





MEMORANDUM TO CITY COUNCIL

Arabella Spa (PZ21-00009)

Development Review

Appeal of Planning & Zoning Commission Action

December 19, 2022

I. Introduction

The matter presented to the City Council is an appeal of the Sedona Planning & Zoning Commission's (the "Commission") action to deny the development review application for the Arabella Spa, case number PZ21-00009 (the "Application"). This appeal is being submitted on behalf of LaDa Sedona, LP (the "Applicant") for PZ21-00009 and the owner and operator of the Arabella Hotel.

On November 15, 2022, the Commission narrowly voted to deny the Application on a 3-3 vote. As detailed below, the application meets all of the review and approval criteria set forth by the Sedona Land Development Code ("LDC"), and the reasons for denial stated by the three "no" votes on November 15, 2022 all relate to land use and fall outside the scope of a Development Review application. Nonetheless, this Memorandum also provides a detailed explanation and analysis of the land use-related concerns expressed by the three Commissioners who voted to deny and how those issues are already being mitigated and/or addressed. For these reasons, we respectfully request that the City Council grant the applicant's appeal and approve Development Review case number PZ21-00009 for the Arabella Spa.

II. Site Location

The subject site is approximately 5.35 acres located at 95 Sombart Lane in Sedona, Arizona (the "Property") as shown on the Aerial Map at **Tab 1.** The Property is currently zoned Commercial (CO) as shown on the Zoning Map at **Tab 2**. As the Aerial Map indicates, the Property is currently vacant, undeveloped land. The Property backs up to the Coconino National Forest boundary to the east and is adjacent to the Arabella Hotel to the west. To the north of the Property are individually owned condos and the Vista Ridge vacation rentals, and the south of the Property are single-family residences in the Oak Creek Knolls neighborhood.

III. Arabella Spa Development Review Application

In March 2022 the Applicant submitted a Development Review application to the City of Sedona for the development of a new 20,000 square-foot thermotherapy spa on

the Property. The proposed spa consists of spa will consist of four (4) buildings which include a 16,777 square-foot, two-story main building and three (3) smaller one-story pavilions with 773, 1,628, and 1,853 square feet, respectively. See Conceptual Site Plan at **Tab 3**. The spa falls within the "Personal Service, General" land use as defined in Section 9.4 of the LDC, which is permitted by right in the CO zoning district as noted in the Table of Allowed Uses in Section 3.2 of the LDC. See Table of Allowed Uses at **Tab 4**

The Arabella Spa is centered around a Nordic thermotherapy experience – a wellness ritual that utilizes alternating hot and cold temperatures followed by a period of deep relaxation. Uniquely suited to Sedona, the Arabella Spa will be the only one of its kind in the State of Arizona. A connection to the natural elements is an important factor in the Nordic spa experience, and the buildings are designed to blend with the natural environment and integrate into the landscape. See Conceptual Renderings at **Tab 5**.

The formal Development Review application was submitted by the Applicant in March of 2022. Over the course of approximately seven months, the Application was revised and resubmitted twice – each time with significant changes in response to staff and community input.

While the Application was in review with the City of Sedona, the applicant held a neighborhood meeting in September 2022 that was attended by seventeen (17) residents. During the meeting, the development team took detailed notes of the issues expressed by residents and later followed up by phone with each attendee. A summary of the residents' comments and the Applicant's responses are attached at **Tab 6**.

At each stage of the application process, the Applicant has responded to comments and concerns expressed from both City staff and residents in a thorough and meaningful manner. This includes the removal of spa villas, removal of the observation deck amenity, the inclusion of a trailhead shuttle stop, and the addition of trailhead parking. The result is a development proposal that not only complies with all relevant code, ordinance, and review criteria, but is also tailored to meet the needs of surrounding neighbors.

IV. Planning & Zoning Commission Public Hearing – November 15, 2022

As noted above, the Application was reviewed in a public hearing by the Sedona Planning & Zoning Commission on November 15, 2022. Prior to the public hearing, the Community Development Department issued a staff report to the Commission with a thorough analysis of the application and the following recommendation:

"Based on compliance with all ordinance requirements and satisfaction of the Development Review findings of the Land Development Code, staff recommends approval of case number PZ21-00009 (DEV), Arabella Spa, as subject to all applicable ordinance requirements and the attached conditions of approval. See November 15, 2022 Staff Report at **Tab 7**. In the report, staff provides a detailed analysis of the Application's compliance with all relevant sections of the LDC and satisfaction of the Development Review findings in Section 8.3.E.(5) of the LDC. See Land Development Code Checklist on Pages 19-24 and Review Guidelines on Pages 6-10 of the Staff Report at **Tab 7**.

At the November 15, 2022 public hearing, Planning Manager Cari Meyer began the agenda item with staff's analysis of the Application and the basis for the recommendation of approval. Following staff's presentation, Applicant's representative William Erwin of Erwin Architecture provided an overview of the project. The remainder of the time was dedicated to Q&A from the Commission and a period of public comment.

At the conclusion of the hearing, Commissioner George Braam made a motion to approve the Application, "...based on compliance with all ordinance requirements of the LDC Section 8.3 and 8.4 and the satisfaction of the Development Review findings and applicable land development code requirements outlined in the staff report...". The motion was seconded by Commissioner Sarah Wiehl. When the Chair called for a vote, Commissioners Braam, Wiehl, and Zonakis voted to approve the Application. Chairperson Levin, Vice Chair Hosseini, and Commissioner Furman voted to deny. With confirmation from City Attorney Kurt Christianson, the Chair noted that a tie vote results in a denial of the application.

Following the vote, Chairperson Levin noted the following in explaining her vote to deny the Application:

"...although the development land use **is by right allowed** I, for me, it's not right in terms of the 20-year mega drought that Arizona is experiencing..."

"I think because it relies so much, its central thesis is to use water, to replenish water, and to continue to use water, that, um, we should not be supporting proposals that are based on this kind of water usage that goes against everything that the Council believes in." (Emphasis added).

Commissioner Peter Furman echoed the Chair's sentiments, stating:

"...the justification for my "no" is that **although you've complied with the LDC**, I think in many ways I also think that this commission, and I look to our Community Plan where it talks about economic diversity, reduced traffic, environmental stewardship, vision, themes about stewardship, improved traffic flow and economic diversity." (Emphasis added).

"And I think that this project is missed about water use and the environmental stewardship. I'm not sure the parking analysis is really gonna work out and it'll end up burdening the local area somehow."

"So I know that we're allowed to, and we must think about balancing all of these things, the LDC with what the Community Plan says, and the public benefit, to me, doesn't raise the level of compromises that we're making relative to these other elements in the Community Plan."

Finally, Vice Chair Hosseini agreed with both Chairperson Levin and Commissioner Peter Furman by stating that she "couldn't have said it better [herself]" and that the project was "out of sync with where we are at this point."

V. Issues Raised at Planning & Zoning Commission Hearing

As an initial matter, it must be noted that the proposed spa use is permitted by right pursuant to Table 3.1 in the LDC. As noted in the comments above, at the November 15th hearing there were several instances in which Commissioners expressed a disagreement with the proposed land use. A denial predicated upon a disapproval of the proposed land use falls outside the permissible scope of review for a Development Review application. The Applicant has vested property right to develop and operate the Property for any land use permitted by the LDC, within the development parameters and regulations promulgated by the LDC and the Community Plan. The purpose of the Development Review process is to ensure that the relevant regulations and policy documents are being adhered to – not to render a decision on the permissibility or appropriateness of the proposed land use.

In this context, the concerns raised by the Commissioners focused on four primary issues: water usage, parking, traffic, and public benefit. As detailed below, the analysis and conclusions provided in the City's Community Development Department's staff report did not raise any concerns related to these topics and determined that the Application met all relevant engineering and development standards.

1. Water Usage

Water usage was the primary concern expressed by the members of the Commission who voted to deny the Application at the November 15th meeting. The focus on water use as the basis for denial is problematic both subjectively and objectively. The Commissioners who voted to deny the project expressed their belief that both the *purpose* for which the water was being used and the *volume* of water being used were unacceptable. Regarding the subjective component, fundamental disagreements with the proposed use of the Property as a thermotherapy spa are outside the scope of a Development Review.

Regarding the objective component, the overall water usage of the proposed project is not dissimilar from other commercial developments around the City of Sedona. As an initial matter, the Applicant has obtained a "will serve" letter from the Arizona Water Company for the proposed project, attached at **Tab 8**. Among the Commissioners who voted to deny the Application, the focus of their concern was the water demand/usage of the Arabella Spa's thermotherapy pools. However, as illustrated by the Design Water

Demand Calculations table in the Preliminary Water Design Report at **Tab 9**, the pools within the Arabella Spa account for approximately only 30% of the overall average daily water demand. By comparison, the water demand of the proposed 1,951 square-foot restaurant and 1.97 acres of Xeriscape landscaping represent approximately 48% of the total average daily water demand. All average daily demand calculations are based upon land use-based estimates provided by the Arizona Water Company.

As these figures illustrate, commercial land uses found throughout the City of Sedona – restaurants, coffee shops, breweries, etc. – consume considerably more water on average than swimming pools. Pools lose approximately a quarter-inch of water of water per day to evaporation (approximately 600 gallons per week for an average-sized swimming pool, which has to be periodically replenished in conjunction with regular pool maintenance operations. In contrast, food and beverage operations require approximately 1.3 gallons of water per-square-foot, per-day for consumption, dishwashing, food preparation, employee sanitation, and other daily operations. In concrete terms, the 10,963 square-foot restaurant component of the 2008 "Nirvana" mixed-use development approved for the Property would have produced an average daily water demand of 14,252 gallons per day – more than the entire Arabella Spa project.

Moreover, the thermotherapy pools at Arabella Spa are designed by Aqua Design International (ADI), a world-renowned pool and water feature design firm based in Tucson, Arizona. ADI is a leader in cutting-edge technology and pool design techniques, creating the most energy-efficient and water-efficient commercial pool systems in the industry. The water usage estimates provided by the Arizona Water Company do not account for the efficiencies and conversation methods pioneered by ADI.

Consequently, there is a considerable difference between the perception of the Arabella Spa's water usage and what the numbers demonstrate. On the spectrum of permissible commercial uses for the Property, the ADI-designed thermotherapy pools at the Arabella Spa require significantly less water than many other land uses found throughout the City of Sedona. Environmental responsibility and community stewardship are foundational principles in the design of the Arabella Spa.

2. Parking

As part of this Application, the Applicant submitted a Traffic Statement and Parking Analysis to evaluate the trip generation, traffic impact, and parking demand for the proposed spa facility (the "Traffic Statement"). Attached at **Tab 10**. The Traffic Statement, prepared by a registered engineer at Kimley-Horn, analyzes the parking demand for the proposed project and the efficiencies created by the association with the Arabella Hotel and construction of a new inter-city shuttle stop at the Property.

The Traffic Statement notes that pursuant to the LDC, a total of 96 parking spaces are required for the Property. However, because the proposed spa will serve as an amenity to the existing Arabella Hotel and many of the hotel guests will use the spa during their stay, the number of required parking spaces can be reliably reduced based upon a

concept known as "internal capture". Common to mixed-use developments, internal capture reflects the parking and trip generation efficiencies gained by having multiple related land uses on a single site. In this model, because a single vehicle/guest is likely to visit the site for more than one reason, the combined trip generation and parking calculations for each of the individual land uses overestimate the actual number of daily trips and parking demand.

Here, the Institute of Transportation Engineers (ITE) *Trip Generation Handbook* calculates that the Arabella Spa will enjoy a 38% daily internal capture rate as a result of its association with the Arabella Hotel. In other words, approximately 38% of the daily visitors to the Arabella Spa will be guests of the Arabella Hotel – people who are already parked on-site and do not require a separate and additional parking space to visit the Arabella Spa. The ITE *Trip Generation Handbook* is recognized by engineers as the gold standard for calculating trip generation and parking demand.

Factoring in the efficiencies gained by the on-site internal capture, the Traffic Statement recommends a corresponding 38% reduction in the overall parking requirement for the Arabella Spa – from 96 spaces to 60 spaces. Per the Land Development Code Checklist on Pages 19-24 of the Staff Report, the Applicant's proposed 61 spaces plus 3 spaces for trailhead parking was reviewed by the City of Sedona's Planning staff and Engineering staff and found to be in compliance with Section 5.5 of the LDC (Off-Street Parking and Loading). The proposed reduction is based upon traffic engineering models and principles that are accepted by government agencies across the country.

At the November 15th public hearing, several Commissioners expressed a concern that the shared parking arrangement would not survive a "divorce" of the Arabella Spa and the Arabella Hotel – in which the entities no longer shared a common owner. However, as noted in Stipulation 8(r) of the draft Conditions of Approval on Pages 12-14 of the Staff Report, the Applicant is required to provide a parking agreement that meets the requirements of LDC Section 5.5.E(2)c prior to the issuance of a grading or building permit. This agreement must remain in effect for the life of the use, and therefore by necessity will run with the land regardless of who owns the Property. Agreements of this nature ensure that shared parking arrangements survive changes in ownership.

3. Traffic

Concerns about the traffic generated by the Arabella Spa were expressed by both Commissioners and some members of the community. As noted above, the proposed spa benefits from a significant amount of internal capture that an unrelated commercial development would not enjoy. With approximately 38% of the daily visits coming from guests of the Arabella Hotel, the proposed spa will only generate approximately 42 additional trips during the AM peak hour and 65 additional trips during the PM peak hour. Stated differently, the Arabella Spa will generate approximately 1 additional vehicle every 1.43 minutes in AM peak hour and 1 additional vehicle every 55 seconds in PM peak

hour. The expected trip generation for the Arabella Spa is considerably lower than many of the other high-turnover commercial land uses permitted by right on the Property.

Additionally, the Applicant is currently awaiting comments and proposed improvements to SR-179 from the Arizona Department of Transportation (ADOT). As reflected in Stipulation 8(b) of the draft Conditions of Approval on Pages 12-14 of the Staff Report at **Tab 7**, the Applicant is required to provide ADOT comments for traffic impact study and intersection improvements shall be determined after ADOT comments are received. Per the draft stipulation, the intersection improvements shall be included on the final plans for the project prior to the issuance of grading and building permits. This condition ensures that any necessary traffic mitigation is incorporated into the project prior to the issuance of any permit.

4. Public Benefit

At the conclusion of the November 15th hearing, Commissioner Furman and Vice Chair Hosseini both noted that the proposed project was lacking in public benefit. However, pursuant to the Development Review Guidelines in Section 8.3 of the LDC, public benefit is only supposed to be considered in the analysis if the project is "contrary to some of the goals, policies, or strategies in the Sedona Community Plan or other applicable plans." As noted in Section C on Page 7 of the Staff Report, the Community Development Department found the project to be consistent with the Community Plan, noting:

- The property is designated Planned Area (PA) in the Community Plan, which supports the CO zoning designation. This use is consistent with the Commercial designation.
 - The Community Plan lists the following needs and benefits for this PA:
 - Provide pedestrian improvements that will enhance overall pedestrian mobility and potential reduction of highway trips for the area.
 - The proposal extends sidewalks along Sombart Lane and includes a shuttle drop off area for future transit or private shuttle drop off.
 - The proposal maintains trailhead parking and trail access for the Marg's Draw Trail.
- Provide a substantial buffer from the National Forest.
 - The code requires a minimum of a 10 foot setback from National Forest property for commercial development. The proposed buildings maintain a minimum setback of 60 feet from National Forest property and other site elements (parking lots, driveways, trash enclosure) have a minimum setback of approximately 40 feet.

- Retain open space and National Forest access as part of coordinated site planning to address the wildland – urban interface.
 - The project proposes an open space buffer along the shared boundary with the National Forest of a minimum of 40 feet.
 - The proposal maintains trailhead parking and trail access for the Marg's Draw Trail.
- The proposal does not contradict any of the policies within the Community Plan.
- The proposal is in compliance with this criterion.

Staff's analysis clearly identifies the goals and policies satisfied by the Application, specifically the expected public benefits outlined for this Planned Area within the Community Plan. The trailhead parking for Marg's Draw is not only maintained, but upgraded from an unmarked dirt area to three fully paved, striped parking spaces. The amount of trailhead parking provided was deemed sufficient by Community Development based upon a) current usage of the trail, b) the introduction of a shuttle stop to reduce vehicular traffic to the trailhead, and c) the location of this trail access at the midpoint of the Marg's Draw trail, which has large trailhead parking lots at both the northern terminus (Schnebly Hill Road) and southern terminus (Morgan Road) of the trail.

Finally, in addition to the benefits outlined above, the Arabella Spa itself will offer a health and wellness public benefit to the residents of Sedona that does not currently exist in the State of Arizona. There are approximately eight (8) Nordic thermotherapy spas in the United States, none of which are in Arizona. Alternating between hot and cold temperatures followed by a period of deep relaxation, the thermotherapy experience has many health benefits, such as elimination of toxins, stimulation of the immune system and cardiovascular system, and improvement of general well-being. The Arabella Spa will be open to the public, providing the residents of Sedona with access to a new suite of health and wellness activities that were not previously available.

VI. Prior Approvals

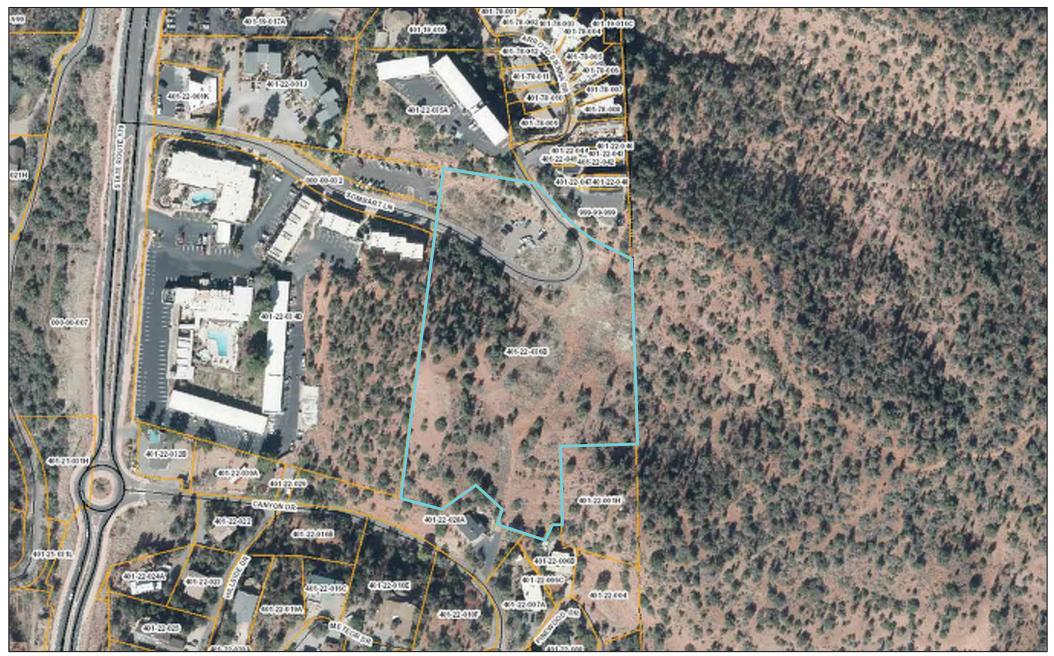
As noted in the Water Usage section, in 2008 a mixed-use project known as "Nirvana" (ZC 2008-1/SUB 2008-1/DEV 2008-1) was approved for the Property through by the City of Sedona. The approved project included a 22,661 square-foot spa, a 10,963 square-foot restaurant, 14,063 square feet of retail space, and 15 residential condominiums, with a combined gross floor area of approximately 88,963 square feet. According to the 2008 approved plat, the total anticipated water demand was approximately 26.72 gallons per minute, or approximately 38,477 gallons per day – almost four times the projected water demand of the proposed Arabella Spa. See Nirvana Approved Plat at **Tab 11.**

The proposed Arabella Spa, by comparison, consists of approximately 21,126 square feet of gross floor area (less than a quarter of the Nirvana development) with a lot coverage of 29% (up to 60% permitted in the CO zoning district). The Arabella Spa's

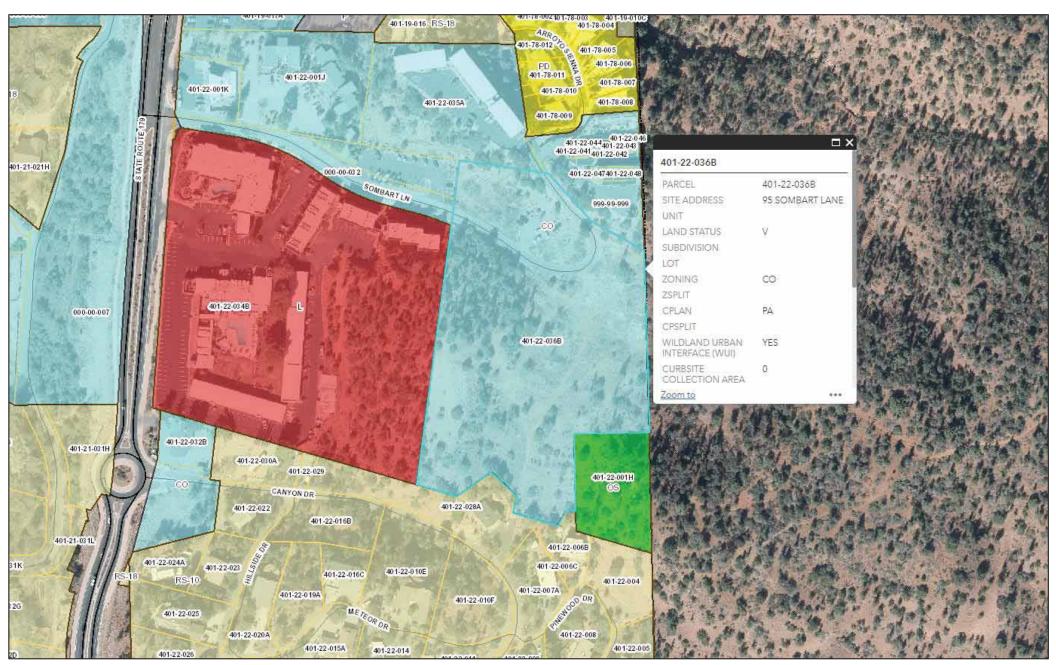
projected 11,395 gallon-per-day average daily water demand is less than a third of what would've been required for the Nirvana mixed-use project. By every metric, the proposed development is more environmentally responsible, more compatible with the surrounding community, and more aligned with the long-term goals and policies of the City of Sedona.

VII. Conclusion

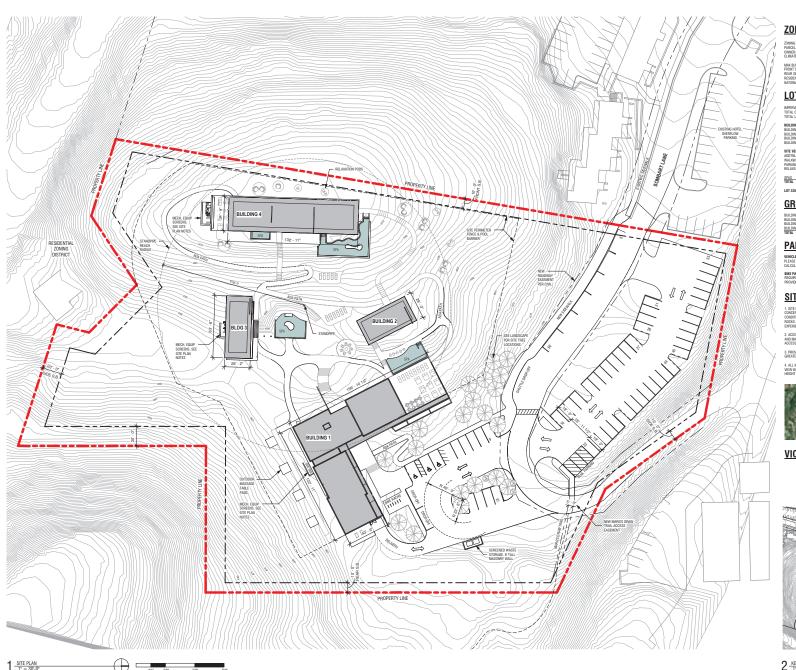
Over the course of several submittals and significant community engagement, the Applicant has gone to great lengths and worked tirelessly with the City of Sedona's Community Development Department staff to design a project that complies with every element of the LDC, meets the Development Review criteria, and addresses the concerns of the neighbors. The result of the Applicant's extensive and earnest efforts is a project that is unique, visually stunning, sensitive to both the environment and surrounding community, and recommended for approval by City's Community Development staff. In light of the foregoing, we respectfully request that the City Council approve the Arabella Spa Development Review Application.











ZONING DATA

ZONING DISTRICT = CO PARCEL: 20122038B OWNER: ARABELLA HOTEL SEDONA CLIMATE ZONE: 5B COCONING COUNT

MAX BUILDING HEIGHT = PER LDC 9
FRONT SETBACK = 10' (EAST)
REAR SETBACK = 20' (WEST
RESIDENTIAL DISTRICT SETBACK = 20' (SOUTH

LOT COVERAGE

IMPERVIOUS COVERAGE MAX ALLOWABLE
TOTAL COVERAGE MAX ALLOWABLE
TOTAL LOT AREA = 231,555 SF / 5.31 ACRES

SITE VEHICLE & PAVING
ADDTINL BUILDING 4 PATIO AREA
WALKWAY HARDSCAPE & PATIOS —1
PARKING AREAS —2
RELAXATION PODS & MASSAGE PADS —1

 SPAS
 = 2.300 SF

 TOTAL
 = 66,706 SF

GROSS AREAS

BUILDING 1 = 16,948 SF BUILDING 2 = 773 SF BUILDING 3 = 1,886 SF BUILDING 4 = 1,540 SF

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PLEASE REFERENCE TRAFFIC STUDY AND PARKING

BIKE PARKING
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SITE PLAN NOTES

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CONCEPTUALLY AND MAY BE RE-ROUTED BASED ON SITE
CONDITIONS. IT IS OUR INTENT TO UTILIZE NATURAL
ROCKS AND FEATURES TO ENHANCE THE GUEST
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ACCESSIBLE PATHWAYS SHALL HAVE MAX SLOPE 1:20
AND MAX CROSS SLOPE 2%. WHERE SLOPE EXCEEDS 1:20
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3. PROVIDE GUARDS AT ALL CHANGES IN ELEVATION

4. ALL MECH EQUIP SHALL BE SCREENED FROM PUBLI VIEW W/ GABION OR MASONRY WALLS TO AT LEAST TO MEIGHT OF THE FOUNDMENT.



VICINITY MAP





PLAN (

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LEMAYMICHAUD ARCHITECTURE DESIGN

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CONTACTS:

OWNER
ARABELLA HOTEL
TREVOR HEWISON
TREVOR@HEWISONHOLDINGS.COM

ARCHITECT OF RECORD.
ERWIN ARCHITECTURE & DEVELOPMENT, LLC.

IAM ERWIN, AIA

@ERWINARCHITECTURE.COM

DESIGN ARCHITECT LEMAYMICHAUD ARCHITECTURE & DESIGN PIERRE MIERSKI

> HE MIERSKING EMATMICHAUD.COM 514.397.8737 EXT 111

ANDREW BAIRD, P.E. ANDREW BAIRD@KIMLEY-HORN.COM (P) 928.457.7121

> INNESEN INC. LL TONNESEN LL GBILL TONNESEN.COM

SHEET ISSUE/REV:

NO.	DESCRIPTION	DATE
	PROGRESS PRINT	11/15/21
	DR SUBMITTAL 2	8/29/22



Owner Proj. Name LADA SEDONA LLC. ARABELLA SPA

SITE PLAN

Project Number	SED21-01
Date	11/30/22

A100

cale As indicated

Table 3.1

Table of Allowed Uses

P = permitted C = conditional use permit required A = accessory Blank Cell = use prohibited

	Parido atal						Non Posidontial) 4 h a					
	Residential			Non-Residential							Othe	er 	Use-Specific						
	RS-70	RS-35	RS-18	RS-10	RS-6	RMH	RM-1	RM-2	RM-3	M T	M2	M3	8	콛	_	₽ F	os	00	Standards
Indoor Recreation Facility								Α	Α	Р	P	P	Р	Р	Р	Р			3.3.C(5)
Outdoor Recreation Facility	CA	CA	CA	CA	A	A	A	A	A		С	С	С	С	С	С	С	P	3.3.C(6)
Food and Beverage Services	5																		
Bar, Tavern, Lounge, or Tasting Room										С	P	P	Р	Р	P			P	3.3.C(7)
Catering Establishment											P	P	Р	Р	Р				
Microbrewery, Distillery, or Winery										С	P	P	P	P	P			P	3.3.C(8)
Mobile Food Vending										P	Р	Р	Р	Р	Р	Р		С	3.3.C(9)
Restaurant										Р	Р	Р	Р	Р	Р			Р	3.3.C(10)
Restaurant with Drive- Through												С	Р	Р	P				3.3.C(11)
Office, Business, and Profes	sior	nal S	ervi	ices															
Administrative, Professional, or Government Office										P	P	P	P	P	P	P		P	3.3.C(12)
Financial Institution										Р	Р	Р	Р	Р	Р				3.3.C(13)
Lodging																			
Lodging, Fewer than Seven Units										P	P	P	P		P			P	3.3.C(14)
Lodging, Medium-Density												P			Р			Р	3.3.C(14)b
Lodging, High-Density															See <u>3.3</u>	201720	201721	201720	→ 3.3.C(14)c
Personal Services																			
Personal Services, General										P	P	P	P	P	P			P	3.3.C(15)
Laundromat, Self-Service							Α	Α	Α	Р	Р	Р	Р	Р	Р				3.3.C(16)
Retail Sales																			



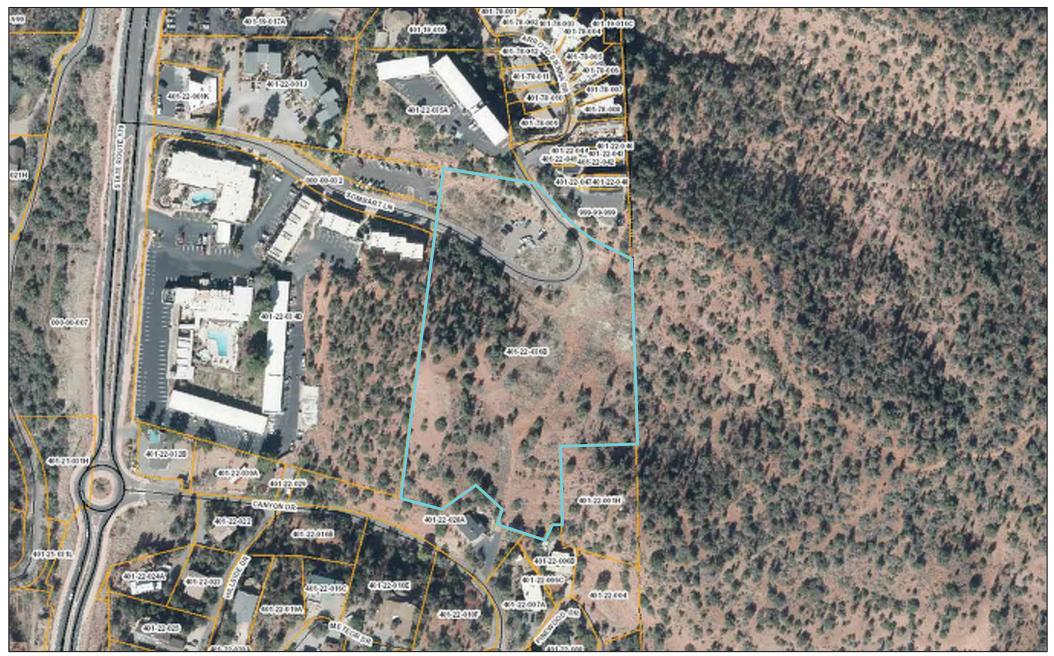
RENDERING - AERIAL VIEW

ARABELLA SPA

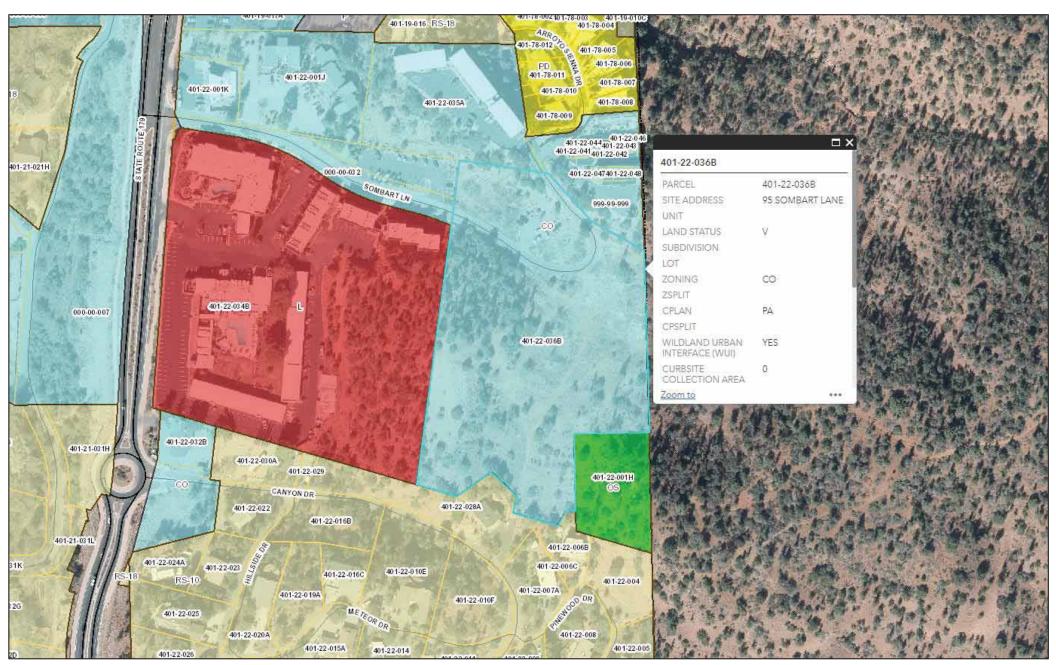
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17 /10 / 2022

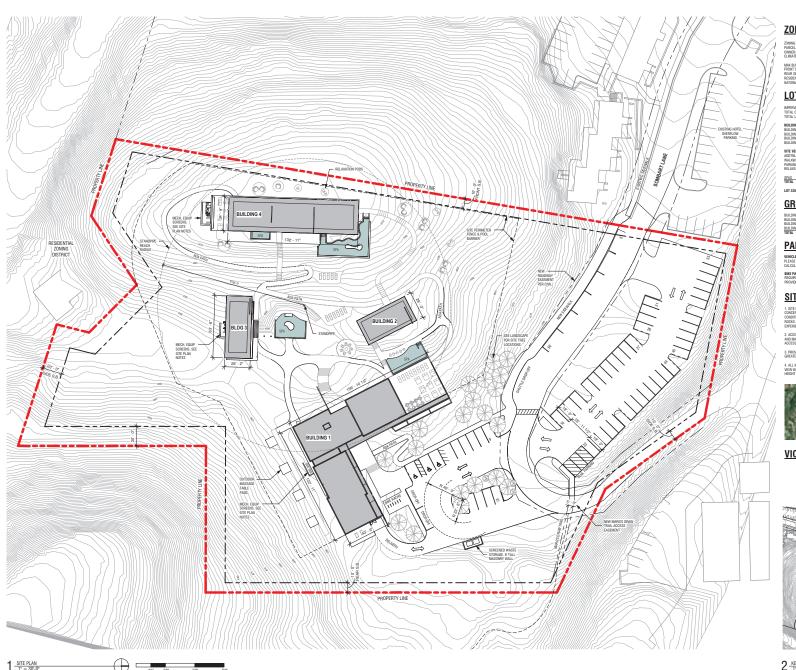
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ANDREW BAIRD, P.E. ANDREW BAIRD@KIMLEY-HORN.COM (P) 928.457.7121

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A100

cale As indicated



RENDERING - AERIAL VIEW

ARABELLA SPA

DESIGN REVIEW REVISION 02 PROJET NO 110720A LEMAYMICHAUD ARCHITECTURE DESIGN

17 /10 / 2022

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RENDERING - BUILDING 1

ARABELLA SPA

DESIGN REVIEW REVISION 02

PROJET NO 110720A LEMAYMICHAUD ARCHITECTURE DESIGN

17 /10 / 2022

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RENDERING - BUILDING 2

ARABELLA SPA

DESIGN REVIEW REVISION 02 PROJET NO 110720A LEMAYMICHAUD ARCHITECTURE DESIGN

17 /10 / 2022



ARABELLA SPA DESIGN REVIEW REVISION 02 **RENDERING - BUILDING 3**

PROJET NO 110720A

LEMAYMICHAUD ARCHITECTURE DESIGN

17 /10 / 2022



RENDERING - BUILDING 4

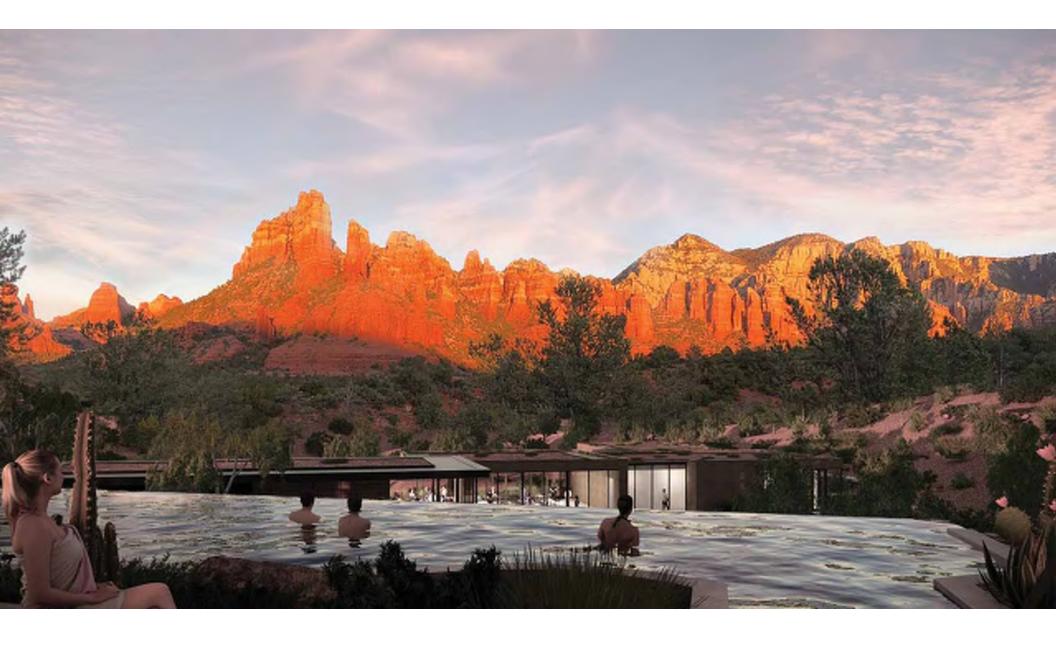
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DESIGN REVIEW REVISION 02 PROJET NO 110720A LEMAYMICHAUD ARCHITECTURE DESIGN

17 /10 / 2022

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RENDERING - VIEW FROM BUILDING 4

ARABELLA SPA

DESIGN REVIEW REVISION 02 PROJET NO 110720A LEMAYMICHAUD ARCHITECTURE DESIGN

17 /10 / 2022

Neighbor Concerns and Solutions:

The list below contains concerns and discussion points that were reviewed in the neighborhood meeting on 9/2/21. Neighbor feedback has been incorporated and the owner has made attempts to address these issues.

Location of Villas:

1. Neighbors were concerned about the location of the villas. Villas have been removed from the project.

Location of Building 4:

2. Neighbors were concerned about visibility of Building 4 from homes to the south. Building 4 will be a single-story pavilion less than maximum allowable height. It will be screened with existing natural vegetation and new additional vegetation. In addition, a low privacy wall is proposed along the south side that will screen direct views. Also, the main habitable area/pool has been intentionally sited towards the north of the hilltop to create separation from neighborhood and orient views away from residences.

Vegetation for Privacy

3. It is the desire of the developer to maintain natural vegetation and supplement where possible to create privacy and blend with the environment.

Building Materials

4. Color of the buildings will be natural/inspired by the environment. Buildings will have ground face exposed aggregate masonry walls with a natural color that relates to the Sedona landscape. The smaller buildings will also be earth toned. In addition, site harvested rock ballast will cover roof surfaces in an attempt to further allow the structures to blend into the landscape. Natural rocks will be used in lieu of retaining walls when possible, along site pathways.

Noise Levels

5. Neighbors had some concerns about noise levels. The spa will be a strictly quite zone. The goal is to create a zen environment. No cell phones and no loud music/parties will be permitted.

Light Levels:

6. Project will meet all city codes and ordinances related to light levels and dark sky requirements.

Natural Vegetation and Wildlife

- 7. The project has been purposely designed to be low impact and small footprint. Previous proposals for project on the property have covered almost the entire site with buildings and hardscape. As demonstrated by the site plan, it is the intent of this project to allow a high percentage of natural vegetation to remain. The project is providing roughly half of the maximum allowable lot coverage.
- 8. The project proposes low water use natural vegetation as much as possible to reduce irrigation demands.

Traffic:

9. The owner will provide parking as required by Sedona zoning code and any traffic analysis that is required. Any commercial project constructed here has the potential to generate additional traffic. The owner would like to share parking with the Arabella hotel to reduce hardscape and paving.

Trailhead Access:

10. The owner shall add a shuttle drop-off as a means for reducing traffic and promoting access to the trailhead.

AGENDA

City of Sedona Planning and Zoning Commission Meeting

4:30 PM

Tuesday, November 15, 2022

NOTICE:

Pursuant to A.R.S. 38-431.02 notice is hereby given to the members of the Planning and Zoning Commission and to the general public that the Planning and Zoning Commission will hold a meeting open to the public on Tuesday, November 15, 2022, at 4:30 pm in the City Hall Council Chambers.

NOTES:

- Meeting room is wheelchair accessible. American Disabilities Act (ADA) accommodations are available upon request. Please phone 928-282-3113 at least 24 hours in advance.
- Planning & Zoning Commission Meeting Agenda Packets are available on the City's website at: www.SedonaAZ.gov

GUIDELINES FOR PUBLIC COMMENT

PURPOSE:

- To allow the public to provide input to the Planning and Zoning Commission on a particular subject scheduled on the agenda.
- Please note that this is not a question/answer session.

PROCEDURES:

- It is strongly encouraged that public input on the agenda items be submitted by sending an email to cnorlock@SedonaAZ.gov in advance of the 4:30 Call to Order.
- Fill out a "Comment Card" and deliver it to the Recording Secretary.
- When recognized, use the podium/microphone.
- State your Name and City of Residence
- · Limit comments to 3 MINUTES.
- Submit written comments to the Recording Secretary.

- 1. CALL TO ORDER, PLEDGE OF ALLEGIENCE, ROLL CALL
- ANNOUNCEMENTS & SUMMARY OF CURRENT EVENTS BY COMMISSIONERS & STAFF
- 3. APPROVAL OF THE FOLLOWING MINUTES:
 - a. October 18, 2022 (R)
 - b. October 18, 2022 (SV)
- 4. PUBLIC FORUM: (This is the time for the public to comment on matters not listed on the agenda. The Commission may not discuss items that are not specifically identified on the agenda. Pursuant to A.R.S. § 38-431.01(H), action taken as a result of public comment will be limited to directing staff to study the matter, responding to criticism, or scheduling the matter for further consideration and decision at a later date.)
- Update/discussion regarding the Community Plan Update.
- 6. CONSIDERATION OF THE FOLLOWING ITEMS THROUGH PUBLIC HEARING PROCEDURES:
 - a. Public hearing/discussion/possible action regarding a request for a Development Review for the construction of an approximately 20,000 square foot spa facility in four buildings and associated site improvements at 95 Sombart Lane. The property is zoned Commercial (CO), is approximately 5.35 acres and is located northeast of the intersection of State Route 179 and Canyon Dr. Case Number: PZ21-00009 (DEV) Applicant: Erwin Architecture (William Erwin)
- 7. FUTURE MEETING DATES AND AGENDA ITEMS
 - a. Tuesday, December 6, 2022
 - b. Tuesday, December 20, 2022
- 8. EXECUTIVE SESSION

If an Executive Session is necessary, it will be held in the Vultee Conference Room at 106 Roadrunner Drive. Upon a public majority vote of the members constituting a quorum, the Planning and Zoning Commission may hold an Executive Session that is not open to the public for the following purposes:

- a. To consult with legal counsel for advice on matters listed on this agenda per A.R.S. § 38-431.03(A)(3).
- b. Return to open session. Discussion/possible action on executive session items.
- ADJOURNMENT

Physical Posting: November 10, 2022 By: DJ

Planning & Zoning Commission Meeting Agenda Packets are available on the City's website at: www.SedonaAZ.gov or in the Community Development Office, 102 Roadrunner Drive approximately one week in advance of the meeting.

Note that members of the City Council and other City Commissions and Committees may attend the Planning and Zoning Commission meeting. While this is not an official City Council meeting, because of the potential that four or more Council members may be present at one time, public notice is therefore given for this meeting and/or event.

Meeting Date: November 15, 2022

Hearing Body: Planning and Zoning Commission

Project Summary: Construction of an approximately 20,000 square foot spa facility (Arabella

Spa)

Action Requested: Approval of Development Review application

Staff Recommendation: Approval, with conditions, of Development Review application

Location: 95 Sombart Lane

Parcel Numbers: 401-22-036B

Owner: Pine Realty LLC

Applicant: Erwin Architectures (William Erwin)

Site Size: \pm 5.35 acres

Community Plan Designation:

Planned Area (Sombart Lane Planned Area)

Zoning: Commercial (CO)

Current Land Use: Vacant

Surrounding Properties: Area Zoning Area Land Uses

North: CO Apartments and Condominiums

East: NF National Forest

South: OS, RS-10 Vacant, Oak Creek Knolls Subdivision

West: L Arabella Hotel

Report Prepared By: Cari Meyer, Planning Manager

Attach	nments:	Page
1.	Aerial View & Vicinity Map	15
2.	Application Materials ¹	
	a. Letter of Intent, Small Documents, Citizen Participation Report	17
	b. Project Plans	18
3.	Land Development Code Checklist	
4.	Public Comments	25

Due to file size constraints, Engineering Reports, including the Grading and Drainage Plan and Report, Water Design, Sewer Report, and Traffic Impact Statement are not included as attachments but are available for review online at: https://www.sedonaaz.gov/your-government/departments/community-development/projects-and-proposals/arabella-spa

PROJECT DESCRIPTION

The applicant is seeking review of a Conceptual Development Review with the expressed intent of developing an approximately 20,000 square foot spa complex in four (4) separate buildings.

Development of this site is permitted in accordance with the Land Development Code (LDC) requirements, including <u>Article 2 (Zoning Districts)</u>, <u>Article 3 (Use Regulations)</u>, and <u>Article 5 (Development Standards)</u>. As the proposed use of the space is categorized as "Personal Services, General" which is a permitted use in the Commercial (CO) zoning district, only a development review is required for the project.

BACKGROUND AND PROPERTY INFORMATION

Site Characteristics

- The property is located east of State Route 179 behind the existing Arabella Hotel.
- The property to the east of the project site is National Forest property and the trailhead for the Marg's Draw trailhead is located on this property.
- There are no floodplains that impact the site.
- The project site is a single parcel of approximately 5.35 acres.
- The property is accessed via Sombart Lane, which connects to State Route 179 at an uncontrolled intersection approximately 700 feet north of the Canyon Drive roundabout.
- The property is currently vacant and has been the subject of various development proposals, none of which have come to fruition.
- The property is not part of a recorded subdivision.
- The existing vegetation consists of a mixture of mature trees and shrubs.

Zoning and Community Plan Designations

The site is zoned CO (Commercial). The purpose of the CO zone is stated as:

... to accommodate general retail and other commercial and service uses, and incidental or accessory uses, where access requires good vehicular circulation. Land uses are characterized by frequent visits of customers and clients. The CO district is intended to provide attractive commercial development with adequate access to arterial streets and with efficient internal circulation and parking and that is compatible with surrounding residential areas.

LDC Section 2.14.A

The proposed use of a spa is categorized as "Personal Services, General", which is listed in LDC Section 3.2.E, Table 3.1 (Table of Allowed Uses) as a permitted use in the CO zone.

The property is designated as PA (Planned Area) in the Community Plan and is part of the Sombart Lane Planned Area. Planned Areas (PA) were established in the 2002 Community Plan and brought forward to the current Community Plan to address needs and provide benefits for certain areas, including land use transitions or buffers between residential areas, commercial uses, and highway corridors. The Community Plan lists the following needs and benefits for this PA:

 Provide pedestrian improvements that will enhance overall pedestrian mobility and potential reduction of highway trips for the area.

- Provide a substantial buffer from the National Forest.
- Retain open space and National Forest access as part of coordinated site planning to address the wildland – urban interface.

While the strict application of the needs and benefits listed in the Community Plan is limited for projects not requesting a zone change, the general principles of the Community Plan can be applied, and the applicant is encouraged to adhere to these principles to the greatest extent possible.

Previous Applications

This property has been the subject of other development applications in the past. Previous applications include the following:

- ZC 2003-03, DEV 2003-05 and ZC 2003-04, SUB 2003-04, DEV 2003-06
 - o 80-unit apartment project, 2nd application would have converted apartments to timeshares
 - o Application withdrawn prior to public hearings
- ZC 2008-01, SUB 2008-01, DEV 2008-01 Nirvana Mixed Use Project
 - o Proposed as either a lodging/heath spa/restaurant or residential/commercial mixed-use project.
 - Planning and Zoning Commission approved Development Review and recommended approval of a preliminary plat for 15 residential condominiums and 51,000 square feet commercial retail
 - o City Council approved the preliminary plat for this project.
 - o Project dropped by applicant prior to approval of Final Plat.

Current Application

The current application is a Development Review to allow for construction of an an approximately 20,000 square foot spa complex in 4 buildings.

This application went through a Conceptual Review in 2021. The public hearing for the Conceptual Review Public Hearing was held by the Planning and Zoning Commission on September 7, 2021. The applicant submitted documents for Comprehensive Review in May 2022 and has been working with Staff to address outstanding comments and amend the plans to comply with LDC requirements.

PUBLIC INPUT

- The applicant completed a Citizen Participation Plan. A copy of the Citizen Participation Report is included (Attachment 2.a)
- Project documents submitted by the applicant were placed on the <u>Projects and Proposals</u> page of the Community Development Department website.
- Property owners within 300 feet of the subject properties were notified of the Public Hearing.
- The property was posted with a Notice of Public Hearing and a notice was published in the Red Rock News on October 28, 2022.
- All notices contain contact information or a way to submit comments. While a number of comments
 were received during the conceptual review phase of this project (and are included as Attachment 4),
 Staff has not received any additional written comments during the comprehensive review phase.

REVIEW AGENCY COMMENTS AND CONCERNS

Development plans are routed to all internal and external review agencies. The comments received were provided to the applicant, and the applicant has submitted revised plans addressing these comments. Any

comments not addressed by resubmitted plans were regarding future requirements and are included as recommended conditions of approval.

Comments were received from the following agencies:

- City of Sedona Community Development
- City of Sedona Public Works
- City of Sedona Sustainability Program

DEVELOPMENT PROPOSAL AND EVALUATION

The applicant is applying for a development review to allow for the construction of an approximately 20,000 square foot spa complex in 4 buildings.

A detailed description of the proposal was submitted by the applicant and is included in Attachment 2.a.

Phasing

• The project is proposed to be developed in single phase.

Land Development Code (LDC)

A comprehensive evaluation for compliance with all applicable sections of the Land Development Code was conducted and is outlined in Attachment 3 (Land Development Code Checklist).

LDC Section 2.14: CO: Commercial

• The project complies with all other standards established by this section, including setbacks, height, and lot coverate.

LDC Article 3: Use Regulations

- Spas fall under the definitions of "Personal Services, General", which are permitted in the CO zone.
- No additional use-specific standards apply to this development.

LDC Section 5.3: Grading and Drainage

- A preliminary grading and drainage report and plan has been submitted and reviewed by the Public Works Department. A Final Grading and Drainage report and plan will be required to be submitted with building permit applications.
- The site is not impacted by any floodplains.

LDC Section 5.4: Access, Connectivity, and Circulation

- A Traffic Impact Study has been submitted by the applicant and reviewed by the Public Works Department.
 - o The TIS indicates that the level of service at the Sombart Lane/State Route 179 intersection will decrease from a C to a D with the added traffic from this project.
 - o ADOT has not completed their review of the TIS, so potential improvements to the intersection have not been determined.
 - o The recommended conditions of approval require this review to be complete and required intersection improvements determined prior to the issuance of building permits.
- Primary vehicular access to the site is from Sombart Lane, which connects to State Route 179 west of the project site.
- Sidewalks will be installed along Sombart Lane.

LDC Section 5.5: Off-Street Parking and Loading

- 96 parking spaces are required, 64 parking spaces are provided (61 for the spa and 3 for the trailhead).
 - o The applicant has provided a parking analysis, prepared by a registered engineer, demonstrating that this parking reduction is warranted based on the spa's association with the hotel.
 - o While the two uses are associated with each other, as they are on different properties, the applicant will be required to enter into a parking agreement, meeting the requirements of LDC Section 5.5.E(2)c prior to issuance of building permits.

LDC Section 5.6: Landscaping, Buffering, and Screening

- A landscaping plan that meets all LDC requirements has been provided as part of the project documents.
- Rooftop equipment is screened.
- All fences and walls meet LDC requirements.

LDC Section 5.7: Site and Building Design

The submitted plans meet all LDC requirements for site and building design.

LDC Section 5.8: Outdoor Lighting

- A total lighting output of 371,700 lumens is permitted; a total of 117,064 lumens are proposed.
- All fixtures are fully shielded and meet lighting color requirements.

LDC Section 5.9: Public Art

• Public art is required and the applicant will need to pay the in lieu fee or have a public art plan reviewed, approved, and installed prior to issuance of a Certificate of Occupancy.

LDC Section Article 6: Signs

- A Master Sign Plan has been submitted.
- The sign plan includes 3 signs (a wall sign, a monument sign, and a directional sign). All signs comply with LDC requirements with the exception of the height of the directional sign.
 - o The LDC allows a directional sign to be 3 feet tall. The directional sign is shown at 4 feet tall.
 - o Deviations from the sign code may be approved through a master sign plan.
 - As all other signs are well below the height and size allowances and the proposed height for the directional sign matches the height and is designed in the same style as the monument sign, Staff is supportive of this sign plan, as it will improve the aesthetics of the development, will aid in traffic circulation on the site, and does not increase the total sign area permitted.

Wastewater Disposal

• The property will connect to the City's wastewater system.

REVIEW GUIDELINES

The following is requested from the Planning and Zoning Commission at this time:

DEVELOPMENT REVIEW Review of Proposal – Final Action

All development applications are reviewed under LDC Article 8 (Administration and Procedures).

<u>LDC Section 8.3</u> contains procedures and rules applicable to all development applications while the following sections contain procedures and rules that apply to specific development applications. <u>LDC Section 8.3.E(5)</u>

contains the approval criteria applicable to all development, subdivision, and rezoning applications. These criteria are as follows:

A. Generally

Unless otherwise specified in this Code, City review and decision-making bodies shall review all development, subdivision and rezoning applications submitted pursuant to this article for compliance with the general review criteria stated below.

Staff Evaluation: Staff and Reviewing Agencies has evaluated the submitted application materials. As conditioned, the proposal complies with all applicable review criteria. The proposal is in compliance with this criterion.

B. Prior Approvals

The proposed development shall be consistent with the terms and conditions of any prior land use approval, plan, or plat approval that is in effect and not proposed to be changed. This includes an approved phasing plan for development and installation of public improvements and amenities.

Staff Evaluation: No prior land use approvals impact the review of this application. The proposal is in compliance with this criterion.

C. Consistency with Sedona Community Plan and Other Applicable Plans

Except for proposed subdivisions, the proposed development shall be consistent with and conform to the Sedona Community Plan, Community Focus Area plans, and any other applicable plans. The decision-making authority:

- 1. Shall weigh competing plan goals, policies, and strategies; and
- 2. May approve an application that provides a public benefit even if the development is contrary to some of the goals, policies, or strategies in the Sedona Community Plan or other applicable plans.

Staff Evaluation: Staff evaluated the proposal for compliance with the Community Plan and it was found to be consistent:

- The property is designated Planned Area (PA) in the Community Plan, which supports the CO zoning designation. This use is consistent with the Commercial designation.
- o The Community Plan lists the following needs and benefits for this PA:
 - Provide pedestrian improvements that will enhance overall pedestrian mobility and potential reduction of highway trips for the area.
 - The proposal extends sidewalks along Sombart Lane and includes a shuttle drop off area for future transit or private shuttle drop off.
 - The proposal maintains trailhead parking and trail access for the Marg's Draw Trail.
 - Provide a substantial buffer from the National Forest.
 - The code requires a minimum of a 10 foot setback from National Forest property for commercial development. The proposed buildings maintain a minimum setback of 60 feet from National Forest property and other site elements (parking lots, driveways, trash enclosure) have a minimum setback of approximately 40 feet.
 - Retain open space and National Forest access as part of coordinated site planning to address the wildland – urban interface.

- The project proposes a open space buffer along the shared boundary with the National Forest of a minimum of 40 feet.
- The proposal maintains trailhead parking and trail access for the Marg's Draw Trail.
- o The proposal does not contradict any of the policies within the Community Plan.

The proposal is in compliance with this criterion.

D. Compliance with This Code and Other Applicable Regulations

The proposed development shall be consistent with the purpose statements of this Code and comply with all applicable standards in this Code and all other applicable regulations, requirements and plans, unless the standard is lawfully modified or varied. Compliance with these standards is applied at the level of detail required for the subject submittal.

Staff Evaluation: As outlined in the Land Development Code Checklist, the proposal is compliant with all applicable standards of the Land Development Code, including the allowed uses for the CO zoning district, CO district standards, and site and building design standards.

The sign plan requests a height increase for the directional sign from the permitted 3 feet to 4 feet. This height increase is permitted through approval of a master sign plan by the Planning and Zoning Commission. As all other signs are well below the height and size allowances and the proposed height for the directional sign matches the height and is designed in the same style as the monument sign, Staff is supportive of this sign plan, as it will improve the aesthetics of the development, will aid in traffic circulation on the site, and does not increase the total sign area permitted.

The proposal is in compliance with this criterion.

E. Minimizes Impacts on Adjoining Property Owners

The proposed development shall not cause significant adverse impacts on surrounding properties. The applicant shall make a good-faith effort to address concerns of the adjoining property owners in the immediate neighborhood as defined in the Citizen Participation Plan for the specific development project, if such a plan is required.

Staff Evaluation: The applicant completed their required Citizen Participation Plan, which is included in <u>Attachment 2.a</u>. Staff completed the required noticing. While comments were received during the conceptual review phase and are included as <u>Attachment 4</u>, no additional written comments have been received during the comprehensive review phase. The proposal is in compliance with this criterion.

F. Consistent with Intergovernmental Agreements

The proposed development shall be consistent with any adopted intergovernmental agreements, and comply with the terms and conditions of any intergovernmental agreements incorporated by reference into this Code.

Staff Evaluation: There are no adopted intergovernmental agreements in place that are affected by the proposed development. This criterion does not apply to this request.

G. Minimizes Adverse Environmental Impacts

The proposed development shall be designed to minimize negative environmental impacts, and shall not cause significant adverse impacts on the natural environment. Examples of the natural environment include water, air, noise, stormwater management, wildlife habitat, soils, and native vegetation.

Staff Evaluation: No negative environmental impacts are anticipated because of the proposed development. The site is an infill site surrounded by existing development, and provides a significant buffer to the National Forest property to the east. The site is proposing building coverage of approximately 8% (60% permitted) and total coverage of approximately 29% (80% permitted), allowing large portions of the site to remain in their natural conditions. The site is served by existing streets and utilities. The drainage for the site has been designed in accordance with the City's requirements.

H. Minimizes Adverse Fiscal Impacts

The proposed development shall not result in significant adverse fiscal impacts on the City.

Staff Evaluation: No adverse fiscal impacts on the City are anticipated. The proposal is in compliance with this criterion.

I. Compliance with Utility, Service, and Improvement Standards

As applicable, the proposed development shall comply with federal, state, county, service district, City and other regulatory authority standards, and design/construction specifications for roads, access, drainage, water, sewer, schools, emergency/fire protection, and similar standards.

Staff Evaluation: The application materials were provided to review agencies for an opportunity to review. As conditioned, the proposed development complies with all applicable regulatory authority standards included within this criterion.

J. Provides Adequate Road Systems

Adequate road capacity must exist to serve the uses permitted under the proposed development, and the proposed uses shall be designed to ensure safe ingress and egress onto the site and safe road conditions around the site, including adequate access onto the site for fire, public safety, and EMS services. The proposed development shall also provide appropriate traffic improvements based on traffic impacts.

Staff Evaluation: No new roads are required to serve the site. The Sedona Fire District and Police Department have reviewed the plans and have raised no concerns from an emergency access perspective. The City's Public Works Department has reviewed the traffic impact statement and will work with ADOT and the applicant to determine any appropriate mitigation measures needed at the Sombart Lane/State Route 179 intersection. The proposal is in compliance with this criterion.

K. Provides Adequate Public Services and Facilities

Adequate public service and facility capacity must exist to accommodate uses permitted under the proposed development at the time the needs or demands arise, while maintaining adequate levels of service to existing development. Public services and facilities include, but are not limited to, roads,

potable water, sewer, schools, public safety, fire protection, libraries, and vehicle/pedestrian connections and access within the site and to adjacent properties.

Staff Evaluation: Staff believes that adequate public service and facility capacity exists to accommodate the proposed development. All applicable review agencies have reviewed the plans and have not stated any concerns from a serviceability standpoint. The proposal is in compliance with this criterion.

L. Rational Phasing Plan

If the application involves phases, each phase of the proposed development shall contain all of the required streets, utilities, landscaping, open space, and other improvements that are required to comply with the project's cumulative development to date, and shall not depend upon subsequent phases for those improvements.

Staff Evaluation: The project is proposed to be developed in a single phase. The proposal is in compliance with this criterion.

It is Staff's opinion that this request for development review approval meets the required findings listed above. As outlined in the Land Development Code checklist, this is a permitted use in the CO zone and meets all applicable criteria for development of the property. Other than an increase to the directional sign height, which can be approved through a master sign plan, no waivers or variances from code requirements are being requested. In addition, as outlined above, Staff believes that the project as currently proposed meet all review criteria applicable to all developments. The LDC does not contain additional approval criteria for development review applications beyond the standard criteria.

Recommendation and Motion PZ21-00009 (DEV) Arabella Spa



Staff Recommendation

Based on compliance with all ordinance requirements and satisfaction of the Development Review findings of the Land Development Code, staff recommends approval of case number PZ21-00009 (DEV), Arabella Spa, as subject to all applicable ordinance requirements and the attached conditions of approval.

Sample Motions for Commission Use

(Please note that the below motions are offered as samples only and that the Commission may make other motions as appropriate.)

Recommended Motion for Approval

I move for approval of case number PZ21-00009 (DEV), Arabella Spa, based on compliance with all ordinance requirements of LDC Section 8.3 and 8.4 and satisfaction of the Development Review findings and applicable Land Development Code requirements as outlined in the staff report, which staff report is hereby adopted as the findings of the Planning and Zoning Commission, and the attached conditions of approval.

Alternative Motion for Denial

I move for denial of case number PZ21-00009 (DEV), based on the following findings (*specify findings*).

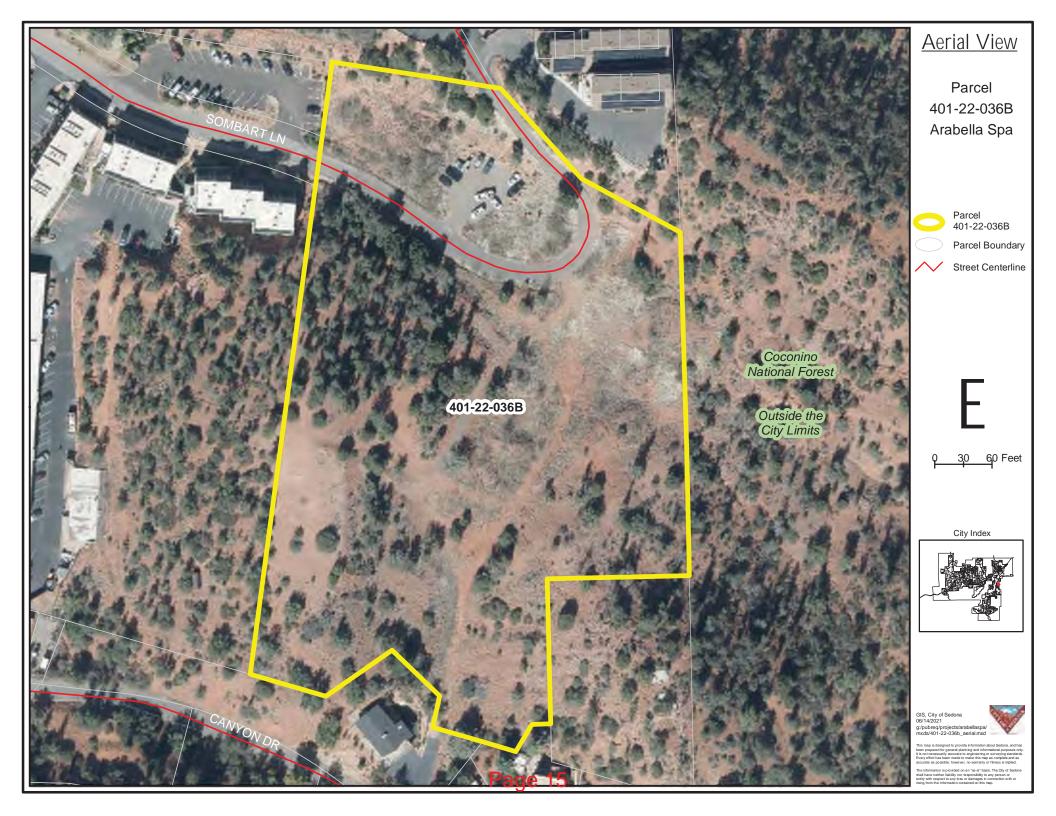
(Please note that the above motions are offered as samples only and that the Commission may make other motions as appropriate.)

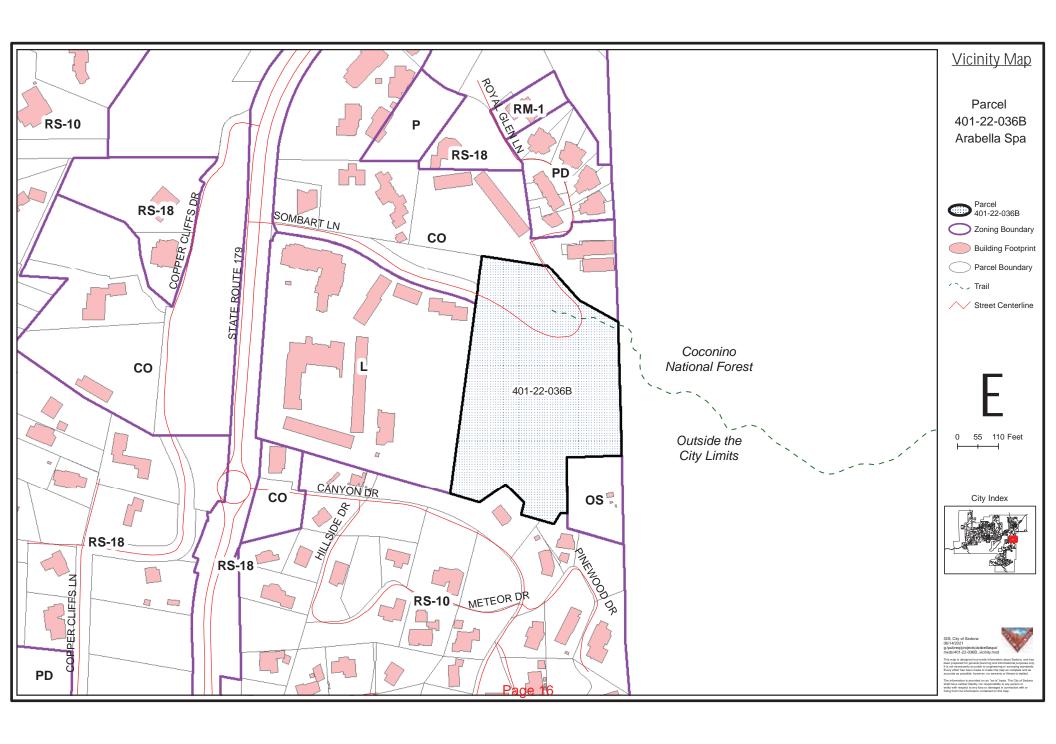
As proposed by Staff

- 1. Development of the subject property shall be in substantial conformance with the applicant's representations of the project, including the letter of intent, site plan, building plans and elevations, landscape plan, and all other supporting documents, as reviewed, modified, and approved by the Planning & Zoning Commission. Proposed changes determined to be substantial by the Community Development Director shall require reconsideration by the Planning & Zoning Commission at a public hearing.
- 2. The project shall be constructed in a single phase.
- 3. The exterior colors and materials shall be in compliance with the submitted color and materials board. Alternate colors proposed by the applicant may be approved by the Director if the colors are darker than the approved colors and meet all other Land Development Code requirements.
 - a. Based on the application of Alternate Standards (LDC Section 2.24.E(4), Table 2.9), the maximum permitted LRV for all buildings shall be 28%.
- 4. All vents, down spouts, gutters, posts, etc. shall be painted to match the exterior wall or roof color or be in compliance with the color provisions of the Land Development Code.
- 5. All landscaping shall be maintained to ensure visibility triangle requirements are met at the driveway entrances and intersection.
- 6. The applicant shall obtain Right-of-Way Permits from the City of Sedona and/or the Arizona Department of Transportation for any work in the Right-of-Way.
- 7. Hours of work, for grading operations, shall be limited to 7 a.m. to 6 p.m., Monday through Friday and 9 a.m. to 5 p.m. on Saturday. No grading work shall occur on Sunday.
- 8. Prior to the issuance of grading and building permits, staff shall verify that all plans submitted for buildings permits are in substantial accordance with the plans as submitted, reviewed, and approved by the Planning and Zoning Commission and meet the following conditions, and the applicant shall provide written documentation of such compliance to staff:
 - a. All plans shall comply with all applicable sections of the Land Development Code and the Development Review application as reviewed and approved by the Planning and Zoning Commission.
 - b. The applicant shall provide ADOT comments for the traffic impact study. Intersection improvements shall be determined after ADOT comments are received and shall be included in the final plans for the project. At a minimum, the applicant shall evaluate the feasibility and efficacy on LOS of adding a dedicated left turn lane at Sombart Lane and State Route 179.
 - c. Provide Final Grading and Drainage Plans. The Site Plan shall meet the grading and drainage requirements of the Sedona Land Development Code and the Design Review, Engineering, and Administrative Manual. A trench drain is recommended at the bottom of slopes and driveways to prevent flooding buildings and roads.
 - i. The drainage channels on both sides of the road shall be reestablished to accommodate the offsite & onsite flows.

- d. Provide Final Drainage Report.
- e. The plans shall include the top and bottom of wall heights for all fences, walls, and and retaining walls. Staff may require modifications to ensure the height and design requirements of LDC Section 5.6.E are met.
- f. An AZPDES Construction Activity General Permit (CGP) must be submitted to ADEQ. We will need a copy of the ADEQ Permit Authorization Certificate prior to issuance of a building permit. Please see the AZPDES website at: http://www.azdeq.gov/node/524
- g. Accessible sidewalks and parking areas will need to meet the current US Dept. of Justice ADA requirements.
 - i. The applicant shall consider widening the existing 5' sidewalk along Sombart to a 10' shared-use-path. At a minimum, the plans shall provide sufficient space for widening the sidewalk in the future.
- h. Accessible parking/signage shall meet the requirements of the City LDC and DREAM documents.
- i. For projects involving grading of more than 5,000 cubic yards, a haul plan, a dust control plan, a topsoil reutilization plan, a stormwater pollution prevention plan, and a traffic control plan shall be required. Each must be acceptable to and approved by the City Engineer. (Manual 3.1.H.6.i).
- j. For Projects involving grading of more than 5,000 cubic yards, an assurance bond is required per Manual Section 3.1.G.1.
- k. Applicant shall provide a Storm Water Pollution Prevention Plan. SWPPP measures shall be in place prior to the start of construction (DREAM 3.1). Storm water quality measures shall also comply with City of Sedona Code requirements (City Code Chapter 13.5)
- I. The plans shall delineate oil separators for all paved surfaces prior to its release into the City's storm sewer system. Manufacturer or engineer's specifications and a maintenance schedule shall be provided.
- m. Construction details shall be provided for sewer construction/connection. Existing sewer laterals that are not utilized by the development shall be abandoned.
- n. Provide utility construction details on plans.
- o. A copy of the ADEQ Approval to Construct Water Facilities and Wastewater Facilities shall be provided prior to construction.
- p. The applicant shall submit landscaping plans that comply with all applicable City codes and the approved landscaping plans.
- q. The applicant shall submit outdoor lighting plans that comply with all applicable City codes and the approved lighting plan. All proposed fixtures shall be fully shielded.
- r. The applicant shall prepare a parking agreement, meeting the requirements of LDC Section 5.5.E(2)c, regarding the proposed parking reductions for the spa based on its association and shared use with the adjacent hotel development.
- s. All requirements of the Sedona Fire District shall be satisfied.
- t. All concrete within the City ROW shall be colored "Sedona Red" (Davis 160 color).

- 9. Prior to the issuance of a Certificate of Occupancy, staff shall verify that all construction is in substantial accordance with the plans as submitted, reviewed, and approved by the Planning and Zoning Commission, and meets the following conditions:
 - a. All on-site improvements shall substantially conform to the plans on which grading and building permits were issued.
 - b. Installation of all proposed landscaping shall be complete and in accordance with the approved landscape plan. (LDC Section 5.6)
 - c. All outside lighting shall have been installed in accordance with the approved plans. All lighting sources shall be fully shielded so that the direct illumination is confined to the subject property boundaries and so no light is directed above the horizontal plane. Staff shall conduct a night inspection and if deemed necessary, additional shielding will be required. (LDC Section 5.8)
 - d. The project shall comply with Public Art requirements (LDC Section 5.9).
 - e. All new utility lines shall be provided through underground installation.
 - f. All mechanical equipment and trash receptacles shall be completely screened from surrounding areas by use of a wall, fence, landscaping or shall be enclosed within a building. All electrical panels shall be located so as not to be visible from public rights-of-way.
 - g. All requirements of the Sedona Fire District shall be satisfied.
 - h. The applicant shall provide copies of all required testing to the Engineering Department.
 - i. As-built plans shall be provided to the City in digital and hard copy formats acceptable to the City Engineer.
 - j. An elevation Certificate from an Arizona Registered Land Surveyor is required for each building.
 - k. All areas of cut and fill shall be landscaped or dressed in such a manner as to reduce the potential for erosion.
 - I. The applicant shall provide a letter, sealed by the engineer of record, verifying that the work, as done, is in substantial accordance with the approved plans.
 - m. All construction shall comply with the Storm Water Regulations in Chapter 14 of the City of Sedona City Code. Storm water quantities and velocities shall not be greater than the historic values at the downstream property line.
- 10. Within thirty days of approval of the Development Review, the property owners of record of the subject properties shall sign and record a waiver acknowledging their waiver of any right to claim just compensation for diminution in value under A.R.S. §12-1134 related to the granting of this Development Review.





TAB 8

ARIZONA WATER COMPANY

3805 N. BLACK CANYON HIGHWAY, PHOENIX, AZ 85015-5351 • P.O. BOX 29006, PHOENIX, AZ 85038-9006 PHONE: (602) 240-6860 • FAX: (602) 240-6874 • TOLL FREE: (800) 533-6023 • www.azwater.com

April 4, 2022

Jake Levin Kimley-Horn 201 N. Montezuma, Suite 206 Prescott, AZ 86301

> Domestic Water Service to APN 401-22-036B Re:

Dear Mr. Levin:

Arizona Water Company (the "Company") certifies that the above-described property is located within its Sedona Certificate of Convenience and Necessity in Sedona, Arizona, and that it will provide water service to the property in accordance with the Company's tariffs and the Arizona Corporation Commission's rules and regulations. It will be the responsibility of the developer to provide the funds to install the necessary water facilities, and the Company assumes no liability to install those facilities if the funds are not advanced by the developer.

The design of the water distribution system must comply with the Company's standard specifications that are on file at the Arizona Department of Environmental Quality. preliminary and final water system designs must be approved by the Company.

It will also be the responsibility of the developer to comply with all of the requirements of regulatory agencies having jurisdiction over Arizona subdivisions and of Arizona statutes applicable to subdivided or unsubdivided land, including, but not limited to, requirements relating to a Certificate of Assured Water Supply, as set forth in the Arizona Groundwater Management Act. A.R.S. §45-576.

Please notify the Company if you will be proceeding with development of the property so the Company can prepare the necessary Agreement.

Very truly yours,

Andrew J. Haas, P.E.

Vice President - Engineering developmentservices@azwater.com

sla

FKS:afh E-3-1-1

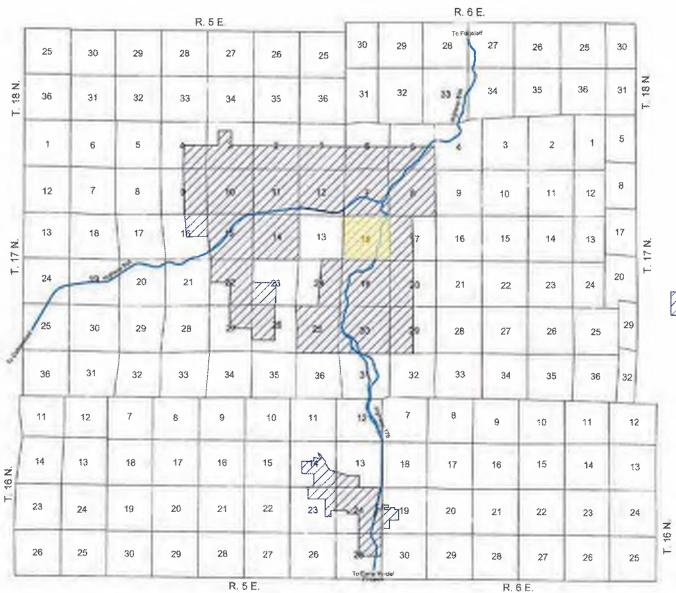
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Sedona, Arizona – Arabelia Spa APN 401-22-036B



Map Disclaimer: This map is for general reference only. It does not replace a land survey and Arizona Water Company does not guarantee its thematic or spatial accuracy.





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ARIZONA WATER COMPANY

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CONTACT INFORMATION

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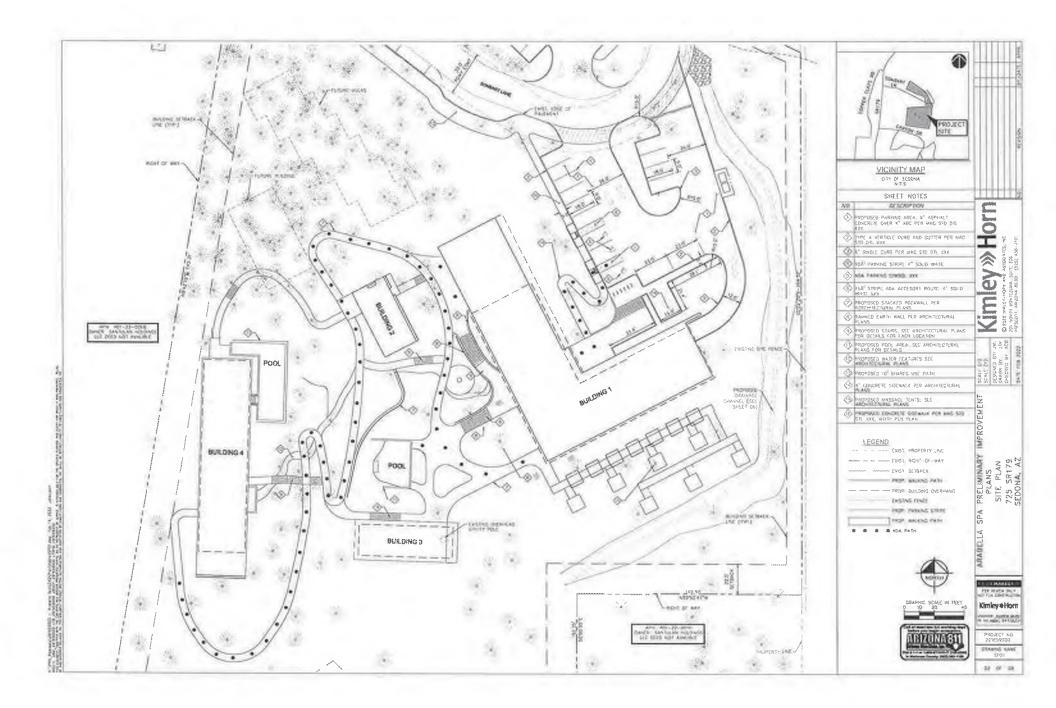
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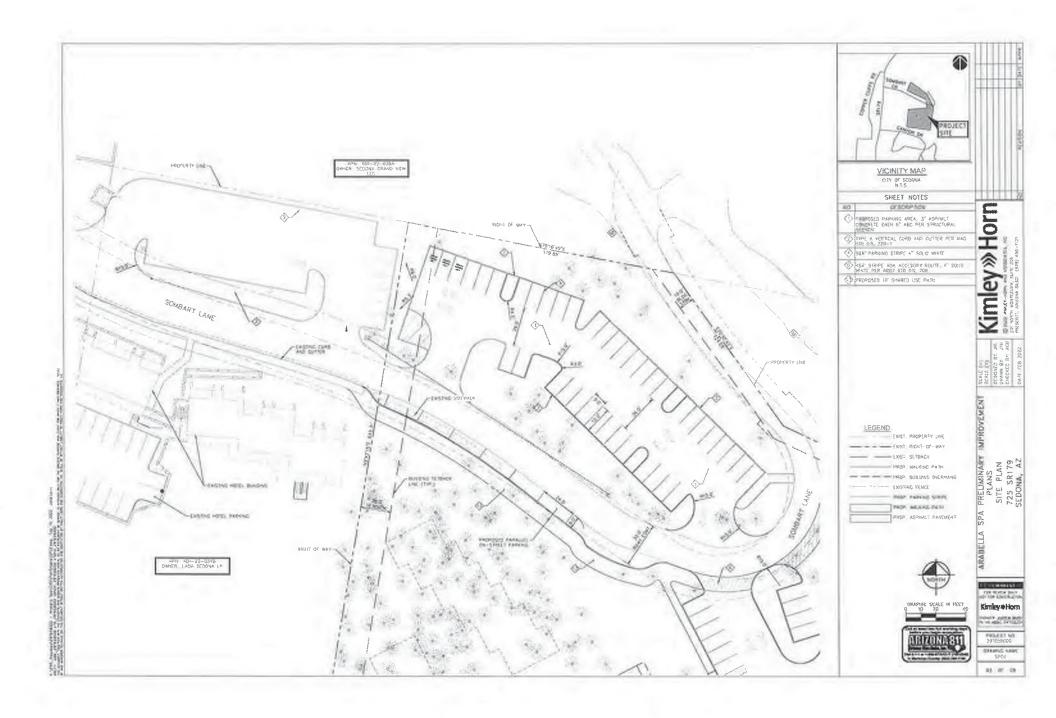
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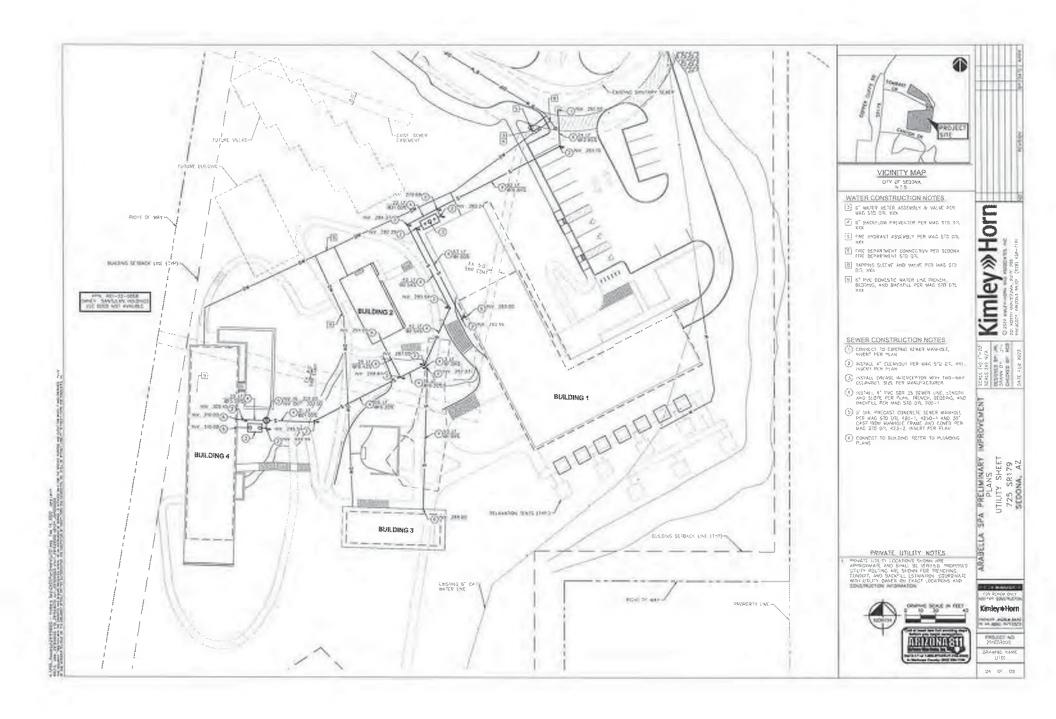
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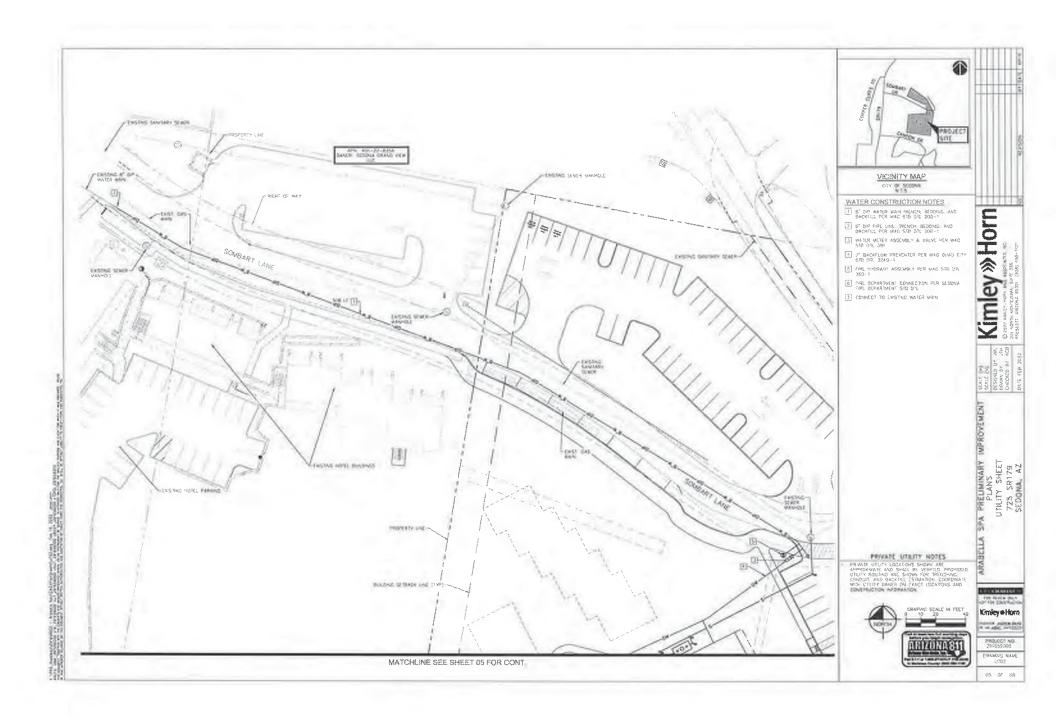
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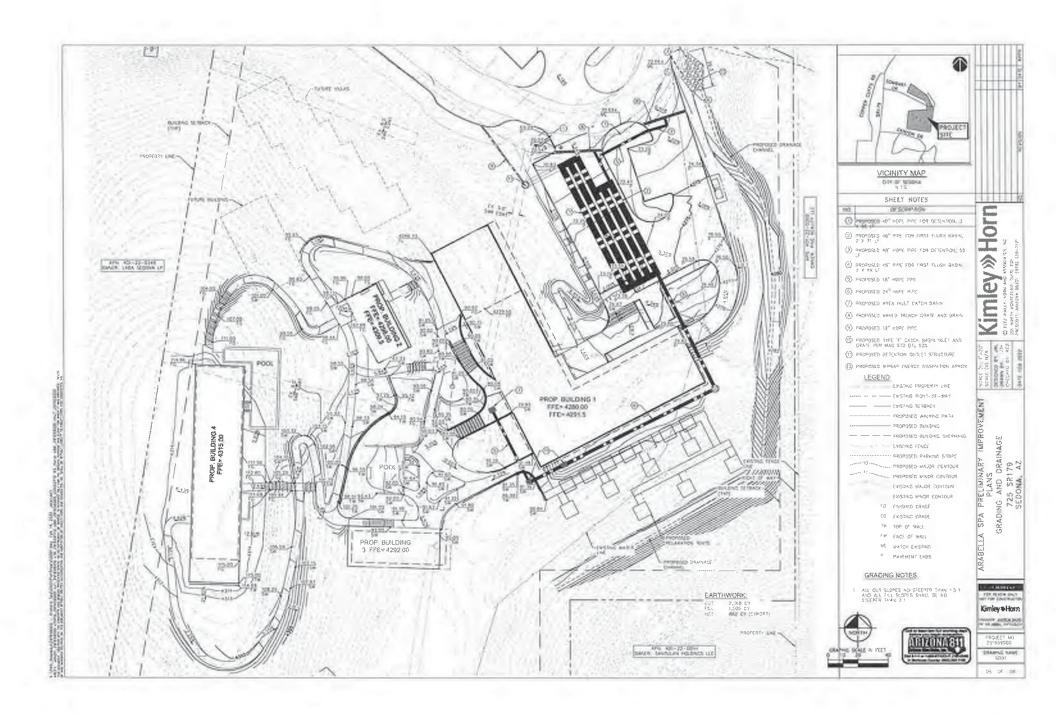
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Kimley » Horn

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PROJECT NO 791659000 TCO1

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TAB 9



PRELIMINARY WATER DESIGN MEMORANDUM

To: Erwin Architecture & Development

From: Andrew Baird, P.E.

Kimley-Horn and Associates, Inc.

Date: December 14, 2022

Subject: Arabella Spa

BACKGROUND

This Preliminary Water Design Memorandum for the Arabella Spa has been prepared to address the water system requirements outlined in the City of Sedona – Design, Review, Engineering and Administrative Manual (DREAM), Arizona Water Company (AWC) and Arizona Department of Environmental Quality (ADEQ). The main purposes of this memo are the following:

- Illustrate compliance with the DREAM, AWC, ADEQ.
- Establish water demand and fire flow criteria for design.
- Establish the feasibility of the development of the site.

The project site (Site) is located along Sombart Ln. east of State Route 179. The Site is bounded to the north by property that is zoned commercial but is currently being utilized as parking for trailheads, east by a hotel complex, south by single family residential properties, and the west by property zoned open space and Coconino National Forest. The Site is located within the City of Sedona, Section 21, Township 4 South, Range 03 East. The Site consists of parcel 401-22-034B approximately 7.0 acres. See **Appendix A** for the Location Map and Vicinity Map, respectively.

As part of this project, a new spa will be constructed, including four buildings, walkways and patio space, and utilities to service the site. The water system design will include the future additions, and the infrastructure designed accounts for the ultimate condition of the Site.

METHODOLOGY

The water system serving the Arabella Spa Site has been modeled using WaterCAD, developed using the Haestad Method. The program utilizes the fluid mechanic head loss theory known as the Hazen-Williams method. This is the generally accepted method used to evaluate water distribution systems.

EXISTING WATER SYSTEM

An existing 8-inch DIP water line is located near the northwest corner of the existing hotel building in Sombart Lane. Hydrants are located west and north of the site in Sombart Lane.

FIRE FLOW TEST

A Fire Hydrant Flow Test was conducted to determine capacity of the existing infrastructure to service the proposed development. Residual and static pressures were obtained from a flow test performed on three fire hydrants near the site, west of the project site in Sombart Lane and on Highway 179, by Arizona Water Company (see **Appendix C** for fire flow test results). The residual and static pressures from the flow test are included in Table 2.



Table 1: Fire Hydrant Flow Rate Test Results

Hydrant No.		Hydrant	Flow Test	*Calculated Maximum			
Hydrant No.	Static		Residual		Minimum		
	Pressure (psi)	Flow (gpm)	Pressure (psi)	Flow (gpm)	Pressure (psi)		
FH 179	<mark>120</mark>	<mark>1379</mark>	<mark>110</mark>	<mark>4782</mark>	<mark>20</mark>		
FH 181	120	1379	108	4333	20		
FH 125	110	1060	65	1541	20		

HYDRAULIC MODEL

From the static and residual pressures obtained, the calculated maximum operating flow was found to be 4,782 GPM at 20 psi. Using this data, the WaterCAD v8i water system modeling software was used to model the proposed water network. The model is calibrated with the provided existing system information and tested fire flow conditions. A fire flow test was performed to determine the residual and static pressure of the existing system. As stated above three fire flow tests were performed. However, only the flow and pressure data from hydrant 179 was used. Using the fire flow test from fire hydrant 179, a supply curve was generated, as shown below in **Figure 1**. The supply curves help model the expected flow from the existing system to the Arabella Spa water distribution system. Within the model the supply curve, and existing system connection, are modeled as a pump connected to a reservoir.

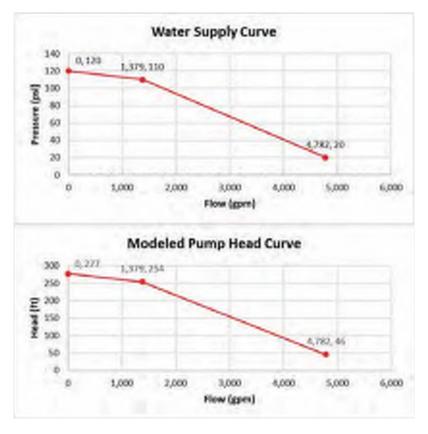


Figure 1. Pump Supply Curve



PROPOSED WATER SYSTEM

An 8-inch DIP water line is proposed in Sombart Lane to provide domestic and fire service to the site. An 8" DIP domestic and fire service line is proposed, which will tie into an existing 8" water main on Sombart Lane near the entrance to Arabella. The 8" DIP line will connect to the line on Sombart Lane with a tapping sleeve and valve. The new 8" fire and domestic line will run from the line on Sombart southwest, as shown in the utility exhibit, with an 8" tee and reducer and a 6" DIP line that will run to building 4. A second 8" line will run south from the tee to a proposed fire suppression standpipe near the center of the site. The remainder of this run past the standpipe will be 6" PVC. The laterals to building 1 and 2 will also be 6" DIP lines. A proposed hydrant will be placed at the northwest corner of the site as well, next to the domestic service connection and will connect to the 8" main on Sombart separately. The domestic service throughout the site will be treated as a private line and will not require an easement. See **Appendix B** for the system layout.

FIRE FLOW DEMAND

The proposed PDAB is a Construction Type I-B. The required fire flow per building was determined using the 2012 International Fire Code as adopted by City of Sedona and is based on construction type, building square footage, and provision of an approved sprinkler system. The City of Sedona allows for a maximum 75% reduction of the required fire flow for building provided that the building is equipped with an interior fire suppression sprinkler system to an absolute minimum of 1,500gpm. The minimum fire flow requirements for the proposed buildings are shown in **Table 3**. **Table 3** also shows the required building fire flow based upon a maximum fire flow reduction of 75% allowed.

Table 2: Design Criteria for Public Water Infrastructure

Building	Building Construction Type ¹	Building Area ² (ft ²)	Required Fire Flow ³ (gpm)	Reduction ³	Required Fire Flow ⁴ (gpm)
1	I-B	16859	1500		1500
2	I-B	524	1500		1500
3	I-B	1915	1500		1500
4	I-B	1304	1500		1500

¹Construction Type based on IBC

WATER ANALYSIS AND RESULTS

The Average Daily Demand, Maximum Daily Demand, and Maximum Day Demand plus Fire Flow Demand analyses were performed, for the development, to evaluate the proposed water infrastructure. The system was analyzed to ensure that the existing and proposed public water infrastructure meets the following criteria as set forth in the DREAM and the AWC guidelines. See **Appendix C** for domestic water demand calculations.

²Areas based on Site Plan (Appendix A)

³Fire flow requirements per Sedona Fire District use of 2012 International Fire Code. Maximum reduction = 75% ⁴Minimum Fire Flow Requirement of 1,500 gpm per 2006 IFC



Table 3: Design Criteria for Public Water Infrastructure

Scenario	Criteria	Constraint
Max Day + Fire Flow	Minimum Pressure	20 psi
Max Day + Fire Flow	Maximum Velocity	*10 fps
Max Day	Minimum Pressure	55 psi

The fire flow demand of 1,500 GPM was applied at the proposed fire hydrant and at the proposed standpipe in the area between the buildings. An assumed demand of 30 GPM was added at the building connections as a demand flow for a fire suppression system at each building. The minimum PSI was recorded at each node. These flows were determined based on the assumption that one building requires fire suppression at a time and the hydrant requires full flow.

As previously discussed, Maximum Day Demand plus Fire Flow Demand analyses were performed for the existing adjacent off-site water infrastructure and the proposed on-site water system. See **Appendix D** for the proposed system's Water Model Schematics and Results. A summary of the water analysis results for the public distribution main is tabulated below:

<u>Table 4: Fire Flow and Maximum Daily Demand Water Model Result Summary</u>

Criteria	Constraint	Max Day	Max Day + FF	
Minimum System Pressure	53 psi		20 psi	
Maximum Velocity	10 fps*		Yes	
Minimum System Pressure	55 psi	Yes		

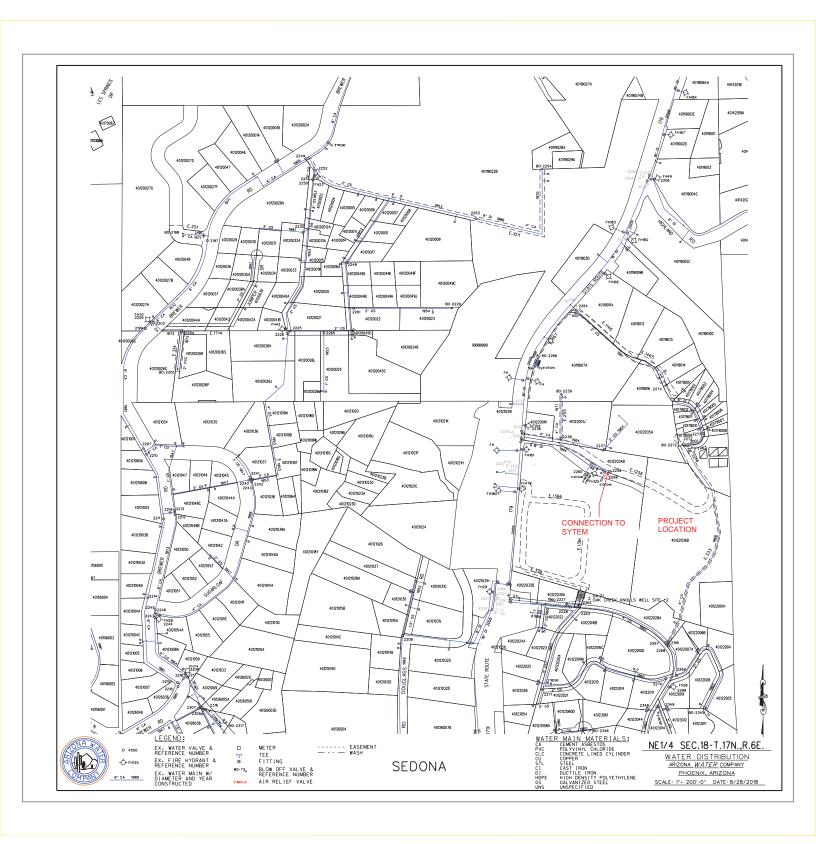
RECOMMENDATION

*Although standard practice requires a maximum velocity of 10 fps during maximum day plus fire flow demand scenarios, Arizona Water Company desires a maximum velocity of 8 fps in the system. Kimley-Horn is requesting a variance for using 10 fps as the maximum velocity requirement, as our system with 8" DIP meets this requirement with a velocity of 9.68 ft/s and maintains adequate pressure.

The proposed on-site water system and the existing, adjacent off-site public water infrastructure, as outlined by this analysis, is adequate and is sufficient to meet the required domestic water demand and fire flow demand for the proposed Arabella Spa project.

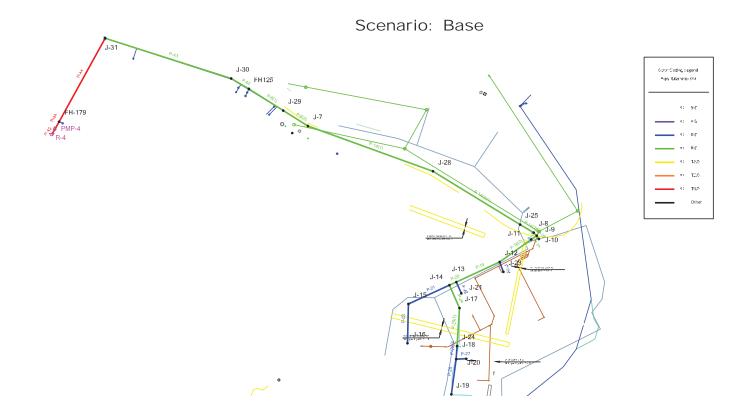


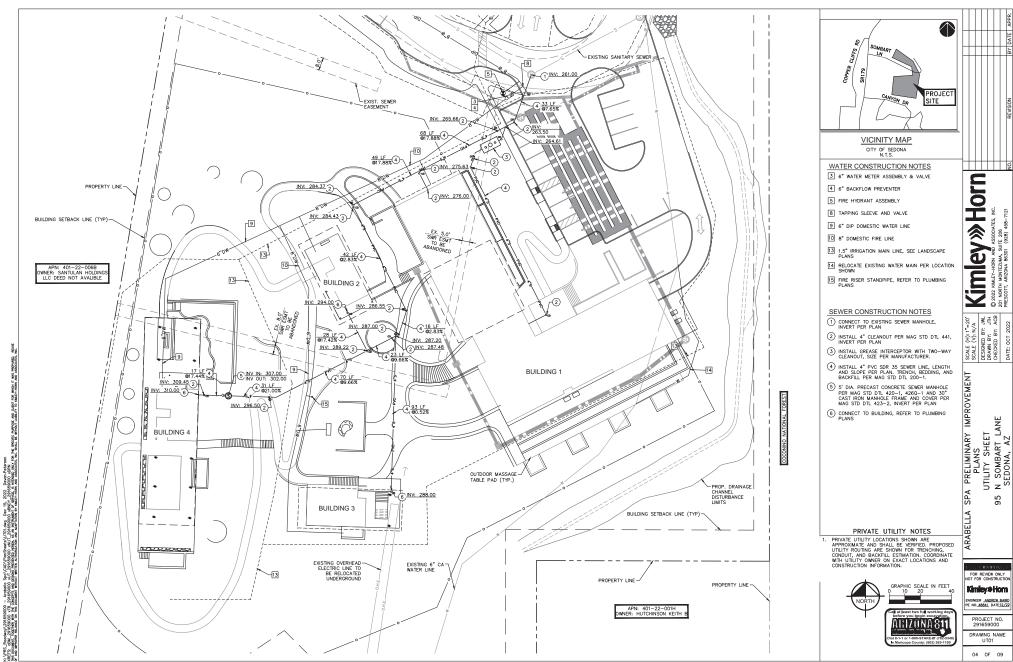
Appendix A – Site Location Map



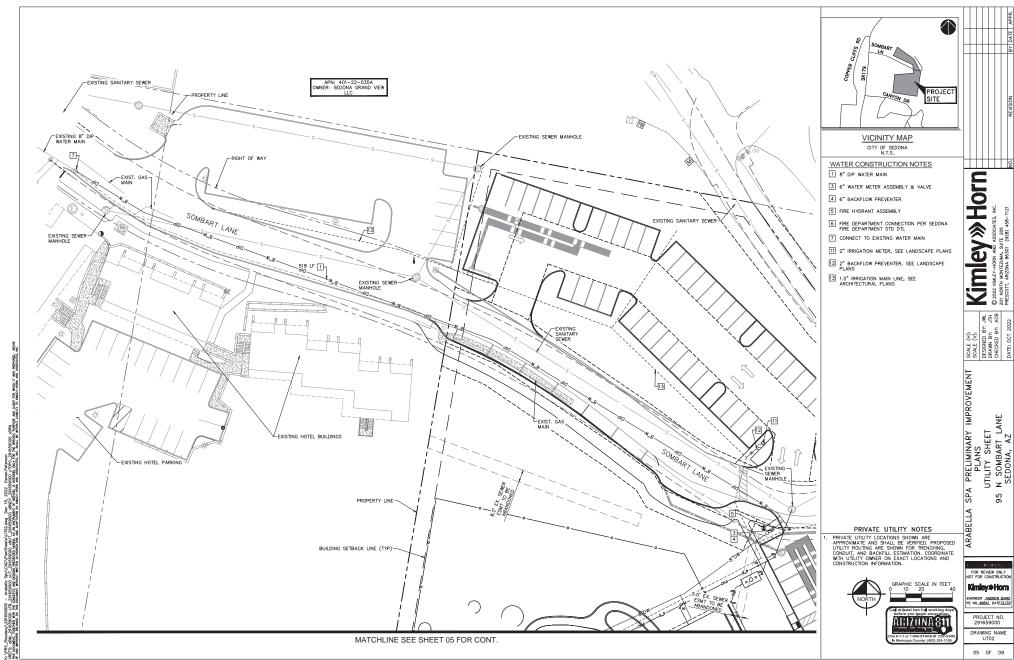


Appendix B- Proposed Water System Layout





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FOR REVIEW ONLY IOT FOR CONSTRUCTION

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Appendix C— Water Demand Flows/Fire Flow Test Results

				D	esign Water Dema	and Calculations	1					
Location	Use			emand Criteria Water Design Flow [GPD]		Avg. Day Demand [GPD]	Avg. Day Demand [gpm]	*Max. Day Demand [GPD]	*Max. Day Demand [gpm]	*Peak Hour Demand	*Peak Hour Demand	
		gpd	unit	No.	unit			157- 1	1 2	151- 1	[GPD]	[gpm]
	Commercial (Building Area)	3000	acre	0.25	acres	746	746	0.52	1491	1.04	2237	1.55
Building 1	Restaurant	1.3	sqft	1951	sqft	2536	2536	1.76	5073	3.52	7609	5.28
Dullullig 1	Developed Open Space (Patio)	3500	acre	0.39	acres	1348	1348	0.94	2696	1.87	4044	2.81
	Hot Pool	720	pool	1	pool	720	720	0.50	1440	1.00	2160	1.50
					Subtotal	5,350	5,350	3.72	10,700	7.43	16,050	11.15
	Commercial (Building Area)	3000	acre	0.04	acres	109	109	0.08	218	0.15	327	0.23
Building 2	Developed Open Space (Patio)	3500	acre	0.02	acres	62	62	0.04	124	0.09	186	0.13
	Cold Pool	120	pool	1	pool	120	120	0.08	240	0.17	360	0.25
					Subtotal	291	291	0.20	582	0.40	873	0.61
	Commercial (Building Area)	3000	acre	0.04	acres	131	131	0.09	261	0.18	392	0.27
Building 3	Developed Open Space (Patio)	3500	acre	0.04	acres	149	149	0.10	298	0.21	447	0.31
	Cold Pool	230	pool	1	pool	230	230	0.16	460	0.32	690	0.48
					Subtotal	510	510	0.35	1,019	0.71	1,529	1.06
	Commercial (Building Area)	3000	acre	0.10	acres	286	286	0.20	573	0.40	859	0.60
Building 4	Developed Open Space (Patio)	3500	acre	0.08	acres	269	269	0.19	537	0.37	806	0.56
	Hot Pool	1500	pool	1	pool	1500	1500	1.04	3000	2.08	9000	6.25
	Subtotal					2,055	2,055	1.43	4,110	2.85	6,164	4.28
Next to Building 3	Hot Pool	885	pool	1	pool	885	885	0.61	1770	1.23	2655	1.84
					Subtotal	885	885	0.61	1,770	1.23	2,655	1.84
Grounds	Xeriscape	1170	acre	1.97	acres	2305	2305	1.60	4610	3.20	6915	4.80
					Subtotal Total	,	2,305 11,395	1.60 7.91	4,610 22,790	3.20 15.83	6,915 34,186	4.80 23.74

^{*}Max Day Demand is based on a Peaking Factor of 2.0

^{**}Average Daily Demands were taken from estimates provided by Arizona Water Company based on land use

From: Casey Goff <cgoff@azwater.com>
Sent: Thursday, September 30, 2021 7:51 AM

To: Warne, James

Subject: Arabella Hydrant Flows **Attachments:** Scan2021-09-30 075026.pdf

James,

Here are the hydrant flows for the surrounding fire hydrants at Arabella. These flows are somewhat old so if you need updated information, please let me know and we can schedule some flow tests. Also, see the attached portion of the ¼ section map for reference.

FH 125 Static – 110 psi Kinetic – 65 psi GPM – 1060

FH 179 Static – 120 psi Kinetic – 110 psi GPM – 1379

FH 181 Static – 120 psi Kinetic – 108 psi GPM – 1379

I hope this information helps.

Thanks,



Casey Goff | Arizona Water Company Distribution Superintendent Verde Valley Division

65 Coffeepot Dr. Ste #7 | Sedona, AZ 86336 D: 928-282-7092 ext 4102 | cgoff@azwater.com

Visit us at www.azwater.com

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Map Disclaimer: This map is for general reference only. It does not replace a land survey and Arizona Water Company does not guarantee its thematic or spatial accuracy.



Appendix D- Water Model Results



AVERAGE DAY

FlexTable: Junction Table

FlexTable: Junction Table

ID	Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
39	FH125	4,241.70	0.00	4,502.00	113
41	J-7	4,246.87	0.00	4,502.00	110
60	J-8	4,269.00	0.00	4,502.00	101
62	J-9	4,269.60	0.00	4,502.00	101
64	J-10	4,270.30	0.00	4,502.00	100
66	J-11	4,270.00	0.00	4,502.00	100
68	J-12	4,281.40	0.00	4,502.00	95
70	J-13	4,294.60	0.00	4,502.00	90
71	J-14	4,299.00	0.00	4,502.00	88
72	J-15	4,310.30	0.00	4,502.00	83
73	J-16	4,315.00	1.43	4,502.00	81
74	J-17	4,298.40	0.00	4,502.00	88
75	J-18	4,300.40	0.00	4,502.00	87
76	J-19	4,299.90	0.35	4,502.00	87
77	J-20	4,294.50	0.61	4,502.00	90
78	J-21	4,296.80	0.20	4,502.00	89
90	J-23	4,280.00	3.72	4,502.00	96
92	J-24	4,299.60	0.00	4,502.00	88
115	J-25	4,269.70	1.60	4,502.00	101
130	J-28	4,256.20	0.00	4,502.00	106
143	J-29	4,244.84	0.00	4,502.00	111
156	J-30	4,240.00	0.00	4,502.00	113
158	J-31	4,225.50	0.00	4,502.00	120
160	FH-179	4,225.00	0.00	4,502.00	120

FlexTable: Pipe Table

FlexTable: Pipe Table

ID	Label	Length (Scaled) (ft)	Start Node	Stop Node	Diamete r (in)	Material	Hazen- William s C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
63	P-15	8	J-8	J-9	8.0	Ductile Iron	120.0	6.31	0.04	0.0000
65	P-16	7	J-9	J-10	8.0	Ductile Iron	120.0	0.00	0.00	0.0000
67	P-17	12	J-9	J-11	8.0	Ductile Iron	120.0	6.31	0.04	0.0000
79	P-19	86	J-12	J-13	8.0	Ductile Iron	120.0	2.59	0.02	0.0000
80	P-20	14	J-13	J-14	8.0	Ductile Iron	120.0	2.39	0.02	0.0000
81	P-21	81	J-14	J-15	6.0	Ductile Iron	120.0	1.43	0.02	0.0000
84	P-23	71	J-15	J-16	6.0	Ductile Iron	120.0	1.43	0.02	0.0069
85	P-24	45	J-14	J-17	8.0	Ductile Iron	120.0	0.96	0.01	0.0000
87	P-26	64	J-18	J-19	6.0	Ductile Iron	120.0	0.35	0.00	0.0000
88	P-27	18	J-18	J-20	6.0	Ductile Iron	120.0	0.61	0.01	0.0000
89	P-28	22	J-13	J-21	6.0	Ductile Iron	120.0	0.20	0.00	0.0000
91	P-29	19	J-12	J-23	6.0	Ductile Iron	120.0	3.72	0.04	0.0000
93	P-25(1)	69	J-17	J-24	8.0	Ductile Iron	120.0	0.96	0.01	0.0000
94	P-25(2)	24	J-24	J-18	6.0	Ductile Iron	120.0	0.96	0.01	0.0000
117	P-18(2)	70	J-11	J-12	8.0	Ductile Iron	120.0	6.31	0.04	0.0000
131	P-14(1)	240	J-7	J-28	8.0	Ductile Iron	120.0	7.91	0.05	0.0020
144	P-6(1)	73	FH125	J-29	8.0	Ductile Iron	120.0	7.91	0.05	0.0000
145	P-6(2)	53	J-29	J-7	8.0	Ductile Iron	120.0	7.91	0.05	0.0093
148	P-14(2) (1)	184	J-28	J-25	8.0	Ductile Iron	120.0	7.91	0.05	0.0026
149	P-14(2) (2)	28	J-25	J-8	8.0	Ductile Iron	120.0	6.31	0.04	0.0000
157	P-42	37	FH125	J-30	8.0	Ductile Iron	120.0	-7.91	0.05	0.0000
159	P-43	239	J-30	J-31	8.0	Ductile Iron	120.0	-7.91	0.05	0.0041
161	P-44	172	J-31	FH-179	16.0	Ductile Iron	120.0	-7.91	0.01	0.0000
164	P-45	11	R-4	PMP-4	16.0	Ductile Iron	120.0	7.91	0.01	0.0000

FlexTable: Pipe Table

FlexTable: Pipe Table

ID	Label	Length (Scaled) (ft)	Start Node	Stop Node	Diamete r (in)	Material	Hazen- William s C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
165	P-46	15	PMP-4	FH-179	16.0	Ductile Iron	120.0	7.91	0.01	0.0000



MAXIMUM DAY

FlexTable: Junction Table

FlexTable: Junction Table

ID	Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
39	FH125	4,241.70	0.00	4,501.99	113
41	J-7	4,246.87	0.00	4,501.99	110
60	J-8	4,269.00	0.00	4,501.99	101
62	J-9	4,269.60	0.00	4,501.99	101
64	J-10	4,270.30	0.00	4,501.99	100
66	J-11	4,270.00	0.00	4,501.99	100
68	J-12	4,281.40	0.00	4,501.99	95
70	J-13	4,294.60	0.00	4,501.99	90
71	J-14	4,299.00	0.00	4,501.99	88
72	J-15	4,310.30	0.00	4,501.98	83
73	J-16	4,315.00	2.85	4,501.98	81
74	J-17	4,298.40	0.00	4,501.99	88
75	J-18	4,300.40	0.00	4,501.99	87
76	J-19	4,299.90	0.71	4,501.99	87
77	J-20	4,294.50	1.23	4,501.99	90
78	J-21	4,296.80	0.40	4,501.99	89
90	J-23	4,280.00	7.43	4,501.99	96
92	J-24	4,299.60	0.00	4,501.99	88
115	J-25	4,269.70	3.20	4,501.99	100
130	J-28	4,256.20	0.00	4,501.99	106
143	J-29	4,244.84	0.00	4,501.99	111
156	J-30	4,240.00	0.00	4,501.99	113
158	J-31	4,225.50	0.00	4,501.99	120
160	FH-179	4,225.00	0.00	4,501.99	120

FlexTable: Pipe Table

FlexTable: Pipe Table

ID	Label	Length (Scaled) (ft)	Start Node	Stop Node	Diamete r (in)	Material	Hazen- William s C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
63	P-15	8	J-8	J-9	8.0	Ductile Iron	120.0	12.62	0.08	0.0000
65	P-16	7	J-9	J-10	8.0	Ductile Iron	120.0	0.00	0.00	0.0000
67	P-17	12	J-9	J-11	8.0	Ductile Iron	120.0	12.62	0.08	0.0000
79	P-19	86	J-12	J-13	8.0	Ductile Iron	120.0	5.19	0.03	0.0000
80	P-20	14	J-13	J-14	8.0	Ductile Iron	120.0	4.79	0.03	0.0000
81	P-21	81	J-14	J-15	6.0	Ductile Iron	120.0	2.85	0.03	0.0060
84	P-23	71	J-15	J-16	6.0	Ductile Iron	120.0	2.85	0.03	0.0000
85	P-24	45	J-14	J-17	8.0	Ductile Iron	120.0	1.94	0.01	0.0000
87	P-26	64	J-18	J-19	6.0	Ductile Iron	120.0	0.71	0.01	0.0000
88	P-27	18	J-18	J-20	6.0	Ductile Iron	120.0	1.23	0.01	0.0000
89	P-28	22	J-13	J-21	6.0	Ductile Iron	120.0	0.40	0.00	0.0000
91	P-29	19	J-12	J-23	6.0	Ductile Iron	120.0	7.43	0.08	0.0000
93	P-25(1)	69	J-17	J-24	8.0	Ductile Iron	120.0	1.94	0.01	0.0000
94	P-25(2)	24	J-24	J-18	6.0	Ductile Iron	120.0	1.94	0.02	0.0000
117	P-18(2)	70	J-11	J-12	8.0	Ductile Iron	120.0	12.62	0.08	0.0070
131	P-14(1)	240	J-7	J-28	8.0	Ductile Iron	120.0	15.82	0.10	0.0102
144	P-6(1)	73	FH125	J-29	8.0	Ductile Iron	120.0	15.82	0.10	0.0067
145	P-6(2)	53	J-29	J-7	8.0	Ductile Iron	120.0	15.82	0.10	0.0093
148	P-14(2) (1)	184	J-28	J-25	8.0	Ductile Iron	120.0	15.82	0.10	0.0106
149	P-14(2) (2)	28	J-25	J-8	8.0	Ductile Iron	120.0	12.62	0.08	0.0000
157	P-42	37	FH125	J-30	8.0	Ductile Iron	120.0	-15.82	0.10	0.0132
159	P-43	239	J-30	J-31	8.0	Ductile Iron	120.0	-15.82	0.10	0.0102
161	P-44	172	J-31	FH-179	16.0	Ductile Iron	120.0	-15.82	0.03	0.0000
164	P-45	11	R-4	PMP-4	16.0	Ductile Iron	120.0	15.82	0.03	0.0000

FlexTable: Pipe Table

FlexTable: Pipe Table

ID	Label	Length (Scaled) (ft)	Start Node	Stop Node	Diamete r (in)	Material	Hazen- William s C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
165	P-46	15	PMP-4	FH-179	16.0	Ductile Iron	120.0	15.82	0.03	0.0000



PEAK HOUR

FlexTable: Junction Table

FlexTable: Junction Table

ID	Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
39	FH125	4,241.70	0.00	4,501.98	113
41	J-7	4,246.87	0.00	4,501.98	110
60	J-8	4,269.00	0.00	4,501.97	101
62	J-9	4,269.60	0.00	4,501.97	101
64	J-10	4,270.30	0.00	4,501.97	100
66	J-11	4,270.00	0.00	4,501.97	100
68	J-12	4,281.40	0.00	4,501.97	95
70	J-13	4,294.60	0.00	4,501.97	90
71	J-14	4,299.00	0.00	4,501.97	88
72	J-15	4,310.30	0.00	4,501.97	83
73	J-16	4,315.00	4.28	4,501.97	81
74	J-17	4,298.40	0.00	4,501.97	88
75	J-18	4,300.40	0.00	4,501.97	87
76	J-19	4,299.90	1.06	4,501.97	87
77	J-20	4,294.50	1.84	4,501.97	90
78	J-21	4,296.80	0.61	4,501.97	89
90	J-23	4,280.00	11.15	4,501.97	96
92	J-24	4,299.60	0.00	4,501.97	88
115	J-25	4,269.70	4.80	4,501.97	100
130	J-28	4,256.20	0.00	4,501.97	106
143	J-29	4,244.84	0.00	4,501.98	111
156	J-30	4,240.00	0.00	4,501.98	113
158	J-31	4,225.50	0.00	4,501.99	120
160	FH-179	4,225.00	0.00	4,501.99	120

FlexTable: Pipe Table

FlexTable: Pipe Table

ID	Label	Length (Scaled) (ft)	Start Node	Stop Node	Diamete r (in)	Material	Hazen- William s C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
63	P-15	8	J-8	J-9	8.0	Ductile	120.0	18.94	0.12	0.0618
65	P-16	7	J-9	J-10	8.0	Iron Ductile Iron	120.0	0.00	0.00	0.0000
67	P-17	12	J-9	J-11	8.0	Ductile Iron	120.0	18.94	0.12	0.0000
79	P-19	86	J-12	J-13	8.0	Ductile Iron	120.0	7.79	0.05	0.0000
80	P-20	14	J-13	J-14	8.0	Ductile Iron	120.0	7.18	0.05	0.0000
81	P-21	81	J-14	J-15	6.0	Ductile Iron	120.0	4.28	0.05	0.0060
84	P-23	71	J-15	J-16	6.0	Ductile Iron	120.0	4.28	0.05	0.0069
85	P-24	45	J-14	J-17	8.0	Ductile Iron	120.0	2.90	0.02	0.0000
87	P-26	64	J-18	J-19	6.0	Ductile Iron	120.0	1.06	0.01	0.0000
88	P-27	18	J-18	J-20	6.0	Ductile Iron	120.0	1.84	0.02	0.0000
89	P-28	22	J-13	J-21	6.0	Ductile Iron	120.0	0.61	0.01	0.0000
91	P-29	19	J-12	J-23	6.0	Ductile Iron	120.0	11.15	0.13	0.0256
93	P-25(1)	69	J-17	J-24	8.0	Ductile Iron	120.0	2.90	0.02	0.0071
94	P-25(2)	24	J-24	J-18	6.0	Ductile Iron	120.0	2.90	0.03	0.0000
117	P-18(2)	70	J-11	J-12	8.0	Ductile Iron	120.0	18.94	0.12	0.0140
131	P-14(1)	240	J-7	J-28	8.0	Ductile Iron	120.0	23.74	0.15	0.0204
144	P-6(1)	73	FH125	J-29	8.0	Ductile Iron	120.0	23.74	0.15	0.0200
145	P-6(2)	53	J-29	J-7	8.0	Ductile Iron	120.0	23.74	0.15	0.0279
148	P-14(2) (1)	184	J-28	J-25	8.0	Ductile Iron	120.0	23.74	0.15	0.0212
149	P-14(2) (2)	28	J-25	J-8	8.0	Ductile Iron	120.0	18.94	0.12	0.0000
157	P-42	37	FH125	J-30	8.0	Ductile Iron	120.0	-23.74	0.15	0.0132
159	P-43	239	J-30	J-31	8.0	Ductile Iron	120.0	-23.74	0.15	0.0225
161	P-44	172	J-31	FH-179	16.0	Ductile Iron	120.0	-23.74	0.04	0.0000
164	P-45	11	R-4	PMP-4	16.0	Ductile Iron	120.0	23.74	0.04	0.0000

FlexTable: Pipe Table

FlexTable: Pipe Table

ID	Label	Length (Scaled) (ft)	Start Node	Stop Node	Diamete r (in)	Material	Hazen- William s C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
165	P-46	15	PMP-4	FH-179	16.0	Ductile Iron	120.0	23.74	0.04	0.0000



MAX DAY PLUS FIRE FLOW

Fire Flow Node FlexTable: Fire Flow Report

Fire Flow Node FlexTable: Fire Flow Report

Label	Fire Flow Iterati ons	Satisfies Fire Flow Constrai nts?	Fire Flow (Needed) (gpm)	Fire Flow (Available) (gpm)	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Pressure (Calculated Zone Lower Limit) (psi)	Velocity of Maximu m Pipe (ft/s)
J-11	2	True	1,500.00	1,501.00	1,500.00	1,501.00	71	52	9.68
J-16	2	True	30.00	31.00	32.85	33.85	81	83	0.38
J-19	2	True	30.00	31.00	30.71	31.71	87	81	0.37
J-21	2	True	30.00	31.00	30.40	31.40	89	81	0.36
J-23	2	True	30.00	31.00	37.43	38.43	96	81	0.44
J-24	2	True	1,500.00	1,501.00	1,500.00	1,501.00	53	48	9.68

TAB 10



rev.1: August 30, 2022 March 29, 2022

Erwin Architecture & Development

Attn: William Erwin

RE: Traffic Statement rev. 1, Arabella Spa, Sedona, AZ

This traffic statement is prepared to support the development of a 21,129 SF luxury spa in Sedona Arizona, where 21,031 SF is indoor space, and 525 SF is outdoor space. The statement documents the existing traffic patterns, potential traffic impacts, and recommendations for the proposed Arabella Spa in Sedona, AZ.

SITE BACKGROUND

The project is proposed south of Sombart Lane, east of SR 179 in Sedona, AZ. The total site area is 231,673 square feet (SF) with a total building footprint of 21,031 SF and an additional 525 SF of outdoor space. The project will consist of a luxury spa and associated amenities. The owner of the development also owns the existing Arabella Hotel on the parcel to the west. The site location is shown in **Figure 1** below.

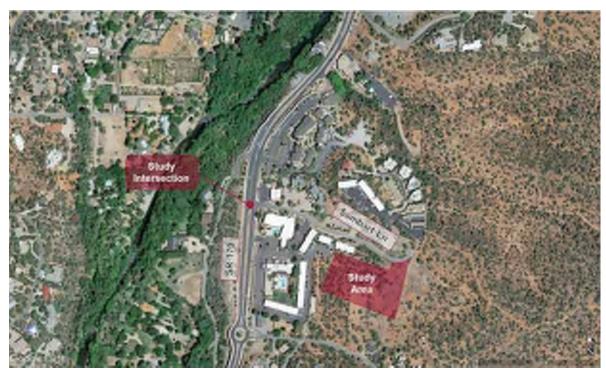


Figure 1. Vicinity Map

The proposed spa is to be located on the south side of Sombart Lane and be accessed by two driveways. Most of the parking for the development, however, will be contained on the north side of Sombart Lane, replacing the existing dirt lot for access to Marg's Draw Trail. There will be two new access drives to the new lot.

TRAFFIC COUNTS

Peak period turning movement counts were collected at the study intersection of SR 179 and Sombart Lane on Tuesday, November 2nd, 2021. The counts were collected between 7:00 AM and 9:00 AM and between 4:00 PM and 6:00 PM for AM and PM peak hours respectively.

Daily traffic (24-hour) counts were collected on Tuesday, November 2nd, 2021 on Sombart Lane just east of SR 179. The daily traffic volume observed on Sombart Lane was 776 vehicles.

The results of the peak-hour turning movement counts are shown in **Figure 2**. A copy of the traffic count data is included as **Attachment A**.

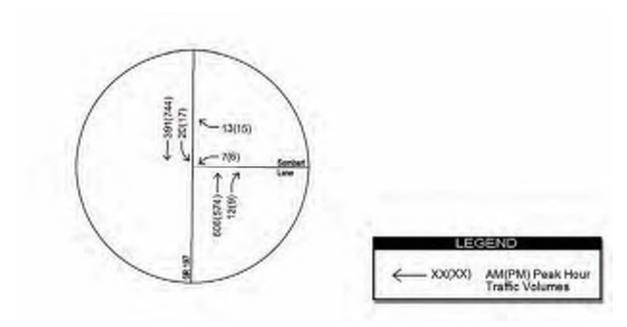


Figure 2. Existing Traffic Volumes

TRIP GENERATION

Institute of Transportation Engineers' (ITE) *Trip Generation Manual, 11th Edition* was used to estimate the number of trips generated the proposed spa. ITE Land Use Code 931 – Quality Restaurant and Land Use Code 493 – Athletic Club daily and peak hour trip generation rates and inbound-outbound percentages were obtained. The 21,031 SF building footprint is split between 19,463 SF of spa space and 1,568 SF of restaurant space, with an additional 525 SF of outdoor space allotted to the restaurant. Trip generation rates for the proposed land uses include:

ITE Land Use 493 - Athletic Club

*Daily rate:	Trips = PM peak hour trips / 0.10	(50% in / 50% out)
AM peak rate:	Trips = 3.16* ksf	(61% in / 39% out)
PM peak rate:	Trips = 6.29* ksf	(62% in / 38% out)

*LUC 493 does not include a daily rate, but it is generally accepted that the PM peak hour is approximately 10% of the daily trips.

ITE Land Use 931 – Quality Restaurant

Tring - 02 04*	l.of
ly rate:	KST
peak rate: Trips = 0.73* ks	sf
peak rate: Trips = 7.80* ks	sf

Due to the shared ownership of the adjacent hotel property, there is the potential that spa patrons would also be staying at the hotel to the west. This shared use is anticipated to reduce the total number of external vehicle trips to the spa. To estimate the shared use reduction, the internal capture percentages per ITE's *Trip Generation Manual, 9th Edition* between retail (the spa) and residential (the hotel) were applied to the trip generation of the site to determine net external trips. This reduction is shown in the removal of internal capture trips. Internal capture for the development is estimated to be a daily rate of 38%, AM peak hour rate of 34%, and PM peak hour of 53%. Trip generation for the site is summarized in **Table 1**.

Table 1: Trip Generation Summary

I and Ilaa	Land	Simo/Othy	Unito	Doily		AM Peak	Hour		PM Peak	Hour
Land Use	Use Code	Size/Qty	Units	Daily	ln	Out	Total	ln	Out	Total
Athletic Club	493	19.463	ksf	1230	38	24	62	76	47	123
Quality Restaurant	931	2.095	ksf	176	2	1	3	11	5	17
SUBTO	TAL	21.556	ksf	1,406	40	25	65	87	53	140
	Internal Capture			-687	-13	-9	-23	-46	-29	-75
	TOTA	.L		1,121	27	16	42	41	24	65

Based on ITE calculations it is estimated that the proposed Arabella Spa will generate 1121 daily trips with 42 occurring in the AM peak hour and 65 occurring in the PM peak hour. Trip generation calculations are included in Attachment B.

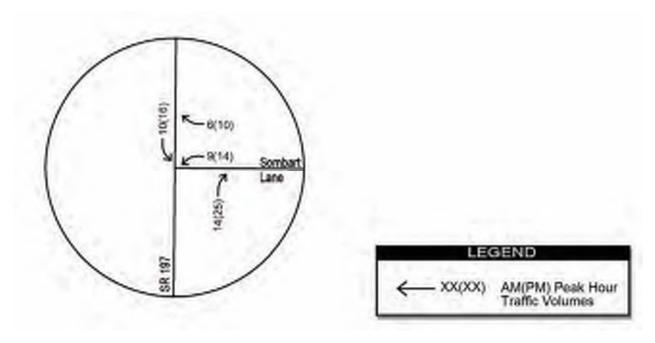
TRANSIT CONNECTIVITY

The Arabella Hotel plans to offer a shuttle service, providing connectivity to the Spa and trailhead to locations through Sedona, including other hotels. With the implementation of the shuffle stop at the Spa, it is anticipated that the vehicle trips produced by the spa will be reduced since customers using the spa may utilize the shuttle service rather than a personal vehicle.

PROJECTED TRAFFIC

Trips generated by the proposed development were assigned to the roadway network based on the trip distribution observed in the collected traffic counts. **Figure 3** shows the projected traffic assignment.

Figure 3. Site Traffic Volumes

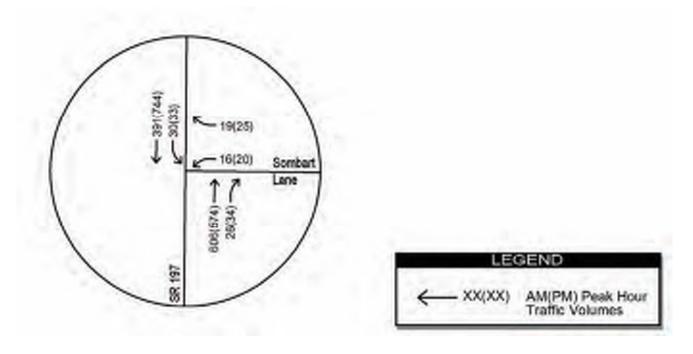


TOTAL TRAFFIC

The results of the traffic assignment (**Figure 2**) for the projected development were added to the existing traffic volumes (**Figure 1**) to produce total traffic volumes for the study intersection.

Figure 4 shows the total weekday traffic volumes for the study intersection.

Figure 4. Total Traffic Volumes



LEVEL OF SERVICE AND DELAY ANALYSIS

Existing Level of Service

The level of service (LOS) under existing conditions was evaluated for the study intersection using the traffic count data previously described. Synchro 11 software and HCM 6th Edition methodology was used to generate LOS and delay for the intersection.

Existing intersection geometry and conditions were used to obtain LOS and delay. The results of this analysis are shown in **Table 2** and reported as "LOS/delay". Existing LOS and analysis reports are included in **Attachment C**.

SB Approach NB Approach EB Approach WB Approach Intersection т R т R т R т R SR 179 & Sombart Lane AM Peak A/9 sec C/17 sec PM Peak A/9 sec C/19 sec

Table 2. Existing Level of Service and Delay

Per ADOT standards, the intersection of SR 179 and Sombart Lane is operating at an acceptable LOS under existing conditions.

Total Level of Service

The study intersection was evaluated based on total traffic, combining existing traffic, and expected site traffic. The results of the analysis are shown in **Table 3**.

The addition of project traffic the westbound approach is operating at LOS D (28 seconds delay) in the PM peak hour, an 8 second increase in delay from existing conditions. Although ADOT requires LOS C on state highways, LOS D may be acceptable per ADOT TGP 240 in urban areas. Considering that the 95th percentile queue for the westbound movement is only 1 vehicle in the total traffic PM scenario and there is less than 30 seconds of delay overall, LOS D is not anticipated to cause adverse impacts to the study intersection. Total Traffic LOS and analysis reports are included in **Appendix C**.

SB Approach **EB Approach WB Approach NB Approach** Intersection R Т R Т R R SR 179 & Sombart Lane AM Peak A/9 sec C/19 sec PM Peak A/9 sec D/27 sec

Table 3. Total Level of Service and Delay

AUXILARY LANE ANALYSIS

The intersection of SR 179 and Sombart Lane has an existing northbound right turn lane and southbound left turn lane. The northbound right turn lane has a storage length of 205'. The southbound left turn lane is a two-way center median with a storage length of 175' to the nearest driveway.

⁻ Free movement: no LOS calculated

⁻ Free movement; no LOS calculated

The northbound right turn lane is anticipated to have no queue after development occurs because the movement is free flow, and the southbound left turn lane has a queue of 0.1 vehicles for the 95th percentile queue. No configuration changes are recommended at the intersection of SR 179 and Sombart Lane.

It is projected that 56 vehicles will travel on to Sombart Lane in the AM peak hour and 65 vehicles in the PM peak hour after development. Minimal volume in the through movement on Sombart Lane anticipates that no auxiliary lanes at the spa driveway will be necessary.

PARKING ANALYSIS

The City of Sedona requires minimum parking ratios to be met for the development. The ratios required by the City for restaurant and spa space are:

- Restaurant Indoor Dining (Greater than 1,000 SF): 1 space per 100 SF
 - Outdoor Dining: If outdoor dining area is lea than 20 percent of the size of the indoor dining area then no additional parking is required. If outdoor dining area is 20% or more of the size of the indoor dining, then the outdoor dining areas that exceed 20% of the indoor dining areas shall providing additional parking at a rate of 1 space per 100 SF.
- Personal Services, General: 1 space per 250 SF

Per the minimum parking requirements set by the City of Sedona, the development would require a total of 96 spaces, as shown in **Table 4**.

Land Use	Units (SF)	Ratio		Number of Spaces		
Spa	19,463	1 Space per 250 SF		1 Space per 250 SF		78
Indoor Dining	1,426	1 Space	e per 100 SF	15		
Outdoor Dining	525	1 Space per 100 SF exceeding 20%		3		
Total	21,414		-	96		

Table 4. City of Sedona Parking Requirements

Due to shuttle access and the location of the development on the Arabella Hotel site, parking requirements for the site will likely be reduced due to shared parking and transit opportunities. The daily internal capture rate per ITE is 38%. A reduction of 38% is recommended due to these factors, resulting in **60 parking spaces** being provided for the development.

RECOMMENDATIONS

This report documents the traffic impact analysis (TIA) for a Spa to be developed west of the intersection of SR 179 and Sombart Lane in Sedona, Arizona. The development will consist of 21,031 SF of building space and 525 SF of additional outdoor space, with a total site area of 68,905 SF. The development is anticipated to generate 1,121 daily trips, with 42 trips occurring in the AM peak hour and 65 trips in the PM peak hour.

It is recommended that the City should extend the sidewalk on the south side of Sombart Lane to include the project frontage. Extension of the sidewalk will increase spa accessibility to hotel

patrons and increase safety for pedestrians. The proposed parking lot should be constructed to maintain trail access to Marg Draw Trail.

The study intersection of SR 179 and Sombart Lane operates at acceptable level of service within existing conditions. The addition of project traffic the westbound approach is operating at LOS D (28 seconds delay) in the PM peak hour, an 8 second increase in delay from existing conditions. Although ADOT requires LOS C on state highways, LOS D may be acceptable per ADOT TGP 240 in urban areas. Considering that the 95th percentile queue for the westbound movement is only 1 vehicle in the total traffic PM scenario and there is less than 30 seconds of delay overall, LOS D is not anticipated to cause adverse impacts to the study intersection. No intersection improvements are recommended per the LOS and delay analysis.

No additional auxiliary lanes are recommended at the intersection of SR 179 and Sombart Lane or at the future driveway intersections. The existing northbound right turn lane and southbound left turn lanes on SR 179 are not recommended to be adjusted.

The City of Sedona requires a minimum of 96 parking spaces for the proposed development. Due to the shuttle access to various destinations throughout Sedona and the location of the development on the Arabella Hotel site, it is expected that parking demand will be lower than what is required. A parking reduction of 38% is recommended per ITE daily internal capture rates, resulting in 60 spaces recommended for the development.

Please let me know if you have any questions. I can be reached at 958-458-7121, or andrew.baird@kimley-horn.com.

Andrew Baird, P.E. Associate

Attachments:

Attachment A: Count Data Attachment B: Trip Generation

Attachment C: Existing & Total Synchro Reports

Attachments

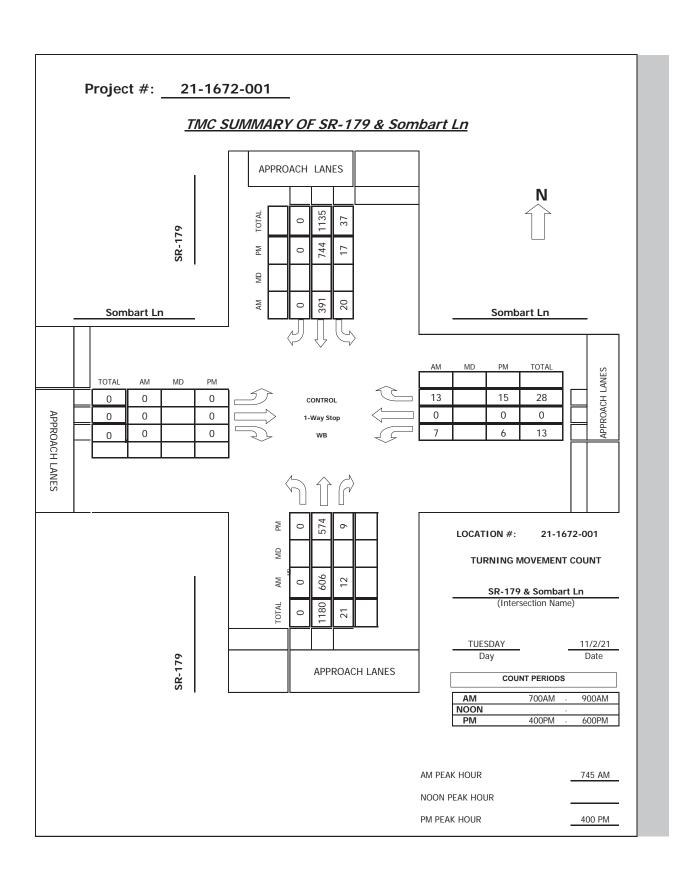
Attachment A: Count Data

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

	Tuesday, Nover		2021			City:	Sedona				Pro	ject #:	21-1	672-00	2
Location: Somb AM Period NB	art Ln east of S SB	SR-179 EB		WB			PM Period	NB	S	В	EB		WB		
00:00		0		0			12:00			_	9		9		
00:15		0		0			12:15				11		6		
00:30		0		0			12:30				9		7		
00:45		0	0	0	0		12:45				7	36	3	25	61
01:00		0		1			13:00				12		4		
01:15		0		0			13:15				11		6		
01:30		1		0			13:30				12		5		
01:45		0	1	1	2	3	13:45				6	41	5	20	61
02:00		0	-	0			14:00				9		5		
02:00		0		0			14:00				8		4		
02:30		0		0			14:13				8		5		
02:45		0	0	0	0		14:45				7	32	6	20	52
			0		- 0							32		20	32
03:00		1		1			15:00				14		4		
03:15		0 1		0 1			15:15				14		7 2		
03:30		0	2	1	3	5	15:30 15:45				10 13	51	8	21	72
03:45					3	5						31		21	72
04:00		1		0			16:00				9		7		
04:15		0		0			16:15				3		5		
04:30		0	0	0	0	0	16:30				7	0.4	2	0.1	47
04:45		1	2	0	0	2	16:45				7	26	7	21	47
05:00		3		1			17:00				8		6		
05:15		2		1			17:15				12		9		
05:30		3		3	_		17:30				5		8		
05:45		4	12	2	7	19	17:45				15	40	3	26	66
06:00		3		2			18:00				6		6		
06:15		3		2			18:15				14		5		
06:30		4		4			18:30				5		2		
06:45		4	14	2	10	24	18:45				9	34	3	16	50
07:00		4		5			19:00				6		1		
07:15		5		3			19:15				4		2		
07:30		7		5			19:30				6		4		
07:45		12	28	2	15	43	19:45				5	21	3	10	31
08:00		7		5			20:00				4		1		
08:15		6		4			20:15				1		0		
08:30		7		9			20:30				5		0		
08:45		6	26	3	21	47	20:45				4	14	3	4	18
09:00		6		6			21:00				3		2		
09:15		9		8			21:15				8		2		
09:30		2		3			21:30				2		1		
09:45		5	22	9	26	48	21:45				0	13	1	6	19
10:00		9		3			22:00				3		2		
10:15		11		6			22:15				1		0		
10:30		6		3			22:30				1		1		
10:45		9	35	6	18	53	22:45				0	5	1	4	9
11:00		5		8			23:00				0		0		
11:15		6		5			23:15				0		0		
11:30		5		4			23:30				1		0		
11:45		7	23	5	22	45	23:45				0	1	0	0	1
Total Vol.			165		124	289						314		173	487
	24 95741	15, -111.763									Daii	y Tota	le		
GPS Coordinates:	34.03/01	, -111./03	7011						NB	SB	Dall	y rota EB	13	WB	Combine
												479		297	776
			AM									PM		<u> </u>	, , ,
Split %			57.1%		12 0%	37.2%						64.5%		35.5%	62.8%
•)		
Peak Hour			11:45		11:45	11:45						15:00		16:45	15:00
Volume			36		27	63						51		30	72
P.H.F.			0.82		0.75	0.88						0.91		0.83	0.86

Intersection Turning Movement Prepared by:





Intersection Turning Movement Prepared by:





N-S STREET: SR-179 DATE: 11/2/21 LOCATION: Sedona

E-W STREET: Sombart Ln DAY: TUESDAY PROJECT# 21-1672-001

	NC	ORTHBO	UND	SC	UTHBO	JND	E	ASTBOL	JND	W	ESTBOL	JND	
LANES:	NL O	NT 1	NR 1	SL 0	ST 1	SR 0	EL 0	ET 0	ER 0	WL 0	WT 1	WR 0	TOTAL
6:00 AM 6:15 AM 6:30 AM 6:45 AM													
7:00 AM 7:15 AM 7:30 AM 7:45 AM 8:00 AM	0 0 0 0	92 92 130 155	4 4 4 4	0 1 3 8 3	50 58 72 93 87	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	4 2 4 0 1	0 0 0 0	1 1 1 2 4	151 158 214 262 254
8:15 AM 8:30 AM 8:45 AM 9:00 AM 9:15 AM 9:30 AM	0 0 0	146 150 126	2 2 0	4 5 6	103 108 118	0 0 0	0 0 0	0 0 0	0 0 0	2 4 1	0 0 0	2 5 2	259 274 253
9:45 AM 10:00 AM 10:15 AM 10:30 AM 10:45 AM 11:00 AM													
11:15 AM 11:30 AM 11:45 AM													

TOTAL	NL	ΝI	NR	SL	SI	SR	ŁL	ΕI	ER	WL	VV I	WR	TOTAL
Volumes	0	1046	24	30	689	0	0	0	0	18	0	18	1825
Approach %	0.00	97.76	2.24	4.17	95.83	0.00	####	####	####	50.00	0.00	50.00	
App/Depart	1070	/	1064	719	/	707	0	/	54	36	/	0	

AM Peak Hr Begins at: 745 AM

PEAK

 Volumes
 0
 606
 12
 20
 391
 0
 0
 0
 0
 7
 0
 13
 1049

 Approach %
 0.00
 98.06
 1.94
 4.87
 95.13
 0.00
 #### #### #### #### 35.00
 0.00
 65.00

PEAK HR.

FACTOR: 0.972 0.909 0.000 0.556 0.957

CONTROL: 1-Way Stop (WB)

COMMENT 1: GPS: 34.857643, -111.763893

Intersection Turning Movement



N-S STREET: SR-179 DATE: 11/2/21 LOCATION: Sedona

E-W STREET: Sombart Ln DAY: TUESDAY PROJECT# 21-1672-001

	NO	RTHBOL	JND	SO	UTHBOL	JND	E	ASTBOL	IND	W	ESTBOU	IND	
LANES:	NL 0	NT 1	NR 1	SL 0	ST 1	SR 0	EL 0	ET 0	ER 0	WL 0	WT 1	WR 0	TOTAL
1:00 PM 1:15 PM 1:30 PM 1:45 PM 2:00 PM 2:15 PM 2:30 PM 2:45 PM 3:00 PM 3:15 PM 3:30 PM													
3:45 PM 4:00 PM 4:15 PM 4:30 PM 4:45 PM 5:00 PM 5:15 PM 5:30 PM 6:00 PM 6:15 PM 6:30 PM 6:30 PM	0 0 0 0 0 0	161 135 147 131 121 123 134 120	3 1 3 2 1 5 3 3	6 2 4 5 7 7 2 12	193 178 180 193 158 163 146 172	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	3 0 1 2 2 3 4 2	0 0 0 0 0 0	4 5 1 5 4 6 4 1	370 321 336 338 293 307 293 310
TOTAL Volumes Approach % App/Depart	NL 0 0.00 1093	NT 1072 98.08	NR 21 1.92 1102	SL 45 3.15 1428	ST 1383 96.85	SR 0 0.00 1400	EL 0 #### 0	ET 0 #### /	ER 0 #### 66	WL 17 36.17 47	WT 0 0.00	WR 30 63.83	TOTAL 2568
	ak Hr Be	gins at:	400	PM									
PEAK Volumes Approach %	0 0.00	574 98.46	9 1.54	17 2.23	744 97.77	0 0.00	0 ####	0 ####	0 ####	6 28.57	0 0.00	15 71.43	1365
PEAK HR. FACTOR:	l	0.889	I		0.956		l	0.000			0.750	I	0.922
CONTROL: COMMENT 1:	0	Stop (WI		12									

GPS: 34.857643, -111.763893



Pedestrian & Bicycle Study

 N-S STREET: SR-179
 Date: 11/2/21
 City: Sedona

 E-W STREET: Sombart Ln
 Day: TUESDAY
 Project #: 21-1672-001

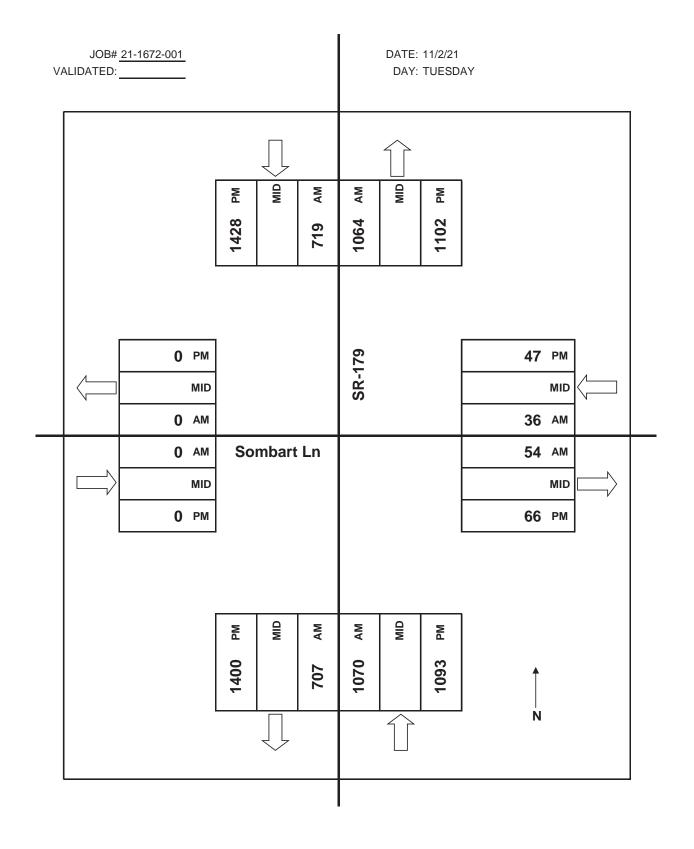
		PEDES	TRIANS	
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	0	0
8:15 AM	0	0	0	0
8:30 AM	0	0	1	0
8:45 AM	0	0	2	0
TOTAL	0	0	3	0

		BICY	CLES	
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	0	0
8:15 AM	0	0	2	0
8:30 AM	0	0	0	0
8:45 AM	0	0	2	0
TOTAL	0	0	4	0

		PEDES'	TRIANS	
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	1	0	0	0
4:15 PM	0	0	2	0
4:30 PM	0	0	0	0
4:45 PM	0	0	5	0
5:00 PM	0	0	4	0
5:15 PM	0	0	3	0
5:30 PM	0	0	0	0
5:45 PM	0	0	0	0
TOTAL	1	0	14	0

		BICY	CLES	
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	0	0	0	0
4:15 PM	0	0	0	0
4:30 PM	0	0	2	0
4:45 PM	0	0	0	0
5:00 PM	0	0	1	0
5:15 PM	0	0	0	0
5:30 PM	0	0	0	0
5:45 PM	0	0	0	0
TOTAL	0	0	3	0

	North Leg	
West Leg		East Leg
	South Leg	



Attachment B: Trip Generation

Athletic Club

(493)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 2 Avg. 1000 Sq. Ft. GFA: 40

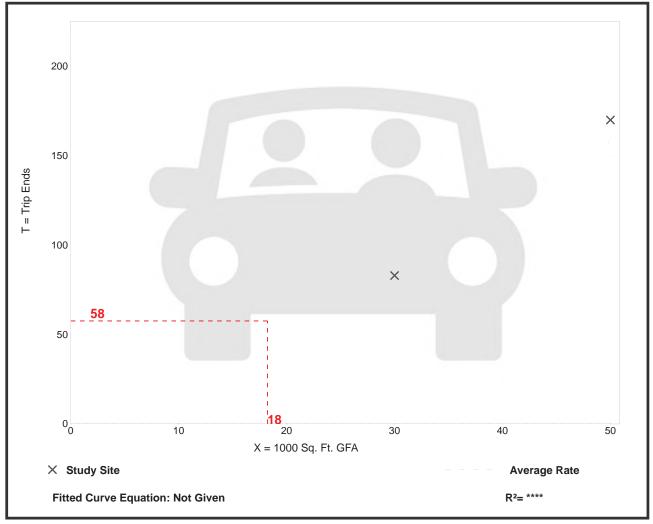
Directional Distribution: 61% entering, 39% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

•	•	
Average Rate	Range of Rates	Standard Deviation
3.16	2.77 - 3.40	*

Data Plot and Equation

Caution - Small Sample Size



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Athletic Club

(493)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 3 Avg. 1000 Sq. Ft. GFA: 33

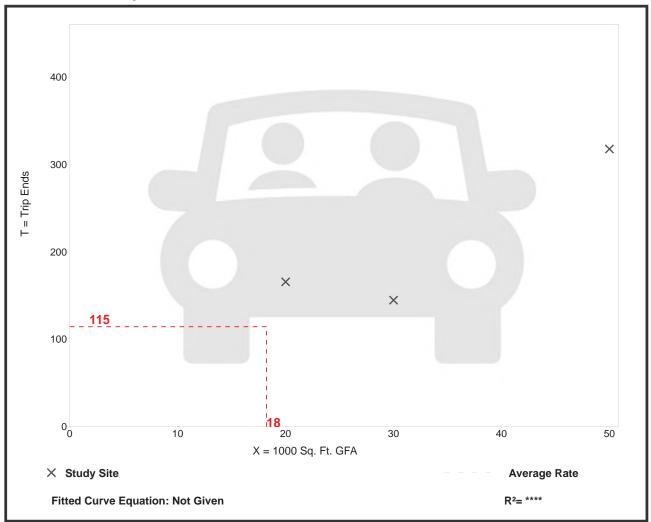
Directional Distribution: 62% entering, 38% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

•	-	
Average Rate	Range of Rates	Standard Deviation
6.29	4.83 - 8.30	1.47

Data Plot and Equation

Caution - Small Sample Size



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Fine Dining Restaurant (931)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

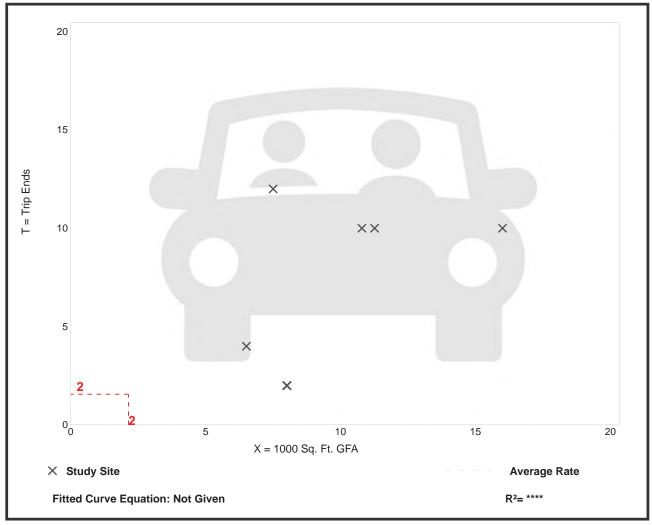
Number of Studies: 7 Avg. 1000 Sq. Ft. GFA: 10

Directional Distribution: Not Available

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.73	0.25 - 1.60	0.42

Data Plot and Equation



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Fine Dining Restaurant (931)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday

Setting/Location: General Urban/Suburban

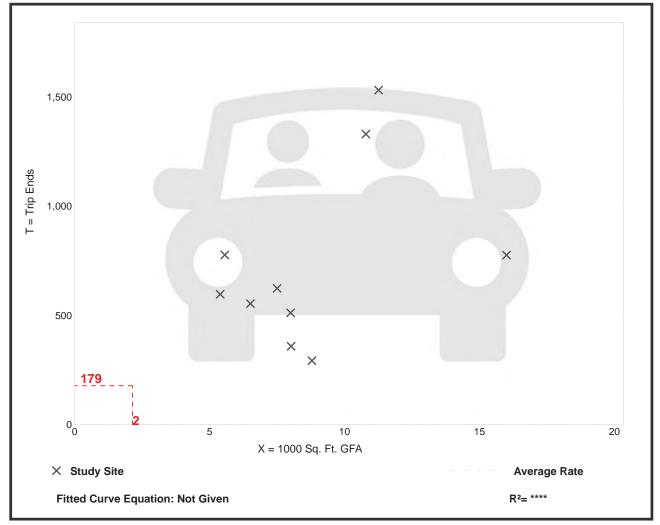
Number of Studies: 10 Avg. 1000 Sq. Ft. GFA: 9

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
83.84	33.45 - 139.93	40.01

Data Plot and Equation



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Fine Dining Restaurant (931)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

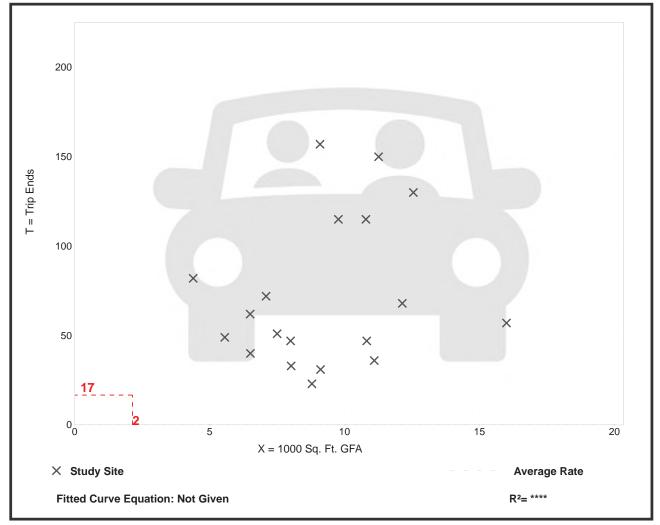
Number of Studies: 19 Avg. 1000 Sq. Ft. GFA: 9

Directional Distribution: 67% entering, 33% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
7.80	2.62 - 18.68	4.49

Data Plot and Equation



Trip Gen Manual, 11th Edition

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Attachment C: Synchro LOS Reports

Intersection						
Int Delay, s/veh	0.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
		WDK				
Lane Configurations	Y	40	↑	7	1	^
Traffic Vol, veh/h	7	13	606	12	20	391
Future Vol, veh/h	7	13	606	12	20	391
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	205	175	-
Veh in Median Storage		-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	56	56	97	97	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	23	625	12	22	430
Malay/Minay N	1!1	Λ.	10:01	Λ.	10:00	
	/linor1		/lajor1		Major2	
Conflicting Flow All	1099	625	0	0	637	0
Stage 1	625	-	-	-	-	-
Stage 2	474	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	235	485	-	-	947	-
Stage 1	534	-	-	-	-	-
Stage 2	626	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	230	485	_	-	947	_
Mov Cap-2 Maneuver	230	-	_	_	-	_
Stage 1	534	_	-	-	_	-
Stage 2	612	_	_	_	_	_
Olago 2	012					
Approach	WB		NB		SB	
HCM Control Delay, s	16.5		0		0.4	
HCM LOS	С					
Minor Lanc/Major Mun	nt	NIDT	NIDDM	/DI n1	SBL	SBT
Minor Lane/Major Mvn	iit	NBT	NBRV			
Capacity (veh/h)		-	-	349	947	-
		-		0.102		-
HCM Carter Dates (c)	١				9 ()	-
HCM Control Delay (s))	-	-	16.5	8.9	
		-	-	C 0.3	0.9 A 0.1	-

Intersection						
Int Delay, s/veh	0.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		↑	7	*	↑
Traffic Vol, veh/h	6	15	574	9	17	744
Future Vol, veh/h	6	15	574	9	17	744
Conflicting Peds, #/hr		0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None		None	-	
Storage Length	0	-	_	205	175	-
Veh in Median Storage		_	0	-	-	0
Grade, %	0	_	0	_	_	0
Peak Hour Factor	75	75	89	89	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mymt Flow	8	20	645	10	18	775
IVIVIIIL FIOW	0	20	043	10	10	113
Major/Minor N	/linor1	١	/lajor1	Λ	/lajor2	
Conflicting Flow All	1456	645	0	0	655	0
Stage 1	645	-	-	-	-	-
Stage 2	811	-	-	-	-	-
Critical Hdwy	6.42	6.22	_	-	4.12	-
Critical Hdwy Stg 1	5.42	_	_	_	_	_
Critical Hdwy Stg 2	5.42	_	-	_	-	_
	3.518	3.318		_	2.218	_
Pot Cap-1 Maneuver	143	472	_	_	932	_
Stage 1	522	- 172	_	_	-	_
Stage 2	437	_	_	_	_	
Platoon blocked, %	TJ1		_			_
Mov Cap-1 Maneuver	140	472			932	
Mov Cap-1 Maneuver	140	4/2	-	-	932	-
	522					
Stage 1		-	-	-	-	-
Stage 2	429	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	19.2		0		0.2	
HCM LOS	С					
200						
NAL 1 (0.4.1		NET	NIDE	VDL 4	001	CDT
Minor Lane/Major Mvr	nt	NBT	NBRV		SBL	SBT
Capacity (veh/h)		-	-	281	932	-
HCM Lane V/C Ratio		-	-		0.019	-
HCM Control Delay (s		-	-	19.2	8.9	-
HCM Lane LOS		-	-	С	Α	-
HCM 95th %tile Q(veh	1)	-	-	0.3	0.1	-

Intersection						
Int Delay, s/veh	1.3					
Movement		MPD	NDT	NDD	SBL	CDT
	WBL	WBR	NBT	NBR		SBT
Lane Configurations	1/	10	^	7	30	201
Traffic Vol, veh/h	16	19	606	26	30	391
Future Vol, veh/h	16	19	606	26	30	391
Conflicting Peds, #/hr		0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None		None	-	
Storage Length	0	-	-	205	175	-
Veh in Median Storage		-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	56	56	97	97	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	34	625	27	33	430
Major/Minor N	/linor1	N	/lajor1	N	Major2	
Conflicting Flow All	1121	625	0	0	652	0
Stage 1	625	023	-	U	032	-
J	496	-		-	-	
Stage 2			-	-	110	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
	3.518		-	-	2.218	-
Pot Cap-1 Maneuver	228	485	-	-	935	-
Stage 1	534	-	-	-	-	-
Stage 2	612	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	220	485	-	-	935	-
Mov Cap-2 Maneuver	220	-	-	-	-	-
Stage 1	534	-	-	-	-	-
Stage 2	591	-	-	-	-	-
J.						
Annuach	MD		ND		CD	
Approach	WB		NB		SB	
HCM Control Delay, s			0		0.6	
HCM LOS	С					
Minor Lane/Major Mvr	nt	NBT	NBRV	VBLn1	SBL	SBT
Capacity (veh/h)		_	-	313	935	-
HCM Lane V/C Ratio		_	_		0.035	-
HCM Control Delay (s)	_	_	19.3	9	_
HCM Lane LOS	1	-	_	C	A	-
HCM 95th %tile Q(veh	1)	_		0.7	0.1	
HOW FULL FORME (VEI	1)			0.7	U. I	

Total AM 9:00 am 11/23/2021 Synchro 11 Report Page 1

Intersection						
Int Delay, s/veh	1.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	WDL	WDK	IND I	NDK 7	3DL N	<u>3</u>
Traffic Vol, veh/h	20	25	574	34	33	T
Future Vol, veh/h	20	25	574	34	33	744
		0			0	
Conflicting Peds, #/hr			0	0		0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	205	175	-
Veh in Median Storage		-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	89	89	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	27	33	645	38	34	775
Major/Minor N	/linor1	N	/lajor1	N	/lajor2	
						0
Conflicting Flow All	1488	645	0	0	683	0
Stage 1	645	-	-	-	-	-
Stage 2	843	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	137	472	-	-	910	-
Stage 1	522	-	-	-	-	-
Stage 2	422	-	-	-	-	-
Platoon blocked, %				_		_
Mov Cap-1 Maneuver	132	472	_	_	910	_
Mov Cap 1 Maneuver	132	- 172	_	_	710	_
Stage 1	522	_	_	_	_	_
Stage 2	406	_	_	_	_	-
Stage 2	400	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	27.4		0		0.4	
HCM LOS	D					
, ====						
						0.5.5
Minor Lane/Major Mvr	nt	NBT	NBRV		SBL	SBT
Capacity (veh/h)		-	-	220	910	-
HCM Lane V/C Ratio		-	-	0.273	0.038	-
HCM Control Delay (s		-	-	27.4	9.1	-
HCM Lane LOS		-	-	D	Α	-
HCM 95th %tile Q(veh	า)	-	-	1.1	0.1	-
	,					

Total PM 9:01 am 11/23/2021 Synchro 11 Report Page 1

TAB 11

