1	1,547.30	0	65	1,697.39
EX FH-2 (TEST 1)	1,543.00	0	69	1,701.35
EX FH-3 (FLOW 1)	1,549.00	0	64	1,697.00
EX FH-4	1,557.29	0	60	1,696.85
EX FH-5	1,558.03	0	60	1,696.85
EX FH-6 (TEST 2)	1,559.33	0	60	1,696.85
EX FH-7 (FLOW 2)	1,556.86	0	61	1,696.85
EX FH-10	1,563.50	0	58	1,696.85
EX FH-11	1,557.90	0	60	1,696.85
EX FH-12	1,552.10	0	62	1,696.33
EX J-10	1,552.00	0	63	1,696.89
EX J-20	1,553.00	0	62	1,696.66
EX J-30	1,553.00	0	62	1,696.53
EX J-34	1,553.36	0	62	1,696.35
EX J-40	1,552.55	0	62	1,696.33
EX J-50	1,552.03	0	62	1,696.33
EX J-54	1,555.20	0	61	1,696.56
EX J-70	1,542.85	0	68	1,700.29
EX J-80	1,542.85	0	67	1,698.07
EX J-90	1,547.00	0	65	1,697.53
EX J-100	1,550.00	0	64	1,697.01
EX J-110	1,556.50	0	61	1,696.86
EX J-120	1,556.34	0	61	1,696.85
EX J-130	1,558.03	0	60	1,696.85
EX J-140	1,560.63	0	59	1,696.85
EX J-141	1,563.47	0	58	1,696.85
EX J-150	1,557.41	0	60	1,696.85
EX J-160	1,554.89	0	61	1,696.85
EX J-170	1,558.93	0	60	1,696.85
EX J-190	1,556.35	0	61	1,696.85
EX J-194	1,556.60	0	61	1,696.85
FH-1	1,552.65	0	62	1,696.33
FH-2	1,553.15	0	62	1,696.33
FH-3	1,556.46	0	61	1,696.86
FH-4	1,556.42	0	61	1,696.86
FH-5	1,556.39	0	61	1,696.86
FH-6	1,556.95	0	61	1,696.85
FH-7	1,557.87	0	61	1,698.16
FH-8	1,552.10	0	62	1,696.33
Fire (Conf. Center)	1,556.46	0	61	1,696.86
Fire (Garage)	1,554.70	0	62	1,696.85
Fire (Guest Room Addition)	1,550.00	0	64	1,697.25

# Fairmont Scottsdale Princess Water Master Plan - WaterCAD

## FlexTable: Junction Table

### Active Scenario: Scenario 4 - Guest Room Addition

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
Fire (Italian)	1,556.30	0	61	1,696.85
Fire (Roasterie)	1,559.64	0	59	1,696.69
Fire (Villas and Bungalows)	1,553.13	0	62	1,696.53
J-10	1,550.14	0	63	1,696.49
J-20	1,552.46	0	62	1,696.33
J-66	1,556.22	0	61	1,696.85
J-70	1,553.30	0	62	1,696.33
J-79	1,585.00	248	33	1,660.64
J-BUNGALOW 1	1,552.30	4	54	1,677.96
J-BUNGALOW 2&3	1,554.15	8	54	1,677.97
J-VILLA 1&2	1,553.50	18	54	1,678.55
J-VILLA 3&4	1,553.15	43	54	1,677.99
J-VILLA 5	1,553.20	7	54	1,678.32
J-VILLA 6	1,553.50	13	54	1,678.06

## Fairmont Scottsdale Princess Water Master Plan - WaterCAD

### Fire Flow Node FlexTable: Fire Flow Results Table

#### Active Scenario: MD+FF Guest Room Addition (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	1,971	2,088	37	1,705.22
Domestic (Guest Room Addition)	1,550.00	True	1,942	2,254	39	1,705.46
Domestic (Italian)	1,556.30	True	1,810	2,066	34	1,705.37
Domestic (Roasterie)	1,560.25	True	1,788	1,860	30	1,705.41
EX FH-1	1,547.30	True	1,750	2,076	40	1,705.51
EX FH-2 (TEST 1)	1,543.00	True	1,750	2,708	42	1,706.82
EX FH-3 (FLOW 1)	1,549.00	True	1,750	2,023	39	1,705.40
EX FH-4	1,557.29	True	1,750	2,006	33	1,705.37
EX FH-5	1,558.03	True	1,750	2,003	32	1,705.37
EX FH-6 (TEST 2)	1,559.33	True	1,750	1,954	31	1,705.37
EX FH-7 (FLOW 2)	1,556.86	True	1,750	1,970	31	1,705.37
EX FH-10	1,563.50	False	1,750	1,727	30	1,705.37
EX FH-11	1,557.90	True	1,750	1,950	31	1,705.37
EX FH-12	1,552.10	True	1,750	1,862	30	1,705.22
EX J-10	1,552.00	True	1,750	2,006	38	1,705.38
EX J-20	1,553.00	True	1,750	1,945	37	1,705.31
EX J-30	1,553.00	True	1,750	1,915	37	1,705.28
EX J-34	1,553.36	True	1,750	1,874	37	1,705.23
EX J-40	1,552.55	True	1,750	1,862	34	1,705.22
EX J-50	1,552.03	True	1,750	1,862	33	1,705.22
EX J-54	1,555.20	True	1,750	1,948	31	1,705.33
EX J-70	1,542.85	True	1,750	2,471	42	1,706.47
EX J-80	1,542.85	True	1,750	2,147	42	1,705.73
EX J-90	1,547.00	True	1,750	2,090	40	1,705.55
EX J-100	1,550.00	True	1,750	2,024	39	1,705.41
EX J-110	1,556.50	True	1,750	2,006	35	1,705.38
EX J-120	1,556.34	True	1,750	2,006	34	1,705.37
EX J-130	1,558.03	True	1,750	2,002	32	1,705.37
EX J-140	1,560.63	True	1,750	1,951	31	1,705.37
EX J-141	1,563.47	True	1,750	1,904	30	1,705.37

## Fairmont Scottsdale Princess Water Master Plan - WaterCAD

### Fire Flow Node FlexTable: Fire Flow Results Table

#### Active Scenario: MD+FF Guest Room Addition (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	1,750	1,950	31	1,705.37
EX J-160	1,554.89	True	1,750	1,956	33	1,705.37
EX J-170	1,558.93	True	1,750	1,954	32	1,705.37
EX J-190	1,556.35	True	1,750	1,983	30	1,705.37
EX J-194	1,556.60	True	1,750	1,976	31	1,705.37
FH-1	1,552.65	True	1,750	1,862	33	1,705.22
FH-2	1,553.15	True	1,750	1,862	37	1,705.22
FH-3	1,556.46	True	1,750	2,006	31	1,705.38
FH-4	1,556.42	True	1,750	1,972	30	1,705.37
FH-5	1,556.39	True	1,750	1,963	30	1,705.37
FH-6	1,556.95	True	1,750	1,868	30	1,705.37
FH-7	1,557.87	True	1,750	1,820	30	1,705.85
FH-8	1,552.10	True	1,750	1,848	30	1,705.22
Fire (Conf. Center)	1,556.46	True	1,750	2,006	30	1,705.38
Fire (Garage)	1,554.70	True	1,750	1,953	33	1,705.37
Fire (Guest Room Addition)	1,550.00	True	1,750	2,062	39	1,705.46
Fire (Italian)	1,556.30	True	1,750	2,006	34	1,705.37
Fire (Roasterie)	1,559.64	True	1,750	1,836	30	1,705.40
Fire (Villas and Bungalows)	1,553.13	True	1,750	1,943	32	1,705.32
J-10	1,550.14	True	1,750	1,927	35	1,705.30
J-20	1,552.46	True	1,750	1,862	33	1,705.22
J-66	1,556.22	True	1,750	1,981	30	1,705.37
J-70	1,553.30	True	1,750	1,862	37	1,705.22
J-BUNGALOW 1	1,552.30	False	1,752	288	30	1,689.24
J-BUNGALOW 2&3	1,554.15	False	1,755	431	30	1,689.25
J-VILLA 1&2	1,553.50	False	1,760	563	30	1,689.45
J-VILLA 3&4	1,553.15	False	1,775	485	30	1,689.25
J-VILLA 5	1,553.20	False	1,754	518	30	1,689.37
J-VILLA 6	1,553.50	False	1,757	481	30	1,689.27

## Fairmont Scottsdale Princess Water Master Plan - WaterCAD

### FlexTable: Pipe Table

#### Active Scenario: MD+FF Guest Room Addition (Model 1)

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: MD+FF Guest Room Addition (Model 1)

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

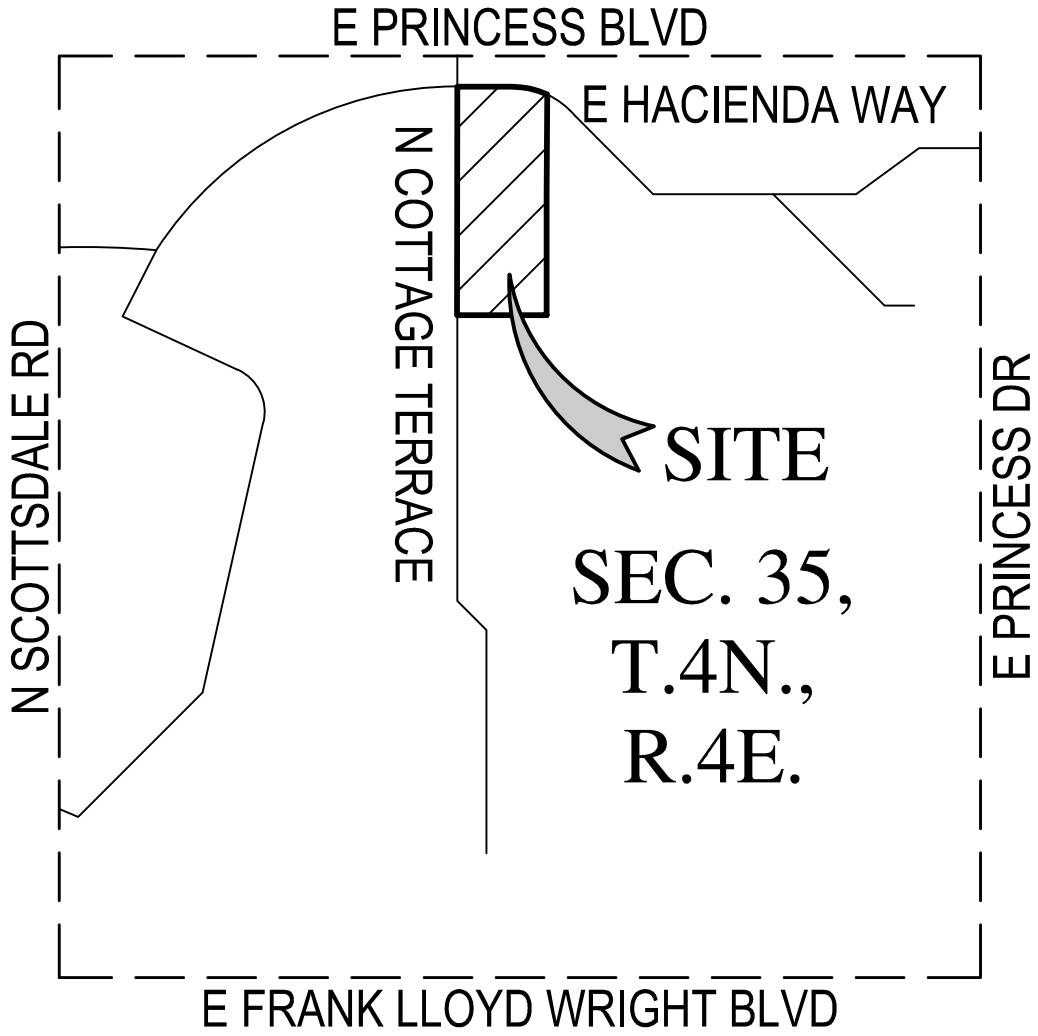
# Fairmont Scottsdale Princess Water Master Plan - WaterCAD

## FlexTable: Pipe Table

### Active Scenario: MD+FF Guest Room Addition (Model 1)

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-EX FH-11	EX J-150	EX FH-11	23	12.0	130.0	0	0.00

**EXHIBIT 1 – VICINITY MAP**



**SITE**  
**SEC. 35,**  
**T.4N.,**  
**R.4E.**

E FRANK LLOYD WRIGHT BLVD

**VICINITY MAP**

N.T.S.

**NOT  
 FOR  
 CONSTRUCTION  
 OR RECORDING**

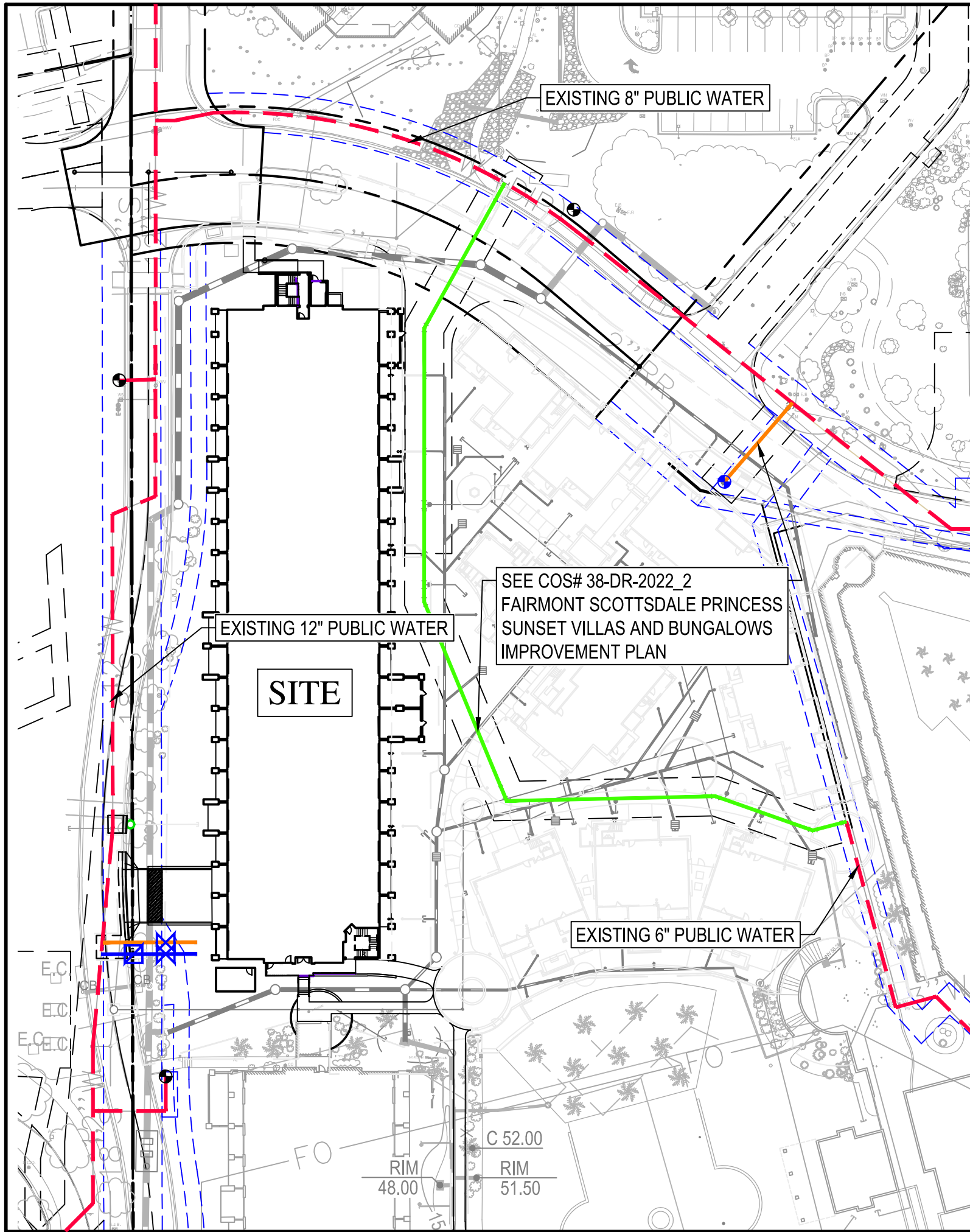


FAIRMONT SCOTTSDALE PRINCESS

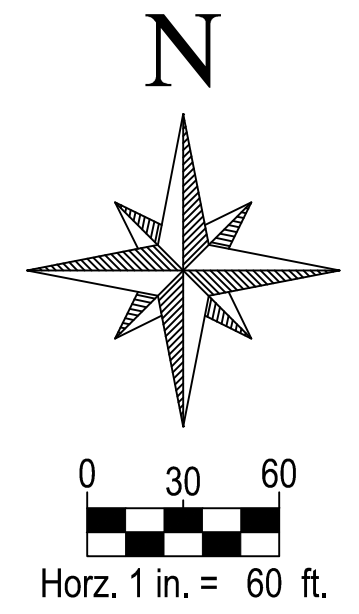
**GUEST ROOM ADDITION  
 VICINITY MAP**

DATE	07/18/2025	SCALE	N.T.S	SHEET	1 OF 1
JOB NO.	215319.50	DESIGN	AJS	CHECK	RS
		DRAWN	AJS	RFI #	










**EXHIBIT 2 – WATER EXHIBIT**



SEE COS# 38-DR-2022\_2  
 FAIRMONT SCOTTSDALE PRINCESS  
 SUNSET VILLAS AND BUNGALOWS  
 IMPROVEMENT PLAN



### LEGEND

-  PROPOSED FIRE HYDRANT
-  EXISTING FIRE HYDRANT
-  PROPOSED BACKFLOW PREVENTER
-  PROPOSED WATER METER
-  EXISTING WATER
-  PROPOSED 8" PUBLIC WATER MAIN
-  PROPOSED 2" DOMESTIC WATER SERVICE
-  PROPOSED 6" WATER LINE
-  PROPERTY BOUNDARY

**NOT  
 FOR  
 CONSTRUCTION  
 OR RECORDING**



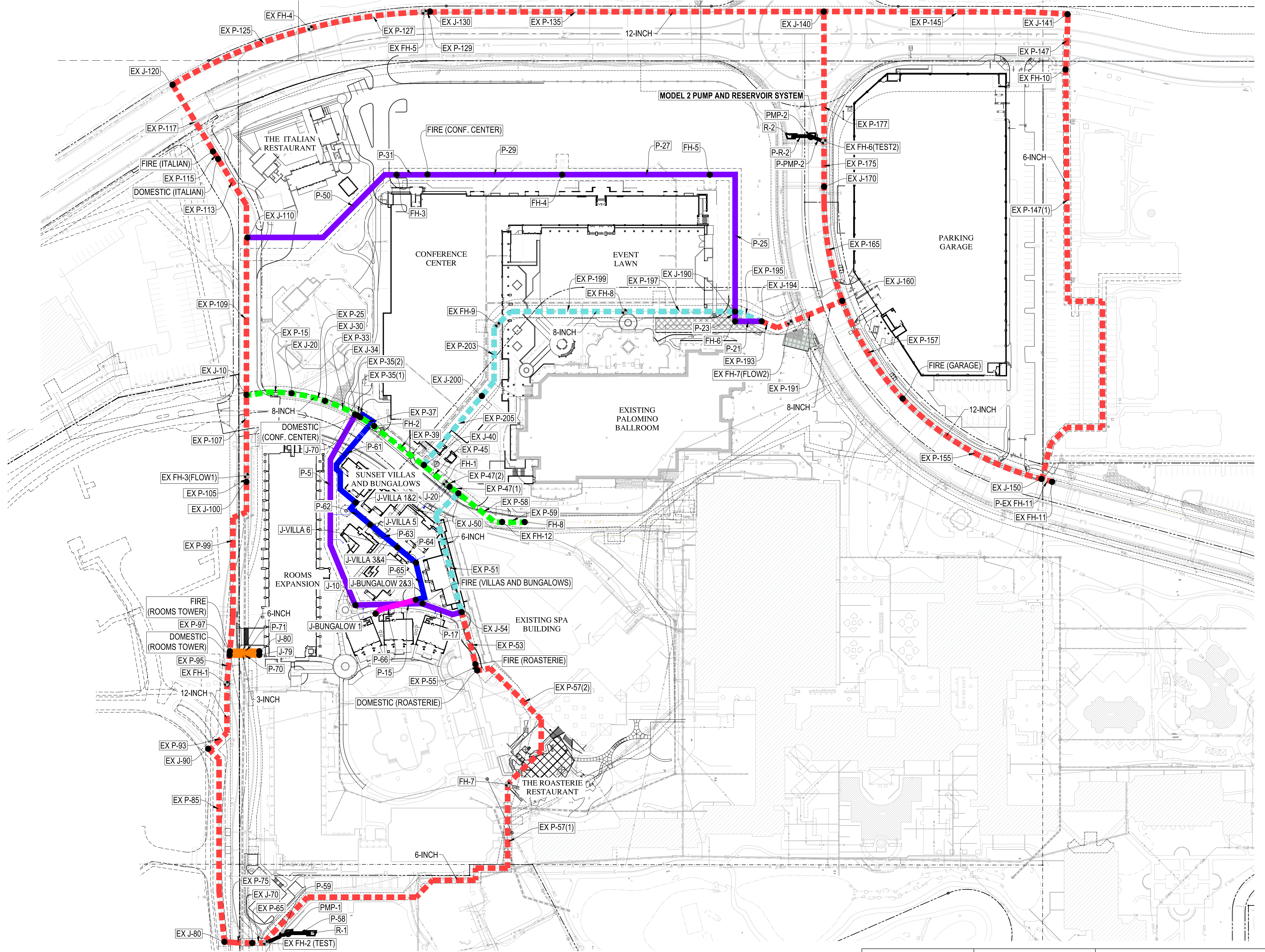
FAIRMONT SCOTTSDALE PRINCESS

GUEST ROOM ADDITION  
 WATER EXHIBIT

DATE	07/18/2025	SCALE	1" = 60'	SHEET	1 OF 1
JOB NO.	215319.50	DESIGN	AJS	DRAWN	AJS

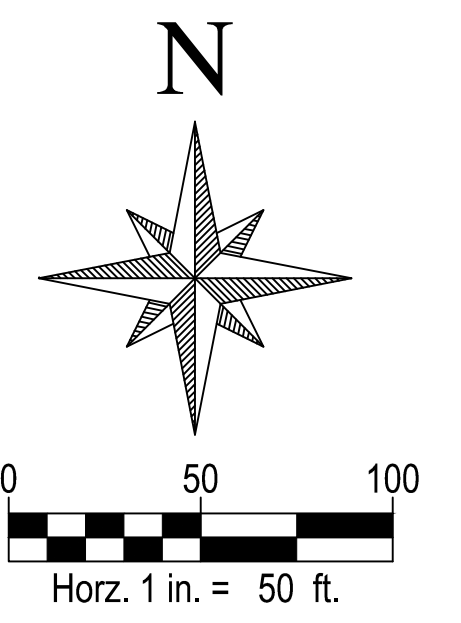
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**EXHIBIT 3 – WATERCAD MODELING MAP**



MODEL 1 PUMP AND RESERVOIR SYSTEM

MODEL 2 PUMP AND RESERVOIR SYSTEM



**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**



**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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