

Case Research

Stipulations for the Zoning Application:

Sundown Plaza

Case Number: 20-ZN-2015

These stipulations are in order to protect the public health, safety, welfare, and the City of Scottsdale.

SITE DESIGN

1. **CONFORMANCE TO CONCEPTUAL SITE PLAN.** Development shall conform with the conceptual site plan submitted by Larson Engineering, Inc. with the city staff date of 11/23/2015, attached as Exhibit A to Exhibit 1. Any proposed significant change to the conceptual site plan, as determined by the Zoning Administrator, shall be subject to additional action and public hearings before the Planning Commission and City Council.

INFRASTRUCTURE AND DEDICATIONS

2. **ACCESS RESTRICTIONS.** Access to the site shall conform to the following restrictions:
 - a. The owner shall remove existing driveway on E. Sahuaro Drive at northern boundary of the site and replace it with vertical curb, gutter and sidewalk to match existing improvements. The owner shall restripe on-street parking and gore area to provide additional parking spaces. The owner shall submit Signing and Pavement Marking plans with final improvement plans for review and approval.
 - b. The owner shall construct a new driveway on N. 71st Place to line up with E. Sahuaro Drive to the west as shown on the site plan with City of Scottsdale staff receipt date of 11/23/2015. The driveway shall be designed and constructed in conformance with type CL-1, City of Scottsdale Standard Detail# 2256. The owner shall install a new 30-inch STOP sign and ALL WAY plaque (R1-1, R1-3P) at this driveway.
 - c. The owner shall modify on-street striping to accommodate the new driveway and install a STOP sign and 12-inch stop bar striping on N. 71st Place.
3. **SIDEWALKS.** On-site sidewalks shall be a minimum width of 6 feet, unless otherwise approved by Transportation Department staff.
4. **REFUSE ENCLOSURE.** The refuse enclosures shall be angled at 30 degrees to the center of adjacent drive aisle.
5. **BICYCLE PARKING.** With the Development Review Board submittal for the site, the owner shall identify bicycle parking locations on the submitted plans.
6. **FIRE HYDRANT RELOCATION.** The owner shall relocate the existing fire hydrant as shown on the site plan submitted with City of Scottsdale staff receipt date of 11/23/15.

Drainage Reports

Abbreviated Water & Sewer Need Reports

Water Study

Wastewater Study

Stormwater Waiver Application

Sundown Plaza

Water Basis of Design Report

10636 N. 71st Way
Scottsdale, AZ 85254

Developer:

Jaylynn Properties
Attn: Mr. Danny Salem
1655 W. Chandler Blvd
Chandler, AZ 85224

Prepared By:

RCC Design Group, LLC
4505 E. Chandler Blvd., Suite 265
Phoenix, AZ 85048
480.598.0270

Accepted For:

City of Scottsdale
Water Resources Department
9379 E. San Salvador
Scottsdale, Arizona

By: RLK/OL
Date: 6/7/17

Date: May 3, 2017



EXPIRES 3/31/20

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A. Introduction

a. Legal Description

Tract A of final Plat of Sundown Plaza of Book 65, Page 40 per Maricopa County Records. Tract A being a portion of Section 22, Township 3 North, Range 4 East, of the Gila and Salt River Base and Meridian, Maricopa County Arizona

b. Existing and Proposed Uses and Site Zoning

The existing site is zoned C-3. The existing use is an office building with associated parking. The proposed building will be placed over existing parking. All water will come from the existing water service to the site.

B. Design Documentation

a. Design Procedures Discussion

To make sure that the existing service can handle the additional needs of the new building, the proposed demand is added to the demand of the existing building and compared to the maximum capacity of the existing meter.

C. Existing Conditions

a. Existing Zoning and Land Use

The existing site is zoned C-3. The existing use is office.

b. Existing Site Conditions

The existing site is composed of the existing building and associated parking.

c. Existing Utilities Discussion

The existing water service is located Along N. 71st Place. There are 2-1.5" water services, each with a 1.5" meter, one for each existing building. The 1.5" service at the north end of the property will need to be relocated out of the proposed footprint.

d. Flow Test Results

The flow test results are included at the back of this report.

D. Proposed Conditions

a. Site Plan

The site plan for the proposed development is included at the back of this report.

b. Proposed Connections to City Water System

There will be no new connection to the City water system. The existing 2" service will accommodate the demands of both the existing northeast building, as well as the proposed building.

E. Computations

a. Water Demands (Figure 6.1-2)

b. Water System Analysis

Project: Sundown Plaza – New Office

Date: May 18, 2017

Prepared by: Julie S. Rayburn, P.E./RCC Design Group, LLC

Project Description: New Office Building

Location: 10636 N. 71st Way, Scottsdale, AZ 85253, A Portion of the NE Corner of Section 22, T3N, R4E of the Gila and Salt River Base and Meridian, Maricopa County, Arizona

Existing Conditions: Currently used as a parking area for existing office building

Zoning: City Zone Code C-3

Domestic Water Demand Calculations:

Average Daily Flow:

$$\text{Office: } 0.6 \text{ gpd / s.f.} = 0.6 \times 4,175 = 2,505 \text{ gpd}$$

$$\text{Total} = 2,505 \text{ gpd}$$

Maximum Daily Flow:

$$2,505 \text{ gpd} \times 4.0 \text{ (peak factor)} = 10,020 \text{ gpd}$$

Water service for this site is provided by the existing 2" service to the site.

F. Summary

- a. Design Standards have been met

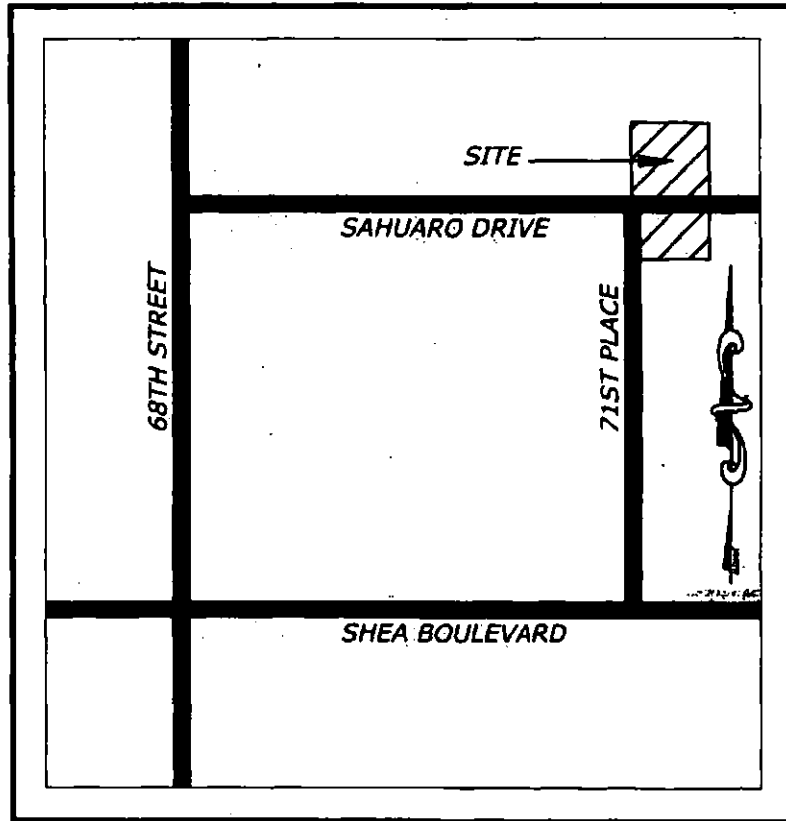
Based on a review from the plumbing engineer, the existing building contains 69 FU, and the new building contains 76 FU for a total of 145 FU or 54 GPM. This can be more than accommodated by the existing water service and meter. The line will be relocated out of the new footprint.

- b. Project Schedule

This project is expected to start in Fall of 2017, and be completed in Fall of 2018.

G. Supporting Maps / Documentation

- a. Vicinity Map
- b. Existing and Proposed Utilities Map
- c. Hydrant Flow test
- d. Proposed Site Plan



VICINITY MAP
NOT TO SCALE

Arizona Flow Testing LLC

HYDRANT FLOW TEST REPORT

Project Name: Sundown Plaza
Project Address: 10636 North 71st Way, Scottsdale, Arizona, 85254
Client Project No.: 16-059-50
Arizona Flow Testing Project No.: 17061
Flow Test Permit No.: C52805
Date and time flow test conducted: March 24, 2017 at 8:00 AM
Data is current and reliable until: September 24, 2017
Conducted by: Floyd Vaughan - Arizona Flow Testing, LLC (480-250-8154)
Witnessed by: Phil Cipolla - City of Scottsdale-Inspector (602-828-0847)

Raw Test Data

Static Pressure: **85.0 PSI**
(Measured in pounds per square inch)

Residual Pressure: **45.0 PSI**
(Measured in pounds per square inch)

Pitot Pressure: **13.0 PSI**
(Measured in pounds per square inch)

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

Coefficient of Diffuser: Big Boy Hose Monster

Flowing GPM: **1,356 GPM**
(Measured in gallons per minute)

GPM @ 20 PSI: **1,763 GPM**

Data with 13 PSI Safety Factor

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

Residual Pressure: **32.0 PSI**
(Measured in pounds per square inch)

Distance between hydrants: Approx. 410 Feet

Main size: Not Provided

Flowing GPM: **1,356 GPM**

GPM @ 20 PSI: **1,563 GPM**

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

Flow Test Location



Sundown Plaza Sewer Basis of Design Report

10636 N. 71st Way
Scottsdale, AZ 85254

Developer:

Jaylynn Properties
Attn: Mr. Danny Salem
1655 W. Chandler Blvd
Chandler, AZ 85224

Prepared By:

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a. Legal Description

Tract A of final Plat of Sundown Plaza of Book 65, Page 40 per Maricopa County Records. Tract A being a portion of Section 22, Township 3 North, Range 4 East, of the Gila and Salt River Base and Meridian, Maricopa County Arizona

b. Existing and Proposed Uses and Site Zoning

The existing site is zoned C-3. The existing use is an office building with associated parking. The proposed building will be placed over existing parking.

B. Design Documentation

a. Design Procedures Discussion

It is believed that the site has a 4" service to it, so a new 6" service will be taken from the existing 8" VCP sewer main in 71st Place, and will serve both the existing building and the new building.

C. Existing Conditions

a. Existing Zoning and Land Use

The existing site is zoned C-3. The existing use is office.

b. Existing Site Conditions

The existing site is composed of the existing building and associated parking.

c. Existing Utilities Discussion

The existing sewer for the building is provided by the 8" VCP line in 71st Place. There are 2 individual sewer stubs, one for each existing building. The stubs are believed to be 4" and so there will need to be a new 6" service to the new building which will also serve the existing building.

D. Proposed Conditions

a. Site Plan

The site plan for the proposed development is included at the back of this report.

b. Proposed Connections to City Sewer System

There will be a new 6" connection to the City Sewer system. The existing stubs that currently serve the existing buildings are 4". The stub that serves the north building will be re-routed out of the proposed footprint, and will connect to the new 6" service that will be provided with this development.

E. Computations

a. Sewer Demands (Figure 7.1-2)

b. Sewer System Analysis

Project: Sundown Plaza – New Office
Date: May 18, 2017
Prepared by: Julie S. Rayburn, P.E./RCC Design Group, LLC
Project Description: New Office Building
Location: 10636 N. 71st Way, Scottsdale, AZ 85253, A Portion of the NE Corner of Section 22, T3N, R4E of the Gila and Salt River Base and Meridian, Maricopa County, Arizona
Existing Conditions: Currently used as a parking lot

Zoning: City Zone Code C-3

Sanitary Sewer Demand Calculations:

Average Daily Flow:

$$\text{Office: } 0.5 \text{ gpd / s.f.} = 0.5 \times 4,175 = 2,088 \text{ gpd}$$

$$\text{Total} = 2,088 \text{ gpd}$$

Maximum Daily Flow:

$$2,088 \text{ gpd} \times 6.0 \text{ (peak factor)} = 12,525 \text{ gpd}$$

Sanitary sewer service for this site is provided by a new 6" service from the main in 71st Place.

F. Summary

- a. Design Standards have been met

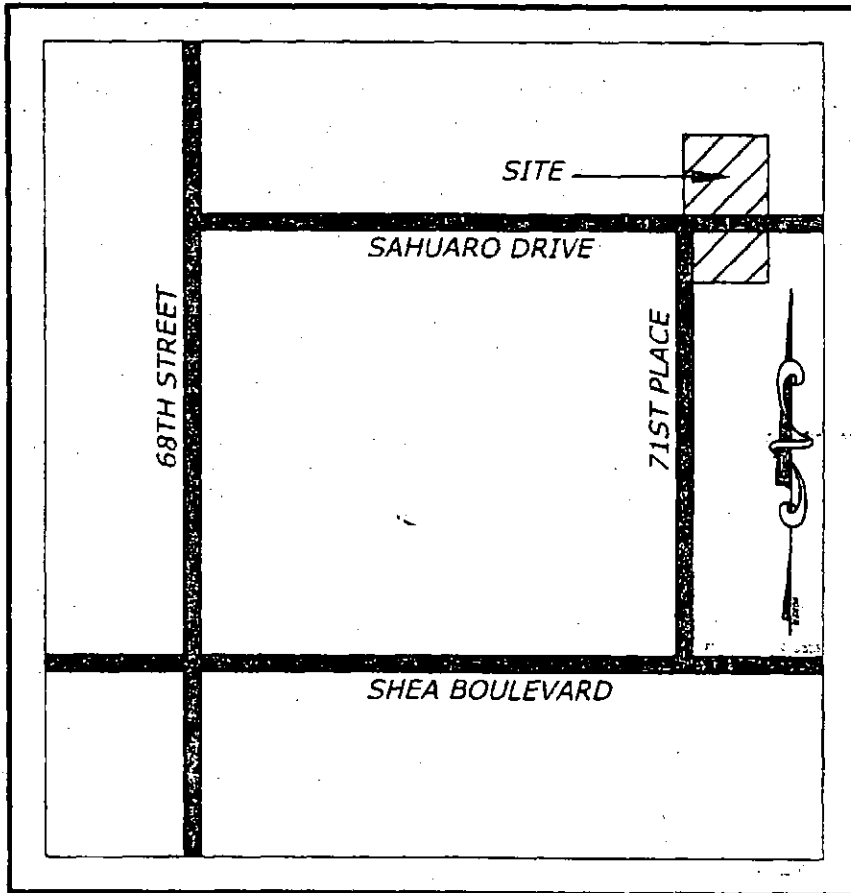
The existing 4" stub is not allowed for commercial development in Scottsdale. With the development of the new building, a new 6" service will be provided from the main in 71st Place. This new service will serve the existing north building and the new building. No changes will be made to the service for the south building.

- b. Project Schedule

The anticipated start of the project is Fall of 2017 and completion is expected in Fall of 2018.

G. Supporting Maps / Documentation

- a. Vicinity Map
- b. Existing and Proposed Utilities Map
- c. Proposed Site Plan



VICINITY MAP
NOT TO SCALE

SAHUARO DR. NORTH

40'
RIGHT-OF-WAY

**PROPOSED
BUILDING**
FN. FLR. ELEV. -
1359.50

EXISTING 8"
VCP SEWER
MAIN

40'
RIGHT-OF-WAY

EXISTING 1.5"
WATER SERVICE

EXISTING 6"
ACP WATER
MAIN

3" WATER SERVICE

WATER SERVICE
FOR NEW BUILDING

SEWER SERVICE
FOR NEW BUILDING

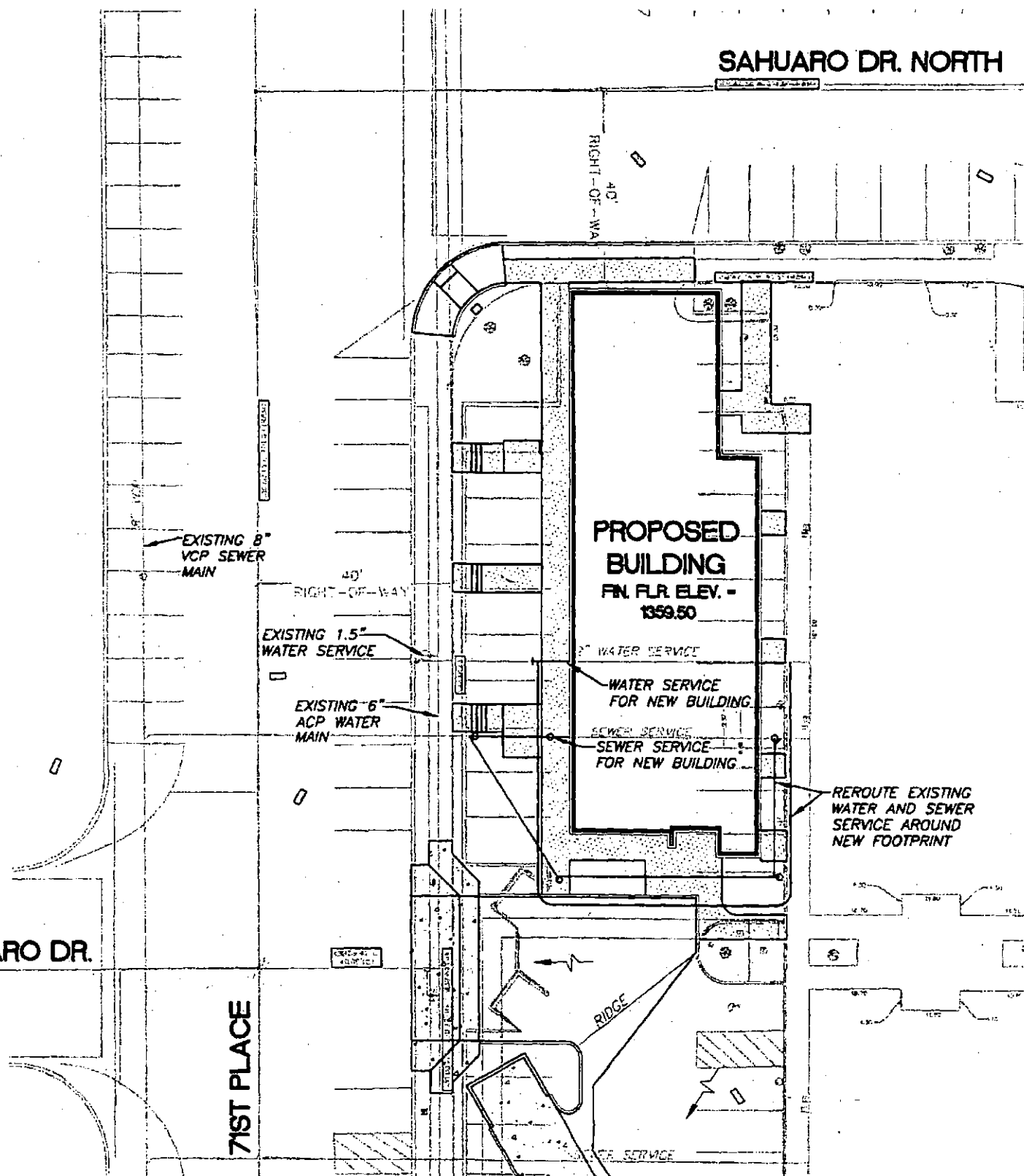
REROUTE EXISTING
WATER AND SEWER
SERVICE AROUND
NEW FOOTPRINT

SAHUARO DR.

71ST PLACE

RIDGE

OFF. SERVICE



Arizona Flow Testing LLC

HYDRANT FLOW TEST REPORT

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Flowing GPM: **1,356 GPM**

GPM @ 20 PSI: **1,563 GPM**

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Flow Test Location

North ↑

