

200 Wolfensberger Road ID/D Offices & Residential Units

Preliminary Utility Report

September 11, 2025

Prepared for:

Wellspring Community
826 Park St #200
Castle Rock, CO 80109

Town of Castle Rock
SDP25-0006

Prepared by:



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Matrix Project No. 24.1692.001

Engineer's Statement:

The enclosed utility report, and exhibits, were prepared by me or under my direct supervision and is correct to the best of my knowledge and belief. Said utility report has been prepared in accordance with applicable Town of Castle Rock criteria and is in conformance with the master utility plans for the affected area. I accept responsibility for any liability caused by negligent acts, errors, or omissions on my part in preparing this report.

Signature: _____

April Lamar, PE

State Of Colorado No. 66406

Owner/Developer's Statement:

As Owner/Developer of Land identified within this report; I agree to proceed, implement and comply with all recommendations and requirements outlined herein.

Name of Developer

Authorized Signature

Table of Contents

Introduction.....	3
General Location and Description.....	3
Existing Water System.....	4
Calculated Water Demands	4
Storage Requirements.....	5
Proposed Water System Analysis and Modeling	5
Existing Wastewater System.....	5
Calculated Wastewater Flows	5
Proposed Wastewater System Analysis and Modeling.....	6
Conclusion.....	7
Appendix/Attachments.....	8

Introduction

The project is located southeast of the intersection of E Wolfensberger Rd and Park St with Eighth St further to the south, commercial properties to the east, E Wolfensberger Rd directly to the north, and Park St further to the west. The project will consist of internal, vertical improvements and rezoning of the existing hotel on the property. The access points to the site to the north and south will remain in place. All utilities will remain in place as the surface parking lot is to remain in place for the majority of the lot.

This Preliminary Utility Report has been prepared to demonstrate that there will be no increase in daily demands for either sanitary and water services and it will comply with the Town of Castle Rock criteria.

General Location and Description

More specifically, the project is located in a portion of the southwest ¼ of Section 2, Township 8 South, Range 67 West of the 6th Principal Meridian, Town of Castle Rock, County of Douglass, State of Colorado.

The existing building is addressed 200 Wolfensberger Rd, which will serve as the project's proposed name. The site is currently Zone B and is proposed as a rezone to PD, more specifically MF; ID/D; ID/DO. The proposed building layout can be found in the appendix of this report which will further demonstrate the internal uses and therefore the demand categories applied to this report's calculations. There are a proposed 24 units on the second floor sprawling 16,960 s.f. (of 31,414 s.f. total building area). As stated above, a majority of the site improvements are internal to the building. All existing utilities are to remain in place and will continue to serve the existing building.



Figure 1 – Vicinity Map

Existing Water System

The building is currently served by existing 2" commercial with irrigation meter and 4" fire protection service line which connects to an 8" water main line within the surface parking lot along the entire east side of the hotel. There are two hydrants on either end of the hotel which are both served off this water main. The existing domestic water service line connection, fire department connection, and water meter are located on the northwest side of the building and will remain in this location. The building is currently sprinklered through the northwest domestic service line, and the proposed site will remain sprinklered. The building was also used as a Town of Castle Rock water quality sampling station and will continue to serve as such as needed.

The water system will remain within the Town of Castle Rock's yellow pressure zone with a maximum HGL elevation of 6352, top elevation served at 6230 and low elevation served at 6065. The site is contained with a maximum elevation of 6178 and a minimum elevation of 6175. No additional land dedication is required.

Calculated Water Demands

The existing hotel building is approximately 16,960 square feet with a total of two stories. The proposed internal improvements will modify the demand type; however, water demand is expected to remain the same, if not decrease, for the proposed improvements. Tables 1 and 2 below illustrate the existing versus proposed water demands based on the Town of Castle Rock Water System Design 2018 Criteria Manual (CRWCM). The appendix includes excerpts from section 4.4.1 of the CRWCM for the equations used to get Average Daily Demand, Max Daily Demand, and Peak Hour Demand values. Also included in the appendix is a preliminary architectural layout of the proposed internal improvements. It should be noted that the existing hotel layout and number of rooms can only be estimated; the hotel is no longer functioning, so this information cannot be accurately acquired.

Table 1				
Existing Hotel Water Demands				
Building Use	Single Family Equivalent (SFE)	ADD (gpd)	MDD (gpd)	PHD (gpd)
Rooms (~80)	15.2	4,256	10,640	23,408
Offices/Lobbies (~10,000s.f.)	5.0	2,000	5,000	11,000
Total =	20.2	6,256	15,640	34,408

Table 2				
200 Wolfensberger Rd ID/D Offices & Residential Units Water Demands				
Building Use	Single Family Equivalent (SFE)	ADD (gpd)	MDD (gpd)	PHD (gpd)
Units (24)	15.6	4,056	10,140	22,308
Offices/Lobbies (~7,500s.f.)	3.8	1,500	3,750	8,250
Classrooms (8)	0.5	200	500	1,100
Total =	19.9	5,756	14,390	31,658

Storage Requirements

Storage requirements are provided below based on Section 4.4.2 of the Town of Castle Rock Water Criteria. A submittal has been made to the Town of Castle Rock Fire and Rescue Department. Based on the existing building square footage and usage, an assumed 2,250 gpm for a duration of two hours has been used until an official fire flow has been assigned. The appendix contains an excerpt from the International Building Code's Fire Flow Calculation Table B105.1(2).

$$\begin{aligned}
 &14,390 \text{ gpd} = 14,390 \text{ Gallons} \\
 &+ 2,250 \text{ gpm} = 270,000 \text{ Gallons} \\
 &\text{Total Required Storage} = 214,390 \text{ Gallons (0.214 MG)}
 \end{aligned}$$

Proposed Water System Analysis and Modeling

Per coordination with Town of Castle Rock, based on the proposed development and the existing utility conditions remaining as they exist today, water analysis and modeling are not required with this report. The approved commercial fixture unit worksheet provided by the Town of Castle Rock is included in the appendix. The water meter will remain in the same current location at the northwest corner of the building.

Existing Wastewater System

The existing building is currently served off from a 6" sewer service which connects to an 8" sanitary main line within the surface parking lot to the south of the hotel. There is no grease trap or sand/oil interceptor on the existing hotel site, and there will be no commercial kitchen after the proposed internal improvements.

Calculated Wastewater Flows

The existing hotel building is approximately 16,960 square feet with a total of two stories. The proposed internal improvements will modify the demand type; however, wastewater demand is expected to decrease significantly for the proposed improvements. Tables 3 and 4 below illustrate the existing versus proposed water demands based on the Town of Castle Rock Wastewater Criteria Manual (CRWWCM). The appendix includes excerpts from section 4.4.1.1 of the CRWWCM for

the equations used to get Average Daily Flow, Peaking Factor, and Peak Daily Flow values. Also included in the appendix is a preliminary architectural layout of the proposed internal improvements. It should be noted that the existing hotel layout and number of rooms can only be estimated; the hotel is no longer functioning, so this information cannot be accurately acquired.

Table 3		
Existing Hotel Wastewater Demands		
Building Use	Typical ADD/Unit	ADF (gpd)
Rooms (~80)	75 gpd/room	6,000
Offices/Lobbies (~8,000s.f.)	0.1 gpd/SF	800
	Total =	6,800

Table 4		
200 Wolfensberger Rd ID/D Offices & Residential Unites Wastewater Demands		
Building Use	Typical ADD/Unit	ADF (gpd)
Units (24)	130 gpd/room	3,120
Offices/Lobbies (~7,500s.f.)	0.1 gpd/SF	750
Classrooms (8)	5 gpd/student	200
	Total =	4,070

Peaking Factor & Peak design Flow Rate

Using the above Average Daily Flow of the proposed improvements building use, the Peaking Factor and furthermore the Peak Design Flow Rate can be calculated using the equations below. Note a maximum Peaking Factor of 5.0 shall be used.

$$\begin{aligned} PF &= 3.65 \times [(ADF)^{-0.168}] \\ &= 3.65 \times [(0.00407 \text{ MGD})^{-0.168}] = \mathbf{9.2} \end{aligned}$$

$$\begin{aligned} PDF &= (ADF \times PF) + (0.1 \times ADF) \\ &= (4,070 \text{ gpd} \times 5.0) + (0.1 \times 4,070 \text{ gpd}) = \mathbf{20,757 \text{ gpd}} \end{aligned}$$

Proposed Wastewater System Analysis and Modeling

Per coordination with Town of Castle Rock, based on the proposed development and the existing utility conditions remaining as they exist today, wastewater analysis and modeling are not required with this report.

Conclusion

The proposed rezoning and internal improvements of the existing building results in negligible changes to the existing water and wastewater demands. There will be no changes to either the existing water and wastewater mains or services. Therefore; the existing wastewater and water system will be sufficient to serve the proposed improvements. Any proposed development of the existing water and wastewater infrastructure needed to serve this title is the responsibility of the developer and or owner.

Appendix/Attachments

1. Water Demands
2. Wastewater Demands
3. Vicinity Map
4. Commercial Fixture Unit Worksheet
5. Preliminary Utility Plan
6. Wellspring Unity Blocking Diagram

associated with the Town's Concept, Preliminary, and Final Development Packages are documented in Chapter 3 of these Criteria.

4.4.1. Design Demands

The tabulation below provides the Average Daily Demand (ADD) rates that shall be applied to compute the demands associated with the various types of land use within the development. Demands shall be computed for intermediate and full build-out phases of the development, and shall be assigned to the appropriate design points within the model to accurately reflect the geographical distribution of land use throughout the site.

Land Use	Typical ADD/Unit	Typical SFEs/Unit
Single Family Residential and Duplexes	400 gpd/dwelling unit	1.00/dwelling unit
Multi-Family Residential (Townhomes and	260 gpd/dwelling unit	0.65/dwelling unit
Retail/Offices	0.2 gpd/SF	0.0005/SF
Hotels/Motels	75 gpd/room	0.19/room
Restaurants	3.0 gpd/SF	0.0075/SF
Car Washes	5,000 gpd/facility	12.5/facility
Industrial / Other Commercial	1,200 gpd/acre	3.0/acre
Institutional	800 gpd/acre	2.0/acre
Rates for Typical Douglas County		
School Sizes:		
Elementary (10 ac, 675 students)	3,375 gpd/school	8.44/school
Middle (25 ac, 850 students)	8,500 gpd/school	21.25/school
High (50 ac, 1,700 students)	17,000 gpd/school	42.50/school
Rates for Alternate School Sizes:		
Elementary – Domestic	5 gpd/student	0.013/student
Middle – Domestic	10 gpd/student	0.025/student
High – Domestic		
Elementary School		
Middle Schools		
High Schools –		
Churches		
Gym/Fitness C		
Irrigated Land (		
and School Site		

Ex. 2" water meter on site is rated at 6.67 SFE per Town of Castle Rock guidance.

(~80 rooms x 0.19 SFE/room = 15.2 SFEs x 260 gpd/unit = 4,256gpd
 Offices/Lobbies/Etc ~10,000 s.f. x 0.0005 sfe/s.f. = 5.0 SFEs
 10,000 s.f. x 0.2 gpd/SF = 2,000gpd
Approx. Existing AAD = 20.2 SFEs / 6,256gpd

24 units x 0.65 SFE/unit = 15.6 SFEs x 260 gpd/unit = 4,056gpd
 Offices/Lobbies/Etc 7,500 s.f. x 0.0005 SFE/s.f. = 3.8 SFEs
 Classrooms 0.013SFE/student x 5 students x 8 classrooms = 0.5 SFE
 7,500 s.f. x 0.2 gpd/SF = 1,500 gpm
 5 students x 8 classrooms x 5 gpd/student = 200 gpd
Approx. Proposed ADD = 19.9 SFEs / 5,756gpd

4.4.1.1 Water System Average Daily Demands (ADD)

Notes:

- (1) All tabulated ADD rates include irrigation demands with the exception of multi-family residential, car washes, gyms/fitness centers, and schools.
- (2) Irrigation demands shall be in accordance with the Irrigation Plan approved by Castle Rock Water and hours of irrigation shall comply with the latest edition of the Town's Water Use Management Plan. Irrigation demands in this Table are for planning purposes only. Peak irrigation rates for 'Irrigated Land' and 'School Irrigation' categories tabulated above shall be in accordance with the approved Irrigation Plan, and shall not be based on the peaking factors identified in the section below.
- (3) The "Irrigated Land" rate identified above may be higher for active sports fields (e.g., irrigated fields within parks) as determined by the approved Irrigation Plan.
- (4) School sizes in this table are for planning purposes, per the Douglas County School District. Regarding design flows for schools, planned school sizes shall be confirmed with the Douglas County School District and documented in the Utility Report. The tabulated rates shown above shall be applied as appropriate, depending on the information provided by the School District.
- (5) Reasonable engineering judgment shall be used in determining the estimated ADD for commercial, industrial and institutional sites. Individual evaluation and justification, including fixture unit counts, shall be provided when the proposed use is not specifically represented in the table above, or when the proposed demands will be inconsistent with the tabulated values. For example, each car wash's unique operating plan, including recycling of wash water, shall be considered. Justification of all non-residential demands shall be addressed in the Utility Report.

4.4.1.2 Demand Factors

Once the ADD has been computed in accordance with the demand rates tabulated above, Maximum Day Demands (MDD) and Peak Hour Demands (PHD) shall be computed by multiplying the ADD by the following factors:

Maximum Day Demand/Average Day Demand:	2.5	MDD/ADD
Peak Hour Demand/Average Day Demand:	5.5	PHD/ADD

Peaking factors are not applied to irrigation ADD demands. Max Day Demand and Peak Hour Demand are calculated by multiplying the ADD demand by the demand factors. If the site's irrigation demands are calculated using the table in section 4.4.1, the irrigation ADD is added as follows:

$$\begin{aligned}\text{Max Daily Demand} &= 5,756 \text{ gpm} \times 2.5 = 14,390 \text{ gpm} \\ \text{Peak Hour Demand} &= 5,756 \text{ gpm} \times 5.5 = 31,658 \text{ gpm}\end{aligned}$$

$$\begin{aligned}\text{MDD} &= \text{Domestic ADD} \times \text{Maximum Day Factor} + \text{Irrigation ADD} \\ \text{PHD} &= \text{Domestic ADD} \times \text{Peak Hour Factor} + \text{Irrigation ADD}\end{aligned}$$

4.4.1.3 Fire Flows

Fire flows shall conform to the latest edition of the International Fire Code (IFC) and shall be confirmed by the Town's Fire Department, as described in section 3.6.XII of

this criteria. A 50 percent reduction in required fire flow may be allowed for approved residential sprinkler systems, and a 75 percent reduction may be allowed for approved commercial sprinkler systems at the discretion of the Town of Castle Rock Fire Chief. The minimum fire flow for the water distribution system is 1,500 gpm, unless otherwise approved by the Fire Department.

Building S.F. = 16,960 S.F. (building consists of 2 floors but will be sprinklered)

TABLE B105.1(2) REFERENCE TABLE FOR TABLES B105.1(1) AND B105.2



FIRE-FLOW CALCULATION AREA (square feet)					FIRE-FLOW (gallons per minute) ^b	FLOW DURATION (hours)
Type IA and IB ^a	Type IIA and IIIA ^a	Type IV and V-A ^a	Type IIB and IIIB ^a	Type V-B ^a		
0-22,700	0-12,700	0-8,200	0-5,900	0-3,600	1,500	2
22,701-30,200	12,701-17,000	8,201-10,900	5,901-7,900	3,601-4,800	1,750	
30,201-38,700	17,001-21,800	10,901-12,900	7,901-9,800	4,801-6,200	2,000	
38,701-48,300	21,801-24,200	12,901-17,400	9,801-12,600	6,201-7,700	2,250	
48,301-59,000	24,201-33,200	17,401-21,300	12,601-15,400	7,701-9,400	2,500	
59,001-70,900	33,201-39,700	21,301-25,500	15,401-18,400	9,401-11,300	2,750	3
70,901-83,700	39,701-47,100	25,501-30,100	18,401-21,800	11,301-13,400	3,000	
83,701-97,700	47,101-54,900	30,101-35,200	21,801-25,900	13,401-15,600	3,250	
97,701-112,700	54,901-63,400	35,201-40,600	25,901-29,300	15,601-18,000	3,500	
112,701-128,700	63,401-72,400	40,601-46,400	29,301-33,500	18,001-20,600	3,750	

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Based on the computed storage volume, Castle Rock Water will evaluate whether the development is compatible with the location and magnitude of the existing and master-planned storage volume within the pressure zone, or if additional storage must be considered to provide the appropriate level of service to the development. Due to hydraulic constraints and limitations within the service area, fire storage within the pressure zone may need to be duplicated as determined by Castle Rock Water.

4.4.3 Minimum Hydraulic Performance Criteria

All mains shall be sized to provide for domestic, irrigation and fire protection demands to all points in the development without violating the pressure, velocity, and headloss criteria set forth herein. The proposed network shall be evaluated by the engineer under the hydraulic conditions stipulated in the following table using an approved hydraulic network analysis model. In some cases, the Town may require the oversizing of certain mains based on required master-planned sizes associated with the overall Town system. Recovery costs of such oversizing shall be in accordance with the Town Municipal Code, and pursuant to applicable executed agreements.

Hydraulic Condition	Pressure (psi)
Minimum static pressure with zero demand (20% tank stage)	43
Maximum static pressure with zero demand (100% tank stage)	125
Minimum dynamic pressures (based on 20% tank stage):	
Max Daily Demand + fire flow (see note below)	20
Peak Hour Demand (see note below)	35

Note: Pressure and Velocity criteria listed above for the MDD plus fire flow and PHD conditions shall be satisfied with one critical distribution loop out of service.

4.4.3.1 Operating Pressures and Pressure Zone Characteristics

The required operating pressures listed above apply to pressures within the mains, and shall be satisfied in accordance with the general pressure zone elevation data tabulated below (Vertical Datum NAVD 88).

Pressure Zone Designation	Max HGL Elev.	Top Elev. Served	Low Elev. Served
1 (Orange)	6192	6072	5915
2 (Yellow)	6352	6230	6065
3a (Blue-east)	6508	6389	6221
3b (Blue-west)	6523	6399	6236
4 (Purple)	6594	6474	6308
5 (Red)	6680	6557	6393
6 (Green)	6824	6700	6537

Notes: (1) Elevations shown above are general guidelines. Engineer shall contact Castle Rock Water to confirm the appropriate numbers for a specific site. (2) Pressure evaluations in areas served solely by PRVs shall be based on the PRV settings, as provided by Castle Rock Water.

4.4.3.2 Assumed Pressures at Existing System Connections

Primary distribution and transmission mains between the supplying storage tank and

the development may be required at the discretion of Castle Rock Water to account for the headloss between the supply source and the location of the development under MDD and PHD conditions. In lieu of this information, Castle Rock Water may provide the engineer with assumed Master Plan pressures or HGL elevations at the proposed connections as the necessary boundary conditions for the required hydraulic models.

4.4.3.3 Maximum Velocities and Headlosses

Maximum velocity with Peak Hour Demands:	10 fps
Maximum velocity with Max Day Demands:	5 fps
Maximum velocity with Max Day + Fire Flow Demands	15 fps
Maximum headloss through 16" (transmission):	2.0 ft/1000 ft
Maximum headloss through 20" (transmission):	1.5 ft/1000 ft
Maximum headloss 24" and larger (transmission):	1.0 ft/1000 ft
Hazen Williams 'C' factor (PVC & DIP):	120

<u>Distribution Main Sizing</u>	<u>Minimum Standard</u>
Minimum pipe size (see note below):	8 inches
Minimum pipe size in an arterial street:	12 inches
<u>Valve Spacing</u>	<u>Minimum Standard</u>
Largest spacing on transmission mains:	1200 feet
Largest spacing on distribution mains:	600 feet

Note: 'C' factor includes allowances for minor losses and pipe aging.

4.4.4 General Water System Layout Criteria

4.4.4.1 Location

All water mains and appurtenances shall be installed in public right-of-way, dedicated utility easements and Town property. Water mains shall not be installed parallel to and directly below, any concrete such as sidewalks, trails, curbs, or gutters, and no water manholes or appurtenances shall be located in multi-use trails and sidewalks. Mains shall be located in accordance with the Standard Details available on the Town's website, unless otherwise approved by variance from Castle Rock Water. In public streets, water mains shall be located near the center of the north and east lane wherever possible, or seven feet minimum from edge of main to

4.4.1.1 Wastewater System Average Daily Flow (ADF)

Land Use	Typical ADF/Unit	Typical SFEs/Unit
Single Family Residential and Duplexes	200 gpd/dwelling unit	1.00/dwelling unit
Multi-Family Residential (Townhomes and Condos)	130 gpd/dwelling unit	0.65/dwelling unit
Retail/Offices	0.1 gpd/SF	0.0005/SF
Hotels/Motels	75 gpd/room	0.375/room
Restaurants	1.5 gpd/SF	0.0075/SF
Car Washes	5,000 gpd/acre	25.0/acre
Industrial/Other Commercial	600 gpd/acre	3.0/acre
Institutional	400 gpd/acre	2.0/acre
Churches	~80 units x 75 gpd/unit = 6,000 gpd Admin Office/Lobby/Etc ~8,000 s.f. x 0.1 gpd/s.f. = 800 gpd Approx. Existing AAD = 6,800 gpd [Note: existing layout and square footages of previous hotel are based on hotel rooms of ~300 s.f. and estimated room numbers. Exact information cannot be confirmed without hotel footprints.]	
Gym/Fitness Center		
Irrigated Land		
<u>Rates for Typical Douglas County School Sizes:</u>		
Elementary (10 ac, 675 Students)	3,375 gpd/school	16.88/school
Middle (25 ac, 850 students)	24 units x 130 gpd/unit = 3,120 gpd Offices/Lobbies/Etc ~7,500 s.f. x 0.1gpd/s.f. = 750 gpd Classrooms 5gpd/student x 5 students x 8 classrooms =200 gpd Approx. Proposed ADF = 4,070 gpd	
High (50 ac, 1700 students)		
<u>Rates for Alternate School Sizes:</u>		
Elementary	5 gpd/student	0.025/student
Middle	10 gpd/student	0.050/student
High	10 gpd/student	0.050/student

The demands noted in the table above represent the “winter time” or “dry weather” Average Daily Flow (ADF) with no allowance for infiltration and inflow (I/I). I/I shall be accounted for in accordance with the Peak Design Flow computation discussed in the sections to follow.

Regarding design flows for schools, planned school sizes shall be confirmed with the Douglas County School District and documented in the Utility Report. The tabulated rates

shown above shall be applied as appropriate, depending on the information provided by the School District. Reasonable engineering judgment shall be used in determining the estimated ADF for commercial, industrial and institutional sites. Individual evaluation and justification shall be provided when the proposed use is not specifically represented in the table above, or when the proposed flows will be inconsistent with the tabulated values. Justification of all non-residential flows shall be addressed in the Utility Report.

4.4.1.2 Peaking Factor

$$\text{Peaking Factor} = 3.65 \times [(4,070 \text{ gpd})^{-0.168}] = 9.22$$
$$\text{PF} = 5.0 \text{ max}$$

The portion of the Peak Design Flow calculation exclusive of I/I shall be determined by multiplying the ADF in the preceding section by a peaking factor (PF). The PF is a function of ADF, and shall be computed as follows: $\text{PF} = 3.65 \times [(\text{ADF})^{-0.168}]$.

The maximum PF shall be 5.0, and ADF shall be expressed in units of million gallons per day (MGD).

4.4.1.3 Peak Design Flow Rate

The Peak Design Flow (PDF) shall be computed at all pertinent design points throughout the system, and used to size the corresponding wastewater facilities. The PDF shall be determined by multiplying the ADF by the calculated peaking factor (PF), plus an I/I allowance, using the following formula:

$$\text{Peak Daily Flow} = (4,070 \text{ gpd} \times 5) + (0.1 \times 4,070 \text{ gpd}) = 20,757 \text{ gpd}$$
$$\text{PDF} = 20,757 \text{ gpd}$$

$$\text{PDF} = \text{peak base flow} + \text{I/I allowance} = (\text{ADF} \times \text{PF}) + (0.1 \times \text{ADF})$$

Once computed, the PDF shall be used to determine the sizes of the facilities in accordance with the criteria established below.

4.4.2 Hydraulic Design

Wastewater systems shall be designed to provide a minimum velocity of two feet per second at the Peak Design Flow. In situations where the minimum velocity of 2.0 feet per second cannot be met, an explanation and justification shall be included in the Final Utility Report. The maximum velocity shall not exceed ten feet per second. Drop manholes shall be provided to break steep slopes to limit the velocities in conformance with this criterion. Where drop manholes are impractical for velocity reduction, the sewer must be approved by variance and shall be of PVC or other abrasion resistant material approved by Castle Rock Water.

Where actual flow will be much below normal for several years, the minimum velocity shall be achieved by suitable grades at the partial design flow rate. Care shall be taken to design invert elevations at manholes in such a manner that the energy gradient is consistently falling in the direction of the flow. Sanitary sewers shall be sized to convey the Peak Design Flow while flowing no more than 75 percent of the maximum pipe flow capacity. Computation of velocity of flow shall be based on a coefficient of roughness "n" in the Manning formula of 0.011 for PVC. At all junctions where a smaller diameter main discharges into a larger one, the invert of the larger sanitary sewer shall be lowered so that the energy gradients of the sewers at the junction are at the same level. Generally, this condition will be met by placing the 0.80 depth point of both sewers at



VICINITY MAP
N.T.S.

APPROVED

Commercial Water Meter Fixture Unit Worksheet

COMMERCIAL FIXTURE UNIT WORKSHEET

In order to determine the required water meter and water supply line size the following information must be provided and completed by the applicant, and must be **signed and sealed** by a registered professional engineer.

Address of Project: 200 E. Wolfensberger Rd

Permit #: 24-3496

1) TOTAL NUMBER OF NEW AND EXISTING WATER SUPPLY FIXTURE UNITS:

TYPE OF FIXTURE	NUMBER OF EXISTING FIXTURES	NUMBER OF NEW FIXTURES		WATER FIXTURE UNIT VALUE*		TOTAL FIXTURE UNITS
Clothes Washer	1	21	X	1.4	=	30.8
Dishwasher		19	X	1.4	=	26.6
Drinking Fountain		1	X	0.25	=	0.25
Hose Bibb	1		X	2.5	=	2.5
Kitchen Sink		26	X	1.4	=	36.4
Lavatory	36		X	2	=	72
Service or Mop Basin	2		X	3	=	6
Service Sink	1		X	3	=	3
Shower	23		X	1.4	=	32.2
Urinal			X	5	=	0
Water Closet (Flush Valve)			X	10	=	0
Water Closet (Flush Tank)	33		X	5	=	165
Other (Specify)			X		=	0
Other (Specify)			X		=	0
Other (Specify)			X		=	0
TOTAL WATER SUPPLY FIXTURE UNITS						374.75

* Based on 2018 IPC Table E103.3(2)

Attach additional sheets if necessary.

2) SYSTEM IS PRIMARILY: Flush Tank x (check one)
Flush Valve

3) CONVERTED WATER DEMAND IN GPM:

100

4) ADDITIONAL WATER USAGE IN GPM: (irrigation, cooling towers, process equipment, etc.)

5

5) TOTAL DEMAND IN GPM (add lines 3+4)

100

6) Total Building Gross Floor Area:

31300

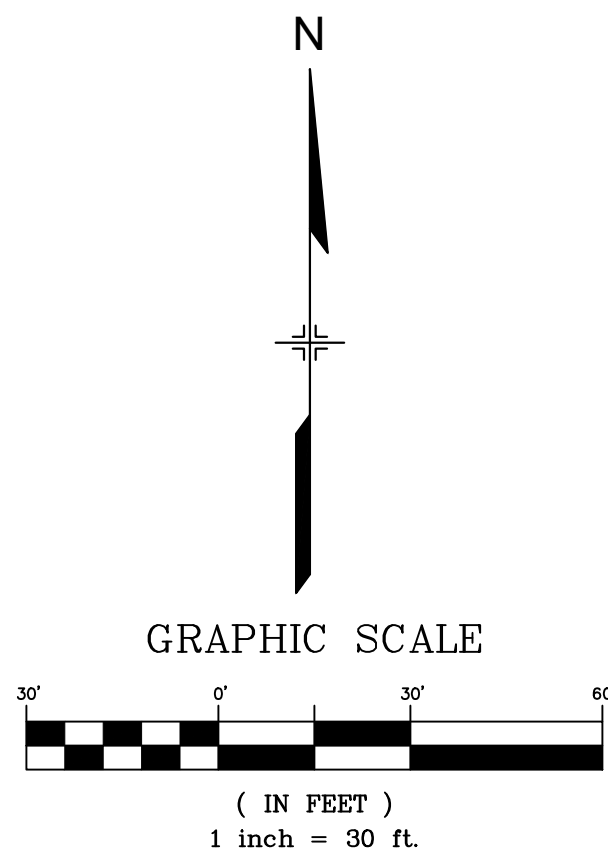
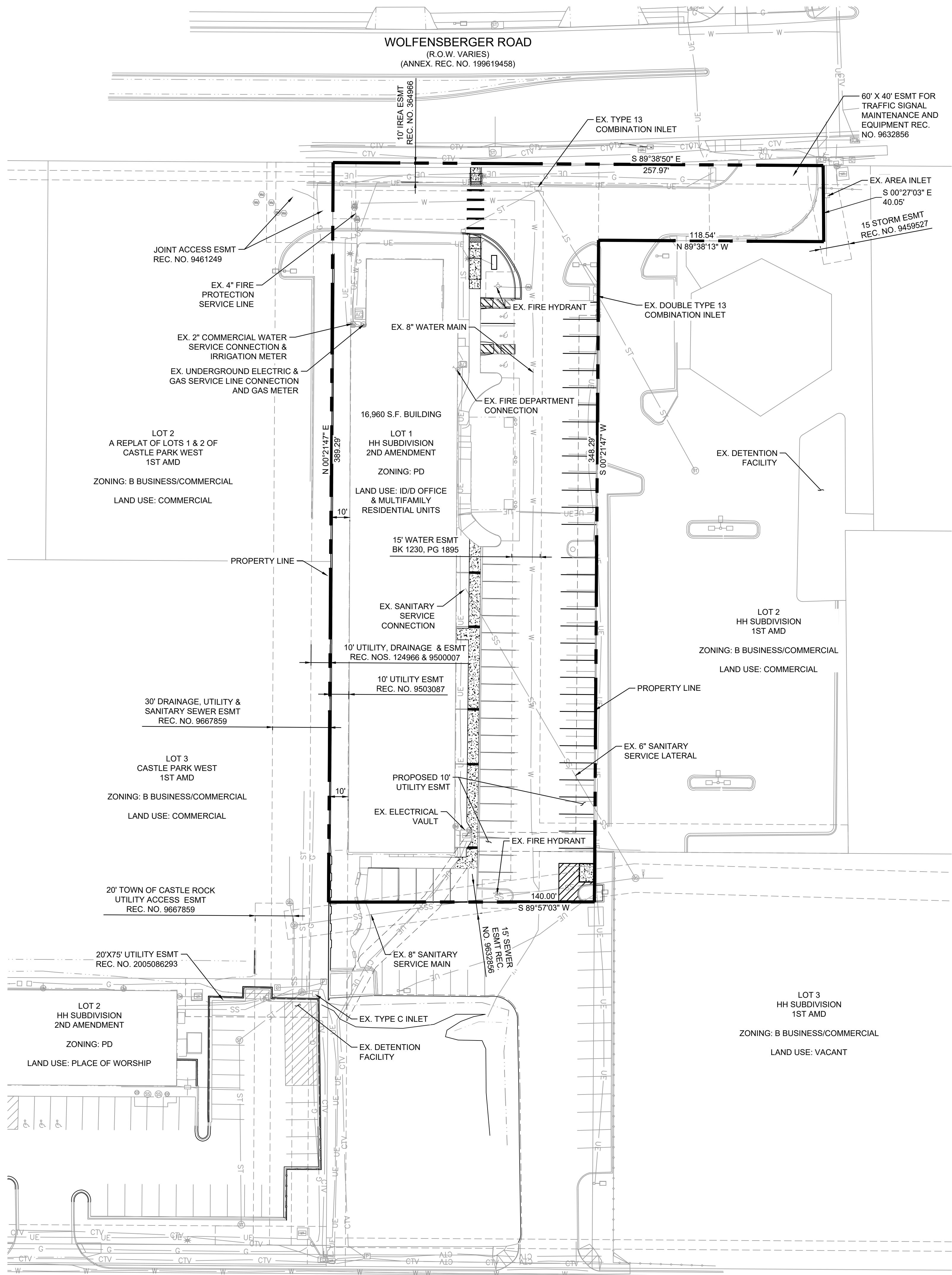
7) P.E. CERTIFICATION:
(required)



200 Wolfensberger Rd is on a 2" master meter. This project will have 374.8 FU's which will leave 560.2 FU's for future projects. Confirmation of irrigation being on the same meter will be determined after the CD's are approve. Will make adjustments if necessary.

5-20-2025

FILE LOCATION: S:\24-1692.001\200 WOLFENBERGER ROAD SDP\000 CAD\004 PLAN SET\DEVELOPMENT PLAN\UT01.DWG



LEGEND

— W — W — W —	EX. WATER MAIN
— SS — SS —	EX. SANITARY SEWER MAIN
— UE —	EX. UNDERGROUND ELECTRIC LINE
— CTV —	EX. UNDERGROUND COMMUNICATIONS LINE
— G —	EX. UNDERGROUND GAS LINE
— ST —	EX. STORM LINE
⊙	EX. FIRE HYDRANT
⊙	EX. SANITARY MANHOLE
⊙	EX. CLEAN OUT
⊙	EX. GAS METER
⊙	EX. AIR CONDITIONING UNIT
⊙	EX. STORM MANHOLE
⊙	EX. ELECTRIC VAULT
⊙	EX. LIGHT POLE
⊙	EX. TELEPHONE PEDESTAL

UTILITY NOTES

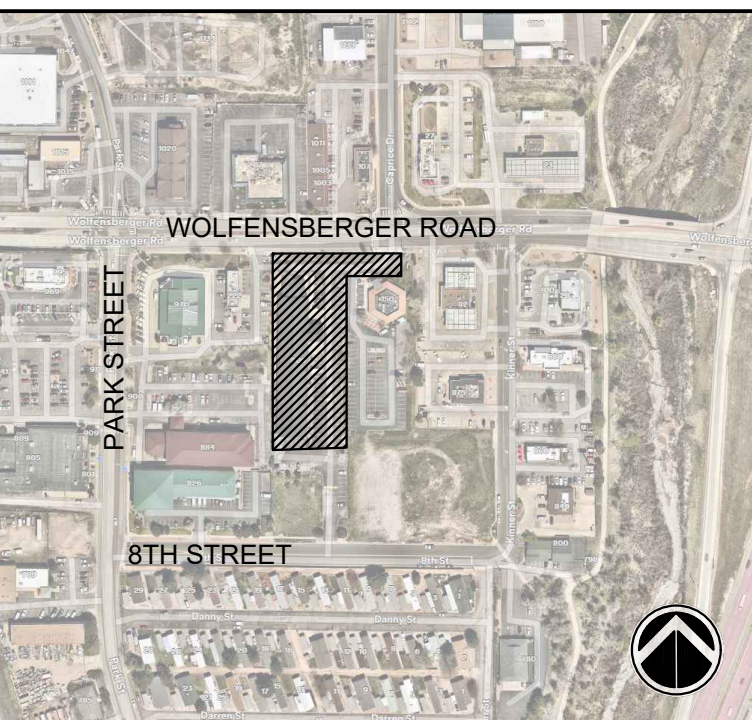
- THIS SITE IS LOCATED WITHIN THE TOWN OF CASTLE ROCK WATER PRESSURE ZONE 2 (YELLOW).
- ALL PROPOSED EASEMENTS MUST BE RECORDED PRIOR TO ISSUANCE OF CONSTRUCTION PERMITS.
- ALL UTILITY EASEMENTS FOR WATER AND WASTEWATER LINES SHALL BE FOR THE EXCLUSIVE USE OF THE TOWN SO THAT ACCESS AND MAINTENANCE MAY BE PERFORMED.
- THE MINIMUM SEPARATION BETWEEN WATERLINES, SANITARY SEWER AND STORM SEWER LINES IS 10 FEET.
- THE MINIMUM SEPARATION BETWEEN WATER SERVICE LINES IS 5 FEET.
- ANY TIE-IN, CROSSING OR LOWERING OF TOWN CRITICAL INFRASTRUCTURE WILL REQUIRE A TIME AND MATERIALS PERMIT (TMU) WITH FEES REQUIRED PRIOR TO CONSTRUCTION.
- THE EXISTING METER CAPACITY IS TO BE CALCULATED BASED ON THE REQUIRED DEMAND OF ALL THE TOTAL EXISTING AND PROPOSED WATER SUPPLY FIXTURE UNITS AND ANY OTHER ADDITIONAL USAGE, PROVIDED TO THE TOWN OF CASTLE ROCK AT THE TIME OF BUILDING PERMITTING.

CONSULTANTS:
PLANNER/ LANDSCAPE ARCHITECT/ CIVIL ENGINEER:
Matrix
2435 RESEARCH PARKWAY, SUITE 300
COLORADO SPRINGS, CO 80920
PHONE: (719) 575-0100
FAX: (719) 575-0208

OWNER/DEVELOPER:
DCP WARD, LLC
524 S TEJON ST
COLORADO SPRINGS, CO 80903

APPROVAL:

VICINITY MAP:



PROJECT:
SITE DEVELOPMENT PLAN, AMENDMENT NO. 2
LOT 1 HH SUBDIVISION - 2ND AMENDMENT

TOWN OF CASTLE ROCK, COLORADO
JULY, 2025

REVISION HISTORY:

NO	DATE	DESCRIPTION	BY
1	05/28/2025	PER CITY COMMENTS	EA
2	09/02/2025	PER CITY COMMENTS	AL

DRAWING INFORMATION:

PROJECT NO: 24.1692.001

DRAWN BY: AL

CHECKED BY: RF

APPROVED BY: NS

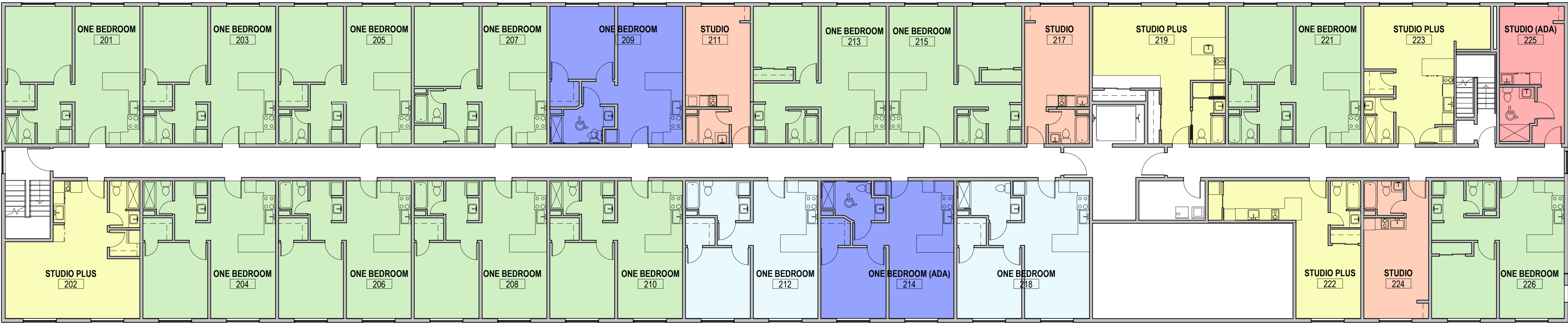
SHEET TITLE:

**PRELIMINARY
UTILITY PLAN**

UT01

SHEET 5 OF 9

SITE DEVELOPMENT PLAN, AMENDMENT NO. 2
LOT 1 HH SUBDIVISION 2ND AMENDMENT
TOWN OF CASTLE ROCK PROJECT NO. SDP25-0006



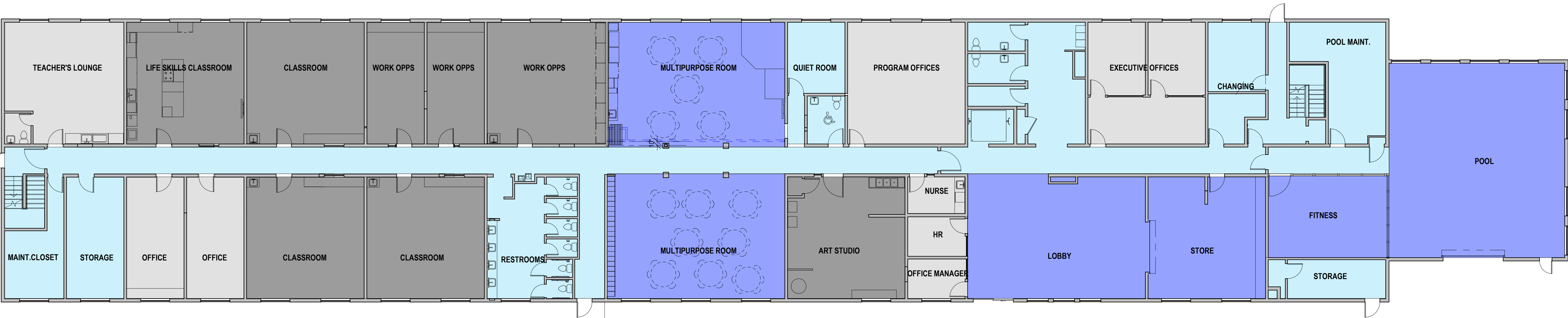
2 SECOND FLOOR PLAN - NEW
3/32" = 1'-0"



LEGEND

- STUDIO (ADA) 1 UNIT
- STUDIO 3 UNITS
- STUDIO PLUS 4 UNITS
- ONE BEDROOM 12 UNITS
- ONE BEDROOM (ADA TYPE A) 2 UNIT
- ONE BEDROOM (ADA TYPE B) 2 UNIT

24 TOTAL UNITS



1 FIRST FLOOR PLAN - NEW
3/32" = 1'-0"



LEGEND

- CLASSROOMS 4,030 SF
- OFFICE 2,565 SF
- PUBLIC 4,990 SF
- SUPPORT 4,580 SF

ARCHITECT:



enlight10architecture

CONSULTANTS:

CLIENT:



PROJECT:

UNITY ON WOLFENBERGER
200 E WOLFENBERGER RD
CASTLE ROCK, CO 80109

STAMP:

PROJECT NUMBER: 2401wc
INITIAL DATE: MAY 2024
DRAWN BY: SG

#	DESCRIPTION	DATE
3	CONSTRUCTION DOCUMENTS	12/04/2024
5	UPDATE FOR TGC	08/06/2025
6	FIELD MODIFICATIONS	07/17/2025

ROOM TYPES

A0.6