

WASTEWATER REPORT
for
WINDERMERE

El Paso County, Colorado

September 2020

Prepared for:

Windsor Ridge Homes

4164 Austin Bluffs Pkwy #361
Colorado Springs, CO 80918
Contact: James Todd Stephens
(719) 200-9594

Prepared by:

Drexel, Barrell & Co.

3 South 7th Street
Colorado Springs, CO 80905
Contact: Tim McConnell, P.E.
(719) 260-0887

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WASTEWATER REPORT
for
WINDERMERE

El Paso County, Colorado

1.0 PURPOSE

This report is prepared by Drexel, Barrel & Co in support of the Windermere project. This report is used to confirm that the sanitary sewer lines are sized to carry the peak wastewater discharge.

2.0 GENERAL LOCATION AND DESCRIPTION

The site is located at the northwest corner of N. Carefree Cir. and Marksheffel Rd. - the E 1/2 of Section 29, Township 13 S, Range 65 W of the 6th P.M., El Paso County, Colorado.

The site is approximately 52.07 acres in size and slopes in all directions with a large hill in the southern half of the site and an existing temporary detention facility located at the northern end. The site is bound on the west by Antelope Ridge Dr., on the north by the Chateau at Antelope Ridge subdivision, on the east by Marksheffel Road, and on the south by N. Carefree Cir.

The current owner of the property is Windsor Ridge Homes.

The proposed concept plan will provide 203 single-family residences to be developed in two filings, residential roadways and two on-site water quality/detention ponds.

3.0 WASTEWATER SERVICE

The owner/developer has already filed and been approved for inclusion within the Cherokee Metropolitan District. See appendix for the District commitment letter.

Proposed sanitary lines for the project will include onsite 8" mains that are proposed to connect to the existing 8" stub to the east of the site which connects to the existing 12" main that flows to the south along Marksheffel Rd. This line is owned and maintained by Cherokee Metropolitan District, and ultimately discharge into the Cherokee Metropolitan District Wastewater Treatment Plant. **The estimated wastewater load is 32,988 gallons per day.**

See the Preliminary Utility Plan in the appendix for proposed wastewater system layout.

4.0 PHASING/CONSTRUCTION/PERMITTING

Grading is anticipated to begin in Fall/Winter 2020. The residential roadways, utility mains and stormwater detention facilities will be installed at this time.

5.0 SUMMARY

The Windermere development contains 52.07 acres, and is anticipated to generate a wastewater load of 32,988 gallons per day. Cherokee Metropolitan District has confirmed that the existing sanitary sewer main stubbed to the property and along Marksheffel Road is able to accommodate the additional flows.

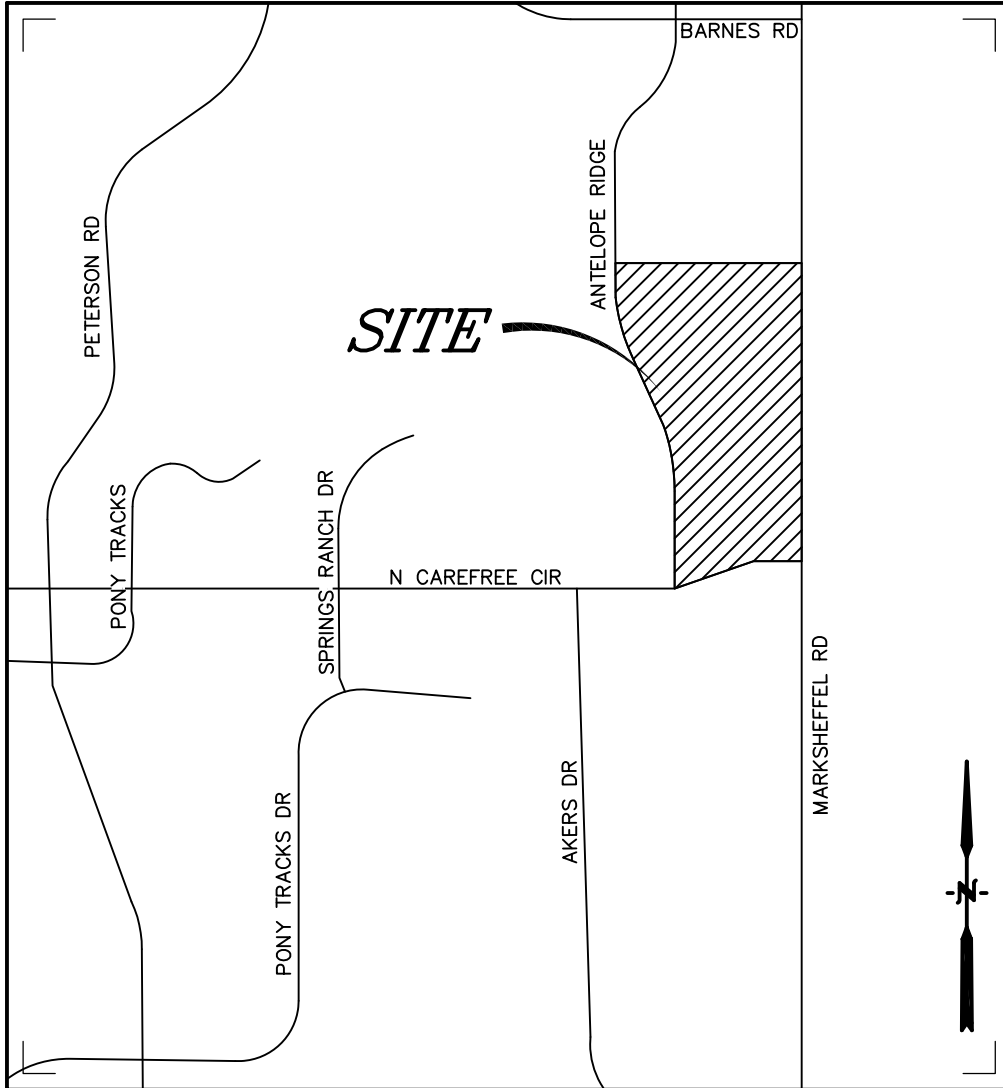
This report represents a preliminary analysis of the wastewater collection system for the Windermere project. The system will be analyzed in further detail during the design process, and is subject to change due to final design considerations.

6.0 UTILITY CONTACT INFORMATION

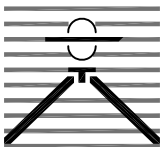
Cherokee Metropolitan District
Attn: Amy Lathen, General Manager
6250 Palmer Park Blvd.
Colorado Springs, CO 80915
Phone: (719) 597-5080
Fax: (719) 597-5145

Drexel, Barrell & Co.
Attn: Tim McConnell, P.E.
3 South 7th Street
Colorado Springs, CO 80905
Phone: (719) 260-0887

Appendix



Vicinity Map
Not to scale



**WINDERMERE
COLORADO SPRINGS, CO
VICINITY MAP**

Drexel, Barrell & Co.
Engineers • Surveyors

DATE: _____
JOB NO:
21187-00CSCV

DWG. NO.
VMAP
SHEET 1 OF 1

WINDERMERE PRELIMINARY PLAN

PREPARED BY:



DREXEL, BARRELL & CO.
Engineers & Surveyors
3 SOUTH 7TH STREET
COLORADO SPGS, COLORADO 80905
CONTACT: TIM D. MCCONNELL, P.E.
(719) 260-0887
BOULDER • COLORADO SPRINGS • GREELEY

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WINDERMERE
PRELIMINARY PLAN
N. MARKSHEFFEL ROAD
EL PASO COUNTY, COLORADO

ISSUE DATE

INITIAL ISSUE 2/21/19

LATEST ISSUE 6/18/20

DESIGNED BY: GES

DRAWN BY: GES

CHECKED BY: TDM

FILE NAME: 21187-01UT1

PREPARED UNDER MY DIRECT
SUPERVISION FOR AND ON
BEHALF OF
DREXEL, BARRELL & CO.

DRAWING SCALE:

HORIZONTAL: 1" = 100'

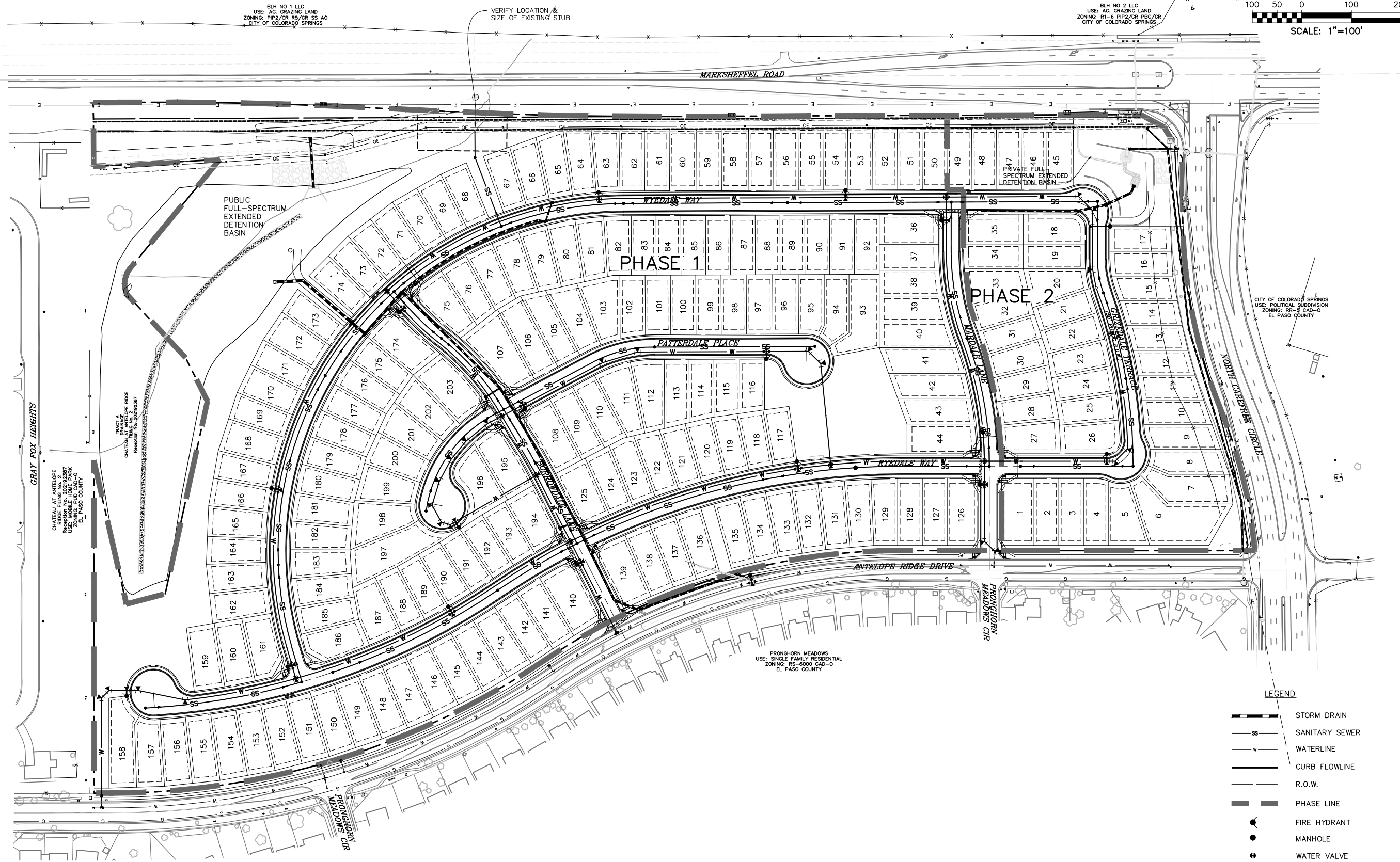
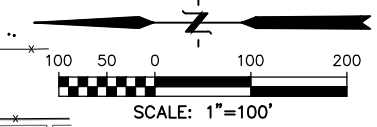
VERTICAL: N/A

PRELIMINARY
UTILITY & PUBLIC
FACILITY PLAN

PROJECT NO. 21187-01CSCV

DRAWING NO.

PP06



LEGEND

- STORM DRAIN
- SANITARY SEWER
- WATERLINE
- CURB FLOWLINE
- R.O.W.
- PHASE LINE
- FIRE HYDRANT
- MANHOLE
- WATER VALVE



CHEROKEE METROPOLITAN DISTRICT

6250 Palmer Park Blvd., Colorado Springs, CO 80915-2842

Telephone: (719) 597-5080 Fax: (719) 597-5145

June 15th, 2020

Tim D. McConnell

Drexel, Barrell, & Co

3 S 7th St

Colorado Springs, CO 80905

Sent via email: tmccconnell@drexelbarrell.com

Original to follow by US Mail

Re: Water and Sewer Service to **Windermere Subdivision**
Commitment Letter No. **2020-09 (Revision of commitment 2018-06)**

Dear Tim McConnell,

As requested, this document will serve as a formal Letter of Commitment from the Cherokee Metropolitan District to provide municipal water and sewer services for Windermere Subdivision located at the northeast corner of N Carefree Circle and Antelope Ridge Drive. The proposed location for this development is located within the District's established boundaries and therefore is eligible for service connections from the District.

Cherokee Metropolitan District staff, along with the developer, have determined that the following will be the total water demand required by this occupancy:

Type of Use	Demand (AF/yr)
Single Family Homes	62.6
Irrigated Common Areas	6.2
Total	68.8

This water commitment is hereby made exclusively for this specific development project at this site within the District. To confirm this commitment you must provide the District with a copy of the final plat approval from El Paso County Development Services within 12 months of the date of this letter. Otherwise, the District may use this allocation for other developments requesting a water commitment. If the subject project is re-platted, you must submit a new commitment request prior to submitting the re-plat to El Paso County, which may result in a recalculation of the water demand for the project.

If I may be of further assistance please contact me at your convenience.

Sincerely,



Amy Lathen
General Manager

Cc: Peter Johnson; Water Counsel w/ encl: sent via email
Steve Hasbrouck; Board President w/ encl: sent via email
Kevin Brown; Jr. Engineer

combine the info from first version to this one...add the paragraphs that were removed to this report from version 1. Below is the list of requirements; this report should contain all of the items in red.

Types of Reports. (a) Sketch Plan Report. The following information shall be included in the wastewater report submitted with the sketch plan application:

- Map showing relative location of point of connection to an existing system;
- Map showing relative location of the existing or proposed treatment facility;
- Estimate of projected population, units, and density, as related to wastewater production on an average daily basis;
- Capacity of the existing treatment plant and current utilization;
- Anticipated capacity of any proposed treatment plant; and
- Letter of commitment from the wastewater provider proposed for service, with identification of whether the sketch plan area is within the service boundaries of the proposed provider.

(b) Preliminary Plan Report. The following information shall be included in the wastewater report submitted with the preliminary plan application:

- All items required to be included with the sketch plan report; and
- Letter of commitment from the wastewater provider proposed for service, which includes whether the preliminary plan area is within the service boundaries of the proposed provider, and a statement by the wastewater provider that adequate capacity exists or will exist in order to provide service.

OPINION OF PROBABLE POPULATION

The proposed development includes 202 single-family residences. The population and quantity of effluent is as follows:

Population: Single-family Residences: 202 units

Quantity of Effluent: Single-family Residences: 1.5 MGD

The projected quantity of effluent is based upon data provided by other utility providers in the area. The actual quantity of effluent will be based on actual calculations.

WASTEWATER DISPOSAL

Effluent from the subdivision will be collected into a mainline and connected to the Metropolitan District's mainlines. The proposed internal 8 inch mainline is located on the east side of the subdivision near Mark Street. A connection will be made to the Metropolitan District treatment facility via other mainlines.

WASTEWATER TREATMENT

Cherokee Metropolitan District's wastewater treatment plant is located on a 160-acre parcel, which is located on the east side of the subdivision near Mark Street. The plant's actual footprint is roughly 26 of the total area. The plant's design rate capacity is 4.8 million gallons per day (MGD). The plant receives 1.5 MGD. The wastewater that the plant receives is from three contributors. The largest of these three is Cherokee Metropolitan District with their flow of 1.2 MGD, Meridian Service Metropolitan District with their flow of 0.13 MGD, and Air Force Base with their flow of 0.13 MGD.

The treatment plant consists of an 'Influent' building, three 'Aerobic Digesters' (AD's), 'Blower' building, 'Biosolids' building (i.e. Biosolids), two 'Equalization' buildings, and a 'Sludge' building.

WW Rep V_4 redlines.pdf Markup Summary 2-4-2021

dsdparsons (4)

combine the info from this version to this one...add the paragraphs that were removed to this report from version 1. Below is the list of requirements; this report should contain all of the items in red.

Subject: Callout
Page Label: 9
Author: dsdparsons
Date: 2/4/2021 7:15:28 AM
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combine the info from first version to this one...add the paragraphs that were removed to this report from version 1. Below is the list of requirements; this report should contain all of the items in red.

Types of Reports. (a) Sketch Plan Report. The following information shall be included in the wastewater report submitted with the sketch plan application:

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Author: dsdparsons
Date: 2/4/2021 7:15:43 AM
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Color: ■
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Types of Reports. (a) Sketch Plan Report. The following information shall be included in the wastewater report submitted with the sketch plan application:

- Map showing relative location of point of connection to an existing system;
- Map showing relative location of the existing or proposed treatment facility;
- Estimate of projected population, units, and density, as related to wastewater production on an average daily basis;
- Capacity of the existing treatment plant and current utilization;
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combine the info from this version to this one...add the paragraphs that were removed to this report from version 1. Below is the list of requirements; this report should contain all of the items in red.

Subject: Image
Page Label: 9
Author: dsdparsons
Date: 2/4/2021 7:16:09 AM
Status:
Color: ■
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The image is a scan of a document page. The text is mostly illegible due to low resolution and blurring. The visible text includes a header, a main body of text, and a footer. The header appears to be a title or page number. The main body contains several lines of text, possibly a list or a paragraph. The footer contains a date and time stamp.


Subject: Image

Page Label: 9

Author: dsdparsons

Date: 2/4/2021 7:16:35 AM

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