



May 16, 2022

Herb Darling, Director
Burnet County
Development Services
220 South Pierce
Burnet, TX 78611

**RE: THE ESTATES AT OATMEAL SUBDIVISION
BLANCO COUNTY, TEXAS
CCL 22-006**

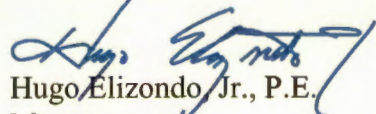
SUBJECT: PRELIMINARY PLAT SUBDIVISION APPLICATION SUBMITTAL

On behalf of our Client, Premier Land Investments, please find the following documents for the Subdivision Application submittal on the referenced Project:

- Subdivision Application;
- Preliminary Plats;
- Sewage Facility Report;
- Water Availability Study, prepared by Intera Inc., dated May 13, 2022; and
- Existing Conditions and Master Drainage Plan Sheets.

We provide this Application and related documents for your review and comments. Please advise if you have questions.

Sincerely,


Hugo Elizondo, Jr., P.E.
Manager

Attachments

SEWAGE FACILITY PLAN
FOR
ESTATES AT OATMEAL SUBDIVISION
BURNET COUNTY, TEXAS

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May 2022

SEWAGE FACILITY PLAN
FOR
ESTATES AT OATMEAL SUBDIVISION
BURNET COUNTY, TEXAS

1. INTRODUCTION

The proposed Estates at Oatmeal Subdivision lies in Burnet County along the south side of County Road 330 approximately 300 feet west of its intersection with Farm to Market 243. The Site area is 31.86 acres. The Project consists of 14 single-family residential lots. The proposed improvements include the construction of paving, drainage, water, and on-site sewage facilities associated with this type of large lot or rural residential development. See **FIGURE 1: LOCATION MAP** for the location of the Subject tract.

The Estates at Oatmeal will consist of a single-family residential subdivision. This includes the following lot summary:

LOT SUMMARY

<u>Description</u>	<u>No.</u>	<u>Area (ac)</u>
<u>Single Family Residential:</u>	14 lots	31.86
Total:		31.86

A copy of the Plat is attached, see **FIGURE 2: PRELIMINARY PLAT**, in Appendix.

Proposed lot improvements include typical single-family residential construction including homes, driveways, onsite sewage facilities, and a water well.

2. PRESENT CONDITIONS

The existing site has sloping topography generally draining south to north. Ground slopes generally range between 1 and 8 percent. Elevations range from 1,228 amsl in the northeast corner to 1,276 amsl along the south border of the tract.

A. Site Plan/ Topographic Map/ 100 Year Floodplain

The Estates at Oatmeal Subdivision comprises the total 31.86-acre tract to be served under this Sewage Facility Plan.

The present and future area covered by this Sewage Facility Plan is shown on the Plat. **FIGURE 3: PRELIMINARY PLAT WITH TOPO** in Appendix shows topographic information.

B. Source, Quantity and Quality of Water

Water service will be provided by private wells.

C. Present and Future Wastewater Treatment Needs

There will be 14 proposed onsite sewage facilities to serve the Estates at Oatmeal Subdivision. Wastewater flows will range from 240 to 300 gallons per day per household.

3. SITE INFORMATION

The proposed onsite sewage facility improvements will serve each single-family lot within Estates at Oatmeal Subdivision. All single-family residential lots are a minimum of 2 acres in size. A copy of the Preliminary Plat is attached, see **FIGURE 2: PRELIMINARY PLAT**, in Appendix. See Appendix for Soil Survey of Site area.

The Project site is located in Burnet County. The Site lies over Brackett Association (1 to 8 percent slopes), Doss Silty Clays (1 to 5 percent slopes), and Krum Clay (1 to 3 percent slopes).

All onsite septic systems shall be designed and installed in accordance with the Burnet County Onsite Sewage Facility (OSSF) rules and construction standards, latest revision.

In addition, all system design and operation must comply with the TCEQ requirements set forth in Title 30 TAC, "Chapter 285 - Onsite Sewage Facilities", latest revision, as amended by Burnet County.

4. SOILS ASSESSMENT AND ANALYSIS

This analysis was completed to obtain general soils characteristics for this Project area. Each permitted OSSF shall have a site-specific soil evaluation for each lot design. For this Facility Plan, the borings provided by the Geotechnical Engineering firm are attached in **FIGURE 4: GEOTECHNICAL BOREHOLES AND SOIL SURVEY**.

A. Soil Analysis Procedures

FIGURE 4: GEOTECHNICAL BOREHOLES AND SOIL SURVEY includes a review of Soil Survey information (U.S.D.A. Natural Resources Conservation Service) used to determine the characteristics of the soil profile. This historical data provides information for preliminary analysis of soil slopes and stratum.

B. Soil Texture Analysis

The Brackett Association (6) series on this site consist of clay loam. These soils exist on slopes ranging from 1 to 8 percent. This soil has clay loam to a depth of 14 inches and bedrock beyond 14 inches. The capacity of the most limiting layer (Ksat) for these soils is moderately low to high ranging from 0.06 to 1.98 inches per hour according to the Soil Survey. These soils are classified as clay loam and are Class III soils. These soils have formed from residuum weathered from limestone.

The Doss Silty Clay (9) series on this site consists of silty clay. These soils existing on slopes ranging from 1 to 5 percent. This soil has clay to a depth of 17 inches and bedrock is beyond 17 inches. The capacity of the most limiting layer (Ksat) for these soils is moderately low to moderately high ranging from 0.06 to 0.57 inches per hour according to the Soil Survey. These soils are classified as silty clay and are Class IV soils. These soils have formed from residuum weathered from limestone.

The Krum Clay (24) series on this site consist of clay. These soils exist on slopes ranging from 1 to 3 percent. This soil has clay to a depth of 80 inches. The capacity of the most limiting layer (Ksat) for these soils is moderately low to moderately high ranging from 0.06 to 0.20 inches per hour according to the Soil Survey. These soils are classified as clay and are Class IV soils. These soils have formed from calcareous silty and clayey alluvium derived from limestone.

In the Appendix, please find an excerpt from the Soil Survey, which has tables depicting engineering properties and physical and chemical properties of these soils.

C. Soil Structure Analysis

Soil structure of these soils is generally blocky. There are no rock outcrops on the property. Where platy or laminated conditions exist, the designer will reflect the appropriate soil replacement or other accepted means to assure proper absorption of effluent.

D. Soil Depth Analysis

Soil depths range from 0 to 7 feet based on Soil Survey data and physical observation during a site evaluation to confirm soils data.

The depth of soils classified as suitable as to texture and structure shall be at least 24 inches below the bottom of the proposed disposal area when standard ground absorption is to be used to treat and dispose effluent.

If suitable soil depth is less than 24 inches below the proposed drain field, then the soil is considered unsuitable.

E. Restrictive Horizons Evaluation

A restrictive horizon was found at a depth ranging from 14 to greater than 80 inches of depth during analysis.

Soils which have restrictive horizons within 24 inches of the bottom of the drain field shall be considered unsuitable.

F. Groundwater Evaluation

For the subdivision area, there was no groundwater noted in review of Soil Survey information to a depth of 80 inches.

Seasonal variations in rainfall and antecedent condition will impact the level of groundwater in the area.

G. Topography

Existing slopes generally vary between 1 and 8 percent, with localized steeper slopes along banks of ravines, etc. The drain field excavation shall generally follow the ground contour. Soil absorption systems shall not be located in depressions or in areas crossed by gullies and ravines.

The installer of each OSSF shall assure that upgradient storm runoff is diverted around or away from the proposed disposal area. Proposed contouring of the final grade over the disposal area shall also be completed to create positive runoff of storm water.

Soil absorption systems shall not be located within areas designated or set aside as conservation easements or drainage easements.

H. Flood Hazard

No portion of this tract is within the boundaries of a 100-year floodplain.

I. Overall Site Suitability

In summary, the Project is suitable for onsite sewage facilities.

For this Project area, we recommend the following:

1. Where soils are not suitable or there is a restrictive horizon, then standard disposal methods cannot be used. In this case, proprietary or advanced disposal systems may be used. These systems may require advanced treatment.
2. The installer may use a combination of standard treatment and non-standard disposal methods; however, each individual system must be approved by Burnet County.

All individual residential system designs will be reviewed and approved by Burnet County, **prior** to construction.

Proprietary systems may also be used on the Project, provided Burnet County approves the design and permit application.

Each individual lot will have a minimum of 1,200 square feet of disposal field area for a typical 3-bedroom house unless the site-specific soil evaluations justify a smaller disposal field area. Each proposed lot has adequate space for the residence structure(s) and the disposal area.

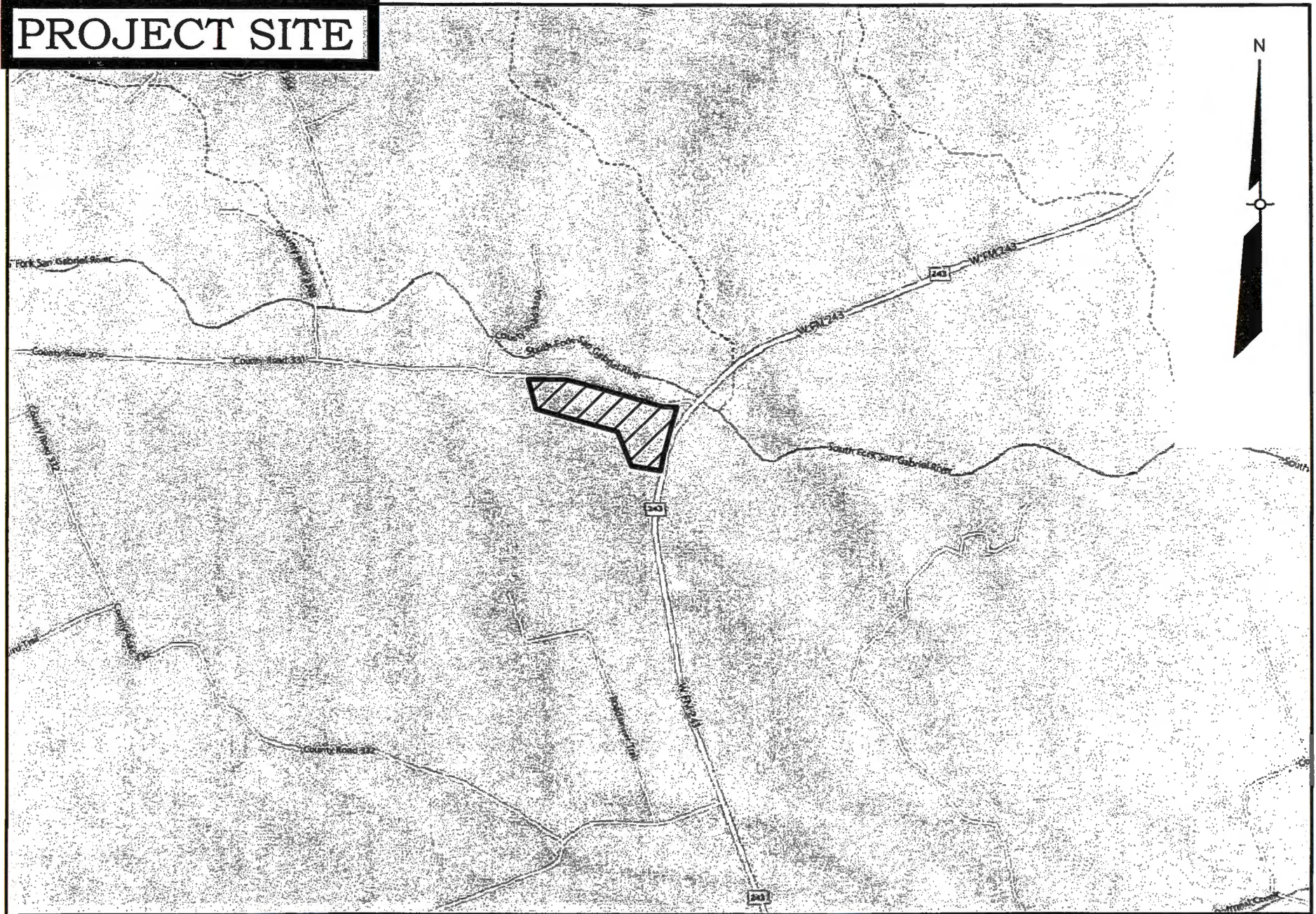
Surface disposal is not recommended, although not prohibited.

APPENDIX

- **FIGURE 1: LOCATION MAP**
- **FIGURE 2: PRELIMINARY PLAT**
- **FIGURE 3: PRELIMINARY PLAT WITH TOPO**
- **FIGURE 4: SOIL SURVEY**

FIGURE 1: LOCATION MAP

PROJECT SITE



LOCATION MAP

1" = 2000'

FIGURE 2: PRELIMINARY PLAT

SHEET 3 OF 4

SHEET 4 OF 4

FIGURE 3: PRELIMINARY PLAT WITH TOPO

SHEET 4 OF 4

PRELIMINARY PLAT OF
ESTATES AT OATMEAL
SUBDIVISION

31.86 ACRES
OUT OF THE A.B. SPEAR SURVEY, ABSTRACT NO. 2, JOHN
JENNINGS TRACT 2 SURVEY, ABSTRACT NO. 480 AND J.W.
JENNINGS SURVEY, ABSTRACT NO. 484
BURNET COUNTY, TEXAS

VICINITY MAP
SCALE 1" = 400'

FOR REVIEW ONLY
NOT FOR CONSTRUCTION

DATE: 4/6/2022

SHEET INDEX	
NAME	DESCRIPTION
SHEET 1 OF 4	VICINITY MAP
SHEET 2 OF 4	SECTION
SHEET 3 OF 4	SECTION
SHEET 4 OF 4	LEGAL DESCRIPTION, PLAT INFO AND SIGNATURES

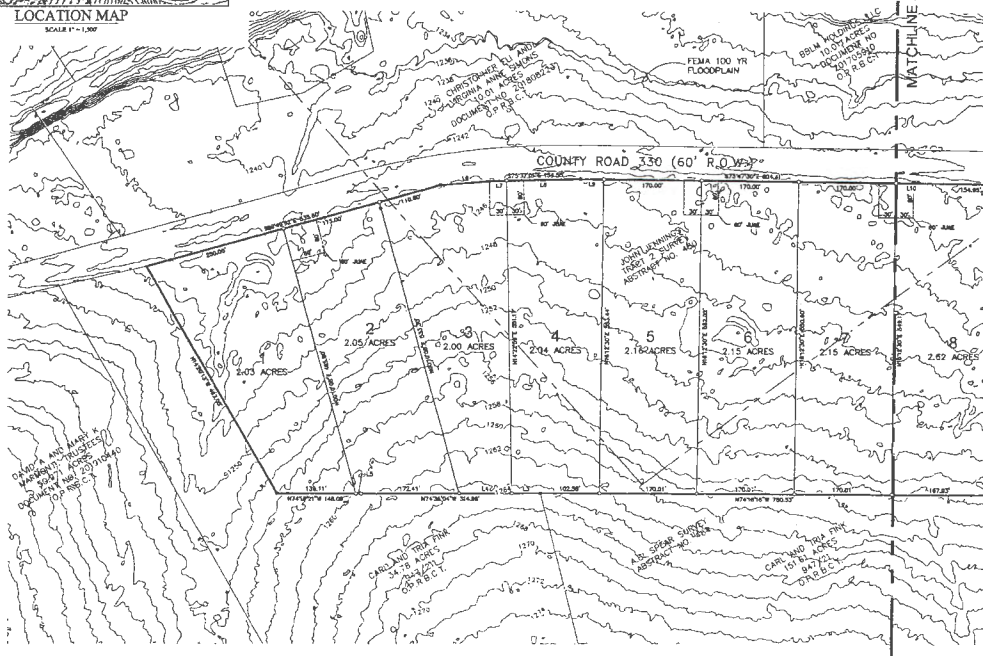
SHEET 1 OF 4

PRELIMINARY PLAT OF
ESTATES AT OATMEAL
SUBDIVISION

31.86 ACRES
OUT OF THE A.B. SPEAR SURVEY, ABSTRACT NO. 2, JOHN
JENNINGS TRACT 2 SURVEY, ABSTRACT NO. 480 AND J.W.
JENNINGS SURVEY, ABSTRACT NO. 484
BURNET COUNTY, TEXAS



LOCATION MAP
SCALE 1" = 1,500'



LEGEND

- | | |
|-------|---|
| 0 | DELETED ABSTRACT LINE RE-IN POWER |
| 0 | DELETED BENCHMARK (SHE NOT) |
| 0 | DELETED 1/2" OF THE SET |
| 0 | DELETED 1/2" OF THE FUEL |
| 0 | UNUSABLE LABORANT |
| 0 | ACCESS CASHEMENT |
| 0 | PUBLIC STOCKHOLD CASHEMENT |
| 0 | JOINT USE ACCESS CASHEMENT |
| 0 | CONCRETE MOUNTAIN |
| <hr/> | |
| 0 | BOUNDARY LINE |
| 0 | PROPERTY LINE |
| 0 | R.O.V. LINE |
| 0 | UTILITY OR DRAINAGE CASHEMENT |
| 0 | ABSTRACT LINE |
| 0 | OPTIONAL PUBLIC RECORDS OF SURVEY COUNTY, TEXAS |

FOR REVIEW ONLY
NOT FOR CONSTRUCTION

DATE: 4/6/2022

FIGURE 4: SOIL SURVEY



United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for **Blanco and Burnet Counties, Texas**

ESTATES AT OATMEAL



May 9, 2022

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units).

Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map



Custom Soil Resource Report

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 1:31,700.

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: Blanco and Burnet Counties, Texas
Survey Area Data: Version 18, Sep 10, 2021

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

Date(s) aerial images were photographed: Dec 15, 2019—Dec 19, 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
6	Brackett association, 1 to 8 percent slopes	17.3	54.5%
9	Doss silty clay, moist, 1 to 5 percent slopes	12.8	40.3%
24	Krum clay, 1 to 3 percent slopes	1.7	5.3%
Totals for Area of Interest		31.8	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The

delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Blanco and Burnet Counties, Texas

6—Brackett association, 1 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2t26h
Elevation: 550 to 1,920 feet
Mean annual precipitation: 30 to 35 inches
Mean annual air temperature: 64 to 68 degrees F
Frost-free period: 210 to 240 days
Farmland classification: Not prime farmland

Map Unit Composition

Brackett and similar soils: 87 percent
Minor components: 13 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Brackett

Setting

Landform: Ridges
Landform position (two-dimensional): Summit, shoulder, backslope, footslope
Landform position (three-dimensional): Interfluve, side slope
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Residuum weathered from limestone

Typical profile

A - 0 to 5 inches: clay loam
Bk - 5 to 14 inches: clay loam
Cr - 14 to 60 inches: bedrock

Properties and qualities

Slope: 1 to 8 percent
Depth to restrictive feature: 5 to 20 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high
(0.06 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 80 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 2.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: D
Ecological site: R081CY355TX - Adobe 29-35 PZ
Hydric soil rating: No

Minor Components

Eckrant

Percent of map unit: 5 percent
Landform: Ridges
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: R081CY360TX - Low Stony Hill 29-35 pZ
Hydric soil rating: No

Doss

Percent of map unit: 3 percent
Landform: Ridges
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: R081CY574TX - Shallow 29-35 PZ
Hydric soil rating: No

Bolar

Percent of map unit: 3 percent
Landform: Ridges on plateaus
Landform position (two-dimensional): Backslope, shoulder
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: R081CY357TX - Clay Loam 29-35 PZ
Hydric soil rating: No

Krum

Percent of map unit: 2 percent
Landform: Stream terraces on plateaus
Landform position (three-dimensional): Riser, tread
Down-slope shape: Concave
Across-slope shape: Linear
Ecological site: R081CY357TX - Clay Loam 29-35 PZ
Hydric soil rating: No

9—Doss silty clay, moist, 1 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2s0st
Elevation: 630 to 1,840 feet
Mean annual precipitation: 30 to 36 inches
Mean annual air temperature: 66 to 68 degrees F
Frost-free period: 210 to 240 days
Farmland classification: Not prime farmland

Map Unit Composition

Doss and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Doss

Setting

Landform: Hillslopes

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Residuum weathered from limestone

Typical profile

A - 0 to 9 inches: silty clay

Bk - 9 to 17 inches: silty clay

Cr - 17 to 80 inches: bedrock

Properties and qualities

Slope: 1 to 5 percent

Depth to restrictive feature: 11 to 20 inches to paralithic bedrock

Drainage class: Well drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.57 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 70 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water supply, 0 to 60 inches: Very low (about 2.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: D

Ecological site: R081CY574TX - Shallow 29-35 PZ

Hydric soil rating: No

Minor Components

Brackett

Percent of map unit: 7 percent

Landform: Ridges

Landform position (two-dimensional): Shoulder, backslope, footslope

Landform position (three-dimensional): Side slope

Down-slope shape: Linear

Across-slope shape: Convex

Ecological site: R081CY362TX - Steep Adobe 29-35 PZ

Hydric soil rating: No

Bolar

Percent of map unit: 5 percent

Landform: Ridges

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Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: R081CY357TX - Clay Loam 29-35 PZ
Hydric soil rating: No

Purves

Percent of map unit: 1 percent
Landform: Plains
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: R081CY574TX - Shallow 29-35 PZ
Hydric soil rating: No

Denton

Percent of map unit: 1 percent
Landform: Plains
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R081CY357TX - Clay Loam 29-35 PZ
Hydric soil rating: No

Eckrant

Percent of map unit: 1 percent
Landform: Ridges
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: R081CY360TX - Low Stony Hill 29-35 PZ
Hydric soil rating: No

24—Krum clay, 1 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2t2j5
Elevation: 550 to 1,750 feet
Mean annual precipitation: 31 to 37 inches
Mean annual air temperature: 65 to 69 degrees F
Frost-free period: 230 to 250 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Krum and similar soils: 90 percent
Minor components: 10 percent

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Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Krum

Setting

Landform: Stream terraces

Landform position (three-dimensional): Tread

Down-slope shape: Concave

Across-slope shape: Linear

Parent material: Calcareous silty and clayey alluvium derived from limestone

Typical profile

A - 0 to 16 inches: clay

Bk1 - 16 to 58 inches: clay

Bk2 - 58 to 66 inches: clay

Ck - 66 to 80 inches: clay

Properties and qualities

Slope: 1 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 50 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 3.0

Available water supply, 0 to 60 inches: High (about 9.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: C

Ecological site: R081CY357TX - Clay Loam 29-35 PZ

Hydric soil rating: No

Minor Components

Bolar

Percent of map unit: 5 percent

Landform: Hillslopes

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: R081CY357TX - Clay Loam 29-35 PZ

Hydric soil rating: No

Doss

Percent of map unit: 3 percent

Landform: Hillslopes

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Base slope

Down-slope shape: Convex

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Across-slope shape: Linear
Ecological site: R081CY574TX - Shallow 29-35 PZ
Hydric soil rating: No

Lewisville

Percent of map unit: 2 percent
Landform: Stream terraces
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Linear
Ecological site: R081CY357TX - Clay Loam 29-35 PZ
Hydric soil rating: No

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