



INNOVATIVE DESIGN. CLASSIC RESULTS.

**DRAINAGE LETTER
FOR
STERLING RANCH
SKETCH PLAN AMENDMENT #4**

Prepared for:
CLASSIC SRJ LAND, LLC
2138 FLYING HORSE CLUB DRIVE
COLORADO SPRINGS CO 80921
(719) 592-9333

Prepared by:
CLASSIC CONSULTING
619 N. CASCADE AVE SUITE 200
COLORADO SPRINGS CO 80903
(719) 785-0790

Job No. 1183.70

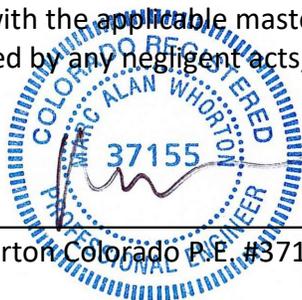
PCD Project No. SKP241



DRAINAGE LETTER FOR STERLING RANCH SKETCH PLAN AMENDMENT #4

ENGINEER'S STATEMENT:

The attached drainage plan and report were prepared under my direction and supervision and are correct to the best of my knowledge and belief. Said drainage report has been prepared according to the criteria established by the County for drainage reports and said report is in conformity with the applicable master plan of the drainage basin. I accept responsibility for any liability caused by any negligent acts, errors, or omissions on my part in preparing this report.



10/16/2024

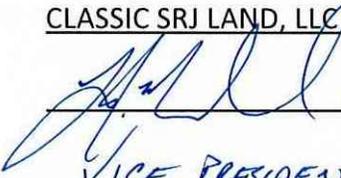
Marc A. Whorton, Colorado P.E. #37155

Date

OWNER'S/DEVELOPER'S STATEMENT:

I, the owner/developer, have read and will comply with all of the requirements specified in this drainage report and plan.

Business Name: CLASSIC SRJ LAND, LLC

By:  LOREN J. MORELAND

Title: VICE PRESIDENT

Address: 2138 Flying Horse Club Drive

Colorado Springs, CO 80921

EL PASO COUNTY:

Filed in accordance with the requirements of the Drainage Criteria Manual, Volumes 1 and 2, El Paso County Engineering Criteria Manual and Land Development Code as amended.

Joshua Palmer, P.E.
County Engineer, / ECM Administrator

Date

Conditions:



DRAINAGE LETTER FOR STERLING RANCH SKETCH PLAN AMENDMENT #4

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DRAINAGE LETTER FOR STERLING RANCH SKETCH PLAN AMENDMENT #4

PURPOSE

The purpose of this Drainage Letter is to address all necessary MDDP level design accommodations based on the latest Sterling Ranch Sketch Plan Amendment #4 related to on-site and off-site drainage patterns and drainage improvements required to minimize impacts to the adjacent properties.

GENERAL DESCRIPTION

The Sterling Ranch Sketch Plan totals 1,444 acres of Planned Unit Development to be built in multiple phases, located in Sections 27, 28, 33 and 34, Township 12 South and Section 4, Township 13 South, range 65 west of the sixth principal meridian. The site is bounded on the north and east by undeveloped land (existing residential properties), to the south by existing platted 5-ac. residential lots (Pawnee Rancheros) and Woodmen Heights developments and to the west by Vollmer Road. The site is in the upper portion of the Sand Creek Drainage Basin. **The proposed Sketch Plan Amendment only affects the residential land-use density of the extreme southeast corner of the property covering about 208 acres. (See Appendix)**

The existing ground cover is sparse vegetation and open space, typical of Colorado rolling range land condition. In general, the site slopes from north to south within the existing natural drainageways at grades of 1%-4%. The average soil condition reflects Hydrologic Group "A" (Columbine gravelly sandy loam) and (Blakeland loamy sand) as determined by the "Web Soil Survey of El Paso County Area," prepared by the Natural Resources Conservation Service (see map in Appendix). Type A soils were used to determine the pre-development conditions however, Type B soils are utilized for developed site conditions as significant import is anticipated for this portion of the development.



FLOODPLAIN STATEMENT

No portion of the proposed Sketch Plan Amendment area is located within a floodplain as determined by the Flood Insurance Rate Maps (F.I.R.M.) Map Number 08041C0535G with effective date of December 7, 2018 (See Appendix).

EXISTING DRAINAGE CONDITIONS

The existing conditions remain unchanged from what was described in the MDDP.

PROPOSED DRAINAGE CONDITIONS

The proposed basins remain unchanged from the MDDP, except for the following:

Basins SCE-6, SCE-9 and SCE-11 (3.8 ac., 4.0 ac. and 5.8 ac. respectively) are basins along the extreme eastern edge of the Sterling Ranch property. These basins are anticipated to be a buffer corridor between the future 4-lane arterial (Banning Lewis Parkway extension) and the adjacent rural properties. These areas and land uses proposed with this Sketch Plan Amendment are unchanged and remain consistent with the MDDP.

Basin SCE-7 is a 44.9 ac. on-site basin that was also originally planned for residential uses ranging from 3-8 du/ac. The Sketch Plan Amendment proposes a residential use with a density range of 5-8 du/ac. While the overall density was slightly increased, the original MDDP used a CN number of 89 for this original basin, which for the Type "A" soils accounts for commercial use. Whereas, residential use at 8 du/ac. has a CN number of 77 for Type "A" soils. (Ref. Table 6-10 in DCM Vol. 1 update) Thus, even with a slight overall residential density increase, this basin remains consistent with the MDDP and ultimately may even has less flows than anticipated. The proposed Pond FSD-E4 will be sized appropriately with future reports.



Basin SCE-8 is a 25.5 ac. on-site basin that was originally planned for Mixed Use Commercial/ Multi-family up to 25 du/ac. The Sketch Plan Amendment proposes the same land use but only 22.0 ac. for this area. The original MDDP used a CN number of 92 for this basin, which for even Type “B” soils accounts for Commercial Use. (Ref. Table 6-10 in DCM Vol. 1 update) Thus, with the 3.5 ac. less land use proposed for this area, this basin will then remain consistent with the MDDP and ultimately will likely even have less flows than anticipated. The proposed Pond FSD-E5 will be sized appropriately with future reports.

Basin SCE-10 is a 174.3 ac. on-site basin that was originally planned for Residential (3-5 du/ac.), Residential (2 du/ac.), 5 ac. park, 10 ac. Elementary School and 5 ac. Utility Parcel (MVEA substation). The Sketch Plan Amendment proposes the same 5 ac. park, 5 ac. Utility Parcel and Residential (2 du/ac.) along the south boundary. No Elementary School is proposed in this area as Classic Homes is in discussions with D49 about moving the school site off Sterling Ranch property further to the east. An additional 2.5 ac. Utility Parcel is proposed adjacent to the MVEA substation for a lift station site. The residential component proposed includes an 18.0 ac. (5-8 du/ac.) parcel with the rest of the property being residential (3-5 du/ac.). The two ponds FSD-E6 and Pond-E7 are included within this residential (3-5 du/ac.). The original MDDP used a CN number of 83 for this entire basin, which for the Type “A” soils accounts for Industrial/Commercial Use. (Ref. Table 6-10 in DCM Vol. 1 update) Thus, with the removal of the 10 ac. school site and the introduction of the 18 ac. 5-8 du/ac. residential use, this basin will remain consistent with the MDDP.

DRAINAGE CONDITION COMPARISON

Based on the proposed Sketch Plan Amendment land use areas described above and the CN numbers utilized in the original MDDP, these basins and proposed ponds within them remain consistent with the MDDP.



DRAINAGE DESIGN CRITERIA

Hydrologic calculations were performed using the City of Colorado Springs/El Paso County Drainage Criteria Manual, as revised in November 1991 and October 1994 with County adopted Chapter 6 and Section 3.2.1 of Chapter 13 of the City of Colorado Springs/El Paso County Drainage Criteria Manual as revised in May 2014. Runoff Coefficients are based on the imperviousness of the particular land use and the hydrologic soil type in accordance with Table 6-6 and 6-10. The average rainfall intensity, by recurrence interval found in the Intensity-Duration-Frequency (IDF) curves in Figure 6-5.

SUMMARY

The proposed Sketch Plan Amendment remains consistent with the Sterling Ranch MDDP. The developer for this area will be responsible for design and installation of all required full spectrum detention facilities and any downstream conveyance facilities. Any such facilities will be constructed as development occurs. The development of the proposed site does not significantly impact any downstream facility or property to an extent greater than that which currently exists in the pre-development conditions. All drainage facilities within this report were sized according to the latest El Paso County Drainage Criteria requirements.

PREPARED BY:

Classic Consulting Engineers & Surveyors, LLC



Marc A. Whorton, P.E.
Project Manager

maw/118370/SKPAmend Letter.doc



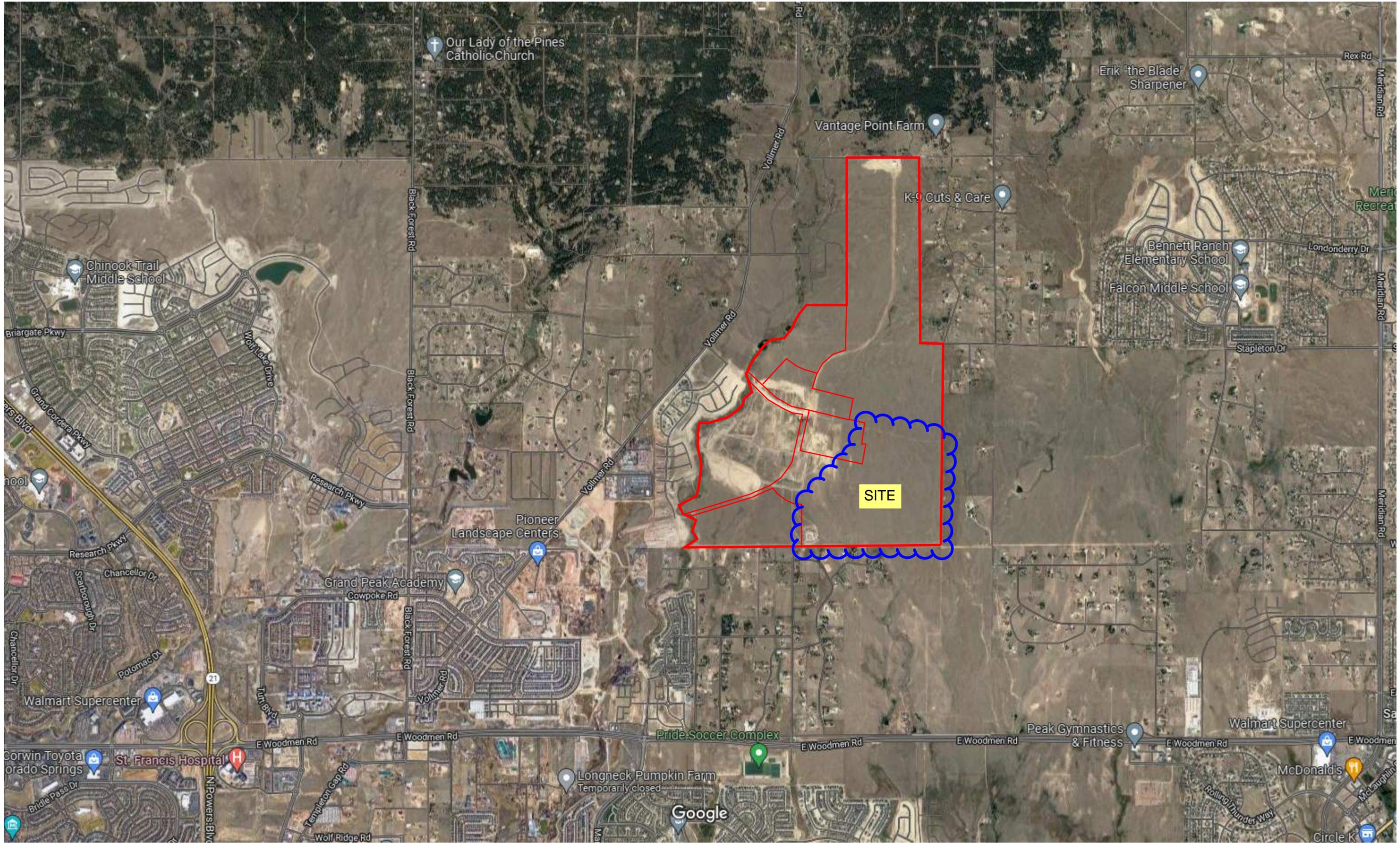
REFERENCES

1. City of Colorado Springs/County of El Paso Drainage Criteria Manual as revised in November 1991 and October 1994 with County adopted Chapter 6 and Section 3.2.1 of Chapter 13 of the City of Colorado Springs/El Paso County Drainage Criteria Manual as revised in May 2014.
2. "Urban Storm Drainage Criteria Manual Volume 1, 2 & 3" Urban Drainage and Flood Control District, dated January 2016.
3. "Sand Creek Drainage Basin Planning Study," Kiowa Engineering Corporation, dated March 1996.
4. "2018 Sterling Ranch MDDP", M&S Civil Consultants, Inc., June 2018
5. "Final Drainage Report for Retreat at TimberRidge Filing No. 1", Classic Consulting, approved November, 2020.
6. "Final Drainage Report for Retreat at TimberRidge Filing No. 2", Classic Consulting, approved September 2022
7. "Final Drainage Report for Retreat at TimberRidge Filing No. 3", Classic Consulting, dated December 2022
8. "Final Design Report for Sand Creek Restoration", JR Engineering, LLC, dated June 2023
9. "Drainage Letter for Sterling Ranch Road and Briargate Pkwy. Interim Plan", prepared by JR Engineering, LLC, dated June 2023
10. "Master Development Drainage Plan Amendment for Sterling Ranch", prepared by JR Engineering, LLC, dated July 2023
11. "Sterling Ranch MDDP Amendment No. 2 & Preliminary Drainage Report for Sterling Ranch East Preliminary Plan No. 1", prepared by Classic Consulting, approved January 2023
12. "Preliminary Drainage Report for Sterling Ranch East Filing No. 5 Preliminary Plan", prepared by Classic Consulting, approved January 2024



APPENDIX

VICINITY MAP

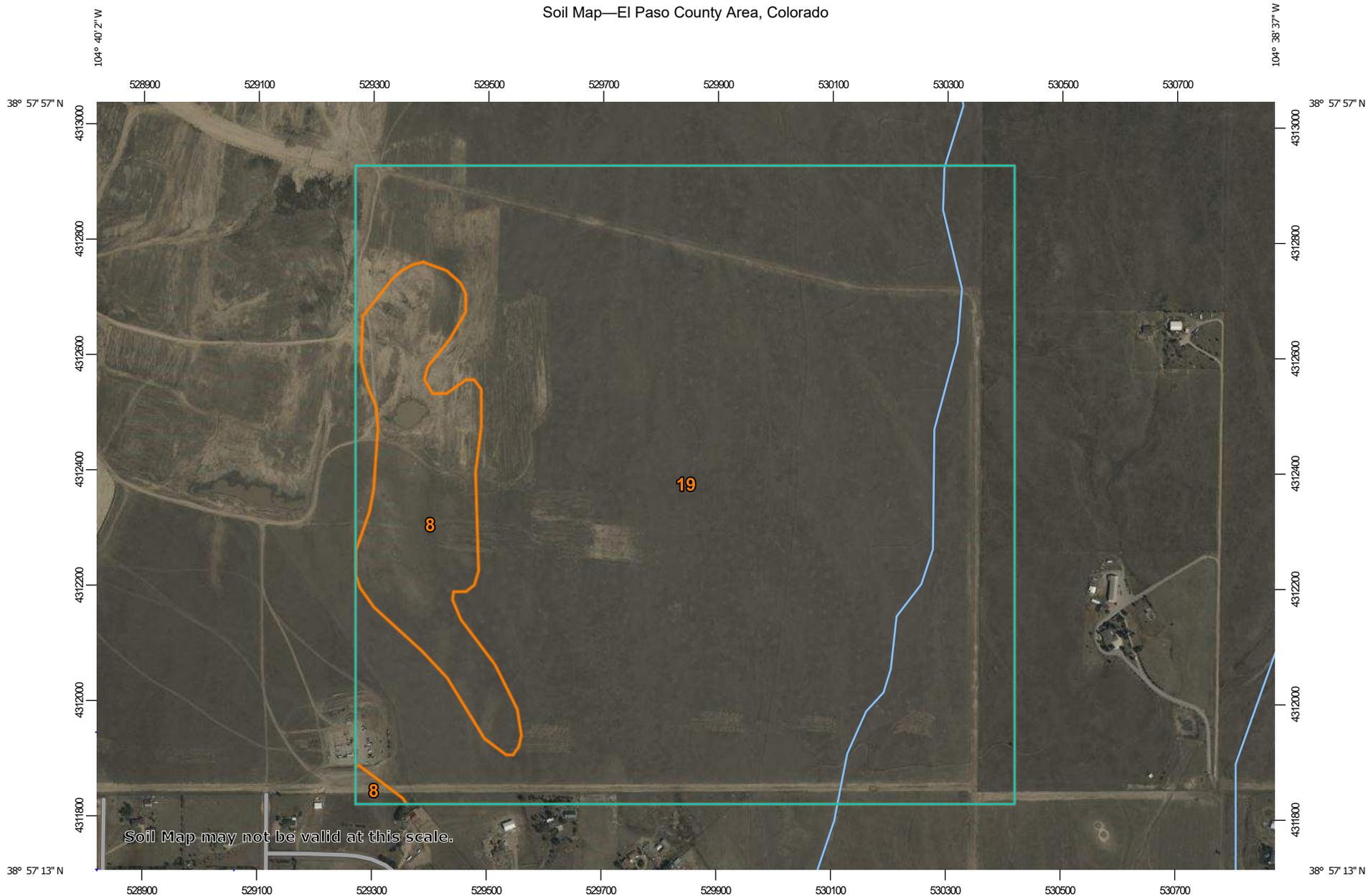


Imagery ©2022 Landsat / Copernicus, Maxar Technologies, USDA/FPAC/GEO, Map data ©2022 2000 ft

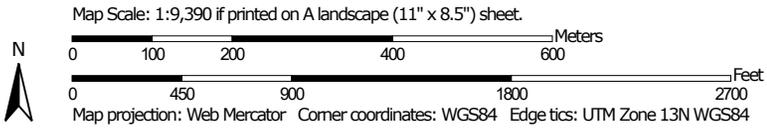
VICINITY MAP

SOILS MAP (S.C.S SURVEY)

Soil Map—El Paso County Area, Colorado



Soil Map may not be valid at this scale.



MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

-  Soil Map Unit Polygons
-  Soil Map Unit Lines
-  Soil Map Unit Points

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

Water Features

-  Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

-  Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: El Paso County Area, Colorado
 Survey Area Data: Version 21, Aug 24, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 19, 2018—May 26, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
8	Blakeland loamy sand, 1 to 9 percent slopes	31.6	10.0%
19	Columbine gravelly sandy loam, 0 to 3 percent slopes	283.9	90.0%
Totals for Area of Interest		315.5	100.0%

El Paso County Area, Colorado

8—Blakeland loamy sand, 1 to 9 percent slopes

Map Unit Setting

National map unit symbol: 369v
Elevation: 4,600 to 5,800 feet
Mean annual precipitation: 14 to 16 inches
Mean annual air temperature: 46 to 48 degrees F
Frost-free period: 125 to 145 days
Farmland classification: Not prime farmland

Map Unit Composition

Blakeland and similar soils: 98 percent
Minor components: 2 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Blakeland

Setting

Landform: Hills, flats
Landform position (three-dimensional): Side slope, talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sedimentary rock and/or eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 11 inches: loamy sand
AC - 11 to 27 inches: loamy sand
C - 27 to 60 inches: sand

Properties and qualities

Slope: 1 to 9 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Available water supply, 0 to 60 inches: Low (about 4.5 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: A
Ecological site: R049XB210CO - Sandy Foothill
Hydric soil rating: No

Minor Components

Other soils

Percent of map unit: 1 percent

Hydric soil rating: No

Pleasant

Percent of map unit: 1 percent

Landform: Depressions

Hydric soil rating: Yes

Data Source Information

Soil Survey Area: El Paso County Area, Colorado

Survey Area Data: Version 21, Aug 24, 2023

El Paso County Area, Colorado

19—Columbine gravelly sandy loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 367p
Elevation: 6,500 to 7,300 feet
Mean annual precipitation: 14 to 16 inches
Mean annual air temperature: 46 to 50 degrees F
Frost-free period: 125 to 145 days
Farmland classification: Not prime farmland

Map Unit Composition

Columbine and similar soils: 97 percent
Minor components: 3 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Columbine

Setting

Landform: Flood plains, fan terraces, fans
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium

Typical profile

A - 0 to 14 inches: gravelly sandy loam
C - 14 to 60 inches: very gravelly loamy sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 2.5 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: A
Ecological site: R049XY214CO - Gravelly Foothill
Hydric soil rating: No

Minor Components

Fluvaquentic haplaquolls

Percent of map unit: 1 percent

Landform: Swales
Hydric soil rating: Yes

Other soils

Percent of map unit: 1 percent
Hydric soil rating: No

Pleasant

Percent of map unit: 1 percent
Landform: Depressions
Hydric soil rating: Yes

Data Source Information

Soil Survey Area: El Paso County Area, Colorado
Survey Area Data: Version 21, Aug 24, 2023

F.E.M.A. MAP

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where Base Flood Elevations (BFEs) and/or Floodways have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only to landward of 0.0' North American Vertical Datum of 1988 (NAVD88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures. Refer to section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The projection used in the preparation of this map was Universal Transverse Mercator (UTM) zone 13. The horizontal datum was NAD83, GRS80 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988 (NAVD88). These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at <http://www.ngs.noaa.gov/> or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, NINGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, MD 20910-3282

To obtain current elevation, description, and/or location information for bench marks shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242 or visit its website at <http://www.ngs.noaa.gov/>.

Base Map information shown on this FIRM was provided in digital format by El Paso County, Colorado Springs Utilities, and Anderson Consulting Engineers, Inc. These data are current as of 2005.

This map reflects more detailed and up-to-date stream channel configurations and floodplain delineations than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map. The profile baselines depicted on this map represent the hydraulic modeling baselines that match the flood profiles and Floodway Data Tables if applicable, in the FIS report. As a result, the profile baselines may deviate significantly from the new base map channel representation and may appear outside of the floodplain.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed Map Index for an overview map of the county showing the layout of map panels, community map repository addresses, and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Contact FEMA Map Service Center (MSC) via the FEMA Map Information eXchange (FMIX) 1-877-336-2627 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. The MSC may also be reached by Fax at 1-800-358-9620 and its website at <http://www.msc.fema.gov/>.

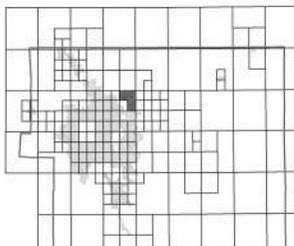
If you have questions about this map or questions concerning the National Flood Insurance Program in general, please call 1-877-FEMA MAP (1-877-336-2627) or visit the FEMA website at <http://www.fema.gov/business/nfp>.

El Paso County Vertical Datum Offset Table

Flooding Source	Vertical Datum Offset (ft)

REFER TO SECTION 3.3 OF THE EL PASO COUNTY FLOOD INSURANCE STUDY FOR STREAM BY STREAM VERTICAL DATUM CONVERSION INFORMATION

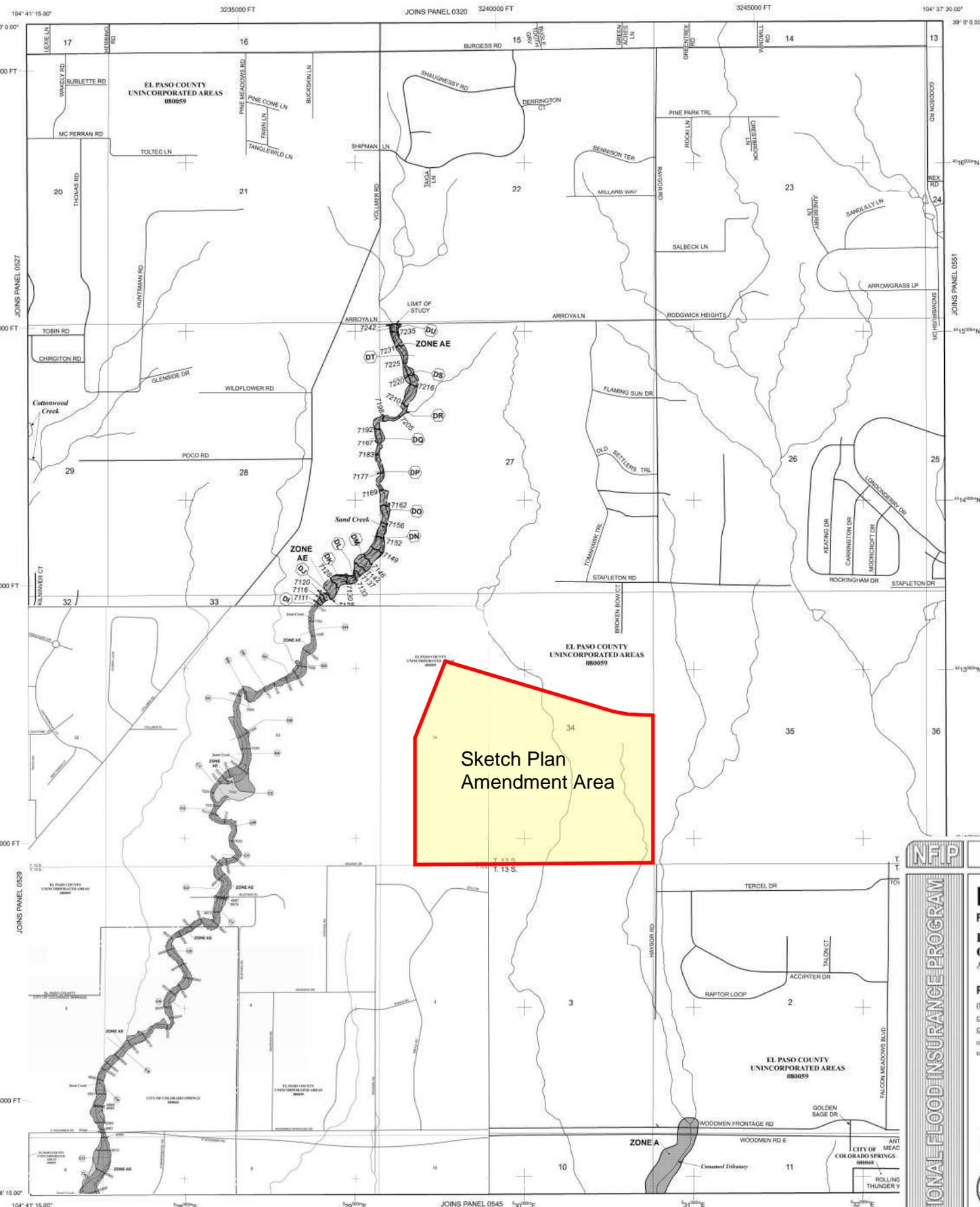
Panel Location Map



This Digital Flood Insurance Rate Map (DFIRM) was produced through a Cooperating Technical Partner (CTP) agreement between the State of Colorado Water Conservation Board (CWCB) and the Federal Emergency Management Agency (FEMA).



Additional Flood Hazard information and resources are available from local communities and the Colorado Water Conservation Board.



NOTE: MAP AREA SHOWN ON THIS PANEL IS LOCATED WITHIN TOWNSHIP 12 SOUTH, RANGE 65 WEST, AND TOWNSHIP 13 SOUTH, RANGE 65 WEST.

LEGEND

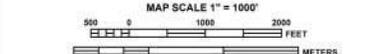
- SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD
- The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, AV, V, and VE. The base flood elevation is the water surface elevation of the 1% annual chance flood.
- ZONE A** No Base Flood Elevations determined.
- ZONE AE** Base Flood Elevations determined.
- ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
- ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE AR** Special Flood Hazard Area Formerly protected from the 1% annual chance flood by a flood control system that was subsequently decremented. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
- ZONE AV** Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
- ZONE V** Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
- ZONE VE** Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.
- FLOODWAY AREAS IN ZONE AE
- The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.
- OTHER FLOOD AREAS
- ZONE X** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with average areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
- OTHER AREAS
- ZONE D** Areas determined to be outside the 0.2% annual chance floodplain.
- ZONE D** Areas in which flood hazards are undetermined, but possible.
- COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS
- OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- Floodplain boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
- Base Flood Elevation line and value; elevation in feet*
- Base Flood Elevation value where uniform within zone; elevation in feet*
- * Referenced to the North American Vertical Datum of 1988 (NAVD 88)
- Cross section line
- Transect line
- Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
- 100-meter Universal Transverse Mercator grid ticks; zone 13
- 5000-foot grid ticks; Colorado State Plane coordinate system, central zone (FIPSZONE 0502), Lambert Conformal Conic Projection
- Bench mark; see explanation in Notes to Users section of this FIRM panel
- River Mile
- MAP REPOSITORIES
- Refer to Map Repositories list on Map Index
- EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
- MARCH 17, 1997
- EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL
- DECEMBER 7, 2018, to update corporate limits, to change Base Flood Elevation and Special Flood Hazard Areas, to update map format, to add roads and road names, and to incorporate previously issued Letters of Map Revision.

For community map revision history prior to countywide mapping, refer to the Community Map History Table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.



NATIONAL FLOOD INSURANCE PROGRAM	PANEL 0533G	NATIONAL FLOOD INSURANCE PROGRAM	PANEL 0535G
	FIRM FLOOD INSURANCE RATE MAP EL PASO COUNTY, COLORADO AND INCORPORATED AREAS PANEL 533 OF 1300 (SEE MAP INDEX FOR FIRM PANEL LAYOUT) CONTAINS: COMMUNITY NUMBER PANEL SUFFIX COLORADO SPRINGS CITY OF 0808 003 0 EL PASO COUNTY 0808 003 0		FIRM FLOOD INSURANCE RATE MAP EL PASO COUNTY, COLORADO AND INCORPORATED AREAS PANEL 535 OF 1300 (SEE MAP INDEX FOR FIRM PANEL LAYOUT) CONTAINS: COMMUNITY NUMBER PANEL SUFFIX COLORADO SPRINGS CITY OF 0808 003 0 EL PASO COUNTY 0808 003 0
MAP NUMBER 08041C0533G		MAP NUMBER 08041C0535G	
MAP REVISED DECEMBER 7, 2018 Federal Emergency Management Agency		MAP REVISED DECEMBER 7, 2018 Federal Emergency Management Agency	

SKETCH PLAN DOCUMENTS

STERLING RANCH SKETCH PLAN AMENDMENT

SECTION 27, TOWNSHIP 12, RANGE 65 WEST OF THE 6TH P.M., EL PASO, CO

Land Planning
Landscape
Architecture
Urban Design

N.E.S. Inc.
619 N. Cascade Avenue, Suite 200
Colorado Springs, CO 80903

Tel. 719.471.0073
Fax 719.471.0267

www.nescolorado.com

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LAND USE LEGEND:

31 AC. RESIDENTIAL: 2.5 DU/AC	9 D.U.
33 AC. RESIDENTIAL: 0.5 DU/AC	39 D.U.
65 AC. RESIDENTIAL: 2 DU/AC	112 D.U.
922 A.C. RESIDENTIAL: 3-5 DU/AC	2,766 D.U.
86 AC. RESIDENTIAL: 5-8 DU/AC	600 D.U.
47 AC. MIXED USE 8-25 DU/AC *	600 D.U.
60 AC. ELEMENTARY / K-8 SCHOOL	
18 AC. NEIGHBORHOOD PARK	
28 AC. COMMUNITY PARK	
62 AC. OPEN SPACE / PARK / GREENWAY	
40 AC. OPEN SPACE / BUFFER	
10 AC. UTILITY PARCEL	
5 AC. INDUSTRIAL	
37 AC. RIGHT-OF-WAY	

TOTAL: 1,444 AC. TOTAL: 4,800 D.U. Max
* COMMERCIAL / MULTIFAMILY UP TO 25 DU/AC

LEGAL DESCRIPTION:

THE WEST HALF OF THE WEST HALF OF THE EAST HALF AND EAST HALF OF THE WEST HALF OF THE WEST HALF OF THE WEST HALF OF THE SOUTHWEST QUARTER OF SECTION 27; THE EAST HALF OF THE SOUTHWEST QUARTER AND THAT PORTION OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER LYING SOUTH AND EAST OF THE COUNTY ROAD KNOWN AS VOLLMER ROAD, OF SECTION 32, EXCEPT THAT PORTION OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION 32 DEEDED TO I. MARCUS BROWN BY TRUSTEES' DEED RECORDED IN BOOK 3292 AT PAGE 168; ALL IN TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M., EL PASO COUNTY, COLORADO LYING SOUTH AND EAST OF THE COUNTY ROAD (VOLLMER ROAD), ALSO: THE NORTHWEST QUARTER OF SECTION 4, TOWNSHIP 13 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, LYING SOUTHERLY OF AN EXISTING EAST- WEST FENCE AS DESCRIBED IN SPECIAL WARRANTY DEED RECORDED DECEMBER 23, 2004 AT RECEPTION NO. 204209417, COUNTY OF EL PASO, STATE OF COLORADO, ALSO: THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 32, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M., LYING SOUTHEASTERLY OF THE PUBLIC ROAD KNOWN AS VOLLMER ROAD, EL PASO COUNTY, COLORADO, AND CONTAINING 1443.695 ACRES MORE OR LESS.

AMENDED AREA DESCRIPTION:

THE APPROXIMATE AREA OF THIS AMENDMENT (SKP235) IS 212 ACRES.

GENERAL NOTES:

- THERE ARE AQUATIC RESOURCES ON THE SITE, PRESUMED TO BE NON-JURISDICTIONAL DUE TO THEIR LACK OF SURFACE WATER CONNECTION TO SAND CREEK TO THE WEST OR ANY OTHER DOWNSTREAM WOTUS. AN APPROVED JURISDICTIONAL DETERMINATION MAY BE NEEDED TO CONFIRM THE REGULATORY STATUS OF THE WETLANDS PRESENT. IF THESE WETLANDS ARE DETERMINED TO BE JURISDICTIONAL, A SECTION 404 PERMIT FROM THE USACE WOULD BE REQUIRED. REGARDLESS OF REGULATORY STATUS, THE WETLANDS ON THE SITE WILL BE IMPACTED BY DEVELOPMENT THROUGH FILL AND REGRADING. WETLAND AREAS WITHIN THE OPEN SPACE BUFFER ON THE EASTERN BOUNDARY WILL REMAIN LARGELY UNDISTURBED.

SKP224 CONDITION OF APPROVAL:

- APPLICANT HAS PROVIDED AN UPDATED TRAFFIC IMPACT STUDY WHICH LIMITS THE MAXIMUM DWELLING UNITS TO 4,800 WITH THE APPROVED 2022 SKETCH PLAN AMENDMENT (SKP224).

Overall Development Dwelling Unit Table

Homestead Fil 1 SF 04-029	Banding Iron Fil 1 SF-06-017	Homestead Fil 2 SF 19-004	Banding Iron Fil 2 SF-19-018	Sterling Ranch Fil 2 SF-20-015	Total Entitled Units	Remaining Developable Units	Maximum Dwelling Units
72	51	104	75	49	351	4449	4800

ROAD CLASSIFICATION TABLE

Roadway	Existing	2040 MTCP	2060 MTCP/CPP	Sterling Ranch Proposed
Vollmer Road	2 lane Collector - 60'	4 lane Minor - 100'	4 lane Minor - 100'	4 lane Minor - 100'
Briargate Parkway	4 lane Principal - 130'	4 lane Principal - 130'	4 lane Principal - 130'	4 lane Principal - 130'
Banning Lewis Ranch Parkway	4 lane Principal - 130'	4 lane Principal - 130'	4 lane Principal - 130'	4 lane Principal - 130'
Marksheffel Road	2 lane Principal - 60'	4 lane Principal - 130'	4 lane Principal - 130'	4 lane Principal - 130'

OWNERS:

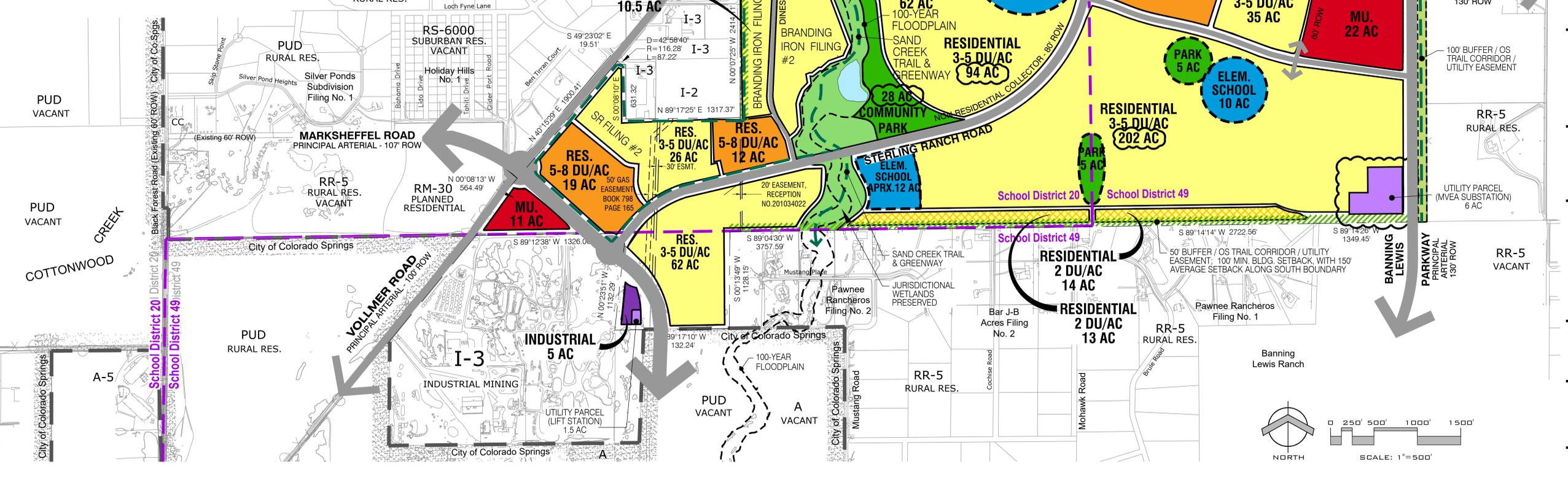
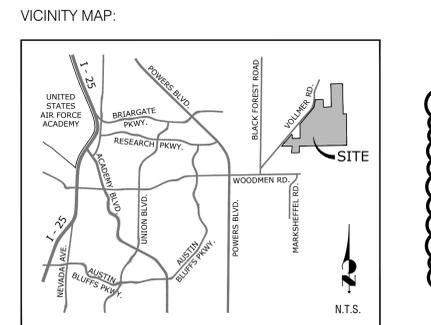
ARTESIA LOT HOLDINGS LLC,
4400 STATE HIGHWAY 121, SUITE 410
THE COLONY, TX 75056

CLASSIC SRJ LAND, LLC
2138 FLYING HORSE CLUB DRIVE
COLORADO SPRINGS, CO 80921

VANTAGE HOMES CORP.
9540 FEDERAL DRIVE, SUITE 100
COLORADO SPRINGS, CO 80921

SYMBOL LEGEND:

- ROAD
- FULL MOVEMENT ACCESS POINT
- 3/4 MOVEMENT
- R/I/O
- 100-YEAR FLOODPLAIN
- TRAIL
- BUFFER / OS TRAIL CORRIDOR / EASEMENT
- NEIGHBORHOOD PARK
- ACCESS SPACING (FEET)
- AQUATIC RESOURCES



STERLING RANCH

SKETCH PLAN
AMENDMENT #3

MORLEY-BENTLEY
INVESTMENTS, LLC.

DATE: 09/29/2023
PROJECT MGR: A. BARLOW
PREPARED BY: B. PERKINS

AMENDMENT #3

DATE	BY	DESCRIPTION
12/19/2023	BP	PER COUNTY REVIEW COMMENTS
1/23/2024	BP	PER COUNTY REVIEW COMMENTS

STERLING RANCH SKETCH PLAN AMENDMENT

SECTION 27, TOWNSHIP 12, RANGE 65 WEST OF THE 6TH P.M., EL PASO, CO

Land Planning
Landscape
Architecture
Urban Design

N.E.S. Inc.
619 N. Cascade Avenue, Suite 200
Colorado Springs, CO 80903

Tel. 719.471.0073
Fax 719.471.0267

www.nescolorado.com

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LAND USE LEGEND:

31 AC. RESIDENTIAL: 2.5 DU/AC	9 D.U.
105 AC. RESIDENTIAL: 2 DU/AC	151 D.U.
882 A.C. RESIDENTIAL: 3-5 DU/AC	2,766 D.U.
129 AC. RESIDENTIAL: 5-8 DU/AC	600 D.U.
47 AC. MIXED USE 8-25 DU/AC *	600 D.U.
50 AC. ELEMENTARY / K-8 SCHOOL	
18 AC. NEIGHBORHOOD PARK	
28 AC. COMMUNITY PARK	
62 AC. OPEN SPACE / PARK / GREENWAY	
40 AC. OPEN SPACE / BUFFER	
11.5 AC. UTILITY PARCEL	
5 AC. INDUSTRIAL	
35.5 AC. RIGHT-OF-WAY	
TOTAL: 1,444 AC.	TOTAL: 4,800 D.U. Max

* COMMERCIAL / MULTIFAMILY UP TO 25 DU/AC

LEGAL DESCRIPTION:

THE WEST HALF OF THE WEST HALF OF THE EAST HALF AND EAST HALF OF THE WEST HALF AND THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 27; THE EAST HALF OF THE SOUTHEAST QUARTER AND THAT PORTION OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER LYING SOUTH AND EAST OF THE COUNTY ROAD KNOWN AS VOLLMER ROAD, OF SECTION 28, THE EAST HALF AND THE WEST HALF OF SECTION 34; THE EAST HALF AND THE EAST HALF OF THE SOUTHWEST QUARTER AND THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 33, AND ALL THAT PART OF THE NORTHWEST QUARTER OF SECTION 33 LYING SOUTH AND EAST OF THE COUNTY ROAD KNOWN AS VOLLMER ROAD, EXCEPT THAT PORTION OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SAID SECTION 33 LYING SOUTH AND EAST OF SAID COUNTY ROAD AS DEEDED TO COLORADO INTERSTATE GAS COMPANY BY WARRANTY DEED RECORDED IN BOOK 1173 AT PAGE 359; AND THAT PORTION OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER AND THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER LYING SOUTHWEST OF THE COUNTY ROAD KNOWN AS VOLLMER ROAD, OF SECTION 32, EXCEPT THAT PORTION OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 32 DEEDED TO I. MARCUS BROWN BY TRUSTEES' DEED RECORDED IN BOOK 3292 AT PAGE 168; ALL IN TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M., EL PASO COUNTY, COLORADO. ALL THAT PORTION OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 28, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M., EL PASO COUNTY, COLORADO LYING SOUTH AND EAST OF THE COUNTY ROAD (VOLLMER ROAD), ALSO: THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 4, TOWNSHIP 13 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, LYING SOUTHERLY OF AN EXISTING EAST- WEST FENCE AS DESCRIBED IN SPECIAL WARRANTY DEED RECORDED DECEMBER 23, 2004 AT RECEPTION NO. 204209417, COUNTY OF EL PASO, STATE OF COLORADO, ALSO: THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 32, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH P.M., LYING SOUTHEASTERLY OF THE PUBLIC ROAD KNOWN AS VOLLMER ROAD, EL PASO COUNTY, COLORADO, AND CONTAINING 1443.695 ACRES MORE OR LESS.

OWNERS OF AMENDED AREA:

CLASSIC SRJ LAND, LLC
2138 FLYING HORSE CLUB DRIVE
COLORADO SPRINGS, CO 80921

SYMBOL LEGEND:

- ROAD
- FULL MOVEMENT ACCESS POINT
- 3/4 MOVEMENT
- RI/RO
- 100-YEAR FLOODPLAIN
- TRAIL
- BUFFER / OS TRAIL CORRIDOR / EASEMENT
- NEIGHBORHOOD PARK
- AQUATIC RESOURCES

AMENDED AREA DESCRIPTION:

THE APPROXIMATE AREA OF THIS AMENDMENT (SKP235) IS 166 ACRES.

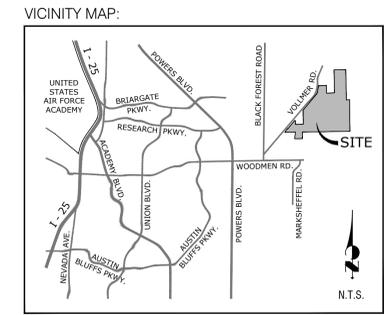
- GENERAL NOTES:**
- THERE ARE AQUATIC RESOURCES ON THE SITE, PRESUMED TO BE NON-JURISDICTIONAL DUE TO THEIR LACK OF SURFACE WATER CONNECTION TO SAND CREEK TO THE WEST OR ANY OTHER DOWNSTREAM WOTUS. AN APPROVED JURISDICTIONAL DETERMINATION MAY BE NEEDED TO CONFIRM THE REGULATORY STATUS OF THE WETLANDS PRESENT. IF THESE WETLANDS ARE DETERMINED TO BE JURISDICTIONAL, A SECTION 404 PERMIT FROM THE USACE WOULD BE REQUIRED. REGARDLESS OF REGULATORY STATUS, THE WETLANDS ON THE SITE WILL BE IMPACTED BY DEVELOPMENT THROUGH FILL AND REGRADING. WETLAND AREAS WITHIN THE OPEN SPACE BUFFER ON THE EASTERN BOUNDARY WILL REMAIN LARGELY UNDISTURBED.

SKP224 CONDITION OF APPROVAL:

- APPLICANT HAS PROVIDED AN UPDATED TRAFFIC IMPACT STUDY WHICH LIMITS THE MAXIMUM DWELLING UNITS TO 4,800 WITH THE APPROVED 2022 SKETCH PLAN AMENDMENT (SKP224).

Overall Development Dwelling Unit Table

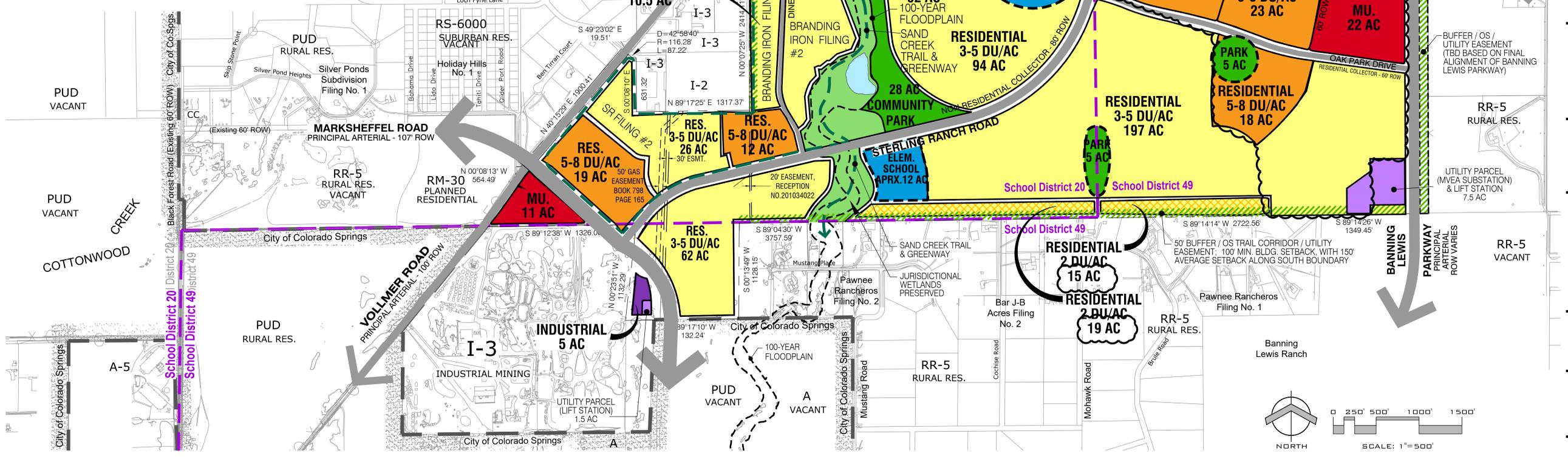
RULING	Plat File No.	Lot No.
Sterling Ranch Filing 2	SF2015	49
Sterling Ranch Filing 3	SF2132	63
Sterling Ranch Filing 3A	SF2413	3
Sterling Ranch Filing 4	SF2230	148
Copper Chase	SF2316	138
Branding Iron Filing 1	SF1724	51
Branding Iron Filing 2	SF1918	75
Homestead Filing 1	SF1725	72
Homestead Filing 2	SF194	104
Homestead North Filing 1	SF2213	73
Homestead North Filing 2	SF2218	74
Homestead North Filing 3	SF2229	77
Sterling Ranch East Filing 1	SF2235	294
Sterling Ranch East Filing 2	SF2237	42
FourSquare at Sterling Ranch	SF2236	158
TOTAL ENTITLED UNITS		1483
REMAINING DEVELOPABLE UNITS		3307
MAXIMUM ALLOWED DWELLING UNITS		4800



ROAD CLASSIFICATION TABLE

Roadway	Existing	2040 MTCP	2060 MTCP/CP	Sterling Ranch Proposed
Voller Road	2 lane Collector - 60'	4 lane Minor - 100'	4 lane Minor - 100'	4 lane Minor - 100'
Briargate Parkway	4 lane Principal - 130'	4 lane Principal - 130'	4 lane Principal - 130'	4 lane Principal - 130'
Banning Lewis Ranch Parkway	4 lane Principal - 130'	4 lane Principal - 130'	4 lane Principal - 130'	4 lane Principal - TBD
Marksheffel Road	2 lane Principal - 130'	4 lane Principal - 130'	4 lane Principal - 130'	TBD *

* A deviation is approved for Marksheffel Road to be built to the City of Colorado Springs standards.



STERLING RANCH

SKETCH PLAN AMENDMENT #4

CLASSIC SRJ LAND, LLC.

DATE: 08/29/2024
PROJECT MGR: A. BARLOW
PREPARED BY: C. HEHLINGER

AMENDMENT #4

DATE	BY	DESCRIPTION

SCALE: 1" = 500'

1 OF 1

SKP XXX

REPORT REFERENCES

STERLING RANCH EAST PRELIMINARY PLAN NO. 1
Pre-Developed Subcatchment Runoff

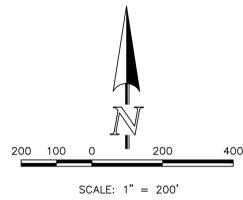
Subcatchment	Area (Ac.)	SWMM Imperv. (%)	Peak Runoff 5yr. (CFS)	Peak Runoff 100 yr. (CFS)
EX-10	265.9	7%	105	222
EX10A	153.5	5%	46	103
EX-11 *	214.3	4%	54	129
EX-13 *	94.8	6%	36	85
EX-4A	44.2	8%	19	50
EX-5	26.2	8%	12	32
EX-7	152.8	5%	46	105
EX-7A	2.4	2%	1	5
EX-8	32.2	2%	5	23
EX-8A	6.6	2%	2	9
EX-9	139.3	8%	59	122
EX-9A	21.8	5%	7	19
TR-12 *	4.7	5%	2	9
TR-20 *	23.2	7%	10	32
TR-4 *	4.4	5%	2	9
TR-5 *	13.7	5%	5	17
TR-6 *	1.5	5%	1	4
TR-7 *	2.6	5%	1	5

* Basins with no change upon developed condition

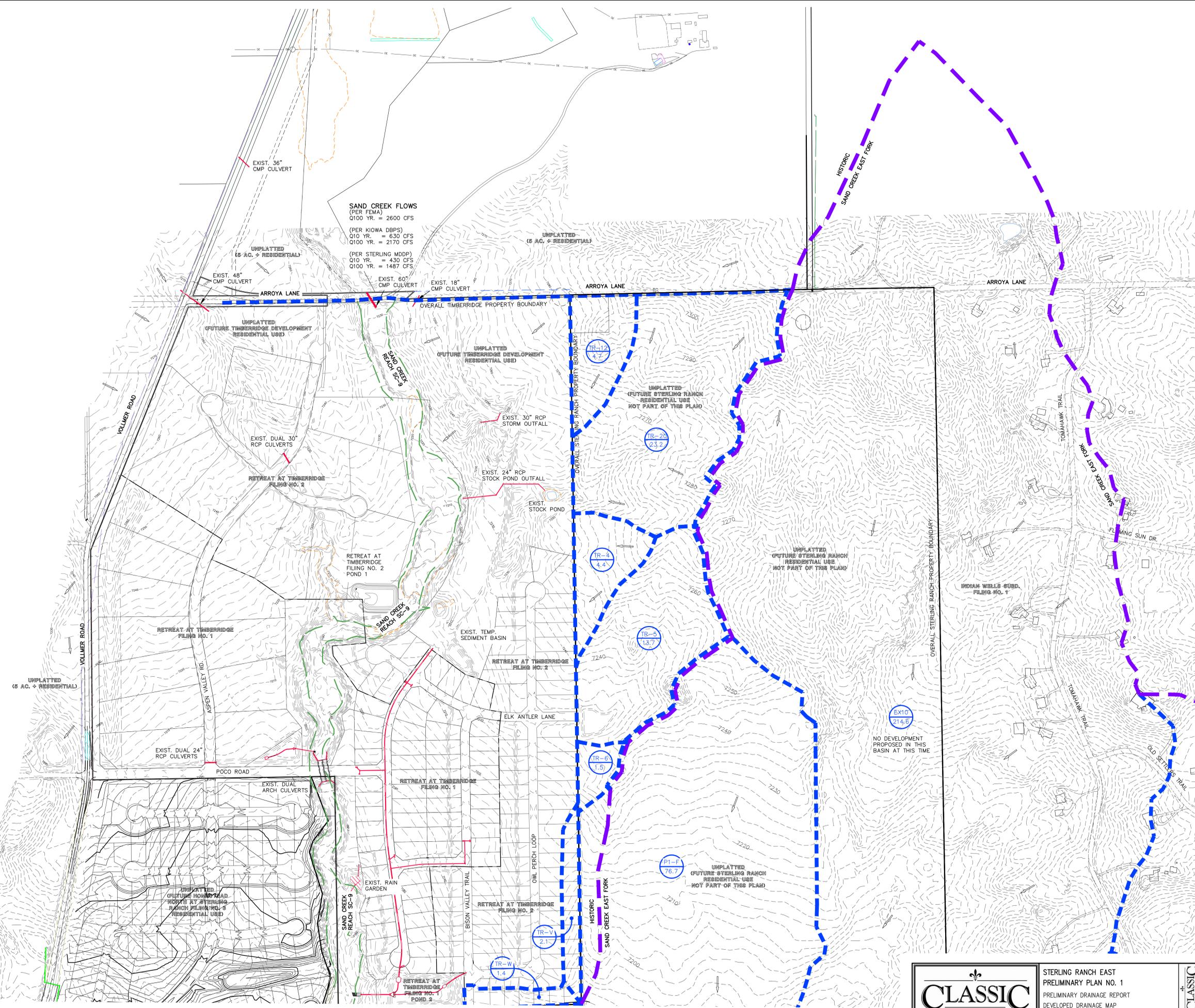
STERLING RANCH EAST PRELIMINARY PLAN NO. 1
Developed Subcatchment Runoff

Subcatchment	Area (Ac.)	SWMM Imperv. (%)	Peak Runoff 5yr. (CFS)	Peak Runoff 100 yr. (CFS)
EF-A	8.2	15%	7	20
EX10A +	60.4	5%	18	50
EX-9 +	6.0	5%	2	8
EX-9A +	12.7	5%	4	16
P1-A	12.7	8%	6	19
P1-A1	5.0	45%	11	21
P1-A2	6.4	45%	12	23
P1-A3	1.8	50%	5	9
P1-A4	2.0	50%	5	10
P1-A5	5.7	45%	13	25
P1-A6	2.8	50%	7	14
P1-B (Dev.)	35.5	38%	55	108
P1-B (Un-dev.)	35.5	5%	10	23
P1-C	8.9	50%	23	46
P1-D	31.4	38%	53	102
P1-E1	30.4	35%	50	97
P1-E2	21.8	40%	41	80
P1-F (Dev.)	76.7	30%	111	215
P1-F (Un-dev.)	76.7	5%	22	59
P2-A	24.4	10%	15	43
P2-B	57.8	38%	88	173
P2-B1	2.5	50%	7	13
P2-B10	1.7	50%	5	10
P2-B2	1.9	50%	5	10
P2-B3	2.8	45%	7	13
P2-B4	1.6	50%	4	8
P2-B5	1.9	45%	5	9
P2-B6	1.1	50%	3	6
P2-B7	2.5	45%	6	12
P2-B8	1.2	50%	3	7
P2-B9	2.0	50%	5	11
P2-S1	35.6	40%	68	133
P3-A	52.6	40%	85	166
P3-C	1.7	13%	1	5
P3-S2	11.9	40%	25	50
P4-A	25.8	35%	41	80
P4-B	37.3	35%	63	123
SC-1 +	3.6	8%	2	6
SC-2 +	10.8	8%	6	20
SC-3 +	27.2	8%	12	26
SC-4 +	16.4	8%	8	27
TR-V	2.1	19%	2	6
TR-W	1.4	38%	3	5

* Basin not changed from pre-development conditions



DESCRIPTION	SYMBOL
EXISTING GROUND CONTOUR	6910
PROPOSED FINISHED CONTOUR	6910
BASIN BOUNDARY	---
EAST FORK BASIN BOUNDARY	---
DESIGN POINT	Ⓟ
BASIN IDENTIFIER AREA IN ACRES	Ⓟ
EXISTING DIRECTION OF FLOW	→
PROPOSED DIRECTION OF FLOW	→
PROPOSED STORM SEWER	---
PROPOSED STORM SEWER PER JR ENG. PLANS	---
PROPOSED POND OUTFALL PER JR ENG. PLANS	---



SEE SHEET 5

CLASSIC CONSULTING ENGINEERS & SURVEYORS

619 N. Cascade Avenue, Suite 200
Colorado Springs, Colorado 80903

(719) 785-0790
(719) 785-0799 (Fax)

STERLING RANCH EAST PRELIMINARY PLAN NO. 1
PRELIMINARY DRAINAGE REPORT
DEVELOPED DRAINAGE MAP

DESIGNED BY	MAW	SCALE	DATE
DRAWN BY	MAW	(H) 1" = 200'	SHEET 4 OF 6
CHECKED BY	(V) 1" = N/A	JOB NO.	1183.22

STERLING RANCH EAST PRELIMINARY PLAN NO. 1
Developed Subcatchment Runoff

Subcatchment	Area (Ac.)	SWMM Imperv. (%)	Peak Runoff 5yr (CFS)	Peak Runoff 100yr (CFS)
EF-A	8.2	15%	7	20
EX10A +	60.4	5%	18	50
EX-9 +	6.0	5%	2	8
EX-9A +	12.7	5%	4	16
P1-A	12.7	8%	6	19
P1-A1	5.0	45%	11	21
P1-A2	6.4	45%	12	23
P1-A3	1.8	50%	5	9
P1-A4	2.0	50%	5	10
P1-A5	5.7	45%	13	25
P1-A6	2.8	50%	7	14
P1-B (Dev.)	35.5	38%	55	108
P1-B (Un-dev.)	35.5	5%	10	23
P1-C	8.9	50%	23	46
P1-D	31.4	38%	53	102
P1-E1	30.4	35%	50	97
P1-E2	21.8	40%	41	80
P1-F (Dev.)	76.7	30%	111	215
P1-F (Un-dev.)	76.7	5%	22	59
P2-A	24.4	10%	15	43
P2-B	57.8	38%	88	173
P2-B1	2.5	50%	7	13
P2-B10	1.7	50%	5	10
P2-B2	1.9	50%	5	10
P2-B3	2.8	45%	7	13
P2-B4	1.6	50%	4	8
P2-B5	1.9	45%	5	9
P2-B6	1.1	50%	3	6
P2-B7	2.5	45%	6	12
P2-B8	1.2	50%	3	7
P2-B9	2.0	50%	5	11
P2-S1	35.6	40%	68	133
P3-A	52.6	40%	85	166
P3-C	1.7	11%	1	5
P3-S2	11.9	40%	25	50
P4-A	25.8	35%	41	80
P4-B	37.3	35%	63	123
SC-1 +	3.6	8%	2	6
SC-2 +	10.8	8%	6	20
SC-3 +	27.2	8%	12	26
SC-4 +	16.4	8%	8	27
TR-V	2.1	19%	2	6
TR-W	1.4	38%	3	5

+ Basin not changed from pre-development conditions

LEGEND

DESCRIPTION	SYMBOL
EXISTING GROUND CONTOUR	6910
PROPOSED FINISHED CONTOUR	6910
BASIN BOUNDARY	---
EAST FORK BASIN BOUNDARY	---
DESIGN POINT	15
BASIN IDENTIFIER	10.0
AREA IN ACRES	10.0
EXISTING DIRECTION OF FLOW	---
PROPOSED DIRECTION OF FLOW	---
PROPOSED STORM SEWER	---
PROPOSED STORM SEWER PER JR. ENG. PLANS	---
PROPOSED STORM OUTFALL PER JR. ENG. PLANS	---
STERLING RANCH EAST PRELIMINARY PLAN NO. 1 AREA	---

STERLING RANCH EAST PRELIMINARY PLAN NO. 1
Pond FSD-14A Tributary Area

Subcatchment	Area (Ac.)	Avg. Lot size (Ac.)	Effective Imperv. (%)
P1-A1	5.0	N/A	70%
P1-A2	6.4	N/A	70%
P1-A3	1.8	N/A	70%
P1-A4	2.0	N/A	70%
P1-A5	5.7	N/A	70%
P1-A6	2.8	N/A	70%
P2-S1	35.6	School	40%
P2-A	24.4	Park	7%
P2-B	57.8	7,000	60%
P2-B1	2.5	N/A	70%
P2-B2	1.9	N/A	70%
P2-B3	2.8	N/A	70%
P2-B4	1.6	N/A	70%
P2-B5	1.9	N/A	50%
P2-B6	1.1	N/A	70%
P2-B7	2.5	N/A	30%
P2-B8	1.2	N/A	70%
TOTAL	157.0	N/A	49%

STERLING RANCH EAST PRELIMINARY PLAN NO. 1
Developed Surface Routing

Design Point (On-Site)	Peak Runoff 5yr (CFS)	Peak Runoff 100yr (CFS)
DP-1	112	219
DP-2	53	103
DP-3	41	80
DP-4	218	379
DP-5	53	102
DP-6	55	108
DP-7	20	39
DP-8	68	133
DP-9	88	173
DP-10	223	441
DP-11	10	21
DP-12	63	123
DP-13	41	80
DP-14	97	189
DP-15	85	166
DP-16	34	69

Pond FSD-11B	115	227
Pond FSD-14A	234	486
Pond FSD-14B	97	189
Pond FSD-16 (Ultimate)	323	499
Pond FSD-16 (Interim)	197	410

STERLING RANCH EAST PRELIMINARY PLAN NO. 1
Pond FSD-16 Tributary Area (Full Build Out)

Subcatchment	Area (Ac.)	Avg. Lot size (Ac.)	Effective Imperv. (%)
P1-A	12.7	N/A	15%
P1-B	35.5	7,500	55%
P1-C	8.9	N/A	70%
P1-D	31.4	6,500	60%
P1-E1	30.4	8,500	50%
P1-E2	21.8	7,500	55%
P1-F	76.7	12,500	35%
TR-V	2.1	17,500	27%
TR-W	1.4	13,500	32%
TOTAL	220.9	N/A	46%

STERLING RANCH EAST PRELIMINARY PLAN NO. 1
Pond FSD-16 Tributary Area (Prelim. Plan 1 & Foursquare PUD Only)

Subcatchment	Area (Ac.)	Avg. Lot size (Ac.)	Effective Imperv. (%)
P1-A	12.7	N/A	15%
P1-B	35.5	UnDev.	2%
P1-C	8.9	N/A	70%
P1-D	31.4	6,500	60%
P1-E1	30.4	8,500	50%
P1-E2	21.8	7,500	55%
P1-F	76.7	Un dev.	2%
TR-V	2.1	17,500	27%
TR-W	1.4	13,500	32%
TOTAL	220.9	N/A	26%

STERLING RANCH EAST PRELIMINARY PLAN NO. 1
Pre-Developed Subcatchment Runoff

Subcatchment	Area (Ac.)	SWMM Imperv. (%)	Peak Runoff 5yr (CFS)	Peak Runoff 100yr (CFS)
EX-10	265.9	7%	105	222
EX10A	153.5	5%	46	103
EX-11 *	214.3	4%	54	129
EX-13 *	94.8	6%	36	85
EX-4A	44.2	8%	19	50
EX-5	26.2	8%	12	32
EX-7	152.8	5%	46	105
EX-7A	2.4	2%	1	5
EX-8	32.2	2%	5	23
EX-8A	6.6	2%	2	9
EX-9	139.3	8%	59	122
EX-9A	21.8	5%	7	19
EX-9A	4.7	5%	2	9
TR-20 *	23.2	7%	10	32
TR-4 *	4.4	5%	2	9
TR-5 *	13.7	5%	5	17
TR-6 *	1.5	5%	1	4
TR-7 *	2.6	5%	1	5

* Basins with no change upon developed condition

STERLING RANCH EAST PRELIMINARY PLAN NO. 1
Pond FSD-14B Tributary Area

Subcatchment	Area (Ac.)	Avg. Lot size (Ac.)	Effective Imperv. (%)
P4-A	37.3	6,500	60%
P4-B	25.8	6,500	60%
TOTAL	63.1	N/A	60%

SEE SHEET 1

LEGEND

DESCRIPTION	SYMBOL
EXISTING GROUND CONTOUR	6910
PROPOSED FINISHED CONTOUR	6910
SUB-BASIN BOUNDARY	---
SAND CREEK EAST FORK BASIN LINE	---
DESIGN POINT	4
BASIN IDENTIFIER	EX-10
AREA IN ACRES	10.0
EXISTING DIRECTION OF FLOW	→
EXISTING STORM SEWER	---

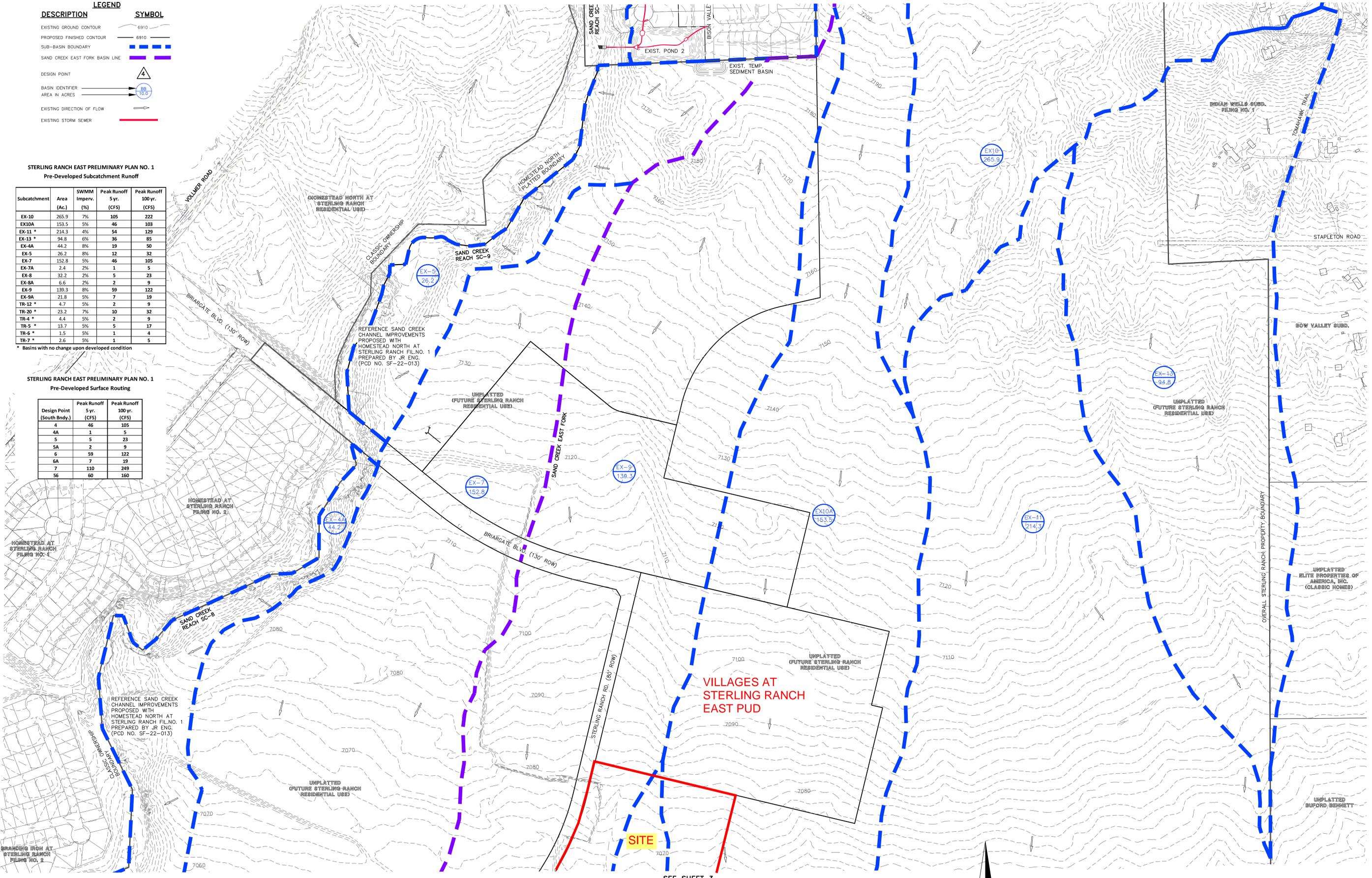
STERLING RANCH EAST PRELIMINARY PLAN NO. 1
Pre-Developed Subcatchment Runoff

Subcatchment	Area (Ac.)	SWMM Imperv. (%)	Peak Runoff 5 yr. (CFS)	Peak Runoff 100 yr. (CFS)
EX-10	265.9	7%	105	222
EX10A	153.5	5%	46	103
EX-11 *	214.3	4%	54	129
EX-13 *	94.8	6%	36	85
EX-4A *	44.2	8%	19	50
EX-5	26.2	8%	12	32
EX-7	152.8	5%	46	105
EX-7A	2.4	2%	1	5
EX-8	32.2	2%	5	23
EX-8A	6.6	2%	2	9
EX-9	139.3	8%	59	122
EX-9A	21.8	5%	7	19
TR-12 *	4.7	5%	2	9
TR-20 *	23.2	7%	10	32
TR-4 *	4.4	5%	2	9
TR-5 *	13.7	5%	5	17
TR-6 *	1.5	5%	1	4
TR-7 *	2.6	5%	1	5

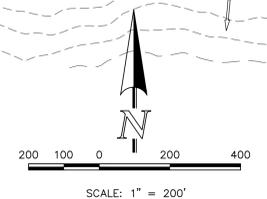
* Basins with no change upon developed condition

STERLING RANCH EAST PRELIMINARY PLAN NO. 1
Pre-Developed Surface Routing

Design Point (South Bndy.)	Peak Runoff 5 yr. (CFS)	Peak Runoff 100 yr. (CFS)
4	46	105
4A	1	5
5	5	23
5A	2	9
6	59	122
6A	7	19
7	110	249
56	60	160



SEE SHEET 3



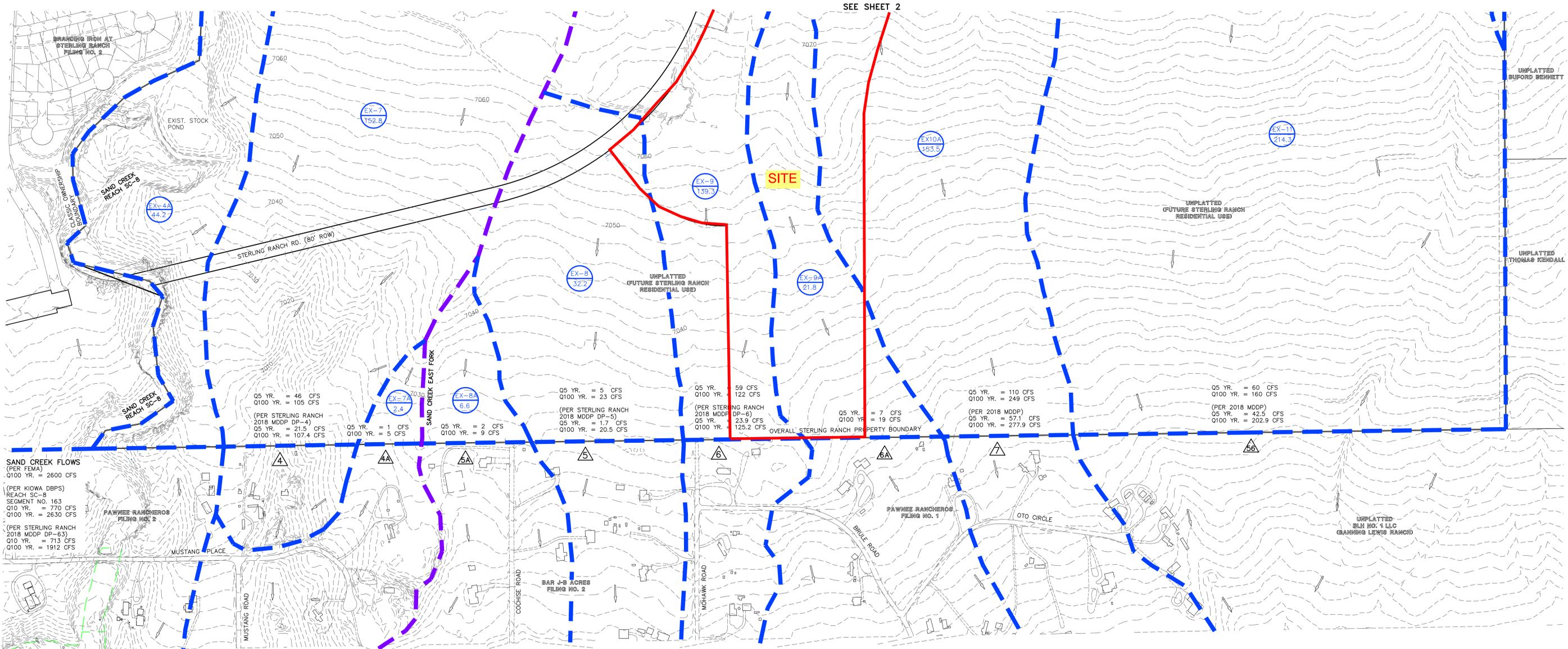
	STERLING RANCH EAST PRELIMINARY PLAN NO. 1 PRELIMINARY DRAINAGE REPORT PRE-DEVELOPMENT DRAINAGE MAP			
	DESIGNED BY	MAW	SCALE	DATE
	DRAWN BY	MAW	(H) 1" = 200'	SHEET 2 OF 6
	CHECKED BY	(V) 1" = N/A	JOB NO.	1183.22

619 N. Cascade Avenue, Suite 200
Colorado Springs, Colorado 80903

(719)785-0790
(719)785-0799 (Fax)

M:\118322\REPORTS\PRELIM\DRAINAGE\REPORT\118322PDR.HDW rev.dwg, 11/17/2012 10:06:43 AM, 1:1

SEE SHEET 2



SAND CREEK FLOWS
(PER FEMA)
Q100 YR. = 2600 CFS

(PER KIOWA DBPS)
REACH SC-8
SEGMENT NO. 163
Q10 YR. = 770 CFS
Q100 YR. = 2630 CFS

(PER STERLING RANCH
2018 MDDP DP-4)
Q5 YR. = 21.5 CFS
Q100 YR. = 107.4 CFS

(PER STERLING RANCH
2018 MDDP DP-5)
Q5 YR. = 1 CFS
Q100 YR. = 5 CFS

(PER STERLING RANCH
2018 MDDP DP-5)
Q5 YR. = 5 CFS
Q100 YR. = 23 CFS

(PER STERLING RANCH
2018 MDDP DP-5)
Q5 YR. = 1.7 CFS
Q100 YR. = 20.5 CFS

(PER STERLING RANCH
2018 MDDP DP-6)
Q5 YR. = 23.9 CFS
Q100 YR. = 125.2 CFS

(PER STERLING RANCH
2018 MDDP DP-6)
Q5 YR. = 59 CFS
Q100 YR. = 122 CFS

(PER STERLING RANCH
2018 MDDP DP-6)
Q5 YR. = 7 CFS
Q100 YR. = 19 CFS

(PER STERLING RANCH
2018 MDDP DP-6)
Q5 YR. = 57.1 CFS
Q100 YR. = 277.9 CFS

(PER STERLING RANCH
2018 MDDP DP-6)
Q5 YR. = 60 CFS
Q100 YR. = 160 CFS

(PER STERLING RANCH
2018 MDDP DP-6)
Q5 YR. = 42.5 CFS
Q100 YR. = 202.9 CFS

NOTE:
THE FOLLOWING LABELS AS SHOWN
ALONG THE SOUTH BOUNDARY
REPRESENT PRE-DEVELOPED
FLOWS AS PRESENTED IN THE
2018 STERLING RANCH MDDP.
SEE REFERENCE MATERIAL IN
APPENDIX FOR ORIGINAL MAP.

(PER STERLING RANCH
2018 MDDP DP-5)
Q5 YR. = 1.7 CFS
Q100 YR. = 20.5 CFS

STERLING RANCH EAST PRELIMINARY PLAN NO. 1
Pre-Developed Subcatchment Runoff

Subcatchment	Area (Ac.)	SWMM Imperv. (%)	Peak Runoff 5 yr. (CFS)	Peak Runoff 100 yr. (CFS)
EX-10	265.9	7%	105	222
EX10A	153.5	5%	46	103
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EX-4A	44.2	8%	19	50
EX-5	26.2	8%	12	32
EX-7	152.8	5%	46	105
EX-7A	2.4	2%	1	5
EX-8	32.2	2%	5	23
EX-8A	6.6	2%	2	9
EX-9	139.3	8%	59	122
EX-9A	21.8	5%	7	19
TR-12 *	4.7	5%	2	9
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TR-4 *	4.4	5%	2	9
TR-5 *	13.7	5%	5	17
TR-6 *	1.5	5%	1	4
TR-7 *	2.6	5%	1	5

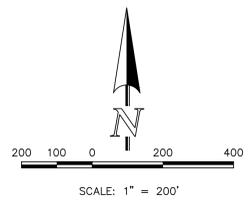
* Basins with no change upon developed condition

STERLING RANCH EAST PRELIMINARY PLAN NO. 1
Pre-Developed Surface Routing

Design Point (South Bndy.)	Peak Runoff 5 yr. (CFS)	Peak Runoff 100 yr. (CFS)
4	46	105
4A	1	5
5	5	23
5A	2	9
6	59	122
6A	7	19
7	110	249
5B	60	160

LEGEND

DESCRIPTION	SYMBOL
EXISTING GROUND CONTOUR	6910
PROPOSED FINISHED CONTOUR	6910
SUB-BASIN BOUNDARY	---
SAND CREEK EAST FORK BASIN LINE	---
DESIGN POINT	△
BASIN IDENTIFIER	△
AREA IN ACRES	△
EXISTING DIRECTION OF FLOW	→
EXISTING STORM SEWER	---



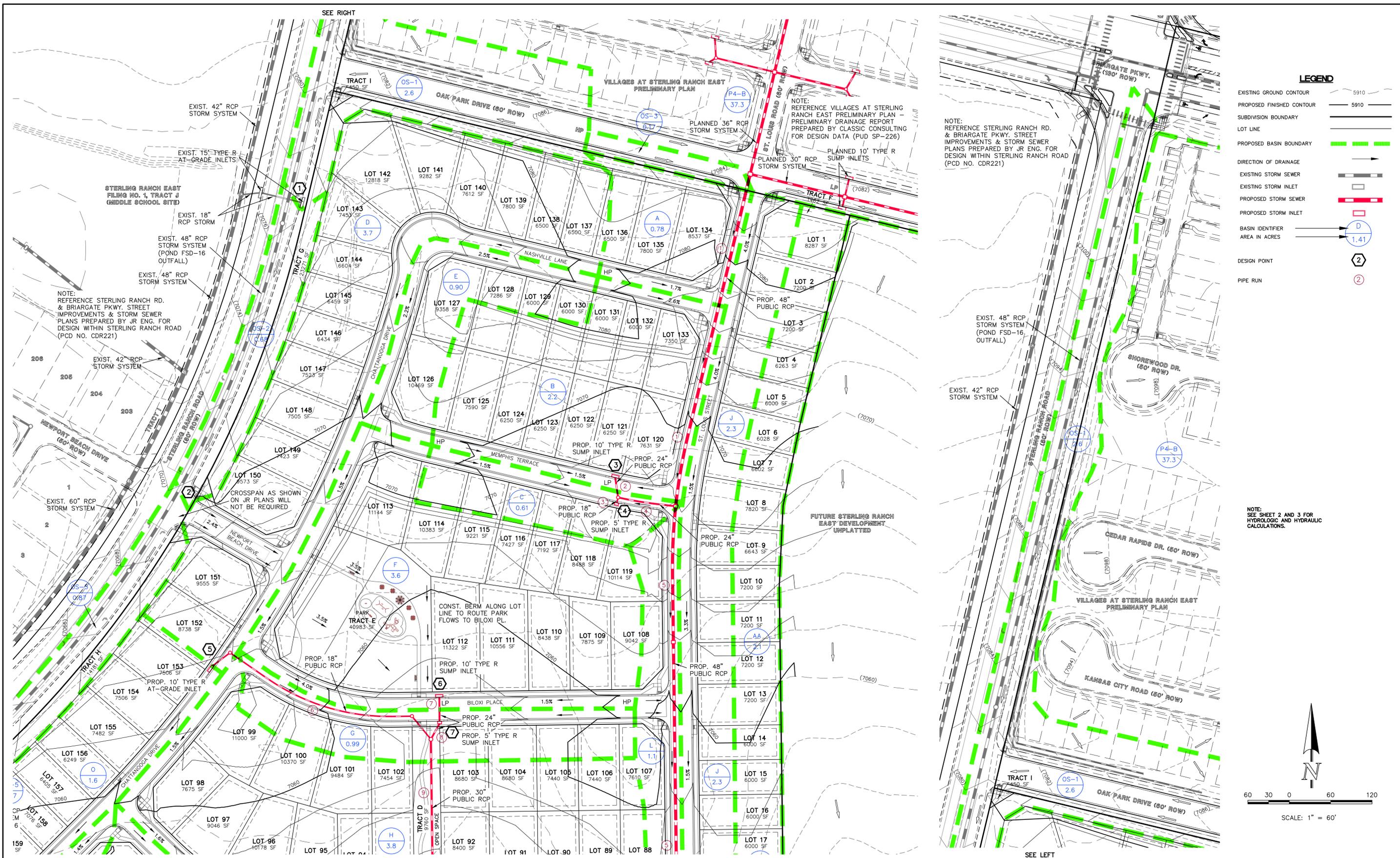
619 N. Cascade Avenue, Suite 200
Colorado Springs, Colorado 80903

(719) 785-0790
(719) 785-0799 (Fax)

**STERLING RANCH EAST
PRELIMINARY PLAN NO. 1**
PRELIMINARY DRAINAGE REPORT
PRE-DEVELOPMENT DRAINAGE MAP

DESIGNED BY	MAW	SCALE	DATE	4-1-22
DRAWN BY	MAW	(H) 1" = 200'	SHEET	3 OF 6
CHECKED BY	(V) 1" = N/A	JOB NO.	1183.22	

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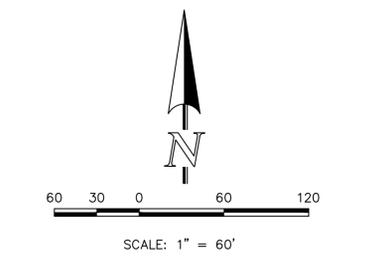
LEGEND

EXISTING GROUND CONTOUR	5910
PROPOSED FINISHED CONTOUR	5910
SUBDIVISION BOUNDARY	---
LOT LINE	---
PROPOSED BASIN BOUNDARY	---
DIRECTION OF DRAINAGE	→
EXISTING STORM SEWER	---
EXISTING STORM INLET	□
PROPOSED STORM SEWER	---
PROPOSED STORM INLET	□
BASIN IDENTIFIER	D
AREA IN ACRES	1.41
DESIGN POINT	2
PIPE RUN	②

NOTE: REFERENCE STERLING RANCH RD. & BRIARGATE PKWY. STREET IMPROVEMENTS & STORM SEWER PLANS PREPARED BY JR ENG. FOR DESIGN WITHIN STERLING RANCH ROAD (PCD NO. CDR221)

NOTE: REFERENCE STERLING RANCH RD. & BRIARGATE PKWY. STREET IMPROVEMENTS & STORM SEWER PLANS PREPARED BY JR ENG. FOR DESIGN WITHIN STERLING RANCH ROAD (PCD NO. CDR221)

NOTE: SEE SHEET 2 AND 3 FOR HYDROLOGIC AND HYDRAULIC CALCULATIONS.



SEE RIGHT

SEE LEFT

SEE SHEET 2

<p>48 HOURS BEFORE YOU DIG, CALL UTILITY LOCATORS 811</p> <p>UTILITY NOTIFICATION CENTER OF COLORADO IT'S THE LAW</p> <p>THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.</p>		<table border="1"> <thead> <tr> <th>NO.</th> <th>REVISION</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>REVISED PER COUNTY COMMENTS</td> <td>11/22/23</td> </tr> </tbody> </table>	NO.	REVISION	DATE	1	REVISED PER COUNTY COMMENTS	11/22/23	<p>REVIEW:</p> <p>PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF CLASSIC CONSULTING ENGINEERS AND SURVEYORS, LLC</p> <p>MARC A. WHORTON, COLORADO P.E. #37155</p>
NO.	REVISION	DATE							
1	REVISED PER COUNTY COMMENTS	11/22/23							

619 N. Cascade Avenue, Suite 200
Colorado Springs, Colorado 80903

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(719) 785-0799 (Fax)

STERLING RANCH EAST FILING NO. 5

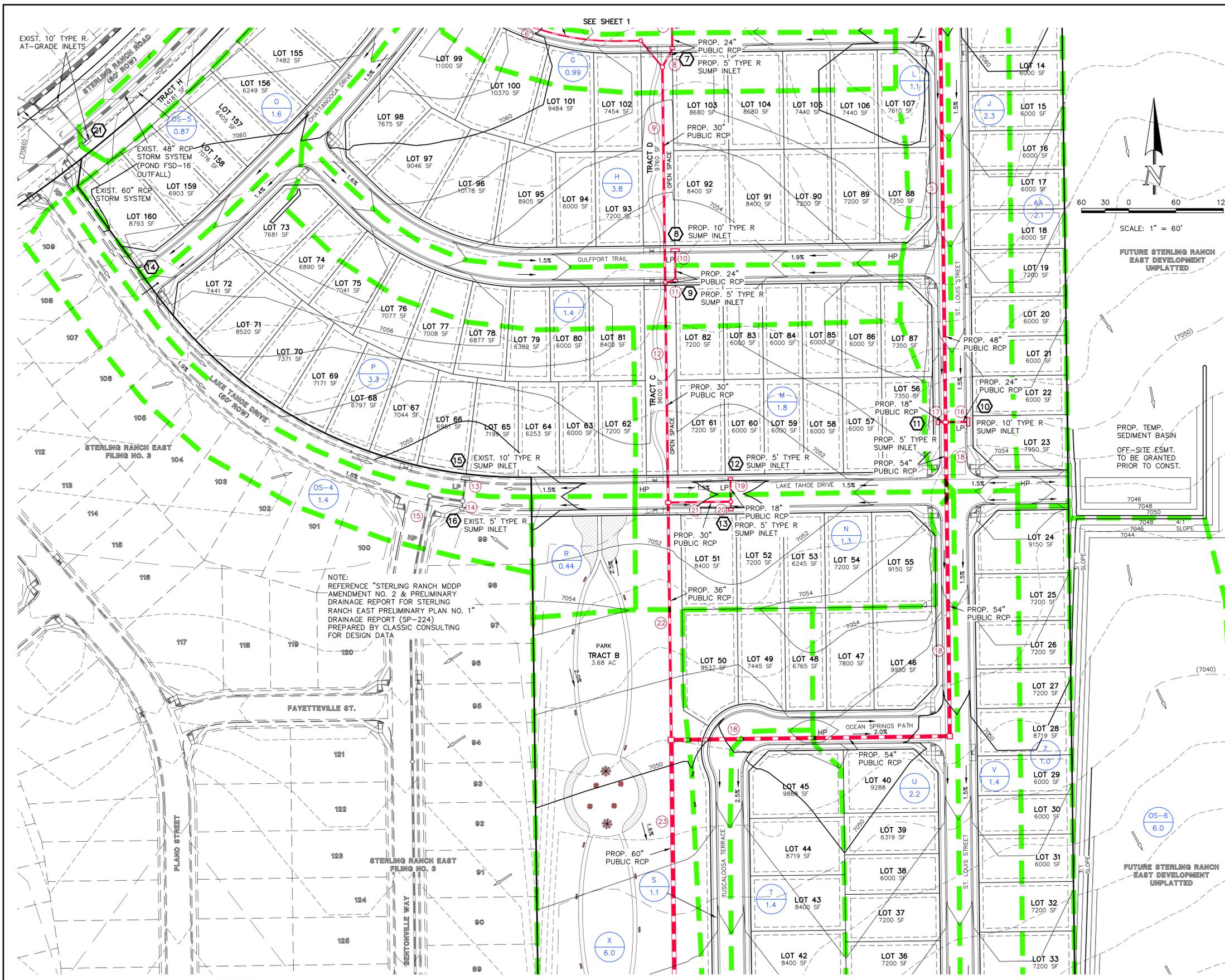
PRELIMINARY PLAN

PRELIMINARY DRAINAGE REPORT

DEVELOPED DRAINAGE MAP

DESIGNED BY	MAW	SCALE	DATE
DRAWN BY	MAW	(H) 1" = 60'	SHEET 1 OF 3
CHECKED BY	(V) 1" = N/A	JOB NO.	1183.25

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FINAL DRAINAGE REPORT - PIPE ROUTING SUMMARY

Pipe Run	Contributing Basin / Design Point / Pipe Run	Equivalent CA(5)	Equivalent CA(100)	Maximum Tc	Intensity		Flow		Pipe Size*
					I(5)	I(100)	Q(5)	Q(100)	
1	P4-B FUTURE VILLAGES AT STERLING RANCH PP	18.28	23.13	18.7	3.19	5.35	58	124	PROP. 48" RCP
2	DP-3	1.27	1.79	16.4	3.39	5.68	4	10	PROP. 24" RCP
3	DP-4	0.23	0.33	12.1	3.84	6.45	0.9	2.1	PROP. 18" RCP
4	PR-2, PR-3	1.50	2.12	16.6	3.37	5.65	5	12	PROP. 24" RCP
5	PR-1, PR-4	19.78	25.25	19.5	3.12	5.25	62	132	PROP. 48" RCP
6	DP-5 COLLECTION	1.71	1.78	20.5	3.05	5.12	5.2	9.1	PROP. 18" RCP
7	DP-6	1.45	2.31	15.9	3.43	5.76	5	13	PROP. 24" RCP
8	PR-7, DP-7	1.81	2.84	15.9	3.43	5.76	6	16	PROP. 24" RCP
9	PR-6, PR-8	3.52	4.62	20.9	3.02	5.07	11	23	PROP. 30" RCP
10	DP-8	1.38	2.04	17.1	3.32	5.57	5	11	PROP. 24" RCP
11	PR-10, DP-9	1.89	2.80	17.1	3.32	5.57	6	16	PROP. 24" RCP
12	PR-9, PR-11	5.41	7.42	21.3	2.99	5.02	16	37	PROP. 30" RCP
13	DP-15	2.07	4.07	24.2	2.80	4.70	6	19	EXIST. 24" RCP
14	DP-16	0.63	0.97	14.4	3.58	6.01	2	6	EXIST. 18" RCP
15	PR-13, PR-14	2.70	5.04	25.4	2.73	4.58	7	23	EXIST. 30" RCP
16	DP-10	0.86	1.25	13.2	3.72	6.24	3	8	PROP. 24" RCP
17	DP-11	0.41	0.60	18.1	3.24	5.44	1.3	3.3	PROP. 18" RCP
18	PR-5, PR-13, PR-14	21.05	27.10	19.7	3.11	5.22	65	141	PROP. 54" RCP
19	DP-12	0.63	0.95	15.4	3.48	5.84	2	6	PROP. 18" RCP
20	DP-13	0.45	0.69	15.4	3.48	5.84	2	4	PROP. 18" RCP
21	PR-16, PR-17	1.08	1.64	15.5	3.47	5.82	4	10	PROP. 24" RCP
22	PR-12, PR-18	6.49	9.06	21.7	2.96	4.98	19	45	PROP. 36" RCP
23	PR-15, PR-19	27.54	36.16	22.2	2.93	4.92	81	178	PROP. 60" RCP
24	DP-17	0.41	0.60	18.1	3.24	5.44	1.3	3.3	PROP. 18" RCP
25	DP-18	0.53	0.76	16.7	3.36	5.64	2	4	PROP. 18" RCP
26	PR-21, PR-22	0.94	1.36	18.1	3.24	5.44	3	7	PROP. 24" RCP
27	PR-20, PR-23 (IN-FLOW ULTIMATE CONDITION)	28.48	37.52	22.3	2.92	4.91	83	184	PROP. 60" RCP
27	PR-20, PR-23 (IN-FLOW INTERIM CONDITION - VILLAGES NOT DEVELOPED)	10.20	14.39	20.3	3.06	5.14	31	74	PROP. 60" RCP
28	DP-19	1.35	1.96	18.1	3.24	5.44	4	11	PROP. 24" RCP
29	DP-20, PR-25	1.50	2.13	18.2	3.23	5.43	5	12	PROP. 24" RCP

FINAL DRAINAGE REPORT - SURFACE ROUTING SUMMARY

Design Point(s)	Contributing Basins / Design Point	Equivalent CA(5)	Equivalent CA(100)	Maximum Tc	Intensity		Flow		Facility/ Inlet Size*
					I(5)	I(100)	Q(5)	Q(100)	
1	OS-1	1.76	2.02	14.0	3.62	6.08	6	12	Exist. 15" Type R At-Grade Inlet
2	OS-2 and OS-1 Flow-By	0.56	1.16	16.6	3.37	5.65	2	7	
3	OS-3, A, B	1.27	1.79	16.4	3.39	5.68	4	10	Prop. 10" Type R Sump Inlet
4	C	0.23	0.33	12.1	3.84	6.45	0.9	2.1	Prop. 5" Type R Sump Inlet
5	D and DP-2 Flow On-Site	1.94	3.18	20.2	3.07	5.16	6	16	Prop. 10" Type R At-Grade Inlet
6	E, F	1.45	2.31	15.9	3.43	5.76	5	13	Prop. 10" Type R Sump Inlet
7	G	0.36	0.53	11.8	3.88	6.52	1.4	3.5	Prop. 5" Type R Sump Inlet
8	H	1.38	2.04	17.1	3.32	5.57	5	11	Prop. 10" Type R Sump Inlet
9	I	0.51	0.75	13.4	3.69	6.19	2	5	Prop. 5" Type R Sump Inlet
10	J	0.86	1.25	13.2	3.72	6.24	3	8	Prop. 10" Type R Sump Inlet
11	L	0.41	0.60	18.1	3.24	5.44	1.3	3.3	Prop. 5" Type R Sump Inlet
12	M	0.63	0.95	15.4	3.48	5.84	2	6	Prop. 5" Type R Sump Inlet
13	N	0.45	0.69	15.4	3.48	5.84	2	4	Prop. 5" Type R Sump Inlet
14	O and DP-5 Flow-By	0.83	2.27	22.2	2.93	4.92	2	11	Prop. 6" Crosspan
15	P and DP-14	2.07	4.07	24.2	2.80	4.70	6	19	Exist. 10" Type R Sump Inlet
16	OS-4, R	0.63	0.97	14.4	3.58	6.01	2	6	Exist. 5" Type R Sump Inlet
17	S	0.41	0.60	18.1	3.24	5.44	1.3	3.3	Prop. 5" Type R Sump Inlet
18	T	0.53	0.76	16.7	3.36	5.64	2	4	Prop. 5" Type R Sump Inlet
19	U, V	1.35	1.96	18.1	3.24	5.44	4	11	Prop. 10" Type R Sump Inlet
20	W	0.15	0.17	5.0	5.17	8.08	0.8	1.4	Prop. 5" Type R Sump Inlet
21	OS-5	0.58	0.69	9.2	4.25	7.14	2	5	Exist. 10" Type R At-Grade Inlet
TOTAL BASINS TRIBUTARY TO POND FSD-14B		30.70	41.99	23.1	2.88	4.83	68	203	
TOTAL BASINS TRIBUTARY TO POND FSD-14B (VILLAGES NOT DEV.)		12.42	18.86	23.1	2.88	4.83	36	91	
6 (MDDP) SOUTH BNDY POND FSD-14B RELEASE AND BASIN Y1		REF. MHFO-DETENTION SPREADSHEET FOR CALCULATIONS				5.0	62.2	Sheet flow from Level Spreader	
6A (MDDP) SOUTH BNDY BASINS Y2 AND OS-6		0.61	2.38	23.2	2.87	4.81	2	11	Sheet flow

NOTE: REFERENCE "STERLING RANCH MDDP AMENDMENT NO. 2 & PRELIMINARY DRAINAGE REPORT FOR STERLING RANCH EAST PRELIMINARY PLAN NO. 1" DRAINAGE REPORT (SP-224) PREPARED BY CLASSIC CONSULTING FOR DESIGN DATA

LEGEND

- EXISTING GROUND CONTOUR — 5910 ———
- PROPOSED FINISHED CONTOUR — 5910 ———
- SUBDIVISION BOUNDARY ———
- LOT LINE ———
- PROPOSED BASIN BOUNDARY ———
- DIRECTION OF DRAINAGE ———
- EXISTING STORM SEWER ———
- EXISTING STORM INLET ———
- PROPOSED STORM SEWER ———
- PROPOSED STORM INLET ———
- BASIN IDENTIFIER ———
- AREA IN ACRES ———
- DESIGN POINT ———
- PIPE RUN ———

**48 HOURS BEFORE YOU DIG,
CALL UTILITY LOCATORS
811**

UTILITY NOTIFICATION CENTER OF COLORADO
IT'S THE LAW

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NO.	REVISION	DATE
1	REVISED PER COUNTY COMMENTS	11/22/23

REVIEW: PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF CLASSIC CONSULTING ENGINEERS AND SURVEYORS, LLC

MARC A. WHORTON, COLORADO P.E. #37155 DATE

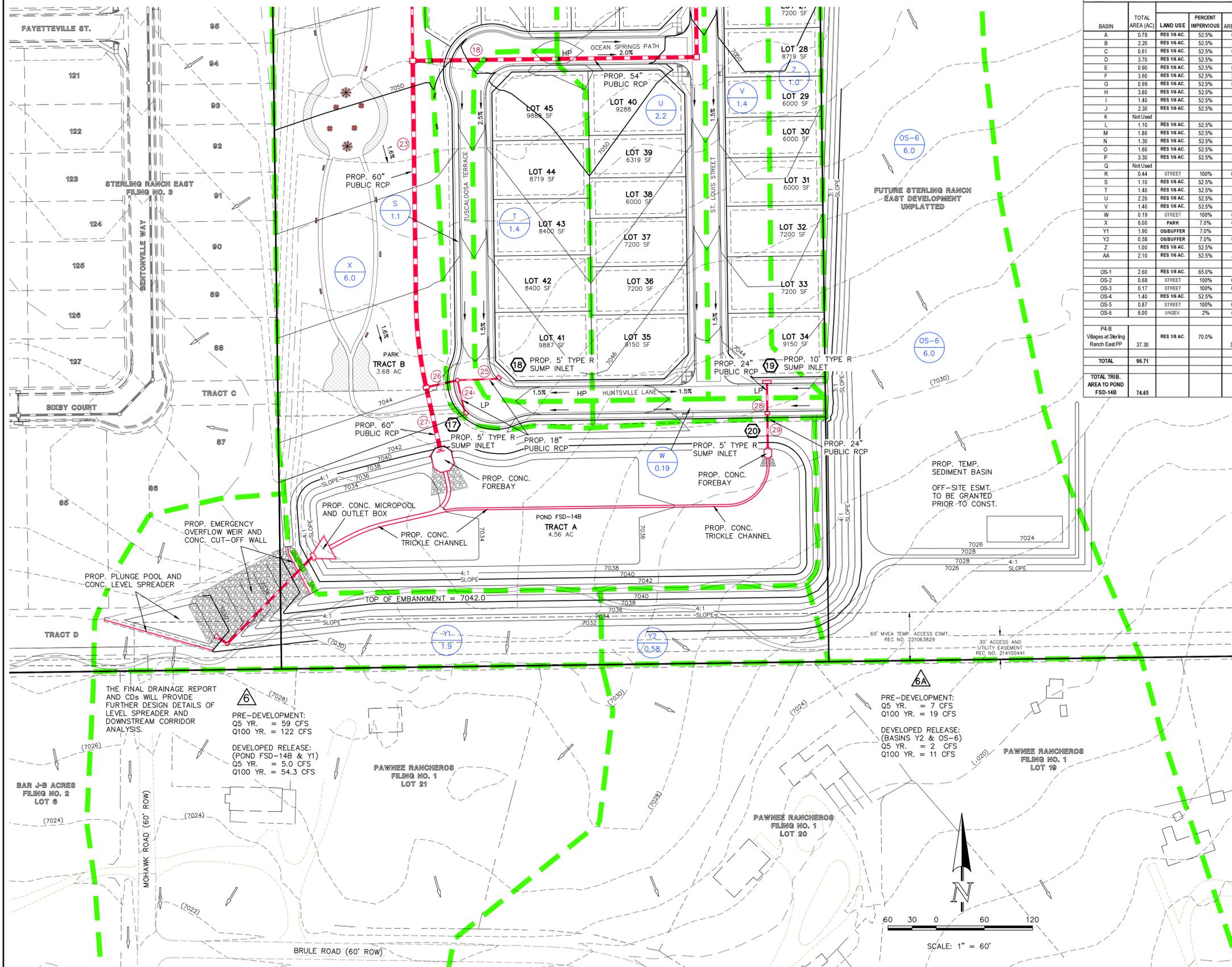


**STERLING RANCH EAST FILING NO. 5
PRELIMINARY PLAN
PRELIMINARY DRAINAGE REPORT
DEVELOPED DRAINAGE MAP**

DESIGNED BY MAW SCALE DATE
DRAWN BY MAW (H) 1" = 60' SHEET 2 OF 3
CHECKED BY (V) 1" = N/A JOB NO. 1183.25

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SEE SHEET 2



FINAL DRAINAGE REPORT - BASIN RUNOFF COEFFICIENT SUMMARY

BASIN	TOTAL AREA (AC)	LAND USE	C VALUE DCM TABLE 6-6					WEIGHTED "C" VALUE					WEIGHTED CA		DCM TABLE 6-6	
			PERCENT IMPERVIOUS	AREA (AC)	C(5)	C(10)	C(100)	PERCENT IMPERVIOUS	AREA (AC)	C(5)	C(10)	C(100)	C(5)	C(10)	CA(5)	CA(100)
A	0.78	RES 1/8 AC	52.5%	0.78	0.38	0.55	0.00	0.08	0.35	0.38	0.55	0.29	0.43	52.5%		
B	2.20	RES 1/8 AC	52.5%	2.20	0.38	0.55	0.00	0.08	0.35	0.38	0.55	0.83	1.20	52.5%		
C	0.61	RES 1/8 AC	52.5%	0.61	0.38	0.55	0.00	0.08	0.35	0.38	0.55	0.23	0.30	52.5%		
D	3.70	RES 1/8 AC	52.5%	3.70	0.38	0.55	0.00	0.08	0.35	0.38	0.55	1.39	2.02	52.5%		
E	0.90	RES 1/8 AC	52.5%	0.90	0.38	0.55	0.00	0.08	0.35	0.38	0.55	0.34	0.40	52.5%		
F	3.60	RES 1/8 AC	52.5%	2.66	0.38	0.55	0.00	0.08	0.35	0.38	0.55	1.11	1.82	40.6%		
G	0.99	RES 1/8 AC	52.5%	0.94	0.38	0.55	0.00	0.08	0.35	0.38	0.54	0.36	0.53	50.2%		
H	3.80	RES 1/8 AC	52.5%	3.63	0.38	0.55	0.00	0.08	0.35	0.38	0.54	1.38	2.04	50.5%		
I	1.40	RES 1/8 AC	52.5%	1.35	0.38	0.55	0.00	0.08	0.35	0.38	0.54	0.51	0.75	50.9%		
J	2.30	RES 1/8 AC	52.5%	2.30	0.38	0.55	0.00	0.08	0.35	0.38	0.55	0.86	1.25	52.5%		
K	Not Used															
L	1.10	RES 1/8 AC	52.5%	1.10	0.38	0.55	0.00	0.08	0.35	0.38	0.55	0.41	0.60	52.5%		
M	1.80	RES 1/8 AC	52.5%	1.63	0.38	0.55	0.00	0.08	0.35	0.38	0.55	0.63	0.95	48.2%		
N	1.30	RES 1/8 AC	52.5%	1.15	0.38	0.55	0.00	0.08	0.35	0.38	0.55	0.45	0.69	47.3%		
O	1.60	RES 1/8 AC	52.5%	1.60	0.38	0.55	0.00	0.08	0.35	0.38	0.55	0.60	0.87	52.5%		
P	3.30	RES 1/8 AC	52.5%	3.30	0.38	0.55	0.00	0.08	0.35	0.38	0.55	1.24	1.80	52.5%		
Q	Not Used															
R	0.44	STREET	100%	0.07	0.90	0.96	0.37	0.12	0.39	0.24	0.48	0.11	0.21	21.8%		
S	1.10	RES 1/8 AC	52.5%	1.10	0.38	0.55	0.00	0.08	0.35	0.38	0.55	0.41	0.60	52.5%		
T	1.40	RES 1/8 AC	52.5%	1.40	0.38	0.55	0.00	0.08	0.35	0.38	0.55	0.53	0.76	52.5%		
U	2.20	RES 1/8 AC	52.5%	2.20	0.38	0.55	0.00	0.08	0.35	0.38	0.55	0.83	1.20	52.5%		
V	1.40	RES 1/8 AC	52.5%	1.40	0.38	0.55	0.00	0.08	0.35	0.38	0.55	0.53	0.76	52.5%		
W	0.19	STREET	100%	0.19	0.90	0.96	0.03	0.12	0.39	0.78	0.87	0.15	0.17	85.3%		
X	6.00	PARK	7.0%	6.00	0.12	0.39	0.00	0.08	0.35	0.12	0.39	0.12	2.34	7.0%		
Y1	1.50	OS/BUFFER	7.0%	1.50	0.12	0.39	0.30	0.90	0.96	0.24	0.48	0.46	0.91	21.7%		
Y2	0.58	OS/BUFFER	7.0%	0.54	0.12	0.39	0.04	0.08	0.35	0.12	0.39	0.07	0.22	13.4%		
Z	1.00	RES 1/8 AC	52.5%	1.00	0.38	0.55	0.00	0.08	0.35	0.38	0.55	0.38	0.55	52.5%		
AA	2.10	RES 1/8 AC	52.5%	2.10	0.38	0.55	0.00	0.08	0.35	0.38	0.55	0.79	1.14	52.5%		
OS-1	2.60	RES 1/8 AC	65.0%	1.30	0.45	0.59	1.30	0.90	0.96	0.88	0.78	1.76	2.02	82.5%		
OS-2	0.68	STREET	100%	0.34	0.90	0.96	0.34	0.12	0.39	0.51	0.68	0.35	0.46	53.5%		
OS-3	0.17	STREET	100%	0.17	0.90	0.96	0.00	0.08	0.35	0.90	0.96	0.15	0.16	100.0%		
OS-4	1.40	RES 1/8 AC	52.5%	1.40	0.38	0.55	0.00	0.08	0.35	0.38	0.55	0.53	0.76	52.5%		
OS-5	0.87	STREET	100%	0.81	0.90	0.96	0.26	0.12	0.39	0.87	0.79	0.58	0.69	72.2%		
OS-6	6.00	UNDEV	2%	6.00	0.09	0.36	0.00	0.08	0.35	0.09	0.36	0.54	2.16	2.0%		
P4-B Villages at Sterling Ranch East PP	37.30	RES 1/8 AC	70.0%	37.30	0.49	0.62	0.00	0.08	0.35	0.49	0.62	18.28	23.13	70.0%		
TOTAL	96.71															
TOTAL TRIB. AREA TO POND FSD-14B	74.65															

FINAL DRAINAGE REPORT - BASIN RUNOFF SUMMARY

BASIN	CA(2)	CA(5)	CA(100)	C(5)	Length (ft)	Height (ft)	Tc (min)	Slope (%)	Velocity (fps)	Tc (hr)	TOTAL Q(2)	Q(5)	Q(100)	INTENSITY		TOTAL FLOWS		
														(hr)	(hr)	Q(2)	Q(5)	Q(100)
A	0.25	0.29	0.43	0.08	100	2	14.7	135	2.0%	2.8	0.4	15.4	2.76	3.46	5.64	0.7	1.0	2.5
B	0.70	0.83	1.20	0.08	100	2	14.7	260	1.5%	2.4	1.8	16.4	2.70	3.39	5.68	2	3	7
C	0.20	0.23	0.33	0.08	50	1	10.4	260	1.5%	2.4	1.8	12.1	3.07	3.84	6.45	0.6	0.9	2.1
D	1.18	1.39	2.02	0.08	100	2	14.7	900	1.8%	2.7	5.9	20.2	2.46	3.07	5.16	3	4	10
E	0.29	0.34	0.46	0.08	50	1	10.4	470	2.5%	3.2	2.5	12.8	3.00	3.75	6.30	0.9	1.3	3.1
F	0.90	1.11	1.82	0.12	100	2	14.1	270	1.5%	2.4	1.8	15.9	2.74	3.43	5.76	2	4	10
G	0.30	0.36	0.53	0.12	50	1	10.0	270	1.5%	2.4	1.8	11.8	3.10	3.88	6.52	0.9	1.4	3.5
H	1.17	1.38	2.04	0.12	100	2	14.1	450	1.5%	2.4	3.1	17.1	2.65	3.32	5.57	3	5	11
I	0.43	0.51	0.75	0.08	50	1	10.4	450	1.5%	2.4	3.1	13.4	2.94	3.69	6.19	1	2	5
J	0.74	0.86	1.25	0.08	50	1	10.4	630	3.5%	3.7	2.8	13.2	2.97	3.72	6.24	2	3	8
K	Not Used																	
L	0.35	0.41	0.60	0.08	100	2	14.7	500	1.5%	2.4	3.4	18.1	2.59	3.24	5.44	0.9	1.3	3.3
M	0.53	0.63	0.96	0.12	100	2	14.1	200	1.5%	2.4	1.4	15.4	2.78	3.48	5.84	1	2	6
N	0.38	0.45	0.69	0.12	100	2	14.1	200	1.5%	2.4	1.4	15.4	2.78	3.48	5.84	1	2	6
O	0.51	0.60	0.87	0.08	100	2	14.7	300	1.5%	2.4	2.0	16.7	2.69	3.36	5.64	1	2	5
P	1.06	1.24	1.80	0.08	100	2	14.7	420	1.5%	2.4	2.9	17.5	2.63	3.29	5.52	3	4	10
Q	Not Used																	
R	0.08	0.11	0.21	0.12	100	2	14.1	50	1.5%	2.4	0.3	14.4	2.86	3.58	6.01	0.2	0.4	1.3
S	0.35	0.41	0.60	0.08	100	2	14.7	500	1.5%	2.4	3.4	18.1	2.59	3.24	5.44	0.9	1.3	3.3
T	0.46	0.53	0.76	0.08	100	2	14.7	300	1.5%	2.4	2.0	16.7	2.69	3.36	5.64	1	2	6
U	0.70	0.83	1.20	0.08	100	2	14.7	900	1.5%	2.4	3.4	18.1	2.59	3.24	5.44	2	3	7
V	0.45	0.53	0.76	0.08	50	1	10.4	650	1.5%	2.4	4.4	14.8	2.83	3.54	5.95	1	2	5
W	0.14	0.15	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
X	0.30	0.36	0.53	0.08	100	2	14.7	500	2.0%	1.0	8.4	23.1	2.30	2.88	4.83	1	2	11
Y1	0.35	0.46	0.91	0.90	250	10	3.6	5.0	4.12	5.17	8.68	1.4	2	8				
Y2	0.03	0.07	0.22	0.08	90	14	7.1	7.1	3.71	4.65	7.81	0.1	0.3	1.8				
Z	0.32	0.38	0.55	0.08	65	2	10.2	10.2	3.27	4.09	6.87	1	2	4				
AA	0.67	0.79	1.14	0.08	65	2	10.2	10.2	3.27	4.09	6.87	2	3	8				
OS-1	1.69	1.76	2.02	0.08	40	0.8	9.3	900	2.5%	3.2	4.7	14.0	2.89	3.62	6.08	5	6	12
OS-2	0.32	0.35	0.46	0.12	50	1	10.0	400	1.6%	2.5	2.8	12.6	3.02	3.78	6.35	1.0	1.3	2.9
OS-3	0.15	0.15	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OS-4	0.45	0.53	0.76	0.08	50	1	10.4	500	1.5%	2.4	3.4	13.8	2.91	3.65	6.13	1	2	5
OS-5	0.56	0.58	0.69	0.12	25	0.75	6.2	450	1.5%	2.4	3.1	12.2	3.39	4.25	7.14	2	2	5
OS-6	0.16	0.54	2.16	0.12	300	7	23.2	10.2	3.27	4.09	6.87	0.4	1.5	10				
P4-B Villages at Sterling Ranch East PP	16.79	18.28	23.13	0.08	100	2	14.7	600	1.5%	2.4	4.1	18.7	2.55	3.19	5.35	43	58	124

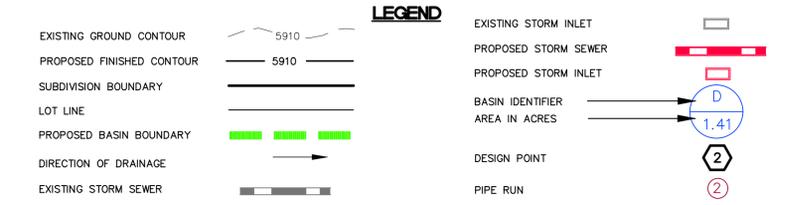
THE FINAL DRAINAGE REPORT AND CD'S WILL PROVIDE FURTHER DESIGN DETAILS OF LEVEL SPREADER AND DOWNSTREAM CORRIDOR ANALYSIS.

PRE-DEVELOPMENT:
Q5 YR. = 59 CFS
Q100 YR. = 122 CFS

DEVELOPED RELEASE:
(POND FSD-14B & Y1)
Q5 YR. = 5.0 CFS
Q100 YR. = 54.3 CFS

PRE-DEVELOPMENT:
Q5 YR. = 7 CFS
Q100 YR. = 19 CFS

DEVELOPED RELEASE:
(BASINS Y2 & OS-6)
Q5 YR. = 2 CFS
Q100 YR. = 11 CFS



48 HOURS BEFORE YOU DIG, CALL UTILITY LOCATORS

811

UTILITY NOTIFICATION CENTER OF COLORADO
IT'S THE LAW

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NO.	REVISION	DATE
1	REVISED PER COUNTY COMMENTS	11/22/23

REVIEW:

PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF CLASSIC CONSULTING ENGINEERS AND SURVEYORS, LLC

MARC A. WHORTON, COLORADO P.E. #37155 DATE

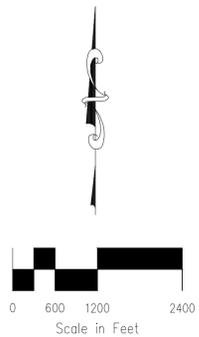


STERLING RANCH EAST FILING NO. 5
PRELIMINARY PLAN
PRELIMINARY DRAINAGE REPORT
DEVELOPED DRAINAGE MAP

DESIGNED BY MAW SCALE DATE
DRAWN BY MAW (H) 1" = 60' SHEET 3 OF 3
CHECKED BY (V) 1" = N/A JOB NO. 1183.25

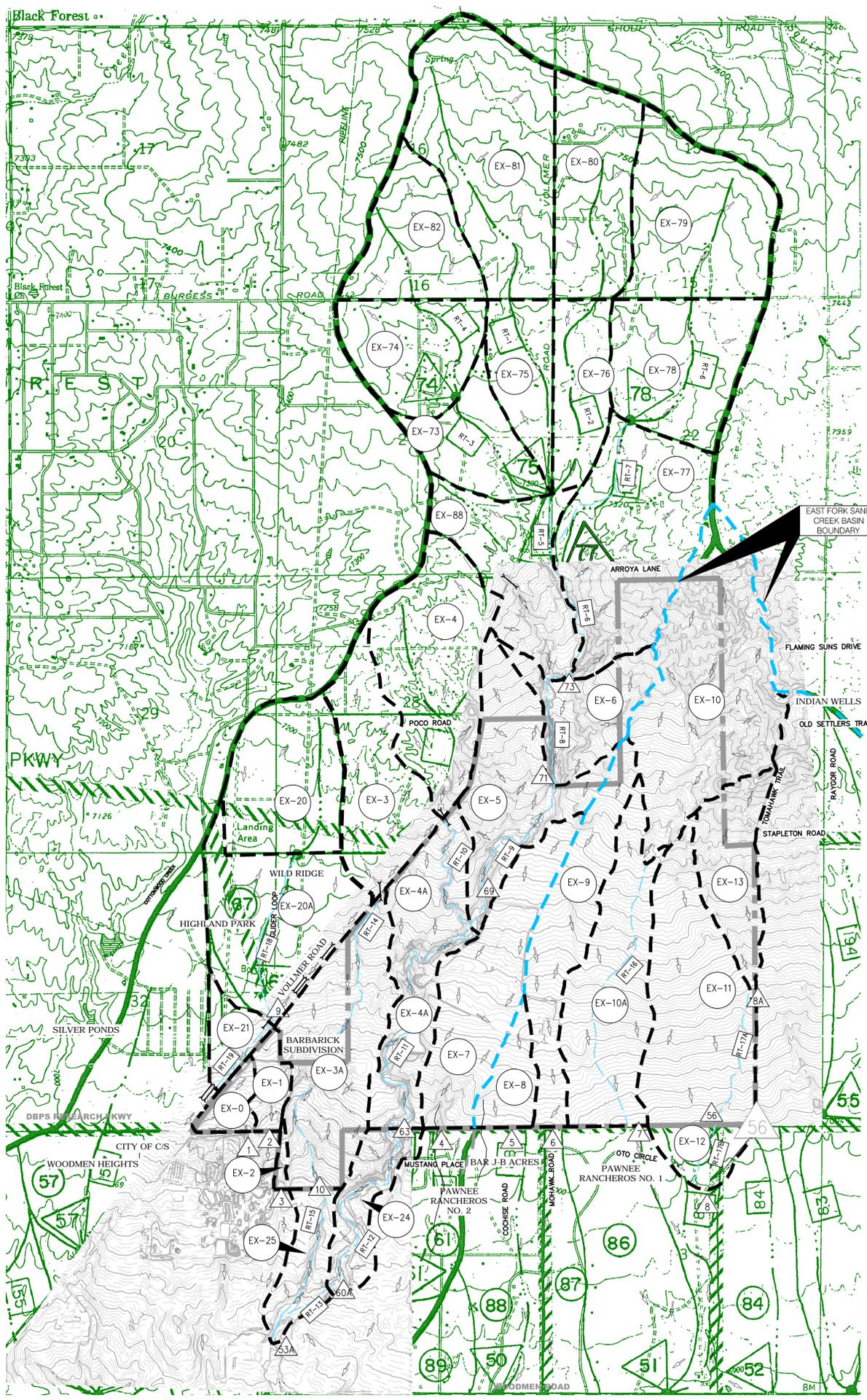


V:\18325\REPORTS\PRELIMINARY DRAINAGE REPORT\18325PRM.dwg, 11/22/2023 11:14:08 PM, 1:1



LEGEND

- BASIN ID - SC3-77
- DESIGN POINT - 87
- REACH IDENTIFIER - RT-17A
- BASIN BOUNDARY - - - - -
- EAST FORK SAND CREEK - - - - -
- BASIN BOUNDARY - - - - -
- FLOW DIRECTION - >>>



BASIN SUMMARY									
BASIN	CN	AREA (ACRES)	AREA (SQ MI)	Q ₂ (CFS)	Q ₅ (CFS)	Q ₁₀ (CFS)	Q ₂₅ (CFS)	Q ₅₀ (CFS)	Q ₁₀₀ (CFS)
EX-0	62	23.8	0.037	5.0	8.2	13.0	19.6	25.7	32.2
EX-1	62	25.7	0.040	4.8	7.9	12.4	18.7	24.5	30.9
EX-2	62	5.5	0.009	1.1	1.8	2.8	4.3	5.6	7.1
EX-3	62	136.8	0.214	22.0	36.4	57.6	86.9	114.0	143.1
EX-3A	61	188.1	0.294	28.3	47.4	75.7	115.1	152.2	192.6
EX-4	62	192.0	0.300	30.1	49.9	79.1	119.5	157.0	197.3
EX-4A	62	151.5	0.237	24.7	40.8	64.4	97.0	127.2	160.1
EX-5	62	153.9	0.240	24.2	40.0	63.4	95.9	125.9	158.2
EX-6	62	90.2	0.141	15.3	25.5	40.1	60.7	79.9	100.5
EX-7	56	165.0	0.258	11.6	21.5	37.5	60.9	83.1	107.4
EX-8	45	42.0	0.066	0.5	1.7	4.5	9.4	14.5	20.5
EX-9	54	131.9	0.206	12.2	23.9	43.1	70.9	97.0	125.2
EX-10	60	270.7	0.423	32.7	56.0	91.1	140.1	185.9	236.1
EX-10A	41	179.3	0.280	0.6	2.2	7.3	17.4	29.1	43.1
EX-11	43	209.3	0.327	18.0	29.8	47.7	73.4	98.3	126.1
EX-12	51	39.5	0.062	2.2	5.1	10.1	17.7	25.1	33.3
EX-13	55	89.3	0.139	7.7	15.2	27.1	44.2	60.5	78.4
EX-20	62	143.4	0.224	25.4	42.1	66.7	100.7	132.3	166.2
EX-20A	64	179.7	0.281	32.2	51.9	80.5	119.8	155.9	194.6
EX-21	65	33.3	0.052	8.6	13.5	20.7	30.5	39.4	49.0
EX-24	59	63.1	0.099	9.5	16.6	27.5	42.9	57.4	73.0
EX-25	43	54.4	0.085	0.3	1.5	4.8	10.7	17.2	25.1
EX-73	63	90.0	0.141	16.4	26.4	41.3	62.1	81.3	102.0
EX-74	63	119.7	0.187	22.3	36.5	57.3	85.9	112.3	140.7
EX-75	63	79.3	0.124	13.1	21.5	33.7	50.5	66.1	82.8
EX-76	63	86.4	0.135	14.2	23.1	36.4	54.6	71.4	89.6
EX-77	62	230.6	0.360	34.7	56.9	90.6	137.5	180.9	227.7
EX-78	63	155.6	0.243	28.1	45.3	70.6	106.2	139.1	174.5
EX-79	63	189.0	0.295	34.9	57.0	89.5	134.3	175.6	220.1
EX-80	63	147.7	0.231	27.3	44.3	69.6	104.5	136.8	171.4
EX-81	62	262.9	0.411	42.6	70.2	111.0	167.4	219.6	275.7
EX-82	62	117.8	0.184	20.0	33.2	52.8	80.0	105.1	132.3
EX-88	62	139.2	0.217	22.2	36.7	58.0	87.6	115.0	144.4

DESIGN POINT SUMMARY (PEAK FLOW)							
DESIGN POINT	AREA (SQ MI)	Q ₂ (CFS)	Q ₅ (CFS)	Q ₁₀ (CFS)	Q ₂₅ (CFS)	Q ₅₀ (CFS)	Q ₁₀₀ (CFS)
DP-74	0.371	39.3	65.3	104.8	158.9	209.1	262.8
DP-75	1.413	141.2	235.1	376.6	566.6	750.9	950.5
DP-78	0.538	59.7	98.4	154.0	232.6	306.2	385.3
DP-73	2.528	225.9	380.7	618.0	957.0	1260.4	1582.3
DP-71	2.669	229.3	388.9	629.7	978.8	1277.3	1637.9
DP-69	3.209	253.0	434.8	707.7	1100.0	1453.3	1870.4
DP-63	3.446	251.4	430.7	713.1	1113.2	1496.2	1911.5
DP-10	0.508	36.5	56.0	106.4	162.9	220.6	287.2
DP-9A	0.557	55.3	94.3	150.3	227.7	299.5	380.5
DP-9	0.505	52.8	88.8	142.1	214.2	281.0	351.4
DP-8A	0.139	7.7	15.2	27.1	44.2	60.5	78.4
DP-8	0.528	24.2	45.1	77.8	124.4	169.5	220.9
DP-7	0.703	32.4	57.1	97.3	156.1	213.8	277.9
DP-6	0.206	12.2	23.9	43.1	70.9	97.0	125.2
DP-5	0.066	0.5	1.7	4.5	9.4	14.5	20.5
DP-4	0.258	11.6	21.5	37.5	60.9	83.1	107.4
DP-3	0.009	1.1	1.8	2.8	4.3	5.6	7.1
DP-2	0.040	4.8	7.9	12.4	18.7	24.5	30.9
DP-1	0.037	5.0	8.2	13.0	19.6	25.7	32.2
DP-60A	3.545	247.7	430.2	707.1	1113.0	1496.6	1913.5
DP-56	0.466	23.2	42.5	71.9	115.6	157.4	202.9
DP-53A	4.138	262.1	454.0	763.2	1196.5	1609.8	2061.5

DESIGN POINT SUMMARY (VOLUME)							
DESIGN POINT	AREA (SQ MI)	V ₂ (AC-FT)	V ₅ (AC-FT)	V ₁₀ (AC-FT)	V ₂₅ (AC-FT)	V ₅₀ (AC-FT)	V ₁₀₀ (AC-FT)
DP-74	0.371	5.9	9.0	13.6	19.8	25.5	31.6
DP-75	1.413	22.7	34.5	51.7	75.4	97.1	120.5
DP-78	0.538	8.9	13.5	20.1	29.3	37.7	46.7
DP-73	2.528	40.4	61.5	92.1	134.3	173.1	214.9
DP-71	2.669	42.5	64.9	97.1	141.6	182.5	226.6
DP-69	3.209	50.7	77.4	116.1	169.4	216.6	271.4
DP-63	3.446	54.1	82.5	123.8	180.8	233.3	289.9
DP-10	0.508	7.6	11.7	17.6	25.8	33.4	41.6
DP-9A	0.557	9.3	14.1	21.1	30.7	39.4	48.8
DP-9	0.505	8.4	12.7	19.0	27.6	35.5	44.0
DP-8A	0.139	1.3	2.1	3.4	5.2	7.0	8.9
DP-8	0.528	4.4	7.0	11.1	16.8	22.3	28.4
DP-7	0.703	6.1	10.0	15.9	24.3	32.4	41.3
DP-6	0.206	2.4	4.0	6.3	9.6	12.7	16.0
DP-5	0.066	0.2	0.4	0.8	1.4	1.9	2.6
DP-4	0.258	2.6	4.2	6.7	10.2	13.5	17.2
DP-3	0.009	0.1	0.2	0.3	0.5	0.6	0.8
DP-2	0.040	0.6	0.9	1.4	2.1	2.7	3.4
DP-1	0.037	0.6	0.9	1.3	1.9	2.5	3.1
DP-60A	3.545	55.3	84.4	126.4	184.8	238.5	296.6
DP-56	0.466	4.0	6.3	9.9	14.9	19.8	25.1
DP-53A	4.138	63.0	96.4	144.7	211.8	273.9	340.9

EFCS DBPS DESIGN POINT SUMMARY (PEAK FLOW)			
DBPS DESIGN POINT	AREA (SQ MI)	Q ₂ (CFS)	Q ₁₀₀ (CFS)
DP-50	0.32	47.0	195.7
DP-51 (BASIN 86)	0.33	17.7	74.1
DP-52	1.67	80.5	456.5
DP-56	0.79	63.6	265.0

Values reported from SCDDBPS
 (DP 50, 51, 52 Not analyzed as a part of this study)
 DBPS Reach 85(Basin#1)=Q10=28.8cfs Q100=115.2cfs

M&S
 CIVIL CONSULTANTS, INC.
 20 BOULDER CRESCENT, SUITE 110
 COLORADO SPRINGS, CO 80903
 PHONE: 719.955.5485

2018 STERLING RANCH MDDP
 EXISTING HYDROLOGIC CONDITIONS MAP

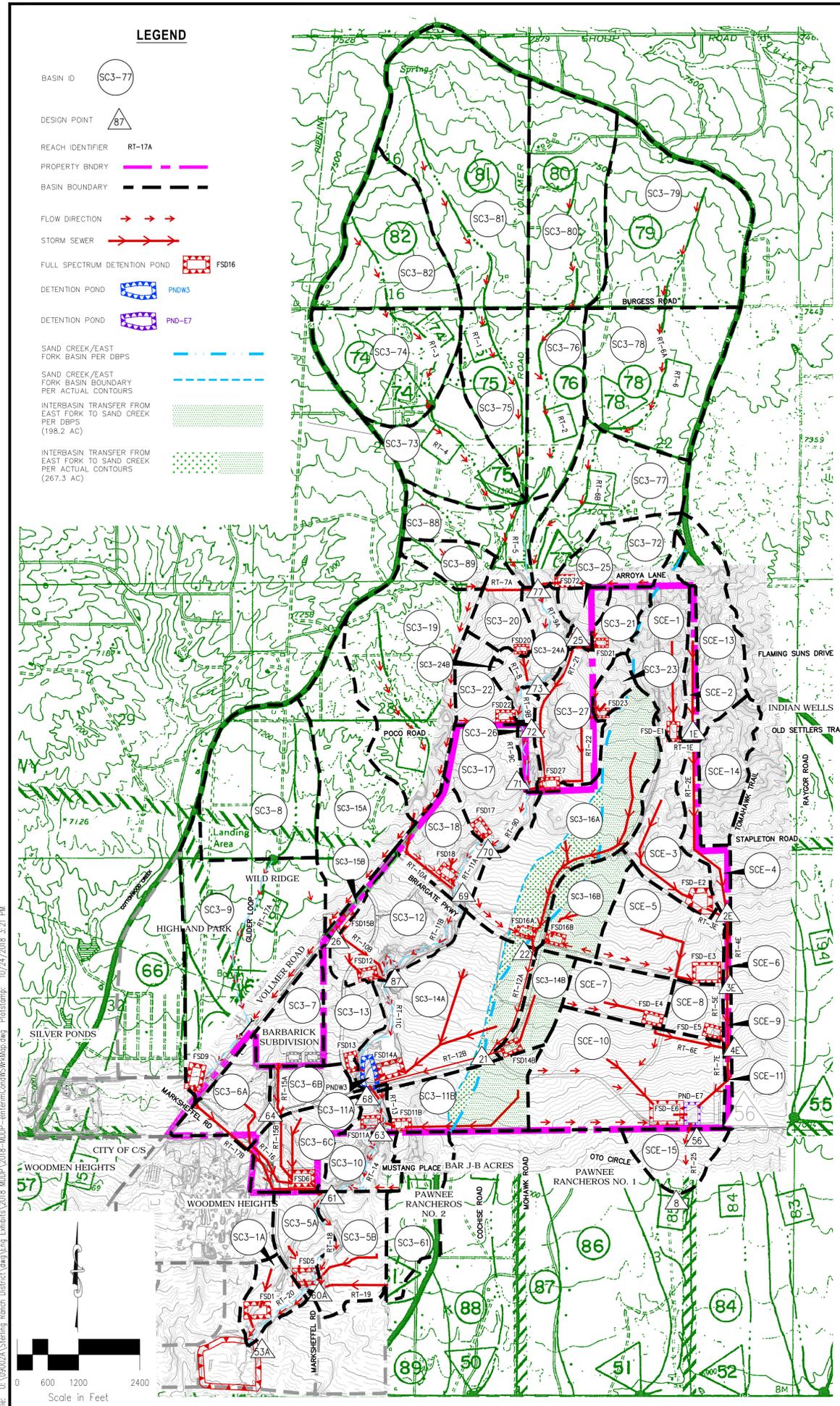
PROJECT NO. 09-002 FILE: \\dmg\Eng Exhibits\2018-MDDP-ExistCondWS\Map.dwg

DESIGNED BY: DLM SCALE: DATE: 08-22-18
 DRAWN BY: DLM HORIZ: NTS
 CHECKED BY: VAS VERT: NTS

DM1

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BASIN SUMMARY

BASIN	CN	AREA (ac)	AREA (sq mi)	Q ₅ (cfs)	Q ₁₀ (cfs)	Q ₂₅ (cfs)	Q ₅₀ (cfs)	Q ₁₀₀ (cfs)
SC3-1A	73	27.8	0.044	16.3	23.3	33.0	45.8	57.1
SC3-5A	84	39.1	0.061	40.6	53.7	71.0	92.4	110.6
SC3-5B	81	63.0	0.098	53.8	73.0	98.5	130.8	158.6
SC3-6A	88	49.3	0.077	61.4	79.3	102.2	130.1	153.6
SC3-6B	85	30.9	0.048	32.9	43.4	57.0	73.9	88.2
SC3-6C	82	58.0	0.091	53.9	72.5	97.1	128.0	154.5
SC3-7	88	45.7	0.071	54.0	69.9	90.3	115.2	136.2
SC3-8	62	143.4	0.224	25.4	42.1	66.7	100.7	132.3
SC3-9	66	217.4	0.340	45.8	71.5	108.6	158.9	204.9
SC3-10	63	36.0	0.056	7.6	12.3	19.4	29.1	38.0
SC3-11A	70	10.7	0.017	5.3	7.8	11.3	15.9	20.0
SC3-11B	80	76.6	0.120	59.4	81.3	110.8	148.1	180.5
SC3-12	81	88.2	0.138	77.8	105.6	142.5	189.1	229.1
SC3-13	85	41.0	0.064	43.9	57.8	76.0	98.5	117.6
SC3-14A	79	164.9	0.258	127.6	175.4	239.8	321.9	393.2
SC3-14B	77	34.7	0.054	24.6	34.3	47.4	64.2	79.0
SC3-15A	62	139.7	0.218	21.3	35.5	56.3	85.3	112.1
SC3-15B	87	7.9	0.012	10.8	14.0	18.2	23.3	27.6
SC3-16A	74	168.1	0.263	84.4	120.4	170.0	234.8	292.2
SC3-16B	78	50.7	0.079	39.0	53.7	73.6	99.0	121.1
SC3-17	73	70.6	0.110	41.8	59.6	85.2	119.0	149.1
SC3-18	81	53.8	0.084	49.3	67.1	91.0	121.2	147.3
SC3-19	62	184.0	0.287	28.8	47.7	75.7	114.4	150.2
SC3-20	65	34.2	0.053	9.9	15.5	23.8	35.1	45.5
SC3-21	66	23.3	0.036	7.0	10.8	16.3	23.7	30.4
SC3-22	65	33.9	0.053	9.4	14.8	22.5	32.9	42.5
SC3-23	67	14.5	0.023	5.5	8.3	12.4	18.0	23.0
SC3-24A	65	35.7	0.056	13.0	20.4	31.1	45.7	59.0
SC3-24B	65	12.2	0.019	3.4	5.3	8.1	11.8	15.2
SC3-25	66	19.0	0.030	5.8	8.9	13.4	19.5	25.1
SC3-26	63	10.0	0.016	2.5	4.0	6.2	9.2	12.1
SC3-27	71	70.0	0.109	35.1	51.2	73.8	103.7	130.3
SC3-61	63	65.5	0.102	13.7	22.0	34.4	51.6	67.6
SC3-72	64	56.2	0.088	12.8	20.2	31.4	46.7	60.9
SC3-73	63	90.0	0.141	16.4	26.4	41.3	62.1	81.3
SC3-74	63	119.7	0.187	22.3	36.5	57.3	85.9	112.3
SC3-75	63	79.3	0.124	13.1	21.5	33.7	50.5	66.1
SC3-76	63	86.4	0.135	14.2	23.1	36.4	54.6	71.4
SC3-77	62	106.9	0.167	16.6	27.6	43.8	66.2	87.0
SC3-78	63	155.6	0.243	28.1	45.3	70.6	106.2	139.1
SC3-79	63	189.0	0.295	34.9	57.0	89.5	134.3	175.6
SC3-80	63	147.7	0.231	27.3	44.3	69.0	104.5	136.8
SC3-81	62	262.9	0.411	42.0	70.2	111.0	167.4	219.6
SC3-82	62	117.8	0.184	10.0	33.2	52.8	80.0	105.1
SC3-88	62	60.7	0.094	10.5	17.4	27.6	41.8	54.9
SC3-89	62	27.5	0.043	6.1	10.0	15.7	23.6	30.8
SCE-1	65	64.4	0.101	23.3	35.9	53.8	79.1	102.4
SCE-2	64	15.0	0.023	4.4	7.0	10.8	15.9	20.7
SCE-3	70	67.5	0.105	30.6	45.2	65.9	93.3	118.0
SCE-4	70	29.5	0.046	13.3	19.6	28.6	40.6	52.8
SCE-5	87	85.5	0.134	100.4	130.6	169.6	217.4	257.8
SCE-6	64	3.8	0.006	1.6	2.5	3.7	5.4	7.0
SCE-7	89	44.9	0.070	58.9	75.5	96.6	122.2	143.7
SCE-8	92	25.5	0.040	38.8	48.4	60.7	75.4	87.7
SCE-9	64	4.0	0.006	1.5	2.4	3.6	5.3	6.8
SCE-10	83	174.3	0.272	7.6	18.9	19.4	29.1	39.8
SCE-11	64	5.8	0.009	2.3	3.6	5.5	8.0	10.3
SCE-13	63	78.6	0.123	19.6	31.3	48.7	73.1	95.7
SCE-14	63	52.5	0.082	13.2	21.2	33.3	49.9	65.2
SCE-15	51	39.7	0.062	2.2	5.1	10.1	17.7	25.1

DESIGN POINT SUMMARY

DESIGN POINT	AREA (sq ft)	Q ₅ (cfs)	Q ₁₀ (cfs)	Q ₂₅ (cfs)	Q ₅₀ (cfs)	Q ₁₀₀ (cfs)	LOCATION
DP-74	0.371	39.3	65.3	104.8	158.9	209.1	262.8
DP-75	1.413	141.2	235.1	376.6	566.6	750.9	950.5
DP-77	2.343	209.9	351.9	580.6	866.6	1168.4	1467.7
DP-78	0.538	59.7	98.4	154.0	232.6	306.2	385.3
DP-73	2.471	207.5	354.3	588.5	897.1	1187.2	1506.7
DP-72	2.543	206.2	352.5	586.7	897.2	1195.3	1518.6
DP-71	2.757	205.9	349.3	610.5	932.4	1226.9	1612.2
DP-70	2.867	205.3	349.8	614.0	940.1	1260.6	1636.7
DP-69	3.238	212.7	366.6	653.7	1010.6	1364.1	1775.7
DP-87	3.594	216.9	374.6	681.9	1072.1	1471.5	1905.9
DP-68	4.312	214.6	374.5	714.9	1187.6	1674.9	2204.1
DP-64	1.119	85.9	112.1	145.9	187.5	222.6	258.0
DP-63	4.449	154.4	201.0	375.7	615.9	1112.1	1385.1
DP-61	5.356	156.6	223.9	428.0	692.8	1287.3	1620.1
DP-60A	5.617	161.6	224.8	444.1	690.4	1309.5	1641.8
DP-53A	5.661	161.6	225.7	441.8	691.1	1328.0	1688.9
DP-1E	0.247	23.9	38.3	70.1	132.8	173.0	220.9
DP-2E	0.486	48.9	76.8	123.0	228.7	319.7	419.4
DP-3E	0.626	48.5	75.7	122.2	271.1	387.1	500.1
DP-4E	0.745	48.1	76.2	124.4	286.9	407.3	534.8
DP-56	1.017	23.1	35.3	71.5	108.3	152.1	196.4
DP-8	1.079	24.1	37.2	73.5	113.5	155.4	200.7
DP-21	0.396	0.6	8.8	17.8	57.1	116.8	174.9
DP-22	0.342	0.6	8.8	17.6	56.8	105.1	156.4
DP-25	0.066	5.9	9.1	16.3	35.1	46.4	58.2
DP-26	0.012	0.1	1.1	3.2	7.3	9.5	12.0

DESIGN POINT SUMMARY (VOLUME)

DESIGN POINT	AREA (sq ft)	V ₅ (ac-ft)	V ₁₀ (ac-ft)	V ₂₅ (ac-ft)	V ₅₀ (ac-ft)	V ₁₀₀ (ac-ft)	LOCATION
DP-74	0.371	5.9	9.0	13.6	19.8	25.5	31.6
DP-75	1.413	22.7	34.5	51.7	75.4	97.1	120.5
DP-77	2.343	37.7	57.4	85.9	125.1	161.1	199.9
DP-78	0.538	8.9	13.5	20.1	29.3	37.7	46.7
DP-73	2.471	40.0	60.8	91.0	132.5	170.7	217.1
DP-72	2.543	41.3	62.9	94.0	135.8	176.2	218.5
DP-71	2.757	46.3	70.0	104.3	151.3	194.5	240.8
DP-70	2.867	49.5	74.5	110.6	160.1	205.4	254.0
DP-69	3.238	57.5	86.1	127.4	183.8	235.3	290.6
DP-87	3.594	66.5	98.9	145.6	209.1	267.1	329.1
DP-68	4.312	81.8	123.7	183.9	264.9	338.0	415.8
DP-64	1.119	7.0	9.1	11.8	15.2	18.1	21.1
DP-63	4.449	85.6	129.5	192.3	276.7	352.8	433.5
DP-61	5.356	103.7	157.8	235.1	338.4	431.3	529.8
DP-60A	5.617	111.0	168.6	250.4	359.5	457.7	561.5
DP-53A	5.661	112.0	170.0	252.6	362.6	461.7	566.5
DP-1E	0.247	3.1	5.2	8.4	12.7	16.6	20.9
DP-2E	0.480	6.1	10.4	16.9	25.7	33.7	42.2
DP-3E	0.620	7.0	13.7	23.4	36.1	47.4	59.3
DP-4E	0.736	7.6	15.6	27.2	43.0	57.2	72.0
DP-56	1.017	7.7	16.1	28.6	51.3	71.7	92.9
DP-8	1.079	8.0	16.7	26.6	53.0	74.0	95.9
DP-21	0.396	6.3	11.3	18.3	27.5	35.6	44.0
DP-22	0.736	6.3	10.7	16.7	24.6	31.5	38.7
DP-25	1.017	1.3	1.9	2.8	4.1	5.2	6.4
DP-26	1.079	0.7	0.9	1.2	1.5	1.8	2.1

WATER QUALITY & DETENTION POND SUMMARY

FSD1	2	5	10	25	50	100
STORM EVENT (YR)	2	5	10	25	50	100
PEAK INFLOW (CFS)	16.3	23.3	33.0	45.8	57.1	68.9
ALLOWABLE RELEASE (CFS)	0.1	1.7	3.3	10.9	17.5	25.5
MODELED RELEASE (CFS)	0.1	1.6	3.2	10.9	17.4	25.4
STORED VOLUME (AC-FT)	2.4	2.6	3.0	3.6	1.9	2.2

SAND CREEK FLOW COMPARISON CHART

DESIGN POINT	AREA (sq ft)	Q ₅ (cfs)	Q ₁₀ (cfs)	Q ₂₅ (cfs)	Q ₅₀ (cfs)	Q ₁₀₀ (cfs)	DESCRIPTION	
DP-77	2.343	146.8	226.2	343.0	474.0	642.0	790.0	PROPOSED CONDITION SAND CREEK DBPS
DP-71	2.757	161.2	226.0	343.0	474.0	642.0	790.0	PROPOSED CONDITION SAND CREEK DBPS
DP-63	4.449	1385	2260	3430	4740	6420	7900	PROPOSED CONDITION SAND CREEK DBPS
DP-60A	5.661	1662	2260	3430	4740	6420	7900	PROPOSED CONDITION SAND CREEK DBPS

EFSC DBPS DESIGN POINT SUMMARY (PEAK FLOW)

DBPS DESIGN POINT	AREA (sq ft)	Q ₅ (cfs)	Q ₁₀ (cfs)	Q ₂₅ (cfs)	Q ₅₀ (cfs)	Q ₁₀₀ (cfs)
DP-50	0.32	47.0	195.7	0.32	146.7	370.3
DP-51 (BASIN 86)	0.33	17.7	74.1	0.33	110.0	233.5
DP-52	1.67	80.5	456.5	1.67	1207.9	2123.0
DP-56	0.79	63.6	265.0	0.79	513.0	908.2

Values reported from SCDBPS, (DP 50, 51, 52 Not analyzed as a part of this study)
 DBPS Reach 85(Basin91)=Q10=28.8cfs, Q100=115.2cfs, Q10=345.7cfs, Q100=588.9cfs
 (EXISTING) (PROPOSED)

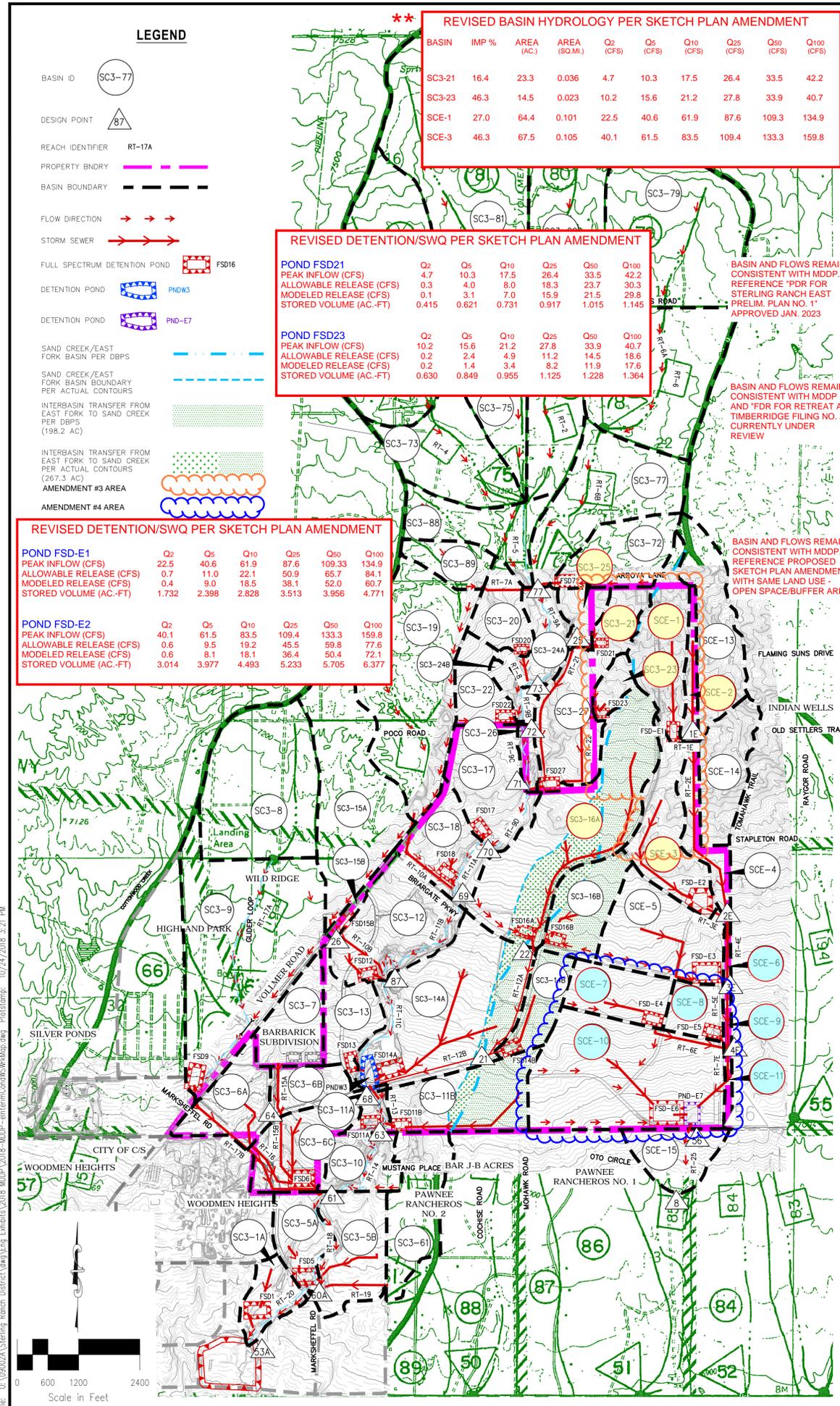
WATER QUALITY & DETENTION POND SUMMARY

FSD16B	2	5	10	25	50	100
STORM EVENT (YR)	2	5	10	25	50	100
PEAK INFLOW (CFS)	39.0	53.7	73.6	99.0	121.1	143.8
ALLOWABLE RELEASE (CFS)	0.0	0.4	0.7	8.3	17.2	28.1
MODELED RELEASE (CFS)	0.0	0.4	0.7	7.9	17.2	28.1
STORED VOLUME (AC-FT)	3.0	3.9	5.1	5.1	5.3	5.8

PND3

STORM EVENT (YR)	2	5	10	25</
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DRAINAGE MAP



REVISED BASIN HYDROLOGY PER SKETCH PLAN AMENDMENT

BASIN	IMP %	AREA (AC)	AREA (SQ.M)	Q2 (CFS)	Q5 (CFS)	Q10 (CFS)	Q25 (CFS)	Q50 (CFS)	Q100 (CFS)
SC3-21	16.4	23.3	0.036	4.7	10.3	17.5	26.4	33.5	42.2
SC3-23	46.3	14.5	0.023	10.2	15.6	21.2	27.8	33.9	40.7
SCE-1	27.0	64.4	0.101	22.5	40.6	61.9	87.6	109.3	134.9
SCE-3	46.3	67.5	0.105	40.1	61.5	83.5	109.4	133.3	159.8

REVISED DETENTION/SWQ PER SKETCH PLAN AMENDMENT

POND	Q2	Q5	Q10	Q25	Q50	Q100
FSD21	4.7	10.3	17.5	26.4	33.5	42.2
ALLOWABLE RELEASE (CFS)	0.3	4.0	8.0	18.3	23.7	30.3
MODELED RELEASE (CFS)	0.1	3.1	7.0	15.9	21.5	28.8
STORED VOLUME (AC-FT)	0.415	0.621	0.731	1.015	1.145	1.454

REVISED DETENTION/SWQ PER SKETCH PLAN AMENDMENT

POND	Q2	Q5	Q10	Q25	Q50	Q100
FSD-E1	22.5	40.6	61.9	87.6	109.3	134.9
ALLOWABLE RELEASE (CFS)	0.7	11.0	22.1	50.9	65.7	84.1
MODELED RELEASE (CFS)	0.4	9.0	18.5	38.1	52.0	60.7
STORED VOLUME (AC-FT)	1.732	2.398	2.828	3.513	3.956	4.771

REVISED DETENTION/SWQ PER SKETCH PLAN AMENDMENT

POND	Q2	Q5	Q10	Q25	Q50	Q100
FSD-E2	40.1	61.5	83.5	109.4	133.3	159.8
ALLOWABLE RELEASE (CFS)	0.6	9.5	19.2	45.5	59.8	77.6
MODELED RELEASE (CFS)	0.6	8.1	18.1	36.4	50.4	72.1
STORED VOLUME (AC-FT)	3.014	3.977	4.493	5.233	5.705	6.377

BASIN SUMMARY

BASIN	CN	AREA (AC)	AREA (SQ.M)	Q2 (CFS)	Q5 (CFS)	Q10 (CFS)	Q25 (CFS)	Q50 (CFS)	Q100 (CFS)
SC3-1A	73	27.8	0.044	16.3	23.3	33.0	45.8	57.1	68.9
SC3-5A	84	39.1	0.061	40.6	53.7	71.0	92.4	110.6	129.1
SC3-5B	81	63.0	0.098	53.8	73.0	98.5	130.8	158.6	187.0
SC3-6A	88	49.3	0.077	61.4	79.3	102.2	130.1	153.6	177.1
SC3-6B	85	30.9	0.048	32.9	43.4	57.0	73.9	88.2	102.7
SC3-6C	82	58.0	0.091	53.9	72.5	97.1	128.0	154.5	181.5
SC3-7	88	45.7	0.071	54.0	69.9	90.3	115.2	136.2	157.2
SC3-8	62	143.4	0.224	25.4	42.1	66.7	100.7	132.3	166.2
SC3-9	66	217.4	0.340	45.8	71.5	108.6	158.9	204.9	254.0
SC3-10	63	36.0	0.056	7.6	12.3	19.4	29.1	38.0	47.7
SC3-11A	70	10.7	0.017	5.3	7.8	11.3	15.9	20.0	24.3
SC3-11B	80	76.6	0.120	59.4	81.3	110.8	148.1	180.5	213.7
SC3-12	81	88.2	0.138	77.8	105.6	142.5	189.1	229.1	270.0
SC3-13	85	41.0	0.064	43.9	57.8	76.0	98.5	117.6	136.9
SC3-14A	79	164.9	0.258	127.6	175.4	239.8	321.9	393.2	466.3
SC3-14B	77	34.7	0.054	24.6	34.3	47.4	64.2	79.0	94.1
SC3-15A	62	139.7	0.218	21.3	35.5	56.3	85.3	112.1	141.0
SC3-15B	87	79.9	0.121	10.9	14.0	18.7	23.3	27.6	31.9
SC3-16A	74	158.1	0.263	84.0	110.4	150.0	204.8	262.2	318.8
SC3-16B	75	50.7	0.079	39.4	52.7	73.6	99.0	121.1	143.8
SC3-17	75	70.6	0.110	41.8	59.6	85.2	119.0	149.1	180.6
SC3-18	81	53.8	0.084	49.3	67.1	91.0	121.2	147.3	174.0
SC3-19	62	184.0	0.287	28.8	47.7	75.7	114.4	150.2	188.8
SC3-20	65	34.2	0.053	9.9	15.5	23.8	35.1	45.5	56.6
SC3-21	66	23.3	0.036	7.0	10.8	16.3	23.7	30.4	37.5
SC3-22	65	33.9	0.053	9.4	14.8	22.5	32.9	42.5	52.6
SC3-23	67	14.5	0.023	5.5	8.3	12.4	18.0	23.0	28.4
SC3-24A	65	35.7	0.056	13.0	20.4	31.1	45.7	59.0	73.2
SC3-24B	65	12.2	0.019	3.4	5.3	8.1	11.8	15.2	18.9
SC3-25	66	19.0	0.030	5.8	8.9	13.4	19.5	25.1	31.0
SC3-26	63	10.0	0.016	2.5	4.0	6.2	9.2	12.1	15.1
SC3-27	71	70.0	0.109	35.1	51.2	73.8	103.7	130.3	158.3
SC3-61	63	65.5	0.102	13.7	22.0	34.4	51.6	67.6	84.8
SC3-72	64	56.2	0.088	12.8	20.2	31.4	46.7	60.9	76.0
SC3-73	63	90.0	0.141	16.4	26.4	41.3	62.1	81.3	102.0
SC3-74	63	119.7	0.187	22.3	36.5	57.3	85.9	112.3	140.7
SC3-75	63	79.3	0.124	13.1	21.5	33.7	50.5	66.1	82.8
SC3-76	63	86.4	0.135	14.2	23.1	36.4	54.6	71.4	89.6
SC3-77	62	106.9	0.167	16.6	27.6	43.8	66.2	87.0	109.4
SC3-78	63	155.6	0.243	28.1	45.3	70.6	106.2	139.1	174.5
SC3-79	63	189.0	0.295	34.9	57.0	89.5	134.3	175.6	220.1
SC3-80	63	147.7	0.231	27.3	44.3	69.6	104.5	136.8	171.3
SC3-81	62	262.9	0.411	42.5	70.2	111.0	167.4	219.6	275.7
SC3-82	62	117.2	0.184	10.0	16.3	24.2	35.2	45.1	56.1
SC3-88	62	60.7	0.094	10.5	17.4	27.6	41.8	54.9	69.0
SC3-89	62	27.5	0.043	6.1	10	15.7	23.6	30.8	38.6
SCE-1	65	64.4	0.101	23.3	35.9	53.9	79.1	102.4	127.4
SCE-2	64	15.0	0.023	4.4	7.0	10.8	15.9	20.7	25.7
SCE-3	70	67.5	0.105	30.6	45.2	65.9	93.3	118.0	143.9
SCE-4	70	29.5	0.046	13.3	19.6	28.6	40.6	52.8	66.6
SCE-5	67	85.5	0.134	10.4	16.0	24.1	35.2	45.8	58.4
SCE-6	84	3.8	0.006	1.6	2.5	3.7	5.4	7.0	8.6
SCE-7	89	44.9	0.070	58.9	75.5	96.6	122.2	143.7	165.2
SCE-8	92	25.5	0.040	38.6	48.4	60.7	75.4	87.7	99.9
SCE-9	64	4.0	0.006	1.5	2.4	3.6	5.3	6.8	8.5
SCE-10	83	174.3	0.272	7.6	18.9	29.4	43.1	56.9	72.5
SCE-11	64	5.8	0.009	2.3	3.6	5.5	8.0	10.3	12.8
SCE-13	63	78.6	0.123	19.6	31.3	48.7	73.1	95.7	120.0
SCE-14	63	52.5	0.082	13.2	21.2	33.3	49.9	65.2	81.7
SCE-15	51	39.7	0.062	2.2	5.1	10.1	17.7	25.1	33.4

DESIGN POINT SUMMARY

DESIGN POINT	AREA (SQ.W)	Q2 (CFS)	Q5 (CFS)	Q10 (CFS)	Q25 (CFS)	Q50 (CFS)	Q100 (CFS)	LOCATION
DP-74	0.371	39.3	65.3	104.8	158.9	209.1	262.8	
DP-75	1.413	141.2	235.1	376.6	566.6	750.9	950.5	
DP-77	2.343	209.9	351.9	580.6	866.6	1168.4	1467.7	ARROYA LANE X-ING
DP-78	0.538	59.7	98.4	154.0	232.6	306.2	385.3	
DP-73	2.471	207.5	354.3	588.5	897.1	1187.2	1506.7	
DP-72	2.543	206.2	352.5	586.7	897.2	1195.3	1518.6	POCO ROAD X-ING
DP-71	2.757	205.9	349.3	610.5	932.4	1226.9	1612.2	STERLING RANCH NORTHERN BNDRY
DP-70	2.867	205.3	349.8	614.0	940.1	1260.6	1636.7	
DP-69	3.238	212.7	366.6	653.7	1010.6	1364.1	1775.7	BRIARGATE PARKWAY X-ING
DP-87	3.594	216.9	374.6	681.9	1072.1	1471.5	1905.9	
DP-68	4.312	214.6	374.5	714.9	1187.6	1674.9	2204.1	UPSTREAM OF POND W3
DP-64	1.119	85.9	112.1	145.9	187.5	222.6	258.0	
DP-63	4.449	154.4	201.0	375.7	615.9	1112.1	1385.1	STERLING RANCH SOUTHERN BNDRY
DP-61	5.356	156.6	223.9	428.0	692.8	1287.3	1620.1	COLORADO SPRINGS/EL PASO BNDRY
DP-60A	5.611	161.6	224.8	439.1	750.4	1320.5	1651.8	MARKSHEFFEL X-ING
DP-53A	5.661	161.6	225.7	441.8	751.3	1328.0	1668.9	SAND CREEK AND POND 3
DP-1E	0.247	23.9	38.3	70.1	132.8	173.0	220.9	
DP-2E	0.486	48.9	76.8	123.0	228.7	319.7	419.4	
DP-3E	0.626	48.5	75.7	122.2	271.1	387.1	500.1	
DP-4E	0.745	48.1	76.2	122.4	286.9	407.3	534.8	
DP-56	1.017	23.1	35.3	71.5	108.3	152.1	196.4	NEAR SE PROP CORNER
DP-8	1.079	24.1	37.2	73.5	111.3	155.4	200.7	BELOW SE PROP CORNER
DP-21	0.396	0.6	8.8	17.8	57.1	116.8	174.9	
DP-22	0.342	0.6	8.8	17.6	56.8	105.1	156.4	
DP-25	0.066	5.9	9.1	16.3	35.1	46.4	58.2	
DP-26	0.012	0.1	1.1	3.2	7.3	9.5	12.0	

DESIGN POINT SUMMARY (VOLUME)

DESIGN POINT	AREA (SQ.W)	V2 (AC-FT)	V5 (AC-FT)	V10 (AC-FT)	V25 (AC-FT)	V50 (AC-FT)	V100 (AC-FT)	LOCATION
DP-74	0.371	5.9	9.0	13.6	19.8	25.5	31.6	
DP-75	1.413	22.7	34.5	51.7	75.4	97.1	120.5	
DP-77	2.343	37.7	57.4	85.9	125.1	161.1	199.9	ARROYA LANE X-ING
DP-78	0.538	8.9	13.5	20.1	29.3	37.7	46.7	
DP-73	2.471	40.0	60.8	91.0	132.5	170.7	217.1	
DP-72	2.543	41.3	62.9	94.0	136.8	176.2	218.9	POCO ROAD X-ING
DP-71	2.757	46.3	70.0	104.3	151.3	194.5	240.8	STERLING RANCH NORTHERN BNDRY
DP-70	2.867	49.5	74.5	110.6	160.1	205.4	254.0	
DP-69	3.238	57.5	86.1	127.4	183.8	235.3	290.6	BRIARGATE PARKWAY X-ING
DP-87	3.594	66.5	98.9	145.6	209.1	267.1	329.1	
DP-68	4.312	81.8	123.7	183.9	264.9	338.0	415.8	UPSTREAM OF POND W3
DP-64	1.119	7.0	9.1	11.8	15.2	18.1	21.1	
DP-63	4.449	85.6	129.5	192.3	276.7	352.8	433.5	STERLING RANCH SOUTHERN BNDRY
DP-61	5.356	103.7	157.8	235.1	338.4	431.3	529.8	COLORADO SPRINGS/EL PASO BNDRY
DP-60A	5.611	111.0	168.6	250.4	359.5	457.7	561.5	MARKSHEFFEL X-ING
DP-53A	5.661	112.0	170.0	252.6	362.6	461.7	565.5	SAND CREEK AND POND 3
DP-1E	0.247	3.1	5.2	8.4	12.7	16.6	20.9	
DP-2E	0.480	6.1	10.4	16.9	25.7	33.7	42.2	
DP-3E	0.620	7.0						