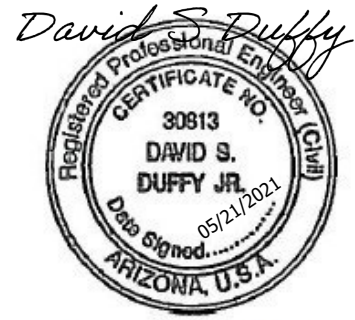




May 20, 2021

Mr. Kent Hotsenpiller, R.L.S
Mogollon Engineering & Surveying, Inc.
411 W. Santa Fe Avenue
Flagstaff, Arizona 86001



Expires 12/31/2023

RE: Trip Generation Comparison Letter for The Cortland Multi-Family Development – Flagstaff, Arizona

Dear Mr. Hotsenpiller:

CivTech is pleased to provide you with this Trip Generation Comparison Letter for the Cortland Multi-Family Development located at the north end of Cortland Boulevard south of Interstate 40 in Flagstaff, Arizona. CivTech prepared a Traffic Statement dated July 3, 2018 on the Cortland Multi-Family development for a previous developer. The previous developer assigned their rights to Miramonte Holdings who wishes to revise the number of units to approximately 139 units. Mogollon Engineering & Surveying (The Client) is the civil engineering firm to Miramonte Holdings who is the developer of this project. The proposed site plan is included as an **Attachment**.

PROPOSED DEVELOPMENT DESCRIPTION

The Cortland development is a multi-family rental complex with 139 dwelling units proposed for a portion of the site which is a reduction from 192 dwelling units proposed previously. The other portion of the site will remain undeveloped for a possible use as a hotel in the future. The development is located at the north end of Cortland Boulevard south of Interstate 40 in Flagstaff, Arizona. There is one full movement access point located on the southwest corner of the proposed site at the end of Cortland Boulevard, shown in an **Attachment**.

TRIP GENERATION COMPARISON

The trips generated for this project are estimated using as a reference the latest (10th) edition of the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*. The manual provides trip generation data collected by various transportation professionals for a wide range of different land uses. The data summarized in the report includes average rates and equations that have been established correlating the relationship between an independent variable that describes the development size and trips generated for each categorized land use. The manual includes information for weekdays and for AM and PM peak hours. The AM peak hour is assumed to one hour occurring between 7:00-9:00 AM and the PM peak hour is between 4:00-6:00 PM.

As previously noted, this development will consist of multi-family housing composed of 139 dwelling units which is a reduction from the previously proposed 192 dwelling units. The trip generation comparison for the proposed development is detailed in an **Attachment**.

Table 1: Trip Generation

Land Use	ITE Code	Size	Daily Total	Weekday					
				AM Peak Hour			PM Peak Hour		
				Enter	Exit	Total	Enter	Exit	Total
Previously Proposed Development									
Apartments	220	192 DU's	1,410	20	69	89	67	39	106
Newly Proposed Development									
Apartments	220	139 DU's	1,010	15	50	65	50	29	79
Difference (Newly Proposed – Previously Proposed)									
Apartments	220	-53 DU's	-400	-5	-19	-24	-17	-10	-27

A review of the detailed trip generation in **Table 1** reveals that the proposed development could generate 400 fewer trips per day with a total of 24 fewer trips (5 in/19 out) during the AM peak hour and a total of 27 fewer trips (17 in/10 out) during the PM peak hour.

CONCLUSIONS

The following can be concluded from the above:

- The trip generation revealed that the proposed development could generate 400 fewer trips per day with a total of 24 fewer trips (5 in/19 out) during the AM peak hour and a total of 27 fewer trips (17 in/10 out) during the PM peak hour.
- The reduced number of anticipated trips generated from the proposed development would result in a lower impact to the roadway network presented in the previously approved Traffic Impact Study dated July 3, 2018.

Thank you for allowing CivTech to assist you on this project. Please contact me with any questions you may have.

Sincerely,



David Duffy, P.E.
 Senior Traffic Engineer

Attachments: Site Plan, Trip Generation Calculations.

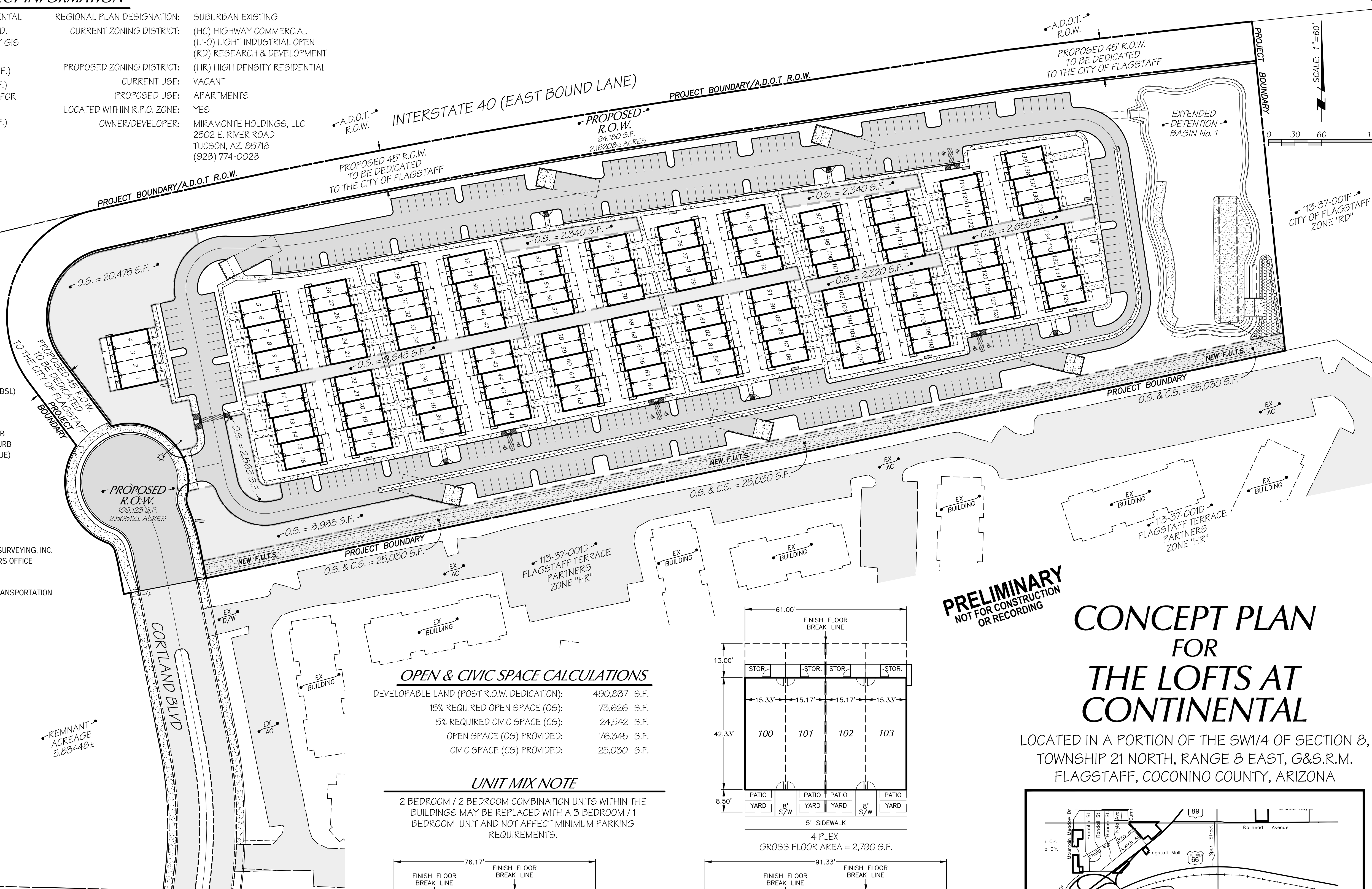
PROJECT INFORMATION

PROJECT NAME: THE LOFTS AT CONTINENTAL
 PROJECT LOCATION: 5531 E. CORTLAND BLVD. PER COCONINO COUNTY GIS
 APN NUMBER: 113-37-001E
 TOTAL ACREAGE: 19.26462± (839,167 S.F.)
 DEVELOPED ACREAGE: 13.43014± (585,017 S.F.) (INC. 2.16208± ACRES FOR R.O.W. DEDICATION)
 REMNANT ACREAGE: 5.83448± (254,150 S.F.)
 TOTAL NUMBER OF UNITS: 139
 TOTAL NUMBER OF BUILDINGS: 25
 UNITS PER ACRE: 10.35±

REGIONAL PLAN DESIGNATION: SUBURBAN EXISTING
 CURRENT ZONING DISTRICT: (HC) HIGHWAY COMMERCIAL (LI-O) LIGHT INDUSTRIAL OPEN (RD) RESEARCH & DEVELOPMENT
 PROPOSED ZONING DISTRICT: (HR) HIGH DENSITY RESIDENTIAL
 CURRENT USE: VACANT
 PROPOSED USE: APARTMENTS
 LOCATED WITHIN R.P.O. ZONE: YES
 OWNER/DEVELOPER: MIRAMONTE HOLDINGS, LLC
 2502 E. RIVER ROAD
 TUCSON, AZ. 85718
 (928) 774-0028

LEGEND & ABBREVIATIONS

- CENTERLINE (CL of C)
- RIGHT OF WAY (R.O.W.)
- PROPERTY LINE (PL or P)
- EX W — EX WATER LINE
- NEW 8" W — NEW WATER LINE (WL)
- NEW 8" S — NEW SEWER LINE (SL)
- FS — NEW FIRE SERVICE (FS)
- WS — NEW WATER SERVICE (WS)
- BSL — NEW BUILDING SUPPLY LINE (BSL)
- SS — NEW SEWER SERVICE (SS)
- EX S — EX SEWER MANHOLE
- S — NEW SEWER MANHOLE (MH)
- EX — EX EDGE OF PAVEMENT / CURB
- NEW EDGE OF PAVEMENT / CURB
- PUBLIC UTILITY EASEMENT (PUE)
- EX FH — EX FIRE HYDRANT (EX FH)
- NEW FH — NEW FIRE HYDRANT (FH)
- EX WV — EX WATER VALVE (EX WV)
- NEW WV — NEW WATER VALVE (WV)
- EX WM — EX WATER METER (EX WM)
- NEW WM — NEW WATER METER (WM)
- EX SL — EX STREET LIGHT (EX SL)
- NEW SL — NEW STREET LIGHT (SL)
- MES — MOGOLLON ENGINEERING & SURVEYING, INC.
- C.C.R.O. — COCONINO COUNTY RECORDERS OFFICE
- EX — EXISTING
- S/W — SIDEWALK
- A.D.O.T. — ARIZONA DEPARTMENT OF TRANSPORTATION
- A.P.S. — ARIZONA PUBLIC SERVICE
- INST. — INSTRUMENT
- AC — ASPHALT CONCRETE
- TYP. — TYPICAL
- B.R. — BIKE RACK
- HT — HEIGHT
- CMU — CONCRETE MASONRY UNIT
- BLDG — BUILDING
- D/W — DRIVEWAY
- F or FL — FLOWLINE
- EG — EXISTING GRADE
- FG — FINISH GRADE
- C.B. — CATCH BASIN
- SD — STORM DRAIN
- FSW — FACE OF SIDEWALK
- C&G — CURB AND GUTTER
- EOP — EDGE OF PAVEMENT
- S/W — SIDEWALK
- PKY — PARKWAY
- D/W — DRIVEWAY
- (TYP) — TYPICAL
- H.C. — HANDICAP
- STD — STANDARD
- DET — DETAIL
- FUT. — FUTURE
- SHLD — SHOULDER
- C.O.F. — CITY OF FLAGSTAFF

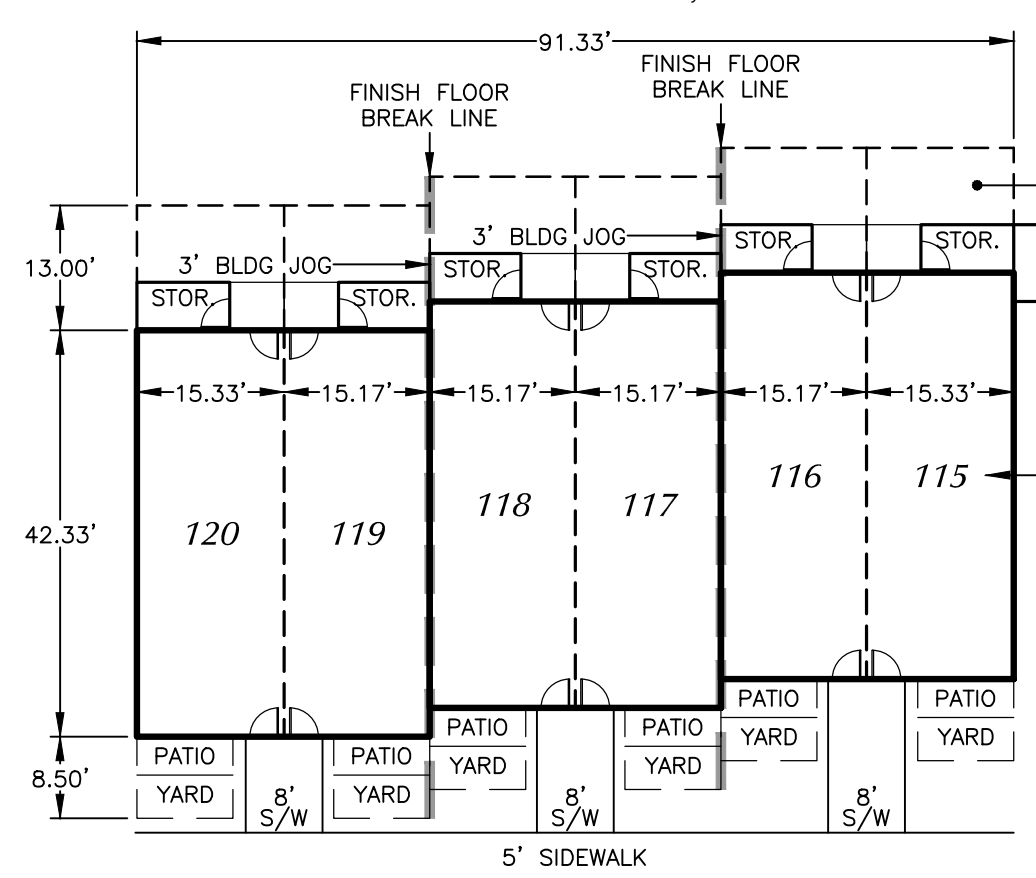
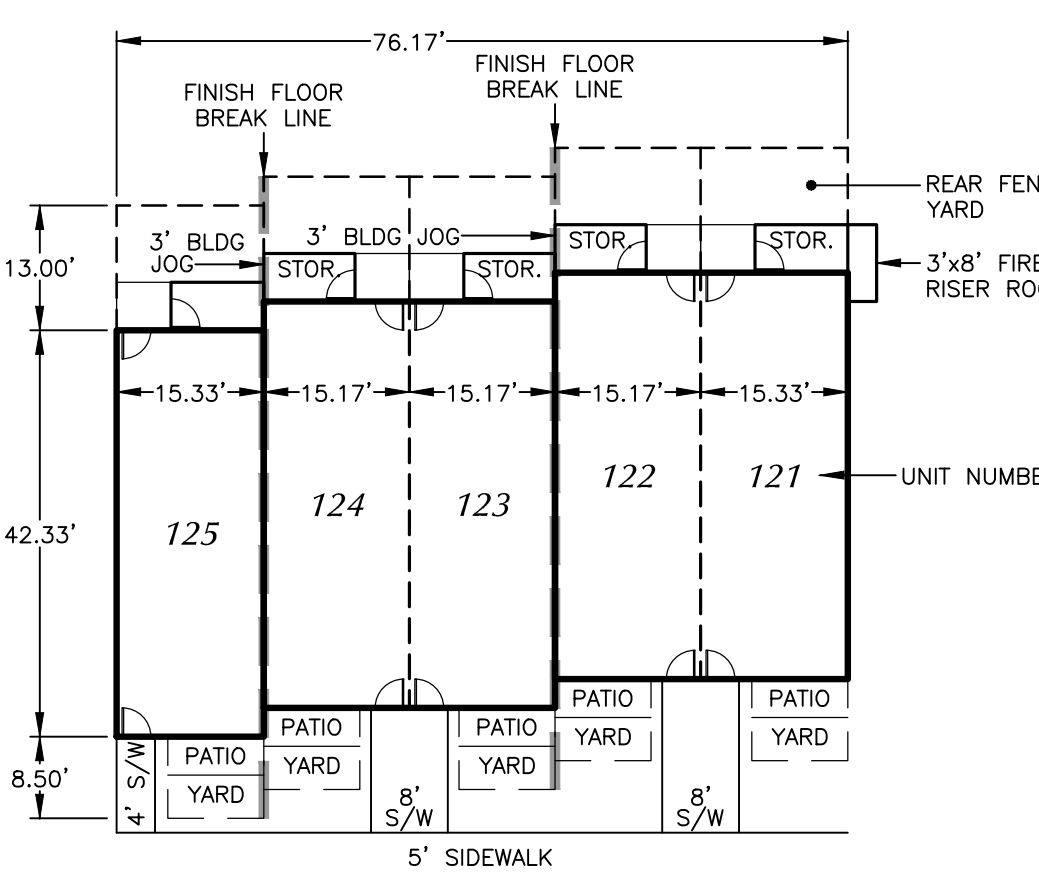


OPEN & CIVIC SPACE CALCULATIONS

DEVELOPABLE LAND (POST R.O.W. DEDICATION): 490,837 S.F.
 15% REQUIRED OPEN SPACE (OS): 73,626 S.F.
 5% REQUIRED CIVIC SPACE (CS): 24,542 S.F.
 OPEN SPACE (OS) PROVIDED: 76,345 S.F.
 CIVIC SPACE (CS) PROVIDED: 25,030 S.F.

UNIT MIX NOTE

2 BEDROOM / 2 BEDROOM COMBINATION UNITS WITHIN THE BUILDINGS MAY BE REPLACED WITH A 3 BEDROOM / 1 BEDROOM UNIT AND NOT AFFECT MINIMUM PARKING REQUIREMENTS.



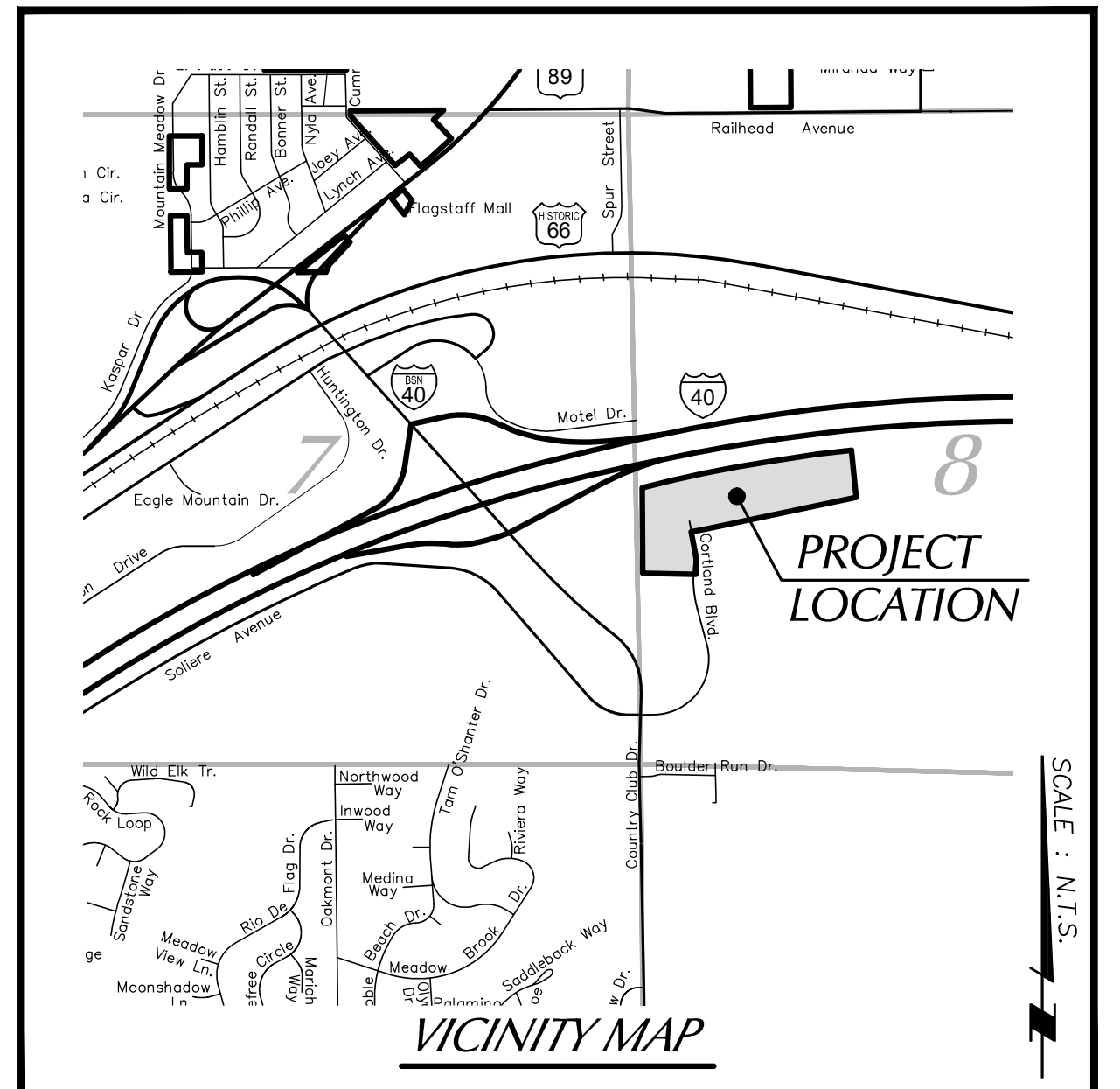
PRELIMINARY BUILDING FOOTPRINTS

SCALE: 1"=20'

PRELIMINARY
 NOT FOR CONSTRUCTION
 OR RECORDING

CONCEPT PLAN FOR THE LOFTS AT CONTINENTAL

LOCATED IN A PORTION OF THE SW1/4 OF SECTION 8, TOWNSHIP 21 NORTH, RANGE 8 EAST, G&S.R.M. FLAGSTAFF, COCONINO COUNTY, ARIZONA



SHEET NO. 1 OF 8

CONCEPT-4
 COF PROJECT # PZ-20-00183

113-29-009±
 HIGH PLAINS HOTEL, LLC
 ZONE "HC"

113-37-002K
 FLAGSTAFF VISTA PARTNERS
 ZONE "HR"

REMNANT ACREAGE
 5.83448±

UNIT COUNT and PARKING INFORMATION

PARKING CALCULATIONS:	TOTAL PARKING REQUIRED
No. OF UNITS	PER UNIT SPACES
STUDIO UNITS: 0 x 1.25	0
ONE BEDROOM UNITS: 30 x 1.5	45
TWO BEDROOM UNITS: 79 x 2	158
THREE BEDROOM UNITS: 30 x 2	60
TOTAL UNITS: 139	263
VISITOR PARKING: 0.25/EACH 2+ BEDROOM = 109 x 0.25 = 27.25 (27)	
REQUIRED PARKING: 290 SPACES REQUIRED	
TOTAL AUTOMOBILE PARKING PROVIDED: 290 (INCLUDING 8 H.C. SPACES)	
TOTAL BICYCLE PARKING PROVIDED: 0.05 x 290 = 14.5 (15 SPACES PROVIDED)	

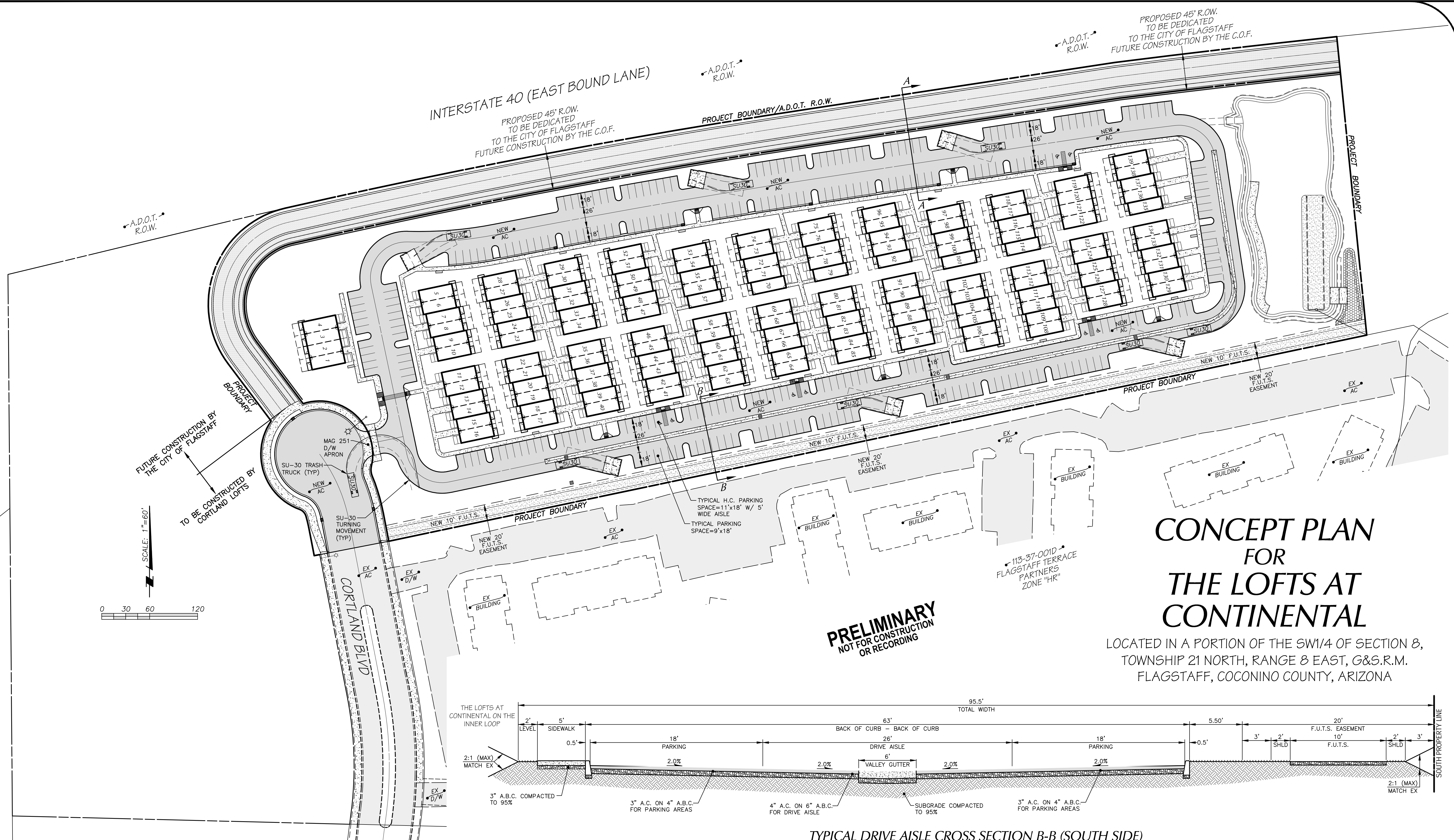
GENERAL NOTES

INFORMATION SHOWN HEREON IS BASED ON CITY OF FLAGSTAFF G.I.S. DATA, AN A.L.T.A./N.S.P.S. LAND TITLE SURVEY PERFORMED BY EXTREME MEASURES LAND SURVEY, INC., JOB No. 17-50, DATED 9/14/17 & ADDITIONAL TOPOGRAPHIC SURVEYS BY EXTREME MEASURES IN APRIL, MAY & AUGUST 2018. NO FIELD SURVEY HAS BEEN PERFORMED BY MOGOLLON ENGINEERING & SURVEYING, INC.

SHEET INDEX

- SHEET 1: PROJECT OVERVIEW & INFORMATION
- SHEET 2: AREA MAP
- SHEET 3: ACCESS & VEHICULAR CIRCULATION
- SHEET 4: PRELIMINARY GRADING & DRAINAGE
- SHEET 5: UNDERGROUND UTILITIES
- SHEET 6: PROPOSED OFF-SITE SEWER
- SHEET 7: RESOURCE PROTECTION PLAN and PRELIMINARY LANDSCAPE PLAN
- SHEET 8: PROPOSED EASEMENTS & ABANDONMENTS

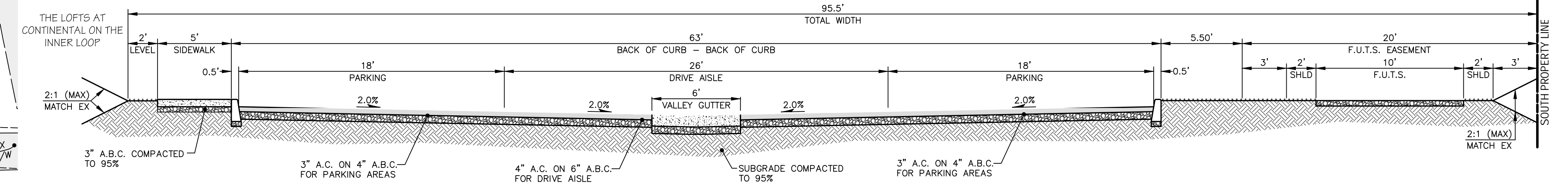
Mogollon ENGINEERING & SURVEYING
 4111 W. Santa Fe Avenue
 Flagstaff, Arizona 86001
 Phone: 928-214-0214
 PROJECT NO. 20256
 REVISIONS PER C.O.F. COMMENTS DATED 12/14/20
 DATE: 3/14/21
 DESIGNED BY: PHE
 DRAWN BY: PHE
 CHECKED BY: KVH/RDS
 PROJECT OVERVIEW & INFORMATION
 THE LOFTS AT CONTINENTAL
 CONCEPT PLAN
 3/14/21
 MES# 20256



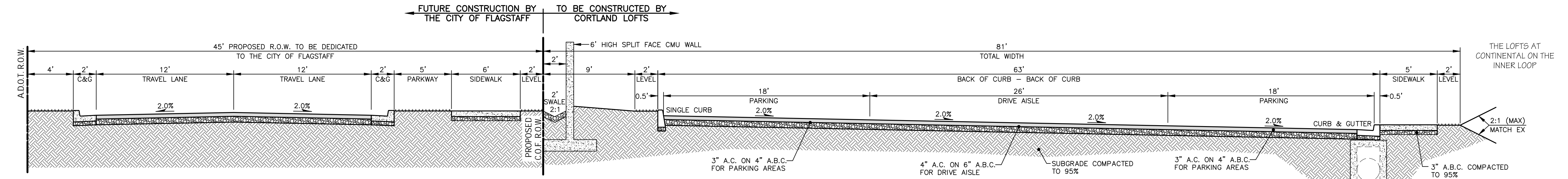
CONCEPT PLAN FOR THE LOFTS AT CONTINENTAL

LOCATED IN A PORTION OF THE SW1/4 OF SECTION 8, TOWNSHIP 21 NORTH, RANGE 8 EAST, G&S.R.M. FLAGSTAFF, COCONINO COUNTY, ARIZONA

PRELIMINARY
NOT FOR CONSTRUCTION OR RECORDING



TYPICAL DRIVE AISLE CROSS SECTION B-B (SOUTH SIDE)
(PRIVATE IMPROVEMENT) N.T.S.



TYPICAL DRIVE AISLE CROSS SECTION A-A (NORTH SIDE)
(PRIVATE IMPROVEMENT) N.T.S.

Mogollon ENGINEERING & SURVEYING
 THE LOFTS AT CONTINENTAL
 CONCEPT PLAN
 ACCESS & VEHICULAR CIRCULATION
 3/4/21
 MES# 20356

Mogollon ENGINEERING & SURVEYING
 411 W. Santa Fe Avenue
 Flagstaff, Arizona 86001
 Phone: 928-214-0214

PRELIMINARY
NOT FOR CONSTRUCTION OR RECORDING

Mogollon ENGINEERING & SURVEYING
 PROJECT NO. 20356
 REVISIONS PER C.O.F. COMMENTS DATED 12/24/20
 DATE: 3/4/21
 DESIGNED BY: PHE
 DRAWN BY: PHE
 CHECKED BY: KVH/RDS
 PROJECT: PZ-20-00183
 SHEET: 03.DWG
 VERT SCALE: N/A
 HOR SCALE: 1"=60'

Methodology Overview

This form facilitates trip generation estimation using data within the Institute of Transportation Engineer's (ITE) Trip Generation Manual, 10th Edition and methodology described within ITE's Trip Generation Handbook, 3rd Edition. These references will be referred to as Manual and Handbook, respectively. The Manual contains data collected by various transportation professionals for a wide range of different land uses, with each land use category represented by a land use code (LUC). Average rates and equations have been established that correlate the relationship between an independent variable that describes the development size and generated trips for each categorized LUC in various settings and time periods. The Handbook indicates an established methodology for how to use data contained within the Manual when to use the fitted curve instead of the average rate and when to adjustments to the volume of trips are appropriate and how to do so. The methodology steps are represented visually in boxes in Figure 3.1. This worksheet applies calculations for each box if applicable.

Box 1 - Define Study Site Land Use Type & Site Characteristics

The analyst is to pick an appropriate LUC(s) based on the subject's zoning/land use(s)/future land use(s). The size of the land use(s) is described in reference to an independent variable(s) specific to (each) the land use (example: 1,000 square feet of building area is relatively common).

Land Use Types and Size

Proposed Use	Amount Units	ITE LUC	ITE Land Use Name
Previously Proposed Development			
Apartments	192 Dwelling Units	220	Multifamily Housing (Low-Rise)
Newly Proposed Development			
Apartments	139 Dwelling Units	220	Multifamily Housing (Low-Rise)

Box 2 - Define Site Context

Context assessment is to "simply determine whether the study sites is in a multimodal setting" and "could have persons accessing the site by walking, bicycling, or riding transit." This assessment is used in Box 4. The Manual separates data into 4 setting categories - Rural, General Urban/Suburban, Dense Multi-Urban Use and Center City Core. This worksheet uses the following abbreviations, respectively: R, G, D, and C. The Manual does not have data for all settings of all land use codes. See the table on the next page titled "Site Context and Time Periods" - if this table is not provided, the "General Urban/Suburban" setting is used by default.

Box 3 - Define Analysis Objectives Types of Trips & Time Period

This tool will focus on vehicular trips for a 24-hour period on a typical weekday as well as its AM peak hour and PM peak hour. Other time period(s) may be of interest.

Site Context and Time Periods - Actual Setting, Setting Data Available for LUC, Setting Used in Analyses

Proposed Use	Setting	ADT		AM Peak Hour		PM Peak Hour		(not used)	
		Available	Used	Available	Used	Available	Used	Available	Used
Previously Proposed Development									
Apartments	General Urban/Suburban	G	G	G	G	G	G		
Newly Proposed Development									
Apartments	General Urban/Suburban	G	G	G	G	G	G		

If the desired setting is not available within the *Manual*, adjustments may be made in Boxes 6 through 8.

Box 4 - Is Study Site Multimodal?

Per the Handbook, "if the objective is to establish a local trip generation rate for a particular land use or study site, the simplified approach (Box 9) may be acceptable but the Box 5 through 8 approach is required if the study site is located in an infill setting, contains a mix of uses on-site, or is near significant transit service."

Box 5/Box 9 - Estimate Baseline Trips/Estimate Vehicular Trips (Determine Equation)

Vehicle trips are estimated using rates/equations applicable to each LUC. When the appropriate graph has a fitted curve, the Handbook has a process (Figure 4.2) to determine when to use it versus using the weighted average rate or collecting local data. The methodology requires for engineering judgement in some circumstances and permits engineering judgement to override or make adjustments when appropriate to best project (example 1: study site is expected to operate differently than data in the applicable land use code - such as restaurant that is closed in the morning or in the evening; example 2: LUC data in a localized area fails to be represented by the typically selected fitted curve/weighted average rate - a small shop/LUC 820, AM peak hour is skewed by the high y-intercept).

Equation Type: Equation Used [Equated Rate] (Type Abbreviations: Weighted Average Rate ("WA"), Fitted Curve ("FC"), or Custom ("C"))

Proposed Use	ADT	AM Peak Hour	PM Peak Hour	(not used)
Previously Proposed Development				
Apartments	FC: T=7.56*X-40.86 [7.35]	FC: LN(T)=0.95*LN(X)-0.51 [0.46]	FC: LN(T)=0.89*LN(X)-0.02 [0.55]	
Newly Proposed Development				
Apartments	FC: T=7.56*X-40.86 [7.27]	FC: LN(T)=0.95*LN(X)-0.51 [0.47]	FC: LN(T)=0.89*LN(X)-0.02 [0.57]	

Box 5/Box 9 - Estimate Baseline Trips/Estimate Vehicular Trips (Apply Equations and in/out Distributions)

Baseline Vehicular Trips

Proposed Use	ADT				AM Peak Hour				PM Peak Hour				(not used)			
	% In	In	Out	Total	% In	In	Out	Total	% In	In	Out	Total	% In	In	Out	Total
Previously Proposed Development																
Apartments	50%	705	705	1,410	23%	20	69	89	63%	67	39	106				
Newly Proposed Development																
Apartments	50%	505	505	1,010	23%	15	50	65	63%	50	29	79				
Totals		1,210	1,210	2,420		35	119	154		117	68	185				