



May 26, 2023

City of Sisters  
Attention: Planning Department  
520 E. Cascade Avenue  
Sisters, OR 9775

Re: **Baker Mixed-Use Development – Sisters, Oregon**  
*Preliminary Transportation Analysis and Traffic Impact Study Scoping Letter*

C&A Project Number 20220806.00

This preliminary transportation analysis and traffic impact study (TIS) scoping letter supports the proposed Baker Mixed-Use development and presents project information for City review. The following items are addressed:

1. Proposed Development and Analysis Requirements
2. Existing Conditions
3. Development Trip Generation
4. Site Access and Circulation
5. Sisters Transportation System Plan (TSP)
6. Transportation Analysis
7. Summary

## **1. PROPOSED DEVELOPMENT AND ANALYSIS REQUIREMENTS**

The subject properties are described as tax lots 4100 and 4101 on Deschutes County Assessor's Map 15-10-04CC and are addressed at 100 E and 130 E Cascade Avenue, Sisters, Oregon. The proposed development includes an approximately 1,120-square-foot addition to the existing Dixie's retail store (tax lot 4100) and the construction of a new three-story mixed-use building with a basement on the adjacent property (tax lot 4101) to the east. The new building includes six (6) residential dwelling units (apartments) and approximately 3,859 square feet of commercial office/retail area. A portion of the development parking is provided on-site on the north side of the property with alley access, and a portion of the parking will be provided on-street. Copies of the proposed site plans are attached for reference.

The proposed development is consistent with the existing Sisters Downtown Commercial (DC) zone designation. Therefore, any necessary traffic impact study (TIS) needs to address the City of Sisters Development Code requirements.

## 2. EXISTING CONDITIONS

Tax lot 4100 (100 E Cascade Avenue) is developed with the existing Dixie’s retail store. Tax lot 4101 (130 E Cascade Avenue) is currently undeveloped except for a small kiosk at the southeast property corner. Both properties front Cascade Avenue (US Highway 20/OR Highway 126) to the south and have alley access to the north. Tax lot 4100 also has a frontage on Elm Street to the west.

### Roadway Facilities

The following table summarizes existing roadway classifications and characteristics in the project area.

TABLE 1 – EXISTING ROADWAY CHARACTERISTICS						
Roadway	Functional Classification	Lanes	Speed Limit (MPH)	Sidewalks	Bicycle Lanes	On-Street Parking
Cascade Avenue (US Highway 20 / OR Highway 126)	Arterial (Statewide Highway, Freight Route)	2	20	Yes	No	Yes
Elm Street	Collector	2	25	Yes	No	Yes
Main Avenue	Collector	2	25 <sup>1</sup>	Yes	Yes	Yes

<sup>1</sup> Speed limit is not posted, and the stated value is assumed, noting the Transportation System Plan (TSP) recommends 20 MPH.

## 3. DEVELOPMENT TRIP GENERATION

The proposed development includes an approximately 1,120-square-foot addition to the existing Dixie’s retail store and the construction of a new three-story mixed-use building with six (6) residential dwelling units (apartments) and approximately 3,859 square feet of commercial office/retail area. Trip generation is estimated using the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 10<sup>th</sup> Edition, and practices from the ITE *Trip Generation Handbook*, 3<sup>rd</sup> Edition, and is presented in the following table.

TABLE 2 – TRIP GENERATION <sup>1</sup>										
Description	Land Use	ITE Code	Size	AM Peak Hour			PM Peak Hour			Daily
				Enter	Exit	Total	Enter	Exit	Total	
Dixie’s Addition	Strip Retail Plaza (<40k)	822	1,120 SF	2	1	3	4	3	7	60
Baker Residential	Multifamily Housing (Low-Rise)	220	6 DU	1	1	2	2	1	3	40
Baker Retail	Strip Retail Plaza (<40k)	822	3,859 SF	5	4	9	13	12	25	210
<b>Total Trip Generation</b>				<b>8</b>	<b>6</b>	<b>14</b>	<b>19</b>	<b>16</b>	<b>35</b>	<b>310</b>

<sup>1</sup> Trip generation estimated using the *Average Rate* for all Land Uses per the ITE *Trip Generation Handbook*, 3<sup>rd</sup> Edition recommended practice.

As presented in the previous table, the proposed development is anticipated to generate 144 AM and 35 PM peak hour, and 310 daily trips.

#### 4. SITE ACCESS AND CIRCULATION

As depicted in the attached site plans the proposed development has frontage on Cascade Avenue to the south, Elm Street to the west, and an alley to the north. Development motor vehicle parking is provided north of the proposed Baker development with alley access, north of the existing Dixie’s building (on the north side of the alley with alley access), and south and west of the development on-street. The ADA-accessible parking spaces are delineated.

On-site pedestrian walkways connect to the existing sidewalks along Cascade Avenue and Elm Street, and pedestrian access is also provided to the alley to the north.

Bicycle access and parking will be constructed consistent with requirements identified in the Sisters Development Code.

#### 5. SISTERS TRANSPORTATION SYSTEM PLAN (TSP)

The following summarizes relevant materials contained in the Sisters TSP in the project area.

##### Existing and Forecast Land Uses

Land use is a key factor affecting demands placed on a City’s transportation system. The location, density, type, and mixture of land uses have a direct impact on traffic levels and patterns. Existing land uses within the City of Sisters were obtained from tax assessors data, census data, and zoning data and compared with existing aerial photography. In addition, land use inventories were compared and controlled to the data published by the City’s Comprehensive Plan<sup>10</sup>. The land uses were grouped into four main categories: households, retail employment, service employment, and other employment.

Projected land uses within the Sisters Urban Growth Boundary (UGB) were estimated for the future horizon year by extrapolating growth trends identified in the City’s Comprehensive Plan. The land use growth was allocated to vacant lands in the City’s urban and urban reserve areas.<sup>11</sup> Table 4-1 summarizes the prior existing and future population and employment projections within the Sisters UGB. The existing land use corresponds to a population of approximately 1,800 residents, and the future land use originally corresponded with a year 2030 population projection of approximately 4,700 residents, which has since been revisited with more current information suggesting that a population of approximately 4,750 persons will not be reached until 2040.

**Table 4-1: Land Use Projection within Sisters Urban Growth Boundary**

Land Use	Existing 2007 Land Use	Projected Growth from 2007 to 2030	Projected 2030 Land Use
<b>Households</b>			
<b>Total Households</b>	920	1,215 (+132%)	2,135
<b>Employees</b>			
Retail Employees	695	550 (+79%)	1,244
Service Employees	375	230 (+61%)	605
Other Employees	755	530 (+70%)	1,285
<b>Total Employees</b>	1,824	1,310 (+72%)	3,134

The TSP contains the following intersection operations analyses for the higher-order intersections in the project area:

**Table 3-2: Study Intersection 30<sup>th</sup> HV Operating Conditions**

Intersection	Jurisdiction	Mobility Standard	Intersection Performance		
			Delay	LOS	V/C
9: N Elm St/S Cascade Ave (US 20)	ODOT	≤ 0.85	33.2	A/D	0.39

**Table 4-2: Year 2040 Study Intersection 30<sup>th</sup> HV Operating Conditions**

Intersection	Jurisdiction	Mobility Standard	Intersection Performance		
			Delay	LOS	V/C
9: N Elm St/S Cascade Ave (US 20)	ODOT	≤ 0.85	61.8	B/F	0.66

**Table 7-7: Forecast Study Intersection 30<sup>th</sup> HV Operating Conditions**

Intersection	Jurisdiction	Mobility Standard	Intersection Performance		
			Delay	LOS	V/C
Cascade Ave (US 20)/Elm St	ODOT	≤ 0.80	>50	A/F	0.61
Main Ave/Elm St	City of Sisters	≤ 0.90	12.3	A/B	0.10

As identified in the TSP tables above, the higher-order intersections near the subject development currently operate and are anticipated to operate in the plan year, at acceptable agency mobility standards.

The proposed development is in an area with a fully developed transportation system including all pedestrian, bicycle, and motor vehicle elements. Sidewalks exist on all adjacent roadway frontages, bicycle lanes are present on Main Avenue, and all adjacent roadways are constructed to current public standards.

The TSP does not identify any specific infrastructure, capacity, or safety deficiencies in the project area, nor does the TSP identify (or plan for) any infrastructure improvements in the project area apart from large-scale east-west travel corridor improvements.

Noting the subject land use action is consistent with the existing Sisters DC zone designation, it is reasonable to assume the transportation system impacts associated with the proposed development are contemplated as background growth within the Sisters UGB. As such, the TSP materials fully contemplate the proposed development impacts and additional off-site transportation system analysis is not necessary.

## 6. TRANSPORTATION ANALYSIS

The proposed development is consistent with the existing Sisters Downtown Commercial (DC) zone designation. Therefore, any necessary traffic impact study (TIS) needs to address the City of Sisters Development Code requirements. Relevant portions of the Development Code state:

### *Section 3.1.300 – Vehicular Access and Circulation*

#### *A. Traffic Study and Control Requirements*

- 1. The City or other agency with access jurisdiction may require a traffic study prepared at the applicant/developer's expense by a qualified professional to determine access, circulation, and other transportation requirements. A Traffic Impact Study shall be required for all development applications that will result in a traffic impact or increase in traffic impact of 200 or more average daily trips (ADT).*

### *Section 4.2.400 – Submittal Requirements*

- S. Documentation that development will not exceed the trip generation thresholds identified in the Transportation System Plan or a transportation impact analysis conducted in a manner satisfactory to the City if the development will exceed the trip generation thresholds.*

### *Section 4.2.500 – Approval Criteria*

- C. Traffic safety, internal circulation, and parking, including pedestrian and bicycle safety*

As identified in the *Development Trip Generation* section of this letter, the proposed development generates 310 daily trips and meets City Traffic Impact Study threshold requirements.

As identified in the *Sisters Transportation System Plan (TSP)* section of the letter the proposed development is in an area with a fully developed transportation system including all pedestrian, bicycle, and motor vehicle elements. Sidewalks exist on all adjacent roadway frontages, bicycle lanes are present on Main Avenue, and all adjacent roadways are constructed to current public standards.

The TSP does not identify any specific infrastructure, capacity, or safety deficiencies in the project area, nor does the TSP identify (or plan for) any infrastructure improvements in the project area apart from large-scale east-west travel corridor improvements.

Noting the subject land use action is consistent with the existing Sisters DC zone designation, it is reasonable to assume the increased transportation system impacts associated with the proposed development are contemplated as background growth within the Sisters UGB. As such, the TSP materials fully contemplate the proposed development and additional off-site transportation system analysis is not necessary.

Overall, the proposed site design will meet the city of Sisters development standards and there are no anticipated safety concerns.

Considering the above information, the applicant respectfully requests that additional transportation analysis not be required.

## 7. SUMMARY

Materials contained in this letter are intended to present sufficient transportation-related information to allow the City to determine if additional analysis is necessary to support the proposed development. Specific analysis methodologies are not identified in this letter; however, all required analyses will be performed consistent with agency requirements.

Following your review of this scope of work, please let us know of any necessary revisions or modifications so we can begin any necessary analysis.

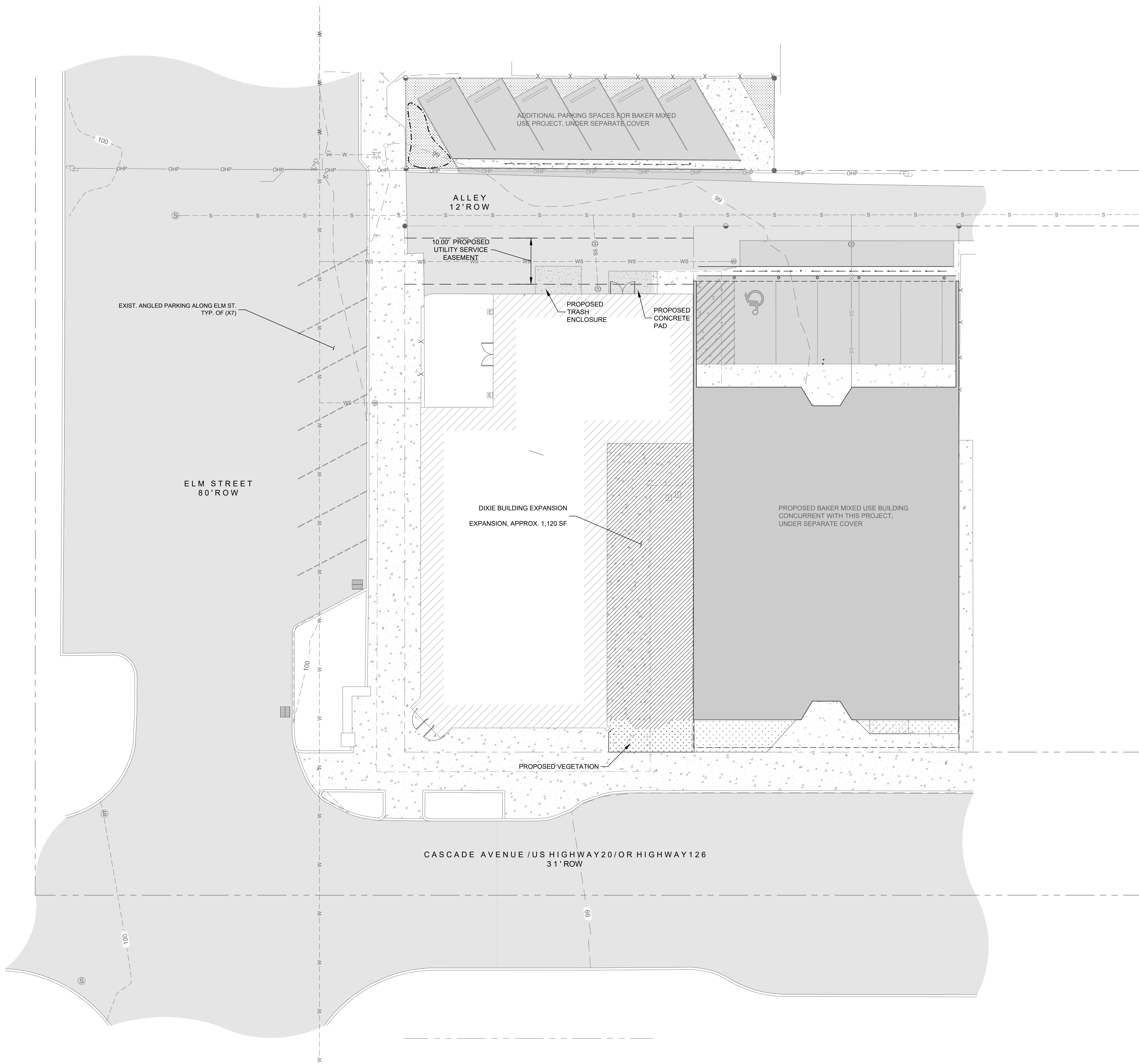
Sincerely,



Christopher M. Clemow, PE, PTOE  
Transportation Engineer

Attachments: Site Plans





**LOT SUMMARY**

LOT AREA - APPROX. 0.1866 PER PROPOSED LOT LINE ADJUSTMENT CONCURRENT WITH THIS PROJECT

ZONED CITY OF SISTERS DOWNTOWN COMMERCIAL

**GENERAL NOTES**

1. INFORMATION SHOWN ON THESE PLANS IS PRELIMINARY IN NATURE AND WILL ADJUST THROUGHOUT THE DESIGN PROCESS.
2. LIMITED COORDINATES, DIMENSIONS, AND OTHER LAYOUT INFORMATION HAVE BEEN PROVIDED ON THIS SHEET. CONTRACTOR WILL BE PROVIDED WITH A DIGITAL SITE MODEL TO AID IN CONSTRUCTION STAKING AND SURVEYING. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DEVIATIONS BETWEEN THE DIGITAL FILES AND HARD COPY PLANS.
3. UNLESS OTHERWISE NOTED, DIMENSIONS ARE TO TOP BACK OF CURB
4. LIGHT POLES, ELECTRICAL TRANSFORMERS, AND OTHER DRY UTILITY FEATURES ARE SHOWN FOR GRAPHICAL REPRESENTATION. SEE ELECTRICAL PLANS AND COORDINATE WITH OWNING UTILITY FOR INSTALLATION
5. ADDITIONAL PROJECT INFORMATION SHOWN ON ARCHITECTURAL PLANS.



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 Bend, OR 97703  
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 colearchitects.com  
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**STAMP**

READERS ARE INSTRUCTED TO CAREFULLY REVIEW THE CONSTRUCTION DOCUMENTS AND THE SITE CONDITIONS. INFORMATION REGARDING THE COMPLETE WORK OF SPECIFIC TRADES IS DISPERSED THROUGHOUT THE ENTIRE DOCUMENT SET AND CANNOT BE ACCURATELY DETERMINED BY REFERENCE TO OTHER THAN COMPLETE DOCUMENT SET.

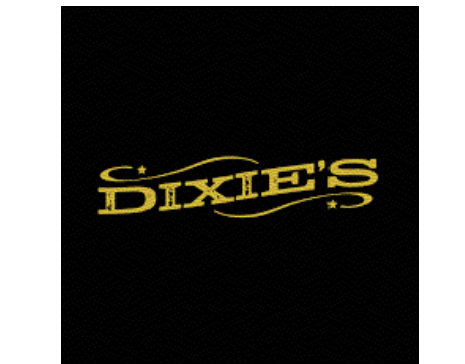
**CONSULTANT**



engineers • surveyors • planners • scientists

1001 SW Disk Dr, Suite #110  
 Bend, Oregon 97702  
 541.699.5432  
 www.m-m.net

**PROJECT INFORMATION**



**DIXIE'S REMODEL**

100 E CASCADE AVENUE  
 SISTERS OREGON 97759

**ISSUES**

PHASE	LAND USE SET
DATE	MARCH 24, 2023
JOB NUMBER	21-053-OR

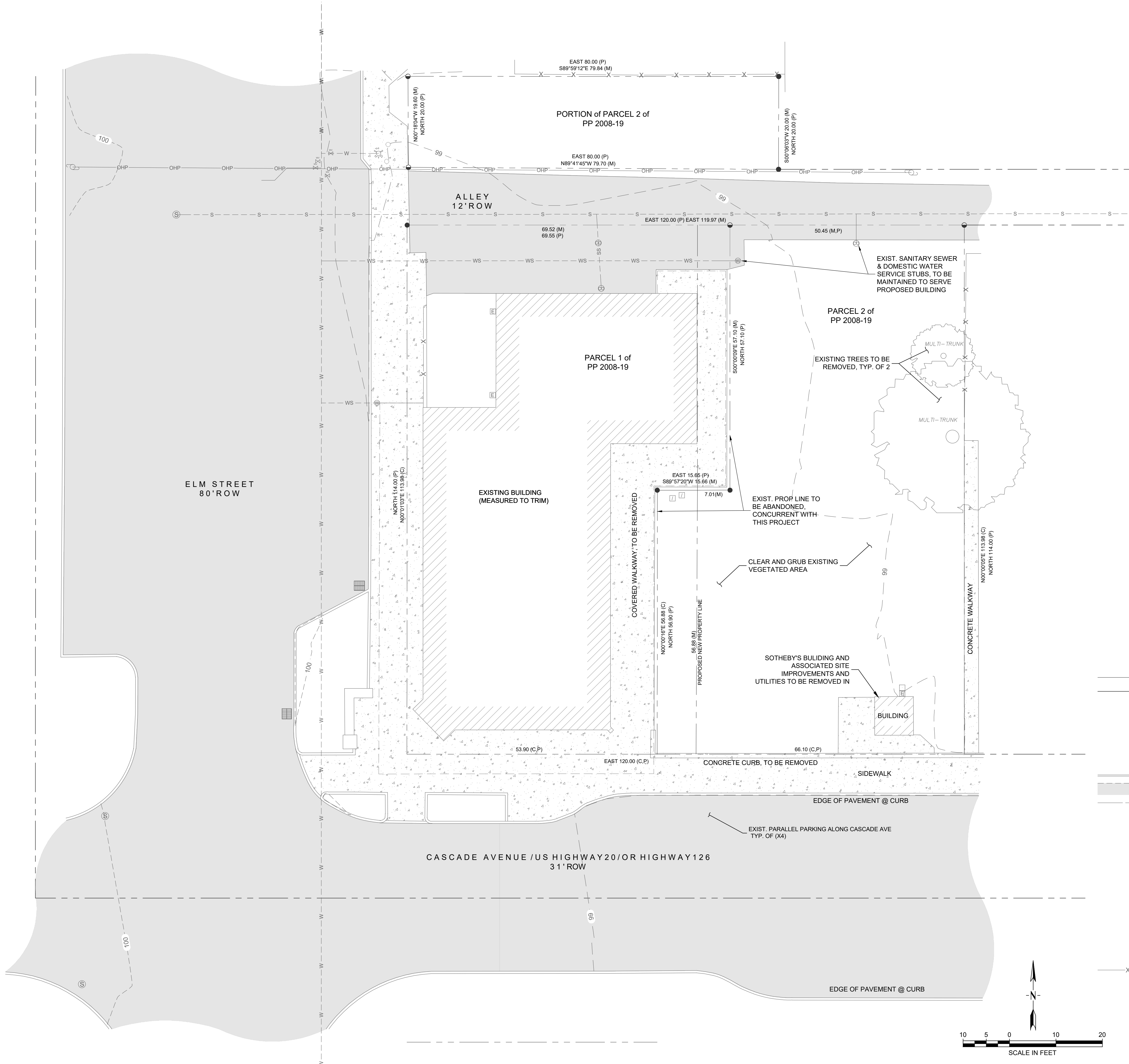
MARK	DATE	DESCRIPTION FOR COVER SHEET SYMBOLS

**SHEET NAME**

SITE PLAN

**SHEET NUMBER**

C1.1



**SURVEY NOTES**

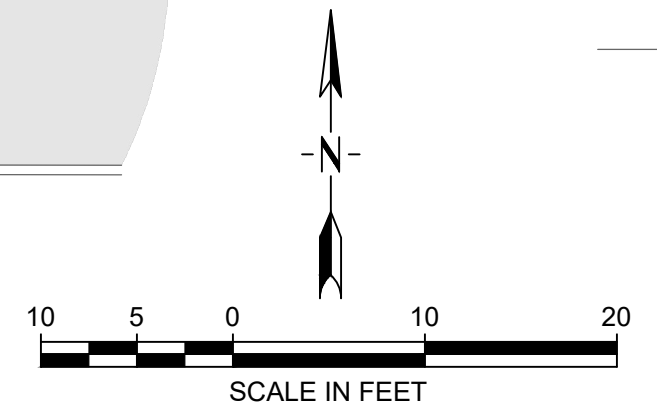
1. **PROPERTY ADDRESS:** 130 E CASCADES AVE, SISTERS, OR 97759
2. **ZONE:** DOWNTOWN COMMERCIAL ZONING DISTRICT.
3. **TAXLOT NUMBER:** 151004CC04101
4. **LEGAL DESCRIPTION:** BLOCK 1, SISTERS, SITUATED IN THE SW ¼ OF SECTION 4, T15S, R10E, W.M., CITY OF SISTERS, DESCHUTES COUNTY, OREGON. PROJECT LOCATION IS ON PARCEL 2 OF THE PARTITION PLAT 2008-19 CITY OF SISTERS DESCHUTES COUNTY, OREGON
5. THIS SURVEY IS FOR TOPOGRAPHIC PURPOSES ONLY AND DOES NOT MEET THE REQUIREMENTS OF A BOUNDARY SURVEY AND IS SUBJECT TO ANY INACCURACIES THAT A SUBSEQUENT BOUNDARY SURVEY MAY REVEAL.
6. CONTOURS ARE BASED ON ASSUMED DATUM AND HAVE NO RELATIONSHIP TO SEA LEVEL DATUM. CONTOUR INTERVAL IS 1.0 FEET.
7. BURIED UTILITIES ARE SHOWN AS INDICATED BY FIELD LOCATES. RECORD MAPS FURNISHED AND VERIFIED WHERE POSSIBLE BY FEATURES LOCATED IN THE FIELD DURING THE SITE SURVEYS. MORRISON MAIERLE ASSUMES NO LIABILITY FOR THE ACCURACY OR COMPLETENESS OF THOSE RECORDS. FOR FINAL LOCATION OF EXISTING BURIED UTILITIES CONTRACTOR SHALL COORDINATE WITH OWNING UTILITY/AGENCY
8. FIELD SURVEY COMPLETED BY BAXTER LAND SURVEYING, INC. IN OCTOBER, 2022.

**GENERAL NOTES**

1. DEMOLITION SHALL NOT PROCEED UNTIL EROSION & SEDIMENTATION CONTROL MEASURES HAVE BEEN INSTALLED.
2. CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND DISPOSAL OF ALL MATERIALS IN ACCORDANCE WITH CITY OF SISTERS PUBLIC WORKS STANDARDS AND SPECIFICATIONS, AND OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION 2020.
3. ALL DISTURBANCE OF EXISTING UTILITIES SHALL BE COORDINATED WITH OWNING UTILITY COMPANY PRIOR TO DISTURBANCE INCLUDING CITY OF SISTERS.
4. EXISTING CONCRETE CURB & GUTTER REMOVAL SHALL BE NEATLINE SAWCUT TO THE NEAREST JOINT.
5. CONTRACTOR SHALL TAKE CARE TO PRESERVE & PROTECT EXISTING ASPHALT TO REMAIN ADJACENT TO THE SITE TO MAXIMUM EXTENT POSSIBLE. ANY DAMAGE DEEMED UNNECESSARY BY ENGINEER SHALL BE REPAIRED AT CONTRACTOR EXPENSE. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRS TO CONCRETE SIDEWALK, CURB & GUTTER AND ASPHALT THAT IS DAMAGED DURING CONSTRUCTION NOT CALLED OUT FOR REMOVAL.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING UTILITY LOCATES PRIOR TO ANY EXCAVATION AND SHALL NOTIFY THE ENGINEER OF ANY POTENTIAL CONFLICTS AS SOON AS POSSIBLE

**LEGEND**

	SUBJECT PROPERTY BOUNDARY
	ADJACENT PROPERTY BOUNDARY
	FOUND 3/8" IRON ROD WITH YELLOW PLASTIC CAP STAMPED "FRED ASAT JR", UNLESS NOTED OTHERWISE
	FOUND 3/8" IRON ROD WITH DAMAGED YELLOW PLASTIC CAP
	(P) BEARING AND DISTANCE PER PARTITION PLAT NO. 200819
	(M) MEASURED BEARING & DISTANCE
	(C) CALCULATED BEARING & DISTANCE
	EXISTING CURB
	EXISTING ASPHALT ROAD
	EXISTING WATER MAIN
	EXISTING WATER VALVE
	EXISTING WATER METER
	EXISTING HYDRANT
	EXISTING IRRIGATION CONTROL VALVE
	EXISTING MANHOLE - SANITARY SEWER
	EXISTING SANITARY SEWER CLEANOUT
	EXISTING STORM WATER CATCH BASIN
	EXISTING ELECTRIC METER
	EXISTING ELECTRICAL PEDESTAL
	EXISTING BOLLARD
	EXISTING POWER POLE
	EXISTING FENCE
	EXISTING DECIDUOUS TREE & DIA.



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**CONSULTANT**



**PROJECT INFORMATION**

**BAKER MIXED USE**  
130 E CASCADE AVENUE  
SISTERS OREGON 97759

PHASE	LAND USE SET
DATE	FEBRUARY 23, 2023
JOB NUMBER	10136.003

MARK	DATE	DESCRIPTION
		FOR COVER SHEET SYMBOLS

**ISSUES**

MARK	DATE	DESCRIPTION
		FOR COVER SHEET SYMBOLS

**SHEET NAME**

**EXISTING CONDITIONS**

**SHEET NUMBER**

**C0.1**