

PUBLIC NOTICE

The Grantsville City Planning Commission will hold a Regular Meeting at 7:00 p.m. on Tuesday, April 21, 2026 at 429 East Main Street, Grantsville, UT 84029. The agenda is as follows:

ROLL CALL

AGENDA

1. Presentation, **Public Hearing**, Discussion, and Consideration: Consideration of the Proposed Conditional Use Permit for Shelton Ross to operate outdoor RV storage within the Commercial Shopping (C-S) Zone, located at approximately 519 West Main Street (Parcel No. 01-066-0-0033).
2. Presentation, **Public Hearing**, Discussion, and Consideration: Consideration of the proposed plat amendment for the Moody Acres Subdivision located approximately at 415 S Worthington Street.
3. Presentation, **Public Hearing**, Discussion, and Consideration: Consideration of a proposed General Plan Amendment for parcels 01-071-0-0012, 01-074-0-0012, 01-074-0-0010, and 11-010-0-0002 to change the land use designation from Low Density Residential to High Single-Family Density Wellstone Subdivision, located near Pear Street and Quirk Street.
4. Presentation, **Public Hearing**, Discussion, and Consideration: Consideration of a proposed rezone of parcels 01-071-0-0012, 01-074-0-0012, 01-074-0-0010, and 11-010-0-0002 from R-1-21 to R-1-12 for the Wellstone Subdivision, located near Pear Street and Quirk Street.
5. Presentation, **Public Hearing**, Discussion, and Consideration: Consideration of the proposed amendments to the Parks and Transportation Capital Facilities Plans (CFPs), Impact Fee Facilities Plans (IFFPs), and Impact Fee Analyses (IFAs) for Grantsville City.
6. Approval of Minutes from the March 24, 2026 Planning Commission Training Meeting.
7. Report from City Staff.
8. Open Forum for Planning Commissioners.
9. Report from City Council.
10. Adjourn.

Shelby Moore
Zoning Administrator
Grantsville City Community & Economic Development

Join Zoom Meeting

Join Zoom Meeting: <https://us02web.zoom.us/j/4358843411>

By Phone, Dial: 1-253-215-8782

Meeting ID: 435 884 3411



**Scan QR code
to join Zoom
meeting.**

AGENDA ITEM #1

Presentation, Public Hearing, Discussion, and Consideration: Consideration of the Proposed Conditional Use Permit for Shelton Ross to operate outdoor RV storage within the Commercial Shopping (C-S) Zone, located at approximately 519 West Main Street (Parcel No. 01-066-0-0033).

Planning and Zoning
336 W. Main St.
Grantsville, UT 84029
Phone: (435) 884-1674



STAFF REPORT

To: Planning Commission
From: Community Development Department
Date: 4/21/2026
Subject: Conditional Use Permit – Outdoor RV Storage (Shelton Ross)

REQUEST

Presentation, Public Hearing, Discussion, and Consideration of a proposed Conditional Use Permit for Shelton Ross to operate outdoor RV storage within the Commercial Shopping (C-S) Zone, located at approximately 519 West Main Street (Parcel No. 01-066-0-0033).

BACKGROUND

The applicant is requesting approval to establish an outdoor RV storage facility on the subject property. The proposal includes designated trailer/RV parking spaces within a controlled and gated area.

SITE & OPERATIONS DETAILS

- **Location:** 519 West Main Street (Parcel No. 01-066-0-0033)
- **Use:** Outdoor RV and trailer storage
- **Employees:** 2 (Shelton Ross and Bria Titmus)
- **Hours of Operation:**
 - Office: Monday–Friday, 8:00 AM – 5:00 PM
 - Customer Access: 24-hour gated access via pin code
- **Traffic:** Approximately 1–2 customers per day
- **Capacity:** Approximately 60-80 trailer/RV spaces
- **Materials/Equipment:** No hazardous materials or chemicals used

The submitted site plan shows an existing gravel lot with organized vehicle storage and access circulation, surrounded by similar commercial and storage-type uses.

ZONING AND LAND USE

- **Zone:** Commercial Shopping (C-S)
- **Use Type:** Conditional Use

Outdoor storage is permitted within this zone subject to Conditional Use Permit approval to ensure compatibility with surrounding properties.

ANALYSIS

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Per Section 7.5 of the Land Use Ordinance, the Planning Commission is authorized to approve Conditional Use Permits with conditions necessary to mitigate impacts.

Staff finds the following:

- **Compatibility:** The site is located in an area already characterized by outdoor storage, vehicle-related uses, and commercial activity. The proposed use aligns with existing land use patterns.
- **Low Intensity:** With only 1–2 customers per day, the use generates minimal traffic and operational impact.
- **Site Suitability:** The large lot size and existing layout support circulation, access, and storage without congestion.
- **Operational Controls:** Gated access and limited staffing reduce the likelihood of nuisance conditions.
- **Impact Mitigation:** No hazardous materials or active mechanical operations are proposed, limiting environmental and safety concerns.

Based on the above, staff does not identify any significant adverse impacts associated with the request.

PROPOSED CONDITIONS OF APPROVAL

1. The use shall be limited to outdoor storage of recreational vehicles and trailers only.
2. The site shall maintain a gated access system to control entry.
3. The property shall be maintained in a clean and orderly condition at all times.
4. Any lighting shall be directed downward and away from adjacent properties and public rights-of-way.
5. No occupancy or habitation of RVs shall be permitted on-site.
6. No repair, dismantling, or commercial servicing of vehicles shall occur on-site unless otherwise approved.
7. Screening or fencing shall be maintained in compliance with City Code.
8. The use shall comply with all applicable local, state, and federal regulations.
9. Any expansion or intensification of the use shall require additional review and approval.
10. The Conditional Use Permit shall run with the land unless revoked due to noncompliance.
11. Compliance with City Code: All requirements of the Grantsville City Code must be met.
12. Payment of Fees: All fees associated with the permit and future permit must be paid.
13. Health and Safety Standards: All industry standards regarding health, safety, and welfare regulations must be followed.
14. State Licensing: The permit holder must maintain current state licensing at all times.
15. Business License: The permit holder must maintain a current business license at all times.
16. Scope of Use: The use of the property must remain within the parameters approved in the application. Any expansion of use requires prior approval.
17. Administrative Review: This permit may be periodically reviewed by the Zoning Administrator and/or reviewed if any complaints are received.

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Phone: (435) 884-1674



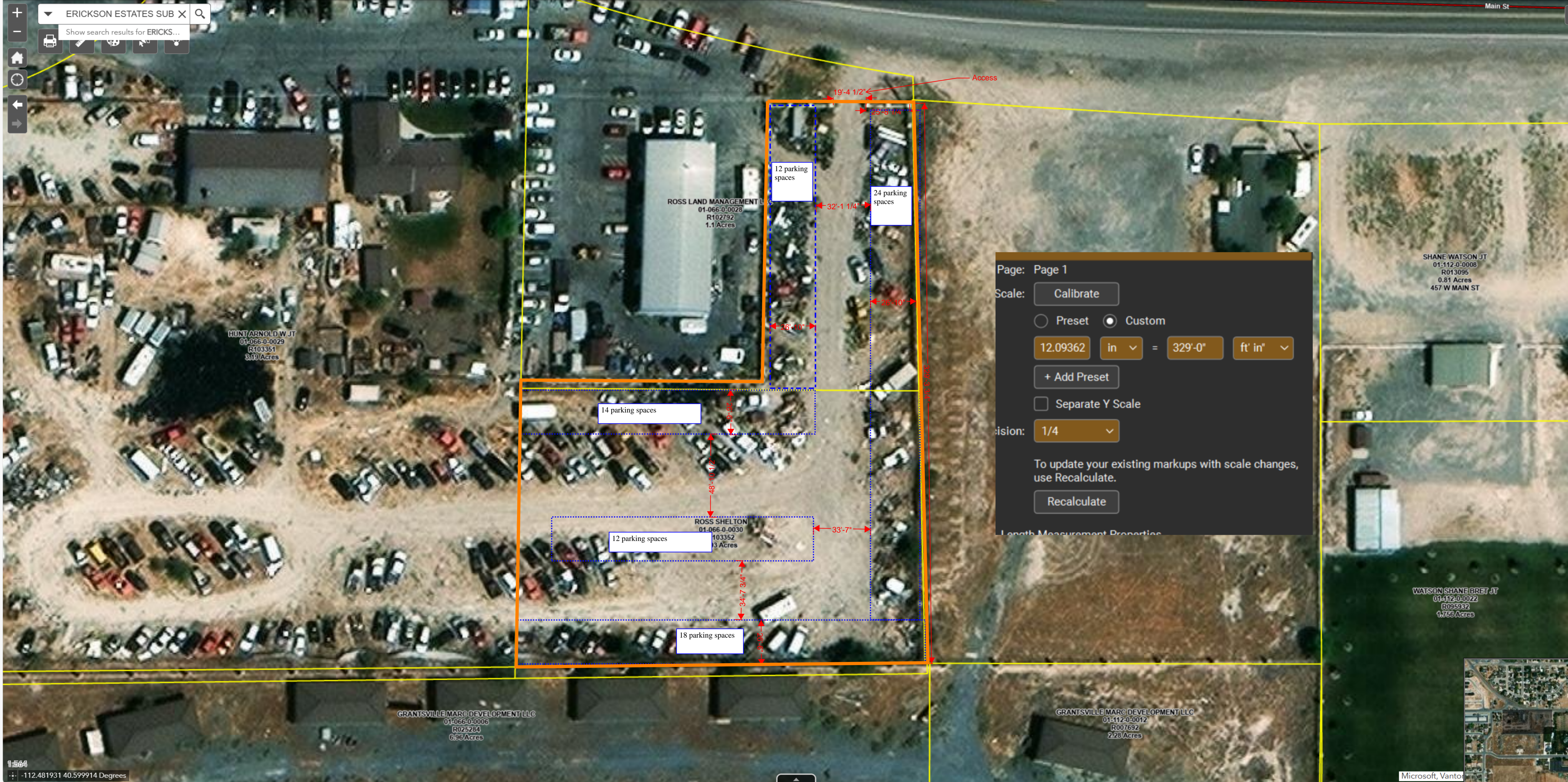
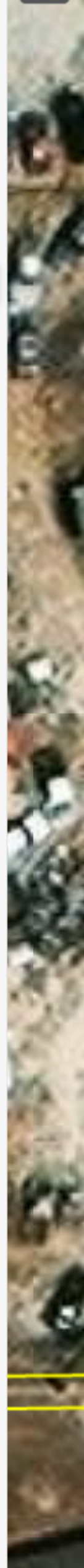
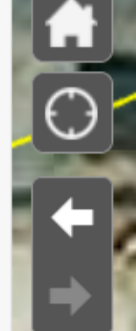
18. Non-Compliance Consequences: Failure to comply with any of these requirements may result in revocation of the permit.

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ERICKSON ESTATES SUB X

Show search results for ERICKS...



ROSS LAND MANAGEMENT LLC
01-066-0-0028
R102792
1.1 Acres

HUNT ARNOLD W JT
01-066-0-0029
R103351
3.19 Acres

SHANE WATSON JT
01-112-0-0008
R013095
0.81 Acres
457 W MAIN ST

WATSON SHANE BRET JT
01-112-0-0022
R095932
1.756 Acres

GRANTSVILLE MARC DEVELOPMENT LLC
01-066-0-0006
R025284
6.96 Acres

GRANTSVILLE MARC DEVELOPMENT LLC
01-112-0-0012
R007692
2.28 Acres

12 parking spaces

24 parking spaces

14 parking spaces

12 parking spaces

18 parking spaces

ROSS SHELTON
01-066-0-0030
R103352
3 Acres

19'-4 1/2"

25'-8 1/2"

32'-1 1/4"

20'-10"

26'-10"

31'-0"

48'-10 1/2"

33'-7"

34'-7 3/4"

Page: Page 1

Scale:

Preset Custom

=

Separate Y Scale

Division:

To update your existing markups with scale changes, use Recalculate.

Length Measurement Properties



AGENDA ITEM #2

Presentation, Public Hearing, Discussion, and Consideration: Consideration of the proposed plat amendment for the Moody Acres Subdivision located approximately at 415 S Worthington Street.

Planning and Zoning
336 W. Main St.
Grantsville, UT 84029
Phone: (435) 884-1674



STAFF REPORT

To: Planning Commission
From: Community Development Department
Date: 4/21/2026
Subject: Moody Acres Subdivision – Plat Amendment

REQUEST

Presentation, Public Hearing, Discussion, and Consideration of a proposed plat amendment for the Moody Acres Subdivision, located at approximately 415 South Worthington Street.

BACKGROUND

The applicant is requesting approval of a plat amendment to the existing Moody Acres Minor Subdivision. The purpose of the amendment is to adjust the configuration of the northern lot to better align with future right-of-way and access associated with Coach Lane.

The original Moody Acres Minor Subdivision was recorded in 2007 and established the existing lot configuration.

This amendment specifically modifies Lot 2 of the subdivision to improve long-term functionality and consistency with surrounding infrastructure.

PROJECT DESCRIPTION

The proposed amendment includes:

- Adjustment of the northern lot boundary
- Alignment with the planned/future right-of-way along Coach Lane
- Retention of a two-lot subdivision configuration

The updated plat (Williams Minor Subdivision) reflects these changes and shows improved lot orientation relative to adjacent roadways and existing development.

The total subdivision area remains approximately 9.04 acres, with Lot 1 remaining a smaller residential lot and Lot 2 comprising the majority of the acreage.

SITE CHARACTERISTICS

- Located along Worthington Street with access to Coach Lane
- Surrounded by existing residential and subdivision development

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- Contains existing structures and utility infrastructure (as shown on the plat)
- Includes standard public utility easements along lot boundaries

ANALYSIS

The proposed plat amendment has been reviewed by the Development Review Committee (DRC) and applicable City departments.

Staff finds:

- **Consistency with Infrastructure:** The adjustment better aligns the lot with the future Coach Lane right-of-way, which is a forward-thinking correction that avoids future conflicts.
- **No Increase in Density:** The amendment does not create additional lots or increase density.
- **Improved Lot Layout:** The revised configuration results in a more functional and logical lot arrangement.
- **Compliance:** The plat meets applicable subdivision requirements, including frontage, access, and utility easements.
- **No Adverse Impacts:** The amendment is minor in nature and does not negatively impact surrounding properties.

Staff does not identify any issues with the proposed plat amendment.

PROPOSED CONDITIONS OF APPROVAL

1. The final plat shall be recorded with Tooele County.
2. All required signatures and approvals shall be obtained prior to recordation.
3. The plat shall comply with all applicable City standards and requirements.

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811

CALL BLUESTAKES @ 811 AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION. Call before you dig.

Grantsville City Development Review Submittal # 3 04/01/2026

APPROVED Grantsville City Planning Department 04/01/2026

APPROVED Grantsville City Engineer 04/01/2026

APPROVED Grantsville City Public Works 04/02/2026

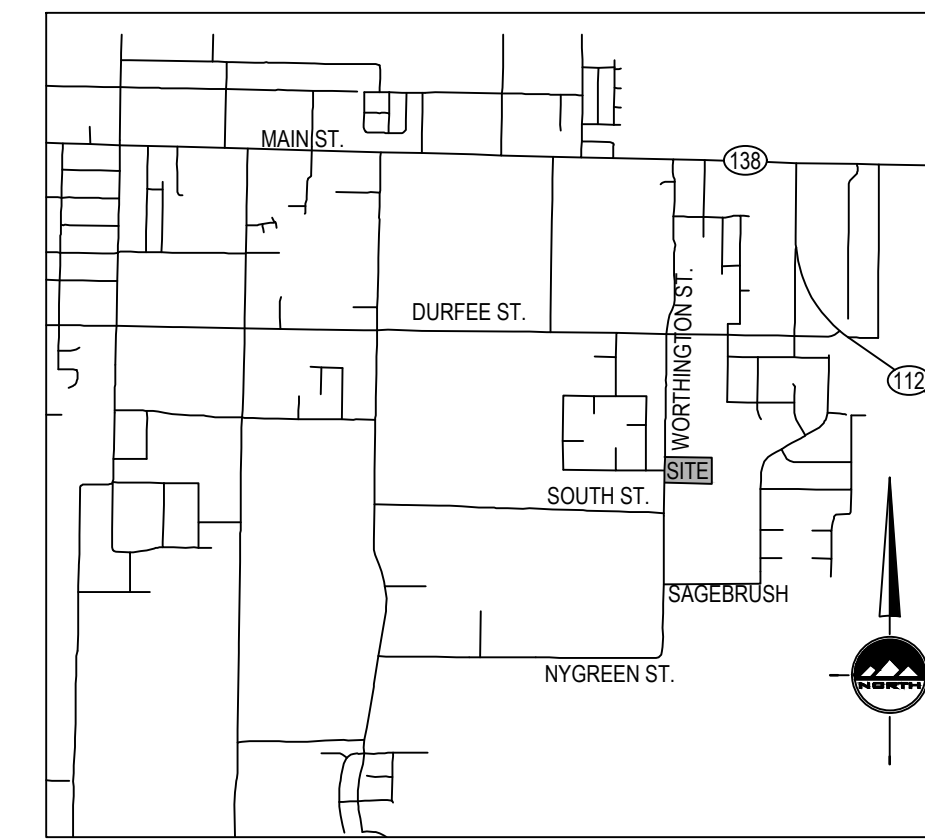
APPROVED Grantsville City Fire Department 04/03/2026

Approved Grantsville Irrigation Co. 04/03/2026

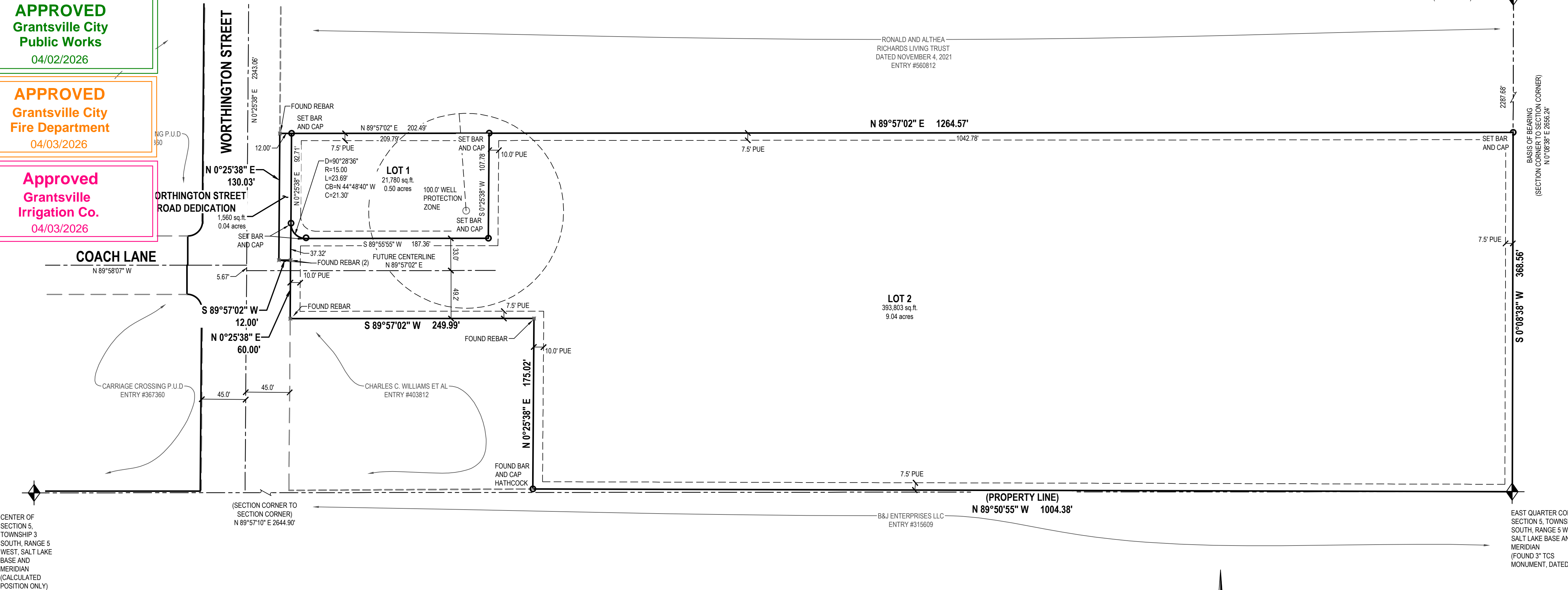
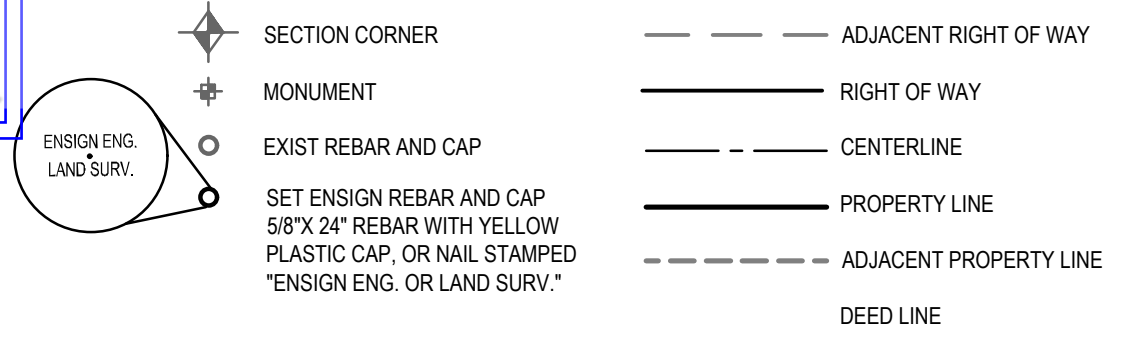
WILLIAMS MINOR SUBDIVISION FINAL PLAT (AMENDING LOT 2 OF THE MOODY ACRES MINOR SUBDIVISION) LOCATED IN THE NORTHEAST QUARTER OF SECTION 5 TOWNSHIP 3 SOUTH, RANGE 5 WEST SALT LAKE BASE AND MERIDIAN GRANTSVILLE CITY, TOOELE COUNTY, UTAH

NOTES

- 1. A 7.5' PUBLIC UTILITY EASEMENT SHALL EXIST AROUND THE PERIMETER OF EACH LOT IN THIS MINOR SUBDIVISION WITH THE EXCEPTION OF THE FRONT LOT LINES WHERE THE EASEMENT SHALL BE 10 FEET WIDE.
2. FINAL GRADING OF ALL LOTS IN THIS SUBDIVISION SHALL BE DONE SO AS TO RETAIN ON EACH INDIVIDUAL LOT ALL STORM WATER GENERATED BY IMPROVEMENT OF THE LOT. THIS MAY BE ACCOMPLISHED WITH EARTHEN BERMS, SHALLOW RETENTION BASINS, LANDSCAPING OR OTHER MEANS APPROVED BY GRANTSVILLE CITY.
3. THE CURRENT OWNER OF THESE LOTS HAS AGREED TO IMMEDIATELY INSTALL OR PAY FOR THE INSTALLATION OF SIDEWALK AND CURB AND GUTTER UPON THE REQUEST OF GRANTSVILLE CITY. THE AGREEMENT TO INSTALL OR PAY FOR THE SAID IMPROVEMENTS IS A COVENANT RUNNING WITH THE LOTS AND SUBSEQUENT OWNERS OF THESE LOTS ASSUME THE SAME OBLIGATION WHEN THEY ACQUIRE TITLE TO THESE LOTS.
4. COORDINATE VALUES SHOWN HEREON ARE BASED UPON TOOELE COUNTY DEPENDENT RESURVEY DATA.



LEGEND



SURVEYOR'S CERTIFICATE

I, Douglas J. Kinsman, do hereby certify that I am a Professional Land Surveyor, and that I hold license No. 334575 in accordance with Title 58, Chapter 22, of the Professional Engineers and Land Surveyors Act. I further certify that by authority of the owners I have completed a survey of the property described on this subdivision plat in accordance with Section 17-13-504, have verified all measurements, and have subdivided said tract of land into a lot, together with easements, hereafter to be known as Williams Minor Subdivision.

A parcel of land, situate in the Northeast Quarter of Section 5, Township 3 South, Range 5 West, Salt Lake Base and Meridian, said parcel also located in Grantsville City, Tooele County, Utah, more particularly described as follows: Beginning at the East Quarter Corner of Section 5, Township 3 South, Range 5 West, Salt Lake Base and Meridian, and running: thence North 89°57'02" West 1004.38 feet to the East line of a parcel whose vesting document is recorded under Entry No. 403812 in the office of the Tooele County Recorder;

Contains 417,143 square feet or 9.58 acres

Date Douglas J. Kinsman License no. 334575

OWNER'S DEDICATION AND CONSENT TO RECORD

Known all men by these present that the undersigned are the owner(s) of the hereon described tract of land and hereby cause the same to be divided into lots and streets together with easements as set forth hereafter to be known as:

WILLIAMS MINOR SUBDIVISION FINAL PLAT (AMENDING LOT 2 OF THE MOODY ACRES MINOR SUBDIVISION)

The undersigned owner(s) hereby dedicate to Grantsville City all those parts or portions of said tract of land on said plat designated hereon as streets, the same to be used as public thoroughfares forever. The undersigned owner(s) also hereby convey to Grantsville City and to all public utility companies providing service to the hereon described tract a perpetual, non-exclusive easement over the public utility, and drainage easements shown on this plat, the same to be used for drainage and the installation, maintenance and operation of public utility service lines and facilities. The undersigned owner(s) also convey any other easements shown on this plat to the parties indicated and for the purposes shown hereon.

In witness whereof I / we have hereunto set my / our hand this ___ day of ___ A.D., 20__

By: Adam Dean Williams By: Misti D. Williams

INDIVIDUAL ACKNOWLEDGMENT

STATE OF UTAH County of Tooele J.S.S. On the ___ day of ___ A.D., 20__ personally appeared before me, the undersigned Notary public, in and for said County of ___ in said State of Utah, who after being duly sworn, acknowledged to me that He/She/They signed the Owner's Dedication, ___ in number, freely and voluntarily for the purposes therein mentioned.

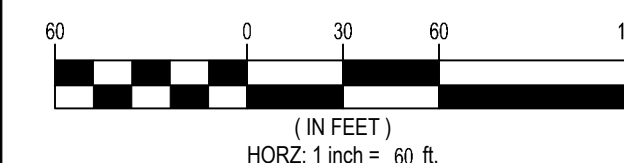
MY COMMISSION EXPIRES: ___ NOTARY PUBLIC RESIDING IN ___ COUNTY.

INDIVIDUAL ACKNOWLEDGMENT

STATE OF UTAH County of Tooele J.S.S. On the ___ day of ___ A.D., 20__ personally appeared before me, the undersigned Notary public, in and for said County of ___ in said State of Utah, who after being duly sworn, acknowledged to me that He/She/They signed the Owner's Dedication, ___ in number, freely and voluntarily for the purposes therein mentioned.

MY COMMISSION EXPIRES: ___ NOTARY PUBLIC RESIDING IN ___ COUNTY.

HORIZONTAL GRAPHIC SCALE



ROCKY MOUNTAIN POWER COMPANY APPROVED THIS ___ DAY OF ___ 20__ BY: ROCKY MOUNTAIN POWER

ENBRIDGE GAS APPROVED THIS ___ DAY OF ___ 20__ BY: QUESTAR GAS COMPANY DBA ENBRIDGE GAS UTAH

GRANTSVILLE CITY MAYOR APPROVAL APPROVED THIS ___ DAY OF ___ 20__ BY THE GRANTSVILLE CITY MAYOR.

GRANTSVILLE CITY ATTORNEY'S APPROVAL APPROVED THIS ___ DAY OF ___ 20__ BY THE GRANTSVILLE CITY ATTORNEY.

TOOELE COUNTY TREASURER I HEREBY CERTIFY THAT PROPERTY TAXES DUE AND OWNING HAVE BEEN PAID IN FULL THIS ___ DAY OF ___ 20__ FOR PARCEL NO. TOOELE COUNTY TREASURER

GRANTSVILLE CITY PLANNER APPROVED THIS ___ DAY OF ___ 20__ BY THE GRANTSVILLE CITY PLANNER.

GRANTSVILLE CITY FIRE DEPARTMENT APPROVAL APPROVED THIS ___ DAY OF ___ 20__ BY THE GRANTSVILLE CITY FIRE DEPT. GRANTSVILLE CITY FIRE CHIEF

GRANTSVILLE CITY PUBLIC WORKS APPROVAL APPROVED THIS ___ DAY OF ___ 20__ BY THE GRANTSVILLE CITY PUBLIC WORKS. GRANTSVILLE CITY PUBLIC WORKS DIRECTOR

GRANTSVILLE PLANNING COMMISSION APPROVAL APPROVED THIS ___ DAY OF ___ 20__ BY THE GRANTSVILLE CITY PLANNING COMMISSION. CHAIR, GRANTSVILLE CITY PLANNING COMMISSION

TOOELE COUNTY SURVEY DEPARTMENT APPROVED THIS ___ DAY OF ___ 20__ BY THE TOOELE COUNTY SURVEY DEPARTMENT. RECORD OF SURVEY FILE # TOOELE COUNTY SURVEY DEPT. DIRECTOR

GRANTSVILLE CITY ENGINEER'S CERTIFICATE I HEREBY CERTIFY THAT THIS OFFICE HAS EXAMINED THIS PLAT AND IT IS CORRECT IN ACCORDANCE WITH INFORMATION ON FILE IN THIS OFFICE. GRANTSVILLE CITY ENGINEER DATE

SHEET 1 OF 1 PROJECT NUMBER: 14351 MANAGER: D. THACKER DRAWN BY: D. THACKER CHECKED BY: D. KINSMAN DATE: 3/25/2026

ENSIGN THE STANDARD IN ENGINEERING SANDY Phone: 801.255.0529 LAYTON Phone: 801.547.1100 CEDAR CITY Phone: 435.865.1453 RICHFIELD Phone: 435.896.2863

WILLIAMS MINOR SUBDIVISION FINAL PLAT (AMENDING LOT 2 OF THE MOODY ACRES MINOR SUBDIVISION) LOCATED IN THE NORTHEAST QUARTER OF SECTION 5 TOWNSHIP 3 SOUTH, RANGE 5 WEST SALT LAKE BASE AND MERIDIAN GRANTSVILLE CITY, TOOELE COUNTY, UTAH

TOOELE COUNTY RECORDER RECORDED # STATE OF UTAH, COUNTY OF TOOELE, RECORDED AND FILED AT THE REQUEST OF: DATE: TIME: FEES TOOELE COUNTY RECORDER

AGENDA ITEM #3

Presentation, Public Hearing, Discussion, and Consideration: Consideration of a proposed General Plan Amendment for parcels 01-071-0-0012, 01-074-0-0012, 01-074-0-0010, and 11-010-0-0002 to change the land use designation from Low Density Residential to High Single-Family Density Wellstone Subdivision, located near Pear Street and Quirk Street.

Planning and Zoning
336 W. Main St.
Grantsville, UT 84029
Phone: (435) 884-1674



**GRANTSVILLE CITY
STAFF REPORT**

To: Grantsville City Planning Commission
From: Community Development Department
Agenda Item: Presentation and Discussion
Meeting Date: March 21, 2026

REQUEST

Presentation, Public Hearing, Discussion, and Consideration of a proposed General Plan Amendment for parcels 01-071-0-0012, 01-074-0-0012, 01-074-0-0010, and 11-010-0-0002 to change the land use designation from Low Density Residential to High Single-Family Density for the Wellstone Subdivision, located near Pear Street and Quirk Street.

BACKGROUND

The applicant is requesting a General Plan Amendment to support the future development of the Wellstone Subdivision. The amendment is being requested in conjunction with a proposed rezone from R-1-21 to R-1-12.

The project area consists of approximately 113 acres located near Pear Street and Quirk Street and is currently designated as Low Density Residential in the City's General Plan.

EXISTING GENERAL PLAN DESIGNATION

According to the Future Land Use Map, the subject properties are currently designated as **Low Density Residential**, which allows for residential development at a maximum of approximately 2 dwelling units per acre.

PROPOSED AMENDMENT

The applicant is proposing to amend the land use designation to **High Single-Family Density**, which would:

- Allow for smaller lot single-family residential development
- Increase overall residential density
- Provide greater flexibility in subdivision design

This amendment would align with the proposed R-1-12 zoning district, which allows minimum lot sizes of 12,000 square feet.

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PROJECT CONCEPT

The applicant has provided a conceptual development plan that includes:

- Internal street connectivity
- Pedestrian trail systems
- Open space areas
- Potential reservation of approximately 54.8 acres for a future school site

The proposal is intended to create a cohesive residential neighborhood while accommodating future community infrastructure.

ANALYSIS

Consistency with General Plan Goals:

- The amendment supports residential growth and provides additional housing opportunities within the City.
- It allows for a transition from very low-density development toward a more efficient single-family neighborhood pattern.

Compatibility with Surrounding Area:

- Surrounding areas include a mix of residential development patterns.
- The proposed designation maintains single-family character while increasing density moderately.

Infrastructure & Connectivity:

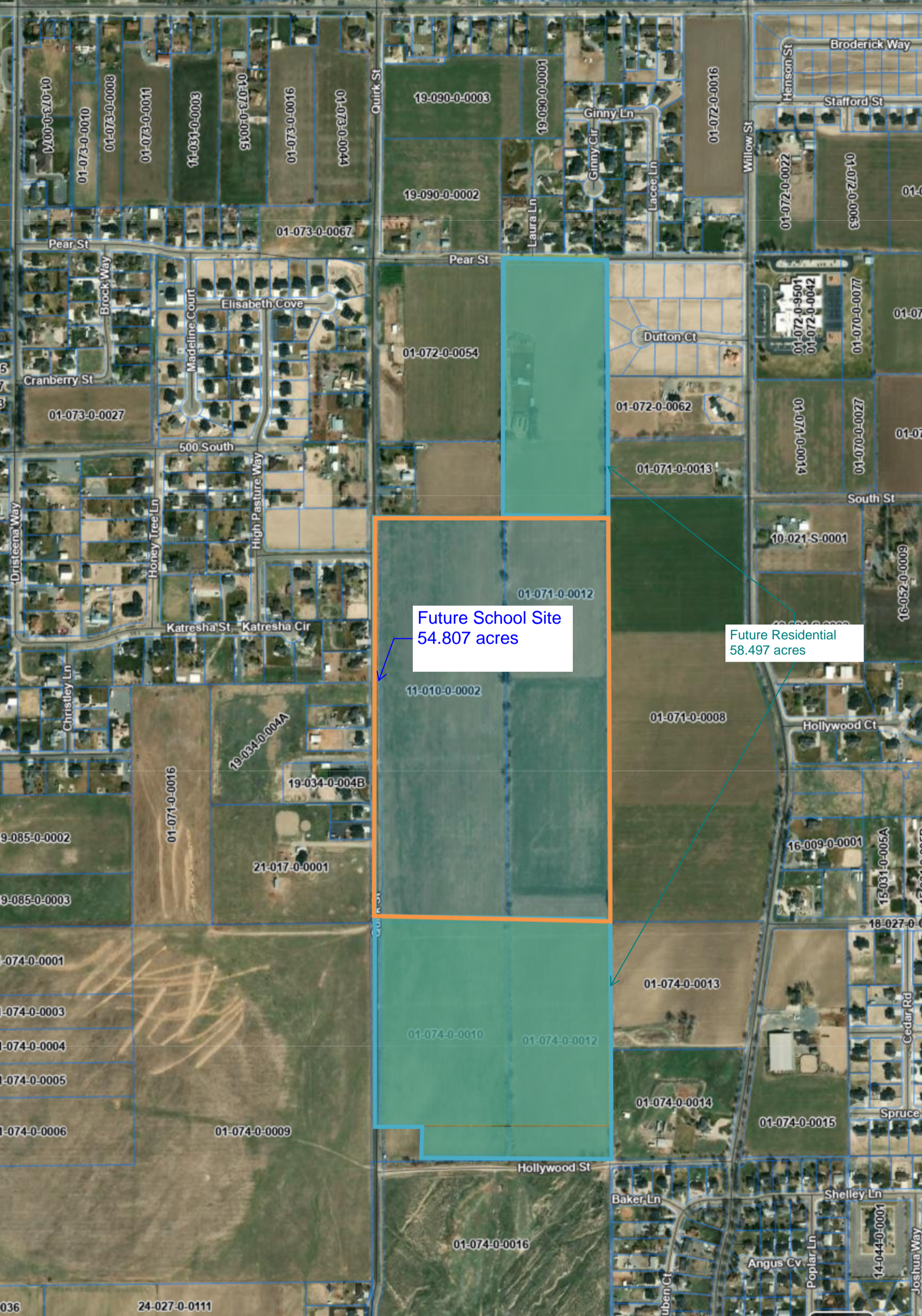
- The conceptual layout promotes internal connectivity and aligns with existing and planned roadways.
- The inclusion of a potential school site supports long-term community planning.

Growth Management Considerations:

- The amendment represents a policy-level decision to accommodate growth in this area.
- It provides a framework for future zoning and subdivision approvals.

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Future School Site
54.807 acres

Future Residential
58.497 acres

01-073-0-0010
01-073-0-0008
01-073-0-0011

11-031-0-0003

9100-0-010-10

01-073-0-0016

11-000-0-0010

19-090-0-0003

19-090-0-0002

19-090-0-0001

01-072-0-0016

01-072-0-0022

01-072-0-0010

Pear St

Brock Way

Madeline Court

Elisabeth Cove

Pear St

Laura Ln

Ginny Ln

Ginny Cir

Lacey Ln

Willow St

Henson St

Broderick Way

Stafford St

Cranberry St

01-073-0-0027

500 South

01-072-0-0054

01-072-0-0062

01-071-0-0013

01-072-0-9501
01-072-0-0042

01-070-0-0077

01-070-0-0014

01-070-0-0027

South St

10-021-S-0001

16-052-0-0009

Dristecna Way

Honey Tree Ln

High Pasture Way

Katresha St - Katresha Cir

01-071-0-0012

Future School Site
54.807 acres

Future Residential
58.497 acres

11-010-0-0002

01-071-0-0008

Hollywood Ct

9-085-0-0002

01-071-0-0016

19-034-0-004A

19-034-0-004B

21-017-0-0001

16-009-0-0001

15-031-0-005A

9-085-0-0003

01-074-0-0001

01-074-0-0003

01-074-0-0004

01-074-0-0005

01-074-0-0006

01-074-0-0009

01-074-0-0013

01-074-0-0010

01-074-0-0012

01-074-0-0014

01-074-0-0015

18-027-0-0001

Hollywood St

Baker Ln

Shelley Ln

01-074-0-0016

Angus Cv

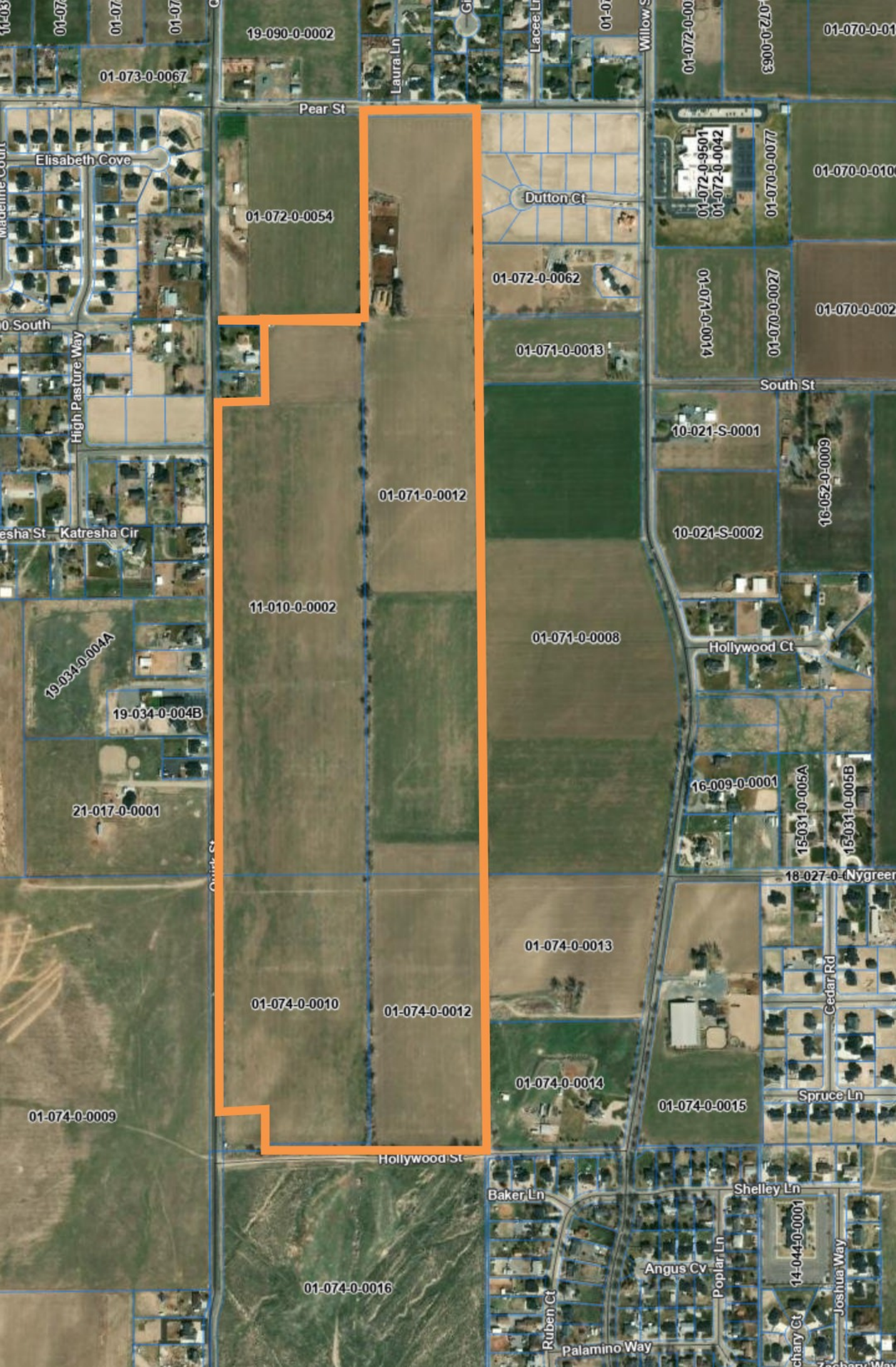
Poplar Ln

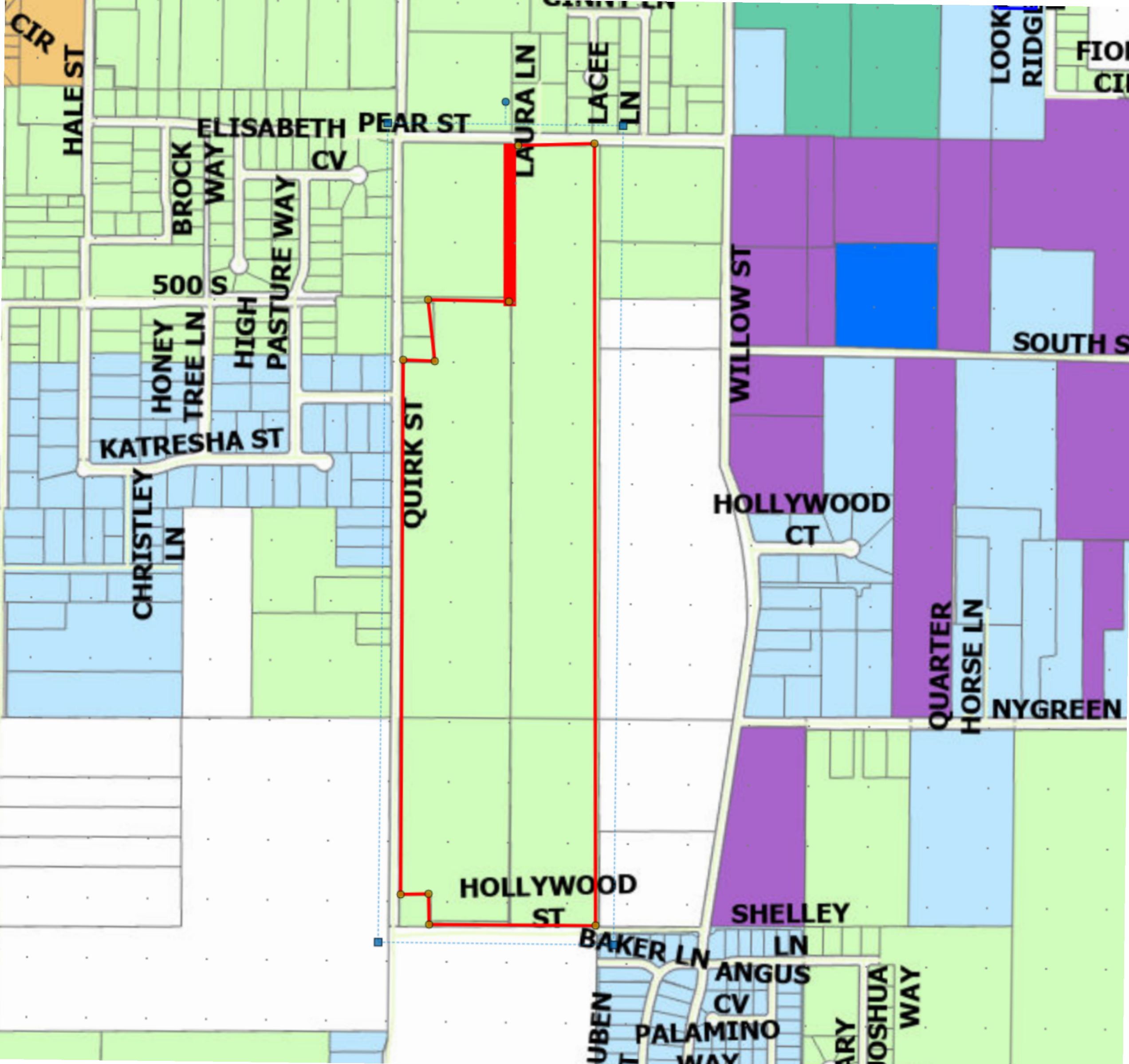
14-044-0-0001

Joshua Way

036

24-027-0-0111





HALE ST

ELISABETH PEAR ST

LAURA LN

LACEE LN

BROCK WAY

500 S

HONEY TREE LN

HIGH PASTURE WAY

KATRESHA ST

CHRISTLEY LN

QUIRK ST

WILLOW ST

HOLLYWOOD CT

HOLLYWOOD ST

SHELLEY

BAKER LN

ANGUS CV

PALAMINO WAY

MARY

JOSHUA WAY

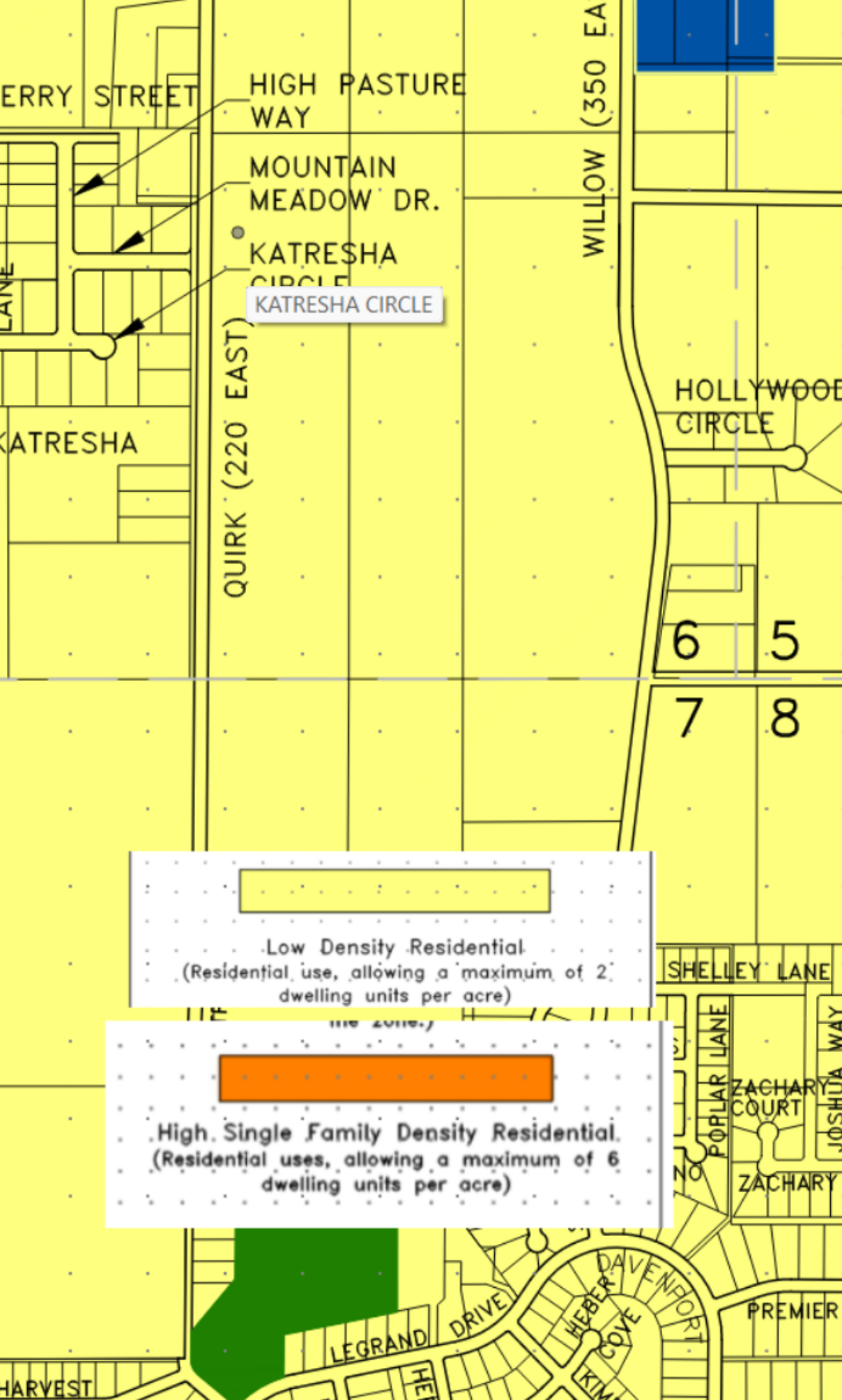
QUARTER HORSE LN

NYGREEN

SOUTH S

LOOK RIDGE

FIORI CIR



KATRESHA CIRCLE

Low Density Residential.
(Residential use, allowing a maximum of 2 dwelling units per acre)

High Single Family Density Residential.
(Residential uses, allowing a maximum of 6 dwelling units per acre)

Executive Summary

Land Use

- Maintain Community Character – Preserve the small town feel and atmosphere through appropriate land use and preservation methods.
- Manage Growth – Manage growth within the community to ensure adequate densities are met and infrastructure costs are attainable.
- Support a Mixture of Land Uses – Create a more diverse and inclusive mixture of land uses within the community, specifically the downtown corridor.

Community Design

- Create a Congruent Community – Create a community that has adequately dense property development to ensure the small town character is retained.
- Provide for Pedestrians – Provide a safer and more convenient atmosphere for pedestrians throughout the community.
- Improve the Streetscapes – Improve the streetscape realm within the community by providing a consistent and adequately designed pedestrian space.
- Personify the Uniqueness of Grantsville – Ensure that building styles, densities and characteristics match the already unique styles of Grantsville.
- Preserve the City's History – Grantsville has a unique and specific history. Work to preserve and personify this character-building history.

Economic Development

- Define the Core – Define the core commercial district and provide adequate amenities or services to attract development for infill of this space.
- Create Priority Areas – Prioritizing areas for development will help encourage appropriate DIRT (Duration, Intensity, Rate & Timing) of development to match the community needs.
- Provide Business Incentives – Where necessary, provide incentives to new business start-ups or existing business expansions to encourage community growth and job creation.

Transportation

- Provide for Future Needs – As Grantsville continues to grow, additional primary and collector roads will need to be created. Work with the public and regional authorities to identify and prepare the community for these roadways.
- Coordinate with Local Agencies – Coordinate with UDOT and Tooele County on roadway projects.
- Develop a Plan – Create a comprehensive transportation system map to provide a clear and concise message to the public about future roadway work.
- Maintain and Improve the Streetscape – Create a functional and visually appealing streetscape.

Housing

- Diversify Housing Stock – Encourage adequate density of housing stock within the community per UCA 10-9a-403(2)(b)(iii)(P-U).
- Improve Quality – Improve the quality of housing within the community to attract new tenants.
- Encourage Affordable Housing – Work with and incentivize local developers to create vital affordable housing within Grantsville.

Recreation & Open Space

- Maintain and Improve Parks – Improve park amenities and maintain them to a high level of service.
- Improve Recreational Opportunities – Work with local residents and regional partners to create improved recreational opportunities that will improve the quality of life for local residents and attract new visitors.
- Increase Cooperation – Increase cooperation among local property owners, developers and the municipality. Maintaining an outstanding park will require a clear and concise agreement of who is responsible to create, maintain and improve each recreational amenity.

Infrastructure

- Provide Quality Services – Provide efficient, cost effective and reliable services or amenities to residents.
- Conduct a Detailed Analysis of Available Water – Residents are concerned about the availability of water. Conduct a detailed analysis of the water supply to ensure adequate water service is available for future needs.

Introduction

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[Implementation](#)

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State Law And Grantsville City's Plan

This general plan update will serve as a framework for Grantsville decision makers as the community continues to experience change, altering future land use, development, and other decisions. The plan is designed to provide a formal policy foundation for enhancing community relations, pursuing economic development activities, coordinating infrastructure planning, and fostering city and county/state cooperation.

This plan is supported by Utah State Law (Title 10 Chapter 9a) which requires local plans and development guidelines to address general health, safety, morals and general welfare issues. The law also requires public participation in the planning process through adequate public notice and open public meetings. The information outlined in this document represent the consensus and vision for the community as well as the goals for the near and distant future.

Purpose Of This Plan

The purpose of the general plan is to provide a set of defined community visions and goals for Grantsville to focus on for the decade that follows final acceptance of the plan. The Grantsville General Plan is not intended to be a static document. Rather, it is intended to be used regularly by local officials and residents to identify and direct where various activities will be located; which strategies the city will encourage and which requirements necessitate their establishment; to identify priorities for city actions and resource allocation decisions; and to identify the provisions of required services and their adopted standards.

Development Of This Plan

Public participation in formulating this plan shaped its content and direction. All information outlined was prepared based upon and incorporating much of the public's valuable feedback.

The Grantsville Planning Commission and City Council placed a high priority on public involvement in the development of this plan, requiring a thorough and detailed public awareness and input campaign to be completed. Public participation strategies utilized in the formulation of this plan included public surveys and open house events, stakeholder meetings, an initiative website, and public hearings.

A summary of the results from each format of community input can be found in the appendix section of this document.

Amending The General Plan

This document should be reviewed at least annually, and updated as the need arises, in order to provide responsible and well-formulated public policy for community decisions.

When necessary, the process for amending the plan, as outlined in Utah state law and local ordinances, requires adequately noticed public hearings, and formal action by Grantsville's Planning Commission and City Council.

Implementation

Implementation of the General Plan by the Mayor, City Council, and Planning Commission fulfills the Plan's purpose and ensures that the community's voice and vision are heard. Each element of the comprehensive plan provides background and context materials as well as goals, policies, and potential action steps for the community to undertake to achieve the plan's vision.

Implementation of the strategic plans or goals should be reviewed annually and amended as needed to ensure the goals are being met.

Next Steps For This Plan

While the general plan defines a clarified community vision and set of goals for the coming years, it does not provide the specifics of "Who, What, When, Where and How" of each goal. To ensure that the community's vision is realized, the City of Grantsville will undergo a strategic planning process that will help rank, prioritize and implement the goals and visions from the general plan. The strategic plan will include:

- Proposed steps for implementation
- Timing for each recommendation
- Funding availability
- Long-term financial needs and recommendations

Community Vision Statement + Core Values

[Community Vision](#)

[Community Core Values](#)

[Community Characteristics](#)

[Regional Context + Anticipated Changes](#)

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Community Vision

A community vision statement is a brief synopsis that “boils down” a myriad of strategies and recommendations into a single sentence. While the statement meets many of the parameters for each goal, it provides a linkage or overarching theme to the entirety of the general plan. All recommendations and elements of this plan are based on this vision. The final Community Vision statement for the Grantsville General Plan is:

“GRANTSVILLE IS A COMMUNITY THAT PRESERVES VALUES AND PROVIDES AN IMPROVED QUALITY OF LIFE FOR RESIDENTS.”

The vision statement takes information like the history of the City, socioeconomics, resident opinion, and the development capacity of the land into consideration. This statement can be amended as the visions and goals or residents within the community adapt.

Community Core Values

Core values of a community are specific statements that illustrate the residents’ desires and needs for their community. These values support and prescribe the future of the community, while remaining adaptable to the ever-changing nature of a municipality. Grantsville values include:

- Retain the feel and atmosphere of a small community
- Offer an increased quality of life for residents, regardless of age or socioeconomic status
- Attract and retain necessary amenities or services to encourage residents to shop locally
- Support development of the local tax base
- Provide affordable housing options that meet local needs and local socioeconomic characteristics for residents
- Support business development for local employment opportunities.

Community Characteristics

The City of Grantsville is a small town in Tooele County known for a great quality of life due to its history and preserved traditions. Many residents have chosen to locate and live within the City of Grantsville due to the small town character and family-friendly way of life.

Grantsville is known for providing a community comprised of open space, convenient access to the natural environment and a strong sense of community. All of these aspects personify the rural character that draws individuals to the community. It is due to these aspects that families are drawn to the community to raise families in a simpler and safer environment.

Regional Context + Anticipated Changes

Grantsville City is a community that is evolving from a rural/agricultural community into a bedroom community supporting the regional economy and growth hubs within the county. Residents of Grantsville primarily provide a workforce for employment centers outside of the city boundaries, primarily the greater Salt Lake and Tooele Valley areas.

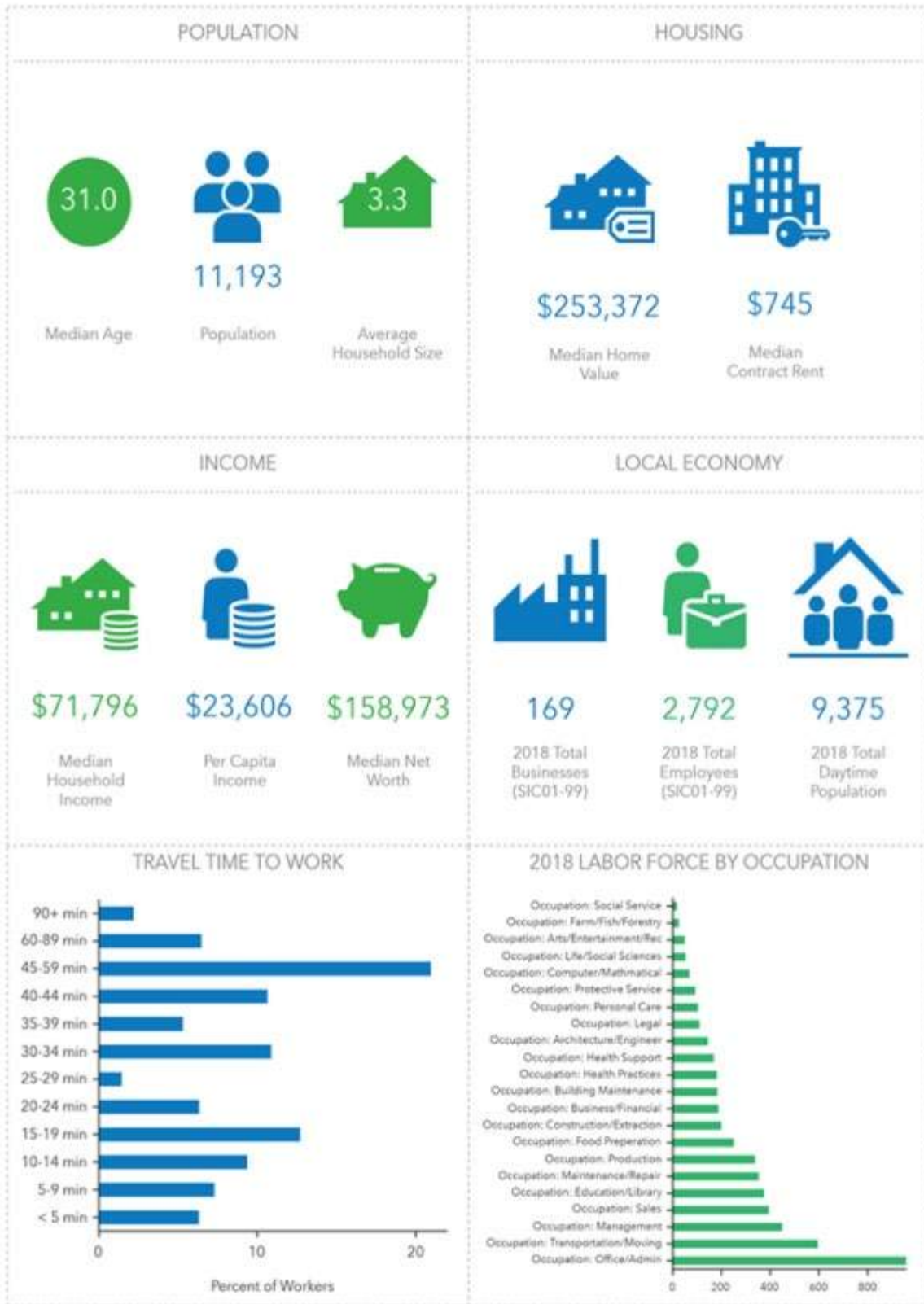
Grantsville is conveniently located within close proximity to the regional hub of Tooele, as well as the greater Salt Lake Valley area. This convenient access has allowed Grantsville to witness an increase in residential growth. While this access allows for individuals to live within the municipality and work in another, it also creates issues with retaining adequate services and retail/commercial amenities for community sustainability.

More dollars are staying locally which expands the local economy and reduces reliance upon regional economies. Since 1998, taxable sales have increased by 7.4% per year outpacing population and inflation growth. Continuing to broaden the local

economy keeps jobs closer to home and increases community self-reliance. It should be noted that while there has been a remarkable increase in taxable sales, a majority of residents still admit to leaving the municipality or ordering online to meet necessary goods or services needs.

Socioeconomic Indicators

Outlined in the below infographic are key community statistics for the City of Grantsville. The land use policies are intended to correlate with population and employment projections. The infographic is a summary of the charts starting on page 52 of the Appendix. NOTE: All of the information and graphics below are based upon information from the ESRI Living Atlas Database and ESRI Business Analyst Data. Sales tax data from Utah State Tax Commission. Population data from the US Census Bureau. Consumer Price Index data from the US Bureau of Labor Statistics.

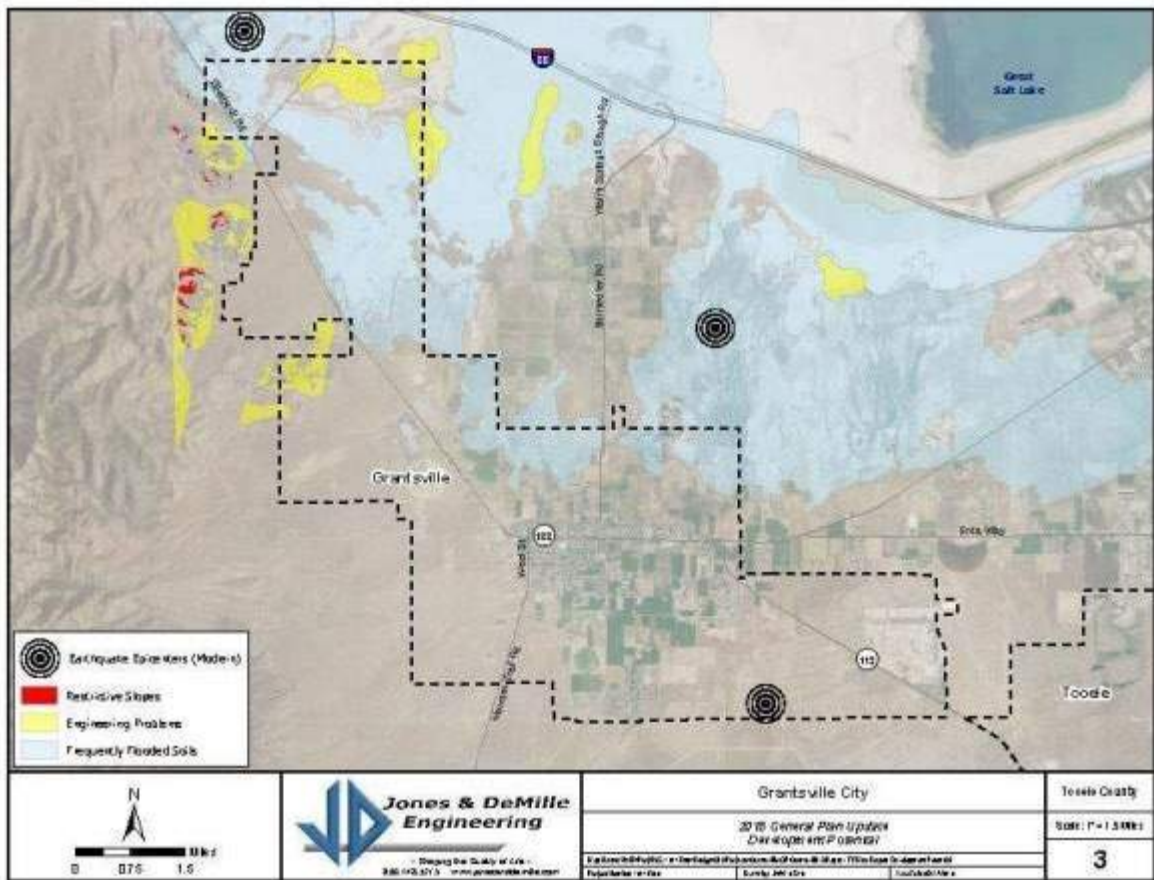


Land Capacity Analysis

The health, safety, and welfare of citizens is the first priority of the City. Special consideration should be given to the built environment and infrastructure that are readily available within the municipality, as well as potentially problematic slopes, soils, or drainage.

The City’s development potential is somewhat constrained because of the high water table on the North side of town. It should be noted that this area will require additional geotechnical analysis to determine the highest and best use for the land. All proposed uses should be properly vetted and ensure that they meet the future land use and density regulations.

The map below indicates problematic areas that will require special consideration when reviewing development requests.



[Land Use](#)

[Conditions Prior To Implementation](#)

[Land Use Designations](#)

[Future Land Use Map](#)

[Annexation](#)

[Goals + Policies + Land Use](#)

[Strategies - Land Use](#)

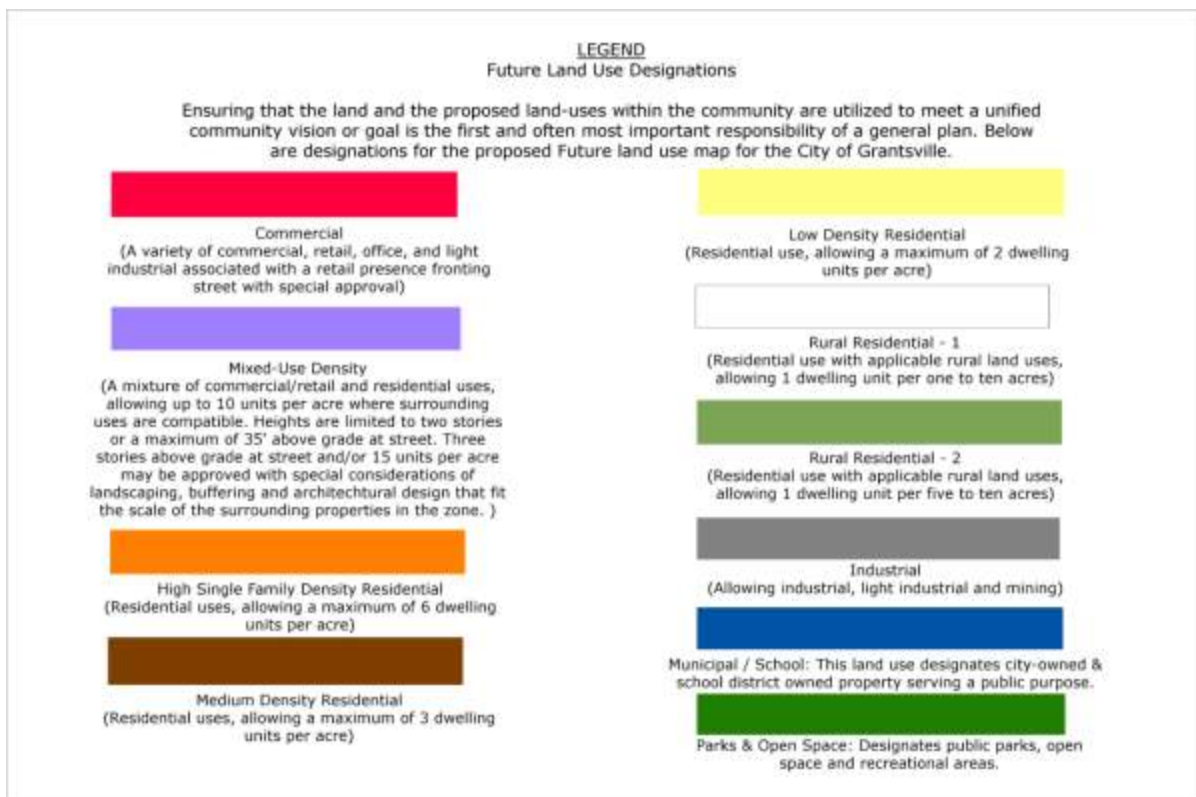
Conditions Prior To Implementation

The land-use development patterns in many areas within the City of Grantsville are non-contiguous, and scattered. This has created an undue hardship for the residents and municipality to maintain.

- Growth and development of land has not been retained or centralized to a location.
- Infrastructure is not adequately located or spaced to support development.
- Current growth is not meeting smart growth principles which are necessary to ensure adequate resources are available within the High Desert region; specifically, to condense development opportunities and infill development along currently existing infrastructure systems.
- Residential development is currently being experienced along the periphery of the community, leaving voids within central community locations.

Land Use Designations

“Future Land Use” is characterized as the way that the community would like to see the area develop and grow generally. As zoning changes are proposed and annexations are requested, this map should be utilized as a guide to Planning Commission and City Council members on where these requests are appropriate and where they are not. The foundational basis of the City’s Zoning Districts can be found in the following designations:

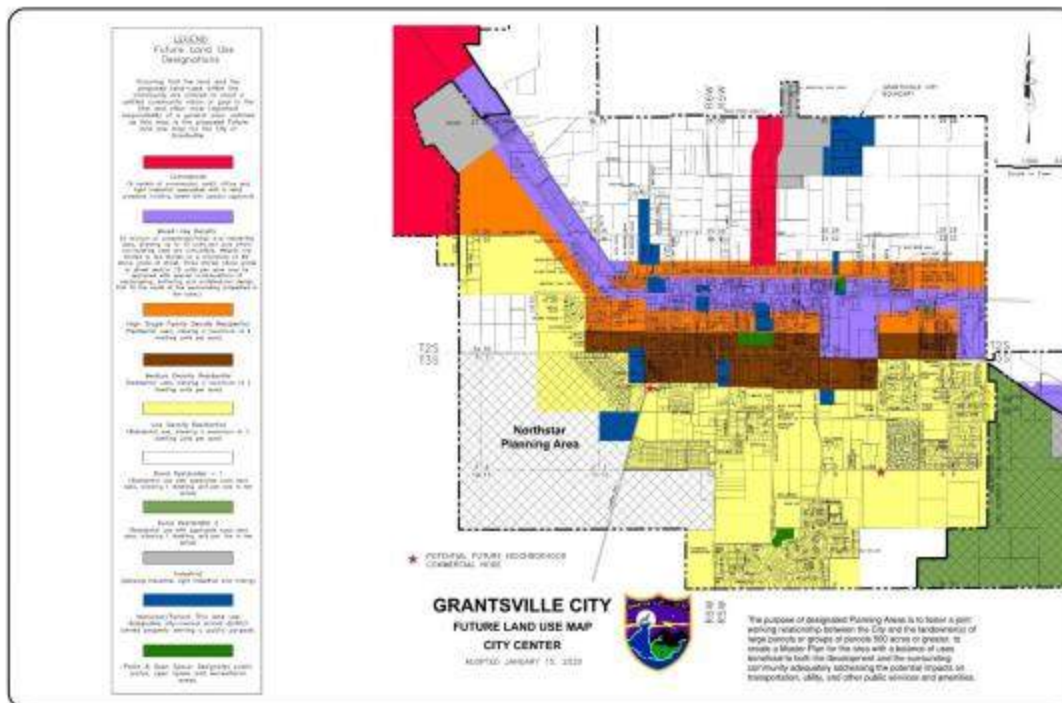


Future Land Use Map

The Future Land Use Map serves as a guide to where future growth should occur. The map guides decisions about proposed uses and densities of development. The map lays the foundation for making changes to zoning in the future, but it is NOT zoning or the zoning map.

The Grantsville Future Land Use Map contains block areas that are not based on exact parcel lines in order to provide a measure of flexibility in interpretation. The colors represent things like allowable land uses and lot size ranges.

The crosshatch areas are designated Planning Areas. The purpose of designated Planning Areas is to foster a joint working relationship between the City and the landowner(s) of large parcels or groups of parcels 500 acres or greater. This is to create a Master Plan for the area with a balance of uses beneficial to both the development and the surrounding community. The plan must adequately address the potential impacts on transportation, utility, and other public services and amenities.



Annexation

Annexation is the process through which properties outside the City's boundaries are incorporated as part of the City. This process includes an application by property owners to the City and a public hearing process where stakeholders can discuss the issue. Petitions for property to be annexed into the City are initiated by property owners and are often started with the intent of receiving services.

In recent years, the City completed annexations in the Flux and Deseret Peak areas. Prior to the annexation, Tooele County projected the Deseret Peak area as one with some of the highest potential population growth (between 1,000-1,500 residents before 2040).

The City should initiate a specific-area planning initiative for these areas as resources are available.

LEGEND
Future Land Use Designations

Existing uses that are not in the designated land use map may be converted to future land use designations at the discretion of the City Council. The City Council shall determine the appropriate future land use designation for any area that is not shown on the map.

	Residential This area is intended for residential use. It is intended for single-family detached homes and is not intended for multi-family or commercial use.
	Medium Density Residential This area is intended for medium density residential use. It is intended for multi-family residential use, such as townhomes or small apartment units.
	High Density Residential This area is intended for high density residential use. It is intended for multi-family residential use, such as multi-story apartment buildings.
	Medium Density Residential This area is intended for medium density residential use. It is intended for multi-family residential use, such as townhomes or small apartment units.
	Low Density Residential This area is intended for low density residential use. It is intended for single-family detached homes.
	Open Space This area is intended for open space use. It is intended for parks, recreation, and other open space uses.
	Forest This area is intended for forest use. It is intended for forested land and other natural resources.
	Industrial This area is intended for industrial use. It is intended for manufacturing, processing, and other industrial uses.
	Community Center This area is intended for community center use. It is intended for community centers, libraries, and other public facilities.
	Parks & Open Space This area is intended for parks and open space use. It is intended for parks, recreation, and other open space uses.



**GRANTSVILLE CITY
GENERAL PLAN
FUTURE LAND USE MAP
DESERT PEAK ANNEXATION**
ADOPTED JANUARY 15, 2009



The purpose of designated Planning Area is to foster a joint working relationship between the City and the landowners of large parcels or groups of parcels 100 acres or greater. To create a Master Plan for the area with a balance of uses, suitable to both the development and the surrounding community adequately addressing the potential impacts on transportation, utility, and other public services and amenities.

GRANTSVILLE CITY

FUTURE LAND USE MAP

FLUX ANNEXATION

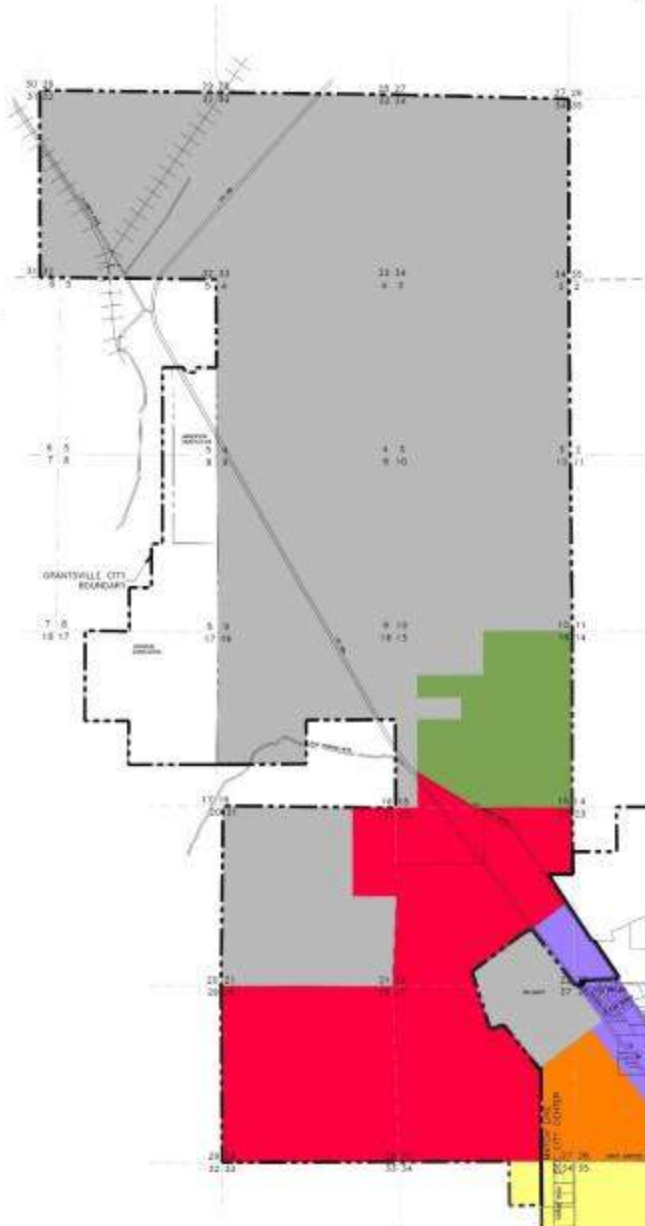
ADOPTED JANUARY 15, 2020



LEGEND
Future Land Use Designations

Ensuring that the land and the proposed land-uses within the community are utilized to meet a unified community vision or goal is the first and often most important responsibility of a general plan. Included on this map is the proposed future land use map for the City of Grantville.

- Commercial**
(A variety of commercial, retail, office and light industrial structures able to retain presents having street with special approval)
- Mixed-Use Density**
(A mixture of commercial/retail and residential uses, allowing up to 10 units per acre where surrounding uses are commercial. Height is limited to two stories or a maximum of 25 above grade or seven. These structures above ground or elevated on 15 poles per acre may be required with special considerations of landscaping, buffering and architectural design that fit the style of the surrounding properties in the zone.)
- High Single Family Density Residential**
(Residential uses, allowing a maximum of 8 dwelling units per acre)
- Medium Density Residential**
(Residential uses, allowing a maximum of 3 dwelling units per acre)
- Low Density Residential**
(Residential uses, allowing a maximum of 2 dwelling units per acre)
- Rural Residential - 1**
(Residential use with appropriate rural lot size, allowing 1 dwelling unit per one to two acres)
- Rural Residential - 2**
(Residential use with appropriate rural lot size, allowing 1 dwelling unit per one to two acres)
- Industrial**
(Heavy industrial, light industrial and mining)
- Municipal/School** This land use designated City-owned school district owned property serving a public purpose.
- Parks & Open Space** Designated public parks, open space and recreational areas.



All of the below goals and policies were derived based on smart growth principles partnered with clearly identified community goals as stated in the public participation process in this general plan update. All recommendations are grounded in a detailed existing conditions analysis and were carefully crafted to help the community create the unique identity desired by residents.

Goal 1. Maintain Community Character. Grantsville seeks to ensure that new development supports and enhances the consistency of an overall community character and that it contributes in a positive way toward the City's image.

1. Regulate setbacks, landscaping, art, appropriate lighting, signs, and other design amenities that complement and enhance the streetscape and design of new development through zoning ordinances.
2. Where resources permit, facilitate the preservation of significant architectural, historical, and cultural structures and landmarks.
3. Ensure that signage is visually attractive and provides a high quality image for the City.
4. Provide additional levels of screening or review for new developments and properties to ensure that their architectural standards, massing, infill, recreational spaces reflect the existing community amenities.
5. Maintain the character of neighborhoods in the City by encouraging comparable uses and densities to existing neighborhoods and development patterns.
6. Protect areas of agricultural uses in the future land use pattern of the City, ensuring that adequate resources remain available to retain this community characteristic.

Goal 2. Manage Growth. Grantsville intends to preserve the integrity of its infrastructure systems by permitting orderly growth that synchronizes development with the availability of public facilities such as road, sewer, and water service needed to support it.

1. The City will make infrastructure and service investment decisions that meet the needs of existing City residents, while balancing the need of growth to provide adequate tax base for future community needs.
2. Implement and routinely assess a thorough program of development impact fees to provide adequate public facilities and services in a timely manner.
3. Maintain an annual Capital Improvement Program.
4. Cooperate with governmental entities that administer and influence areas bordering Grantsville City.
5. Annexations should provide a real and measurable benefit to the City. Measurable benefits may be in the form of qualitative (civic pride, community health, etc.) or quantitative (tax base generation, recreational land acquisition, etc.). The City may require an "annexation impact statement" with all annexations of 5 acres or larger.

Goal 3. Support a Mix of Land Uses. Grantsville desires a well-balanced, financially sound, and functional mix of agricultural, residential, commercial, open-space, recreational, and institutional land uses.

- 1.
2. Provide for the reservation of adequate land to meet projected institutional and infrastructure needs.
3. Ensure compatibility of future land uses with adjoining properties.
4. Promote neighborhood commercial development in targeted areas, to preserve existing or planned residential development without detracting from the residential character of the community. Increase density along the Main Street corridor, offering more clustered housing alternatives for lower income families within convenient access to necessary amenities.

5. Through the land use regulations of the City, and other strategies, encourage an “out-from-the-center” development pattern.
6. Implement a set of concentrated growth boundaries radiating from the center of Grantsville, ensuring that adequate density is realized before allowing further sprawl development to be built.
7. Allow the sizes of lots/units within a subdivision to vary from the zoning requirement while maintaining the overall zoning density of the parcel to provide Improved Open Space through the Planned Unit Development (PUD) Process.

HISTORY

Amended by Ord. [2020-26](#) on 9/2/2020

Strategies - Land Use

1. Exchange information between Grantsville City and surrounding governmental entities on policies/activities which may have cross-boundary impacts.
2. Amend the Land Use Code to support the goals and policies set forward in this updated general plan. It is important that this is readily available to the public and private development sectors.
3. Avoid rezoning residential areas to higher density if the area is not served by adequate public facilities.
4. Work with the programs of the Governor’s Office of Economic Development and EDCUtah to promote the commercial opportunities that the city supports.
5. Use administrative tools (i.e. zoning) to preserve farmland and recreational opportunities.
6. Meet with the County Community Development Department regularly to ensure that development codes are up to date and being implemented by county staff during their plan review.
7. Set aside funds in the next budget cycle to spend on code and maintenance enforcement.
8. Develop and implement impact fees for commercial and industrial uses as well as planned unit developments.
9. Initiate an intergovernmental agreement with the County to ensure that development outside of City boundaries is aligned to City standards.
10. Work with the Tooele County Economic Development department to locate business in Grantsville, particularly uses that have shown an interest in the past.
11. Incorporate the general plan into the City’s website.
12. Consider developing incentives to in-fill development that better utilizes existing infrastructure. Incentives may include a variety of items but may include things like waiving application fees, lowering impact fees etc.
13. Develop an updated annexation policy plan and map.

Community Design

Design

Community Character

Street Design + Edges

Historic Preservation

Nonconforming Uses

Goals + Policies + Community Design

Strategies - Community Design

Design

Well planned community design improves both visual and functional characteristics of the city. Community design shapes, and is shaped by, other facets of planning (such as transportation, housing, and recreation). It is through this unique form meets function process that the City of Grantsville will be able to create, market and retain their unique character and appearance.

There are opportunities in Grantsville for reinvestment in community design, specifically within the areas of community unification and integration, such as:

- Community signage
- Downtown corridor enhancements
- Gateway and entrance signage
- Conforming land uses

Community Character

The character of a community is the image that residents and visitors experience when utilizing community spaces. It is through this “image” that people make their impressions of a community, lasting or temporary. Residents of Grantsville are cognizant of this character and have a strong desire to protect the rural or small town charm that abounds within the municipality. Residents were vocal in their interpretation of what made “Grantsville feel like Grantsville,” often noting that this character is the reason that families and individuals moved to town. It is through preservation of the below listed community character elements that the City of Grantsville will continue to offer their residents the feel of the community that remains attractive:

- Small building form for buildings along the Main Street corridor
- Safe corridors for residents and visitors to utilize with various methods of transportation
- Sense of a “tight-knit” community with neighbors and elected officials
- A multi-generational community, providing opportunities for residents to grow up in and remain in the same community
- A culture that retains and personifies the unique cultural heritage of Grantsville

Street Design + Edges

Streets act as edges and can help define boundaries of districts and create visual changes. These visual changes that happen at edges often are the most impactful. Those visiting the city will be more likely to stay if they feel safe and welcomed. Business will be more likely to locate if they feel the area will attract visitors.

Grantsville’s roadways in the city core area should be redesigned in a way that complements a “small town main street” and a sense of destination, specifically incorporating adequate transportation and safe route designations. In order to accomplish this, the City is supportive of development that prioritizes active transportation improvements.

In the core area, Grantsville can encourage visual interest through guidelines related to building materials, and can enhance visual diversity with setback requirements, massing, and architectural detail variations.

Historic Preservation

Although there are several historic properties in Grantsville, there are currently no formally-designated historic districts in town. However, because historic buildings contribute to the small-town charm and cherished heritage of the community, the preservation of Grantsville's historic legacy and culture is a priority of residents and the City Council. It should be noted that while there are no formal districts, downtown or historic, many individuals still feel that these areas and amenities are the personification of the small town way of life that was an initial draw for their residence within the community.

While it is many of the residents' desire to continue to preserve their small town charm, it is through the creation of a historic district that the community will be able to better preserve and personify this desire. A potential district should include all areas of historical significance or unique assets. This will allow the City of Grantsville to ensure that these unique assets are retained and personified, attracting potential visitors and future residents.



Donner Reed Museum, Photo credit: Jewel Allen

Nonconforming Uses

A nonconforming use is one that legally existed under a previous land use regulation, but that does not meet current requirements for land-use or utilization. Under Utah State law, this use has the right to continue if the use does not change (although ownership can change) and no substantial changes are made to the property, use or process. Similar to nonconforming uses, noncomplying structures are those that no longer meet current regulations (such as setback or height). These structures also have the right to continue, but the City is legally permitted to set local rules about how these structures can be modified and/or brought-up to safety standards.

As is evident within the City of Grantsville, and many similar communities, nonconforming uses are typically utilized when:

- Communities experience growth at a higher than expected rate
- Development is not centralized or located within proximity to each other
- The community has many areas where nuisance uses are not directly adjacent to residential property uses.

While many of these elements are standard for a community witnessing exponential growth, the City of Grantsville has begun the necessary steps to remedy many of these issues.

Goals + Policies + Community Design

Goal 1. Create a community with congruent and adequately dense land uses. As the community looks to unify the elements of the community to create a defined community character, the City should research and encourage adequate growth and density within the centralized core.

1. Create smaller lot requirements for residential and commercial lots in the core area of the City.
2. Create a downtown development authority to allow for flexibility within the land use and development standards.

Goal 2. Create a more pedestrian-friendly community. As new development is proposed, and/or as resources become available to the City, invest in things that promote an active lifestyle.

1. In the core area, the City should look to implement new development that will incorporate shade trees, a landscaped buffer from traffic, ornamental plantings with year-round appeal, public art, site furniture, and pedestrian lighting.
2. Construct maintained pathways of adequate widths on streets in high density areas that currently do not have paths for other types of transportation other than driving.

Goal 3. Implement a community streetscape enhancements program. A community with a unified streetscape has a strong sense of character. The City will implement a comprehensive streetscape project that will allow for a unified character when enhancements are constructed. It is important to note that all proposed streetscape enhancements should be properly vetted by the public to ensure they meet the community vision and will balance preserving private property and the natural environment.

1. Residential streetscapes shall be designed to meet the needs of residential neighborhood and collectors/arterials and implemented in phases and as roadways are rebuilt. Residential streetscapes should include:

- a. Sidewalk
- b. Integral curb/gutter
- c. Planting strip
- d. Trees and/or shrubs
- e. ADA ramps

2. Commercial streetscapes shall be designed to encourage individuals and groups to utilize the commercial core and districts. Commercial streetscapes should include:

- a. Sidewalks
- b. Integral curb/gutter
- c. Planting strips
- d. ADA ramps
- e. Crosswalks

3. Alternative Transportation Options - Where possible, in both residential and commercial streetscapes, installation of alternative transportation options should be recommended. Options should include:

- a. Bike trail installation on one side of the road where right-of-way allows.
- b. Park & Ride lots in coordination with Utah Transit Authority
- c. Equestrian trails

Goal 4. Retain small town charm. The small town way of life is an attractor for residents and visitors. It is critical that the small town charm be retained.

1. Personify and encourage small town form factor buildings within the community. Small town form factors include the size, density and height of buildings within the community.
2. Ensure that the residents have a safe and inviting atmosphere for civic gatherings.
3. Create civic spaces within the community.
4. Properly manage and promote events that personify the small town charm.
5. Personify the historical image and feel of the community, through retaining historic characteristics.

Goal 5. Creatively prepare the built environment to personify the community's vision for Grantsville. Ensuring that the buildings and built environment adequately meet the community goals will maintain community character.

1. Prepare and implement necessary infrastructure upgrades to meet the current and future demand.
2. Review and amend zoning ordinances to promote adequate infill development and discourage sprawl.
3. Promote different areas of Grantsville as unique areas of architecture or elements.
4. Design and monitor development within the community to ensure that traffic, noise, pollution and crime are kept to a minimum.

Goal 6. Preserve the natural environment. Critical to the small town charm is the ease of access to the natural assets surrounding the community.

1. Strive for a balance system of open lands, natural areas, recreation spaces, and parks, including trails and streetscapes.
2. Preserve and protect important natural areas within the City, as practicable.
3. Protect the existing irrigation system of the City and encourage new developments to incorporate the City's existing irrigation system into project designs and amenities.
4. Use storm water basins for ground water recharge.
5. Acquire and manage land and water to preserve, protect, and enhance important natural areas.

Goal 7. Preserve the City's unique history. Preservation of historical assets will aid in protecting the desired character of the community.

1. Protect and preserve Grantsville City's current historical sites.
2. Identify and protect Grantsville archeological and natural resources.
3. Support cultural amenities as an important contributor to our economic health and as a reflection of the importance of the arts and our heritage.

Strategies - Community Design

1. Develop design guidelines for main transportation corridors and residential corridor.
2. Define a viewshed for protection that limits the height, color, and lighting of properties within the viewshed. A viewshed is defined as the area one views from a specific point, including periphery and

ancillary spaces.

3. City Council could identify historic areas / buildings and create walking tours between assets.

4. Promote historical assets and create an interactive guide on the city website.

5. Strengthen “sense of place” through public art, gateway development, wayfinding, and streetscape investments.

6. Grantsville could reinforce their definition of the downtown and cultural core areas with simple signage and by focusing investments in things like holiday decorations on those areas only.

7. Continue to maintain a historic preservation commission that recommends policy or actions to preserve locally significant buildings and areas.

Economic Development

[Conditions Prior To Implementation \(Economic Development\)](#)

[Areas Of Potential](#)

[Goals + Policies + Economic Development](#)

[Strategies - Economic Development](#)

Conditions Prior To Implementation (Economic Development)

Grantsville City is a community that is slowly evolving from a rural/agricultural community to a bedroom community supporting the regional economy. They recognize the need to ensure that commercial land is available for future growth, but like most communities, there are concerns about the trade-offs of economic development.

PROS	CONS
increased amenities	increased traffic
increased tax base	infrastructure upgrade and right-sizing costs
improved local tax dollar capture	reduced pedestrian safety
less commuting	pollution with local employment

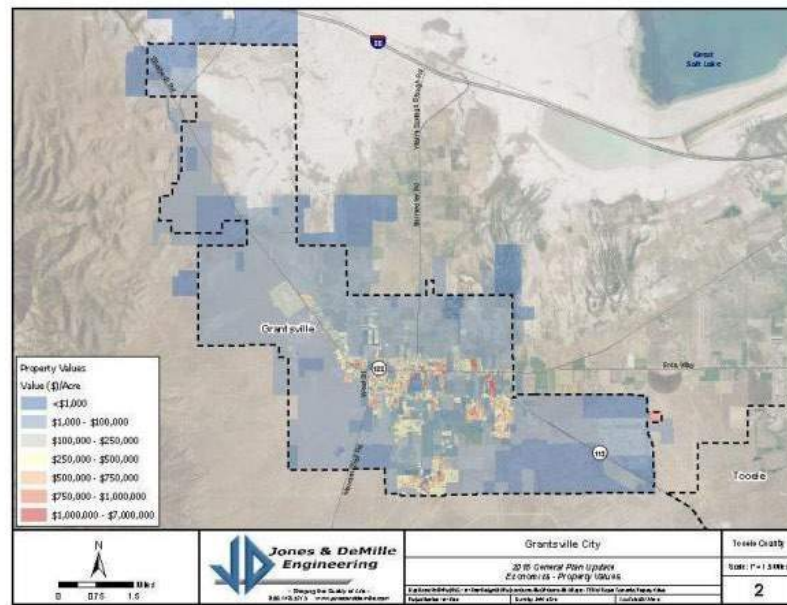
Areas Of Potential

● A major distribution center with approximately 1.3 million square feet of floor space has created a significant positive economic impact to the City both in terms of tax base and increased housing development and has also generated spin-off projects and businesses. ● Commercial/industrial development is expected to hold steady and perhaps build momentum in many parts of the City. ● Many Grantsville residents commute to work in the Salt Lake Valley, while others provide local services for the county and the community. ● Residents have few retail options in Grantsville and must shop out of town. The following table demonstrates the retail sales captured in the City versus per capita averages in the County and State.

Retail Sector Category	Per Capita Sales			Per Capita Leakage	
	City	County	State	(State minus City)	Dollar Leakage
Motor Vehicle & Parts Dealerships	\$ 59	\$ 1,152	\$ 2,263	\$ 2,204	\$ 22,830,298
General Merchandise Stores	296	1,838	2,224	1,928	19,975,314
Build. Material, Garden Equip & Supplies Dealers	152	674	1,213	1,060	10,984,616
Clothing & Clothing Accessories	6	76	613	607	6,286,897
Non-store Retail	5	336	522	517	5,357,619
Electronics & Appliance Stores	3	98	359	356	3,686,007
Furniture & Home Furnishing Stores	15	88	355	340	3,522,015
Sporting Goods, Hobby, Music & Book Stores	3	71	341	339	3,507,744
Health & Personal Care Stores	3	58	172	168	1,743,312
Miscellaneous Retail Trade	393	187	542	149	1,539,196
Food & Beverage Stores	1,438	1,060	1,552	114	1,182,231

* No adjustment for income/buying power due to similar median household incomes among City, County and State.
Source: Utah State Tax Commission

● Areas of greatest retail potential are Motor Vehicle sales, General Merchandise and Building Materials. Most of these sales are being made outside the City but within the County, primarily in Tooele City. ● Most of the City workforce leaves the City for employment. Sixty percent of the workforce works in Tooele County with 40% working out of the County. Based upon commute times, 25-30% of the workforce works in the City, 25-30% work in the County, 40% work out of the County. Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates ● Forty-five percent of the City's workforce income comes from those making \$100k-250k. Ten percent is above \$250k. The three highest paying sectors in the County are Utilities, Public Administration, and Manufacturing with average wages of \$75k, \$62k and \$58k. Many high wage earners are leaving the County for employment. Source: Utah State Tax Commission, U.S. Census Bureau, Division of Workforce Services (2017)



Goals + Policies + Economic Development

Goal 1. **Define the Core.** Maintain Grantsville’s Main Street as the primary retail commercial, office and business area.

1. Formulate standards so that new commercial uses are encouraged to locate in the Main Street Corridor, including protecting the existing residential uses.
2. All new commercial or mixed-use developments will be designed and constructed in a way that will promote the existing characteristics of the historic architectural styles of Grantsville.

Goal 2. **Priority Areas.** Recognize economic opportunity areas identified by the community and prioritize them for long-term development.

1. Zone priority areas selectively and focus incentives and investments in those areas.
2. Grantsville City will create an economic development / industrial policy and reevaluate it annually.

Goal 3. **Administrative Business Incentives.** Grantsville is a business-friendly community that actively seeks ways to encourage business.

1. Streamline the development process for priority businesses (like restaurants and office space).
2. Utilize incentives for desired businesses, specifically ensuring that necessary services are provided within the community.
3. Grantsville will continue to maintain a quick and efficient business and development permitting process.
4. All commercial and industrial developments will provide adequate buffer and screening treatments to protect the desirability and amenities of adjoining properties.

Strategies - Economic Development

1. Designate a council member who is responsible for business recruitment, relationship, or regulations that fit the local economy.
2. Develop an incentive program to attract retail businesses of greatest leakage including auto sales, general merchandise stores, and building & garden.
3. Develop incentive programs to keep jobs local. Encourage greater investment in broadband capacity to keep jobs local.
4. As resources become available, work with the Salt Lake Chamber of Commerce to receive the Governor’s award for being a business-friendly community.
5. Identify, inventory, and assemble underutilized parcels for redevelopment within the commercial corridors and nodes.

Transportation

[Conditions Prior To Implementation \(Transportation\)](#)

[Future Transportation Map](#)

[Impact Fees + Traffic Impact Studies](#)

[Roadway Design](#)

[Access Management](#)

[Active Transportation + Public Transportation](#)

[Roadway Placement](#)

[Goals + Policies + Transportation](#)

[Strategies - Transportation](#)

Conditions Prior To Implementation (Transportation)

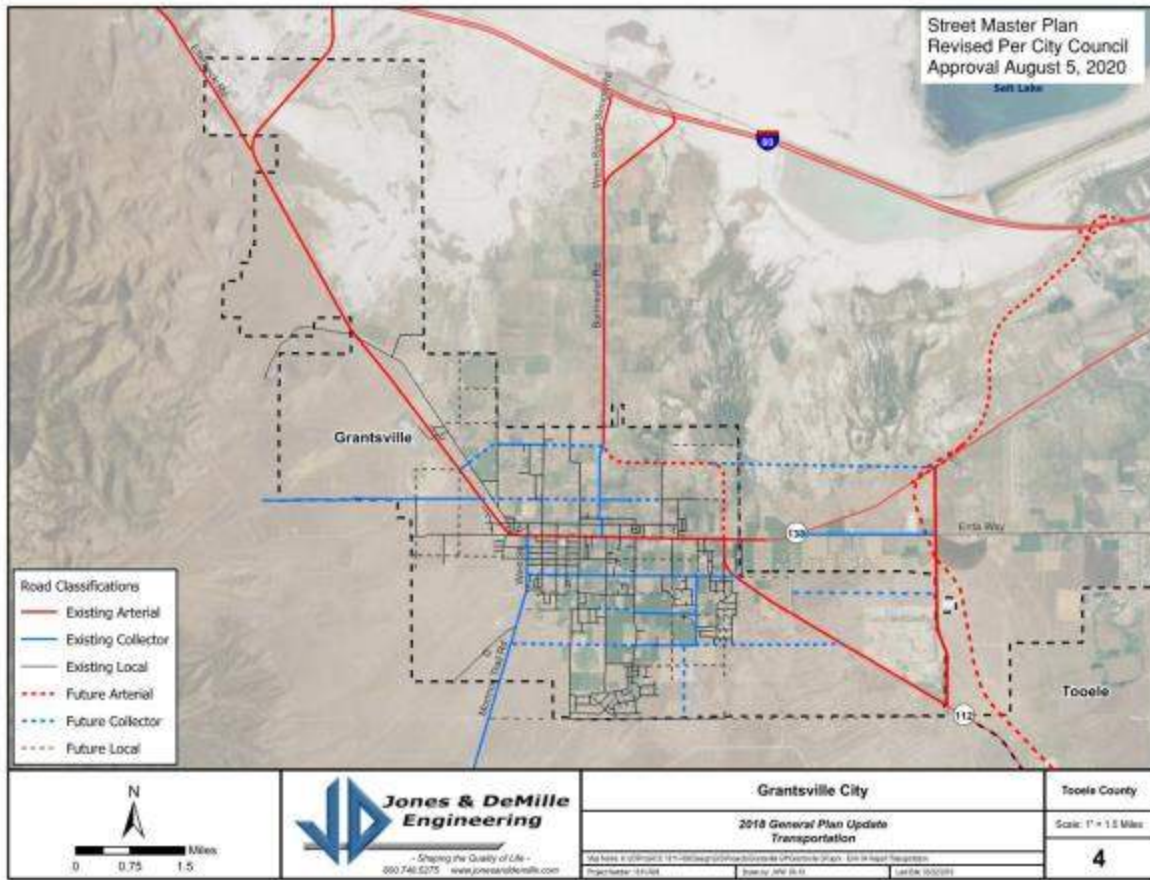
It is essential to analyze and recommend roadway improvements based on an understanding of the historical land use patterns within Grantsville. Land use develops along transportation corridors and typically shapes and follows the future land use plans identified by the City.

Grantsville last updated its transportation master plan in 2005. The following highlights summarize the state of the transportation network in the City:

- Most of the roadways in Grantsville are two-lane roads. Most of them are between 26 and 70 feet of pavement, though some are significantly larger.
- SR-138 currently serves as the major route in and out of the valley, classifying as an arterial or primary route. The Utah Unified Transportation Plan has identified road widening projects for both SR-112 and SR-138. While they are being upgraded, they still have the same capacity bottleneck at I-80.
- UDOT estimates that between 2015 and the end of 2018, there have been just over 300 vehicle accidents within city limits (with most of these accidents occurring on Main Street). In contrast, the Stansbury Park area saw 1,139 and Tooele City area saw 2,128 over the same time period.
- The Tooele County Transportation Plan that was adopted in 2015 did not recommend any new major roadways or transportation corridors within Grantsville. As a result of this, it is recommended to re-evaluate the needs for roadway within the city based upon new growth-demand modeling.
- Recognizing the potential bottlenecks in the valley's network, UDOT and Tooele County collaborated to create "Tooele Traffic," an online resource with real-time information on traffic information and road conditions.
- Maintenance of the existing transportation facilities and construction of new facilities come primarily from revenue sources that include the Grantsville general fund, federal funds, and State Class C funds. Financing for local transportation projects consists of a combination of federal, state, and local revenues. However, this total is not entirely available for transportation improvement projects, since annual operating and maintenance costs must be deducted from the total revenue. In addition, the City is limited in its ability to subsidize the transportation budget from general fund revenues.
- There is a clear need for more ways to access Grantsville generally. The new Midvalley Highway will do this as well as provide opportunities for broadening the local economy in the area.

Future Transportation Map

This plan has looked at the major circulation patterns required by the land uses presented in this plan. The map in this chapter shows major arterial, major collector and collector roads. This map is a schematic plan only and the final alignment of all roadways will be determined by specific demands of each area.



Impact Fees + Traffic Impact Studies

Grantsville does not currently have a street impact fee for transportation improvements. The impact fees can assist in building the necessary roadway improvements to handle the increased growth and mitigate congestion that is currently being realized on the roadways in the City. Proposed roads on the future roadways map and maintenance of existing roads can be funded by these fees.

As part of furthering this plan and deciding how to use funds wisely, Grantsville City will require an impact fee for any new development and a Traffic Impact Study (TIS) for larger developments. A TIS is a specialized study of the impacts that a certain type and size of development will have on the surrounding transportation system. It is specifically concerned with the generation, distribution, and assignment of traffic to and from a new development. Since residential and private roads are not part of the Future Roadway map, TIS reports allow the City flexibility when deciding these smaller road locations.

Roadway Design

A safe transportation system is one of the top priorities of Grantsville. New roads should be designed to give proper access to emergency vehicles and should be well maintained. Also, roadways and walkways should be designed in a way that all people can equally access and use the transportation system.

Specific areas of concern are residential neighborhoods and schools. A reduction in the use of cul-de-sacs should be emphasized in order to provide greater traffic circulation. Streets that serve schools should incorporate traffic calming devices and have well-designed pedestrian street crossings. Minor collectors should maintain the current grid system.

Overall, the roadway network should focus on connectivity. This means that block sizes should not be too large, and important collectors should not dead end or terminate in a cul-de-sac. This is best achieved by utilizing a hierarchical grid system of roadways, which Grantsville already has in some parts of the City.



Access Management

A critical factor to the safety and function of the transportation system is access management. Access management is the practice of coordinating the location, number, spacing and design of access points to minimize site access conflicts and maximize the traffic capacity of a roadway. Techniques include signal spacing, street spacing, access spacing, and interchange to crossroad access spacing.

Since the main road through the City is a state highway, the City cannot control access on it. On local collectors, the City can focus on more access to slow down traffic and minimize cut through traffic as the state highway becomes more congested.

Future commercial and high-density residential development along Main Street should anticipate access management requirements from UDOT.

Active Transportation + Public Transportation

If done correctly, public transportation services can reduce traffic on roads. Utah Transit Authority (UTA) currently has limited plans for public transportation expansion within the City of Grantsville. As the city continues to increase in density and population, Grantsville intends to work with UTA to review the need based upon future growth demand.

Essential to this system is connectivity to areas outside of the City's boundaries on a regional scale. Though not currently included in the Wasatch Choice: 2019-2050 Regional Transportation Plan, Grantsville intends to be involved in studies that are conducted to determine regional transportation investments.

Often those who use public transportation need to bike or walk from stations to their destinations. Therefore, Grantsville considers an optimized transportation system to be one with transit investments that also include bike and pedestrian infrastructure.

Roadway Placement

Currently the community is experiencing growth around the periphery of the municipal boundary. As this development trend continues to take place within the community roads that were designed and located for neighborhood usage will become arterial or collector roads. This expansion of traffic along the roads will require one of two options to be completed: (1) to enlarge roadways or (2) to add new roads. As this requirement becomes a necessity, the public will need to be petitioned for input about roadway placement.

Goals + Policies + Transportation

Goal 1. Provide for the existing and future transportation needs. Develop and maintain transportation systems of adequate size and capacity to serve the existing and projected permanent and peak population in all areas of the city.

1. Street paving and pedestrian surfacing materials should be economical, serviceable, and easy to repair. The variety of surfacing materials should be kept to a minimum.
2. The parking policy shall be to require on-site parking enough to meet the anticipated parking demand of proposed development.
3. The City will require necessary transportation improvements, including adequate right-of-way dedications, and other transportation facility enhancements, concurrent with development approvals to adequately serve the development.

Goal 2. Connect local transportation facilities with regional transportation systems.

1. Maintain close relationships and cooperation with organizations that have transportation implementation/planning responsibilities, such as UDOT, Tooele County, and WFRC in order to stay informed of planned future transportation developments and communicate the needs of the community.
2. Maintain the ability to provide fire and ambulance protection, delivery and public transportation service in all areas of the city.
3. Coordinate with UDOT for Park & Ride lots.

Goal 3. Develop a comprehensive transportation system. Incorporate many modes of travel, including private vehicle, mass transit, pedestrians and bicycles.

1. Access for the disabled shall be addressed in all public improvements.
2. Provide a pedestrian-oriented sidewalk, path and trail system that offers convenient access throughout the entire city.
3. Walking and biking will be a practical and enjoyable means of travel within the City with the provision of safe sidewalks and multiple use trail system (including ATV and equestrian users).
4. Consult the Tooele County Active Transportation Plan when considering transit and active transportation investments locally.

Goal 4. Maintain a functional and visually appealing streetscape. Parking, pedestrian, landscaping, plaza and street furnishing improvements should be designed to accommodate four-season weather conditions.

1. Provision should be made for future undergrounding of utility services.
2. No new above-ground utility service lines will be created.
3. Landscaping within the right-of-way shall be reviewed on a case-by-case basis relative to

existing and future right-of-way uses and should employ native species where possible.

4. Property owners that have lots fronting on rights-of-way should be responsible for landscaping maintenance (e.g., along sidewalk planting strips).

Goal 5. Public participation for roadway design - As new roadways are located or as roadway classifications are expanded, it is recommended to complete the following:

1. Undertake a transportation master plan update.
2. Coordinate with the public to identify concerns residents may have.
3. Reach a compromise about locations and roadway designs that are implemented.

Strategies - Transportation

1. Continue a regular maintenance program of pavement preservation methods such as chip sealing, crack sealing, pavement sealing, and overlays on existing roadways to maintain roadway integrity.
2. Establish a street impact fee for new development.
3. Consider requiring a Traffic Impact Study for any new, significant developments.
4. Incorporate appropriate site planning criteria into the development approval processes.
5. Adopt a program of street and highway landscaping (i.e. street trees) to enhance the appearance of the City's circulation system.
6. Convene local community volunteers to make recommendations on safe bicycling infrastructure (bike lanes, widen shoulders, share the road signs, etc.) on local streets.

Housing

Conditions Prior To Implementation (Housing)

Moderate Income Housing

Future Demand

Goals + Policies - Housing

Strategies - Housing

Conditions Prior To Implementation (Housing)

Assessing a community's housing stock in a general plan ensures that future housing needs are addressed before the issues of supply, cost, and quality become problematic. Grantsville is a city of quality housing stock and a welcoming population. Members of the Grantsville community share the goals of high quality and accessible housing. This can be achieved by allowing diverse housing styles that blend aesthetically with neighboring structures and land uses.

Moderate Income Housing

Grantsville completed their biennial report on moderate income housing in 2018, and the new state model was run for this plan update. The following is a summary of its findings.

- The housing profile of Grantsville's total population in 2017 was roughly 84% in owner-occupied units, and 16% in rental housing units.
- The population in both owner-occupied and rental units is expected to increase over the next five years, but the number of owned units will likely far outpace rental units (+45% and +15% respectively).
- As expected with the new housing developments in Grantsville since 2010, the number of households that own their housing without a mortgage has declined and will continue to do so.
- Occupancy rates for rental units has been and is expected to remain very high.
- Median housing costs for owner occupied housing are currently (2017) estimated to be \$1,277 and median gross rents are at \$815 per month.
- The median household income for City residents is estimated to be at \$66,478. Those in owner-occupied units are reporting \$71,609, and those in rental units report \$31,042.
- Utah Statute requires cities to evaluate their housing opportunities for those earning 80% of the "area median income." Tooele County's household AMI is approximately \$74,000 for households that are between 3-4 people, and 80% of this amount is \$59,200. Under the assumption that appropriate housing costs should not exceed 30% of a household budget, then the City should look for ways to support housing development that is as, or more affordable than, what is in the market currently.

Future Demand

While petitioning input from the community and working with the local elected officials, it became evident that the housing stock within the community is not necessarily considered affordable for all individuals specific needs. To remedy this, affordable housing needs will be reviewed, and adequate options will be provided for all individuals or families as required by state law. Future demand will be matched with the community housing forecast and a preference be placed on affordable housing alternatives. Infill development should be preferred for affordable housing, offering a cost reduction to developers and even potentially a streamlined process for approvals.

Goals + Policies - Housing

Goal 1. **Housing Stock.** Grantsville seeks to develop a variety of housing opportunities.

1. Support the development of single-family dwellings, multi-family dwellings, and retirement housing.
2. Encourage a variety of housing and residential opportunities by establishing and providing a range of allowed residential densities and lot sizes [as per UCA 10-9a-403(2)(b)(iii)(A)].

Goal 2. **Moderate Income Housing.** Grantsville seeks to equitably provide housing opportunities for its residents.

1. Grantsville will continue to monitor the supply and demand of the local housing market to ensure that the needs of residents are met, and that housing stays affordable through regulation and incentives.
2. Continually evaluate the land use regulations of the City to ensure they work to achieve the purposes of this Plan.
3. The City will work to provide opportunities to live in safe, habitable and affordable housing.
4. Work with other agencies to provide moderate income housing for City residents [as per UCA 10-9a-403(2)(b)(iii)(P-U)].
5. Encourage the preservation of existing housing to provide opportunities for moderate income housing [as per UCA 10-9a-403(2)(b)(iii)(L)].

Goal 3. **Accessory Dwellings.** Grantsville will consider including additional types of accessory dwellings permitted within city boundaries.

Goal 4. **Encourage affordable housing.** Affordable housing must be matched to the average income for residents.

1. Incentivize a variety of affordable housing options to ensure all families, individuals and couples have an equal opportunity.
2. Encourage infill development within the downtown core (as defined on the future land use map) [as per UCA 10-9a-403(2)(b)(iii)(F)].

Strategies - Housing

1. Review height, viewshed, preservation of open space, and historic preservation policies and ensure that they are not barriers to affordable development within City.
2. Continue to work with nearby municipalities to ensure that workforce housing and transportation for employees is provided.
3. Consider Public Private Partnership opportunities for the City and major employers to provide subsidized employee housing.
4. Provide additional multi-family housing infill along Main Street corridors and immediately adjacent cross streets.
5. Consider ordinance relative to changes to the amount of land that is zoned to allow accessory units to create more rental opportunities.
6. Consider working with developers to use state low-income housing tax credit funds to subsidize affordable apartment developments.

[Recreation + Open Space](#)

[Conditions Prior To Implementation \(Recreation + Open Space\)](#)

[Recreation Plan](#)

[Special Protection Areas](#)

[Recreation Spaces](#)

[Potential Improvement Opportunities](#)

[Goals + Policies - Recreation And Open Space](#)

[Strategies - Recreation And Open Space](#)

Conditions Prior To Implementation (Recreation + Open Space)

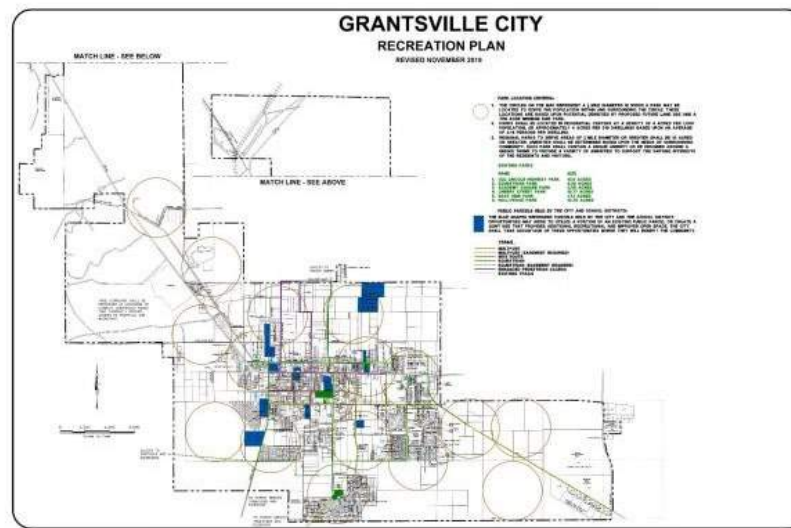
Grantsville desires to maintain and cultivate recreational opportunities that serve the interests of residents and visitors. These recreation opportunities greatly enhance the quality of life for our residents. Highlights of existing conditions include:

- Convenient Access - Recreational assets surround the community and are quickly accessed through pedestrian, vehicular, and bicycle access.
- Ample land (privately held) is available around the perimeter of Grantsville, allowing for expansion of recreational opportunities into regional amenities (i.e. trails along foothills) if the community desired to expand these opportunities.
- Parking at recreational facilities is limited, causing ingress and egress issues.
- Recreational opportunities are bound by roadways, limiting the potential uses.
- Many residents voiced concerns that there are not a lot of after-school options for youth and consider a “Rec Center” as a solution.

2019 Park Facilities

Location	Acreage
Academy Sq.	0.65
City Hall	0.5
Clark Farm	0.25
Lincoln Park	0.9
Museum	0.3
Shops	0.11
Cherry Street Park	15.77
Cemetery	7.02
Clark Cemetery	1.7
Hollywood Park	10.75
East Side Park	1.74





Special Protection Areas

State statute requires that general plans “identify and consider each agriculture protection area” Utah Code §10-9a-403(2)(c). Statute also requires the plan to recognize industrial and/or critical infrastructure materials protection areas. These protection areas are a section of land that has a protected, vested use of an agriculture, mining, or industrial nature for a period of 20 years. Under state statute, a community must appoint an advisory board that reviews requests from private property owners that want to establish a protection area. A final decision is then made by the legislative body, and it is registered with the Utah Division of Agriculture and Food (UDAF). During the 20 year period, the land and use is protected from rezoning, eminent domain, nuisance claims, and state development.

The Steering Committee involved with the development of the 2019 plan update were not aware of any parcels within city limits that have been formally designated as agriculture, industrial, or critical infrastructure protection areas. The City is interested in working with property owners that are considering the need for these designations before the process is formally initiated.

Recreation Spaces

Currently, Grantsville has several regional and neighborhood-scale recreational spaces available for the public. Recreation is currently being completed on both municipal-owned and privately held grounds. Parks and other recreational spaces are in acceptable condition, yet there appears to be significantly more demand for this space than space is available to utilize. Recreational spaces are inadequate for sports leagues to have practices or games, specifically baseball, softball and soccer.

The National Recreation and Park Association (NRPA) has developed standards for parks, recreation and open space development that are intended to guide communities in establishing a hierarchy of park areas. The general standard established by the NRPA for park acreage per 1,000 people is between 15 and 17 acres, or 1.5 to 1.7 acres for every 100 people. Grantsville will use 4 acres per 1,000 people as the standard for future park planning due to the large lot sizes that are prevalent within the community. Future park planning should involve an analysis of total acres as well as activity amenities (i.e. pickleball, playgrounds, etc.).

Potential Improvement Opportunities

Ensuring that the community retains the recreational assets that will draw users to the site is of vital importance. To improve the amenities that are available, it is recommended to provide the following elements:

1. Interconnected recreational opportunities - specifically trail linkages.
2. Centrally located “regional parks” renovations. These parks are typically 15-25 acres in size and offer a myriad of opportunities for recreational enjoyment.
3. Local neighborhood park renovations. These parks are roughly 2-5 acres in size and are focused around a green space and small exercise facility to encourage use by younger children.
4. Installation of bike lanes throughout the community.
5. Develop a city-wide parks and recreation plan and incorporate the priority projects into the city’s capital budgeting process. This plan should also include an inventory of property that is currently owned by the city.

Goals + Policies - Recreation And Open Space

Goal 1. Improvement and Maintenance of Open Space. Grantsville seeks to maintain recreation facilities and natural assets to improve the quality of life and area property values.

1. Protect air quality, groundwater and surface water resources, drinking water resources, and soils within the City.
2. Use citizen volunteers for select maintenance projects.
3. Maintain a park funding program to ensure that the funds are available to improve and maintain dedicated parkland and acquiring park acreage.

Goal 2. Improve Recreation Opportunities. Grantsville encourages the development and maintenance of parks with quality recreational facilities that connect all parts of the community.

1. As resources are available, work with the county and neighboring communities to provide programs for a variety of passive and active recreational opportunities for all area residents.
2. As resources and opportunities allow, obtain land and facilities as they become available and/or ahead of need for subsequent improvement to meet future recreational and open space needs in community expansion areas.
3. All park improvements will be universally accessible as much as possible.
4. Provide a connected and useable open space network.
5. Establish open space guidelines and maintenance options for existing and future open space areas.
6. All new developments will be required to contribute to the provision of open spaces within the City, either through onsite reservation, where appropriate, offsite contributions, or payment in lieu.
7. Increase prescribed play spaces for sporting teams or events, specifically soccer, baseball, softball and other sports.
8. Play structures/areas shall meet and/or exceed all current CPSC, ASTM, IPEMA standards, and ADA requirements.

Goal 3. Public/Private Cooperation. Grantsville supports public/private cooperation in developing recreation and open space improvements, services, and facilities.

1. Encourage residential and commercial developers to improve and/or construct recreational facilities in lieu of paying fees for developments that will generate need beyond current recreation infrastructure capacity.
2. Support the arts, emphasizing the potential of the arts to add to the quality of life of City residents.
3. Support and promote the growth and enhancement of the facilities and programs of local museums.
4. Consider granting a density bonus which will encourage developers to provide fully built out parks and recreational facilities. Play structures/areas shall meet and/or exceed all current CPSC, ASTM, IPEMA standards, and ADA requirements.
5. If developed parks are within $\frac{3}{4}$ of a mile from a proposed park, require developers to provide funds to maintain and improve the existing park.

Goal 4. **Park Acreage Acquisition Plan.** Grantsville will develop a plan to acquire land for the development of regional parks and recreational amenities through option or right of first refusal contracts, use of fee-in-lieu payments and grant opportunities.

1. Use option or right of first refusal contracts with landowners to secure acreage for future parks as property becomes available.
2. Develop a plan for using fees acquired from “fee in lieu” payments as development continues.
3. Seek grant opportunities to purchase land for regional parks and recreational amenities.
4. Set standards for regional/ neighborhood parks and recreational facilities.

Strategies - Recreation And Open Space

1. Formulate a coordinated, multiple-use trails plan that may be implemented on City-owned property and as a requirement of development approval, include trails with a maintenance plan that connect all areas of the city through natural areas.
2. Seek out state funds for recreation programs and facilities.
3. Acquire right-of-way for trail network as a new development is proposed.

Infrastructure + Public Facilities

[Introduction \(Infrastructure And Public Facilities\)](#)

[Culinary Water](#)

[Secondary Water](#)

[Water Sources](#)

[Natural Gas](#)

[Wastewater System](#)

[Power](#)

[Sanitation](#)

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[Goals + Policies - Infrastructure And Public Facilities](#)

[Strategies - Infrastructure And Public Facilities](#)

Introduction (Infrastructure And Public Facilities)

The City of Grantsville recognizes the need to provide capital facilities within the City to protect the health, safety, and property of the City and its citizens by maintaining the level of service for future generations which Grantsville City's residents, industries, and businesses have enjoyed.

The purpose of the public facilities chapter is to explain the various public facilities and services within the city, such as water and sewer. These services represent the public's investment in the development and operation of Grantsville. The public facilities chapter should be reviewed periodically and updated as necessary in order to meet the evolving needs of the City.

Development in the future will cause a demand for more public utilities. Estimates can be made about the demand that will exist in the future for these services based upon population projections and other information.

Culinary Water

Water planning and the efficient use of water is a city-wide priority. Grantsville City has five (5) water sources, four (4) water storage tanks, and a distribution system consisting of pipelines ranging from 4-inches to 16-inches in diameter. The City's current distribution system meets the City's required level of service.

Deseret Peak has existing culinary water rights that have been deeded to the city.

Secondary Water

The Grantsville Irrigation Company provides secondary water, but it is limited to the supply available.

Water Sources

Grantsville City holds water rights available for municipal, recreation, and irrigation use. The City has also acquired other minor culinary water rights via standard development policy.

A sole source aquifer is defined as providing at least 50% of the drinking water to the population residing above the aquifer. Service areas of an aquifer are typically defined by well location. The term applies to projects that receive federal financial assistance and have the potential to contaminate a sole source aquifer in a manner that creates a significant hazard to public health. These aquifers are of critical importance for the people of Grantsville City.

Water source protection plans delineate protection zones according to state standards. Water source protection zones were created by the state specifically as a tool for local governments to adopt local ordinances that protect public drinking water. State rules and water source protection plans provide standards specifically for land uses authorized by local governments.

Natural Gas

Grantsville City residents purchase their natural gas directly from Dominion Energy. Currently, there are no concerns about supply.

Wastewater System

Grantsville City's wastewater collection system consists of trunk lines, interceptor lines, lateral mains, force mains, and

three lift stations. The sewer lines range from 8 to 18-inches. Wastewater is treated at the City's wastewater treatment plant located in the northeast corner of the City off Race Street. Wastewater is conveyed to the treatment plant and central trunk line through a series of interceptor pipelines and lift stations.

Future development will require expanding the wastewater system to accommodate the new growth. There are areas of the community that cannot be serviced by the currently existing system.

Power

Rocky Mountain Power supplies Grantsville with electricity.

Sanitation

Solid waste is hauled by franchised waste haulers in the city (currently Ace Disposal).

Schools

Grantsville recognizes that it doesn't have statutory authority over the location and design of public schools. However, the City wants to continue to work with the School District to identify preferred areas for new facilities.

Emergency Preparedness + Resilience

Grantsville City has a police department, including animal control, and a fire department, but contracts outside providers for its ambulance services. The City assesses impact fees for public safety capital improvement projects and future debt service related to these capital improvement projects.



Anticipated Changes

● Predicting growth in a city is difficult due to a myriad of factors that influence it; however, there are some indicators that provide clues. In general, consideration for distribution of growth over the six planning areas has been based on proximity to infrastructure, historic growth patterns, proposed future development, and input from the City. ● In 2016, the City noticed that most of its new development was occurring in a localized area and not as evenly spread as anticipated in 2012. The City's experience leads them to believe that the population projection numbers are still expected, but the locations of development may require additional infrastructure or improvements to existing infrastructure to serve the accelerated growth on the south side of the City. ● The City's recent capital facilities plan and impact fee analysis included a rate study. The plan recommends slight increases to water and sewer user fees in order to maintain a positive fund balance. ● The City's capital improvements plan also anticipates the need to construct a new Public Works facility. The project costs for the Public Works facility would be funded by the water and sanitary sewer utility. ● With the growth of the Flux and West planning areas, an upper pressure zone water line connection will become more important between the City's existing culinary water tanks and sources. This will provide more evenly

distributed fire and demand storage to the different areas of the City. ● The City will need to serve the Flux & West planning areas with sewer to avoid a proliferation of septic systems that may contaminate / pollute the aquifer.

Goals + Policies - Infrastructure And Public Facilities

Goal 1. Provide quality public services. Grantsville City will seek to adequately provide services to City residents by:

1. Protecting water sources from potential threats. 2. Developing and maintaining an accurate, fully-functional system for planning and infrastructure information (i.e. ArcGIS Online). 3. Exploring more opportunities to provide culinary and secondary water to residents that currently do not have access to it. 4. Ensuring that any future land uses do not jeopardize water source protection zones. 5. Not permitting large commercial or residential developments on septic systems and encouraging these uses to be located close enough to the sewer systems to connect. 6. Updating the current subdivision and site plan ordinances to require adequate planning for drainage and stormwater runoff. 7. Improving traffic along Main Street by allowing alternative transportation and reducing traffic speeds. 8. Ensuring all land use, infrastructure, service and resource allocation decisions shall be found to be consistent with the City General Plan recommendations and goals. 9. Formulating, and annually updating, a Capital Facilities Plan. 10. Appropriately maintaining the City's existing capital facilities. 11. Updating and monitoring the City's public improvement and construction standards. 12. Encouraging development within areas of the City where required infrastructure already exists. 13. Identifying and evaluating potential public safety hazards involving vehicular and pedestrian hazards and prescribing corrective actions. 14. Requiring configurations, designs and other development options that maximize safety of City residents and property in all development applications.

Goal 2. Complete a detailed analysis of existing water resources and availability to meet development needs.

1. Work with regional authorities or consultants to prepare a detailed study itemizing the availability of water. 2. Review water availability and projected demand growth to ensure that ample resources are available to support development.

Strategies - Infrastructure And Public Facilities

1. Create a set of recommended and desired amenities within the community and work towards acquiring or creating the necessary infrastructure for such assets.

2. Expand the Capital Facilities Plan to include "roadmap" for the next ten (10) years of the municipality, focusing on:

a. Prioritized capital improvements projects
b. Sidewalk and roadway improvements projects
c. Recreational amenity creation within ½ of a mile of each residential structure
d. System expansion and creation of a new sewer plant
e. Expanded water system to NW quadrant of the City

3. Explore transportation options for critical corridors within the community, increasing transportation options. 4. Improve existing streets and reserve R.O.W. (right of way) for future streets.

APPENDIX

[Implementation Recommendation - Zoning Code Update](#)

[Implementation Recommendation - Roles + Responsibilities](#)

[Implementation Recommendation - Best Practice Ideas](#)

Implementation Recommendation - Zoning Code Update

The role of the general plan is to provide vision, direction, and rationale for the land use policies and capital improvements of the city. It is critical that the zoning ordinance aligns with the general plan to ensure a transparent development regulation.

As part of the 2019 plan update process, the consulting team conducted a review of the existing land use ordinance. The overall conclusion is that Grantsville should undertake a comprehensive and thorough update of its ordinances as resources are available. This will be a major undertaking, and until it can be done completely, the team recommended changes that would help improve the alignment in some of the most critical issues.

The recommendation report is available at these links:

Zoning Report (.pdf) <https://tinyurl.com/GvZoningReport-PDF>

Zoning Report (.docx) <https://tinyurl.com/GVZoning-docx>

Implementation Recommendation - Roles + Responsibilities

In order to encourage and facilitate implementation of the general plan, the consulting team developed a summary of recommended roles and responsibilities. This matrix can be found at the following link:

- Roles and Responsibilities <https://tinyurl.com/GVRoles>

Implementation Recommendation - Best Practice Ideas

[IDEA 1 - Improve Plan And Budget Integration](#)

[IDEA 2 - Community Clean-Up Initiative Enforcement](#)

[IDEA 3 - Agenda Alignment](#)

[IDEA 4 - Adequate Public Facilities \(Concurrence\)](#)

[IDEA 5 - Development Process Flowchart](#)

The following ideas are suggestions of implementation best practices. The City is not obligated to implement any of them or consider them policy.

- IDEA #1 - Improve Plan and Budget Integration
- IDEA #2 - Community Clean-Up Initiative Enforcement
- IDEA #3 - Planning Commission Agenda Alignment
- IDEA #4 - Adequate Public Facilities (Concurrence)
- IDEA #5 - Development Process Flowchart

IDEA 1 - Improve Plan And Budget Integration

Budget is policy, and planning without investing in its implementation is largely a waste of everyone's time. City leaders need to first develop a baseline of what their strategic priorities are, and then deliberately update this vision over time.

- Host an annual pre-budget retreat with the commission and administration. The City Council and Planning Commission should meet for a joint session before any budget requests are considered. The purpose of this meeting would be to review the City's long-range goals.
- Conduct a biannual "Discovery" event. An outside party could facilitate a "discovery" discussion for existing and prospective City Council members (and anyone else in the public that is interested). The intent of this event would be to increase awareness of how cities work by describing systems, explaining rules, and sharing best practices. If done near the deadline for candidates to file in the summer, then the outcome of this event would be a more informed election in the fall. It can be assumed that an investment in "taking the long view" like this will result in better policy and budgets into the future.

IDEA 2 - Community Clean-Up Initiative Enforcement

Update the land use code to outline a clear process for enforcing clean-up efforts:

- establish a clear definition of what needs to be cleaned-up
- review staff capacities, including enforcement personnel and attorney staff time
- outline roles and responsibilities in responding to citizen complaints
- create a method to document violations
- establish deadlines for clean-up
- establish a cost recovery system for City-initiated efforts on properties in violation
- explore ways the City can assist cleanup initiatives by supporting disposal efforts

IDEA 3 - Agenda Alignment

Although every community is different in the details of how it operates, the one thing they have in common is a council / commission that makes decisions that affect the whole enterprise. Because they must deal with several short-term issues, it is easy for them to lose focus on any kind of long-term strategy.

Municipalities need a way to standardize the implementation of their long-term goals. The way to do this is to keep the goals in front of everyone (especially the commissions) when they are facing decisions.

- Incorporate the long-term goals into their regular meetings. Format the agenda so that each discussion item is categorized under one strategic priority. Those issues/items that don't help achieve a priority goal are moved to the bottom.
- Formally establish an "implementation champion". Assign someone on the City Council or Planning Commission to monitor the implementation of the plan's goals and strategies. Require a public report to be created quarterly.

IDEA 4 - Adequate Public Facilities (Concurrence)

The adequacy and availability of public facilities and services to support growth and development has become a key issue in most areas, both because of the financial implications as well as the effect on the timing of development.

A concurrence system requires that prior to the issuance of a land development permit, the applicant must demonstrate that all necessary public facilities and services are available and adequate at a specified level of service (LOS) standards.

The "adequacy" requirements provide that, for a development project to be approved, infrastructure must conform to level-of-service standards in the General Plan.

The availability requirement establishes where needed public facilities or public facility capacity is indeed available for use by the proposed development. Unlike other resources which are sometimes used to ensure carry capacity, infrastructure capacity is not static. It is increased as new capital improvements are added, and, it is decreased as other development comes on-line. Development approvals can be denied, deferred, or recommended for phasing in order to keep infrastructure capacity and utilization in proper balance.

IDEA 5 - Development Process Flowchart

A clearly-defined approval process will facilitate better understanding of the City's requirements for development approvals. This will help applicants understand what is expected of them and might even help the City ensure due process.

These flowcharts could be incorporated into brochures and development applications. It is important that the process is also formally incorporated into the land use ordinance.

[APPENDIX PART 2](#)

[Community Surveys](#)

[Regional Context + Anticipated Changes \(Appendix 2\)](#)

[Community Characteristics \(Appendix 2\)](#)

[Socioeconomic Indicators \(Appendix 2\)](#)

[Opportunities + Constraints \(Appendix 2\)](#)

Community Surveys

A series of community surveys were conducted to gather resident feedback about the future of Grantsville. The results from the survey have been used to guide the goals and policies outlined in this plan. This process was completed to ensure that the plan adequately reflects the viewpoint of the residents of Grantsville. Residents were asked questions about the elements outlined in the general plan, identifying areas of interest or concern. One specific question they were asked was what the top priorities of the City should be over the next five years. According to the results, the top five priorities of Grantsville residents include:

- Increasing economic development opportunities within the community
- Increasing public safety along roadways and at community facilities
- Providing necessary amenities to local youth to ensure a safe and drug-free environment
- Improving the financial stability of the city
- Retaining the small town charm that is attractive to Grantsville Residents, while providing necessary resources or services for day to day uses

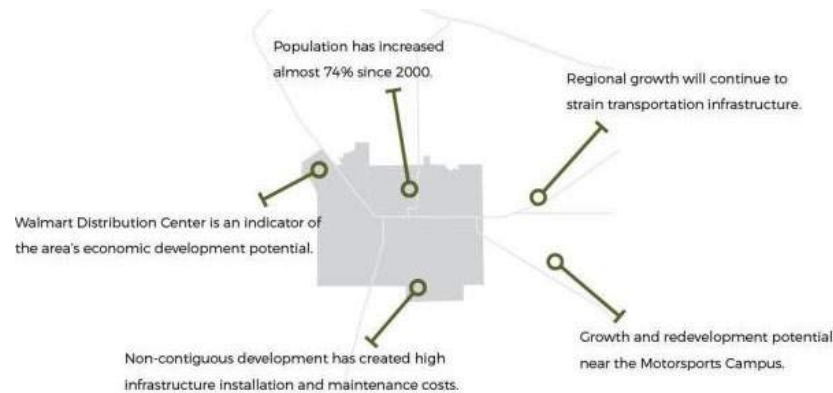
Regional Context + Anticipated Changes (Appendix 2)

Grantsville City is a community that is evolving from a rural/agricultural community into a bedroom community supporting the regional economy and growth hubs within the county. Residents of Grantsville primarily provide a workforce for employment centers outside of the city boundaries, primarily the greater Salt Lake and Tooele Valley areas.

Residents of Grantsville provide a workforce for mineral extraction and waste disposal companies located in the west desert and around the south arm of the Great Salt Lake as well as warehousing, distribution, and manufacturing services located in the Tooele Valley.

Note that unless otherwise noted, all numbers used in this section of the plan are from the US Census, American Community Survey.

- Drivers of change
 - Increasing infrastructure costs to meet demand for residential purposes
 - Limited resources for residential properties, specifically water
 - An abnormally large amount of residential development within the city over the last five (5) years
 - Loss of commercial amenities within the community (clothing stores, sporting goods, etc.)
- Certainties / Uncertainties
 - Certainties - The City of Grantsville has a few certainties that will negatively or positively affect the community:
 - Growth will continue at the current or higher rate
 - Resources will become more scarce as development intensifies
 - Uncertainties - The City of Grantsville has several uncertainties that must be carefully managed to ensure the community vision is met:
 - The effect of growth on the character of the community
 - How closely the rate and location of development follows plan expectations



Community Characteristics (Appendix 2)

[COMMUNITY DRAW](#)

[GROWTH PRESSURE](#)

[RURAL CHARACTER](#)

[CONVENIENT ACCESS](#)

[SMALL BUT GROWING LOCAL ECONOMY](#)

COMMUNITY DRAW

The City of Grantsville is a small town in Tooele County known for a great quality of life due to its history and preserved traditions. Many residents have chosen to locate and live within the City of Grantsville for its small town

character and family-friendly way of life.

GROWTH PRESSURE

In recent years, the City has witnessed unchecked and unprecedented growth pressures as the Salt Lake Valley continues to expand west in search of increased housing opportunities. Currently, the City is experiencing issues with levels of service caused by the influx of additional residences. As growth continues within the municipality, it is critical that the development be planned and prepared for, ensuring that the quality of life is preserved for current and future residents.

RURAL CHARACTER

Grantsville is known for providing a community comprised of open space, convenient access to the natural environment and a strong sense of community. All these aspects personify the rural character that draws individuals to the community. It is due to these aspects that families are drawn to the community’s simpler and safer environment.

CONVENIENT ACCESS

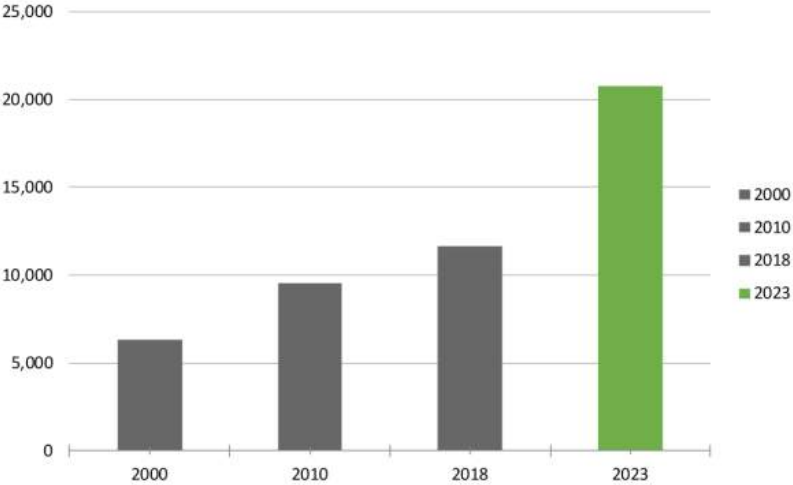
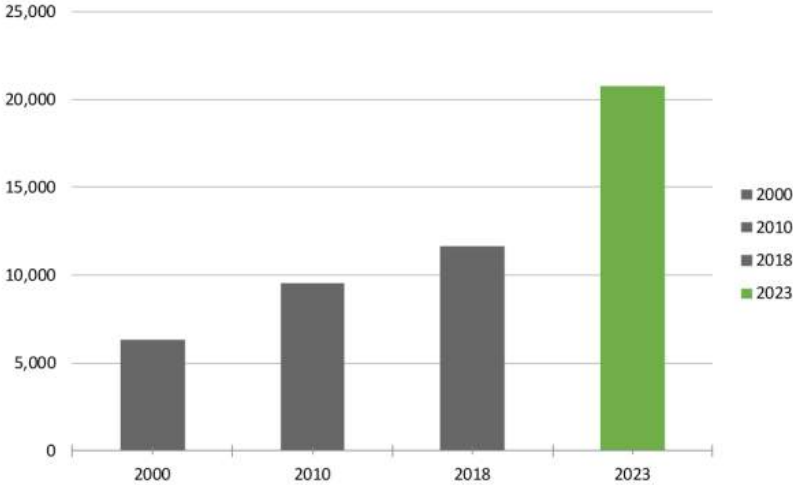
Grantsville is conveniently located within proximity to the regional hub of Tooele, as well as the greater Salt Lake Valley area. This convenient access has allowed Grantsville to witness an increase in residential growth. While this access allows for individuals to live within the municipality and work in another, it also creates issues with retaining adequate services and retail/commercial amenities for community sustainability.

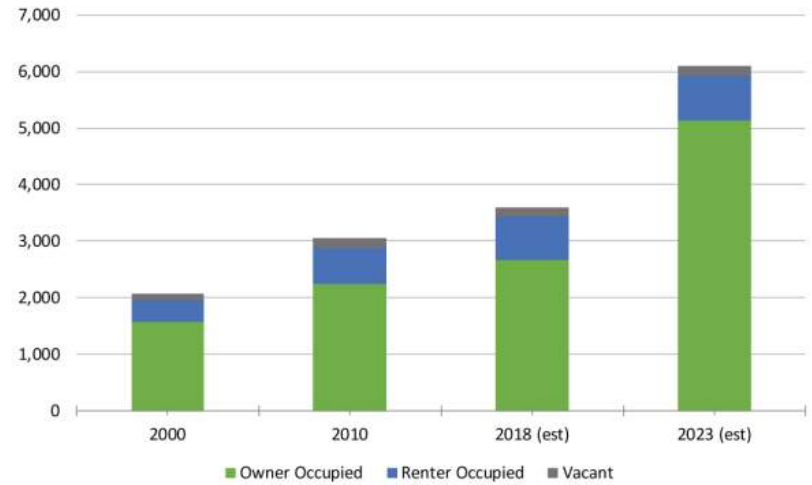
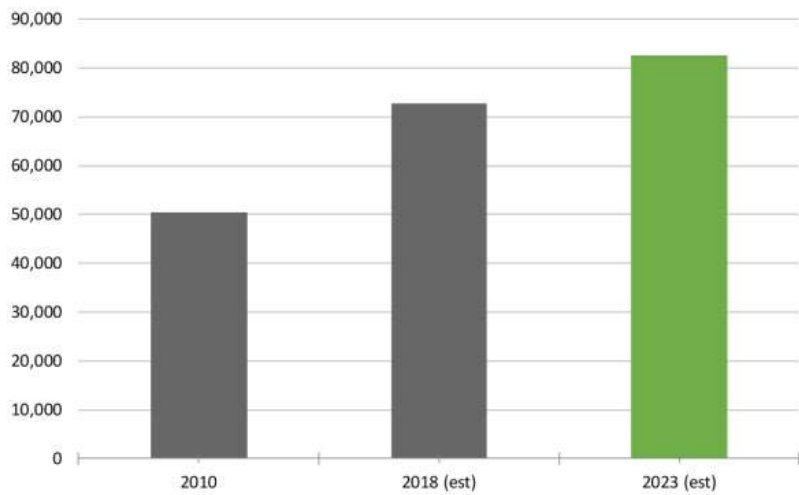
SMALL BUT GROWING LOCAL ECONOMY

More dollars are staying locally which expands the local economy and reduces reliance upon regional economies. Since 1998, taxable sales have increased by 7.4% per year, outpacing population growth and average inflation costs. Continuing to broaden the local economy keeps jobs closer to home and increase community self-reliance. It should be noted that while there has been a remarkable increase in taxable sales, the multitude of residents still admit to leaving the municipality or ordering online to meet necessary goods or services.

Socioeconomic Indicators (Appendix 2)

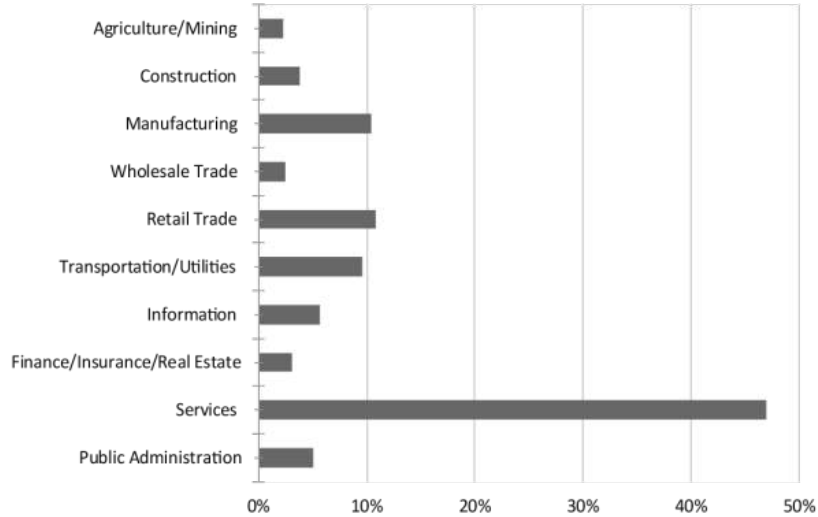
Following are key community statistics for the City of Grantsville. The information was collected to assist in developing the land use policies contained in this plan. All the information and graphics are based upon ESRI Living Atlas Database and ESRI Business Analyst Data. Sales tax data was collected from Utah State Tax Commission. Population data was collected from the US Census Bureau. Consumer Price Index data was collected from the US Bureau of Labor Statistics.

POPULATION	HOUSEHOLDS																				
<p>The 2018 population was 11,193. The rate of change since 2010 was 2.4% annually. The five-year projection for the population in the area is 20,741 representing a change of 12.3% annually from 2018 to 2023. Currently, the median age is 30.7 (the statewide is also currently 30.7).</p>	<p>The household count in Grantsville has changed from 2,874 in 2010 to 3,449 in the current year, a change of 2.24% annually. The five-year projection of households is 5,921, a change of 11.41% annually from the current year total. Average household size is currently 3.36, compared to 3.31 in the year 2010. The number of families in the current year is 2,749.</p>																				
 <table border="1"> <caption>Population Data</caption> <thead> <tr> <th>Year</th> <th>Population</th> </tr> </thead> <tbody> <tr> <td>2000</td> <td>~6,500</td> </tr> <tr> <td>2010</td> <td>~9,500</td> </tr> <tr> <td>2018</td> <td>~11,200</td> </tr> <tr> <td>2023</td> <td>~20,700</td> </tr> </tbody> </table>	Year	Population	2000	~6,500	2010	~9,500	2018	~11,200	2023	~20,700	 <table border="1"> <caption>Household Count Data</caption> <thead> <tr> <th>Year</th> <th>Household Count</th> </tr> </thead> <tbody> <tr> <td>2000</td> <td>~6,500</td> </tr> <tr> <td>2010</td> <td>~9,500</td> </tr> <tr> <td>2018</td> <td>~11,200</td> </tr> <tr> <td>2023</td> <td>~20,700</td> </tr> </tbody> </table>	Year	Household Count	2000	~6,500	2010	~9,500	2018	~11,200	2023	~20,700
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<p>INCOME</p> <p>The 2018 estimated median household income in Grantsville is \$71,796, compared to \$67,456 in the county, and \$74,181 for the rest of the state. Median household income is projected to be \$82,470 in five years. Current per capita income is estimated to be \$23,645 in the area.</p>	<p>HOUSING UNITS</p> <p>It is estimated that 74.3% of the 3,592 housing units in the area are currently owner occupied; 21.7%, renter occupied; and 4.0% are vacant. The annual rate of change in housing units since 2010 is 7.48%. Median home values are estimated to be \$221,596. In five years, the median value is projected to change by 7.54% annually to \$318,729.</p>																				



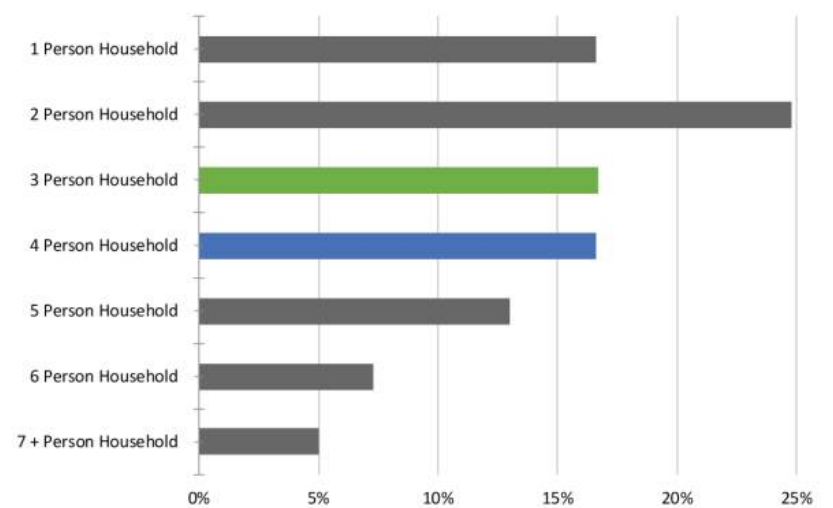
EMPLOYMENT

Employment within the community is currently limited to services and retail opportunities. Many of the trades/professions outlined below illustrate the “bedroom community” where commuters transit to work and return home at night.



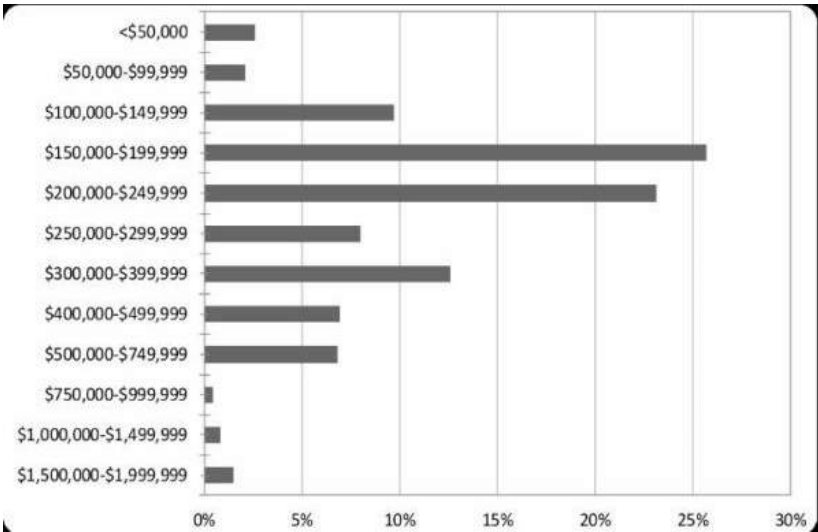
HOUSEHOLD SIZE

Grantsville has an average household size similar to both Tooele County and the State of Utah.



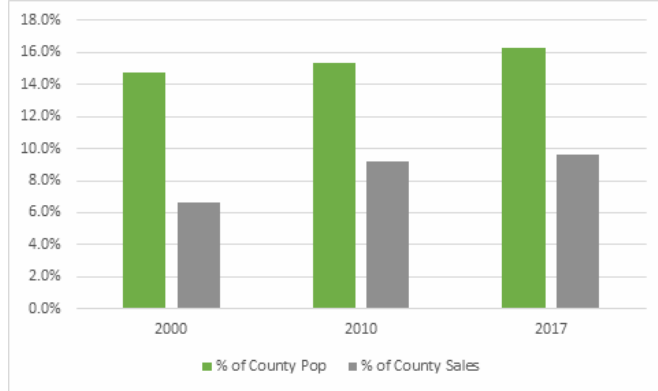
HOUSING VALUES

Housing values within the municipal limits are significantly lower than other regional communities. Due to this, many areas within the community are experiencing additional growth beyond the state average.



TAXABLE SALES AS A PERCENT OF TOTAL COUNTY SALES

The City has increased its share of total County taxable sales at a steady pace since 1998 compared to population growth which means more dollars are staying in the City.



**NOTE: All the information and graphics outlined above are based upon information from the ESRI Living Atlas Database and ESRI Business Analyst Data. Sales tax data from Utah State Tax Commission. Population data from the US Census Bureau. Consumer Price Index data from the US Bureau of Labor Statistics.*

Opportunities + Constraints (Appendix 2)

- [Recreation And Housing](#)
- [Infrastructure And Transportation](#)
- [Community Character And Economy](#)

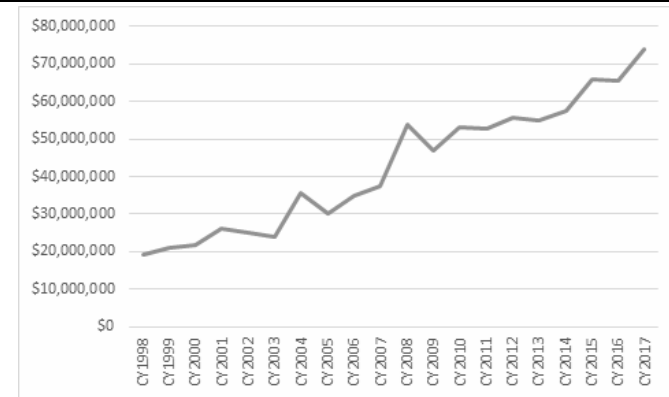
As a result of the various public input strategies utilized, a set of opportunities and constraints were created to provide a clear and defined vision for the community, outlining the potential barriers and assets that will affect the community. Outlined below are the results, broken down by category:

Recreation And Housing

Opportunities	Constraints
<ul style="list-style-type: none"> Convenient Access. Recreational assets surround the community and are quickly accessed through pedestrian, vehicular, and bicycle access. 	<ul style="list-style-type: none"> Recreational amenities are clustered around one geographic region of town. Residents outlined the fact that the most notable, accessible, and improved recreational facilities are located toward the center of town and not easily accessed by new developments.
<ul style="list-style-type: none"> Ample land is available around the perimeter of Grantsville, allowing for expansion of recreational 	<ul style="list-style-type: none"> Recreational opportunities are often bound by roadways. While the roadways provide convenient access to

TAXABLE SALES INCREASE

Taxable sales in the City have grown 7.39% annual average growth since 1998. Population growth (3.61%) and consumer price index growth (1.95%) make up approximately half of that increase. The balance represents more money being spent in the local economy.



opportunities into regional amenities (i.e. trails along foothills).	recreational facilities, there are many areas that are wholly defined by roadways or artificial barriers. This is causing “islands” of recreation that are hard to access for pedestrians and bicycles.
<ul style="list-style-type: none"> ● Strong sense of pride and community ownership. Almost two-thirds of Grantsville residents that responded to the public survey have lived there for 10+ years. For the most part, people that moved to Grantsville want to remain there. 	<ul style="list-style-type: none"> ● Lack of adequate parking at privately held access points for recreational amenities. Residents noted that parking was not immediately available at trailheads where private landowners controlled access to unimproved trails.
<ul style="list-style-type: none"> ● The family-friendly atmosphere and relationships between community members in Grantsville is an asset. 	<ul style="list-style-type: none"> ● Many residents voiced concerns that there are not a lot of after school options for youth and consider a “Rec Center” as a solution.
<ul style="list-style-type: none"> ● Increased Density. Ample areas for increased housing density in the downtown core and immediately adjacent areas 	<ul style="list-style-type: none"> ● Lack of Options. Residents are vocal about not having adequate and affordable housing for first-time home buyers or lower-income families.
<ul style="list-style-type: none"> ● Define areas of growth. Define areas of higher density or non-single family housing through codes and restrictions 	
<ul style="list-style-type: none"> ● Retain “large” residential lots. While most residents and respondents found it acceptable for increased land-use density within the community core, they desired to retain 1/4 or 1/2 acre lots for residential uses. 	

Infrastructure And Transportation

Opportunities	Constraints
<ul style="list-style-type: none"> ● Recent upgrades - The City of Grantsville has recently completed numerous upgrades to the infrastructure systems throughout town, specifically the water and sewer lines under Main Street, as well as its natural gas system soon. 	<ul style="list-style-type: none"> ● Hwy 138 experiences waves of demand because of the heavy truck traffic, proximity of the high school, and the Wal-Mart employment center. This road is also the primary commuting route.
<ul style="list-style-type: none"> ● Infrastructure system longevity - Currently the City of Grantsville is designing and installing infrastructure and rightsizing projects that will allow for adequate growth and development throughout the community. 	<ul style="list-style-type: none"> ● Lack of sidewalks. Some areas along main streets and near schools don’t have sidewalks.
<ul style="list-style-type: none"> ● Most of Grantsville’s roadways within the core have wide Right of Way that would facilitate new bike lanes. 	<ul style="list-style-type: none"> ● Sporadic Development. In recent years, development within the community has been approved according to regulations, yet the regulations were not properly altered to correct a “scattered” development pattern.
	<ul style="list-style-type: none"> ● Inadequate stormwater systems. The community currently has inadequate stormwater systems to properly convey water away from paved surfaces, creating pooling or ponding issues at curbs and on the roadway.
	<ul style="list-style-type: none"> ● Despite regular maintenance, roadways are often in poor condition. Included in this constraint is roadway pavement, curbing, sidewalks, and crosswalks. This is noticeable at most side streets, and especially along the Main Street corridor at all crossing locations within the UDOT Right of Way.
	<ul style="list-style-type: none"> ● Residents are concerned with water resource availability and pricing.

Community Character And Economy

Opportunities	Constraints
<ul style="list-style-type: none"> ● Retain small town charm. There is a strong desire among residents to retain the small town charm that makes up their community, including: architecture, lot sizes, preservation of agricultural activity, access to shopping/retail and a Main Street corridor. 	<ul style="list-style-type: none"> ● Finite amounts of land. While there is currently ample amounts of land available for development, the community will quickly see a diminishing amount of land available for development if the larger lot theory plays-out.
<ul style="list-style-type: none"> ● Increase unification among town. Residents showed a desire to increase the opportunities where unifying characteristics can be utilized within the community, specifically to create an overall unified community theme or appearance. This includes, creation of unified signature styles, utilization of the new logo on multiple items (benches, banners, bike racks, etc.), and increased ordinances for building appearance or maintenance. 	<ul style="list-style-type: none"> ● Increased infrastructure costs. Larger lots and less dense land-use increase the costs for construction and maintenance on infrastructure systems due to the distances necessary.
<ul style="list-style-type: none"> ● Lack of diversity in retail/commercial. The community has a strong desire to increase the variety of restaurants, retail and commercial amenities along the Main Street corridor. 	<ul style="list-style-type: none"> ● Lack of adequate water for increased development. It is the perception of many residents that there are not enough water resources (well or culinary system) to allow for development to continue within the municipality.
<ul style="list-style-type: none"> ● Support infill of “GAP” services. There is a desire for necessary services to be fulfilled within the community. The community was noted as stating there were basic services missing such as: dry cleaners, outdoor and recreation outfitters, clothing stores, etc. 	<ul style="list-style-type: none"> ● Proximity to regional retail/commercial hubs. Grantsville is within proximity of the Salt Lake metro area and the county seat (Tooele) where a myriad of other services or retail goods can be attained. This proximity will require local businesses and individuals to be in competition with the nearby regional attractors.
<ul style="list-style-type: none"> ● Available properties for development. There are ample properties along the Main Street corridor that are available for preservation and development opportunities. 	

Public Input Summary

The Grantsville Planning Commission and City Council placed a very high priority on public input. The project began with public notice, and a series of public meetings and surveys were conducted. The initiative generated an email list of over 400 residents and business owners that asked to remain informed about major steps in the development of the plan, and the public open house events were very well-attended.

Information and examples about the public interaction are at the following links:

- Community Survey #1 Report <https://tinyurl.com/GvPublicSurvey1>
- Community Survey #2 Report <https://tinyurl.com/GvPublicSurvey2>
- Initiative marketing example (poster) <https://tinyurl.com/GvPoster1>
- Initiative marketing example (postcard) <https://tinyurl.com/GvPostcard>
- Example of comments generated at a public event <https://tinyurl.com/GvPublicCommentExample>

AGENDA ITEM #4

Presentation, Public Hearing, Discussion, and Consideration: Consideration of a proposed rezone of parcels 01-071-0-0012, 01-074-0-0012, 01-074-0-0010, and 11-010-0-0002 from R-1-21 to R-1-12 for the Wellstone Subdivision, located near Pear Street and Quirk Street.

Planning and Zoning
336 W. Main St.
Grantsville, UT 84029
Phone: (435) 884-1674



GRANTSVILLE CITY STAFF REPORT

To: Grantsville City Planning Commission

From: Community Development Department

Date: April 21st, 2026

Agenda Item: Presentation, Public Hearing, Discussion, and Consideration – Proposed Rezone for Wellstone Subdivision

PROJECT SUMMARY

The request is to **rezone the properties from the R-1-21 (Single-Family Residential, 21,000 sq. ft. minimum lot size) zoning district to the R-1-12 (Single-Family Residential, 12,000 sq. ft. minimum lot size) zoning district.**

The proposed rezone to R-1-12 would allow development with a minimum lot size of 12,000 square feet, which would provide a slightly higher residential density while still maintaining a single-family residential character. The applicant has provided a conceptual development plan illustrating potential lot layouts and neighborhood design elements.

PROPERTY INFORMATION

Parcel Numbers:

- 01-071-0-0012
- 01-074-0-0010
- 11-010-0-0002
- 01-071-0-0012

Location:

Approximately adjacent to **Quirk Street**

Current Zoning:

R-1-21 – Single-Family Residential (21,000 sq. ft. minimum lots)

Proposed Zoning:

R-1-12 – Single-Family Residential (12,000 sq. ft. minimum lots)

*** Disclaimer: Please be advised that at no point should the comments and conclusions made by The City staff or the conclusions drawn from them be quoted, misconstrued, or interpreted as recommendations. These inputs are intended solely for the legislative body to interpret as deemed appropriate.*

The information provided is purely for the legislative body to interpret in their own right and context. It is crucial to maintain the integrity and context of the information shared, as it is meant to assist in the decision-making process without implying any endorsement or directive, but it is essential that it is understood within the appropriate scope.

PROJECT BACKGROUND

The applicant is proposing to rezone approximately **113 acres** located near **Pear Street and Quirk Street** to allow for the development of the **Wellstone Subdivision**. The property is currently zoned **R-1-21**, which requires a minimum lot size of **21,780 square feet**.

The proposed rezone to **R-1-12** would allow development with a **minimum lot size of 12,000** square feet, which would provide a slightly higher residential density while still maintaining a single-family residential character.

The applicant has provided a conceptual development plan illustrating potential lot layouts and neighborhood design elements.

PROPOSED DEVELOPMENT CONCEPT

The applicant has presented conceptual plans for the Wellstone development which include a mix of residential lot sizes and housing types. The conceptual plans illustrate:

- Internal neighborhood street connectivity.
- Pedestrian trail connections throughout the subdivision.
- Designated **open space areas**.

One concept plan also identifies a **future school site of approximately 54.8 acres** centrally located within the project area.

The intent of reserving land for a school is to provide a future opportunity for educational facilities to serve both this subdivision and surrounding neighborhoods if a school district chooses to pursue the site

ZONING ANALYSIS

Current Zoning – R-1-21

The R-1-21 zoning district is intended for **low-density residential development**, with minimum lot sizes of approximately **21,780 square feet (½ acre)**.

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Development under this zoning would likely result in **larger residential lots and lower overall density.**

Proposed Zoning – R-1-12

The R-1-12 zoning district allows **single-family residential development with a minimum lot size of 12,000 square feet (approximately ¼ acre).**

Rezoning the property to R-1-12 would:

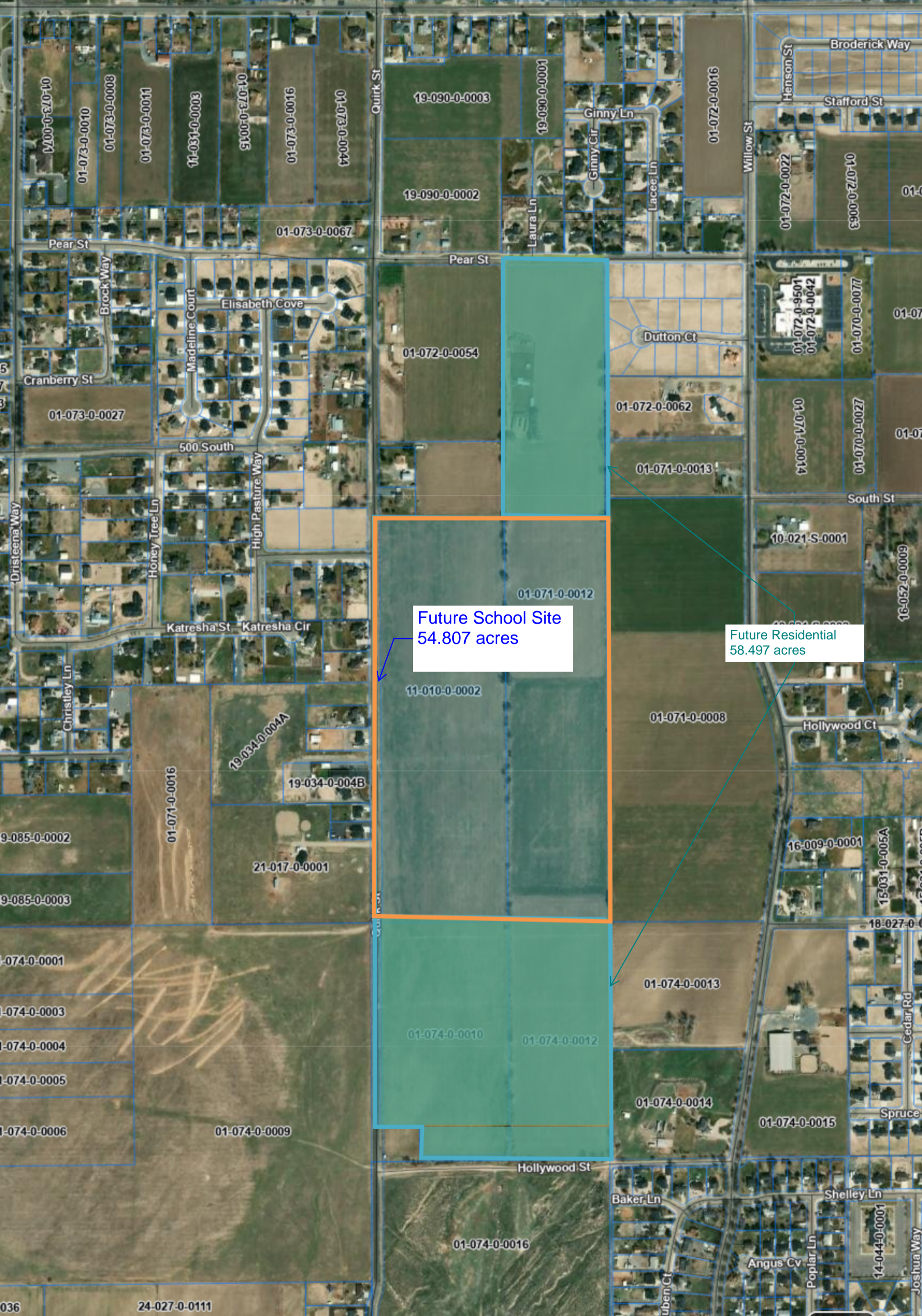
- Allow a **moderate residential density**
-
- Provide flexibility for neighborhood desi

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Future School Site
54.807 acres

Future Residential
58.497 acres

01-073-0-0010
01-073-0-0008
01-073-0-0011

11-031-0-0003

9100-0-010-10

01-073-0-0016

11-000-0-0010

19-090-0-0003

19-090-0-0002

19-090-0-0001

01-072-0-0016

01-072-0-0022

01-072-0-0010

Pear St

Brock Way

Madeline Court

Elisabeth Cove

Pear St

Ginny Ln

Ginny Cir

Lacey Ln

Willow St

Henson St

Broderick Way

Stafford St

Cranberry St

01-073-0-0027

500 South

01-072-0-0054

Durton Ct

01-072-0-0062

01-072-0-9501
01-072-0-0042

01-070-0-0077

01-070-0-0014

01-070-0-0027

01-071-0-0013

South St

10-021-S-0001

Dristecna Way

Honey Tree Ln

High Pasture Way

Katresha St - Katresha Cir

01-071-0-0012

Future School Site
54.807 acres

Future Residential
58.497 acres

11-010-0-0002

01-071-0-0008

Hollywood Ct

Christley Ln

19-034-0-004A

19-034-0-004B

01-071-0-0016

21-017-0-0001

16-009-0-0001

15-031-0-005A

9-085-0-0002

9-085-0-0003

01-074-0-0001

01-074-0-0003

01-074-0-0004

01-074-0-0005

01-074-0-0006

01-074-0-0009

01-074-0-0013

01-074-0-0010

01-074-0-0012

01-074-0-0014

01-074-0-0015

18-027-0-0001

Cedar Rd

Spruce

Hollywood St

Baker Ln

Shelley Ln

01-074-0-0016

Angus Cv

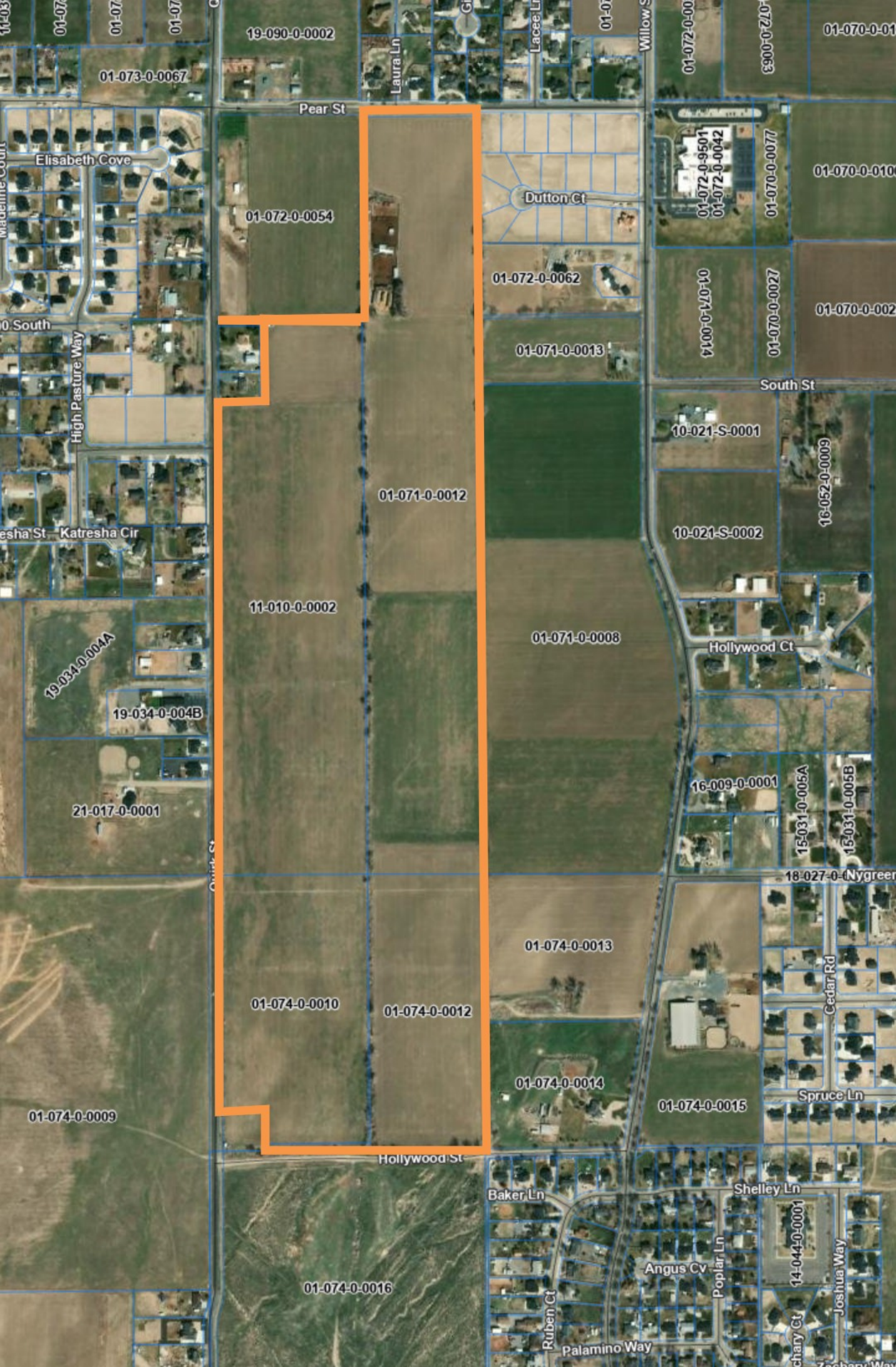
Poplar Ln

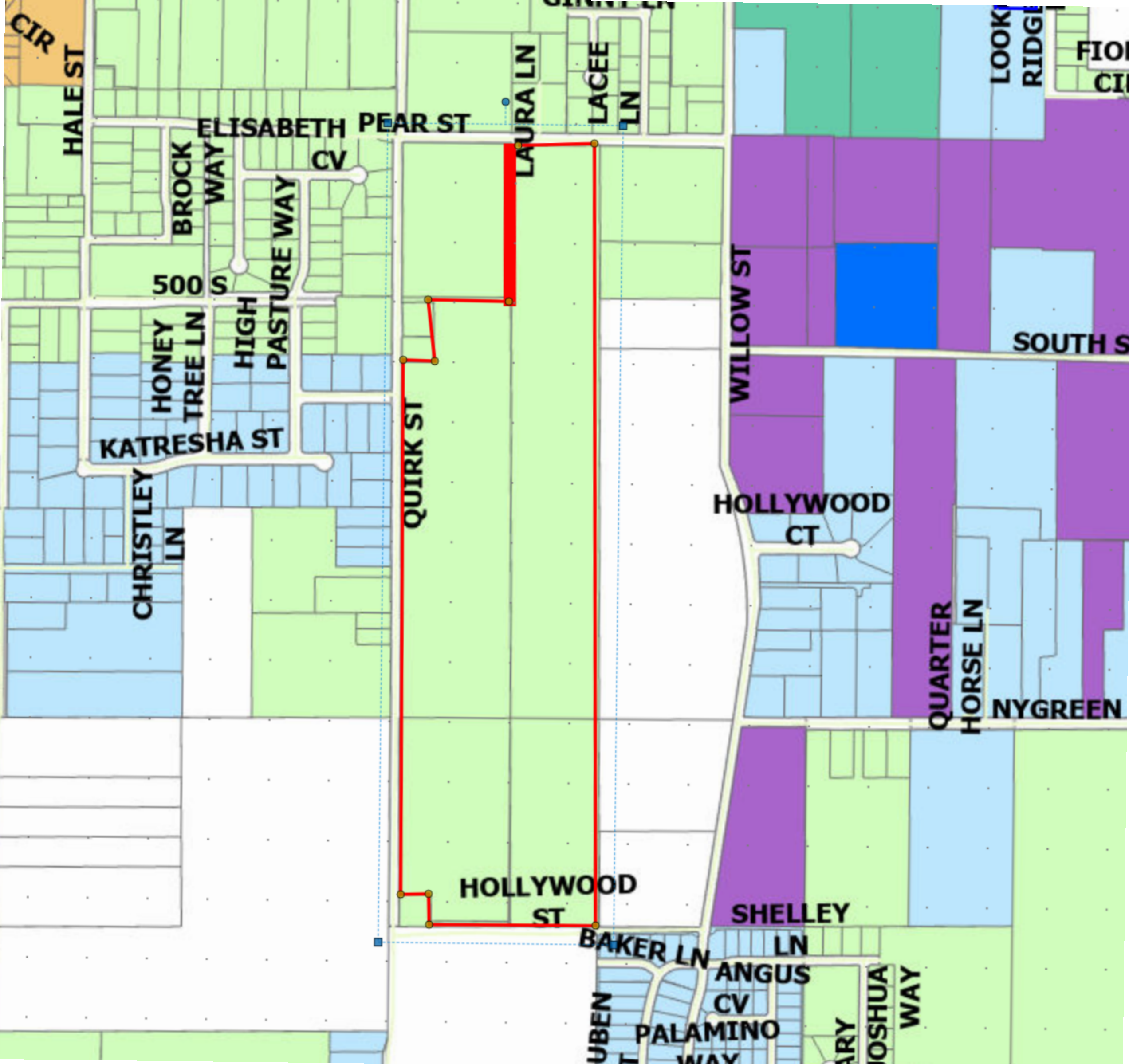
14-044-0-0001

Joshua Way

24-027-0-0111

036





HALE ST

ELISABETH PEAR ST

LAURA LN

LACEE LN

BROCK WAY

500 S

HONEY TREE LN

HIGH PASTURE WAY

KATRESHA ST

CHRISTLEY LN

QUIRK ST

WILLOW ST

HOLLYWOOD CT

HOLLYWOOD ST

SHELLEY

BAKER LN

ANGUS CV

PALAMINO WAY

MARY

JOSHUA WAY

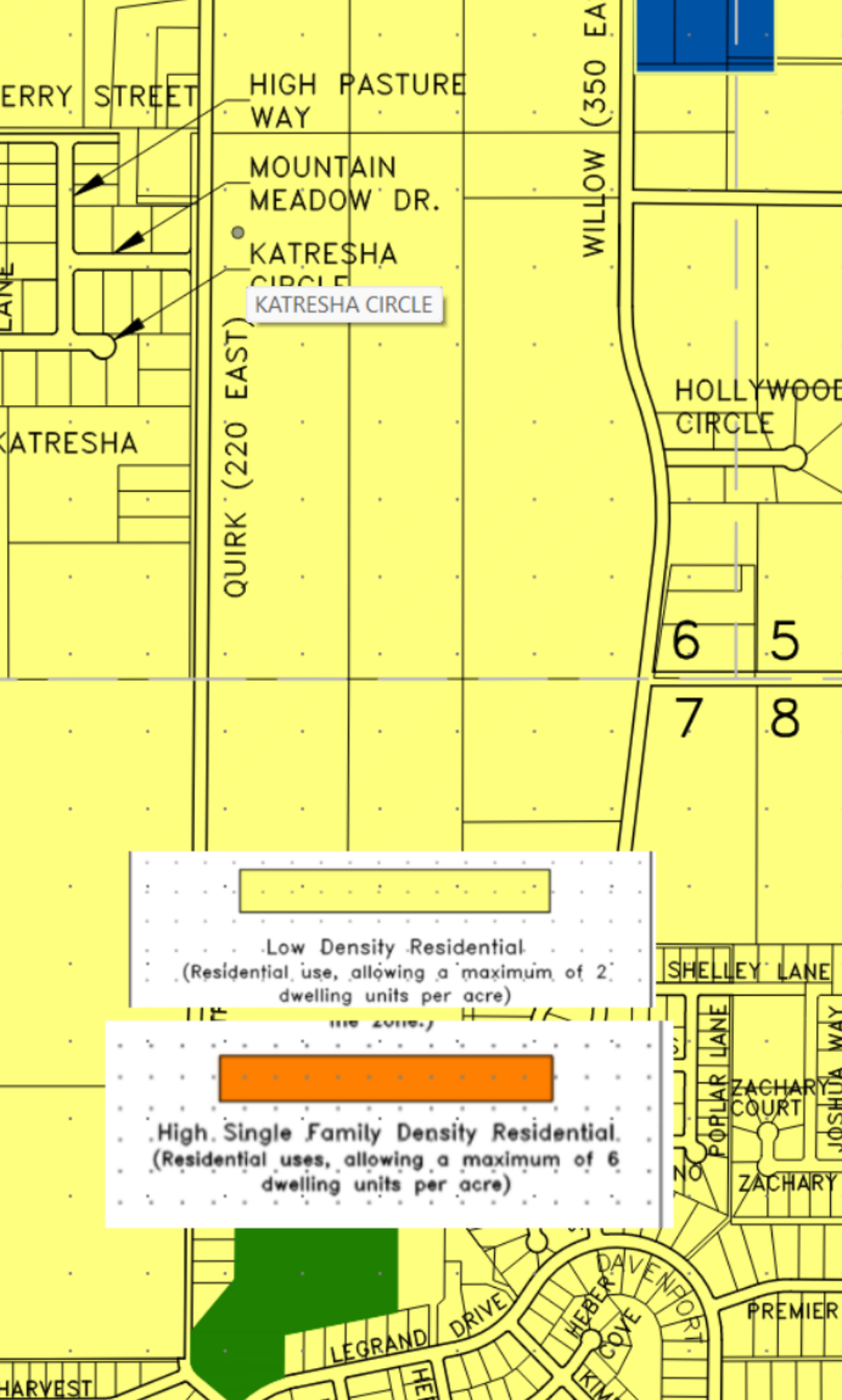
QUARTER HORSE LN

NYGREEN

SOUTH S

LOOK RIDGE

FIORI CIR



HIGH PASTURE WAY

MOUNTAIN MEADOW DR.

KATRESHA CIRCLE

KATRESHA CIRCLE

WILLOW (350 EA)

QUIRK (220 EAST)

HOLLYWOOD CIRCLE

6 5

7 8

Low Density Residential
(Residential use, allowing a maximum of 2 dwelling units per acre)

High Single Family Density Residential
(Residential uses, allowing a maximum of 6 dwelling units per acre)

SHELLEY LANE

POPLAR LANE

ZACHARY COURT

JOSHITA WAY

ZACHARY

LEGRAND DRIVE

HEBER DAVENPORT

KIM COVE

PREMIER

HARVEST

AGENDA ITEM #5

Presentation, Public Hearing, Discussion, and Consideration: Consideration of the proposed amendments to the Parks and Transportation Capital Facilities Plans (CFPs), Impact Fee Facilities Plans (IFFPs), and Impact Fee Analyses (IFAs) for Grantsville City.

Planning and Zoning
336 W. Main St.
Grantsville, UT 84029
Phone: (435) 884-1674



STAFF REPORT

To: Planning Commission
From: Community Development Department
Date: 4/21/2026
Subject: Amendments to Parks and Transportation CFPs, IFFPs, and IFAs

REQUEST

Presentation, Public Hearing, Discussion, and Consideration of proposed amendments to the Parks and Transportation Capital Facilities Plans (CFPs), Impact Fee Facilities Plans (IFFPs), and Impact Fee Analyses (IFAs) for Grantsville City.

BACKGROUND

Grantsville City periodically updates its Capital Facilities Plans (CFPs), Impact Fee Facilities Plans (IFFPs), and Impact Fee Analyses (IFAs) to reflect current conditions, updated growth projections, infrastructure needs, and cost assumptions.

These documents serve as the foundation for the City's impact fee program and ensure compliance with the Utah Impact Fees Act. Updates are necessary to maintain legally defensible impact fees and to accurately reflect the cost of providing public infrastructure to new development.

PURPOSE OF AMENDMENTS

The proposed amendments are intended to:

- Update projected growth and development assumptions
- Identify current and future capital facility needs for parks and transportation
- Revise project lists and cost estimates based on current conditions
- Ensure impact fees remain proportionate and legally compliant
- Align infrastructure planning with anticipated development patterns

DOCUMENT OVERVIEW

Capital Facilities Plans (CFPs):

The CFPs identify existing levels of service, future demand, and capital improvement projects needed to serve anticipated growth.

Impact Fee Facilities Plans (IFFPs):

The IFFPs establish the specific facilities and improvements that are eligible for impact fee funding and demonstrate the relationship between growth and infrastructure demand.

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Planning and Zoning
336 W. Main St.
Grantsville, UT 84029
Phone: (435) 884-1674



Impact Fee Analyses (IFAs):

The IFAs calculate the appropriate impact fee amounts based on the cost of facilities, level of service standards, and projected growth.

ANALYSIS

Compliance with State Law:

- The updates are prepared in accordance with the Utah Impact Fees Act.
- The amendments ensure that fees are proportionate and attributable to new growth.

Infrastructure Planning:

- The Parks CFP identifies future park land, improvements, and recreational facilities needed to maintain service levels.
- The Transportation CFP identifies roadway improvements, connectivity needs, and capacity enhancements necessary to accommodate growth.

Financial Responsibility:

- Impact fees ensure that new development contributes its fair share toward infrastructure costs.
- The updates help prevent existing residents from subsidizing growth-related infrastructure.

Growth Management:

- The amendments align capital planning with anticipated residential and commercial development.
- Updated projections provide a more accurate basis for long-term infrastructure decisions.

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Capital Facilities Plan, Impact Fee Facilities Plan, and Impact Fee Analysis 2026 Amendments



April 2026

Prepared For:
Grantsville City
429 East Main Street
Grantsville, Utah 84029

Prepared By:
Max Nelsen, Dylan Cooper, EIT,
and Conor Dunkel, PE

Reviewed By:
Robert Rousselle, PE



Acknowledgments

A special thanks to all who contributed to the development of this plan. Its completion was made possible by the effort, support, and collaboration from each person involved. The participation of the following individuals is greatly appreciated.

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Jeff Williams
Derek Dalton

Planning Commission

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Andy Jensen (Building Official)
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Jason Remick (Fire Chief / Fire Marshal)
Robert Sager (Chief of Police)
Tae-Eun Ko (GIS Analyst / City Planner)
Barry Bunderson (City Engineer)

H.W. Lochner

Brad Lucas

Certification and Declaration of Impact Fee Analysis

In accordance with Utah Code Annotated, 11-36a-306(1) and (2), I, Robert Joseph Rousselle, on behalf of Ensign Engineering and Land Surveying, LLC, certify that I am a Registered Professional Engineer holding Certificate 7885569-2202 in the State of Utah.

I declare, to the best of my knowledge, information, and belief that the Impact Fee Facilities Plan and Impact Fee Analysis included herein include only the costs of public facilities that are:

- Allowed under the Impact Fees Act;
- Actually incurred; or
- Projected to be incurred or encumbered within six (6) years after the day on which each impact fee is paid;
- Does not include costs for operation and maintenance of public facilities;
- Does not include costs for qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the level of service that is supported by existing residents;
- Offsets costs with grants or alternate sources of payment;
- Complies in each and every relevant respect with the Impact Fees Act.

I make this certification and declaration with the following conditions:

1. All of the recommendations for implementation of the Capital Facilities Plans (CFP) made in the CFP documents or in the Impact Fee Analysis documents are followed in their entirety by Grantsville City and its elected officials.
2. All information provided to Ensign Engineering and Land Surveying, LLC, its contractors or suppliers is assumed to be correct, complete, and accurate. This includes information provided by Grantsville City and outside sources.

Ensign Engineering and Land Surveying, LLC

Robert Joseph Rousselle

Senior Associate

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- Appendix E Drinking Water Calculations
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- Appendix J Wastewater Cost Estimates
- Appendix K Water Rights Calculations
- Appendix L Grantsville City Storm Drainage Design Guidelines
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Glossary of Technical Terms

80th Percentile Rainfall Event

Storm event in which precipitation is greater than or equal to 80 percent of all storm events averaged over a given period of record.

Average Daily or Day Demand

The average yearly demand volume expressed as a flow rate. Demand is typically used in irrigation or drinking water terminology.

Average Daily or Day Flow

The average yearly flow volume expressed as a flow rate. Term typically used in wastewater terminology.

Average Yearly Demand

Amount of water delivered to consumers by a public water system during a typical year. Demand is typically used in irrigation or drinking water terminology.

Bonds

Fixed-income instrument representing a loan made by an investor to a borrower (typically corporate or governmental). Bonds are used by companies, municipalities, states, and sovereign governments to finance projects and operations.

Build-Out

The maximum number of ERCs or EDUs allowed by the planning jurisdiction in its service area.

Buy-in Costs

Depreciated costs for municipal or service district assets which have excess capacity and can be contributed to existing or future development.

Capital Facilities Plan

A plan to assist a jurisdiction to use its funding wisely and efficiently to maximize funding opportunities. A capital facilities plan will assist in determining needs, prioritizing projects, coordinating related projects, and applying for loan, bonds, and grant opportunities.

Collection System

Wastewater system consisting of manholes, gravity pipes, force mains, interceptors, trunk lines, lift stations, and appurtenances.

Collector Line

Sanitary sewer line which receives wastewater flow from lateral sewer lines and conveys flow to a trunk line or an interceptor line.

Cost Estimate

Typically, an Engineer's Estimate of Probably Costs for a project improvement based on recently bid projects and current construction climate. A cost estimate may include design fees, permitting, administrative costs, and contingency.

Curve Number

Empirical parameter used in hydrology for predicting storm water runoff potential for a given drainage area based on land use, soil group, and soil moisture derived by the National Resources Conservation Service (NRCS). Term typically used in storm water terminology.

Debt Service

Money required to cover the payment of interest and principal on a loan or other debt for a particular time period.

Demand

The drinking water flow rate or volume consumed by water system users.

Demographics

Characteristics of human population and population segments.

Detention

Term typically used in storm water terminology to define a storm water storage site which stores and releases storm water at a controlled discharge rate.

Disinfection

A process which inactivates pathogenic organisms in water by chemical oxidants or equivalent agents.

Distribution System

Drinking water system's network of pipes, valves, fitting, and appurtenances.

Drinking Water

Water suitable to be ingested by humans. Sometimes referred to as Culinary or Potable Water.

Dwelling Unit(s)

Dwelling Unit (DU) is a structure or the part of a structure used as a home, residence, or sleeping place by one person who maintains a household or by two or more persons who maintain a common household.

Equivalent Residential Connection(s), Dwelling Unit(s) or Residential Unit(s)

An ERC, EDU, or ERU is a unit of measurement used to compare water demand from non-residential connections to residential connections. Water use criteria from source (wells and springs) and metered data are established based on average demand or consumption by residential connections. This is compared with non-residential uses.

Excess Capacity

Excess capacity used for engineering purposes is when the demand is less than capacity. An example of excess capacity is when the water demand (consumption) of drinking water system users is less than the drinking water system supply.

Fixture Unit

A unit of measure expressing the hydraulic loading imposed by any sanitary fixture on the system of pipe work to which it discharges. Fixture units are typically defined in the International Plumbing Code (IPC).

Fire Flow

Available flowrate of water supply for firefighting with a residual pressure of 20 psi. Typically measured as a rate of flow (gpm) for a specific period of time or duration (hours).

Flood Hazard Zone

Flood Hazard Zone is an area identified on a Flood Insurance Rate Map (FIRM) which specifies a Base Flood Elevation (BFE) or flood depth.

Head

Also referred to as Pressure Head is a measurement of water pressure in a hydraulic setting expressed as feet of water. One (1) lbs per square inch (psi) of head equals 2.31 feet.

Head Loss

Measurement of energy dissipated in a fluid system due to friction along the length of a pipe or hydraulic system, and those due to fittings, valves and other system structures.

HEC

Computer software for hydrologic engineering and planning analysis.

HEC-RAS

Computer program which models the hydraulics of water flow through natural rivers and channels.

Hydrology

Scientific study of the properties, distribution, and effects of water on the earth's surface, in the soil and underlying rocks, and in the atmosphere.

Hydrologic Soil Group

Natural Resource Conservative Service (NRCS) classification system in which soils are categorized into four (4) runoff potential groups. This groups consist of soil groups A, B, C, or D.

Indoor Use

Hydraulic loading imposed by any sanitary fixture on the system of pipe work to which it discharges inside a building.

Infiltration

Process by which water enters the soil and recharges streams, lakes, rivers, and underground aquifers. Term typically used in storm water terminology.

Infiltration Rate

Flow rate by which water enters the soil and recharges streams, lakes, rivers, and underground aquifers. Typically, specified in inches per hour. Term typically used in storm water terminology.

Inflation

Rate at which prices for goods and services increases.

Interceptor Lines

Major sanitary sewer line that receives flow from trunk sanitary sewer lines.

Interest

Amount paid to borrow money or the cost charged to lend money. Interest is most often reflected as an annual percentage of the amount of a loan.

Impact Fee

Payment of money imposed upon new development activity as a condition of development approval to mitigate the impact of the new development on public infrastructure.

Impact Fee Analysis

The written analysis of each impact fee required by Utah Code Section 11-36a-303.

Impact Fee Facilities Plan

Plan required by Utah Code Section 11-36a-301.

Impervious

Term typically used in storm water terminology to define an area which is impervious such as asphalt pavement or a concrete sidewalk.

Level of Service

Defined performance standard or unit of demand for each capital component of a public facility within a service area.

LID

Low Impact Development is a storm water management strategy which seeks to mitigate the impacts of increased runoff and storm water pollution by managing runoff as close to its source as possible.

Manning's n

Unitless coefficient which represents the roughness or friction applied to the flow of a conduit or a channel.

Master Plan

Dynamic long-term planning document providing a conceptual layout to guide future growth and development.

Major Head Losses

Major head losses or friction losses is the loss of pressure or “head” in pipe flow due to the effect of the fluid’s viscosity near the surface of the pipe or duct.

Minor Head Losses

Minor head losses are local pressure losses or pressure drops of various hydraulic elements such as bends, fittings, valves, elbows, tees or heated channels.

Multi-Unit

Any attached housing units not limited to: town homes, condos, apartments, duplexes, etc..

NOAA ATLAS 14 Precipitation Data

Point precipitation frequency estimates for a specific area in the United States available on NOAA’s website.

Non-Residential

A non-residential use such as a warehouse, commercial building, or business.

Occurrence

Term used in storm water terminology to estimate the frequency of a storm water event.

Outdoor Use

Hydraulic loading imposed on the system typically by an irrigation system.

Par

A par rate is the special loan (grant) interest rate that a lender charges for access to a specific loan.

Peak Day Demand

Amount of water utilized by a water supplier on the day of highest consumption, generally expressed in gallons per day (gpd) or millions of gallons per day (MGD). Demand is typically used in irrigation or drinking water terminology.

Peak Day Flow

Amount of wastewater utilized by a wastewater supplier on the day of highest consumption, generally expressed in gallons per day (gpd) or millions of gallons per day (MGD).

Peak Discharge

Maximum rate of flow during a storm event. Term typically used in storm water terminology.

Peaking Factors

Ratio of a peak day or instantaneous flow/demand to the average day or daily flow/demand.

Peak Inflow

Highest inflow of wastewater into a wastewater treatment facility.

Peak Instantaneous Demand

Calculated or estimated highest demand which can be expected through any water main of the distribution network of a water system at any instant in time, generally expressed in gpm or cfs.

Peak Instantaneous Flow

Calculated or estimated highest flowrate which can be expected through any wastewater collection system at any instant in time, generally expressed in gpm or cfs.

Peak Rainfall Depth

The point at which the amount of rain received is at its highest depth.

Percolation Rate

Flow rate by which water enters the soil and recharges streams, lakes, rivers, and underground aquifers. Typically, specified in minutes per inch. Term typically used in storm water terminology.

Pervious

Term typically used in storm water terminology to define an area which is pervious or allows storm water to infiltrate into the soil such as a parking strip or lawn.

Planning Period

The period of time, typically in years, used in a plan. A planning period of 10-years is typically used in Impact Fee Facilities Plans. Master or General Plans may use planning periods from 20 to 50 years.

Pressure Reducing Valve

Valve provided to reduce pressure in a water distribution system. Typically, used to reduce pressure greater than 100 psi to 50 – 65 psi depending on specific distribution system requirements.

Pressure Zone

A pressure zone in a distribution system is established with a minimum and maximum pressure range which is maintained without the use of ancillary control equipment (e.g. booster pumps, pressure reducing valves, etc.). Maximum static pressures in a typical drinking water pressure zone are 100 to 120 psi with minimum static pressures from 50 to 65 psi.

Professional Expenses

Expenses of a professional consultant. An example is engineering design and construction administrative fees from an engineering company.

Proportionate Share

Cost of public facility improvements which are roughly proportionate and reasonably related to the service demands and needs of any development activity.

Retention

Term typically used in storm water terminology to define a storm water storage site which retains storm water without releasing at a controlled discharge rate and instead infiltrates stored storm water into the ground.

Runoff

Precipitation which does not soak or absorb into the soil surface.

Runoff Coefficients

Percentage of precipitation leaving a particular site as runoff.

Safety Factor

Engineering term utilized to describe how much stronger a system or structure is than it is required to be to fulfil its purpose under expected conditions.

SCS Method

Soil Conservation Service (SCS) Method is a hydrologic modeling method for computing the volume of surface runoff for a given rainfall event from small agricultural, forest, and urban watersheds.

Service Area

Geographic area designated by an entity which a facility, or a defined set of facilities, provides service within the area.

Single Family

Residence used by a single private family which serves no other purpose.

Source

Term used in irrigation or drinking water terminology to specify where the supply of water originates. Examples include groundwater wells or springs.

Static Pressure

The pressure exerted by a liquid or gas, especially water or air, on a body at rest.

Storm and Sanitary Analysis

Comprehensive hydrology and hydraulic analysis application which assists in planning and design of storm water and sanitary sewer systems.

Storm Event

Amount of precipitation which occurs during a specific duration and recurrence interval for the location of the storm event. An example is a 100-year storm event during a 24-hour duration.

Surplus Capacity

The amount of surplus or excess capacity a system has available to future development.

SWMM Method

Storm Water Management Model (SWMM) Method is used throughout the world for planning, analysis and design related to storm water runoff, combined and sanitary sewers, and other drainages. SWMM is a Windows-based, open source, desktop program.

Time of Concentration

Time required for water to flow from the most remote point in a watershed to the point of interest within the watershed. It is a function of topography, geology and land use within the watershed and is computed by summing all the travel times for consecutive components of the drainage conveyance system.

Total Dynamic Head

Total Dynamic Head is the total equivalent height that water needs to be pumped or lifted vertically while also factoring in the friction losses of the pipe and minor head losses in valves and fittings.

TR-55

Technical Release 55 (TR-55) presents simplified procedures to calculate storm runoff volume, peak rate of discharge, hydrographs, and storage volumes required for storm water detention or retention.

Transmission Pipeline

For drinking water or irrigation, a transmission pipeline is typically defined as the pipe from a storage reservoir to the distribution system. A transmission pipeline typically does not have any user water connections.

Trunk Line

Sewer line which receives wastewater flow from the collector sanitary sewer lines and conveys this wastewater either to an interceptor line or a wastewater treatment or reclamation facility.

Waterline

A line formed by the surface of the water on a structure.

Water Line

Pipe or conduit which contains and conveys water.

Water Right

The right to use water diverted at a specific location on a water source, and putting it to recognized beneficial uses at set locations.

Water Wise, Waterwise, or Water-Wise

Generally a functional, attractive, and easily maintained landscape in its natural surroundings. A water wise landscape helps conserve water. Note: Local jurisdiction may have specific definition of water wise landscaping.

Abbreviations and Units

ac	acre [area unit of measurement]
ac-ft	acre-foot (1 acre-foot = 325,851 gallons) [volume unit of measurement]
AWWA	American Water Works Association
BFE	Base Flood Elevation
C	Runoff Coefficient
CN	Curve Number(s)
CFP	Capital Facilities Plan
cfs	cubic feet per second [flow rate unit of measurement]
cfs/acre	cubic feet per acre [flow rate per area unit of measurement]
CMP	Corrugated Metal Pipe
d/D	depth to diameter ratio
DIP	Ductile Iron Pipe
DEQ	Department of Environmental Quality
DU	Dwelling Unit(s)
EDU	Equivalent Dwelling Unit(s)
Ensign	Ensign Engineering and Land Surveying
EPA	U.S. Environmental Protection Agency
ERC	Equivalent Residential Connection(s)
ERU	Equivalent Residential Units(s)
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map(s)
ft	foot [length unit of measurement]
ft/s or fps	feet per second [velocity unit of measurement]
FU	Fixture Unit
gal	gallons [volume unit of measurement]
gpd	gallons per day [flow rate unit of measurement]
gpm	gallons per minute [flow rate unit of measurement]
HDPE	High-density Polyethylene [material used for various building materials]
HEC	Hydrologic Engineering Center
HEC-RAS	Hydrologic Engineering Center – River Analysis System
hr	hour [time unit of measurement]
ID	Inside Diameter

IFFP	Impact Fee Facilities Plan
IPC	International Plumbing Code
i	Average Rainfall Intensity (inches per hour)
I&I	Inflow and Infiltration
in.	inch [length unit of measurement]
L	Length (ft)
LID	Low Impact Development
LOS	Level of Service
MG	million gallons [volume unit of measurement]
MGD	millions of gallons per day [flow rate unit of measurement]
mi	mile [length unit of measurement]
min	minute [time unit of measurement]
MP	Master Plan
NOAA	National Oceanic Atmospheric Administration
NOI	Notice of Intent
NOT	Notice of Termination
NRCS	Natural Resources Conservation Service
PF	Peaking Factor
PRV	Pressure Reducing Valve
psi	pounds per square inch [pressure unit of measurement]
PVC	Polyvinyl Chloride [type of plastic pipe]
Q	Flow Rate or Peak Rate of Runoff (cubic feet second)
RCP	Reinforced Concrete Pipe
s	second [time unit of measurement]
SCADA	Supervisory Control And Data Acquisition
SCS	Soil Conservation Service
SF	Safety Factor
SR	State Route
SSA	Storm and Sanitary Analysis
SWMP	Storm Water management Program
SWPPP	Storm Water Pollution Prevention Plan
T_c	Time of Concentration
UAC	Utah Administrative Code
V	Velocity (fs/s or fps)

WSFU	Water Supply Fixture Unit
WW	Wastewater
WWTF	Wastewater Treatment Facility
WWRF	Wastewater Reclamation Facility
yr	year [time unit of measurement]

Executive Summary

The City of Grantsville is amending its Capital Facilities Plan (CFP), Impact Fee Facilities Plan (IFFP), and Impact Fee Analysis (IFA) in order to ensure the current level of service (LOS) provided to citizens meets demands and can be maintained as the City continues to grow. The CFP, IFFP, and IFA contained in this plan update projects identified in the previous Capital Facility Plans, propose new projects, and update impact fees associated with planned development.

First, a demographic analysis of Grantsville City’s current population, land-use, development patterns, and development potential was completed. The results of the analysis have been used as a basis for projection of future growth over a 10-year planning period and its distribution throughout the planning area. These future growth projections were used as one of the factors to estimate future utility demands and infrastructure requirements for the community. The existing conditions resulting from this analysis are shown in Table ES 1 and the future growth projections are shown in Table ES 2.

Table ES 1: Existing Demographic Conditions

Service Connection Type	Service Connections	Units	ERC / Unit	ERCs
Single Family	4,609	4,618	1.00	4,618
Multi-Unit	46	290	0.52	151
Trailer	8	208	1.12	233
Commercial	110	155	7.34	1,138
Church	10	11	4.57	50
School	7	12	5.09	61
Construction Water	20	20	6.81	136
City Rate	5	33	10.59	349
Total	4,815	5,347		6,736

Table ES 2: Future Growth Projections

Year:		2025		2026		2027		2028		2029		2030		2031		2032		2033		2034		2035	
Projected Population:		16,056		16,592		17,148		17,803		18,486		19,193		19,934		20,705		21,501		22,332		23,192	
Residential Growth Rate:		2.93%		3.5%		3.5%		4.0%		4.0%		4.0%		4.0%		4.0%		4.0%		4.0%		4.0%	
Commercial Growth Rate:		0.73%		0.88%		0.88%		1.00%		1.00%		1.00%		1.00%		1.00%		1.00%		1.00%		1.00%	
Service Connection Type	ERC / Unit	Units	ERCs	Units	ERCs	Units	ERCs	Units	ERCs	Units	ERCs	Units	ERCs	Units	ERCs	Units	ERCs	Units	ERCs	Units	ERCs	Units	ERCs
Single Family	1.00	4,618	4,618	4,780	4,780	4,947	4,947	5,145	5,145	5,351	5,351	5,565	5,565	5,788	5,788	6,020	6,020	6,261	6,261	6,511	6,511	6,771	6,771
Multi-Unit	0.52	290	151	300	156	311	162	323	168	336	175	349	181	363	189	378	197	393	204	409	213	425	221
Trailer ¹	1.12	208	233	208	233	208	233	208	233	208	233	208	233	208	233	208	233	208	233	208	233	208	233
Commercial	7.34	155	1,138	156	1,145	157	1,152	159	1,167	161	1,182	163	1,196	165	1,211	167	1,226	169	1,240	171	1,255	173	1,270
Church ²	4.57	11	50	11	50	11	50	12	55	12	55	13	59	13	59	14	64	14	64	15	69	15	69
School ³	5.09	12	61	12	61	12	61	13	66	13	66	14	71	14	71	15	76	16	81	16	81	17	87
Construction Water	6.81	20	136	21	143	22	150	23	157	24	163	25	170	26	177	27	184	28	191	29	197	30	204
City Rate ⁴	10.59	33	349	35	371	36	381	37	392	37	392	39	413	39	413	40	424	41	434	42	445	42	445
Total		5,347	6,736	5,523	6,939	5,704	7,136	5,920	7,383	6,142	7,617	6,376	7,888	6,616	8,141	6,869	8,424	7,130	8,708	7,401	9,004	7,681	9,300
<i>Increase from 2025</i>		-	-	176	203	357	400	573	647	795	881	1,029	1,152	1,269	1,405	1,522	1,688	1,783	1,972	2,054	2,268	2,334	2,564

¹ Trailer units are not expected to increase.

² Church growth rate is 1 church per 1,450 population.

³ School growth rate is 1 school per 1,330 population.

⁴ City Rate growth rate is based on anticipated City projects.

Next, an analysis of the existing facilities for each utility (drinking water, public safety, parks, wastewater, water rights acquisition, storm drainage, and transportation) was completed. A level of service was proposed for each utility which was used to determine the capacity of existing facilities and future projects required to meet the demands of future development. A cost estimate was completed for each proposed project, and proportionate shares were determined based on the proportion of future development expected to be served by the facility within the planning period. The amount of each project which is eligible for impact fees was calculated by multiplying the proportionate share by the estimated project cost (inflated to the proposed construction year). The proposed system improvements for each utility along with the results of these calculations are shown in Table ES 3 through Table ES 6.

Table ES 3: Drinking Water System Improvements

Project	Construction Year	Current Year (2025) Cost Estimate	Construction Year Cost Estimate	Proportionate Share	Impact Fee Eligible Cost
Bates Well	2027	\$3,041,918.77	\$3,258,579.43	0% ²	\$0.00
West Bank Well	2027	\$3,518,067.73	\$3,768,642.10	0% ²	\$0.00
Southwest Well	2031	\$2,979,952.08	\$3,663,121.97	0%	\$0.00
Northstar Tank No. 1	2026	\$3,387,223.88	\$3,505,776.72	0.00%	\$0.00
West Bank Tank	2027	\$4,898,123.85	\$5,246,992.72	0% ²	\$0.00
Southwest Tank	2031	\$3,825,690.00	\$4,702,749.81	0% ²	\$0.00
Osborne Way Water Line Loop	2026	\$76,356.25	\$79,028.72	27.6%	\$21,788.13
SR-138 Water Line Extension (Developer Portion)	2026	\$6,272,971.05	\$6,492,525.04	0% ²	\$0.00
Northstar Tank No. 1 Transmission Line	2026	\$2,504,135.45	\$2,591,780.19	0% ²	\$0.00
SR-138 Water Line Extension	2027	\$566,221.70	\$606,550.84	27.6%	\$167,225.41
Generator	2027	\$269,200.00	\$288,373.77	27.6%	\$79,504.34
SR-112 Water Line Extension	2027	\$540,168.75	\$578,642.27	0% ²	\$0.00
Southeast Water Line Project	2028	\$1,507,959.92	\$1,671,902.12	0% ²	\$0.00
Clark Street Water Line Project	2029	\$480,299.94	\$551,155.23	27.6%	\$151,952.90
Burmester and Vegas Street Water Pipeline Project	2031	\$973,445.29	\$1,196,612.81	27.6%	\$329,904.86
Centennial Way Water Line Project	2035	\$357,093.75	\$503,716.00	27.6%	\$138,873.96
Public Works Improvements	2035	\$1,318,982.50 ¹	\$1,860,555.08	27.6%	\$512,953.03
Hale Street Water Line Replacement	2029	\$878,172.10	\$1,007,722.68	27.6%	\$277,828.06
Total		\$37,395,983.01	\$41,574,427.50		\$1,680,030.71

¹ The cost shown for the Public Works Improvements project is half of the total cost estimate because this project cost will be split evenly between the wastewater and drinking water utilities.

² The proportionate share is 0% because the project is expected to be constructed by developers.

Table ES 4: Public Safety System Improvements

Project	Construction Year	Current Year (2025) Cost Estimate	Construction Year Cost Estimate	Proportionate Share	Impact Fee Eligible Cost
Animal Control Shelter	2033	\$1,567,581.40	\$2,064,205.35	14.3%	\$295,585.40
Justice Center Police Expansion	2034	\$1,246,608.00	\$1,698,998.74	34.0%	\$578,158.28
Total		\$2,814,189.40	\$3,763,204.10		\$873,743.68

Table ES 5: Parks System Improvements

Project	Construction Year	Current Year (2025) Cost Estimate	Construction Year Cost Estimate	Proportionate Share	Impact Fee Eligible Cost
West Street Park	2026	\$297,903.23	\$308,329.84	19.7%	\$60,752.89
Scenic Slopes Park, Utilities, Pump Track, Site Improvements	2026	\$3,170,969.33	\$2,420,969.33 ²	100.0%	\$2,420,969.33
Desert Edge Park	2027	\$2,664,070.11	\$2,853,818.50	0% ¹	\$0.00
Scenic Slopes Parking, Park Amenities, Ball Courts	2028	\$2,447,372.82	\$2,713,445.99	100.0%	\$2,713,445.99
President's Park	2034	\$1,695,904.66	\$2,311,343.97	100.0%	\$2,311,343.97
Scenic Slopes Park Baseball and Soccer Field	2032	\$3,198,537.29	\$4,069,432.67	100.0%	\$4,069,432.67
Twenty Wells Park	2032	\$8,628,500.00	\$10,977,861.62	0% ¹	\$0.00
Highlands Park	2033	\$3,392,678.66	\$4,467,509.92	0% ¹	\$0.00
Clark Farm Park	2034	\$3,405,170.23	\$4,640,897.49	0%	\$0.00
Total		\$28,901,106.33	\$34,763,609.34		\$11,575,944.86

¹ The proportionate share is 0% because the project is expected be constructed by developers.

² Construction Year Cost based on Resolution No. 2025-71 not inflated, without grant of \$750k which is not impact fee eligible.

Table ES 6: Wastewater System Improvements

Project	Construction Year	Current Year (2025) Cost Estimate	Construction Year Cost Estimate	Proportionate Share	Impact Fee Eligible Cost
SR112 Interceptor	2027	\$2,988,835.56	\$3,201,715.37	0% ²	\$0.00
West Bank Interceptor Segment 1	2027	\$376,287.40	\$403,088.47	8.8% ⁴	\$35,294.63
West Bank Interceptor Segment 2	2027	\$39,832.00	\$42,669.03	13.5% ⁴	\$5,756.82
West Bank Interceptor Segment 3	2027	\$3,927,403.66	\$4,207,132.99	0% ²	\$0.00
Southeast Sewer Line	2027	\$1,564,982.00	\$1,676,447.84	0% ²	\$0.00
Vegas Street Collector	2035	\$5,790,294.14	\$8,167,781.74	0.0%	\$0.00
Northwest Lift Station - Upsize Force Main	2028	\$194,363.06	\$215,493.80	100%	\$215,493.80
Proposed Wastewater Treatment Facility	2026	\$48,402,175.15 ³	\$48,402,175.15	12.8%	\$6,205,158.85
Public Works Improvements	2035	\$1,318,982.50 ¹	\$1,860,555.08	27.6%	\$512,953.03
Total		\$64,603,155.47	\$68,177,059.48		\$6,974,657.14

¹ The cost shown for the Public Works Improvements project is half of the total cost estimate because this project cost will be split evenly between the wastewater and drinking water utilities.

² The proportionate share is 0% because the project is expected be constructed by developers.

³ Proposed WWTF is 2026 cost estimate.

⁴ The proportionate share within the planning period for Segment 1 is calculated by dividing planning period ERCs (1,544 ERCs) by upsize capacity [36-inch capacity (26,682 ERCs) - Deseret minimum diameter (9,050 ERCs)]=17,632 ERCs.

The proportionate share within the planning period for Segment 2 is calculated by dividing planning period ERCs (1,544 ERCs) by upsize capacity [36-inch capacity (15,008 ERCs) - Deseret minimum diameter (3,565 ERCs)]=11,443 ERCs. The costs shown for West Bank Interceptor Segment 1 and 2 in the table are upsize costs only.

Impact fees were then calculated considering buy-in costs to be charged for existing facilities with excess capacity, the proposed system improvements, and any loans which are anticipated to fund proposed projects. There is no impact fee charged for storm drainage because the required projects are associated with correcting existing deficiencies, and it is the responsibility of the developers, not the City, to construct facilities required to meet the specified level of service. The impact fee for water rights acquisition is calculated by multiplying the required quantity of water rights shown in Table ES 11 and Table ES 12 by the typical cost of water rights of \$29,000 per acre-foot. The proposed impact fees for each utility are shown in Table ES 7 through Table ES 11 with the maximum allowable impact fees for each infrastructure type. Where appropriate, the maximum allowable fee is adjusted to reflect the proportional infrastructure needs of different land use types. In case of excess capacity, new development

contributions to existing infrastructure are included to calculate the final recommended impact fee.

Table ES 7: Proposed Drinking Maximum Allowable Water Impact Fees

Water Meter Size (inches)	Maximum Flow Rate (gpm)	ERCs	Impact Fee
3/4	25 ¹	1	\$2,841.56
1	40 ¹	1.6	\$4,546.49
1 1/2	50 ¹	2	\$5,683.11
2	100 ¹	4	\$11,366.22
3	200 ²	8	\$22,732.45
4	400 ²	16	\$45,464.89
6	800 ²	32	\$90,929.79
8	1,000 ²	40	\$113,662.24
Non-Residential Development Indoor			\$28.97 per fixture unit
Non-Residential Development Outdoor			\$17,957.79 per irrigated acre

¹ From AWWA M6 Table 5-3 Displacement Meters.

² From AWWA M6 Table 5-3 Electromagnetic and Ultrasonic Meter Type 1.

Table ES 8: Proposed Public Safety Maximum Allowable Impact Fees

Land Use	Impact Fee
Single Family	\$712.43 per Dwelling Unit
Multi-Unit	\$2,388.62 per Dwelling Unit
Non-Residential	\$3,070.10 per Non-Residential Unit

Table ES 9: Proposed Parks Maximum Allowable Impact Fees

Land Use	Impact Fee
Single Family and Multi-Unit	\$3,762.18 per Dwelling Unit

Table ES 10: Proposed Wastewater Maximum Allowable Impact Fees

Water Meter Size (inches)	Maximum Flow Rate (gpm)	ERCs	Impact Fee
3/4	25 ¹	1	\$6,081.18
1	40 ¹	1.6	\$9,729.89
1 1/2	50 ¹	2	\$12,162.36
2	100 ¹	4	\$24,324.72
3	200 ²	8	\$48,649.44
4	400 ²	16	\$97,298.89
6	800 ²	32	\$194,597.77
8	1,000 ²	40	\$243,247.22
Non-Residential Development			\$253.38 per fixture unit

¹ From AWWA M6 Table 5-3 Displacement Meters.

² From AWWA M6 Table 5-3 Electromagnetic and Ultrasonic Meter Type 1.

Table ES 11: Indoor Use Water Rights Requirements and Maximum Allowable Impact Fee

Land Use	Water Right Quantity (ac-ft)	Impact Fee	Unit
Single Family Residential	0.218	\$6,322.00	per Dwelling Unit
Multi-Unit Residential	0.120	\$3,480.00	per Dwelling Unit
Non-Residential	0.00908	\$263.32	per fixture unit

Table ES 12: Outdoor Use Water Rights Requirements

Land Use	Water Right Quantity (ac-ft)
No Waterwise Landscaping	
Category 1	= (lot size ¹ , acres) * (0.64) * (3.33 ac-ft/irr. ac)
Category 2	= (irrigated area, acres) * (3.33 ac-ft/irr. ac)
Waterwise Landscape Front Yard Only	
Category 1	= (lot size ¹ , acres) * [(0.18) * (2.28 ac-ft/irr. ac) + (0.46) * (3.33 ac-ft/irr. ac)]
Category 2	= (front yard irrigated area, acres) * (2.28 ac-ft/irr. ac) + (remaining irrigated area, acres) * (3.33 ac-ft/irr. ac)
Waterwise Landscape Entire Lot	
Category 1	Reduction not allowed (use front yard only formula)
Category 2	= (irrigated area, acres) * (2.28 ac-ft/irr. ac)

¹ Lot size capped at 1 acre.

Section 1 Introduction

1.1 Purpose and Scope

Grantsville City is amending its Capital Facilities Plan (CFP), Impact Fee Facilities Plan (IFFP), and Impact Fee Analysis (IFA) to ensure the City's infrastructure will continue to meet the demands of its residents; to plan for improvements needed to meet new demands of future residents; and to collect funding for these projects necessitated by future growth. This plan builds upon information presented in the City's previous CFPs, IFFPs, and IFAs.

1.2 Capital Facilities Plan and Impact Fee Facilities Plan Overview

Capital facilities plans provide a path forward for the City by identifying future capital improvement projects necessary to maintain the current LOS provided by the City to its current and future residents. This capital facilities plan addresses the following:

- Complete a 10-year population and demographic projection within existing City limits by reviewing U.S. Census Data; Utah Division of Drinking Water (UDDW) data; an analysis of recent impact fees paid to the City; Utah State demographic data; and other demographic data sources.
- Identify existing City infrastructure using City records, past and present master plans, and the previous CFP.
- Identify new, proposed, and previously undocumented improvements for each infrastructure and public safety element.
- Calculate existing levels of service (LOS) using specified standards.
- Identify system deficiencies and surpluses.
- Identify present and future demands on the system.
- Identify Capital Improvement Projects (CIP) necessary to remedy deficiencies and meet the demands of new and proposed development.
- Identify and quantify all revenue sources for potential improvements.
- Prioritize and schedule each CIP within the 10-year planning period.
- Solicit and document input from City officials, staff, stakeholders, and affected entities during the CFP process.

Per Impact Fees Act, 11-36a-301, before imposing an impact fee the City shall prepare an impact fee facilities plan to determine the public facilities required to serve development resulting from a new development activity. An impact fee facilities plan shall:

- Identify the existing level of service.
- Establish a proposed level of service.
- Identify any excess capacity to accommodate future growth at the proposed level of service.
- Identify demands placed upon existing public facilities by new development activity at the proposed level of service.
- Identify the means by which the political subdivision or private entity will meet those growth demands.

Impact fees may not be used to directly improve the existing level of service. Existing deficiencies must use funding other than impact fees to be corrected or improved (Impact Fees Act, 11-36a-302).

1.3 Impact Fee Analysis Overview

Per Impact Fees Act, 11-36a-304, an impact fee analysis shall:

- Identify the anticipated impact on or consumption of any existing capacity of a public facility by the development activity.
- Identify system improvements required to maintain the level of service for the anticipated development activity.
- Demonstrate how the anticipated impacts are related to the development activity.
- Estimate the proportionate share of the costs of existing capacity that will be recouped and the cost of system improvements related to the development activity.
- Identify the manner of financing each public facility, and the extent to which development activity will contribute to the financing and cost of existing public facilities and future system improvements.
- Identify the extent to which development activity is entitled to a credit against impact fees, extraordinary costs in servicing the newly developed properties, and the time-price differential of amounts paid at different times.

In calculating an impact fee, a local political subdivision or private entity may include (Impact Fees Act, 11-36a-305):

- The construction contract price.
- The cost of acquiring land, improvements, materials, and fixtures.
- The cost for planning, surveying, and engineering fees for services provided for and directly related to the construction of the system improvements.
- For a political subdivision, debt service charges, if the political subdivision might use impact fees as a revenue stream to pay the principal and interest on bonds, notes, or other obligations issued to finance the costs of the system improvements.
- One or more expenses for overhead.

In addition to preparing an impact fee analysis, a summary of the impact fee analysis shall be prepared so that it can be understood by a layperson (Impact Fees Act, 11-36a-303).

1.4 Impact Fee Requirements

The authority to implement impact fees in Utah was established with the Impact Fee Act, Utah Code – Title 11 – Chapter 36a. The Impact Fees Act grants the City the ability to impose fair impact fees on new development in accordance with requirements set forth in the act to maintain existing levels of service. Impact fees on new development help distribute the cost associated with providing expanded services to a greater population over a larger area to ensure that the existing LOS is not diminished with new and anticipated development. In order to establish an impact fee, the City must complete an Impact Fee Facilities Plan and Impact Fee Analysis which meet the provisions of the Impact Fees Act as discussed in Sections 1.2 and 1.3. Additionally, the City must comply with the Impact Fees Act requirements of enactment, notice, proceeds, and challenges discussed below. Refer to Appendix B for the City's current Impact Fee Ordinance. The details of the Impact Fees Act described in this plan are a summary of the code for reference purposes; the original and complete text of Utah Code 11-36a should be referred to in conjunction with this document.

1.4.1 Prohibitions

The City may not in accordance with Utah Code Section 11-36a-202:

- Impose an impact fee to:
 - Cure deficiencies in a public facility serving existing development.
 - Raise the established level of service of a public facility serving existing development.
 - Recoup more than the local political subdivision's or private entity's costs actually incurred for excess capacity in an existing system improvement.
- Delay the construction of a school or charter school because of a dispute with the school or charter school over impact fees.
- Impose or charge any other fees as a condition of development approval unless those fees are a reasonable charge for the service provided.
- Impose an impact fee on:
 - Residential components of development to pay for a public safety facility that is a fire suppression vehicle.
 - A school district or charter school for a park, recreation facility, open space, or trail.

1.4.2 Enactment

In order to impose impact fees, an impact fee enactment shall be passed in accordance with Section 11-36a-402. The imposed impact fees may not exceed the highest fee justified by the impact fee analysis and may not take effect until 90 days after the impact fee enactment is approved. An impact fee enactment shall contain:

- A provision establishing one or more service areas within which the City calculates and imposes impact fees for various land use categories.
- A schedule of impact fees for each type of development activity that specifies the amount of the impact fee to be imposed for each type of system improvement or the formula that the City will use to calculate each impact fee.
- A provision authorizing the City to adjust the standard impact fee at the time the fee is charged to:
 - Respond to unusual circumstances; or
 - Respond to a request for a prompt and individualized impact fee review for the development activity of the State, a school district, or a charter school and an

offset or credit for a public facility for which an impact fee has been or will be collected; and

- Ensure that the impact fees are imposed fairly.
- A provision governing the calculation of the amount of the impact fee to be imposed on a particular development that permits adjustment of the amount of the impact fee based upon studies and data submitted by the developer.
- A provision that allows a developer, including a school district or a charter school, to receive a credit against or proportionate reimbursement of an impact fee if the developer:
 - Dedicates land for a system improvement;
 - Builds and dedicates some or all of a system improvement; or
 - Dedicates a public facility that the City and the developer agree will reduce the need for a system improvement.
- A provision that requires a credit against impact fees for any dedication of land for, improvement to, or new construction of, any system improvements provided by the developer if the facilities are system improvements or are dedicated to the public and offset the need for an identified system improvement.

1.4.3 Notice

Before preparing or amending an impact fee facilities plan, a local political subdivision or private entity shall provide written notice in accordance with Section 11-36a Part 5 of its intent to prepare or amend an impact fee facilities plan that shall:

- Indicate that the local political subdivision or private entity intends to prepare or amend an impact fee facilities plan.
- Describe or provide a map of the geographic area where the proposed impact fee facilities will be located.
- Be provided for the geographic area where the proposed impact fee facilities will be located, as a class A notice under Section 63G-30-102, for at least 10 days.

Before adopting or amending the impact fee facilities plan, the City shall:

- Give public notice of the plan or amendment at least 10 days before the day on which the public hearing is scheduled.

- Make a copy of the plan or amendment, together with a summary designed to be understood by a lay person, available to the public.
- Place a copy of the plan or amendment and summary in each public library within the local political subdivision.
- Hold a public hearing to hear public comment on the plan or amendment.

Before preparing or contracting to prepare an impact fee analysis, the City shall provide a public notice, as a class A notice under Section 63G-30-102, for at least 10 days. Before adopting an impact fee enactment, the City shall:

- Comply with the notice requirements of Section 10-9a-205 as if the impact fee enactment were a land use regulation.
- Hold a hearing in accordance with Section 10-9a-502 as if the impact fee enactment were a land use regulation.
- Receive the protections of Section 10-9a-801 as if the impact fee were a land use regulation.
- At least 10 days before the day on which a public hearing is scheduled:
 - Make a copy of the impact fee enactment available to the public.
 - Provide notice of the City's intent to enact or modify the impact fee, specifying the type of impact fee being enacted or modified, as a class A notice under Section 63G-30-102, for at least 10 days.
- Submit a copy of the impact fee analysis and a copy of the summary of the impact fee analysis on its website or to each public library within the local political subdivision.

1.4.4 Proceeds

To collect impact fees in accordance with Section 11-36a Part 6 the City shall:

- Establish a separate interest-bearing ledger account for each type of public facility for which an impact fee is collected.
- Deposit a receipt for an impact fee in the appropriate ledger account.
- Retain the interest earned on each fund or ledger account in the fund or ledger account.
- At the end of each fiscal year, prepare a report that:
 - For each fund or ledger account, shows the source and amount of all money collected, earned, and received by the fund or ledger account during the fiscal year and each expenditure from the fund or ledger account.

- Accounts for all impact fee funds that the local political subdivision has on hand at the end of the fiscal year.
- Identifies the impact fee funds by:
 - The year in which the impact fee funds were received;
 - The project from which the impact fee funds were collected;
 - The project for which the impact fee funds are budgeted; and
 - The projected schedule for expenditure.
- Is:
 - In a format developed by the state auditor;
 - Certified by the local political subdivision's chief financial officer; and
 - Transmitted to the state auditor within 180 days after the day on which the fiscal year ends.

The City may expend impact fees only for a system improvement identified in the impact fee facilities plan and for the specific public facility type for which the fee was collected. The City shall expend or encumber an impact fee collected with respect to a lot for a permissible use and within six years after the impact fee with respect to that lot is collected. The City may hold the fees for longer than six years if it identifies, in writing an extraordinary and compelling reason why the fees should be held longer than six years and an absolute date by which the fees will be expended.

The City shall refund any impact fee paid by a developer, plus interest earned, when the developer does not proceed with the development activity and has filed a written request for a refund, the fee has not been spent or encumbered, and no impact has resulted.

1.4.5 Challenges

In accordance with Utah Code Section 11-36a Part 7.

- A person or an entity residing in or owning property within a service area, or an organization, association, or a corporation representing the interests of persons or entities owning property within a service area, has standing to file a declaratory judgment action challenging the validity of an impact fee.
- A person or entity required to pay an impact fee who believes the impact fee does not meet the requirements of law may file a written request for information with the City.

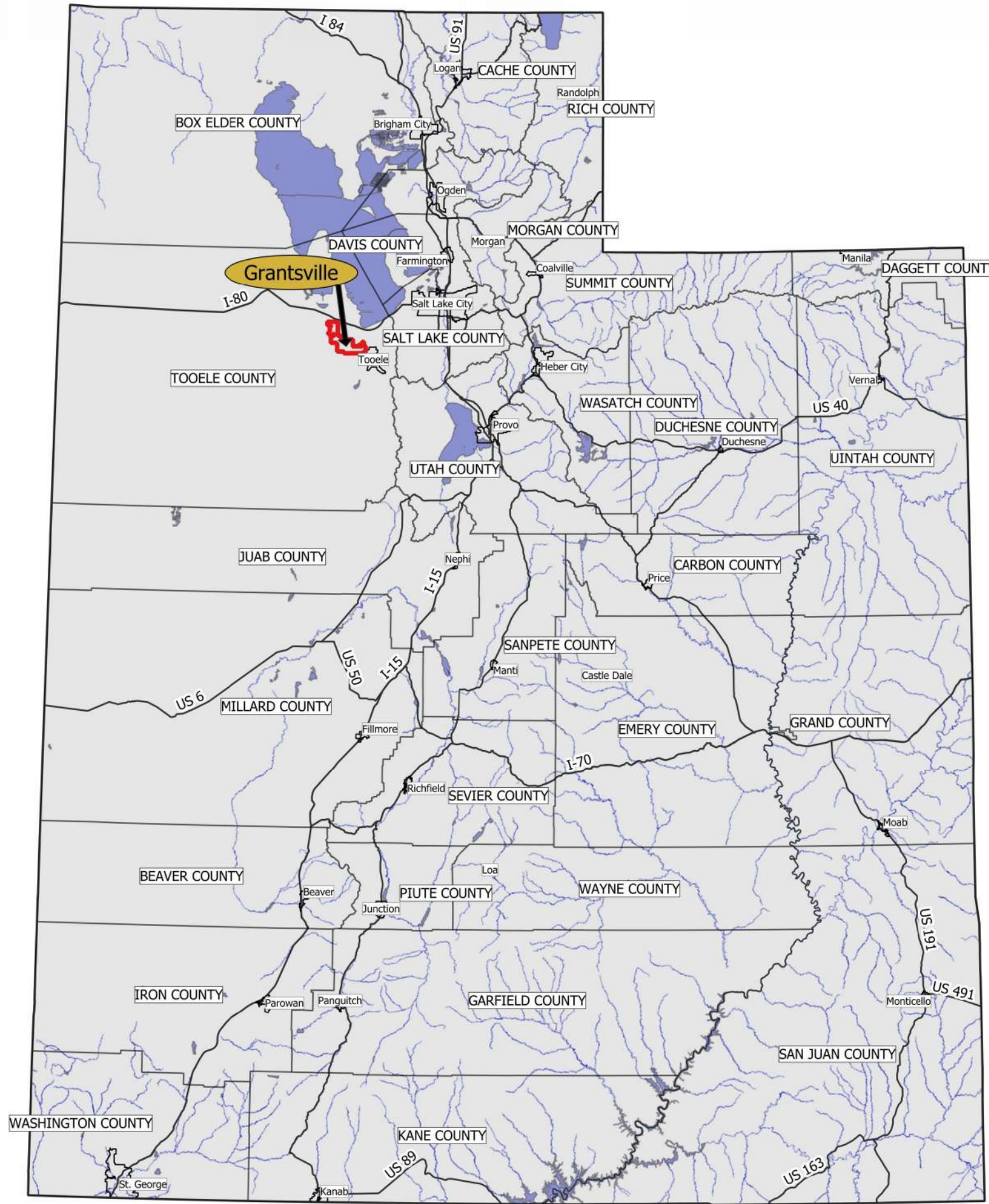
- Within two weeks after the receipt of the request for information, the City shall provide the person or entity with the impact fee analysis, the impact fee facilities plan, and any other relevant information relating to the impact fee.
- A person or entity that has paid an impact fee that the City imposed may challenge whether the City complied with the notice and other procedural requirements of the Impact Fees Act with respect to the imposition of the impact fee.
- If a challenge is successful, the remedy shall be a refund of the difference between what the person or entity paid as an impact fee and the amount the impact fee should have been if it had been correctly calculated.
- If an impact fee that is the subject of an advisory opinion is listed as a cause of action in litigation, the substantially prevailing party on that cause of action may collect reasonable attorney fees and court costs pertaining to the development of that cause of action and shall be refunded an impact fee held to be in violation of the Impact Fees Act, based on the difference between the impact fee paid and what the impact fee should have been if it had been correctly calculated.

1.5 Background

Grantsville City is situated in Tooele County at the northwestern end of the Tooele Valley and at the south end of the Great Salt Lake. The City's location is shown in Figure 1-1 and Figure 1-2. Grantsville is located both in the floor of the valley with western portions of the City entering into the foothills of the Stansbury Mountains to the west. The Tooele Valley is on the eastern end of the basin and range topography of the Great Basin Desert.

Grantsville City, like much of Utah, has experienced rapid growth in the past decade and is projected to continue for the next decade and beyond. This growth is coinciding with a transition period for the City as it grows from a bedroom community supported largely by jobs in the greater Tooele Valley or Salt Lake City metropolitan area, to a City with a sizable commercial presence. From the Wal-Mart distribution center in the northwest corner of the city to the Purple Mattress warehouse and Lakeview Business Center in the Deseret Peak portion of the City, the City is poised for continued growth in these sectors. Recent residential growth in the southern and western portions of the City indicate a growing local population to service these new industries. Additional dwelling units (ADU) are becoming more prevalent as the City grows, and for the sake of this plan shall only be considered impact fee eligible if they are an independent or detached structure. An ADU could be considered a duplex, townhomes, a commercial center

with multiple store fronts, or etc. The number of units an ADU can qualify for is determined by the number of independent connections to the system. As the cost of real-estate rises in the Salt Lake Valley and it nears build-out capacity, jobs that Grantsville City residents formerly commuted to could instead be re-located to Grantsville City itself. This growth and associated developments will bring needed improvements and extensions of the City's existing infrastructure to maintain existing levels of service.



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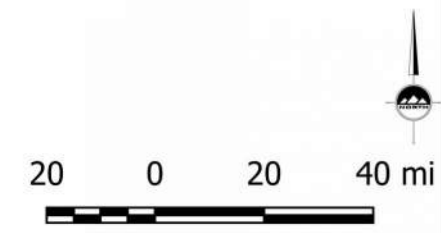
CONTACT:
MAYOR HEIDI HAMMOND
PHONE: 435-243-9458

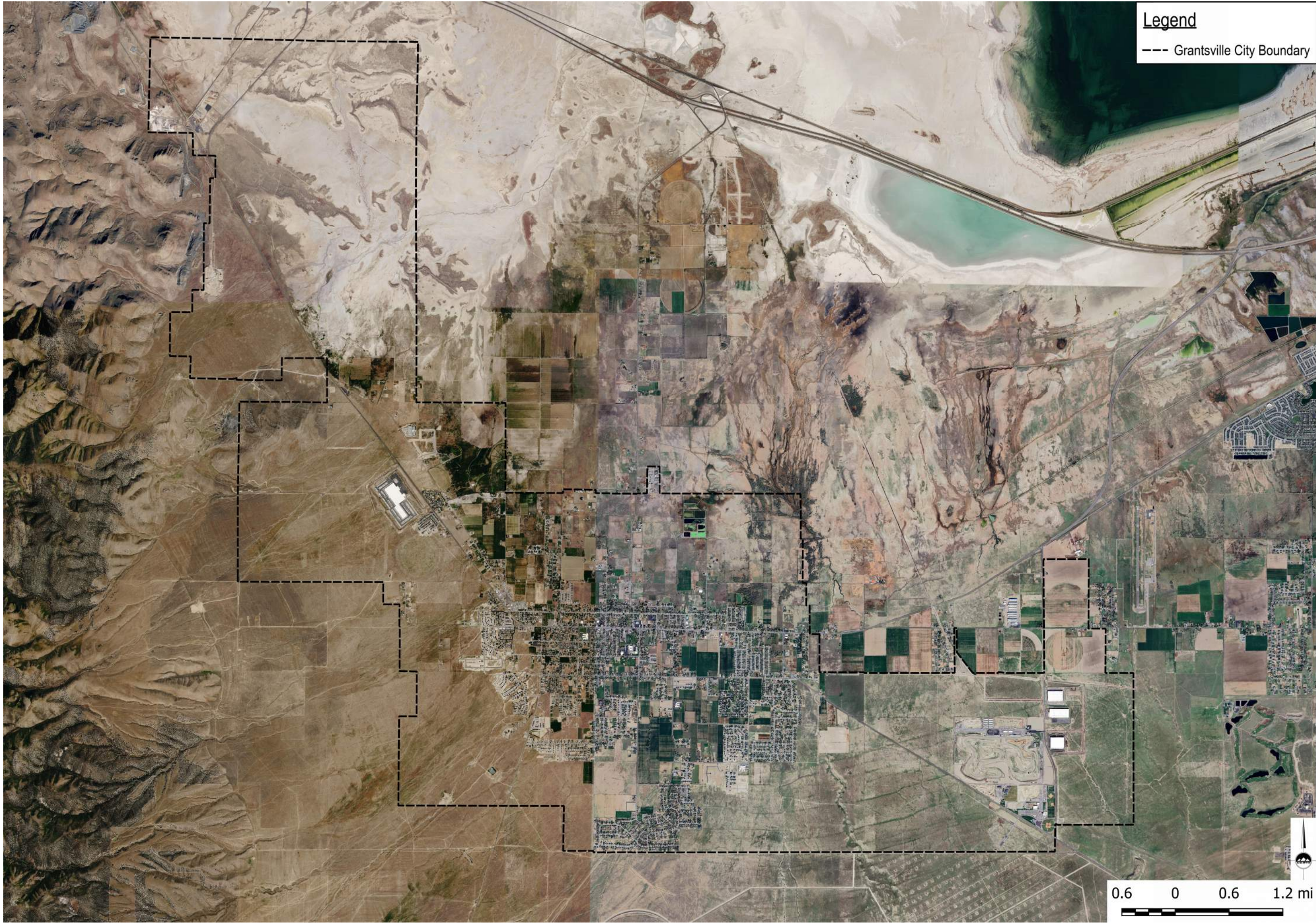
GRANTSVILLE CFP, IFFP, AND IFA
GRANTSVILLE, UTAH

LOCATION MAP

PROJECT NUMBER 11637	PRINT DATE 2026-04-02
PROJECT MANAGER R. ROUSSELLE	DESIGNED BY M. SANFORD

FIG 1-1





Legend

--- Grantsville City Boundary



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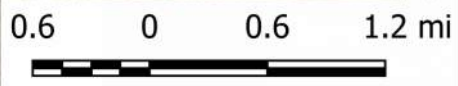
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GRANTSVILLE CFP, IFFP, AND IFA
GRANTSVILLE, UTAH

CITY AERIAL
OVERVIEW

PROJECT NUMBER: 11637
PRINT DATE: 2026-04-02
PROJECT MANAGER: R. ROUSSELLE
DESIGNED BY: M. SANFORD

FIG 1-2



1.6 Inflation Rate

Inflation must be accounted for when calculating impact fees, so for the purposes of this CFP, IFFP, and IFA an annual inflation rate of 3.5% is used. It is recognized that the current economic climate is unpredictable and inflation rates vary significantly, but these rates are predicted to stabilize over time so 3.5% is believed to be a reasonably accurate rate. If this predicted rate is not consistent with actual inflation rates over time, then the City should revisit and update any cost-estimates contained in this plan to reflect an accurate inflation rate.

Section 2 Demographics

2.1 Introduction

Grantsville City is transitioning from a small bedroom community supporting the regional economy to a small city experiencing rapid growth. Many residents commute to work in the Salt Lake Valley, while others increasingly work locally providing services for the County and the community. Local work is concentrated in mineral extraction and waste disposal companies located in the West Desert and around the south arm of the Great Salt Lake along with warehousing, distribution, and manufacturing located in the Tooele Valley. Warehousing and distribution jobs increased in recent years with the arrival of a Walmart Distribution Center in the northwest corner of the City and a Purple Mattress warehouse in the southeast. The construction of the Lakeview Business Park, adjacent to the Utah Motorsports Campus in the Deseret Peak area of the City, will result in a substantial increase in warehousing and distribution jobs in the future. It is anticipated that the Flux and West areas of the City will see a significant increase in residential and commercial development. Even with this considerable anticipated growth, the City recognizes the importance in preserving its character and rural community.

A demographic analysis of Grantsville City's current population, land-use, development patterns, and development potential has been completed. The results of the analysis have been used as a basis for projection of future growth and its distribution throughout the planning area. These future growth projections will be used as one of the factors to estimate future utility demands and infrastructure requirements for the community.

2.2 Planning Period

This plan focuses on growth projected in the next 10 years to determine future capital facility needs. The planning period begins at the end of 2025 and finishes at the end of 2035. Anytime a year is stated throughout this plan it is referring to the end of the specified year.

2.3 Planning Areas

In order to identify areas that are showing recent growth trends and more accurately determine needed improvements, the entire planning area has been divided into six distinct planning areas: Flux, North, Central, South, West, and Deseret Peak (see Figure 2-1). Major roads,

transitions in existing development density, or changes in land use have been used as boundaries to the extent possible to define these planning areas.

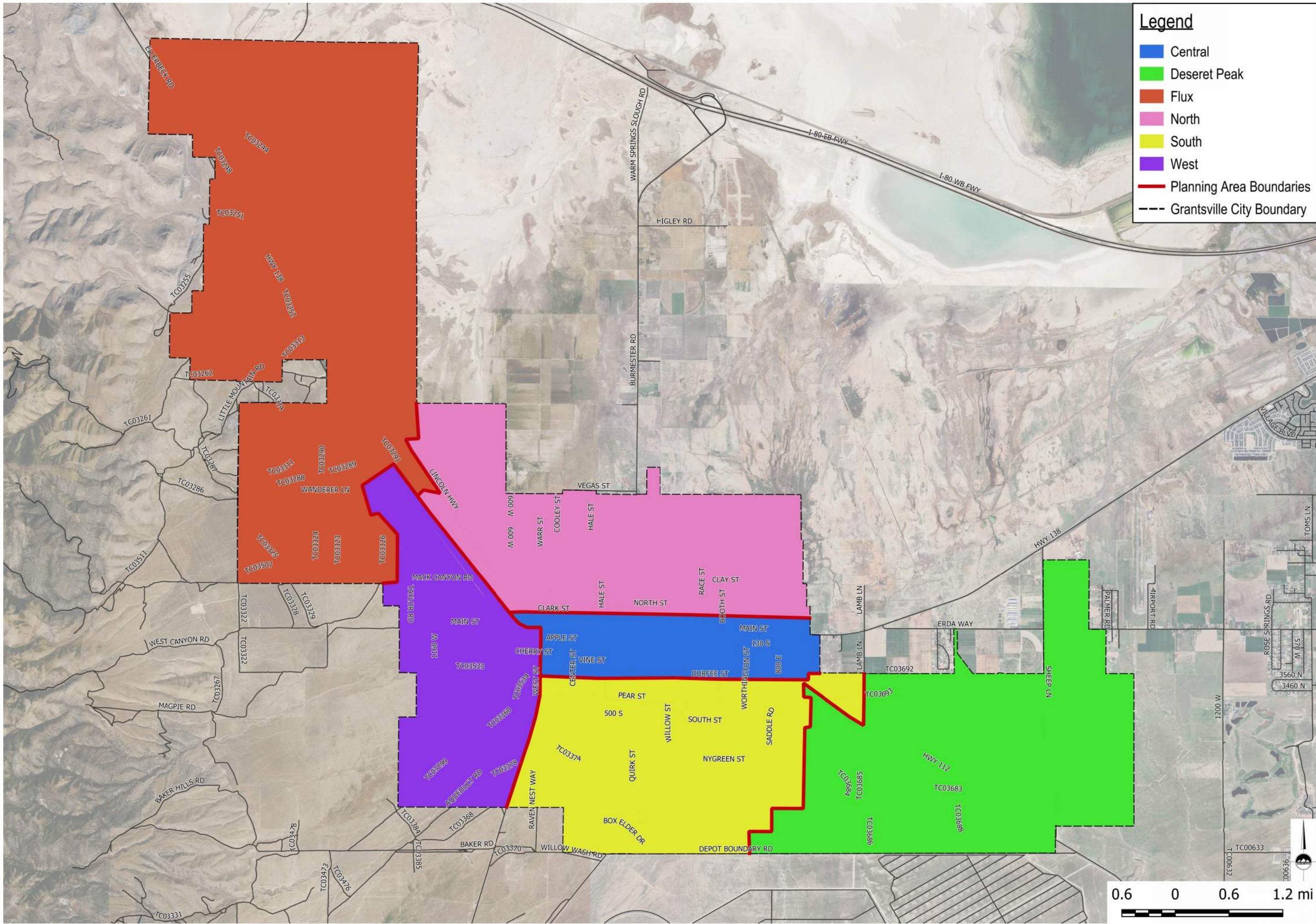
2.4 Land Use and Build Out Capacity

Grantsville City limits encompass approximately 25,522 gross acres. Much of this land is currently undeveloped, particularly in the area northwest of the City along SR 138 (Flux and West areas) and the Deseret Peak area. Future land use areas per the City’s current zoning designations are shown in Figure 2-2. The Grantsville City General Plan provides values for maximum allowable densities for each land use type (Table 2-1), and Ensign assumed an actual build-out density for each land use type in order to project future development.

Table 2-1: Land Use Densities

Land Use	Maximum Land Use Density (Units/Acre)	Assumed Density (Units/Acre)
Commercial	-	3
Mixed-Use Density	10 to 15	5
High Single Family Residential	6	3.5
Medium Density Residential	3	1.75
Low Density Residential	2	1
Rural Residential-1	0.1 to 1	0.5
Rural Residential-2	0.1 to 0.2	0.15
Industrial	-	0.25
Municipal / School	-	0.1
Park & Open Space	-	0.01
General Manufacturing	-	0.25

Note: Assumed density was assigned to Park and Open Space to be able to determine future infrastructure improvements.



Legend

- Central
- Deseret Peak
- Flux
- North
- South
- West
- Planning Area Boundaries
- Grantsville City Boundary

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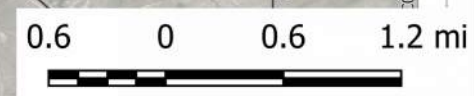
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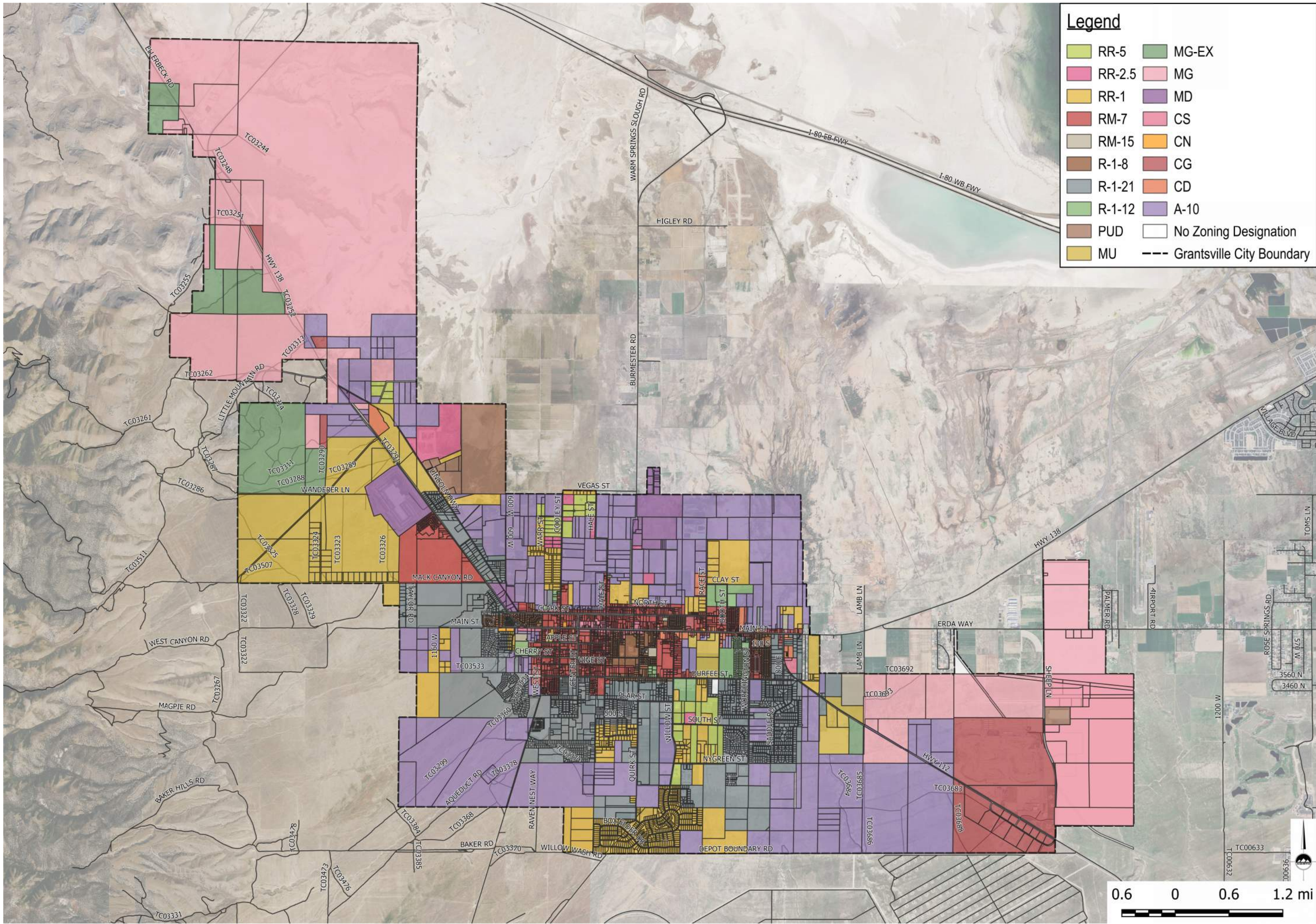
GRANTSVILLE, UTAH

PLANNING AREAS

PROJECT NUMBER: 11637 PRINT DATE: 2026-04-02
 PROJECT MANAGER: R. ROUSSELLE DESIGNED BY: M. SANFORD

FIG 2-1





Legend

 RR-5	 MG-EX
 RR-2.5	 MG
 RR-1	 MD
 RM-7	 CS
 RM-15	 CN
 R-1-8	 CG
 R-1-21	 CD
 R-1-12	 A-10
 PUD	 No Zoning Designation
 MU	 Grantsville City Boundary

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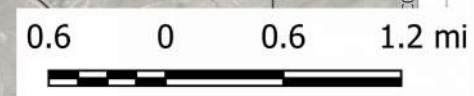
GRANTSVILLE CFP, IFFP, AND IFA

GRANTSVILLE, UTAH

FUTURE LAND USE MAP

PROJECT NUMBER: 11637 PRINT DATE: 2026-04-02
PROJECT MANAGER: R. ROUSSELLE DESIGNED BY: M. SANFORD

FIG 2-2



2.5 Planning Conversions

The Equivalent Residential Connection (ERC) is the recognized standard planning unit when planning for future utility infrastructure needs. One ERC represents a single-family dwelling with known demand characteristics or requirements. Other types of uses are typically factored based upon comparison of their demand versus the residential single-family unit. The types of uses for Grantsville City are categorized as shown in Table 2-2. The Construction Water connection type represents water drawn from a hydrant for construction use, and the City Rate connection is water usage from City buildings and parks.

In order to determine the total number of ERCs, it is necessary to convert the number of physical units and metered service connections on the system to ERCs. The existing numbers of units and service connections for Grantsville were determined from the City’s monthly water meter reports. The conversion between service connections and ERCs has been calculated (Appendix C) using approved methods as outlined in the State of Utah Administrative Code R309-510, and the results are summarized in Table 2-2.

Table 2-2: Existing Service Connections and ERCs

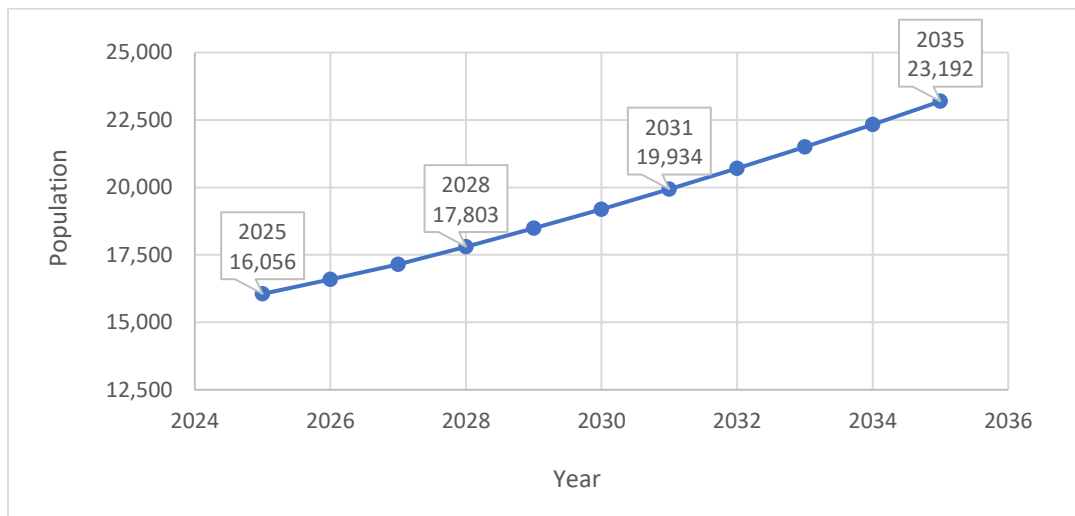
Service Connection Type	Service Connections	Units	ERC / Unit	ERCs
Single Family	4,609	4,618	1.00	4,618
Multi-Unit	46	290	0.52	151
Trailer	8	208	1.12	233
Commercial	110	155	7.34	1,138
Church	10	11	4.57	50
School	7	12	5.09	61
Construction Water	20	20	6.81	136
City Rate	5	33	10.59	349
Total	4,815	5,347		6,736

2.6 Population

The Utah Division of Drinking Water (UDDW) estimated Grantsville’s 2018 population to be 10,660. The 2020 Census estimated Grantsville’s population to be 12,617 and a Census Bureau estimate completed in 2023 estimated the population to be 15,267. Based on this information and the number of ERCs in the respective years, Ensign determined a ratio of 3.21 persons per residential ERC to estimate the City’s population. These residential ERCs include the Single

Family, Multi-Unit, and Trailer service connection types. Based on the number of residential ERCs shown in Table 2-2, the City’s estimated current (2026) population is 16,592. The following graph illustrates the projected population growth over the planning period. The method of estimating the future growth is discussed in Section 2.7.

Figure 2-3: 10-Year Population Projection



2.7 Growth Projections

Like much of Utah, Grantsville City experienced steady growth of approximately 1.5% to 2.5% between 2010 and 2014, with a growth rate that has accelerated exponentially since 2015. Looking back at recent history, an article from the Deseret News dated April 26, 1999, had projected that Grantsville’s population at the time, 5,800, would increase 72% by the year 2020. The City ended up growing by 121% during this timeframe. Municipalities in Salt Lake Valley have seen this type of exponential growth in the 2000s to keep up with the booming economy. An example of this growth was Draper which grew from a population of 25,220 persons in 2000 to 42,275 persons in 2010 (67.6% growth) according to the U.S. Census Bureau. This high level of growth is expected to continue in Grantsville as a large majority of current development in Salt Lake Valley is higher-density residential infill projects, leaving people looking for affordable single-family homes to venture farther from the Salt Lake Valley into Tooele Valley. Additionally, a significant amount of future development in Grantsville is currently in the planning process. The West Bank and Northwest areas along with the Lakeview Business Park in the Deseret Peak planning area are anticipated to be the largest contributors to the growth of the City in the next 10 years.

Recently, Grantsville has observed annual growth rates of about 4% from 2016-2019 and approximately 3-10% from 2019-2025. Reviewing growth rates for various size cities throughout America, 75 to 80% growth in 10 years is the highest rate observed for a city similar in size to Grantsville. Considering the proposed developments, input from City staff, and the predicted growth in the Salt Lake and Tooele Valley and surrounding cities, a growth rate shown in Table 2-3 is anticipated in the next 10 years. Due to the significant change of growth rates seen in recent years along with an unstable economic climate and varying construction pricing and supplies available, the actual City growth may differ from these estimated projections. Therefore, the City should revisit the demographic projections of this plan on a yearly basis and compare them with the actual growth rates occurring in the City. If the actual growth differs significantly from the projections, then the demographic projections need to be amended, and this CFP/IFFP/IFA in its entirety needs to be amended, as the results contained throughout this plan are based on the assumption that the demographic projections accurately represent future conditions of the City.

The yearly unit and ERC projections over the planning period for each connection type are shown in Table 2-3. The annual growth rate was applied to Single-Family, Multi-Unit, Commercial, and Construction Water connection types to project the number of future units and thus ERCs. New trailer units are not expected to be constructed in Grantsville, so the future number of trailer units and ERCs are shown to remain unchanged. Future Church and School units were projected by maintaining a set unit density relative to the City's population, which were determined by the existing conditions in 2025. At this time, there was one church per 1,460 residents and one school per 1,340 residents. Lastly, the City Rate growth was estimated based on anticipated City projects and their predicted construction years.

2.8 Distribution of Growth

Uncertainties arise in predicting growth in a City due to different factors that can influence when and where it may occur. An analysis of past impact fee locations can provide an indication as to where growth is likely to continue. This, coupled with longer historic growth patterns, proximity to existing infrastructure, and input from the City can allow for a reasonable projection of growth. Considering each of these factors, the percentages of growth expected to occur in each planning area were determined and used to project units and ERCs per area for the planning period, shown in Table 2-4.

Table 2-3: Projected Units and ERCs

Year:		2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035											
Projected Population:		16,056	16,592	17,148	17,803	18,486	19,193	19,934	20,705	21,501	22,332	23,192											
Residential Growth Rate:		2.93%	3.5%	3.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%											
Commercial Growth Rate:		0.73%	0.88%	0.88%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%											
Service Connection Type	ERC / Unit	Units	ERCs	Units	ERCs	Units	ERCs	Units	ERCs	Units	ERCs	Units	ERCs	Units	ERCs	Units	ERCs	Units	ERCs	Units	ERCs		
Single Family	1.00	4,618	4,618	4,780	4,780	4,947	4,947	5,145	5,145	5,351	5,351	5,565	5,565	5,788	5,788	6,020	6,020	6,261	6,261	6,511	6,511	6,771	6,771
Multi-Unit	0.52	290	151	300	156	311	162	323	168	336	175	349	181	363	189	378	197	393	204	409	213	425	221
Trailer ¹	1.12	208	233	208	233	208	233	208	233	208	233	208	233	208	233	208	233	208	233	208	233	208	233
Commercial	7.34	155	1,138	156	1,145	157	1,152	159	1,167	161	1,182	163	1,196	165	1,211	167	1,226	169	1,240	171	1,255	173	1,270
Church ²	4.57	11	50	11	50	11	50	12	55	12	55	13	59	13	59	14	64	14	64	15	69	15	69
School ³	5.09	12	61	12	61	12	61	13	66	13	66	14	71	14	71	15	76	16	81	16	81	17	87
Construction Water	6.81	20	136	21	143	22	150	23	157	24	163	25	170	26	177	27	184	28	191	29	197	30	204
City Rate ⁴	10.59	33	349	35	371	36	381	37	392	37	392	39	413	39	413	40	424	41	434	42	445	42	445
Total		5,347	6,736	5,523	6,939	5,704	7,136	5,920	7,383	6,142	7,617	6,376	7,888	6,616	8,141	6,869	8,424	7,130	8,708	7,401	9,004	7,681	9,300
<i>Increase from 2025</i>		-	-	176	203	357	400	573	647	795	881	1,029	1,152	1,269	1,405	1,522	1,688	1,783	1,972	2,054	2,268	2,334	2,564

¹ Trailer units are not expected to increase.

² Church growth rate is 1 church per 1,460 population.

³ School growth rate is 1 school per 1,340 population.

⁴ City Rate growth rate is based on anticipated City projects.

Table 2-4: Distribution of Projected Units and ERCs

Year:		2025		2026		2027		2028		2029		2030		2031		2032		2033		2034		2035	
Projected Population:		16,056		16,592		17,148		17,803		18,486		19,193		19,934		20,705		21,501		22,332		23,192	
Residential Growth Rate		2.93%		3.5%		3.5%		4.0%		4.0%		4.0%		4.0%		4.0%		4.0%		4.0%		4.0%	
Commercial Growth Rate:		0.73%		0.88%		0.88%		1.00%		1.00%		1.00%		1.00%		1.00%		1.00%		1.00%		1.00%	
Area	Percentage of Growth	Units	ERCs	Units	ERCs	Units	ERCs	Units	ERCs	Units	ERCs	Units	ERCs	Units	ERCs	Units	ERCs	Units	ERCs	Units	ERCs	Units	ERCs
Central	8.10%	2,245	2,806	2,259	2,822	2,274	2,838	2,291	2,858	2,309	2,877	2,328	2,899	2,347	2,919	2,368	2,942	2,389	2,965	2,411	2,989	2,434	3,013
	<i>Increase from 2025</i>	-	-	14	16	29	32	46	52	64	71	83	93	103	114	123	137	144	160	166	184	189	208
Deseret Peak	16.02%	148	355	176	387	205	419	240	459	275	496	313	539	351	580	392	625	434	671	477	718	522	766
	<i>Increase from 2025</i>	-	-	28	33	57	64	92	104	127	141	165	185	203	225	244	270	286	316	329	363	374	411
Flux	39.80%	314	409	384	490	456	568	542	666	631	760	724	867	819	968	920	1,081	1,024	1,194	1,132	1,312	1,243	1,429
	<i>Increase from 2025</i>	-	-	70	81	142	159	228	258	316	351	410	458	505	559	606	672	710	785	817	903	929	1,020
North	2.38%	582	908	586	913	591	918	596	924	601	929	607	936	612	942	618	948	625	955	631	962	638	969
	<i>Increase from 2025</i>	-	-	4	5	8	10	14	15	19	21	24	27	30	33	36	40	42	47	49	54	56	61
South	10.26%	1,659	1,837	1,677	1,858	1,696	1,878	1,718	1,903	1,741	1,927	1,765	1,955	1,789	1,981	1,815	2,010	1,842	2,039	1,870	2,070	1,899	2,100
	<i>Increase from 2025</i>	-	-	18	21	37	41	59	66	82	90	106	118	130	144	156	173	183	202	211	233	239	263
West	23.44%	399	421	440	469	482	515	533	573	585	628	640	691	696	751	755	817	817	884	880	953	946	1,022
	<i>Increase from 2025</i>	-	-	41	48	84	94	134	152	186	207	241	270	297	329	357	396	418	462	481	532	547	601
Total		5,347	6,736	5,523	6,939	5,704	7,136	5,920	7,383	6,142	7,617	6,376	7,888	6,616	8,141	6,869	8,424	7,130	8,708	7,401	9,004	7,681	9,300
	<i>Increase from 2025</i>	-	-	176	203	357	400	573	647	795	881	1,029	1,152	1,269	1,405	1,522	1,688	1,783	1,972	2,054	2,268	2,334	2,564

Section 3 Drinking Water

3.1 Capital Facilities Plan and Impact Fee Facilities Plan

3.1.1 Inventory of Existing Facilities

Grantsville City’s drinking water system consists of water sources (Table 3-1), storage tanks (Table 3-2), booster pump stations (Table 3-3), and a distribution system (Figure 3-1). The water system provides drinking water (indoor use), irrigation water (outdoor use), and fire suppression for the City. The City’s system supplies irrigation water for approximately 2/3 of the City, and the Grantsville Irrigation Company supplies the remaining 1/3 of the City.

Table 3-1: Existing Sources

Source	Type/ Equipment	Casing, (inches) / Depth (feet)	Pump Setting (feet)	Equipped Capacity (gpm)	Well Completion Date	Cost ²
Cherry Street (Park) Well	Well / 150 Hp Vertical Turbine Pump and Motor	12 / 480	150	1,030	1975	\$9,618.00 ³
South Willow Well	Well / 100 Hp Sub. Pump and Motor	16 / 395	254	620	May 15, 1998	\$2,600.00 ³
Hunsaker Well	Well / 125 Hp Sub. Pump and Motor	16 / 650	470	350 ¹	October 20, 2004	\$265,003.92 ⁴
South Well	Well / 100 Hp Hollow Shaft Pump and Motor	16 / 520	420	750	December 22, 1995	\$197,555.36 ³
North Well	Well / 150 Hp Sub. Pump and Motor	16 / 550	510	1,200	February 20, 2019	\$1,499,501.65
Marshall Well	Well / 450 Hp Vertical Turbine Pump and Motor	16 / 610	410	2,500	2024	N/A ⁵
Total				6,450		\$1,974,278.93

¹ The Hunsaker Well is equipped and able to pump at 500 gpm however, the drawdown in the well limits pumping to approximately 350 gpm.

² The costs shown are historical costs which may include initial construction, acquiring land, improvements, planning, and engineering.

³ The City does not have records of the original construction costs, but recorded costs of improvements made to the wells are included.

⁴ The Hunsaker Well original construction cost was excluded because Tooele County constructed the well at its own cost. The cost of improvements paid for by the City are included.

⁵ The Marshall Well cost was excluded because it was paid for by the Redevelopment Agency (RDA).

The City's existing storage tanks along with historic construction costs are listed in Table 3-2.

Table 3-2: Existing Storage Tanks

Tank	Diameter / Dimensions (feet)	Depth (feet)	Primary Supply Source(s)	Equipped Capacity (Million Gallons)	Cost ¹
North Tank (Rect.)	49.5 x 50.5	12.5	North Well and Cherry Street Well	0.225	N/A
North Tank (Circ.)	80	14	North Well and Cherry Street Well	0.5	N/A
South Tank	94	21	South Well	1.0	N/A
South Willow Tank	83	25.5	South Willow Well, Hunsaker Well, and Marshall Well	1.0	\$12,308.53 ²
Lakeview Business Park Tank	92	26	South Willow Well and Marshall Well	1.2	\$1,746,515.04
Total				3.925	\$1,758,823.57

¹ The costs shown are historical costs which may include initial construction, acquiring land, improvements, planning, and engineering.

² The City does not have records of the original construction cost, but recorded costs of improvements made to the tank are included.

Grantsville's existing distribution system is shown in Figure 3-1. The City's booster pump stations are listed in Table 3-3. The total recorded historic cost for the distribution system is \$18,410,022.79.

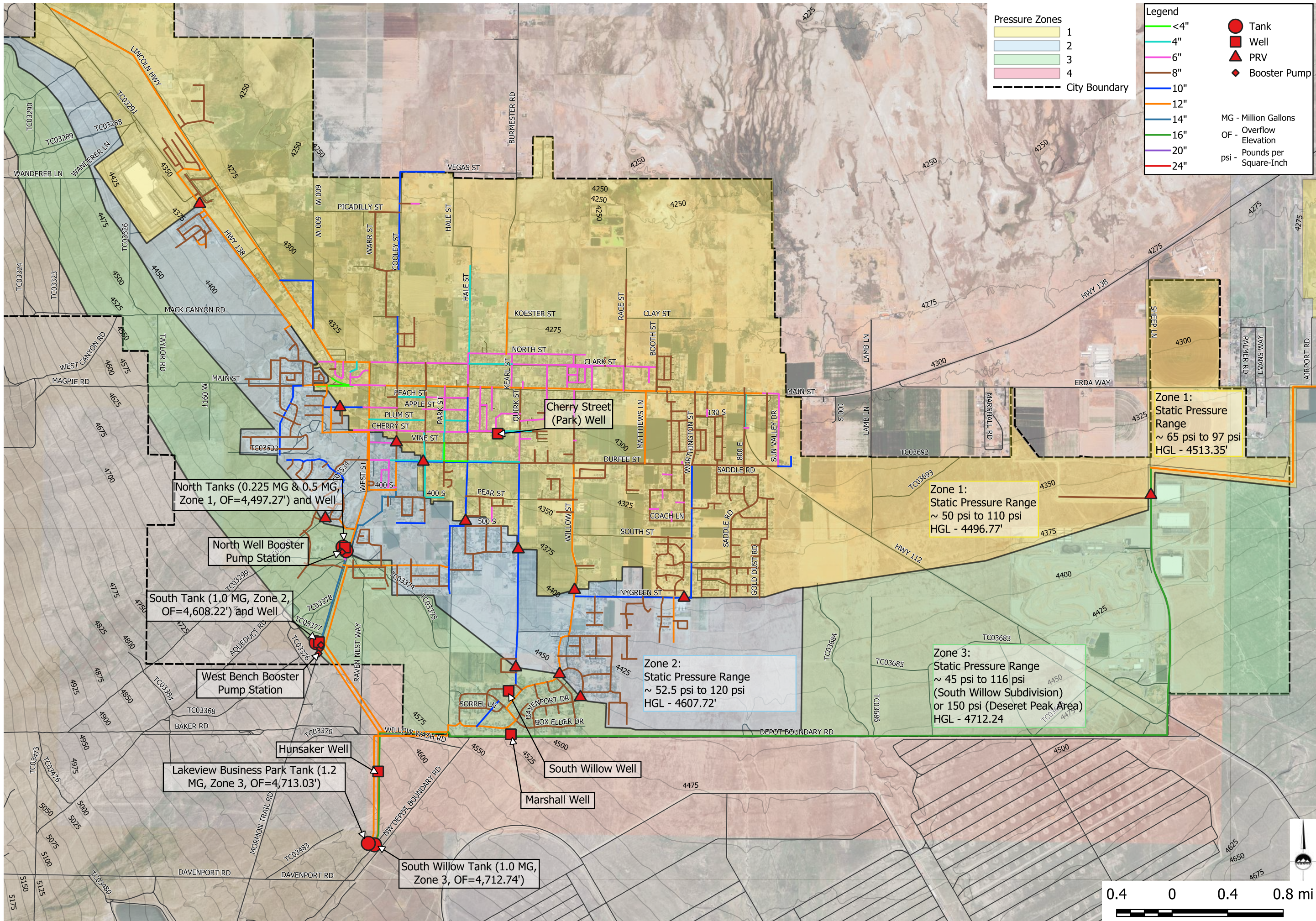
Table 3-3: Existing Booster Pump Stations

Booster Pump Station	Primary Supply	Equipped Capacity (gpm)	Completion Date	Cost ²
West Bank Booster Pump Station	South Tank	540 (1 pump), 995 (2 pumps), 1,350 (3 pumps) ¹	2015	N/A
North Well Booster Pump Station	North Well	300 (1 pumps), 600 (2 pumps), 900 (3 pumps), 1,200 (4 pumps), 1,500 gpm (5 pumps)	2023	\$200,688.73 ³

¹ Equipped capacities assume both the Hunsaker and South Willow Wells are pumping to the South Willow Tank at the same time the booster pump station is operating.

² The costs shown are historical costs which may include initial construction, acquiring land, improvements, planning, and engineering.

³ The City does not have records of the original construction costs, but recorded costs of improvements made to the booster pumps are included.



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GRANTSVILLE CFP, IFFP, AND IFA

GRANTSVILLE, UTAH

EXISTING DRINKING WATER SYSTEM

PROJECT NUMBER: 11637 PRINT DATE: 2026-04-03
PROJECT MANAGER: R. ROUSSELLE DESIGNED BY: C. DUNKEL

FIG 3-1

The existing Public Works Building serves both drinking water and wastewater facilities. The building was constructed in 2021 for a cost of \$222,483.40 attributed to water facilities.

The City has long-term debt associated with a bond issued to finance improvements to the distribution system as shown in Table 3-4.

Table 3-4: Existing Water Long-Term Debt

Bond	Date of Issue	Interest Rate	Final Maturity Date	Original Bond, Note Issue	Principal Outstanding at June 30, 2025	Total Interest Payments (2025-2035)
Water Revenue Bond, Series 2018	December, 2018	1.50%	August, 2039	\$2,700,000.00	\$2,700,000.00	\$293,430.00

3.1.2 Level of Service

The proposed level of service (LOS) standards, listed below, were previously established in the Grantsville City Capital Facilities Plan dated May 2022 by Ensign Engineering and Land Surveying. The City’s recent water usage data (2022-2024) was analyzed and determined to be consistent with the previously established level of service.

- **Unit Average Day Demand = 807 gpd/ERC (0.618 ac-ft/year/ERC)**
 - Indoor Demand = 195 gpd/ERC (0.218 ac-ft/year/ERC)
 - Outdoor Demand = 612 gpd/ERC (0.400 ac-ft/year/ERC)
- **Unit Peak Day Demand = 1,416 gpd/ERC (0.983 gpm/ERC)**
 - Indoor Demand = 275 gpd/ERC (0.191 gpm/ERC)
 - Outdoor Demand = 1,141 gpd/ERC (0.792 gpm/ERC)
- **Peak Instantaneous Demand:**
 - Indoor Demand = $10.8 \cdot (\text{ERCs})^{0.64}$ gpm/ERC
 - Outdoor Demand = 1.58 gpm/ERC
- **Fire Flow:**
 - Industrial/Commercial Buildings = 2,050 gpm for 4 hours (492,000 gallons)
 - Residential = 1,500 for 2 hours

Drinking Water System Capacity Requirements:

- **Sources:**
 - Supply Peak Day Demand
- **Storage:**
 - Storage for Average Day Demand plus Fire Flow (Industrial/Commercial Buildings Fire Flow)
- **Distribution:**
 - Per UAC R309-105-9, distribution systems should maintain a minimum pressure at all points in the system during;
 - Peak Day Demand plus Fire Flow - 20 psi
 - Peak Instantaneous Demand – 30 psi
 - Peak Day Demand – 40 psi
 - Max Velocity Requirements:
 - Peak Day and Peak Instantaneous Demand - 5 fps
 - Peak Day Demand plus Fire Flow – 10 fps

3.1.3 Capacity of Existing Facilities

As mentioned in Section 3.1.2, source capacity requirements are based on peak day demand. The current peak day demand was calculated based on demographic projections established in Section 2.7 and the source level of service shown in Section 3.1.2. This demand was compared with the equipped capacity to determine the source deficit shown in Table 3-5.

Table 3-5: Capacity of Existing Sources

Current (2025) ERCs	Peak Day LOS (gpm/ERC)	Peak Day Demand (gpm)	Equipped Capacity (gpm)	Excess / (Deficit) (gpm)
6,736	0.983	6,621	6,450	(171.49)

The City’s current average day demand plus the fire flow storage requirement shown in Section 3.1.2 was compared with the equipped storage capacity to calculate the current storage deficit as shown in Table 3-6.

Table 3-6: Capacity of Existing Storage

Current (2025) ERCs	Average Day LOS (gpd/ERC)	Fire Storage (gal)	Average Day Demand (gpd)	Average Day Demand Plus Fire Storage (gal)	Equipped Capacity (gal)	Excess / (Deficit) (gal)
6,736	807	492,000	5,435,952	5,927,952	3,925,000	(2,002,952)

Drinking water distribution systems are pressurized and the City of Grantsville is capable of pumping drinking water from its lowest pressure zone, zone 1, to its highest-pressure zone, zone 3. It is also capable of distributing from its pressure zone 3 tanks to all its pressure zones. Therefore, the distribution system serves the entire City equally and has excess capacity to accommodate any future development.

3.1.4 Demands of Future Development

The future requirements for the drinking water system (Table 3-7) were determined by utilizing the projected growth in the planning period shown in Table 2-3 and the levels of service from Section 3.1.2.

Table 3-7: Future Drinking Water Requirements

Year	ERCs	Sources		Storage		
		Peak Day Demand (gpm)	Excess / (Deficit) (gpm)	Average Day Demand (gpd)	Average Day Demand Plus Fire Storage (gal)	Excess / (Deficit) (gal)
2025	6,736	6,621	(171.49)	5,435,952	5,927,952	(2,002,952)
2026	6,939	6,821	(371)	5,599,773	6,091,773	(2,166,773)
2027	7,136	7,015	(565)	5,758,752	6,250,752	(2,325,752)
2028	7,383	7,257	(807)	5,958,081	6,450,081	(2,525,081)
2029	7,617	7,488	(1,038)	6,146,919	6,638,919	(2,713,919)
2030	7,888	7,754	(1,304)	6,365,616	6,857,616	(2,932,616)
2031	8,141	8,003	(1,553)	6,569,787	7,061,787	(3,136,787)
2032	8,424	8,281	(1,831)	6,798,168	7,290,168	(3,365,168)
2033	8,708	8,560	(2,110)	7,027,356	7,519,356	(3,594,356)
2034	9,004	8,851	(2,401)	7,266,228	7,758,228	(3,833,228)
2035	9,300	9,142	(2,692)	7,505,100	7,997,100	(4,072,100)

Future requirements for the distribution system were determined based on the distribution of growth throughout the City shown in Table 2-4.

3.1.5 Proposed Projects

Proposed projects were determined to meet the demands of future development shown in the previous section and located by utilizing the distribution of growth in the planning period, see Figure 3-2. The proposed wells and storage tanks are shown in Table 3-8 and Table 3-9, along with the planning year, construction year, and cost estimates (Appendix D).

Table 3-8: Proposed Source Projects

Source	Type / Equipment	Casing (inches) / Depth (feet)	Pump Setting (feet)	Equipped Capacity (gpm)	Construction Priority		Current Year (2025) Cost Estimate
					Begin Planning	Begin Construction	
Bates Well	Well / Line Shaft Pump	16 / 600	450	2,000	2024	2026	\$3,041,918.77
West Bank Well	Well / Line Shaft Pump	16 / 600	550	2,000	2026	2027	\$3,518,067.73
Southwest Well	Well / Line Shaft Pump	16 / 600	450	1,500	2030	2031	\$2,979,952.08
Total				5,500			\$9,539,938.58

Table 3-9: Proposed Storage Projects

Storage	Equipped Capacity (gal)	Construction Priority		Current Year (2025) Cost Estimate
		Begin Planning	Begin Construction	
Northstar Tank No. 1	2,000,000	2024	2026	\$3,387,223.88 ¹
West Bank Tank	1,500,000	2026	2027	\$4,898,123.85
Southwest Tank	1,500,000	2030	2031	\$3,825,690.00
North Tank No. 3	2,000,000	2039	2040	\$3,970,468.68 ²
Total	7,000,000			\$16,081,506.41

¹ Actual construction cost and includes \$142k for engineering design and construction management.

² North Tank No. 3 is shown even though it falls outside the 10-year planning period, as it may be constructed prior to the Southwest Tank. This will be evaluated on an annual basis.

Proposed distribution system projects are shown in Table 3-10. These projects are required to extend water service to future development while providing vital distribution looping for the water system.

Table 3-10: Proposed Distribution System Projects

Distribution Project	Description	Construction Priority		Current Year (2025) Cost Estimate
		Begin Planning	Begin Construction	
Osborne Way Water Line Loop	Construct approximately 425 linear feet of 10-inch diameter water line from Osborne Way to Cherry Wood Lane	2024	2025	\$76,356.25
SR-138 Water Line Extension (Developer Portion)	Extend approximately 300 linear feet of 8-inch diameter water line, 6,300 linear feet of 12-inch diameter water line, and 21,700 linear feet of 16-inch diameter water line along SR 138 and install a PRV Station.	2024	2025	\$6,272,971.05
Northstar Tank No. 1 Transmission Line	Construct approximately 3,660 linear feet of 12-inch diameter and 10,750 linear feet of 16-inch diameter water line for the Northstar Tank No. 1 and install a PRV station.	2024	2025	\$2,504,135.45
SR-138 Water Line Extension	Extend approximately 188 linear feet of 8-inch diameter water line and 1,760 linear feet of 12-inch diameter water line along SR 138.	2024	2026	\$566,221.70
Generator	Purchase 350 kW Trailer Mounted Diesel Generator including cables, connectors, and appurtenances.	2024	2026	\$269,200.00
SR-112 Water Line Extension	Extend approximately 3,950 linear feet of 12-inch diameter water line along SR 112.	2025	2026	\$540,168.75
Apple Street Water Line Replacement	Replace approximately 920 linear feet of 6-inch diameter water line in Apple Street with 8-inch diameter water line.	2025	2026	\$319,629.60

Distribution Project	Description	Construction Priority		Current Year (2025) Cost Estimate
		Begin Planning	Begin Construction	
Apple Street Water Line Replacement	Replace approximately 920 linear feet of 6-inch diameter water line in Apple Street with 8-inch diameter water line.	2025	2026	\$319,629.60
Southeast Water Line Project	Construct approximately 9,380 linear feet of 12-inch diameter water line in the southeast portion of the City and two PRV Stations.	2026	2027	\$1,507,959.92
Blaine Avenue Water Line Replacement	Replace approximately 1,070 linear feet of 6-inch diameter water line in Blaine Avenue with 8-inch diameter water line.	2026	2027	\$357,991.20
Hale Street Water Line Replacement	Replace approximately 3,240 linear feet of 6-inch diameter water line in Hale Street with 8-inch diameter water line.	2027	2028	\$878,172.10
16-inch Water Line Replacement Phase 1	Replace approximately 9,300 linear feet of damaged 16-inch diameter water line from the South Willow Tank to the Marshall Well with 16-inch diameter water line.	2027	2028	\$2,510,954.37
Clark Street Water Line Project	Construct approximately 612 linear feet of 12-inch diameter water line along Clark Street and install a PRV station.	2027	2028	\$480,299.94
Quirk Street Water Line Replacement	Replace approximately 1,200 linear feet of 6-inch diameter water line in Quirk Street with 8-inch diameter water line.	2028	2029	\$408,871.50
Burmester Road and Vegas St. Water Pipeline Project	Extend approximately 7,757 linear feet of 12-inch diameter water line along Burmester Street.	2029	2030	\$973,445.29
16-inch Water Line Replacement Phase 2	Replace approximately 10,800 linear feet of damaged 16-inch diameter water line from the Marshall Well to the Twenty Wells connection with 16-inch diameter water line.	2029	2031	\$2,659,736.68
Centennial Way Water Line Project	Construct approximately 810 linear feet of 12-inch diameter water line along Centennial Way and install a PRV station.	2033	2034	\$357,093.75
16-inch Water Line Replacement Phase 3	Replace approximately 14,900 linear feet of damaged 16-inch diameter water line from the Twenty Wells connection to Sheep Lane with 16-inch diameter water line and install a PRV station.	2033	2034	\$4,437,861.29

Distribution Project	Description	Construction Priority		Current Year (2025) Cost Estimate
		Begin Planning	Begin Construction	
Hale to Kearsal Street Clark Street Water Line Replacement Project	Replace approximately 1,640 linear feet of 6-inch diameter water line with 8-inch diameter water line along Clark Street from Hale Street to Kearsal Street.	2026	2027	\$913,693.52
West to Hale Street Clark Street Water Line Replacement Project	Replace approximately 3,780 linear feet of 6-inch diameter water line with 8-inch diameter water line along Clark Street from West Street to Hale Street.	2029	2030	\$2,105,952.14
Kearsal to Booth Street Clark Street Water Line Replacement Project	Replace approximately 3,780 linear feet of 6-inch diameter water line with 8-inch diameter water line along Clark Street from West Street to Hale Street.	2032	2033	\$3,078,144.34
Total				\$31,579,427.84

The City also plans to expand the Public Works site to add a shop area, expected to begin construction in 2035. The estimated cost is \$1.86 million and will be split evenly between the drinking water and wastewater utility.

3.1.6 Methods of Financing

The intent is to fund the majority of the projects through impact fees. The portion of the projects not eligible for impact fees may be funded through grants, loans, developer dedications, or reserves in the Water Fund.

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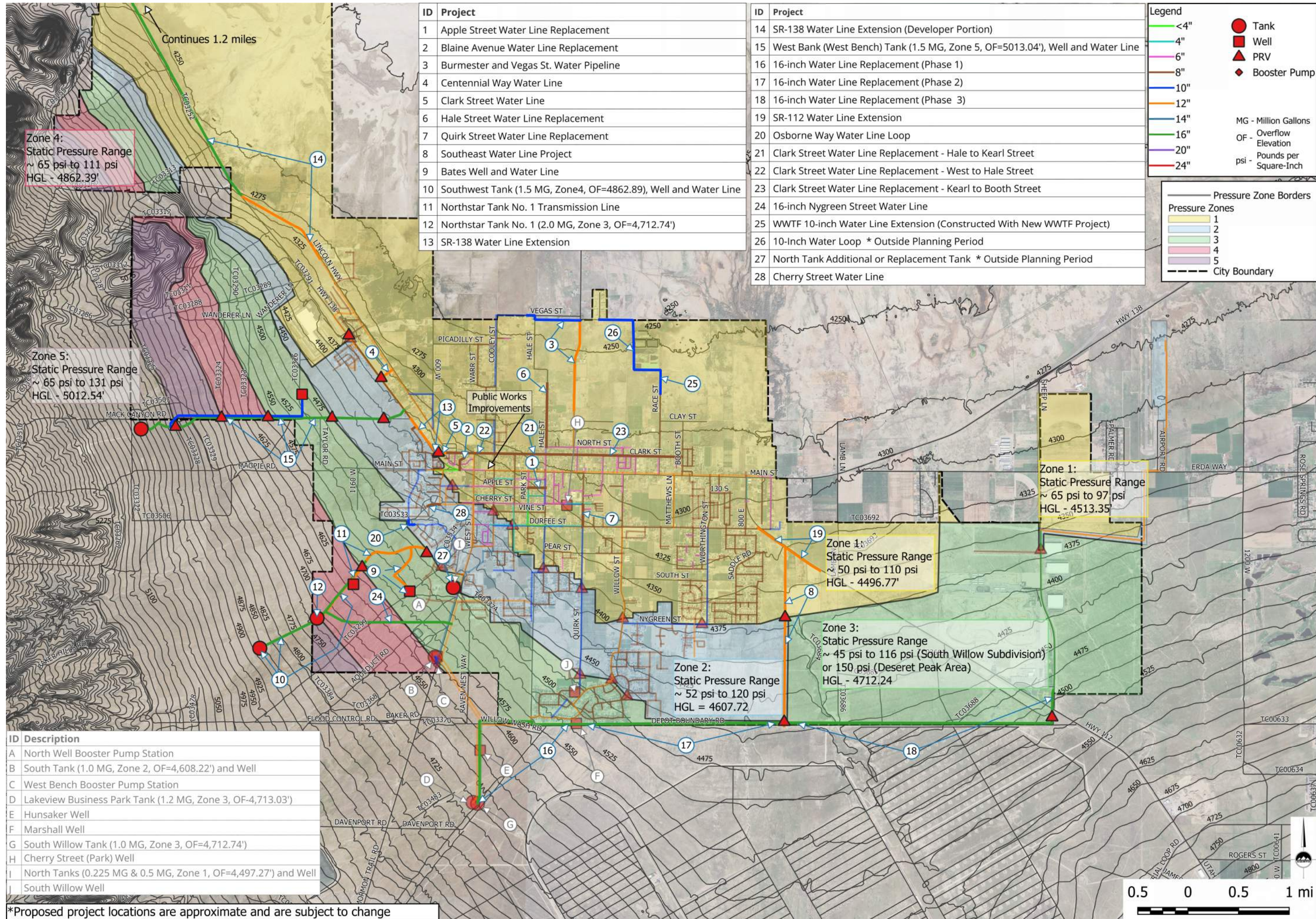
GRANTSVILLE, UTAH

PROPOSED DRINKING WATER SYSTEM

PROJECT NUMBER: 11637
PRINT DATE: 2026-04-02

PROJECT MANAGER: R. ROUSSELLE
DESIGNED BY: C. DUNKEL

FIG 3-2



3.2 Impact Fee Analysis

3.2.1 Existing Facilities

As shown in Section 3.1.3, there is no excess source or storage capacity so no buy-in cost can be charged for source or storage facilities. The existing distribution system has excess capacity to serve future development and benefits all of the City proportionally as the City is able to pump or gravity flow water throughout the drinking water system. Therefore, the proportionate share for the existing distribution system was calculated based on the proportion of future ERCs expected to be served within the planning period as shown in Table 3-11. The existing Public Works Building will utilize the same proportionate share as it is considered beneficial to both existing and future development. Another item eligible to charge a buy-in cost for is the interest payment amount due within the planning period for the Water Revenue Bond shown in Table 3-4. This loan was used to fund past improvements to the distribution system which benefited existing and future development, so the buy-in cost was calculated using the same proportionate share as the existing distribution system. The proportionate share for each existing facility was multiplied by the historic construction costs in order to calculate the impact fee eligible buy-in costs (Table 3-12).

Table 3-11: Existing Drinking Water Facilities Proportionate Share

Facility	Total ERCs (Year 2035)	Increase in ERCs (Year 2025-2035)	Proportionate Share
Existing Distribution System, Public Works Building, and Water Revenue Bond Interest Payments	9,300	2,564	27.6%

Table 3-12: Drinking Water Buy-In Costs

Facility	Cost ¹	Proportionate Share	Buy-In Cost
Existing Distribution System	\$18,182,119.15	27.6%	\$5,012,790.70
Public Works Building	\$222,483.40 ²	27.6%	\$61,338.43
Water Revenue Bond Interest Payments (2025-2035)	\$293,430.00	27.6%	\$80,898.34
Matthews Lane Water Line Project	\$495,746.06	27.6%	\$136,676.66
Durfee Street Water Line Project	\$60,750.85	27.6%	\$16,748.94
Total			\$5,308,453.07

¹ The costs shown are historical costs which may include initial construction, acquiring land, improvements, planning, and engineering.

² The cost shown for the Public Works Building is the cost associated with drinking water facilities.

3.2.2 System Improvements

The drinking water system improvements needed to accommodate future development within the planning period were determined in Section 3.1.5. The proportionate shares for sources and storage were calculated based on the increase in system capacity to meet the level of service, as shown in Table 3-13 and Table 3-14. Any portion of a project associated with correcting an existing deficiency was excluded from the proportionate share calculation. The City does not charge impact fees for projects which are expected to be constructed by developers so they have a proportionate share of 0%. If it is determined the City will pay for any portion of these projects as the development agreements are finalized then this plan should be amended to include the project.

Table 3-13: Proposed Source Projects Proportionate Share

Project	Equipped Capacity (gpm)	Existing (2025) Deficit (gpm)	Future (2035) Deficit (gpm)	Proportionate Share
Bates Well	2,000	171.49	2,692	0% ¹
West Bank Well	2,000	371	692	0% ¹
Southwest Well	1,500	565	0	0% ¹

¹ The proportionate share is 0% because the project is expected be constructed by developers.

Table 3-14: Proposed Storage Projects Proportionate Share

Project	Equipped Capacity (gal)	Existing (2025) Deficit (gal)	Future (2035) Deficit (gal)	Proportionate Share
Northstar Tank No. 1	2,000,000	2,002,952	4,072,100	0.00%
West Bank Tank	1,500,000	2,166,773	2,072,100	0% ¹
Southwest Tank	1,500,000	2,325,752	572,100	0% ¹

¹ The proportionate share is 0% because the project is expected be constructed by developers.

The proposed distribution system projects and the Public Works Improvements project were determined to be beneficial to both existing and future development, so the proportionate share was calculated based on the ERCs expected to be served within the planning period as shown in Table 3-15.

Table 3-15: Proposed Distribution System and Public Works Proportionate Share

Project	Total ERCs (Year 2035)	Increase in ERCs (Year 2025-2035)	Proportionate Share
Distribution Projects and Public Works Improvements	9,300	2,564	27.6%

The cost of each project which is attributed to new development in the planning period, and therefore eligible for impact fees, was calculated by multiplying the total project cost by the proportionate share as shown in Table 3-16. In order to account for the time-price differential inherent with future costs, the current year cost estimates were inflated at a rate of 3.5% to the anticipated construction year.

Table 3-16: Drinking Water Impact Fee Eligible Costs

Project	Construction Year	Current Year (2025) Cost Estimate	Construction Year Cost Estimate	Proportionate Share	Impact Fee Eligible Cost
Bates Well	2027	\$3,041,918.77	\$3,258,579.43	0% ²	\$0.00
West Bank Well	2027	\$3,518,067.73	\$3,768,642.10	0% ²	\$0.00
Southwest Well	2031	\$2,979,952.08	\$3,663,121.97	0%	\$0.00
Northstar Tank No. 1	2026	\$3,387,223.88	\$3,505,776.72	0.00%	\$0.00
West Bank Tank	2027	\$4,898,123.85	\$5,246,992.72	0% ²	\$0.00
Southwest Tank	2031	\$3,825,690.00	\$4,702,749.81	0% ²	\$0.00
Osborne Way Water Line Loop	2026	\$76,356.25	\$79,028.72	27.6%	\$21,788.13
SR-138 Water Line Extension (Developer Portion)	2026	\$6,272,971.05	\$6,492,525.04	0% ²	\$0.00
Northstar Tank No. 1 Transmission Line	2026	\$2,504,135.45	\$2,591,780.19	0% ²	\$0.00
SR-138 Water Line Extension	2027	\$566,221.70	\$606,550.84	27.6%	\$167,225.41
Generator	2027	\$269,200.00	\$288,373.77	27.6%	\$79,504.34
SR-112 Water Line Extension	2027	\$540,168.75	\$578,642.27	0% ²	\$0.00
Southeast Water Line Project	2028	\$1,507,959.92	\$1,671,902.12	0% ²	\$0.00
Clark Street Water Line Project	2029	\$480,299.94	\$551,155.23	27.6%	\$151,952.90
Burmester and Vegas Street Water Pipeline Project	2031	\$973,445.29	\$1,196,612.81	27.6%	\$329,904.86
Centennial Way Water Line Project	2035	\$357,093.75	\$503,716.00	27.6%	\$138,873.96
Public Works Improvements	2035	\$1,318,982.50 ¹	\$1,860,555.08	27.6%	\$512,953.03
Hale Street Water Line Replacement	2029	\$878,172.10	\$1,007,722.68	27.6%	\$277,828.06
Total		\$37,395,983.01	\$41,574,427.50		\$1,680,030.71

¹ The cost shown for the Public Works Improvements project is half of the total cost estimate because this project cost will be split evenly between the wastewater and drinking water utilities.

² The proportionate share is 0% because the project is expected be constructed by developers.

In addition to impact fee eligible project costs, planning costs can also be included in the calculation of impact fees. Due to the uncertainty which comes with long-term development projections, this plan is expected to be amended annually. The future professional expenses expected to occur within the planning period were inflated at a 3.5% rate as shown in Table 3-17.

Table 3-17: Drinking Water Professional Expenses

Year	Cost
2025	\$8,300.00
2026	\$8,590.50
2027	\$8,891.17
2028	\$9,202.36
2029	\$9,524.44
2030	\$9,857.80
2031	\$10,202.82
2032	\$10,559.92
2033	\$10,929.52
2034	\$11,312.05
2035	\$11,707.97
Total	\$109,078.53

3.2.3 Methods of Financing

The drinking water system improvements are expected to be funded through impact fees, loans, developer dedications, and Water Fund reserves as discussed in Section 3.1.6. As shown in Table 3-18, the City is financing the Northstar Tank No. 1 project with a loan through the Utah Drinking Water Board, which is necessary to prevent the impact fee fund balance from going negative (see Section 3.2.5). This loan is a 20-year bond with a 2.0% interest rate and 1.5% loan origination fee. The interest cost for this bond attributed to development within the planning period can be included in the impact fee calculation.

Table 3-18: Drinking Water Future Debt Financing

Project	Proceeds	Par Amount ¹	Debt Service (Interest)	Debt Service (Principal + Interest)	Proportionate Share	Impact Fee Eligible Debt Service (Interest)
Northstar Tank No. 1	\$3,294,000.00	\$3,326,940.00	\$742,354.64	\$4,069,294.64	0.00%	\$0.00

¹ Includes cost of issuance, bond insurance, and surety policy.

3.2.4 Impact Fee Calculation

As shown in Table 3-19, impact fees to be charged per ERC were calculated by dividing the impact fee eligible costs by the number of ERCs expected to be served within the planning period, determined from Table 2-3. The City does not charge impact fees to the construction water and City rate connection types so they were excluded from the calculation.

Table 3-19: Drinking Water Impact Fee Calculation

Project	Impact Fee Eligible Cost	Planning Period (2025-2035) ERCs ¹	Cost per ERC
Buy-In Cost	\$5,308,453.07	2,400	\$2,211.86
Northstar Tank No. 1	\$0.00	2,400	\$0.00
Northstar Tank No. 1 Debt Service (Interest)	\$0.00	2,400	\$0.00
Osborne Way Water Line Loop	\$21,788.13	2,400	\$9.08
SR-138 Water Line Extension	\$167,225.41	2,400	\$69.68
Generator	\$79,504.34	2,400	\$33.13
Clark Street Water Line Project	\$151,952.90	2,400	\$63.31
Burmeister and Vegas Street Water Pipeline Project	\$329,904.86	2,400	\$137.46
Centennial Way Water Line Project	\$138,873.96	2,400	\$57.86
Public Works Improvements	\$512,953.03	2,400	\$213.73
Professional Expenses	\$109,078.53	2,400	\$45.45
Total			\$2,841.56

¹ Does not include Construction Water or City Rate ERCs.

The City charges impact fees to residential users based on their water meter size. A 3/4-inch water meter was determined to be equivalent to one ERC, and the remaining meter sizes were converted to ERCs based on the maximum flow rates from AWWA Manual M6, Table 5-3. Non-residential users are charged impact fees based on the number of fixture units in a development. A typical ERC was determined to have 24 fixture units as calculated in Appendix E. The results of these impact fee calculations are summarized in Table 3-20.

Table 3-20: Proposed Drinking Maximum Allowable Water Impact Fees

Water Meter Size (inches)	Maximum Flow Rate (gpm)	ERCs	Impact Fee
3/4	25 ¹	1	\$2,841.56
1	40 ¹	1.6	\$4,546.49
1 1/2	50 ¹	2	\$5,683.11
2	100 ¹	4	\$11,366.22
3	200 ²	8	\$22,732.45
4	400 ²	16	\$45,464.89
6	800 ²	32	\$90,929.79
8	1,000 ²	40	\$113,662.24
Non-Residential Development Indoor			\$28.97 per fixture unit
Non-Residential Development Outdoor			\$17,957.79 per irrigated acre

¹ From AWWA M6 Table 5-3 Displacement Meters.

² From AWWA M6 Table 5-3 Electromagnetic and Ultrasonic Meter Type 1.

3.2.5 Impact Fee Cashflow

The anticipated impact fee revenues and expenses over the 10-year planning period are shown in Table 3-21. The expenses represent only what is attributable to planning period development and include capital project costs, the expenditure of buy-in costs, and proposed bond payments. The impact fee cashflow (Table 3-22) estimates the end of year impact fee fund balance throughout the planning period by comparing the impact fee revenues, total expenses, and interest income calculated at 3.0% of the fund balance.

3.2.6 Impact Fee Credits

There are procedures in place for credits, appeals, and exemptions of impact fees for Grantsville City. Refer to Appendix B for the City’s current impact fee ordinance.

Table 3-21: Drinking Water Impact Fee Revenues and Expenses

Year	ERCs ¹	Annual ERC Increase ¹	Impact Fee Revenues	Impact Fee Eligible Project Costs	Bond Payments	Bond Proceeds	Buy-In Cost Expenses	Professional Expenses	Total Expenses
2025	6,251	-	-	-	-	-	-	(\$8,300.00)	(\$8,300.00)
2026	6,425	174	\$494,430.73	(\$21,788.13)	-	-	(\$384,862.85)	(\$8,590.50)	(\$415,241.48)
2027	6,605	180	\$511,480.07	(\$246,729.75)	-	-	(\$398,133.98)	(\$8,891.17)	(\$653,754.90)
2028	6,834	229	\$650,716.31	-	-	-	(\$506,514.90)	(\$9,202.36)	(\$515,717.26)
2029	7,062	228	\$647,874.75	(\$429,780.96)	-	-	(\$504,303.04)	(\$9,524.44)	(\$943,608.45)
2030	7,305	243	\$690,498.09	-	-	-	(\$537,480.87)	(\$9,857.80)	(\$547,338.67)
2031	7,551	246	\$699,022.76	(\$329,904.86)	-	-	(\$544,116.44)	(\$10,202.82)	(\$884,224.12)
2032	7,816	265	\$753,012.32	-	-	-	(\$586,141.69)	(\$10,559.92)	(\$596,701.61)
2033	8,083	267	\$758,695.44	-	-	-	(\$590,565.40)	(\$10,929.52)	(\$601,494.92)
2034	8,362	279	\$792,794.11	-	-	-	(\$617,107.67)	(\$11,312.05)	(\$628,419.72)
2035	8,651	289	\$821,209.67	(\$651,826.99)	-	-	(\$639,226.22)	(\$11,707.97)	(\$1,302,761.19)
Total		2,400	\$6,819,734.25	(\$1,680,030.71)			(\$5,308,453.07)	(\$109,078.53)	(\$7,097,562.31)

¹ Does not include Construction Water or City Rate ERCs.

Table 3-22: Drinking Water Impact Fee Cashflow

Year	Impact Fee Revenues	Total Expenses	Interest Income	End of Year Balance
2025	-	(\$8,300.00)	-	\$1,321,360.81
2026	\$494,430.73	(\$415,241.48)	\$39,640.82	\$1,440,190.89
2027	\$511,480.07	(\$653,754.90)	\$43,205.73	\$1,341,121.78
2028	\$650,716.31	(\$515,717.26)	\$40,233.65	\$1,516,354.49
2029	\$647,874.75	(\$943,608.45)	\$45,490.63	\$1,266,111.43
2030	\$690,498.09	(\$547,338.67)	\$37,983.34	\$1,447,254.20
2031	\$699,022.76	(\$884,224.12)	\$43,417.63	\$1,305,470.46
2032	\$753,012.32	(\$596,701.61)	\$39,164.11	\$1,500,945.29
2033	\$758,695.44	(\$601,494.92)	\$45,028.36	\$1,703,174.16
2034	\$792,794.11	(\$628,419.72)	\$51,095.22	\$1,918,643.78
2035	\$821,209.67	(\$1,302,761.19)	\$57,559.31	\$1,494,651.57

Section 4 Public Safety

4.1 Capital Facilities Plan and Impact Fee Facilities Plan

4.1.1 Inventory of Existing Facilities

Grantsville City’s public safety services consist of a Police Department, Animal Control, and Fire Department. There is also an Emergency Medical Technician (EMT)/ambulance service which the City has contracted with through Mountain West Hospital, but this will not be included in impact fee calculations because it is not a City run service.

The Utah Impact Fees Act defines a public safety facility as “a building constructed or leased to house police, fire, or other public safety entities; or a fire suppression vehicle costing in excess of \$500,000.” The City does not currently have any fire suppression vehicles which cost more than \$500,000. The existing buildings associated with City’s public safety services are listed in Table 4-1 along with the floor area and historical construction cost. The City Hall building is included in the public safety section of this plan, but it is not eligible for impact fees because it does not house any public safety services.

Table 4-1: Existing Public Safety Facilities

Facility	Construction Year	Floor Area (sq ft)	Cost ¹
Justice Center (Police Station)	2017	8,450 ²	\$3,905,831.64
Animal Shelter	1983	1,155	\$10,006.00
Fire Station	2007	15,500	\$2,376,472.15
City Hall	1996	7,000	\$526,910.54
Total			\$6,819,220.33

¹ The costs shown are historical costs which may include initial construction, acquiring land, improvements, planning, and engineering.

² The Justice Center is shared between the Police Department and the Justice Court. The total building floor area is 12,947 square feet, but the area of the portion occupied by the Police Department is 8,450 square feet.

The locations of these facilities are shown in Figure 4-1. See Appendix F for more detailed information about the Police Department staffing and Justice Center layout.

The City does have long-term debt associated with existing public safety facilities in the form of revenue bonds issued for the Fire Station and Justice Center. The details of these bonds are shown in Table 4-2.

Table 4-2: Existing Public Safety Long-Term Debt

Bond	Date of Issue	Interest Rate	Final Maturity Date	Original Bond, Note Issue	Principal Outstanding at June 30, 2024	Total Interest Payments (2024-2034)
MBA Lease Revenue Bond, Series 2006 (Fire Station)	May 25, 2006	3.50%	January, 2037	\$2,000,000.00	\$1,048,000.00	\$241,780.00
MBA Lease Revenue Bond, Series 2016 (Justice Center)	December, 2016	2.50%	October, 2047	\$2,700,000.00	\$2,236,000.00	\$470,875.00
Total				\$4,700,000.00	\$3,284,000.00	\$712,655.00

4.1.2 Level of Service

The proposed levels of service for each public safety department (Table 4-3) were determined based on input from Police Chief Sager and Fire Chief Smith regarding the needs of each department. More information about these requirements can be found in Appendix F.

Table 4-3: Public Safety Level of Service

Department	Staff Level of Service	Facility Level of Service
Police	1.87 staff per 1,000 population ¹	232.1 sq ft building area per staff member
Fire	3.14 firefighters per 1,000 population	0.0565 fire stations per 1,000 population
Animal Control	0.156 officers per 1,000 population	90.3 sq ft building area per 1,000 population

¹ Police staff LOS does not include animal control officers, crossing guards, or victim advocate volunteers.

4.1.3 Capacity of Existing Facilities

The capacity of existing public safety facilities was calculated based on the current City population and the appropriate levels of service for each facility type, as shown in the following three tables.

Table 4-4: Capacity of Existing Police Facilities

Population (2024)	Police Staff per 1,000 Population	Police Staff Required	Building Area per Staff Member (sq ft)	Building Area Required (sq ft)	Existing Building Area (sq ft)	Excess / (Deficit) (sq ft)
16,056	1.87	30	232.1	6,963	8,450	1,487

Table 4-5: Capacity of Existing Fire Facilities

Population (2024)	Stations Per 1,000 Population	Number of Stations Required	Existing Number of Stations	Excess / (Deficit)
16,056	0.0565	0.91	1	0.09

Table 4-6: Capacity of Existing Animal Control Facilities

Population (2024)	Building Area per 1,000 Population (sq ft)	Building Area Required (sq ft)	Existing Building Area (sq ft)	Excess / (Deficit) (sq ft)
16,056	90.3	1,450	1,155	(295)

4.1.4 Demands of Future Development

Based on the demographic projections discussed in Section 2.7 and the levels of service established in Section 4.1.2, the requirements for public safety facilities to accommodate future development were calculated as shown in Table 4-7.

Table 4-7: Future Public Safety Requirements

Year	Population	Police			Fire		Animal Control	
		Police Staff Required	Building Area Required (sq ft)	Excess / (Deficit) (sq ft)	Number of Stations Required	Excess / (Deficit)	Building Area Required (sq ft)	Excess / (Deficit) (sq ft)
2025	16,056	30	6,963	1,487	0.91	0.09	1,450	(295)
2026	16,592	31	7,195	1,255	0.94	0.06	1,498	(343)
2027	17,148	32	7,427	1,023	0.97	0.03	1,548	(393)
2028	17,803	33	7,659	791	1.01	(0.01)	1,608	(453)
2029	18,486	35	8,124	327	1.04	(0.04)	1,669	(514)
2030	19,193	36	8,356	94	1.08	(0.08)	1,733	(578)
2031	19,934	37	8,588	(138)	1.13	(0.13)	1,800	(645)
2032	20,705	39	9,052	(602)	1.17	(0.17)	1,870	(715)
2033	21,501	40	9,284	(834)	1.21	(0.21)	1,942	(787)
2034	22,332	42	9,748	(1,298)	1.26	(0.26)	2,017	(862)
2035	23,192	43	9,980	(1,530)	1.31	(0.31)	2,094	(939)

4.1.5 Proposed Projects

The proposed public safety projects which are required to meet the demands of future development within the planning period are shown in Table 4-8 along with the anticipated planning and construction years as well as the estimated costs (Appendix G). These projects are shown in Figure 4-1, however the locations are subject to change as the planning process

begins. The Justice Center Renovations project will consist of converting the conference room into additional cubicle space to accommodate the required future staff. The Justice Center Police Expansion project will be renovating the Justice Center to allow the Police Department to expand into the space currently being used by the court. This project is expected to occur after the New City Hall Building project is constructed and the Existing City Hall Renovations project occurs to allow the court to move into the existing City Hall.

Table 4-8: Proposed Public Safety Projects

Project	Building Area (sq ft)	Construction Priority		Current Year (2025) Cost Estimate
		Begin Planning	Completion	
Animal Control Shelter	4,500	2025	2033	\$1,567,581.40 ¹
Justice Center Renovations	N/A	2028	2029	\$19,580.00 ¹
Justice Center Police Expansion	4,497	2033	2034	\$1,246,608.00 ¹
New City Hall Building	20,000	2032	2034	\$9,681,145.54 ¹
Existing City Hall Renovations	N/A	2033	2034	\$2,425,500.00 ¹
Future Satellite Fire Station and Ladder Truck	N/A	N/A	N/A	\$0.00
Total				\$14,940,414.94

¹ Cost estimates are based on rough costs per square footage. These should be updated when project details are determined.

² Assumed that 50% of the Animal Control Shelter will be jointly paid and constructed in 2033

4.1.6 Methods of Financing

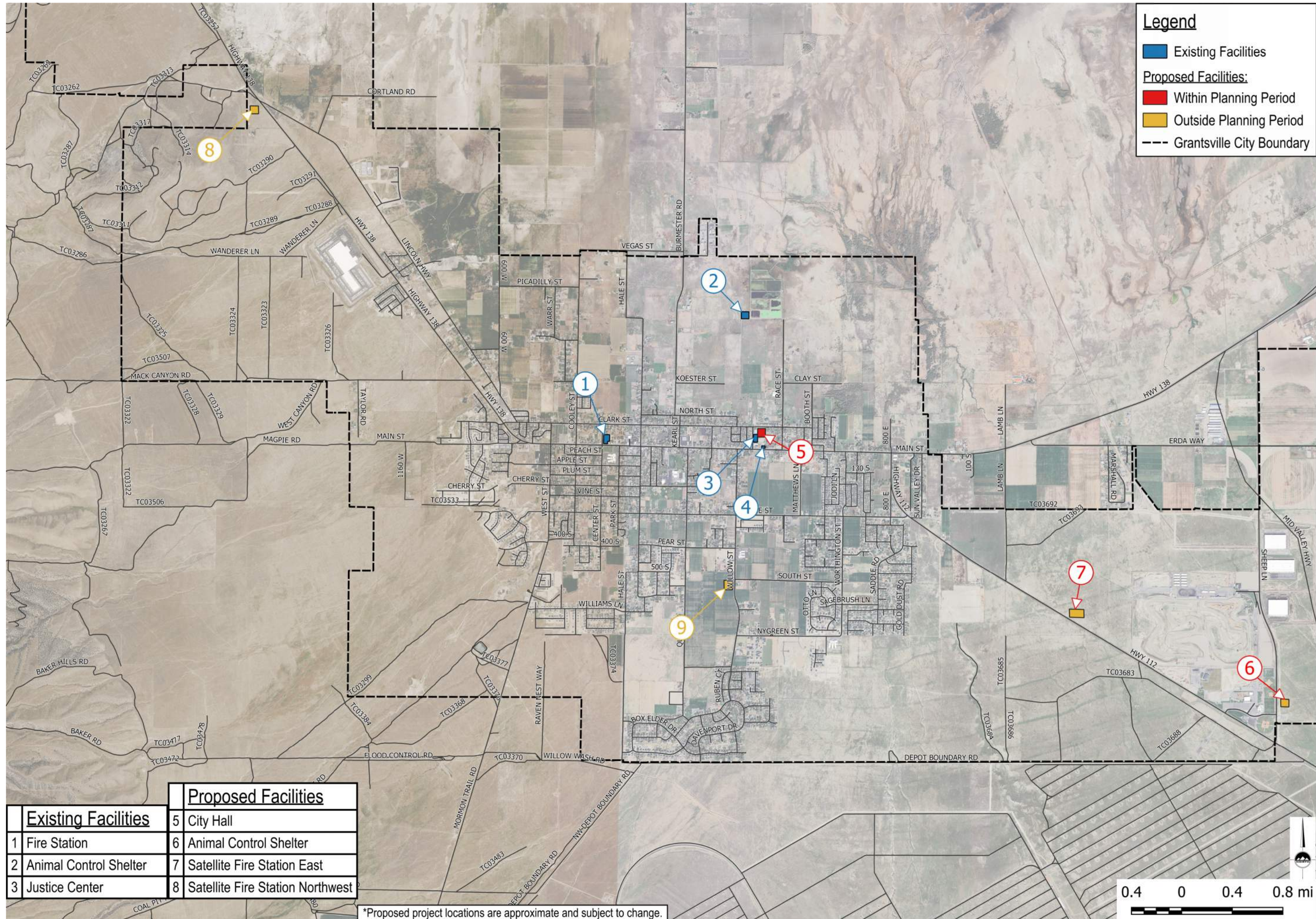
Funding for the City’s public safety facilities typically comes from impact fees, grants, loans, taxes, and reserves in the Capital Project Fund. At this time, it is not expected that any of the proposed projects listed above will be funded through grants.

GRANTSVILLE CFP, IFFP, AND IFA
GRANTSVILLE, UTAH

PUBLIC SAFETY FACILITIES

Legend

- Existing Facilities
- Proposed Facilities:**
 - Within Planning Period
 - Outside Planning Period
 - Grantsville City Boundary



Proposed Facilities	
Existing Facilities	5 City Hall
1 Fire Station	6 Animal Control Shelter
2 Animal Control Shelter	7 Satellite Fire Station East
3 Justice Center	8 Satellite Fire Station Northwest

*Proposed project locations are approximate and subject to change.

4.2 Impact Fee Analysis

4.2.1 Existing Facilities

As determined in Section 4.1.3, the Justice Center and Fire Station have excess capacity to serve future development. Proportionate shares for these projects were calculated by dividing the excess capacity by the existing capacity. The proportionate share was multiplied by the historic project cost in order to calculate a buy-in cost, as shown in Table 4-9. The interest payments due within the planning period for the existing loans associated with each facility are also eligible for buy-in costs, calculated based on the proportionate share for the facility which the loan funded.

Table 4-9: Public Safety Buy-In Costs

Facility	Cost ¹	Existing Capacity	Excess Capacity	Proportionate Share	Buy-In Cost
Justice Center (Police Station)	\$3,905,831.64	8,450 sq ft	1,487 sq ft	17.6%	\$687,333.92
Justice Center Revenue Bond Interest Payments (2025-2035)	\$470,875.00	N/A	N/A	17.6%	\$82,862.86
Fire Station	\$2,376,472.15	1 station	0.09 station	9.3%	\$220,622.17
Fire Station Revenue Bond Interest Payments (2025-2035)	\$241,780.00	N/A	N/A	9.3%	\$22,445.89
Total					\$1,013,264.83

¹ The costs shown are historical costs which may include initial construction, acquiring land, improvements, planning, and engineering.

4.2.2 System Improvements

The system improvements for public safety facilities proposed in the planning period were determined in Section 4.1.5. The proposed City Hall projects are not impact fee eligible as they do not directly serve any public safety facilities. Proportionate shares were calculated in Table 4-10 based on the requirements to meet the level of service for future development at the end of the planning period, excluding any portion of the project associated with correcting an existing deficiency. The fire vehicles associated with the proposed fire station were calculated at the same proportionate share as the station. However, the proposed vehicles which cost less than \$500,000 are not eligible for impact fees per Utah Code Section 11-36a-102.

Table 4-10: Proposed Public Safety Projects Proportionate Share

Project	Building Area (sq ft)	Existing (2025) Deficit	Future (2035) Deficit	Proportionate Share
Animal Control Shelter	4,500	295 sq ft	939 sq ft	14.3%
Justice Center Police Expansion	4,497	N/A	1,530 sq ft	34.0%

¹ The Satellite Fire Station East and Vehicles project is placed outside the planning period until demographics east of Grantsville City is determined.

The cost of each project which is eligible for impact fees is based on the portion of the project associated with serving future development in the planning period, excluding any portion of the project attributed to correcting the existing deficiency. This was calculated in Table 4-11 by multiplying the total project cost by the proportionate share shown above. In order to account for the time-price differential inherent with future costs, the current year cost estimates were inflated at a rate of 3.5% to the anticipated construction year.

Table 4-11: Public Safety Impact Fee Eligible Costs

Project	Construction Year	Current Year (2025) Cost Estimate	Construction Year Cost Estimate	Proportionate Share	Impact Fee Eligible Cost
Animal Control Shelter	2033	\$1,567,581.40	\$2,064,205.35	14.3%	\$295,585.40
Justice Center Police Expansion	2034	\$1,246,608.00	\$1,698,998.74	34.0%	\$578,158.28
Total		\$2,814,189.40	\$3,763,204.10		\$873,743.68

In addition to impact fee eligible project costs, planning costs can also be included in the calculation of impact fees. Due to the uncertainty that comes with long-term development projections, this plan is expected to be amended annually. The future professional expenses expected to occur within the planning period were inflated at a 3.5% rate as shown in Table 4-12.

Table 4-12: Public Safety Professional Expenses

Year	Cost
2025	\$5,300.00
2026	\$5,485.50
2027	\$5,677.49
2028	\$5,876.20
2029	\$6,081.87
2030	\$6,294.74
2031	\$6,515.05
2032	\$6,743.08
2033	\$6,979.09
2034	\$7,223.36
2035	\$7,476.17
Total	\$69,652.56

4.2.3 Methods of Financing

As discussed in Section 4.1.6, public safety system improvements are expected to be financed through impact fees, loans, and reserves in the Capital Project Fund. There is no debt expected to be incurred during this planning period. In the future the City expects to finance a future Satellite Fire Station project with a loan.

4.2.4 Impact Fee Calculation

Impact fees for public safety facilities are calculated based on the building area of proposed development and police computer aided dispatch (CAD) calls in order to make the fees equitable for the varying demands of different development types (see Appendix F). The number of CAD calls used in Table 4-13 was provided by the City to determine calls per unit. This rate was then applied to convert the projected annual increase in units into an increase in calls, as shown in the Future Calls and Units table (see Appendix F). The construction water and City rate development types were excluded from these calculations because there are no buildings associated with construction water and the City does not charge impact fees for their own buildings. Per Utah Code Section 11-36a-202, impact fees for fire suppression vehicles can only be charged to non-residential development. When a satellite fire station is constructed, these vehicles will be included in the impact fee calculation.

Table 4-13: Calls Per Unit

Type	Units	Calls	Calls/Unit
Single Family	4,618	2,655	0.575
Multi-Family	290	559	1.928
Non-Residential	178	441	2.478

Table 4-14: Public Safety Impact Fee Calculation

Project	Impact Fee Eligible Cost	Planning Period (2025-2035) Calls	Cost per Call
Buy-In Cost	\$1,013,264.83	1,579	\$641.71
Animal Control Shelter	\$295,585.40	1,579	\$187.20
Justice Center Police Expansion	\$578,158.28	1,579	\$366.15
Professional Expenses	\$69,652.56	1,579	\$44.11
Total			\$1,239.18

In order to simplify the process of charging impact fees, the fees for residential development are charged based dwelling or non-residential unit. The results of these impact fee calculations are summarized in Table 4-15.

Table 4-15: Proposed Public Safety Maximum Allowable Impact Fees

Land Use	Impact Fee
Single Family	\$712.43 per Dwelling Unit
Multi-Unit	\$2,388.62 per Dwelling Unit
Non-Residential	\$3,070.10 per Non-Residential Unit

Single family and multi-family units are self-explanatory, but non-residential units are different. An example of non-residential units are a strip mall with one building with 10 units or shops. Another example is a 1,000,000 square foot warehouse which only has one tenant/business accounting for one (1) unit. There may also be multiple commercial buildings on one property which are one (1) unit each if they are different businesses.

4.2.5 Impact Fee Cashflow

The anticipated impact fee revenues and expenses over the 10-year planning period are shown in Table 4-16. The expenses represent only what is attributable to planning period development and include capital project costs, the expenditure of buy-in costs, and proposed bond payments. The impact fee cashflow (Table 4-17) estimates the end of year impact fee fund balance

throughout the planning period by comparing the impact fee revenues, total expenses, and interest income calculated at 3.0% of the fund balance.

4.2.6 Impact Fee Credits

The City currently has procedures in place for credits, appeals, and exemptions of impact fees, refer to Appendix B for the City's current impact fee ordinance.

Table 4-16: Public Safety Impact Fee Revenues and Expenses

Year	Single Family Residential Units Increase	Multi-Family Residential Units Increase	Non-Residential Units Increase	Impact Fee Revenues	Impact Fee Eligible Project Costs	Bond Payments	Bond Proceeds	Buy-In Cost Expenses	Professional Expenses	Total Expenses
2025	-	-	-	-	-	-	-	-	(\$5,300.00)	(\$5,300.00)
2026	162	10	1	\$142,370.47	-	-	-	(\$104.60)	(\$5,485.50)	(\$5,590.10)
2027	167	11	1	\$148,321.25	-	-	-	(\$107.81)	(\$5,677.49)	(\$5,785.30)
2028	198	12	4	\$182,005.59	-	-	-	(\$129.63)	(\$5,876.20)	(\$6,005.83)
2029	206	13	2	\$183,953.48	-	-	-	(\$133.48)	(\$6,081.87)	(\$6,215.35)
2030	214	13	4	\$195,793.14	-	-	-	(\$139.89)	(\$6,294.74)	(\$6,434.63)
2031	223	14	2	\$198,453.47	-	-	-	(\$144.39)	(\$6,515.05)	(\$6,659.44)
2032	232	15	4	\$213,394.18	-	-	-	(\$151.44)	(\$6,743.08)	(\$6,894.52)
2033	241	15	3	\$216,735.98	(\$295,585.40)	-	-	(\$156.58)	(\$6,979.09)	(\$302,721.07)
2034	250	16	3	\$225,536.50	(\$578,158.28)	-	-	(\$162.35)	(\$7,223.36)	(\$585,543.99)
2035	260	16	3	\$232,660.83	-	-	-	(\$168.77)	(\$7,476.17)	(\$7,644.94)
Total	2,153		27	\$1,939,224.88	(\$873,743.68)			(\$1,398.93)	(\$69,652.56)	(\$944,795.17)

Table 4-17: Public Safety Impact Fee Cashflow

Year	Impact Fee Revenues	Total Expenses	Interest Income	End of Year Balance
2025	-	(\$5,300.00)	-	\$93,980.30
2026	\$142,370.47	(\$5,590.10)	\$2,819.41	\$233,580.08
2027	\$148,321.25	(\$5,785.30)	\$7,007.40	\$383,123.43
2028	\$182,005.59	(\$6,005.83)	\$11,493.70	\$570,616.89
2029	\$183,953.48	(\$6,215.35)	\$17,118.51	\$765,473.53
2030	\$195,793.14	(\$6,434.63)	\$22,964.21	\$977,796.25
2031	\$198,453.47	(\$6,659.44)	\$29,333.89	\$1,198,924.16
2032	\$213,394.18	(\$6,894.52)	\$35,967.72	\$1,441,391.54
2033	\$216,735.98	(\$302,721.07)	\$43,241.75	\$1,398,648.20
2034	\$225,536.50	(\$585,543.99)	\$41,959.45	\$1,080,600.16
2035	\$232,660.83	(\$7,644.94)	\$32,418.00	\$1,338,034.04

Section 5 Parks

5.1 Capital Facilities Plan and Impact Fee Facilities Plan

5.1.1 Inventory of Existing Facilities

Grantsville City’s existing City parks are shown in Figure 5-1. These parks have a varying level of amenities as listed in Table 5-1. The City does not have any long-term debt associated with its park facilities.

Table 5-1: Existing Park Facilities

Facility	Area (ac)	Amenities	Cost ¹
Old Lincoln Park	1.08	Restroom, dog park, pavilion, playground, and drinking fountains	\$240,986.42
Academy Square	0.65	Pavilion	N/A
Rodeo Grounds	6.26	Arena	\$98,353.45
Scott Bevan Memorial Park	1.73	Flex trail and playground	\$555,549.34
Cherry Street Park	19.58	Playground, picnic benches, soccer fields, tennis courts, baseball fields, softball fields, restrooms, skate park, four pavilions, T-ball field, water fountain, tot park, pickleball courts	\$1,096,726.37
Hollywood Park	12.69	Shaded playground, restrooms, pavilion, basketball hoops, soccer field, ball field, splash pad	\$1,696,554.79
Total	41.99		\$3,688,170.37

¹ The costs shown are historical costs which may include initial construction, acquiring land, improvements, planning, and engineering.

5.1.2 Level of Service

The existing level of service for park facilities is 4 acres of park area per 1,000 population, as established in the City’s previous Capital Facilities Plans as well as the Grantsville General Plan dated January 15, 2020. This CFP/IFFP will continue to use the established level of service of 4 acres per 1,000 population.

5.1.3 Capacity of Existing Facilities

The capacity of existing park facilities was calculated based on the park area needed to meet the level of service at the City’s current population compared to the existing park area, as shown in Table 5-2.

Table 5-2: Capacity of Existing Parks

Population (2024)	Park Area LOS (ac/1,000 Population)	Park Area Required (ac)	Existing Park Area (ac)	Excess / (Deficit) (ac)
16,056	4	64.22	41.99	(22.23)

5.1.4 Demands of Future Development

Utilizing the demographic projections from Section 2.7, the park area required to meet the level of service throughout the planning period was calculated as shown in Table 5-3.

Table 5-3: Future Park Requirements

Year	Population	Park Area Required (ac)	Excess / (Deficit) (ac)
2025	16,056	64.22	(22.23)
2026	16,592	66.37	(24.38)
2027	17,148	68.59	(26.60)
2028	17,803	71.21	(29.22)
2029	18,486	73.94	(31.95)
2030	19,193	76.77	(34.78)
2031	19,934	79.74	(37.75)
2032	20,705	82.82	(40.83)
2033	21,501	86.00	(44.01)
2034	22,332	89.33	(47.34)
2035	23,192	92.77	(50.78)

5.1.5 Proposed Projects

Grantsville City plans to construct the parks listed in Table 5-4 within the planning period to satisfy the future park area requirements. Also shown in the table are the proposed areas, recommended years to begin planning and complete the project by, and the current year cost estimates (see Appendix H).

Table 5-4: Proposed Park Projects

Project	Proposed Area (ac)	Construction Priority		Current Year (2025) Cost Estimate
		Begin Planning	Completion	
West Street Park	27.69	N/A ¹	2026	\$297,903.23
Scenic Slopes Park, Utilities, Pump Track, Site Improvements	6.98	2025	2026	\$3,170,969.33 ²
Desert Edge Park	5	2025	2027	\$2,664,070.11
Scenic Slopes Parking, Park Amenities, Ball Courts	5.39	2026	2028	\$2,447,372.82
President's Park	10	2026	2028	\$1,695,904.66
Scenic Slopes Park Baseball and Soccer Field	7.05	2028	2030	\$3,198,537.29
Twenty Wells Park	27	2030	2032	\$8,628,500.00
Highlands Park	10	2031	2033	\$3,392,678.66
Clark Farm Park	30	2032	2034	\$3,405,170.23
Total	129.11			\$28,901,106.33

¹ The City has already begun the planning process.

² Cost Estimate based on Resolution 2025-71.

The proposed locations of these parks are shown in Figure 5-1, but these are approximate locations which are subject to change, and the exact locations will be determined during the planning phase of each project. It should be noted the City does not maintain parks less than 10 acres but will work with developers for impact fee credits associated with parks less than 10 acres which are HOA maintained. The City also has the option to utilize parks as retention/detention basins, although this is typically not permitted.

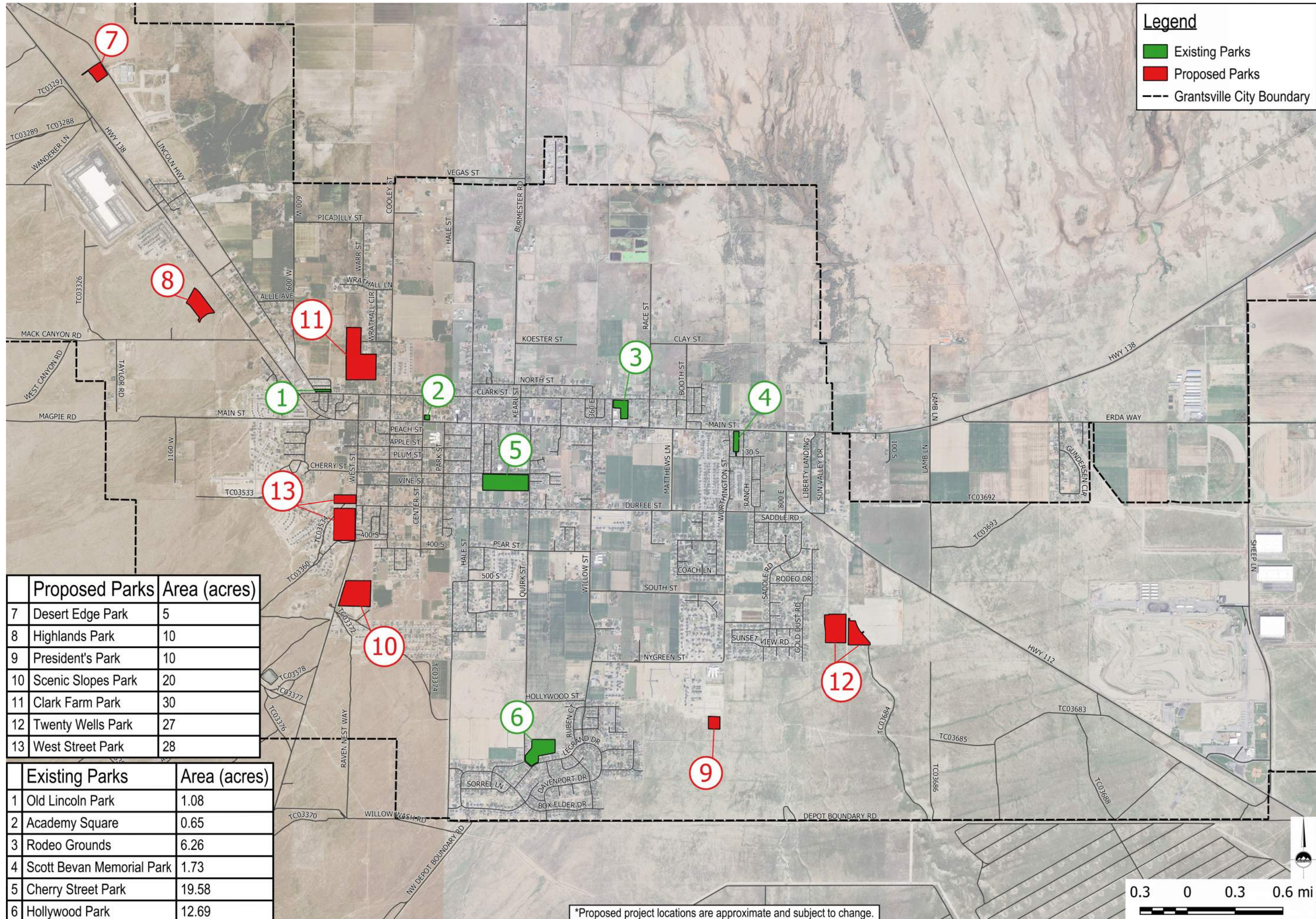
5.1.6 Methods of Financing

The City funds park projects as much as possible through grants and impact fees. Parks may also be funded through loans, developer dedications, taxes, and reserves in the Capital Project Fund.

GRANTSVILLE CFP, IFFP, AND IFA
GRANTSVILLE, UTAH

Legend

- Existing Parks
- Proposed Parks
- Grantsville City Boundary



Proposed Parks	Area (acres)
7 Desert Edge Park	5
8 Highlands Park	10
9 President's Park	10
10 Scenic Slopes Park	20
11 Clark Farm Park	30
12 Twenty Wells Park	27
13 West Street Park	28

Existing Parks	Area (acres)
1 Old Lincoln Park	1.08
2 Academy Square	0.65
3 Rodeo Grounds	6.26
4 Scott Bevan Memorial Park	1.73
5 Cherry Street Park	19.58
6 Hollywood Park	12.69

*Proposed project locations are approximate and subject to change.

PARK FACILITIES

5.2 Impact Fee Analysis

5.2.1 Existing Facilities

As discussed in Section 5.1.3, there is no excess capacity for existing parks to serve future development. Therefore, no buy-in cost can be charged for existing park facilities.

5.2.2 System Improvements

The system improvements for park facilities which are needed to meet the demands of future development in the planning period were determined in Section 5.1.5. A proportionate share for each new park project was calculated based on the added park acreage to meet the level of service, as shown in Table 5-5. Any portion of a project associated with correcting an existing deficiency was excluded from the proportionate share calculation. The City does not charge impact fees for projects which are expected to be constructed by developers so they have a proportionate share of 0%. If it is determined the City will pay for any portion of these projects as the development agreements are finalized then this plan should be amended to include the project.

Table 5-5: Proposed Parks Proportionate Share

Project	Park Area (ac)	Existing (2025) Deficit (ac)	Future (2035) Deficit (ac)	Proportionate Share
West Street Park	27.69	22.23	50.78	19.7%
Scenic Slopes Park, Utilities, Pump Track, Site Improvements	6.98	0	23.09	100%
Desert Edge Park	5	0	16.11	0% ¹
Scenic Slopes Parking, Park Amenities, Ball Courts	5.39	0	11.11	100%
President's Park	10	0	23.09	100%
Scenic Slopes Park Baseball and Soccer Field	7.05	0	13.09	100%
Twenty Wells Park	27	0	6.04	0% ¹
Highlands Park	10	0	0	0% ¹
Clark Farm Park	30	0	0	0%

¹ The proportionate share is 0% because the project is expected be constructed by developers.

The cost of each project which is eligible for impact fees is based on the portion of the project associated with serving future development in the planning period, excluding any portion of the

project attributed to correcting an existing deficiency. This was calculated in Table 5-6 by multiplying the total project cost by the proportionate share shown above. In order to account for the time-price differential inherent with future costs, the current year cost estimates were inflated at a rate of 3.5% to the anticipated construction year.

Table 5-6: Parks Impact Fee Eligible Costs

Project	Construction Year	Current Year (2025) Cost Estimate	Construction Year Cost Estimate	Proportionate Share	Impact Fee Eligible Cost
West Street Park	2026	\$297,903.23	\$308,329.84	19.7%	\$60,752.89
Scenic Slopes Park, Utilities, Pump Track, Site Improvements	2026	\$3,170,969.33	\$2,420,969.33 ²	100.0%	\$2,420,969.33
Desert Edge Park	2027	\$2,664,070.11	\$2,853,818.50	0% ¹	\$0.00
Scenic Slopes Parking, Park Amenities, Ball Courts	2028	\$2,447,372.82	\$2,713,445.99	100.0%	\$2,713,445.99
President's Park	2034	\$1,695,904.66	\$2,311,343.97	100.0%	\$2,311,343.97
Scenic Slopes Park Baseball and Soccer Field	2032	\$3,198,537.29	\$4,069,432.67	100.0%	\$4,069,432.67
Twenty Wells Park	2032	\$8,628,500.00	\$10,977,861.62	0% ¹	\$0.00
Highlands Park	2033	\$3,392,678.66	\$4,467,509.92	0% ¹	\$0.00
Clark Farm Park	2034	\$3,405,170.23	\$4,640,897.49	0%	\$0.00
Total		\$28,901,106.33	\$34,763,609.34		\$11,575,944.86

¹ The proportionate share is 0% because the project is expected be constructed by developers.

² Construction Year Cost based on Resolution No. 2025-71 not inflated, without grant of \$750k which is not impact fee eligible.

In addition to impact fee eligible project costs, planning costs can also be included in the calculation of impact fees. Due to the uncertainty that comes with long-term development projections, this plan is expected to be amended annually. The future professional expenses expected to occur within the planning period were inflated at a 3.5% rate as shown in Table 5-7.

Table 5-7: Parks Professional Expenses

Year	Cost
2025	\$5,300.00
2026	\$5,485.50
2027	\$5,677.49
2028	\$5,876.20
2029	\$6,081.87
2030	\$6,294.74
2031	\$6,515.05
2032	\$6,743.08
2033	\$6,979.09
2034	\$7,223.36
2035	\$7,476.17
Total	\$69,652.56

5.2.3 Methods of Financing

As discussed in Section 5.1.6, the parks system improvements are expected to be funded through impact fees, loans, developer dedications, taxes, and Capital Project Fund reserves. The City expects to finance the Scenic Slopes Park Amenities project with a loan, which is necessary to prevent the impact fee fund balance from going negative (see Section 5.2.5). This loan was assumed to be a 30-year bond with a 4.0% interest rate, 1.5% cost of issuance, 0.5% bond insurance, and a \$20,000 surety policy. The interest cost for this bond attributed to development within the planning period can be included in the impact fee calculation. Table 5-8 shows the details of this bond along with the impact fee eligible interest cost.

Table 5-8: Parks Future Debt Financing

Project	Proceeds	Par Amount ¹	Debt Service (Interest)	Debt Service (Principal + Interest)	Proportionate Share	Impact Fee Eligible Debt Service (Interest)
Scenic Slopes Parking, Park Amenities, Ball Courts	\$2,713,445.99	\$1,403,857.46	\$1,031,699.02	\$2,435,556.48	100.0%	\$1,031,699.02

¹ Includes cost of issuance, bond insurance, and surety policy. It is assumed bond will be 50% of construction cost.

5.2.4 Impact Fee Calculation

Impact fees for parks are charged based on the number of dwelling units. Per Utah Code Section 11-36a-202, it is prohibited to charge schools impact fees for park facilities. Additionally, park facilities only benefit residential development in the City, so only single family and multi-unit developments are charged impact fees for parks and were the only development types

considered in the impact fee calculation shown in Table 5-9. The growth of these development types was projected in Table 2-3. The proposed impact fees are summarized in Table 5-10.

Table 5-9: Parks Impact Fee Calculation

Project	Impact Fee Eligible Cost	Planning Period (2025-2035) Dwelling Units ¹	Cost per Dwelling Unit
West Street Park	\$60,752.89	2,288	\$26.55
Scenic Slopes Park, Utilities, Pump Track, Site Improvements	\$2,420,969.33	2,288	\$1,058.12
Scenic Slopes Parking, Park Amenities, Ball Courts	\$2,713,445.99	2,288	\$1,185.95
Scenic Slopes Parking, Park Amenities, Ball Courts Debt Service (Interest)	\$1,031,699.02	2,288	\$450.92
President's Park	\$2,311,343.97	2,288	\$1,010.20
Twenty Wells Park	\$0.00	2,288	\$0.00
Professional Expenses	\$69,652.56	2,288	\$30.44
Total			\$3,762.18

¹ Includes only residential dwelling units (single family and multi-unit).

Table 5-10: Proposed Parks Maximum Allowable Impact Fees

Land Use	Impact Fee
Single Family and Multi-Unit	\$3,762.18 per Dwelling Unit

5.2.5 Impact Fee Cashflow

The anticipated impact fee revenues and expenses over the 10-year planning period are shown in Table 5-11. The expenses represent only what is attributable to planning period development and include capital project costs, the expenditure of buy-in costs, and proposed bond payments. The impact fee cashflow (Table 5-12) estimates the end of year impact fee fund balance throughout the planning period by comparing the impact fee revenues, total expenses, and interest income calculated at 3.0% of the fund balance.

5.2.6 Impact Fee Credits

The City currently has procedures in place for credits, appeals, and exemptions of impact fees, refer to Appendix B for the City's current impact fee ordinance.

Table 5-11: Parks Impact Fee Revenues and Expenses

Year	Dwelling Units ¹	Annual Dwelling Unit Increase ¹	Impact Fee Revenues	Impact Fee Eligible Project Costs	Bond Payments	Bond Proceeds	Professional Expenses	Total Expenses
2025	4,908	-	-	-	-	-	(\$5,300.00)	(\$5,300.00)
2026	5,080	172	\$647,094.65	(\$2,481,722.23)	-	-	(\$5,485.50)	(\$2,487,207.73)
2027	5,258	178	\$669,667.72	-	-	-	(\$5,677.49)	(\$5,677.49)
2028	5,468	210	\$790,057.43	(\$2,713,445.99)	-	\$2,713,445.99	(\$5,876.20)	(\$5,876.20)
2029	5,687	219	\$823,917.03	-	(\$81,185.22)	-	(\$6,081.87)	(\$87,267.09)
2030	5,914	227	\$854,014.46	-	(\$81,185.22)	-	(\$6,294.74)	(\$87,479.95)
2031	6,151	237	\$891,636.24	-	(\$81,185.22)	-	(\$6,515.05)	(\$87,700.27)
2032	6,398	247	\$929,258.02	(\$4,069,432.67)	(\$81,185.22)	-	(\$6,743.08)	(\$4,157,360.96)
2033	6,654	256	\$963,117.62	-	(\$81,185.22)	-	(\$6,979.09)	(\$88,164.30)
2034	6,920	266	\$1,000,739.41	(\$2,311,343.97)	(\$81,185.22)	-	(\$7,223.36)	(\$2,399,752.54)
2035	7,196	276	\$1,038,361.19	-	(\$81,185.22)	-	(\$7,476.17)	(\$88,661.39)
Total		2,288	\$8,607,863.77	(\$11,575,944.86)			(\$69,652.56)	(\$9,500,447.93)

¹ Includes only residential dwelling units (single family and multi-unit)

Table 5-12: Parks Impact Fee Cashflow

Year	Impact Fee Revenues	Total Expenses	Interest Income	End of Year Balance
2025	-	(\$5,300.00)	-	\$1,413,470.27
2026	\$647,094.65	(\$2,487,207.73)	\$42,404.11	(\$384,238.69)
2027	\$669,667.72	(\$5,677.49)	-	\$279,751.54
2028	\$790,057.43	(\$5,876.20)	\$8,392.55	\$1,072,325.30
2029	\$823,917.03	(\$87,267.09)	\$32,169.76	\$1,841,145.01
2030	\$854,014.46	(\$87,479.95)	\$55,234.35	\$2,662,913.86
2031	\$891,636.24	(\$87,700.27)	\$79,887.42	\$3,546,737.24
2032	\$929,258.02	(\$4,157,360.96)	\$106,402.12	\$425,036.42
2033	\$963,117.62	(\$88,164.30)	\$12,751.09	\$1,312,740.83
2034	\$1,000,739.41	(\$2,399,752.54)	\$39,382.22	(\$46,890.08)
2035	\$1,038,361.19	(\$88,661.39)	-	\$902,809.72

Section 6 Wastewater

6.1 Capital Facilities Plan and Impact Fee Facilities Plan

6.1.1 Inventory of Existing Facilities

Grantsville City's wastewater collection system consists of trunk lines, interceptor lines, collector lines, lift stations, force mains, and the Wastewater Treatment Facility (WWTF), as shown in Figure 6-1. The major gravity sewer lines and their historic construction costs are listed in **Error! Reference source not found.** The minor gravity sewer lines owned by the City (all sewer lines not listed in **Error! Reference source not found.**) have historic construction costs totaling \$12,632,038.68.

Table 6-1: Existing Major Gravity Sewer Lines

Pipeline	Diameter	Material	Length (ft)	Minimum Slope	Flow Capacity (gpm) ²	Cost ³
Main Trunk	18-inch	Concrete	2,340	0.113% ¹	1,252	N/A
Central Trunk	(2) parallel 12-inch	PVC	1,690	0.194% ¹	1,113	N/A
Central Interceptor	12-inch and 15-inch	PVC	2,480	0.194% ¹	556	N/A
Hale Street Collector	12-inch	PVC	3,990	0.37%	768	\$1,060,736.07
Northwest Interceptor	12-inch, 15-inch, and 18-inch	PVC	17,770	0.12%	1,289 ⁴	\$749,254.71
Burmester Collector	12-inch	PVC	4,730	0.194% ¹	556	\$226,236.98
West Interceptor	10-inch	PVC	6,440	0.25%	388	\$1,712,065.24
Northeast Interceptor	18-inch and 24-inch	PVC	9,180	0.345%	2,186	\$1,083,869.01
Matthew's Lane Collector	12-inch and 15-inch	PVC	7,670	0.20%	564	\$2,039,059.07
Worthington Street Collector	12-inch	PVC	11,760	0.194% ¹	556	\$193,636.00
Main Street Trunk	18-inch	PVC	2,460	0.20%	1,664	\$653,987.65
Lakeview Business Park Offsite Gravity Line	18-inch and 21-inch	PVC	20,440	0.06%	912	\$3,398,037.81
Deseret Peak Collector	8-inch, 10-inch, 12-inch, and 15-inch	PVC	7,630	1.60%	542	\$190,270.90
West Street Collector	12-inch	PVC	6,600	1.06%	1,300	\$1,324,885.24 ⁵
Cooley Street Collector	8-inch	PVC	4,048	0.80%	383	
Total			109,228			\$12,632,038.68

¹ The regulatory minimum slope per UAC R317-3-2 is used when the actual minimum slope is unknown.

² The flow capacity was calculated based on d/D=0.67 and the minimum slope of the pipeline.

³ The costs shown are historical costs which may include initial construction, acquiring land, improvements, planning, and engineering.

⁴ The flow capacity is 944 gpm for the 15-inch portion of the pipeline and 1,289 gpm for the 18-inch portion, but the 18-inch is the controlling portion because it collects significantly more flow than the 15-inch.

⁵ Cost does not include the amount paid for by a grant.

The City’s existing lift stations and associated force mains are detailed in Table 6-2. Additional existing lift stations include the Sheep Lane, Deseret Peak, Utah Motorsports Campus (UMC), and Tooele Valley Airport Lift Stations. However, the Sheep Lane Lift Station is no longer in use, the Deseret Peak Lift Station is County owned, and the UMC and Tooele Valley Airport Lift Stations are privately owned so these are not included in the table.

Table 6-2: Existing Lift Stations

Lift Station	Associated Force Main(s)	Flow Capacity (gpm)	Cost ¹
Northwest	6-inch and 10-inch	1,200	\$500,000.00
Northeast	8-inch	2,170	\$400,000.00
Total			\$900,000.00

¹ The costs shown are historical costs which may include initial construction, acquiring land, improvements, planning, and engineering.

The capacity and historic cost of the City’s Wastewater Treatment Facility is shown in Table 6-3. The WWTF was originally designed to treat an average day flow of 1.5 million gallons per day (MGD), but in 2019 permit requirements were updated to require greater nutrient removal which limits the average day capacity of the facility to 1 MGD (per the 2022 Wastewater Treatment Plant Study by AQUA Engineering).

Table 6-3: Existing Wastewater Treatment Facility

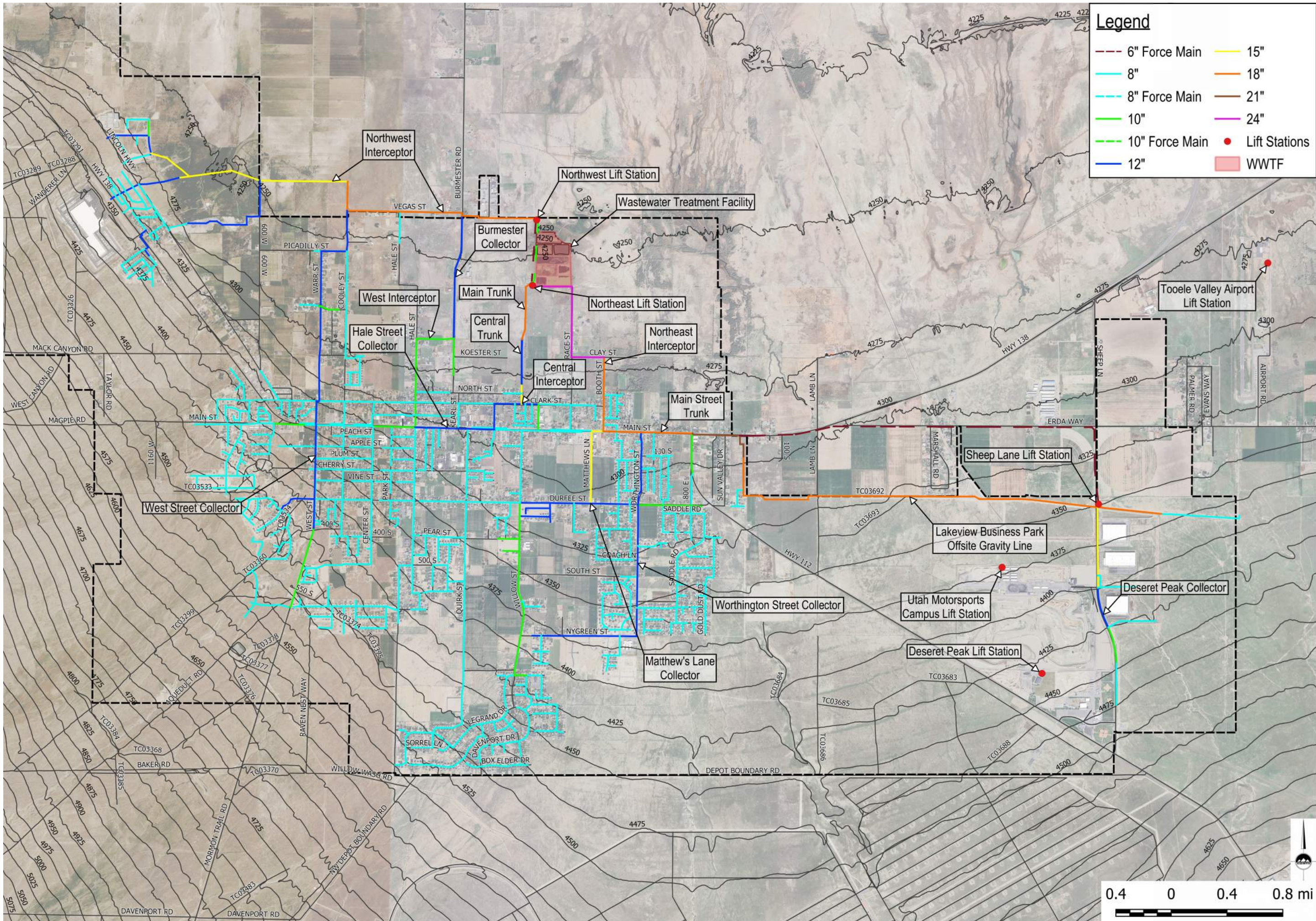
Facility	Capacity		Cost ²
	Average Day Flow (MGD)	Peak Day Flow (MGD)	
Wastewater Treatment Facility	1.00 ¹	2.25	\$5,559,563.47

¹ The WWTF was originally designed to treat an average day flow of 1.5 MGD, but currently can only treat 1 MGD due to updated nutrient removal requirements.

² The costs shown are historical costs which may include initial construction, acquiring land, improvements, planning, and engineering.

As discussed in Section 3.1.1, the existing Public Works Building serves both drinking water and wastewater facilities. The building was constructed in 2021 for a cost of \$222,483.40 attributed to wastewater utilities.

The City has long-term debt associated with existing wastewater facilities in the form of a revenue bond, as detailed in Table 6-4. This Sewer Revenue Bond was used to finance improvements to the collection system.



Legend

	6" Force Main		15"
	8"		18"
	8" Force Main		21"
	10"		24"
	10" Force Main		Lift Stations
	12"		WWTF

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GRANTSVILLE CFP, IFFP, AND IFA

GRANTSVILLE, UTAH

EXISTING WASTEWATER SYSTEM

PROJECT NUMBER: 11637 PRINT DATE: 2026-04-02
 PROJECT MANAGER: R. ROUSSELLE DESIGNED BY: C. DUNKEL

FIG 6-1



Table 6-4: Existing Wastewater Long-Term Debt

Bond	Date of Issue	Interest Rate	Final Maturity Date	Original Bond, Note Issue	Principal Outstanding at June 30, 2025	Total Interest Payments (2025-2035)
Sewer Revenue Bond, Series 2018	December, 2018	1.75%	August, 2049	\$4,880,000.00	\$4,232,000.00	\$628,057.00

6.1.2 Level of Service

The level of service standards to be used for this plan, shown in Table 6-5, were previously established in the Grantsville City Capital Facilities Plan dated May 2022. These standards were calculated based on measured flow data (see Appendix I), and peaking factors were determined from the Grantsville City – Sanitary Sewer Flow Monitoring 2018 – Flow and Model Summary by AQUA Engineering. The City’s recent wastewater flow data (2022-2025) was analyzed and determined to be consistent with the previously established level of service.

Table 6-5: Wastewater Level of Service

Component	Parameter	Level of Service	
Collection System	Average Day Flow	150 gpd/ERC	
	Peaking Factors	<i>Miles From WWTF</i>	<i>Factor</i>
		<1	1.85
		>1 and <1.6	2.25
	>1.6	4	
Lift Stations	Peak Inflow	0.35 gpm/ERC	
Wastewater Treatment Facility	Average Day Flow	150 gpd/ERC	
	Peak Day Flow	175 gpd/ERC	
	Peak Instantaneous Flow	0.4 gpm/ERC	

6.1.3 Capacity of Existing Facilities

The capacity of the City’s major gravity sewer lines was determined by modeling the existing conditions of the entire wastewater collection system and then analyzing the flow in each of the major sewer lines. The total capacity of each pipe is defined as the flow by which the depth to diameter ratio (d/D) is equal to 0.67, also stated as the pipe flowing 67% full by depth. The excess capacity for each pipeline was calculated by dividing the estimated current flow in the pipe by the total capacity flow of the pipe at the most critical point (largest d/D) along the whole pipeline. The resulting excess capacities for each major gravity sewer line are shown in Table 6-6.

Table 6-6: Capacity of Existing Major Gravity Sewer Lines

Pipeline	Current (2025) Peak Hour Flow (gpm)	Flow Capacity (gpm)	Excess / (Deficit) (gpm)
Main Trunk	583	1,252	669
Central Trunk	583	1,113	530
Central Interceptor	441	556	115
Hale Street Collector	385	768	383
Northwest Interceptor	781	1,289	508
Burmester Collector	489	556	67
West Interceptor	260	388	128
Northeast Interceptor	1,138	2,186	1,048
Matthew's Lane Collector	252	564	312
Worthington Street Collector	69	556	487
Main Street Trunk	704	1,664	960
Lakeview Business Park Offsite Gravity Line	299	912	613
Deseret Peak Collector	274	542	268
West Street Collector	278	1,300	1,022

It was not feasible to complete a pipe by pipe analysis of every single sewer line in the collection system beyond the major sewer lines, and any inaccuracies in the modeled conditions would be emphasized in these smaller diameter sewer lines which are upstream of the major sewer lines. The sewer lines other than the major pipelines are typically constructed to serve a single subdivision and designed to have sufficient capacity to serve the build-out conditions of the subdivision. Therefore, all of these existing minor sewer lines should have excess capacity to serve any future development in their service area and are considered beneficial to both future and existing development. Additionally, the majority of existing and future development connect or will connect to a minor sewer line, as opposed to connecting directly to a major pipeline, so the system of minor sewer lines as a whole can be considered to be beneficial to the entire City, even though each line individually serves only a limited portion of the City. For the purposes of this plan, the minor sewer lines (all pipes not listed in Table 6-6) are considered to be a whole system which serves the entire City and has excess capacity to accommodate any future development.

The capacities of the City’s existing lift stations were calculated by comparing the current modeled inflow with the total capacity of each lift station. The total capacities were determined by the design flows of the equipped pumps excluding any redundant or standby pumps. These results are shown in Table 6-7.

Table 6-7: Capacity of Existing Lift Stations

Lift Station	Current (2025) Peak Day Flow (gpm)	Flow Capacity (gpm)	Excess / (Deficit) (gpm)
Northwest	781	1,200	419
Northeast	1,138	2,170	1,032

The Wastewater Treatment Facility’s capacity was determined by comparing the flow capacity for both average day and peak day conditions with the current inflow at the facility, which was calculated based on existing ERCs and the level of service, as shown in Table 6-8.

Table 6-8: Capacity of Existing Wastewater Treatment Facility

Current (2025) ERCs	Average Day			Peak Day		
	Current Flow (MGD)	Flow Capacity (MGD)	Excess / (Deficit) (MGD)	Current Flow (MGD)	Flow Capacity (MGD)	Excess / (Deficit) (MGD)
6,736	1.010	1.50	0.490	1.18	2.25	1.07

The WWTF was originally designed to treat an average day flow of 1.5 MGD. The practical capacity is 1.0 MGD to meet the nutrient limits. Grantsville is currently in a 5-year grace period until the new plant is constructed which is anticipated to be complete summer of 2028.

6.1.4 Demands of Future Development

The future requirements for sewer lines and lift stations were determined by adding the demands of future development to the sewer model and analyzing when and where any deficiencies appear in the system. These estimated demands were based on the demographic projections per planning area shown in Table 2-4 and the level of service from Section 6.1.2. The future requirements for the WWTF were determined from the level of service and the projected ERCs for the whole City, as shown in Table 6-9.

Table 6-9: Future Wastewater Treatment Facility Requirements

Year	ERCs	Average Day Flow (MGD)	Excess / (Deficit) (MGD)	Peak Day Flow (MGD)	Excess / (Deficit) (MGD)
2025	6,736	1.010	0.490	1.18	1.07
2026	6,939	1.041	0.459	1.21	1.04
2027	7,136	1.07	0.430	1.25	1.00
2028	7,383	1.11	0.393	1.29	0.958
2029	7,617	1.14	0.357	1.33	0.917
2030	7,888	1.18	0.317	1.38	0.870
2031	8,141	1.22	0.279	1.42	0.825
2032	8,424	1.26	0.236	1.47	0.776
2033	8,708	1.31	0.194	1.52	0.726
2034	9,004	1.35	0.149	1.58	0.674
2035	9,300	1.40	0.105	1.63	0.623

6.1.5 Proposed Projects

The wastewater projects required to meet the demands of development within the planning period were determined based on future deficiencies identified in the sewer model analysis as well as development anticipated to occur in areas of the City not currently served by sewer infrastructure. The locations of the proposed projects can be seen in Figure 6-2. The proposed gravity sewer lines (Table 6-10) were sized to have sufficient capacity to serve projected development for 30 years beyond the expected construction date. The minimum slope for each pipeline was chosen as the larger of the minimum existing ground slope along the expected alignment or the minimum regulatory slope per UAC R317-3-2. Since these existing ground slopes will likely change as roads are built and development will probably occur at a rate and in locations somewhat different than projected in this plan, the City should reevaluate and amend this plan periodically and consider the proposed diameters and alignments may change when the project is designed. The cost estimates for the gravity sewer projects were calculated based on the costs per linear foot for each diameter are shown in Appendix J.

Table 6-10: Proposed Gravity Sewer Lines

Pipeline	Diameter (in)	Length (ft)	Minimum Slope	Flow Capacity (gpm)	Construction Priority		Current Year (2025) Cost Estimate
					Begin Planning	Begin Construction	
Willow Street Sewer Improvements	12	3,380	0.25%	628	2035	2036	\$1,310,628.80
SR112 Interceptor	15 and 18	6,914	0.13%	825 and 1,342	2026	2027	\$2,988,835.56
West Bank Interceptor Segment 1	36	7,444	0.07%	6,252	2026	2027	\$3,748,798.40
West Bank Interceptor Segment 2	36	2,695	0.07%	6,252	2026	2027	\$1,357,202.00
West Bank Interceptor Segment 3	18 and 24	8,884	0.50%, 0.12%, and 0.07%	2,631 and 2,776	2026	2027	\$3,927,403.66
Southeast Sewer Line	10	4,120	1.27%	875	2026	2027	\$1,564,982.00
Vegas Street Collector	18, and 24	12,966	0.08%, and 0.08%	1,053 and 2,267	2034	2035	\$5,790,294.14
Total							\$20,688,144.56

Note: Willow Street Sewer Improvements project is shown, but construction is outside the 10-year planning period so it won't be included in impact fee calculations.

Results from the sewer model analysis show the Northwest Lift Station is predicted to reach its capacity within the planning period. As shown in Table 6-11, it is proposed to replace the existing 6-inch diameter force main of the Northwest Lift Station with a 16-inch diameter force main. This would increase the flow capacity of the lift station from 1,200 gpm to 1,600 gpm which is enough to serve future development for the entire planning period. Additionally, when the Northwest Lift Station eventually reaches its capacity and needs to be replaced, the proposed 16-inch force main can be utilized as a part of the replacement project which significantly extends the design life of this project.

Table 6-11: Proposed Lift Station Projects

Project	Description	Length (ft)	Flow Capacity (gpm)	Construction Priority		Current Year (2025) Cost Estimate
				Begin Planning	Begin Construction	
Northwest Lift Station - Upsize Force Main	Upsize 6" diameter force main to 16"	2,380	1,600	2027	2028	\$194,363.06

The existing WWTF was predicted to exceed its capacity in 2025. The City plans to correct this with the construction of a new WWTF as detailed in the 2022 Wastewater Treatment Plant Study by AQUA Engineering. The new WWTF is proposed to have the capacities shown in Table 6-12 and is expected to begin construction in 2026. The cost estimate was provided by AQUA Engineering.

Table 6-12: Proposed Wastewater Treatment Facility

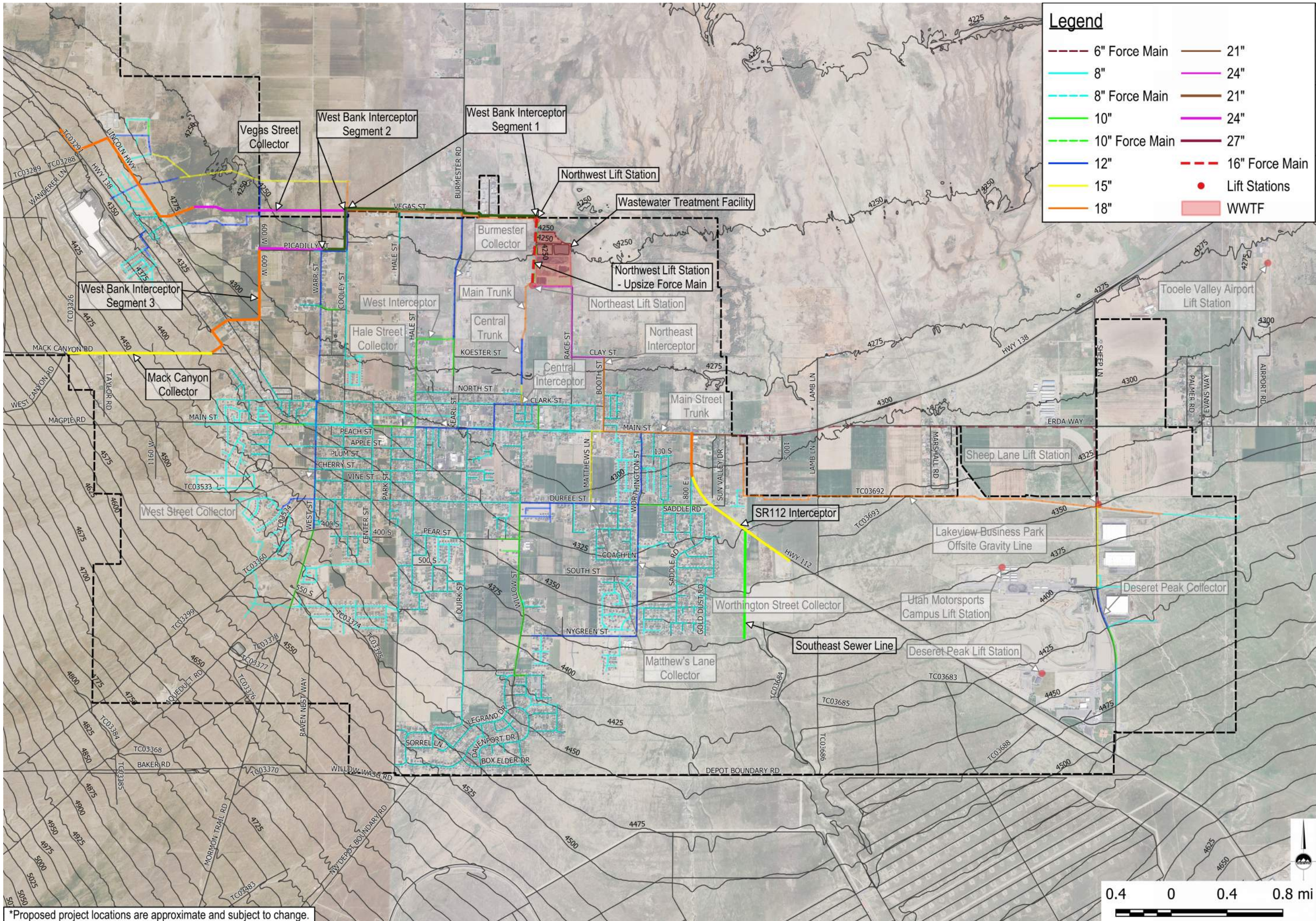
Project	Capacity		Construction Priority		Current Year (2025) Cost Estimate
	Average Day Flow (MGD)	Peak Hour Flow (MGD)	Begin Planning	Begin Construction	
Proposed Wastewater Treatment Facility	3.0	7.0	N/A ¹	2026	\$48,402,175.15

¹ The City has already begun the design process.

As mentioned in Section 3.1.5, the City also plans to expand the Public Works site to add a shop area, expected to begin construction in 2035. The estimated cost is \$1.86 million and will be split evenly between the drinking water and wastewater utility.

6.1.6 Methods of Financing

Each project will be funded to the extent possible through impact fees. The portion of each project not eligible for impact fees may be funded through grants, loans, developer dedications, or reserves in the Sewer Fund.



Legend

6" Force Main	21"
8"	24"
8" Force Main	21"
10"	24"
10" Force Main	27"
12"	16" Force Main
15"	Lift Stations
18"	WWTF

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GRANTSVILLE CFP, IFFP, AND IFA
GRANTSVILLE, UTAH

PROPOSED WASTEWATER SYSTEM

PROJECT NUMBER: 11637 PRINT DATE: 2026-04-02
PROJECT MANAGER: R. ROUSSELLE DESIGNED BY: C. DUNKEL

FIG 6-2

*Proposed project locations are approximate and subject to change.



6.2 Impact Fee Analysis

6.2.1 Existing Facilities

Grantsville City’s existing wastewater facilities which have excess capacity to serve future development are listed in Table 6-14. Also shown are the historic construction costs for each project as well as the total and excess capacities which were discussed in Section 6.1.3. Proportionate shares were calculated by dividing the anticipated flow due to growth in the planning period by the total capacity. As discussed in Section 6.1.3, the City’s existing minor gravity sewer lines also have excess capacity to accommodate future growth and are considered to be a whole system which benefits both existing and future development. Therefore, the proportionate share for minor sewer lines was calculated based on the proportion of future ERCs expected to be served within the planning period, as shown in Table 6-13. The existing Public Works Building will utilize this same proportionate share as it is also considered beneficial to both existing and future development. Another item eligible to charge a buy-in cost for is the interest payments amount due within the planning period for the Sewer Revenue Bond (Section 6.1.1). This loan was used to fund past improvements to the collection system which benefit existing and future development, so the buy-in cost was calculated utilizing the same proportionate share as the minor sewer lines. The proportionate share for each existing facility was multiplied by the historic construction cost in order to calculate the impact fee eligible buy-in costs (Table 6-14). The City has elected to not charge a buy-in cost for the WWTF, even though it technically has excess capacity for typical wastewater treatment but not for nutrients. The WWTF is needed for nutrient removal and will be replaced within the planning period.

Table 6-13: Existing Wastewater Facilities Proportionate Share

Facility	Total ERCs (Year 2035)	Increase in ERCs (Year 2025-2035)	Proportionate Share
Minor Sewer Lines, Public Works Building, and Sewer Revenue Bond Interest Payments	9,300	2,564	27.6%

Table 6-14: Wastewater Buy-In Costs

Facility	Cost ¹	Flow Capacity (gpm)	Planning Period (2025-2035) Flow (gpm)	Proportionate Share	Buy-In Cost
Main Trunk	N/A	1,252	115	9.18%	\$0.00
Central Trunk	N/A	1,113	115	10.33%	\$0.00
Central Interceptor	N/A	556	87	15.63%	\$0.00
Hale Street Collector	\$1,060,736.07	768	76	9.90%	\$105,001.07
Northwest Interceptor	\$749,254.71	1,289	508	39.4%	\$230,953.43 ⁴
Burmester Collector	\$226,236.98	556	97	17.43%	\$39,434.93
Northeast Interceptor	\$1,083,869.01	2,186	743	34.0%	\$368,428.33
Matthew's Lane Collector	\$2,039,059.07	564	73	12.93%	\$263,700.72
Worthington Street Collector	\$193,636.00	556	20	3.59%	\$6,959.24
Main Street Trunk	\$653,987.65	1,664	444	26.7%	\$174,475.51
Lakeview Business Park Offsite Gravity Line	\$3,398,037.81	912	136	14.9%	\$506,977.22
Deseret Peak Collector	\$190,270.90	542	125	23.1%	\$43,921.05
West Street Collector	\$1,324,885.24	1,300	186	14.31%	\$189,632.13
Northwest Lift Station	\$500,000.00	1,200	419	34.9%	\$174,583.33
Northeast Lift Station	\$400,000.00	2,170	743	34.2%	\$136,958.53
Wastewater Treatment Facility	\$5,559,563.47	1.50 (MGD)	0.490 (MGD)	32.64%	\$0.00 ²
Minor Gravity Sewer Lines	\$10,053,823.31	N/A	N/A	27.6%	\$2,771,828.28
Public Works Building	\$222,483.40 ³	N/A	N/A	27.6%	\$61,338.43
Sewer Revenue Bond Interest Payments (2025-2035)	\$628,057.00	N/A	N/A	27.6%	\$173,154.64
Total					\$5,247,346.84

¹ The costs shown are historical costs which may include initial construction, acquiring land, improvements, planning, and engineering.

² The City is not charging a buy-in cost for the WWTF because it is expected to be replaced.

³ The cost shown for the Public Works Building is the cost associated with wastewater facilities.

⁴ The Northwest Interceptor remains in place and will be used for future development. The West Street Collector and Cooley Street are expected to be diverted to the West Bank Interceptor which frees up capacity in the Northwest Interceptor.

6.2.2 System Improvements

The wastewater system improvements needed to accommodate future development within the planning period were determined in Section 6.1.5. A proportionate share for each of these projects was calculated by estimating the flow to each facility contributed by the anticipated planning period development, which was divided by the total flow capacity of the facility (see Table 6-15). The City does not charge impact fees for projects which are expected to be constructed by developers so they have a proportionate share of 0%. If it is determined the City will pay for any portion of these projects as the development agreements are finalized then this plan should be amended to include the project. The Public Works Improvements project was determined to be beneficial to both existing and future development, so the proportionate share

was calculated based on the ERCs expected to be served within the planning period as shown in Table 6-16.

Table 6-15: Proposed Wastewater Projects Proportionate Share

Project	Flow Capacity (gpm)	Planning Period (2025-2035) Flow (gpm)	Proportionate Share
SR112 Interceptor	825 and 1,342	108	0% ⁴
West Bank Interceptor Segment 1	6,252	305	4.9% ⁵
West Bank Interceptor Segment 2	6,252	305	4.9% ⁵
West Bank Interceptor Segment 3	2,631 and 2,776	305	0% ⁴
Southeast Sewer Line	875	36.1	0% ⁴
Vegas Street Collector	1,053 and 2,267	0, and 0	0% ⁴
Northwest Lift Station - Upsize Force Main	400 ²	154.4 ³	100%
Proposed Wastewater Treatment Facility	3.0 (MGD)	0.38 (MGD)	12.8%

¹ A proportionate share was calculated for each diameter of the project, which was scaled based on the length of each stretch then added together.

² The increase in flow capacity resulting from the proposed project upgrades is shown as opposed to the total capacity of the facility.

³ The flow shown is the planning period flow exceeding the existing capacity of the facility before the proposed project upgrades.

⁴ The proportionate share is 0% because the project is expected be constructed by developers.

Table 6-16: Proposed Public Works Improvements Proportionate Share

Project	Total ERCs (Year 2035)	Increase in ERCs (Year 2025-2035)	Proportionate Share
Public Works Improvements	9,300	2,564	27.6%

The cost of each project which is attributed to new development in the planning period, and therefore eligible for impact fees, was calculated by multiplying the total project cost by the proportionate share as shown in Table 6-17. In order to account for the time-price differential inherent with future costs, the current year cost estimates were inflated at a rate of 3.5% to the anticipated construction year.

Table 6-17: Wastewater Impact Fee Eligible Costs

Project	Construction Year	Current Year (2025) Cost Estimate	Construction Year Cost Estimate	Proportionate Share	Impact Fee Eligible Cost
SR112 Interceptor	2027	\$2,988,835.56	\$3,201,715.37	0% ²	\$0.00
West Bank Interceptor Segment 1	2027	\$376,287.40	\$403,088.47	8.8% ⁴	\$35,294.63
West Bank Interceptor Segment 2	2027	\$39,832.00	\$42,669.03	13.5% ⁴	\$5,756.82
West Bank Interceptor Segment 3	2027	\$3,927,403.66	\$4,207,132.99	0% ²	\$0.00
Southeast Sewer Line	2027	\$1,564,982.00	\$1,676,447.84	0% ²	\$0.00
Vegas Street Collector	2035	\$5,790,294.14	\$8,167,781.74	0.0%	\$0.00
Northwest Lift Station - Upsize Force Main	2028	\$194,363.06	\$215,493.80	100%	\$215,493.80
Proposed Wastewater Treatment Facility	2026	\$48,402,175.15 ³	\$48,402,175.15	12.8%	\$6,205,158.85
Public Works Improvements	2035	\$1,318,982.50 ¹	\$1,860,555.08	27.6%	\$512,953.03
Total		\$64,603,155.47	\$68,177,059.48		\$6,974,657.14

¹ The cost shown for the Public Works Improvements project is half of the total cost estimate because this project cost will be split evenly between the wastewater and drinking water utilities.

² The proportionate share is 0% because the project is expected be constructed by developers.

³ Proposed WWTF is 2026 cost estimate.

⁴ The proportionate share within the planning period for Segment 1 is calculated by dividing planning period ERCs (1,544 ERCs) by upsize capacity [36-inch capacity (26,682 ERCs) - Deseret minimum diameter (9,050 ERCs)]=17,632 ERCs.
The proportionate share within the planning period for Segment 2 is calculated by dividing planning period ERCs (1,544 ERCs) by upsize capacity [36-inch capacity (15,008 ERCs) - Deseret minimum diameter (3,565 ERCs)]=11,443 ERCs.
The costs shown for West Bank Interceptor Segment 1 and 2 in the table are upsize costs only.

In addition to impact fee eligible project costs, planning costs can also be included in the calculation of impact fees. Due to the uncertainty that comes with long-term development projections, this plan is expected to be amended annually. The future professional expenses expected to occur within the planning period were inflated at a 3.5% rate as shown in Table 6-18.

Table 6-18: Wastewater Professional Expenses

Year	Cost
2025	\$8,300.00
2026	\$8,590.50
2027	\$8,891.17
2028	\$9,202.36
2029	\$9,524.44
2030	\$9,857.80
2031	\$10,202.82
2032	\$10,559.92
2033	\$10,929.52
2034	\$11,312.05
2035	\$11,707.97
Total	\$109,078.53

6.2.3 Methods of Financing

As discussed in Section 6.1.6, the wastewater system improvements are expected to be funded through impact fees, loans, developer dedications, and Sewer Fund reserves. The City received a \$16,000,000 Utah Water Quality Board 30-year loan with a 0.75% interest rate and \$160,000 loan origination fee. The City is also anticipating obtaining a private bond in the amount of \$25,152,175.15 assumed to be a 30-year bond with a 5.052% interest rate, 1.5% cost of issuance, 0.5% bond insurance, and a \$20,000 surety policy. The interest cost for this bond attributed to development within the planning period can be included in the impact fee calculation. Additionally, a portion of the engineering cost of the Wastewater Treatment Facility project will be funded through a \$1 million bond with a 0% interest rate. This is a 20-year bond and has a \$33,000 issuance fee along with a \$10,000 loan origination fee. Table 6-19 shows the details of these bonds along with the impact fee eligible interest cost.

Table 6-19: Wastewater Future Debt Financing

Project - Loan or Bond	Proceeds	Par Amount ¹	Debt Service (Interest)	Debt Service (Principal + Interest)	Proportionate Share	Impact Fee Eligible Debt Service (Interest)
Proposed WWTF - Private Bond	\$25,152,175.15	\$25,675,218.65	\$15,711,571.94	\$41,386,790.59	12.8%	\$2,014,223.52
Proposed WWTF - Engineering Loan	\$1,000,000.00	\$1,043,000.00	\$0.00	\$1,043,000.00	12.8%	\$0.00
Proposed WWTF - Utah Water Quality Board Loan	\$16,000,000.00	\$16,160,000.00	\$1,946,388.33	\$18,106,388.33	12.8%	\$249,526.98

¹ Includes cost of issuance, bond insurance, and surety policy.

6.2.4 Impact Fee Calculation

As shown in Table 6-20, impact fees to be charged per ERC for each project were calculated by dividing the impact fee eligible costs by the number of ERCs expected to be served within the planning period, determined from Table 2-3. The construction water and City rate connection types were excluded from this calculation because construction water is not served by wastewater facilities and the City does not charge themselves impact fees.

Table 6-20: Wastewater Impact Fee Calculation

Project	Impact Fee Eligible Cost	Planning Period (2025-2035) ERCs ¹	Cost per ERC
Buy-In Cost	\$5,247,346.84	2,400	\$2,186.39
West Bank Interceptor Segment 1	\$35,294.63	2,400	\$14.71
West Bank Interceptor Segment 2	\$5,756.82	2,400	\$2.40
West Bank Interceptor Segment 3	\$0.00	2,400	\$0.00
Vegas Street Collector	\$0.00	2,400	\$0.00
Northwest Lift Station - Upsize Force Main	\$215,493.80	2,400	\$89.79
Proposed Wastewater Treatment Facility	\$6,205,158.85	2,400	\$2,585.48
Proposed Wastewater Treatment Facility Debt Service (Interest)	\$2,263,750.51	2,400	\$943.23
Public Works Improvements	\$512,953.03	2,400	\$213.73
Professional Expenses	\$109,078.53	2,400	\$45.45
Total			\$6,081.18

¹ Does not include Construction Water or City Rate ERCs.

The City charges impact fees to residential users based on their water meter size. A 3/4-inch water meter was determined to be equivalent to one ERC, and the remaining meter sizes were converted to ERCs based on the maximum flow rates from AWWA Manual M6, Table 5-3. Non-residential users are charged impact fees based on the number of fixture units in a development. A typical ERC was determined to have 24 fixture units as calculated in Appendix I. The results of these impact fee calculations are summarized in Table 6-21.

Table 6-21: Proposed Wastewater Maximum Allowable Impact Fees

Water Meter Size (inches)	Maximum Flow Rate (gpm)	ERCs	Impact Fee
3/4	25 ¹	1	\$6,081.18
1	40 ¹	1.6	\$9,729.89
1 1/2	50 ¹	2	\$12,162.36
2	100 ¹	4	\$24,324.72
3	200 ²	8	\$48,649.44
4	400 ²	16	\$97,298.89
6	800 ²	32	\$194,597.77
8	1,000 ²	40	\$243,247.22

¹ From AWWA M6 Table 5-3 Displacement Meters.

² From AWWA M6 Table 5-3 Electromagnetic and Ultrasonic Meter Type 1.

6.2.5 Impact Fee Cashflow

The anticipated impact fee revenues and expenses over the 10-year planning period are shown in Table 6-22. The expenses represent only what is attributable to planning period development

and include capital project costs, the expenditure of buy-in costs, and proposed bond payments. The impact fee cashflow (Table 6-23) estimates the end of year impact fee fund balance throughout the planning period by comparing the impact fee revenues, total expenses, and interest income calculated at 3.0% of the fund balance.

6.2.6 Impact Fee Credits

The City currently has procedures in place for credits, appeals, and exemptions of impact fees, refer to Appendix B for the City's current impact fee ordinance.

Table 6-22: Wastewater Impact Fee Revenues and Expenses

Year	ERCs ¹	Annual ERC Increase ¹	Impact Fee Revenues	Impact Fee Eligible Project Costs	Bond Payments	Bond Proceeds	Buy-In Cost Expenses	Professional Expenses	Total Expenses
2025	6,251	-	-	-	-	\$128,200.00	-	(\$8,300.00)	\$119,900.00
2026	6,425	174	\$1,058,125.39	(\$6,205,158.85)	(\$6,410.00)	\$3,224,508.85	(\$380,432.65)	(\$8,590.50)	(\$3,376,083.15)
2027	6,605	180	\$1,094,612.48	(\$41,051.45)	(\$381,801.79)	\$2,051,200.00	(\$393,551.01)	(\$8,891.17)	\$1,225,904.58
2028	6,834	229	\$1,392,590.32	(\$215,493.80)	(\$298,410.34)	-	(\$500,684.34)	(\$9,202.36)	(\$1,023,790.84)
2029	7,062	228	\$1,386,509.14	-	(\$298,410.34)	-	(\$498,497.95)	(\$9,524.44)	(\$806,432.73)
2030	7,305	243	\$1,477,726.84	-	(\$298,410.34)	-	(\$531,293.87)	(\$9,857.80)	(\$839,562.00)
2031	7,551	246	\$1,495,970.38	-	(\$298,410.34)	-	(\$537,853.05)	(\$10,202.82)	(\$846,466.21)
2032	7,816	265	\$1,611,512.81	-	(\$298,410.34)	-	(\$579,394.55)	(\$10,559.92)	(\$888,364.80)
2033	8,083	267	\$1,623,675.17	-	(\$298,410.34)	-	(\$583,767.34)	(\$10,929.52)	(\$893,107.19)
2034	8,362	279	\$1,696,649.34	-	(\$298,410.34)	-	(\$610,004.07)	(\$11,312.05)	(\$919,726.45)
2035	8,651	289	\$1,757,461.14	(\$512,953.03)	(\$298,410.34)	-	(\$631,868.02)	(\$11,707.97)	(\$1,454,939.36)
Total		2,400	\$14,594,833.02	(\$6,974,657.14)			(\$5,247,346.84)	(\$109,078.53)	(\$9,702,668.13)

¹ Does not include Construction Water or City Rate ERCs.

Table 6-23: Wastewater Impact Fee Cashflow

Year	Impact Fee Revenues	Total Expenses	Interest Income	End of Year Balance
2025	-	\$119,900.00	-	\$352,296.11
2026	\$1,058,125.39	(\$3,376,083.15)	\$10,568.88	(\$1,955,092.76)
2027	\$1,094,612.48	\$1,225,904.58	-	\$365,424.30
2028	\$1,392,590.32	(\$1,023,790.84)	\$10,962.73	\$745,186.51
2029	\$1,386,509.14	(\$806,432.73)	\$22,355.60	\$1,347,618.51
2030	\$1,477,726.84	(\$839,562.00)	\$40,428.56	\$2,026,211.91
2031	\$1,495,970.38	(\$846,466.21)	\$60,786.36	\$2,736,502.45
2032	\$1,611,512.81	(\$888,364.80)	\$82,095.07	\$3,541,745.53
2033	\$1,623,675.17	(\$893,107.19)	\$106,252.37	\$4,378,565.89
2034	\$1,696,649.34	(\$919,726.45)	\$131,356.98	\$5,286,845.75
2035	\$1,757,461.14	(\$1,454,939.36)	\$158,605.37	\$5,747,972.91

Section 7 Water Rights Acquisition

7.1 Capital Facilities Plan and Impact Fee Facilities Plan

7.1.1 Inventory of Existing Facilities

Grantsville City currently holds an estimated 10,286.86 acre-feet of municipal use water rights as shown in Appendix K. The historic cost to purchase these water rights totals \$38,582,861.42, which represents all available records of water rights purchases but does not account for the full quantity of water rights held by the City. There is no existing long-term debt associated with water rights acquisition.

Most of the City's water rights have been quantified through the Change Application process, and these water rights total 5,787.39 ac-ft. A few of the City's water rights (15-376, 15-516, and 15-1699) were originally established as municipal flow rights that total 6.215 cfs, and therefore have an estimated maximum of 4,499.46 ac-ft.

The majority of the City's water rights (totaling 5,775.39 ac-ft) have been acquired for new development since 2000, including water rights that have been dedicated to the City for completed developments, water rights that have been dedicated to the City for pending or planned developments, water rights that have been banked with the City for future development under Water Right Banking Agreements, and water rights that have been purchased by the City using water supply impact fee funds (i.e., "fee in lieu" funds).

Four of the City's water rights (15-376, 15-516, 15-1699, and 15-1060) were originally established by the City for municipal and irrigation purposes. These water rights have an estimated maximum of 4,511.46 ac-ft. As of 2000, which was prior to developers being required to dedicate water rights to the City per City Code, the City had a reported use of 896.43 ac-ft, as shown in the *Division of Water Rights Public Water Supplier Information* website. The remaining 3,615.03 ac-ft represents the maximum "available" water; i.e., water that the City may be able to use to support new development. It is questionable if the City will be able to fully develop this water as it may require the City to pump the full flow continuously, which may not be feasible. Using a "buffer" of 80%, the City estimates that it may be able to develop 2,892.02 ac-ft of the "available" water rights. This "available" water has been committed to future commercial and residential developments, including the Lakeview Business Park and the Deseret Development.

The estimated total of the City’s water rights is 9,563.84 ac-ft (which is the sum of 5,775.39 ac-ft of water rights acquired for development, plus 896.43 ac-ft of water used to serve the City prior to dedications, plus 2,892.02 ac-ft of available water under the City’s original water rights).

Tooele Valley is closed to water rights appropriations except for small amounts of shallow ground water that would otherwise flow to the Great Salt Lake. Therefore, the City can only acquire additional water rights through developer contributions or by purchasing existing water rights and, if needed, filing change applications to convert them to municipal use.

7.1.2 Level of Service

The level of service standards for water rights acquisition are determined based on the drinking water levels of service discussed in Section 3.1.2. The indoor water use level of service was determined from the drinking water indoor average day demand, which was calculated from the City’s water use data. The outdoor use level of service was determined based on state standards and assuming an irrigation efficiency of 60%. These levels of service are shown in Table 7-1. For the purposes of estimating city-wide water rights demands, it is assumed there is an average of 0.12 irrigated acres per ERC based on an analysis of residential lots in Grantsville and estimates made by nearby cities.

Table 7-1: Water Rights Level of Service

Parameter	Level of Service
Indoor Use	0.218 acre-feet/year/ERC
Outdoor Use	3.33 acre-feet/year/irrigated acre

7.1.3 Capacity of Existing Facilities

The capacity of the City’s held water rights to serve future development is difficult to accurately estimate. Based on the estimated quantity of the City’s water rights and the level of service, an excess capacity of unused water rights can be estimated as shown in

Table 7-2. The actual quantity of water rights the City has available for future development is less than the amount shown in Appendix K. One reason for this, as discussed in Section 7.1.1, is the total quantity of water rights is expected to be less than what is estimated to be held. Additionally, some of the water rights held by the City have been allocated to developments yet to be built or have been banked for future development, which further reduces the excess

capacity of existing water rights. Lastly, in order to calculate the city-wide water demand the broad assumption of 0.12 irrigated acres per ERC was made, which most likely does not reflect the true outdoor water demand. Therefore, the estimated excess capacity shown in Table 7-2 should be considered a high-level estimate which overestimates the actual excess quantity of water rights the City currently holds. Furthermore, whatever excess of water rights does exist needs to be maintained in order to cover existing platted subdivisions and other such commitments while accounting for the uncertainty in quantity, possible reductions and cuts due to ongoing droughts, and being able to vary diversion through the year rather than a presumed constant pumping. For the purposes of this plan there is considered to be no excess capacity of water rights available to accommodate future growth.

Table 7-2: Estimated Capacity of Water Rights

Current (2025) ERCs	Water Demand				Existing Water Rights (ac-ft)	Excess / (Deficit) (ac-ft)
	Indoor Use (ac-ft)	Outdoor Use (ac-ft)	Committed to Future Development	Total (ac-ft)		
6,736	1,471.33	2,694.40	2,892.02	7,057.75	9,563.84	2,506.09

7.1.4 Demands of Future Development

The future water rights demand of development anticipated in the planning period (Table 7-3) was estimated based on the demographics calculated in Section 2.7 and the level of service from Section 7.1.2. Due to the reasons discussed in Section 7.1.3, these results should be considered high-level estimates, serving as a general guideline for the City’s planning purposes.

Table 7-3: Future Water Rights Requirements

Year	ERCs	Water Demand		
		Indoor Use (ac-ft)	Outdoor Use (ac-ft)	Total (ac-ft)
2025	6,736	1,471.33	2,694.40	4,165.73
2026	6,939	1,515.67	2,775.60	4,291.27
2027	7,136	1,558.70	2,854.40	4,413.10
2028	7,383	1,612.65	2,953.20	4,565.85
2029	7,617	1,663.77	3,046.80	4,710.57
2030	7,888	1,722.96	3,155.20	4,878.16
2031	8,141	1,778.22	3,256.40	5,034.62
2032	8,424	1,840.04	3,369.60	5,209.64
2033	8,708	1,902.07	3,483.20	5,385.27
2034	9,004	1,966.73	3,601.60	5,568.33
2035	9,300	2,031.38	3,720.00	5,751.38

7.1.5 Proposed Projects

The City does not need to acquire the full quantity of water rights anticipated to be required by future development because it is expected many of these developments will acquire the water rights themselves and then transfer them to the City. The City requires large developments to contribute the water rights themselves, but smaller developments have the option to pay an impact fee in lieu of contributing water rights. Therefore, the City only needs to acquire the quantity of water rights anticipated to be paid for by impact fees, but this quantity is not able to be accurately predicted. Additionally, since it is desired to maintain an excess of water rights, as discussed in Section 7.1.3, and due to the increasingly limited availability of water rights for sale in the Tooele Valley, the City should plan to purchase any water rights listed for a reasonable price as soon as they become available. So, there are no specifically proposed water rights acquisition projects, but instead there is the ongoing consideration that the City should continue to seek out available water rights to purchase. It is expected water rights will typically cost around \$29,000 per acre-foot, based on recent listings for water rights in the Tooele Valley and recent purchases made by the City.

7.1.6 Methods of Financing

The City expects to finance water rights acquisitions solely through developer contributions and impact fees.

7.2 Impact Fee Analysis

7.2.1 Existing Facilities

As discussed in Section 7.1.3, for the purposes of this plan there is considered to be no excess capacity of water rights and therefore no buy-in costs to be charged.

7.2.2 System Improvements

There is no specific system improvements proposed for water rights acquisition, as mentioned in Section 7.1.5. The City will purchase additional water rights as they become available.

7.2.3 Methods of Financing

The City will finance water rights purchases with impact fees, and other demands for water rights will be met through developer contributions.

7.2.4 Impact Fee Calculation

As discussed in Section 7.1.5, the City requires large developments to contribute the required quantity of water rights themselves, but smaller developments have the option to pay an impact fee in lieu of water rights. The impact fee is calculated as the required quantity of water rights multiplied by \$29,000 per acre-foot (the current average cost of water rights in the Tooele Valley). The required quantity of water rights is determined based on various conditions of the development, and are calculated separately for indoor and outdoor water usage.

7.2.4.1 Indoor Use

The indoor use water right quantity for single family residential and multi-unit residential connections was determined by multiplying the indoor level of service (Table 7-1) times the equivalent ERCs per unit (Table 2-2). The indoor quantity for non-residential development is based on fixture units and was calculated using 24 fixture units per ERC (Appendix E). The required water rights quantity and the equivalent impact fees for each development type are summarized in Table 7-4.

Table 7-4: Indoor Use Water Rights Requirements

Land Use	Water Right Quantity (ac-ft)	Impact Fee	Unit
Single Family Residential	0.218	\$6,322.00	per Dwelling Unit
Multi-Unit Residential	0.120	\$3,480.00	per Dwelling Unit
Non-Residential	0.00908	\$263.32	per fixture unit

7.2.4.2 Outdoor Use

Additional land use classifications were established for the calculation of required outdoor water rights. Category 1 includes single family homes only, while Category 2 covers all other types of development not included in Category 1. Water rights for Category 1 are calculated based on total lot size assuming that on average 64% of the lot area will be irrigated (see Appendix K). Additionally, it was found that as lot sizes increase above an acre the irrigated area does not increase proportionally. Therefore, the lot size for Category 1 is capped at 1 acre, so any lots larger than this would still use 1 acre in the calculation. The calculation for Category 2 is based directly on irrigated area. The formulas for the required water rights quantity (in ac-ft) are as follows:

- Category 1 = (lot size, acres) * (0.64) * (3.33 ac-ft/irr. ac)
- Category 2 = (irrigated area, acres) * (3.33 ac-ft/irr. ac)

The outdoor water rights requirements for typical residential lot sizes, without waterwise landscaping, are listed in Table 7-5.

Table 7-5: Outdoor Use Requirements (No Waterwise Landscaping)

Category 1 Lot Size	Water Right Quantity (ac-ft)	Impact Fee
7,000 sq ft	0.34	\$9,931.90
8,000 sq ft	0.39	\$11,350.74
10,000 sq ft	0.49	\$14,188.43
14,000 sq ft	0.68	\$19,863.80
1/2 acre	1.07	\$30,902.40
2/3 acre	1.42	\$41,203.20
3/4 acre	1.60	\$46,353.60
1.0 acre	2.13	\$61,804.80
> 1.0 acre	2.13	\$61,804.80

The outdoor water rights impact fee for Category 2 developments with no waterwise landscaping is calculated as follows:

- **Category 2 = (irrigated area, acres) * (3.33 ac-ft/irr. ac) * \$29,000**

7.2.4.3 Waterwise Landscaping

In order to promote water conservation efforts for future development, the City allows a reduction in the required outdoor use water rights for developments which implement waterwise landscaping. The definition of waterwise landscaping is intended as “landscaping for water conservation with (1) no more than 35% of the total landscaped area planted in lawn, (2) planting beds and landscape plants watered with a drip-irrigation system, (3) watering zones separate for lawn and landscape plants, (4) back flow preventer required (5) and landscape plants should be waterwise, adapted to our local climate, able to thrive on less water.” Refer to the Grantsville City Municipal Code and Land Use Code for the most current version of the waterwise landscaping definition. To qualify for the waterwise landscaping reduction, the waterwise landscaping and irrigation must be installed entirely during initial construction. Due to the challenges associated with monitoring and enforcing the requirements in residential backyards, the City only allows Category 1 development to receive a reduction for waterwise landscaping in the front yard. For purposes of calculating water rights requirements, the definition of front yard is intended to be “a yard extending across the full width of a parcel measured perpendicularly from the front boundary of the parcel to the front wall(s) of the main building situated on the parcel. For corner lots the front yard would include the side yard to the privacy fence, assumed to be located 5 feet forward from the back of the house.” See Appendix K for a sketch depicting this definition, and refer to the Grantsville City Municipal Code and Land Use Code for the most current definition. Category 2 development can choose to receive a waterwise landscaping reduction for landscaping in the front yard only or the entire irrigated area. The outdoor use level of service is reduced from 3.33 to 2.28 acre-feet/year/irrigated acre for waterwise landscaping (see Appendix K for calculations). It was estimated the average residential front yard irrigated area in Grantsville is 18% of the total lot size. The lot size for Category 1 is again capped at 1 acre as done for the no waterwise calculation. The formulas to calculate outdoor use water rights for waterwise landscaping in the front yard only are:

- **Category 1 = (lot size, acres) * [(0.18) * (2.28 ac-ft/irr. ac) + (0.46) * (3.33 ac-ft/irr. ac)]**
- **Category 2 = (front yard irrigated area, acres) * (2.28 ac-ft/irr. ac) + (remaining irrigated area, acres) * (3.33 ac-ft/irr. ac)**

The outdoor water rights requirements for typical residential lot sizes, for waterwise landscaping in the front yard only, are given in Table 7-6.

Table 7-6: Outdoor Use Requirements (Waterwise Landscaping Front Yard Only)

Category 1 Lot Size	Water Right Quantity (ac-ft)	Impact Fee
7,000 sq ft	0.31	\$9,051.12
8,000 sq ft	0.36	\$10,344.13
10,000 sq ft	0.45	\$12,930.17
14,000 sq ft	0.62	\$18,102.23
1/2 acre	0.97	\$28,161.90
2/3 acre	1.29	\$37,549.20
3/4 acre	1.46	\$42,242.85
1.0 acre	1.94	\$56,323.80
> 1.0 acre	1.94	\$56,323.80

The outdoor water rights impact fee for Category 2 developments with waterwise landscaping in the front yard only is calculated as follows:

- Category 2 = (front yard irrigated area, acres) * (2.28 ac-ft/irr. ac) + (remaining irrigated area, acres) * (3.33 ac-ft/irr. ac) * \$29,000**

Category 1 developments utilizing waterwise landscaping for the entire lot would still use the front yard only formula above. Category 2 developments which are waterwise landscaping the entire lot calculate outdoor use water rights quantity with the following formula:

- Category 2 = (irrigated area, acres) * (2.28 ac-ft/irr. ac)**

The outdoor water rights impact fee for Category 2 developments with waterwise landscaping on the entire lot is calculated as follows:

- Category 2 = (irrigated area, acres) * (2.28 ac-ft/irr. ac) * \$29,000**

A summary of all the water rights quantity formulas for each land use and landscaping condition discussed above is shown in Table 7-7.

Table 7-7: Summary of Outdoor Use Water Rights Requirements

Land Use	Water Right Quantity (ac-ft)
No Waterwise Landscaping	
Category 1	= (lot size ¹ , acres) * (0.64) * (3.33 ac-ft/irr. ac)
Category 2	= (irrigated area, acres) * (3.33 ac-ft/irr. ac)
Waterwise Landscape Front Yard Only	
Category 1	= (lot size ¹ , acres) * [(0.18) * (2.28 ac-ft/irr. ac) + (0.46) * (3.33 ac-ft/irr. ac)]
Category 2	= (front yard irrigated area, acres) * (2.28 ac-ft/irr. ac) + (remaining irrigated area, acres) * (3.33 ac-ft/irr. ac)
Waterwise Landscape Entire Lot	
Category 1	Reduction not allowed (use front yard only formula)
Category 2	= (irrigated area, acres) * (2.28 ac-ft/irr. ac)

¹ Lot size capped at 1 acre.

7.2.4.4 Example Calculations

For example, the impact fee for a single-family development on a 2-acre lot with waterwise landscaping would be calculated as follows:

- Indoor use quantity = 0.218 ac-ft
- Outdoor use quantity = (1 ac) * [(0.18) * (2.28 ac-ft/irr. ac) + (0.46) * (3.33 ac-ft/irr. ac)] = 1.9422 ac-ft
- Total quantity = (0.218 ac-ft) + (1.9422 ac-ft) = 2.16 ac-ft
- Total impact fee = (2.16 ac-ft) * \$29,000 = \$62,640

For an apartment building with 15 units, 1/8-acre irrigated area, and waterwise landscaping for the entire lot, the impact fee is calculated as:

- Indoor use quantity = (15 units) * (0.120 ac-ft/unit) = 1.800 ac-ft
- Outdoor use quantity = (1/8 ac) * (2.28 ac-ft/irr. ac) = 0.285 ac-ft
- Total quantity = (1.800 ac-ft) + (0.285 ac-ft) = 2.09 ac-ft
- Total impact fee = (2.09 ac-ft) * \$29,000 = \$60,610

The impact fee for a commercial development with 50 fixture units that will be irrigating 2,000 square feet and will not utilize waterwise landscaping would be calculated as follows:

- Indoor use quantity = (50 fixture units) * (0.00908 ac-ft/fixture unit) = 0.454 ac-ft
- Outdoor use quantity = (2,000 sq ft) / (43,560 sq ft/ac) * (3.33 ac-ft/irr. ac) = 0.153 ac-ft
- Total quantity = (0.454 ac-ft) + (0.153 ac-ft) = 0.61 ac-ft
- Total impact fee = (0.61 ac-ft) * \$29,000 = \$17,690

7.2.5 Impact Fee Credits

Water rights can be transferred to the City in lieu of paying the impact fees. The quantity to be transferred is calculated as discussed in Section 7.2.4. The water rights required must be transferred to City as 100% owner. If the quantity of water rights required is only a portion of the total right pledged, the City must be identified as the owner of the required portion, or the required portion must be segregated from the base right and transferred to City as 100% owner. Additionally, the water rights transferred to cover the indoor use requirement must be municipal use rights or change applications prepared to convert water rights to municipal rights. For the outdoor use requirement, municipal use water rights, change applications prepared to convert water rights to municipal rights, or Grantsville Irrigation Co. shares are accepted by the City. Refer to the Grantsville City Municipal Code and Land Use Code for the requirements to transfer Grantsville Irrigation Co. shares. The City currently has procedures in place for credits, appeals, and exemptions of impact fees, see Appendix B for the City's current impact fee ordinance.

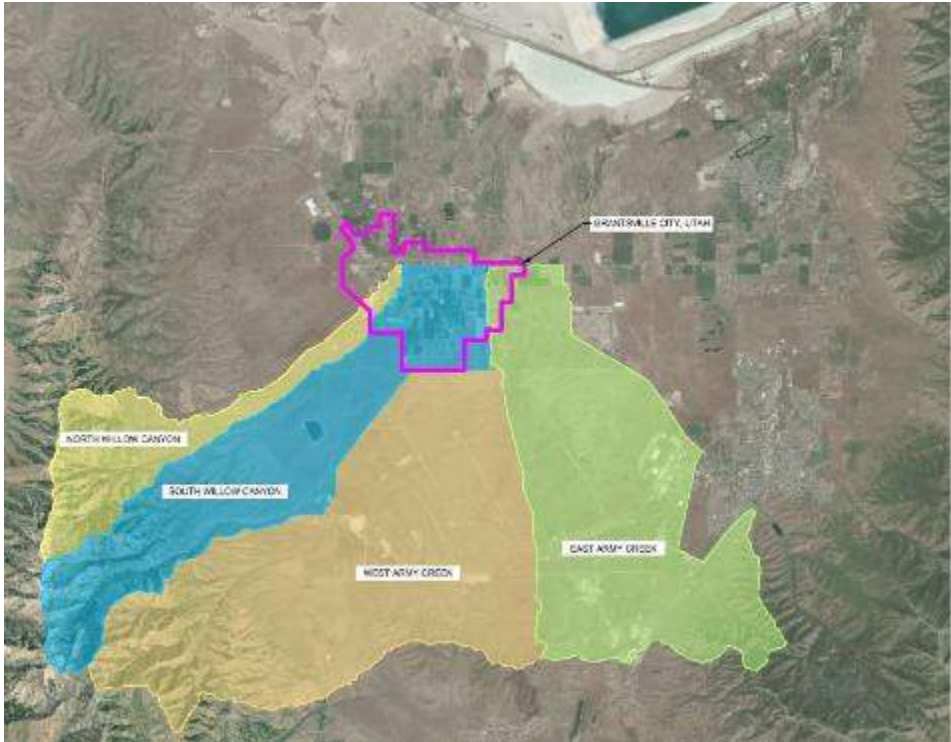
Section 8 Storm Drainage

8.1 Capital Facilities Plan and Impact Fee Facilities Plan

8.1.1 Inventory of Existing Facilities

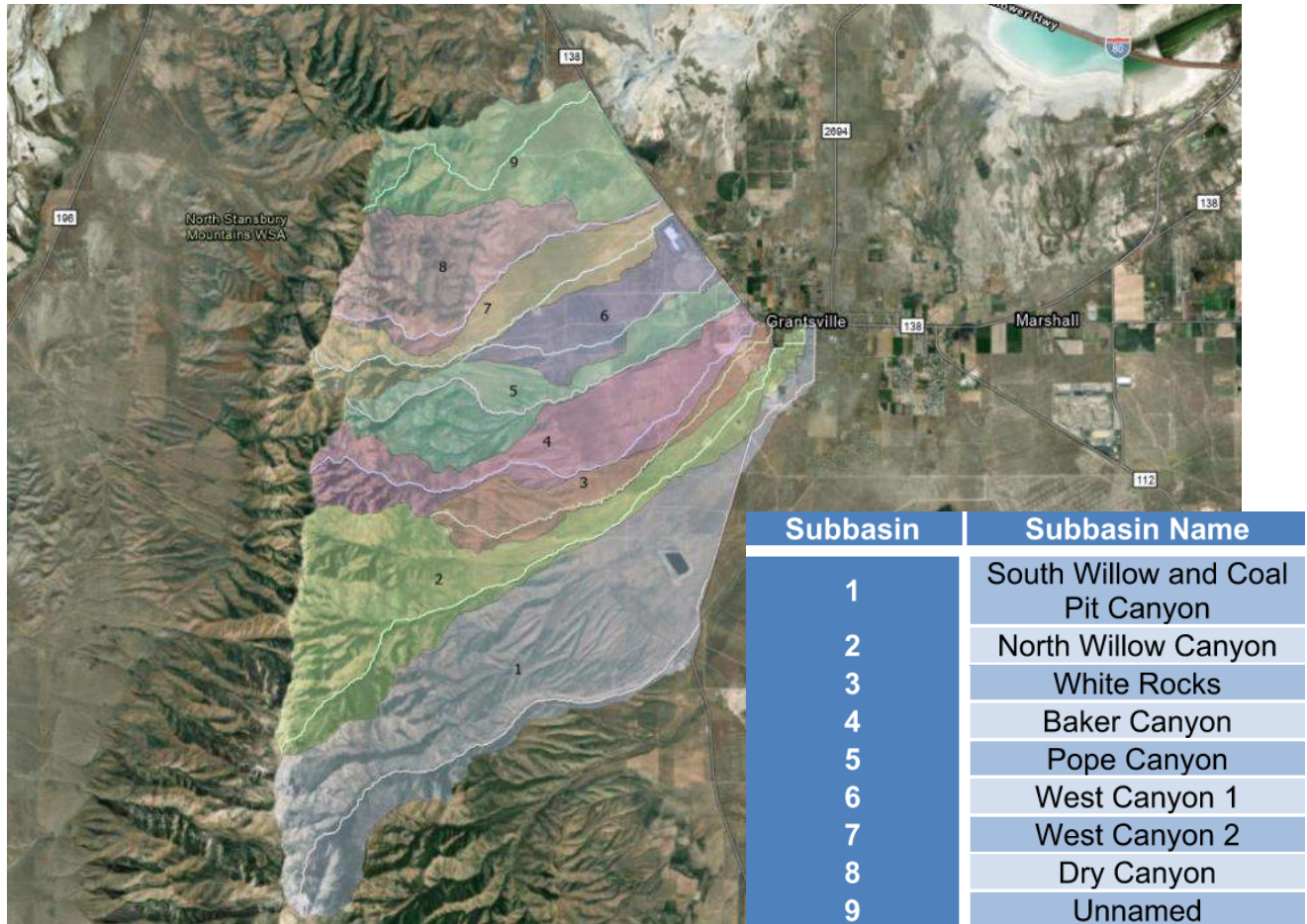
Grantsville City is situated at the base of the Stansbury Mountains and about six (6) miles south of the Great Salt Lake. The terrain of the City slopes gently northeasterly closer to the Stansbury Mountains and then northerly for the remainder of the City. The watersheds surrounding the City are shown in Figure 8-1 and Figure 8-2.

Figure 8-1: Existing Grantsville City Watersheds (Four Major)



Source: Figure 2-1 from Grantsville City FEMA BRIC Flood Protection Scoping Study dated February 6, 2024 by Jones & DeMille Engineering

Figure 8-2: Existing Grantsville City Watersheds (West Bank Area)



Source: Figures 1 and 2 of 2024 Final Draft Grantsville West Bank Development Stormwater Master Plan Report by Jones & DeMille Engineering.

Tooele County has constructed flood control facilities, consisting of debris/detention basins and a cut-off ditch, which are located just south of the City (Figure 8-3).

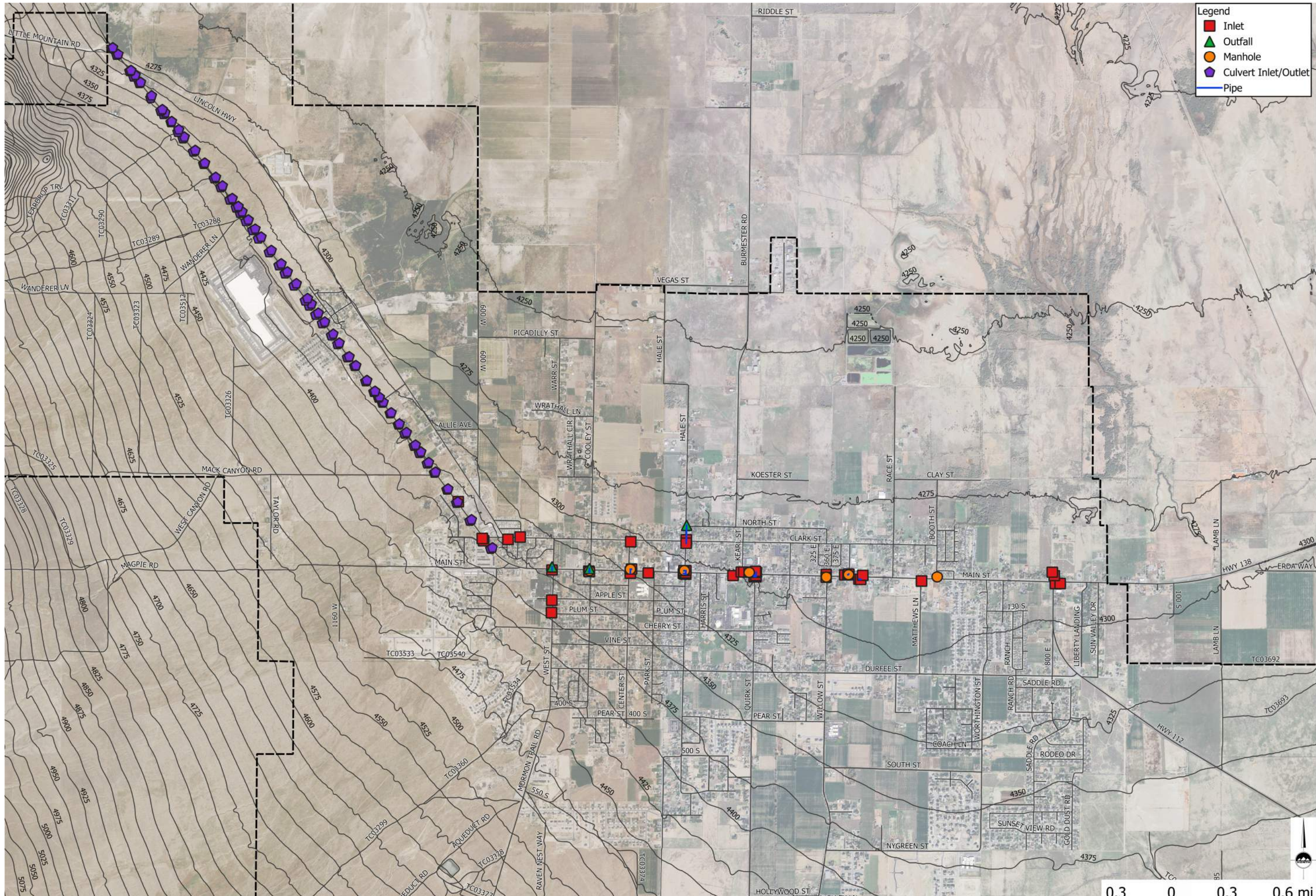
Figure 8-3: Existing Flood Protection Infrastructures



Source: Figure 4-1 from Grantsville City FEMA BRIC Flood Protection Scoping Study dated February 6, 2024 by Jones & DeMille Engineering

These facilities intercept runoff from the North Willow, South Willow Canyon, and West Army Creek and discharge east of Grantsville into an existing natural drainage. Also south of the City is the existing Grantsville Irrigation Company Reservoir, which collects the majority of flows from the South Willow Canyon and discharges any overflow into the County’s flood control facilities. Grantsville City’s storm drainage system consists of gutters, grates, detention/retention ponds, storm inlets, pipes, and culverts. There are upwards of 50 culverts crossing SR-138 ranging from corrugated metal pipe to an 8-foot wide by 4-foot-tall concrete box culvert. The main drainage system within the City is located mostly along Main Street and Clark Street as shown in Figure 8-4. The City does not currently have costs of past storm drain projects, therefore historical construction costs have not been listed.

The City has constructed the Clark Street Storm Drain Improvements project with a construction cost of \$1,755,075.52. The City has received funding through Utah State via a Water Infrastructure Grant to construct this project. This project is shown in Figure 8-5.



Legend

- Inlet
- ▲ Outfall
- Manhole
- ⬠ Culvert Inlet/Outlet
- Pipe

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GRANTSVILLE CFP, IFFP, AND IFA

GRANTSVILLE, UTAH

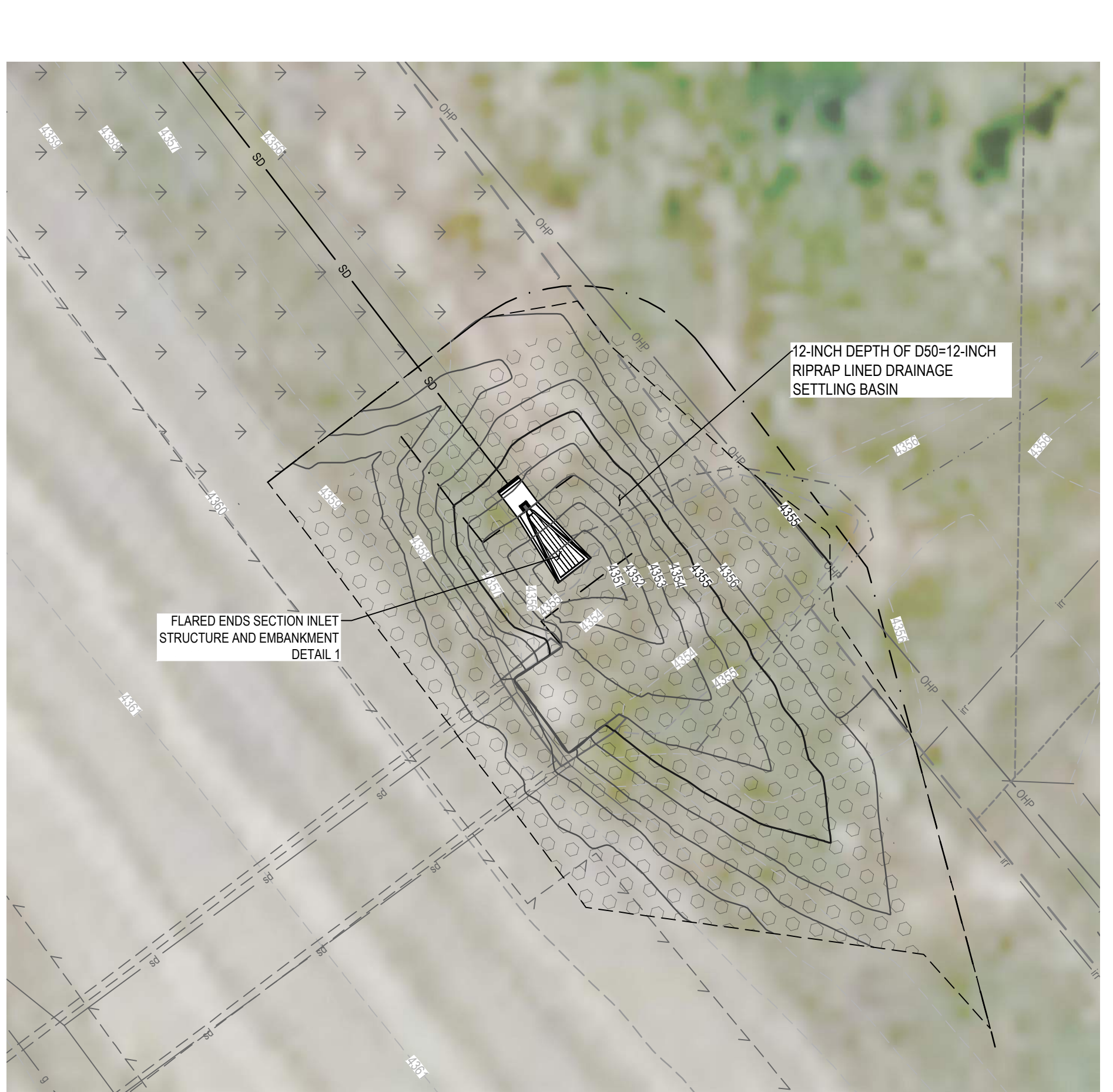
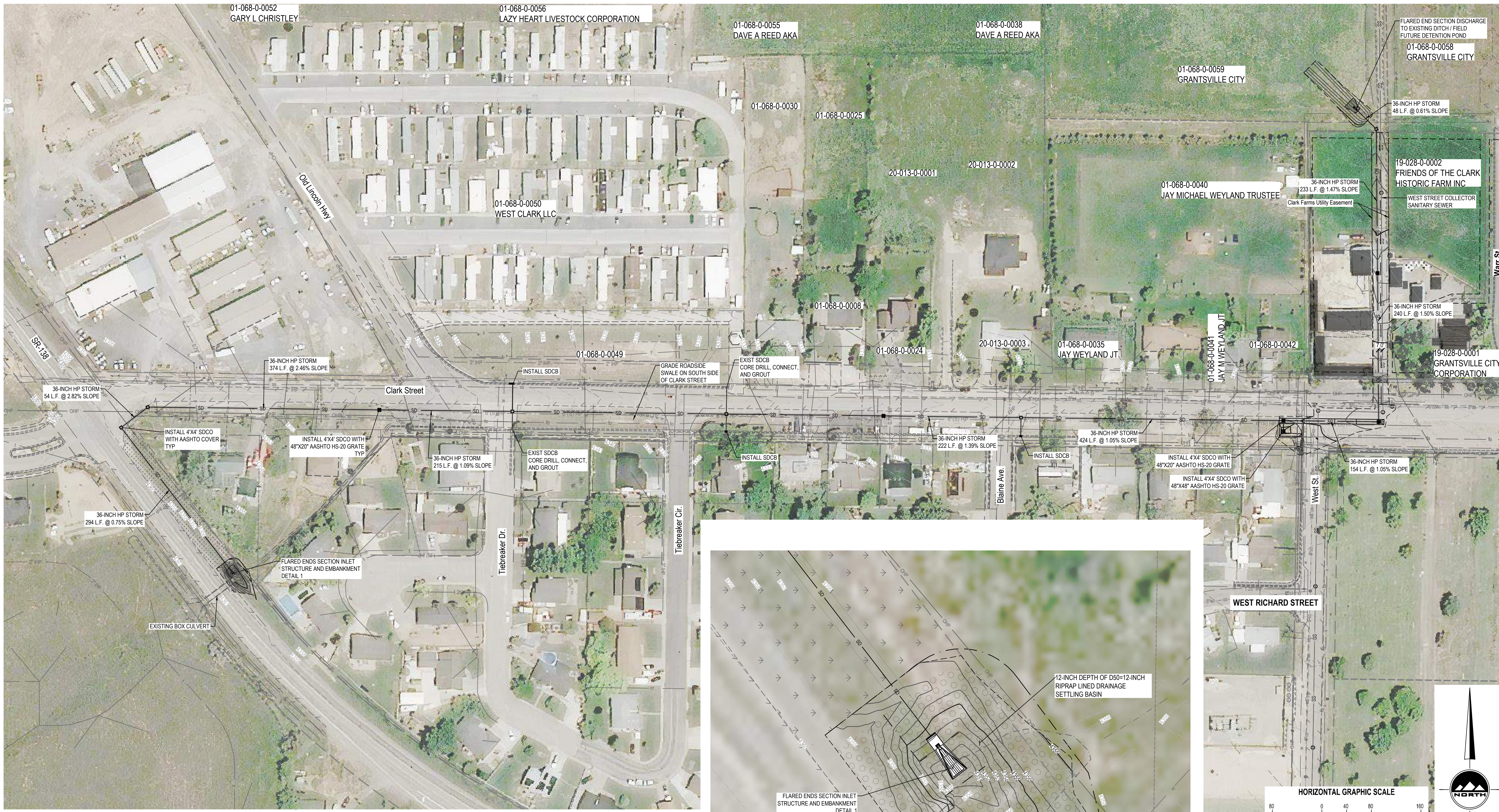
**EXISTING
STORM
DRAINAGE
SYSTEM**

PROJECT NUMBER: 1167
DRAWN BY: M. SANFORD
PROJ. MANAGER: R. ROUSSELLE

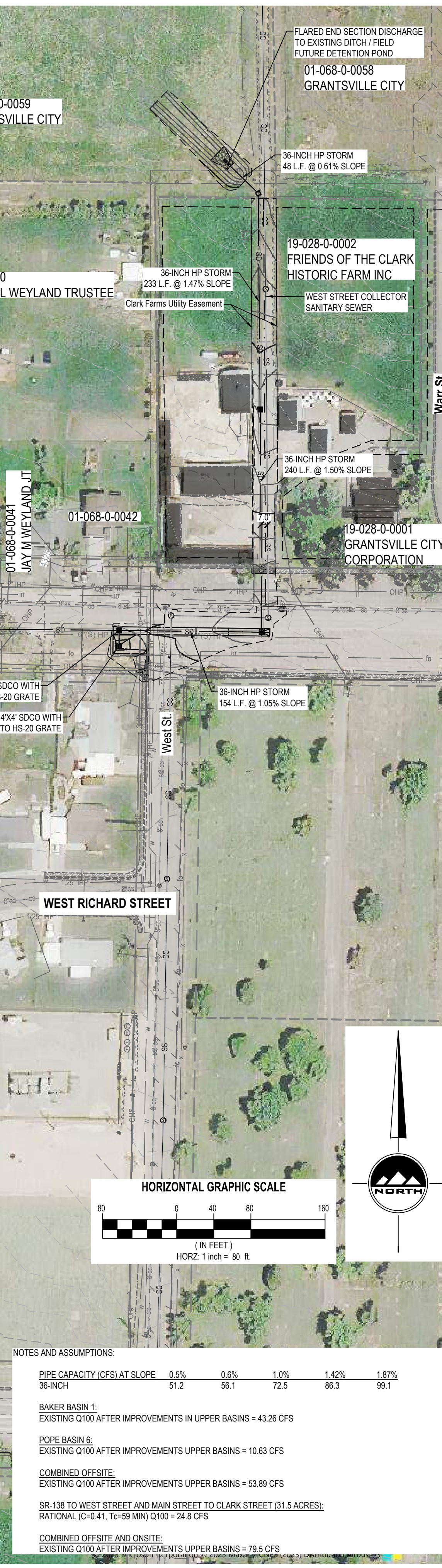
PRINT DATE: 04-22-2016
CHECKED BY: R. ROUSSELLE


This figure was created using information gathered from construction drawings for the capital water and sewer project and Google Earth imagery. Due to this limited information, this figure is likely not a complete representation of the City's storm drainage system and may contain minor inaccuracies. However, a more in-depth analysis of the existing system is outside the scope of this plan, and the figure is sufficient for the purposes of this plan.

FIG 8-4



1 DRAINAGE SETTLING BASIN
Scale: None





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CLIENT CITY STATE ZIP

CONTACT:
CLIENT CONTACT
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BAKER DRAINAGE BASIN 1
 DRAINAGE INFRASTRUCTURE PLANNING

GRANTSVILLE, UTAH

2024-04-19

CLARK STREET STORM
 DRAIN IMPROVEMENTS
 PROJECT EXHIBIT

PROJECT NUMBER: 11637 PRINT DATE: 2024-04-19
 PROJECT MANAGER: R. ROUSSELLE DESIGNED BY: M. SANFORD

FIG 8-5

8.1.2 Level of Service

The level of service standards to be used for this plan are shown in Appendix L which were established by the Grantsville City Storm Drainage Design Guidelines with the current version available on the City's website.

8.1.3 Capacity of Existing Facilities

Existing Grantsville City storm drainage studies, Storm Water Management Study for Baker and Pope Watersheds Grantsville City and Tooele County dated April 2015 by AQUA Engineering, Grantsville City FEMA BRIC Study Flood Protection Scoping Study dated February 6, 2024 by Jones & DeMille Engineering, and Grantsville West Bank Development Stormwater Master Plan Report dated August, 2024 by Jones & DeMille Engineering all identify the need for upstream diversion, detention, and retention to protect the existing developed areas of Grantsville City. The existing storm drainage system is not sufficient to meet the level of service, and there is no surplus capacity.

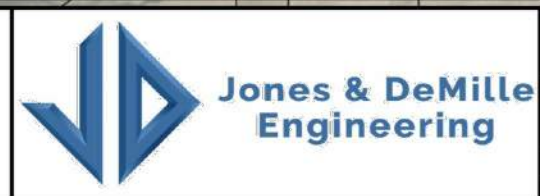
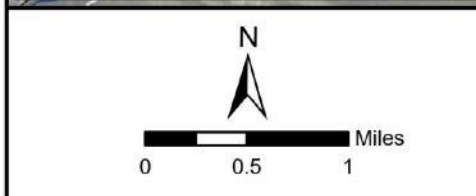
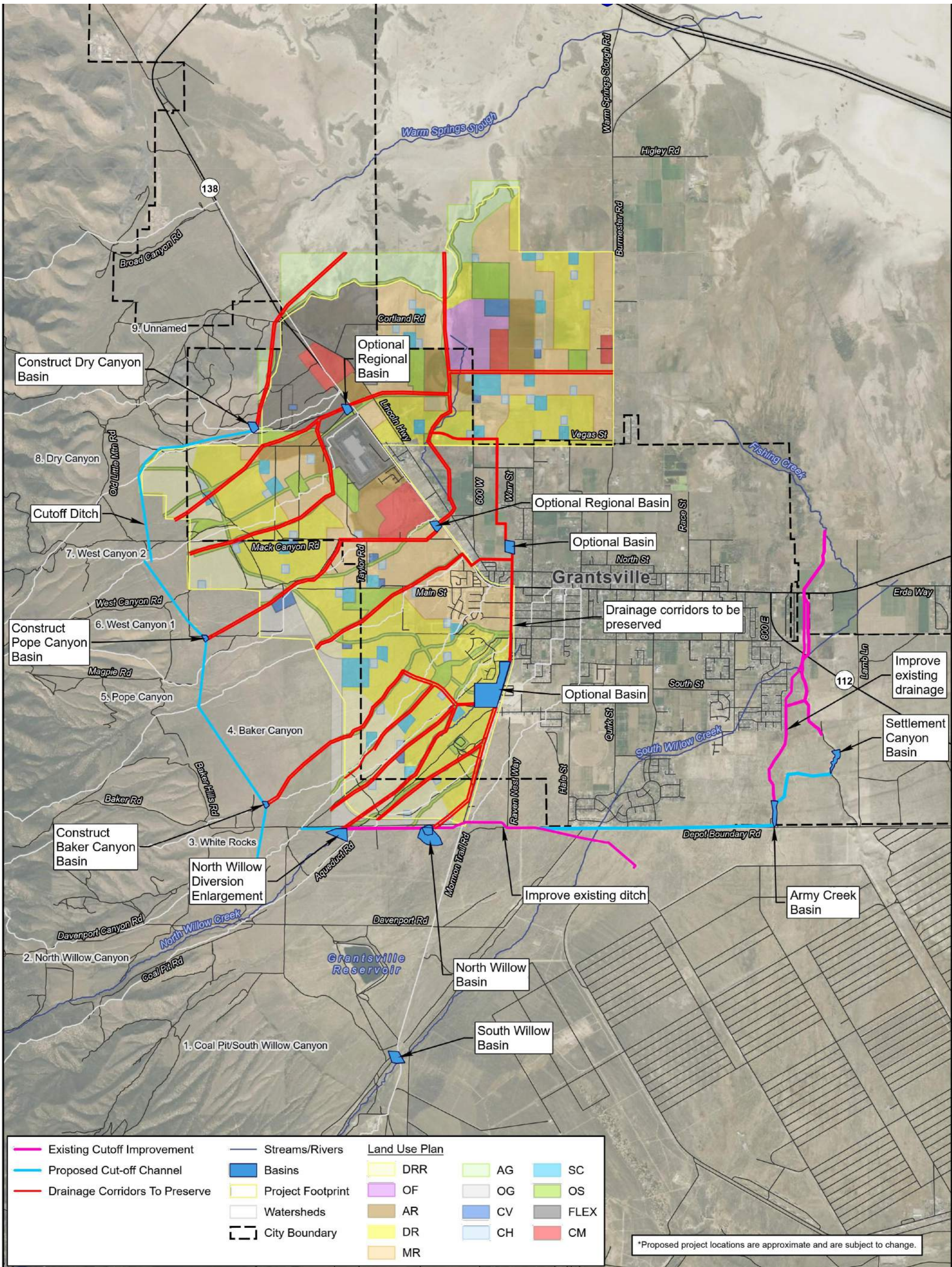
8.1.4 Demands of Future Development

The requirements for future development are based on the level of service requirements stated in Section 8.1.2. It is anticipated developers will construct future storm drainage improvements.

8.1.5 Proposed Projects

The future requirements for the storm drainage system outside of development constructed improvements were determined in the FEMA BRIC Study and West Bank Development Stormwater Master Plan. The FEMA BRIC Study analyzed the North Willow Canyon, South Willow Canyon, West Army Creek, and East Army Creek. These watersheds and storm drainage improvements were also incorporated into the West Bank Development Stormwater Master Plan.

Four alternatives of proposed projects were established for the West Bank Development Stormwater Master Plan. Alternative 4 was the selected alternative in the study. Alternative 4 would construct five debris/detention basins across the watersheds with smaller cutoff ditches to convey flows to these basins as depicted in Figure 8-6 at a cost of \$143,215,000 (Appendix M).



Grantsville City

West Bank & North West Master Development & Capital Facilities Plans
Stormwater - Alternative 4 Overview

Mac Name: H:\JD\Pro\2205-048\Design\GIS\Projects\2205-048_Model.aprx - Exh Grantsville - West Bank - Stormwater - Alternative 4 Overview 11x17P
Project Number: 2205-048 Drawn by: JEM 04-24 Last Edit: 04/04/2024

Tooele County, Utah
Scale: 1" = 1 mile
Figure 12

PROJECT NUMBER: PRINT DATE: 2024-04-19
PROJECT MANAGER: DESIGNED BY:

FIG 8-6

WEST BANK DEVELOPMENT STORMWATER MASTER PLAN ALTERNATIVE 4 PROJECT

SOURCE: GRANTSVILLE WEST BANK DEVELOPMENT, STORMWATER MASTER PLAN REPORT, JONES & DEMILLE ENGINEERING, APRIL 5, 2024

GRANTSVILLE, UTAH

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8.1.6 Methods of Financing

The projects listed are not attributable to new growth, so impact fees cannot be charged. Storm drainage projects may be funded through grants, loans, developer dedications, taxes, or the Capital Project Fund.

8.2 Impact Fee Analysis

As discussed in Section 8.1.3, there is no surplus capacity for existing facilities so no buy-in costs can be charged. There are no proposed storm drainage projects which are eligible for impact fees at this time because the required projects are associated with correcting existing deficiencies in the system. Additionally, it is the responsibility of the developers, not the City, to construct facilities required to meet the specified level of service. Thus, the City will not construct additional storm drainage projects to accommodate new development and have no storm drainage facilities for which to charge impact fees.

The State is currently mapping floodplains throughout Utah and specifically Tooele Valley where floodplains have not previously been mapped. This establishment of floodplains for the City of Grantsville will require projects to help existing and future developments. If any of these improvements are constructed by the City regionally and not by developers than impact fees might need to be reconsidered for storm drainage.

Appendix A References

1. Impact Fees Act. Title 11, Chapter 36a, Utah State Code
2. Growth Consuming Grantsville 72% Population Increase in City Expected by 2020. Don Baker, Deseret News, dated April 26, 1999. <https://www.deseret.com>
3. U.S. Census Bureau. <https://www.census.gov>
4. Utah Division of Drinking Water. <https://deq.utah.gov/division-drinking-water>
5. Grantsville General Plan. Grantsville City, Utah, dated January 15, 2020.
6. Utah Administrative Code Title R309.
<https://adminrules.utah.gov/public/search//Current%20Rules>
7. Grantsville City, Utah - Culinary Water and Wastewater Systems Master Plan. AQUA Engineering, dated June 2005.
8. Capital Facilities Plan and Impact Fee Analysis Grantsville City Revision. AQUA Engineering, dated August 2016.
9. Capital Facilities Plan, Impact Fee Facilities Plan, and Impact Fee Analysis Updates. Ensign Engineering and Land Surveying, dated May 2022.
10. Capital Facilities Plan, Impact Fee Facilities Plan, and Impact Fee Analysis 2024 Amendments. Ensign Engineering and Land Surveying, dated July 2024.
11. Capital Facilities Plan, Impact Fee Facilities Plan, and Impact Fee Analysis 2025 Amendments. Ensign Engineering and Land Surveying, dated May 2025.
12. Grantsville City Culinary and Secondary Water Rights Forty-Year Master Plan. AQUA Engineering, dated October 2009.
13. AWWA Manual M6. American Water Works Association, dated November 2018.
14. Grantsville City Capital Facilities Plan. Hansen, Allen, and Luce, Inc. dated October 1996.
15. Capital Facilities Plan and Impact Fee Analysis Grantsville City. AQUA Engineering, dated April 3, 2013.
16. 2016 Crime in the United States, Table 24. FBI, dated fall 2017. <https://ucr.fbi.gov>
17. Calculating Shelter Capacity. UC Davis Koret Shelter Medicine Program, dated June 19, 2015. <https://www.sheltermedicine.com>
18. Fire Suppression Rating Schedule. Insurance Services Office, Inc.
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21. Grantsville City – Sanitary Sewer Flow Monitoring 2018 – Flow and Model Summary. AQUA Engineering, dated August 9, 2018.
22. Storm Water Management Study for Baker and Pope Watersheds Grantsville City and Tooele County. AQUA Engineering, dated April 2015.
23. Grantsville City Storm Drainage Master Plan. Hansen, Allen, and Luce, Inc. dated August 1998.
24. Grantsville City Wastewater Treatment Plant Study. AQUA Engineering dated November 2022.
25. Grantsville City Transportation Master Plan. Horrocks dated 2022.
26. Highway Capacity Manual (HCM). Transportation Research Board, Current Edition.
27. Trip Generation Manual, 11th Edition. Institute of Transportation Engineers dated September 2021.
28. Grantsville City FEMA BRIC Flood Protection Scoping Study. Jones & DeMille Engineering dated February 6, 2024.
29. West Bank & Northwest Area Master Development Plan & Capital Facilities Plan. PSOMAS, Wall Consultant Group, and Jones & DeMille Engineering dated August 2024.
30. Grantsville Engineering Report to Evaluate Minimum Sizing Standards. Ensign Engineering and Land Surveying, dated March 21, 2025.

Appendix B Grantsville City Current Impact Fee Ordinance

Title 13 Impact Fees

Chapter 13-1 General Provisions

Chapter 13-1 General Provisions

13-1-1 Definitions

13-1-2 Collection Procedures-Exemptions

13-1-3 Accounting

13-1-4 Refunds - Credits - Challenges - Appeals

13-1-5 Parks And Recreation Facilities Impact Fee

13-1-6 Public Safety (Fire And Police) Capital Facilities Impact Fees

13-1-7 Culinary Water Capital Facilities Impact Fee

13-1-8 Water Rights Acquisition Impact Fee

13-1-9 Wastewater Capital Facilities Impact Fee

13-1-10 Transportation Impact Fee

(Adopted by ordinance 2017-10, effective July 11, 2017)

13-1-1 Definitions

- A. The definitions referred to in Utah Code Annotated § 11-36a-102, 2014 as amended, shall apply to the terms used in this chapter. (Adopted 07-16-1997 by Ord. No. 97-28; amended 10-15-1997 by Ord. No. 97-33, included unrevised in Ord. No. 2006-01 on 02-1-06.)
- B. The term “Service Area” as used in this chapter and the area of Grantsville City, which will be served by the impact fees imposed by this chapter, shall constitute the entire corporate boundaries of Grantsville City, Tooele County, Utah unless otherwise indicated. (Adopted 07-16-1997 by Ord. No. 97-28; amended 10-15-1997 by Ord. No. 97-33.)
- C. Equivalent Residential Connection (ERC) for the purposes of Section 30-1-7 (Culinary Water Capital Facilities Impact Fee) of this Chapter is defined as the storage and distribution requirement that will allow a peak usage of 900 gallons of water per day with an average flow of 475 gallons of water per day per connection for each single family dwelling unit. The Culinary Water Capital Facilities impact fee for nonresidential development shall be calculated by estimating the water service demands of the use and then converting it to an ERC, which shall then be multiplied by the impact fee specified in Section 30-1-7 herein for each ERC. Equivalent Residential Connection may also be specified as an equivalent residential user/unit or ERU. (Adopted 10-15-1997 by Ord. No. 97-33, amended on 02-1-06 by Ord. No. 2006-01)
- D. Equivalent Residential Connection (ERC) for the purposes of Section 30-1-8 (Water Source Impact Fee) shall be calculated as follows: The water right required for indoor use is based upon two criteria; a) that the water right will allow the extraction of 800 gallons per day per connection, and b) that the yearly extraction be sufficient to provide 0.45 acre-feet per connection. The indoor water source (rights) acquisition impact fee for nonresidential development shall be calculated by estimating the indoor water service demands of the use and then converting it to an ERC, which shall then be multiplied by the impact fee specified in Section 30-1-8 herein for each ERC. No development, however, shall pay a water source impact fee of less than required for one ERC. The ERC for outdoor water use is based on .12 irrigated acres per ERC, 3.96 gallons per irrigated acre (.0099 cfs/acre) and 3.0 acre feet of water rights for each irrigated acre. Equivalent Residential Connection may also be specified as an equivalent residential user/unit or ERU. (Subsection (D) adopted 02-1-06 by Ord. No. 2006-01)
- E. Equivalent Residential Connection (ERC) for the purposes of Section 30-1-9 (Wastewater Capital facilities Impact Fee) of this Chapter is defined as 280 gallons of wastewater per day. The wastewater impact fee for a nonresidential development shall be calculated by estimating

the wastewater flow per day and then converting it to an ERC, which shall then be multiplied by the impact fee specified in Section 30-1-9 herein for each ERC. Equivalent Residential Connection may also be specified as an equivalent residential user/unit or ERU. (Subsection (E) adopted 02-1-06 by Ord. No. 2006-01)

13-1-2 Collection Procedures-Exemptions

After the effective date of this Ordinance, no application for a building permit as set forth herein, shall be approved by Grantsville City unless the applicable impact fee has been paid or is adjusted or waived by the City Council.

The impact fees imposed by this Ordinance shall not apply to the following development activities:

- A. Residential development activities that do not increase the number of residential dwelling units.
- B. Nonresidential development activities that do not increase the total square footage in an existing nonresidential development.
- C. Proposed development for which a building permit has been issued prior to the effective date of the enactment of an impact fee.
- D. Any new subdivision or planned unit development(except minor subdivisions or small planned unit developments of six or less lots), shall be required to provide, prior to final approval, sufficient water rights to the City or dedicated private water resources to provide for all of the indoor and outdoor water uses required for the development.
- E. Low income housing and other development activities with broad public purposes may be exempted from the payment of impact fees by the City Council. Low income housing shall be defined by the regulations adopted or used by the Tooele County Housing Authority.

(Originally adopted 07-16-1997 by Ord. No. 97-28; Subsection (D) was added by Ord. No. 99-13 on 04-21-1999; Subsection (E) was added by Ord. No. 2002-1 on 01-09-2002.)

13-1-3 Accounting

The City Treasurer shall establish separate interest-bearing ledger accounts for each type of public facility for which an impact fee is collected. The City shall also deposit impact fee receipts in the appropriate ledger account and retain the interest earned on each fund or account in the fund. The City Treasurer shall, at the end of each fiscal year prepare and submit a report to the City Council on each fund or account showing the source and amount of all monies collected, earned or received by the fund or account and each expenditure from the fund or account including other expenditures to support this impact fee process.

(Adopted on 07-16-1997 by Ord. No.97-28, included unrevised in Ord. No.99-13, adopted 4-21-1999.)

13-1-4 Refunds - Credits - Challenges - Appeals

- A. Refunds. The City shall refund any impact fee paid by a developer, plus interest earned when:
 - 1. The developer does not proceed with the development activity and has filed a written request for a refund; or
 - 2. The fees have not been timely spent or encumbered as required by law; or

3. No impact has resulted.

B. Credits. Credits against the amount of an impact fee due from a proposed development may be provided for by the dedication of land or the provision of City resources or facilities by an applicant when such land, facilities or resources are determined to provide additional City facilities or resource capacity to meet the demand generated by the development and when either:

1. Costs. The costs of such land, facilities or resources have been included in the City impact fee calculation methodology or the land dedicated or facilities provided is determined by the City Council to be a reasonable substitute for the cost of facilities or resources which are included in the City's impact fee calculation methodology. Applications for a credit will be made to the City and will be submitted at or before the time when the impact fee is due. The application for a credit will be accompanied by relevant documentary evidence indicating the eligibility of the applicant for the credit. The City Recorder will present an application for any credit to the City Council, accompanied by a recommendation by the Mayor. Any credit determined appropriate by the City Council shall be applied against the impact fee calculated to be due; provided, however, that in no event shall a credit be granted in an amount exceeding the impact fee due.
2. Unusual Circumstances. The City Council may adjust the impact fee at the time the fee is charged, to respond to unusual circumstances in specific cases and ensure that the impact fees are imposed fairly. The City Council may also adjust an impact fee based upon studies and data submitted by a developer.

C. Challenges. Any person claiming that the impact fee required by this ordinance has no reasonable relationship to the needs created by or benefits conferred upon the proposed development and does not demonstrably benefit the new development or is otherwise constitutionally invalid or unlawful pursuant to the standards of applicable case law or statutes then in effect, must file a written challenge with the City Recorder in order to obtain a final determination regarding the application of the impact fee to the development by the City Council, which may include a request for a credit against the impact fees paid. Such a determination shall be a necessary prerequisite before filing any legal challenge to the basis of or the amount of the impact fee in question. Any challenge to an impact fee must be filed within 30 days after paying an impact fee. The City Council shall make its decision no later than 30 days after the date the challenge to the impact fee is filed.

D. Arbitration. In addition to the procedure under the foregoing paragraph to challenge an impact fee, a person or entity may submit an impact fee challenge to arbitration, if the person or entity resides in or owns property within the impact fee service area or is an organization, association, or corporation representing the interests of a person or entity owning property within the impact fee service area and files a written request for arbitration with the Grantsville City Council within 30 days after the day the impact fee is paid. If a person or entity files a written request for arbitration an arbitrator or arbitration panel shall be selected as follows:

1. the City Council and the person or entity filing the request may agree on a single arbitrator within ten days after the day the request for arbitration is filed; or
2. if a single arbitrator is not agreed to, an arbitration panel shall be created with the following members:
 - a. each party shall select an arbitrator within 20 days after the date the request is filed; and

b. the arbitrators selected by each party shall select a third arbitrator.

3. The arbitration panel shall hold a hearing on the challenge within 30 days after the date the single arbitrator is agreed upon or within 30 days after the two arbitrators are selected. The arbitrator or arbitration panel shall issue a decision in writing within ten days from the date the hearing is completed. Except as provided in this section, each arbitration shall be governed by Utah Code Ann. Title 78B, Chapter 11, Utah Uniform Arbitration Act. The parties may agree to binding arbitration, formal, nonbinding arbitration or informal, nonbinding arbitration. If the parties agree in writing to binding arbitration, the arbitration shall be binding, the decision of the arbitration panel shall be final, neither party may appeal the decision of the arbitration panel and notwithstanding Subsection (C) above, the person or entity challenging the impact fee may not file an action under Subsection (C) or Utah Code Ann. §11-36a-701, et al. If the parties agree to formal, nonbinding arbitration, the arbitration shall be governed by the provisions of Utah Code Ann. Title 63G, Chapter 4, Administrative Procedures Act. For purposes of applying Utah Code Ann. Title 63G, Chapter 4, Administrative Procedures Act, to a formal, nonbinding arbitration under this section, notwithstanding Utah Code Ann. §63G-4-502, "agency" means a local political subdivision. An appeal from a decision in an informal, nonbinding arbitration may be filed with the district court in which Grantsville City is located. Each authorized appeal to the district court shall be filed within 30 days after the date the arbitration panel issues a decision. The district court shall consider de novo each appeal filed from an informal, nonbinding arbitration filed under this subsection. A person or entity that files an appeal to the district court after an informal nonbinding arbitration decision under this subsection may not file an action under Subsection (C) of this provision or Utah Code Ann. §11-36a-701, et al. The filing of a valid written request for arbitration within 30 days after the date the impact fee is paid tolls all time limitations under Utah Code Ann. §11-36a-701, et al. until the date the arbitration panel issues a decision. The person or entity filing a request for arbitration and Grantsville City shall equally share all costs of an arbitration proceeding under this section. Except as provided for herein, this subsection shall not be construed to prohibit a person or entity from challenging an impact fee as provided in Subsection (C) or Utah Code Ann. §11-36a-701, et al.

- E. Oversized Water Services - No Appeal Allowed. If the developer or owner of property knowingly requests or installs a water service, at its option, that is larger than is required by this Chapter or any other part of this Code, the impact fees associated with the requested service size, shall be charged and collected by the City. No credit, challenge, appeal or arbitration related to the impact or other fees knowingly paid for an oversized service, shall be allowed under this Chapter, after the impact fee has been paid to the City. If an oversized water service has been installed and the impact fee for the same has not been paid, the developer or owner may replace the oversized service, with a properly sized service, provided the City is paid for its costs to inspect the new installation. (Adopted 02-04-2009 by Ord. 2009-03).

(Section 30-1-4 originally adopted on 02-05-1997, amended and renumbered on 07-16-1997 by Ord. No.97-28, amended 04-21-99 by Ord. No. 99-13.)

13-1-5 Parks And Recreation Facilities Impact Fee

As a condition for the issuance of a building permit for the new construction or placement of any structure for a single or multi-family dwelling within Grantsville City’s Boundaries, the developer, owner or builder shall pay an impact fee of \$936.00 for each single family dwelling unit and \$3,952.56 for each individual dwelling unit in a multi-family dwelling. The City council may adjust the standard impact fee at the time of the fee is charged to respond to unusual circumstances in specific cases and ensure that the impact fees are imposed fairly.

(Originally adopted on 02-05-1997 by Ord. No. 97-5, included unrevised and renumbered in Ord. No. 99-13 adopted 04-21-99)

HISTORY

Amended by Ord. [2024-32](#) on 11/6/2024

13-1-6 Public Safety (Fire And Police) Capital Facilities Impact Fees

As a condition for the issuance of a building permit for the new construction or placement of any structure for a single or multi-family dwelling within Grantsville City’s Boundaries, the developer, owner or builder shall pay a public safety (fire and police) capital facilities impact fee of \$996.12 for each single-family dwelling unit and \$430.33 per unit for each individual dwelling unit in a multi-family dwelling. Prior to the issuance of a building permit for any nonresidential development activity within the District’s boundaries, the developer, owner or builder thereof, shall pay a public safety facilities impact fee of \$953.80 per 1,000 sq ft building area. The City Council may adjust the standard impact fee at the time the fee is charged to respond to unusual circumstances in specific cases and ensure that the impact fees are imposed fairly.

(Adopted 07-16-1997 by Ord.No.97-28, amended 07-08-1998 by Ord. No. 98-17, included unrevised in Ord. No. 99-13 adopted 04-21-99).

HISTORY

Amended by Ord. [2024-32](#) on 11/6/2024

13-1-7 Culinary Water Capital Facilities Impact Fee

As a condition for the issuance of a building permit or as a condition of obtaining culinary water service for any new residential construction or development within Grantsville City’s boundaries that requires a new or expanded culinary water service, the developer, owner or builder shall pay a culinary water (source development, storage and distribution) capital facilities impact fee based upon the size of the culinary water service meter connection necessary for the development as follows:

Meter Size in Inches	Max Flow Rate (GPM)	ERC's	Impact Fee per Meter Size
3/4"	25	1.00	\$3,432.76
1"	40	1.60	\$5,492.42
1 1/2"	50	2.00	\$6,865.52
2"	100	4.00	\$13,731.05
3"	150	6.00	\$27,462.09
4"	200	8.00	\$54,924.19
6"	500	20.00	\$109,848.38

As a condition for the issuance of a building permit or as a condition of obtaining culinary water service for any new residential construction or development or any other activity within Grantsville City’s

boundaries that requires a new or expanded culinary water service, the developer, owner or builder shall pay a culinary water (source development, storage and distribution) capital facilities impact fee based upon the number of fixture units for indoor water use or the number of fixture units per acre for outdoor water use as follows:

Non-Residential (Indoor Use) \$35.00 per fixture unit
 Non-Residential (Outdoor Use) \$21,694.03 per irrigated acre

The City council may adjust the standard water capital facilities impact fee at the time of the fee is charged, to respond to unusual circumstances in specific cases and ensure that the impact fees are imposed fairly. (Originally adopted 07-16-1997 by Ord. No. 97-28, amended 04-21-1999 by Ord. No. 99-13; amended 02-1-06 by Ord. No. 2006-01)

13-1-8 Water Rights Acquisition Impact Fee

A. As a condition for the issuance of a building permit or as a condition of obtaining Citywater service for any new residential or commercial construction or development or any other activity within Grantsville City's boundaries that requires City water for indoor or outdoor use or a new or expanded City water service, the developer, owner or builder, when required by this ordinance, shall pay an indoor and outdoor water right acquisition impact fee for the development as follows:

1. Single Family Residential: :\$5,450.00 per Dwelling Unit. (0.218 acre-feet per year per Equivalent Residential Connection (ERC)x \$25,000.00 per acre foot of water)

Multi-Unit Residential: \$3,000.00 per Dwelling Unit. (0.120 acre-feet per Dwelling Unit x \$25,000.00 per acre-foot of water)

Non-Residential: \$227.00per Fixture Unit. (0.00908 acre-feet per Fixture Unit x \$25,000.00 per acre-foot of water)

2. Outdoor Use Impact Fee:

Outdoor use impact fee shall be calculated utilizing the Grantsville Water Rights Dedication Requirements and then multiplying the resulting acre feet of required water for the lot by \$25,000.00.&

No additional outdoor use impact fee shall be charged for single family residential lots (Category 1) over one acre in size and therefore the outdoor use impact fee is capped at \$53,280.00 (no waterwise landscaping) and \$48,555.00 (waterwise landscape front yard only) for single family residential lots (Category 1) of one acre in size or larger; provided that irrigation of more than 0.64 acres per lot may be temporarily or permanently terminated by Resolution, as provided in subsection (F)

Example: A single family residential lot of 8,000 total square feet, no waterwise landscaping = $(8,000 \text{ square feet} / 43,560 \text{ square feet per acre} \times 0.64 = \text{irrigated area of } 0.1175 \text{ acre} \times 3.33 = .39 \text{ acre feet of water} \times \$25,000.00 = \$9,785.12$ as the outdoor use impact fee.

*See the Impact Fee Analysis for more examples

(Adopted 04-21-1999 by Ord. No. 99-13; amended 12-19-2001 by Ord. No. 2001-19)

B. Developments providing a permanent secondary water source (non-City waterworks sources) for outdoor use on the property may petition the City Council for a waiver of the Outdoor Use Impact Fee, which may be granted, provided that said water right can be verified as supplying adequate water for outdoor purposes on the property and adequate assurance is given that no Grantsville City will be used for outdoor purposes on the property in perpetuity. Adequate assurance for purposes of the waiver may be by transfer to the City of water shares to be held by the City for use on the property or within the City. Secondary water user fees and related charges may be collected by the City from the owner or tenant of the property in connection with the City's billing for culinary water and other City services. (Adopted 04-21-1999 by Ord. No. 99-03; amended 12-03-2003 by Ord. 2003-29). All charges provided for hereunder shall be charged with the City sewer and water fees and shall constitute one charge. If any part of the account for either the secondary water assessment or the City sewer or charges becomes delinquent, as in this Code provided, the City shall discontinue the water service until all delinquencies have been paid in full, including the reconnection fee. (Included 03-02-2005 by Ord. No. 2005-04) C. Subsection (C) was repealed on October 17, 2007 by Ord. No. 2007-36) D. Any new subdivision or planned unit development (except (i) developments of one to four family dwellings, and (ii) amendments to existing platted subdivisions that require only up to a total of two acre-feet of additional indoor water and only up to a total of eight acre-feet of additional outdoor water for full development, shall be required to provide, prior to final approval, sufficient water rights to the City or dedicated private water resources to provide for all of the indoor and outdoor water uses required for the development. Unless otherwise provided for, the impact fees specified in this Section shall apply to all development in subdivisions and planned unit developments initiated prior to April 23, 1999 and shall be collected as provided in subsection (A) above. (Adopted 04-21-1999 by Ord. No. 99-13; amended 12-19-2001 by Ord. No. 2001-19).

- A. The Outdoor Use Impact fee is based upon a typical irrigated single family residential lot (Category 1) or development as defined in the Grantsville Water Rights Dedication Requirements.. The Outdoor Use Impact fee for residential lots (Category 1) up to one acre in size shall be strictly applied without regard to claims of restricted irrigation areas, since these claims can rarely be verified or enforced. The water rights acquisition fee for all development that does not fall under Category 1 as defined in the Grantsville Water Rights Dedication Requirements shall be based upon an estimate of the indoor and outdoor water usage specified for the project, (Adopted 04-21-1999 by Ord. No. 99-13; amended 12-19-2001 by Ord. No. 2001-19)
- B. No owner or possessor of real property within Grantsville City has the right to use City water for outdoor use (irrigation) on more than the irrigated acreage as defined in subsection (A) above or in the development plan as otherwise approved by the City. Owners or possessors of such real property, who do not have access to non-City secondary water, may at their option irrigate more than the specified irrigated acreage of their property or lot with City water until such time as the City determines by a formally adopted Resolution that its City water supply is insufficient to continue to allow such irrigation. Any such Resolution may temporarily terminate the use of culinary water on more than the allowed irrigated acreage until the water shortage abates or the Resolution may permanently terminate such use. Any person who irrigates more of their property than the allowed irrigated acreage as defined herein, after a Resolution prohibiting said use is adopted, shall be guilty of guilty of a Class "C" Misdemeanor. Nothing contained in this Section shall prohibit the City from otherwise limiting the outside use of City water in times of emergency or shortage. (Adopted 12-19-2001 by Ord. No. 2001-19)

HISTORY

Amended by Ord. [2024-11](#) on 5/1/2024

Amended by Ord. [2024-32](#) on 11/6/2024

13-1-9 Wastewater Capital Facilities Impact Fee

As a condition for the issuance of a building permit or as a condition of obtaining wastewater (sewer) service for any new residential construction or development within Grantsville City's boundaries that requires a new or expanded wastewater service, the developer, owner or builder shall pay a wastewater capital facilities impact fee based upon the size of the wastewater service meter connection necessary for the development as follows:

Meter Size In	(GPM)	(ERC's)	Impact Fee Meter Size
3/4"	20	1.00	\$5,120.79
1"	38	1.90	\$8,193.26
1 1/2"	48	2.38	\$10,241.58
2"	95	4.75	\$20,483.15
3"	143	7.13	\$40,966.30
4"	190	9.50	\$81,932.61
6"	475	23.75	\$163,865.22

As a condition for the issuance of a building permit or as a condition of obtaining wastewater (sewer) service for any new commercial construction or development or any other activity within Grantsville City's boundaries that requires a new or expanded wastewater service, the developer, owner or builder shall pay a wastewater capital facilities impact fee based upon the number of fixture units necessary for the development as follows:

Non-Residential Wastewater \$213.37 per fixture unit

(Originally adopted 7-16-1997 by Ord. No. 97-28, amended and renumbered on 04-21-1999 by Ord. No. 99-13; amended 02-01-2006 by Ord. No. 2006-01).

HISTORY

Amended by Ord. [2024-32](#) on 11/6/2024

13-1-10 Transportation Impact Fee

As a condition for the issuance of a building permit for any new residential construction or development within Grantsville City's boundaries, impact fees for transportation will be based on development type.

Development Type	Peak Hour Trips Rate	Impact Fee	Units
Single Family	0.99	\$2,754.42	per Dwelling Unit
Multi-Unit	0.56	\$1,558.05	per Dwelling Unit
Trailer	0.46	\$1,279.83	per Dwelling Unit
Industrial/Manufacturing	0.37	\$1,029.43	per 1,000 sf Building Area
Warehousing	0.09	\$250.40	per 1,000 sf Building Area
Retail	3.295	\$9,167.48	per 1,000 sf Building Area
Church	0.049	\$136.33	per 1,000 sf Building Area
School	0.0665	\$185.07	per Student

HISTORY

Amended by Ord. [2024-32](#) on 11/6/2024

Appendix C Demographic Calculations

ERC / Unit Summary:

Service Connection Type	2019	2020	2021	2022	2023	2024	2025	Average
Single Family	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Multi-Unit	0.472	0.532	0.572	0.476	0.474	0.419	0.716	0.523
Trailer	1.074	1.222	1.116	1.143	1.033	1.179	1.039	1.115
Commercial	8.753	8.056	6.744	6.852	6.851	6.849	7.247	7.336
Church	3.689	3.326	4.234	4.360	6.119	5.681	4.572	4.569
School	2.726	3.254	6.566	3.865	4.314	3.938	10.974	5.091
Construction Water	17.373	3.709	6.372	4.533	4.308	4.121	7.261	6.811
City Rate			9.663	9.976	9.281	13.363	10.685	10.594

Year 2025:

Service Connection Type	Avg Units	Avg Monthly Usage (gal)	Usage (gal) / Unit	ERC / Unit
Single Family	4,560	42,805,833	9,387.59	1.000
Multi-Unit	292	1,959,250	6,721.27	0.716
Trailer	213	2,075,500	9,751.76	1.039
Commercial	154	10,487,583	68,027.57	7.247
Church	11	472,167	42,924.24	4.572
School	12	1,236,250	103,020.83	10.974
Construction Water	16	1,102,042	68,167.53	7.261
City Rate	33	3,310,167	100,308.08	10.685

Year 2024:

Service Connection Type	Avg Units	Avg Monthly Usage (gal)	Usage (gal) / Unit	ERC / Unit
Single Family	4,417	38,437,000	8,701.57	1.000
Multi-Unit	291	1,058,167	3,642.57	0.419
Trailer	213	2,188,000	10,256.25	1.179
Commercial	153	9,098,833	59,599.34	6.849
Church	11	543,750	49,431.82	5.681
School	12	405,500	34,267.61	3.938
Construction Water	16	567,742	35,857.39	4.121
City Rate	33	3,866,167	116,275.69	13.363

Year 2023:

Service Connection Type	Avg Units	Avg Monthly Usage (gal)	Usage (gal) / Unit	ERC / Unit
Single Family	4,208	32,012,917	7,607.78	1.000
Multi-Unit	285	1,027,917	3,603.56	0.474
Trailer	218	1,715,917	7,859.16	1.033
Commercial	146	7,627,417	52,123.58	6.851
Church	11	512,083	46,553.03	6.119
School	11	361,000	32,818.18	4.314
Construction Water	15	475,234	32,774.79	4.308
City Rate	34	2,400,667	70,607.84	9.281

Year 2022:

Service Connection Type	Avg Units	Avg Monthly Usage (gal)	Usage (gal) / Unit	ERC / Unit
Single Family	4,012	33,274,417	8,293.38	1.000
Multi-Unit	272	1,075,333	3,951.01	0.476
Trailer	224	2,119,000	9,480.98	1.143
Commercial	143	8,130,917	56,826.44	6.852
Church	11	397,750	36,159.09	4.360
School	12	371,250	32,050.36	3.865
Construction Water	20	767,546	37,594.08	4.533
City Rate	35	2,854,250	82,731.88	9.976

Year 2021:

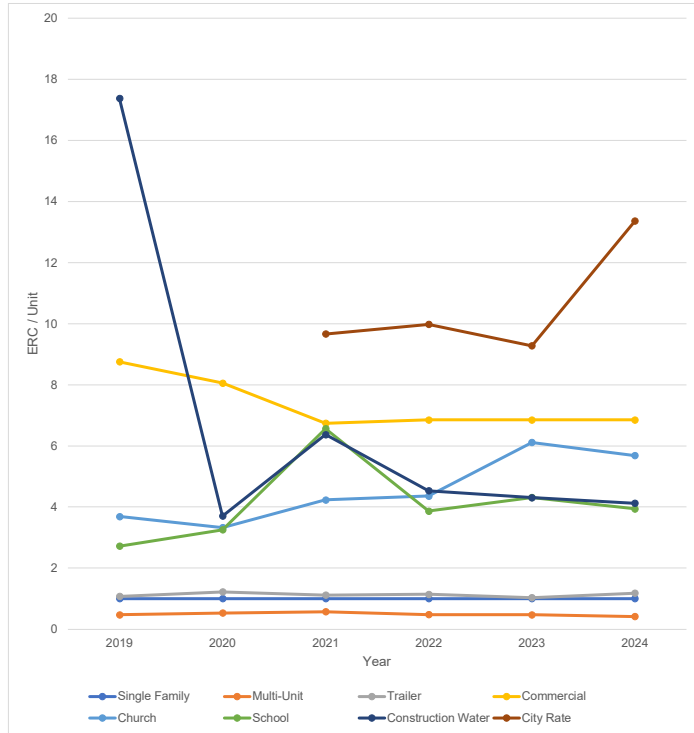
Service Connection Type	Avg Units	Avg Monthly Usage (gal)	Usage (gal) / Unit	ERC / Unit
Single Family	3,737	31,404,250	8,403.97	1.000
Multi-Unit	264	1,267,417	4,809.93	0.572
Trailer	227	2,132,417	9,376.69	1.116
Commercial	138	7,835,333	56,675.11	6.744
Church	11	388,417	35,580.15	4.234
School	11	602,417	55,183.21	6.566
Construction Water	22	1,169,167	53,549.62	6.372
City Rate	32	2,558,083	81,208.99	9.663

Year 2020:

Service Connection Type	Avg Units	Avg Monthly Usage (gal)	Usage (gal) / Unit	ERC / Unit
Single Family	3,428	31,442,292	9,171.97	1.000
Multi-Unit	268	1,307,667	4,880.87	0.532
Trailer	225	2,517,167	11,208.16	1.222
Commercial	130	9,605,250	73,886.54	8.056
Church	11	335,545	30,504.13	3.326
School	11	328,333	29,848.48	3.254
Construction Water	22	731,426	34,019.81	3.709
City Rate				

Year 2019:

Service Connection Type	Avg Units	Avg Monthly Usage (gal)	Usage (gal) / Unit	ERC / Unit
Single Family	3,185	27,138,200	8,521.52	1.000
Multi-Unit	270	1,085,750	4,020.06	0.472
Trailer	227	2,075,250	9,148.79	1.074
Commercial	126	9,366,583	74,584.61	8.753
Church	11	345,833	31,439.39	3.689
School	11	255,500	23,227.27	2.726
Construction Water	20	2,899,199	148,044.21	17.373
City Rate				



Appendix D Drinking Water Cost Estimates

ENGINEERS ESTIMATE OF PROBABLE COSTS



These costs are opinions only and should not be considered as a formal construction estimate. These quantities and costs are based on information derived from the master plan and are therefore subject to change. Ensign has no control over costs of labor, materials, bidding procedures, unidentified field conditions, or other factors. Ensign cannot and does not make any warranty, promise, or guarantee as to the accuracy of this estimate.

Project: Grantsville City CFP, IFFP, and IFA
 By: Dylan Cooper
 Date: 3/16/2026

Project No.: 11637
 Checked By: Robert Rousselle

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT COST ¹	COST
Bates Well					
1	Well Flush Line	LS	1	\$50,000.00	\$50,000.00
2	Exploratory and Municipal Production Well Drilling and Completion	LF	600	\$2,400.00	\$1,440,000.00
3	Municipal Well Equipment, Connection to Existing Infrastructure, and Modification to Electrical/Controls	LS	1	\$890,000.00	\$890,000.00
4	Mobilization	LS	1	\$18,000.00	\$18,000.00
5	Furnish and Install 12-inch Water Main Including Fittings and Appurtenances	LF	3,110	\$85.00	\$264,350.00
6	Furnish and Install 12-inch Isolation Valve	EA	2	\$2,300.00	\$4,600.00
7	Furnish and Install 12-inch Tee and (3) 12-inch Butterfly Valves, Including Fittings and Appurtenances	EA	1	\$12,000.00	\$12,000.00
8	Furnish and Install 2-inch Combination Air Vac Valve	EA	1	\$13,000.00	\$13,000.00
9	Disinfection and Testing Water Line	LF	3,110	\$0.55	\$1,710.50
10	Revegetation	SF	124,400	\$0.06	\$7,464.00
11	Easement Acquisition	AC	1.43	\$45,000.00	\$64,256.20
Subtotal					\$2,765,380.70
Engineering, Surveying, and Construction Management and Inspection Costs (10%)					\$276,538.07
Total Bates Well Cost					\$3,041,918.77
Southwest Well					
1	Well Flush Line	LS	1	\$50,000.00	\$50,000.00
2	Exploratory and Municipal Production Well Drilling and Completion	LF	600	\$2,400.00	\$1,440,000.00
3	Municipal Well Equipment, Connection to Existing Infrastructure, and Modification to Electrical/Controls	LS	1	\$890,000.00	\$890,000.00
4	Mobilization	LS	1	\$16,000.00	\$16,000.00
5	Furnish and Install 10-inch Water Main Including Fittings and Appurtenances	LF	220	\$75.00	\$16,500.00
6	Furnish and Install 12-inch Water Main Including Fittings and Appurtenances	LF	2,410	\$85.00	\$204,850.00
7	Furnish and Install 12-inch Isolation Valve	EA	2	\$2,300.00	\$4,600.00
8	Furnish and Install 12-inch x 10-inch Tee, (2) 12-inch Butterfly Valves, and (1) 10-inch Butterfly Valve, Including Fittings and Appurtenances	EA	1	\$12,000.00	\$12,000.00
9	Furnish and Install 2-inch Combination Air Vac Valve	EA	1	\$13,000.00	\$13,000.00
10	Disinfection and Testing Water Line	LF	2,630	\$0.55	\$1,446.50
11	Revegetation	SF	105,200	\$0.06	\$6,312.00
12	Easement Acquisition	AC	1.21	\$45,000.00	\$54,338.84
Subtotal					\$2,709,047.34
Engineering, Surveying, and Construction Management and Inspection Costs (10%)					\$270,904.73
Total Southwest Well Cost					\$2,979,952.08
West Bank Well					
1	Well Flush Line	LS	1	\$50,000.00	\$50,000.00
2	Exploratory and Municipal Production Well Drilling and Completion	LF	600	\$2,400.00	\$1,440,000.00
3	Municipal Well Equipment, Connection to Existing Infrastructure, and Modification to Electrical/Controls	LS	1	\$890,000.00	\$890,000.00
4	Mobilization	LS	1	\$39,000.00	\$39,000.00
5	Furnish and Install 10-inch Water Main Including Fittings and Appurtenances	LF	7,385	\$75.00	\$553,875.00
6	Furnish and Install 10-inch Isolation Valve	EA	6	\$2,000.00	\$12,000.00
7	Furnish and Install 2-inch Combination Air Vac Valve	EA	3	\$13,000.00	\$39,000.00
8	Disinfection and Testing Water Line	LF	7,385	\$0.55	\$4,061.75
9	Revegetation	SF	295,400	\$0.06	\$17,724.00
10	Easement Acquisition	AC	3.39	\$45,000.00	\$152,582.64
Subtotal					\$3,198,243.39
Engineering, Surveying, and Construction Management and Inspection Costs (10%)					\$319,824.34
Total West Bank Well Cost					\$3,518,067.73
Southwest Tank					
1	Mobilization	LS	1	\$171,000.00	\$171,000.00
2	Site Clearing and Grubbing	LS	1	\$16,000.00	\$16,000.00
3	Earthwork / Fine Grading	CY	7,500	\$11.50	\$86,250.00
4	Construct 1.5 M.G. Buried Tank	LS	1	\$2,250,000.00	\$2,250,000.00
5	Furnish and Install Tank Valve Vault	LS	1	\$130,000.00	\$130,000.00
6	Electrical and Telemetry	LS	1	\$125,000.00	\$125,000.00
7	Disinfection and Testing Tank	LS	1	\$21,000.00	\$21,000.00
8	Revegetation	LS	1	\$30,000.00	\$30,000.00
9	Furnish and Install 16-inch Water Main Including Fittings and Appurtenances	LF	3,580	\$115.00	\$411,700.00
10	Furnish and Install 12-inch Water Main Including Fittings and Appurtenances	LF	1,090	\$85.00	\$92,650.00
11	Furnish and Install 16-inch Isolation Valve	EA	3	\$4,500.00	\$13,500.00
12	Furnish and Install 12-inch Isolation Valve	EA	1	\$2,300.00	\$2,300.00
13	Furnish and Install 16-inch x 12-inch Tee, (2) 16-inch Butterfly Valves, and (1) 12-inch Butterfly Valve, Including Fittings and Appurtenances	EA	1	\$19,000.00	\$19,000.00
14	Furnish and Install 4-inch Combination Air Vac Valve	EA	1	\$17,000.00	\$17,000.00
15	Furnish and Install 10-inch PRV Station	EA	1	\$100,000.00	\$100,000.00
16	Disinfection and Testing Water Line	LF	4,670	\$0.55	\$2,568.50
17	Easement Acquisition	AC	2.14	\$45,000.00	\$96,487.60
Subtotal					\$3,584,456.10
Engineering, Surveying, and Construction Management and Inspection Costs (6.73%)					\$241,233.90
Total Southwest Tank Cost					\$3,825,690.00
West Bank Tank					
1	Mobilization	LS	1	\$219,000.00	\$219,000.00

2	Site Clearing and Grubbing	LS	1	\$16,000.00	\$16,000.00
3	Earthwork / Fine Grading	CY	10,000	\$11.50	\$115,000.00
4	Construct 1.5 M.G. Buried Tank	LS	1	\$2,250,000.00	\$2,250,000.00
5	Furnish and Install Tank Valve Vault	LS	1	\$130,000.00	\$130,000.00
6	Electrical and Telemetry	LS	1	\$125,000.00	\$125,000.00
7	Disinfection and Testing Tank	LS	1	\$21,000.00	\$21,000.00
8	Revegetation	LS	1	\$30,000.00	\$30,000.00
9	Furnish and Install 16-inch Water Main Including Fittings and Appurtenances	LF	9,880	\$115.00	\$1,136,200.00
11	Furnish and Install 16-inch Isolation Valve	EA	7	\$4,500.00	\$31,500.00
14	Furnish and Install 4-inch Combination Air Vac Valve	EA	4	\$17,000.00	\$68,000.00
15	Furnish and Install 16-inch PRV Station	EA	1	\$200,000.00	\$200,000.00
16	Connect to Water Main	EA	2	\$19,000.00	\$38,000.00
17	Disinfection and Testing Water Line	LF	9,880	\$0.55	\$5,434.00
18	Easement Acquisition	AC	4.54	\$45,000.00	\$204,132.23
Subtotal					\$4,589,266.23
Engineering, Surveying, and Construction Management and Inspection Costs (6.73%)					\$308,857.62
Total West Bank Tank Cost					\$4,898,123.85
Northstar Tank No. 1 Transmission Line					
1	Mobilization	LS	1	\$108,000.00	\$108,000.00
2	Furnish and Install 16-inch Water Main Including Fittings and Appurtenances	LF	10,750	\$115.00	\$1,236,250.00
3	Furnish and Install 12-inch Water Main Including Fittings and Appurtenances	LF	3,660	\$85.00	\$311,100.00
4	Furnish and Install 16-inch Isolation Valve	EA	8	\$4,500.00	\$36,000.00
5	Furnish and Install 12-inch Isolation Valve	EA	3	\$2,300.00	\$6,900.00
6	Furnish and Install 16-inch Tee and (3) 16-inch Butterfly Valves, Including Fittings and Appurtenances	EA	1	\$19,000.00	\$19,000.00
7	Furnish and Install 4-inch Combination Air Vac Valve	EA	4	\$17,000.00	\$68,000.00
8	Furnish and Install 2-inch Combination Air Vac Valve	EA	1	\$13,000.00	\$13,000.00
9	Furnish and Install 10-inch PRV Station	EA	1	\$100,000.00	\$100,000.00
10	Connect to Water Main	EA	2	\$19,000.00	\$38,000.00
11	Disinfection and Testing Water Line	LF	14,410	\$0.55	\$7,925.50
12	Revegetation	SF	576,400	\$0.06	\$34,584.00
13	Easement Acquisition	AC	6.62	\$45,000.00	\$297,727.27
Subtotal					\$2,276,486.77
Engineering, Surveying, and Construction Management and Inspection Costs (10%)					\$227,648.68
Total Northstar Tank No. 1 Transmission Line Cost					\$2,504,135.45
Matthews Lane Water Line Project ²					
1	Mobilization	LS	1	\$16,000.00	\$16,000.00
2	12" Tee	EA	3	\$1,600.00	\$4,800.00
3	12" C900 DR18 PVC	LF	2,711	\$90.00	\$243,990.00
4	Fire Hydrants Assembly	EA	7	\$9,000.00	\$63,000.00
Subtotal					\$327,790.00
Engineering, Surveying, and Construction Management and Inspection Costs (10%)					\$32,779.00
Total Matthews Lane Water Line Project Cost					\$360,569.00
SR-112 Water Line Extension					
1	Mobilization	LS	1	\$23,000.00	\$23,000.00
2	Saw Cut Asphalt	LF	3,950	\$4.50	\$17,775.00
3	Furnish and Install 12-inch Water Main Including Fittings and Appurtenances	LF	3,950	\$85.00	\$335,750.00
4	Furnish and Install 12-inch Isolation Valve	EA	3	\$2,300.00	\$6,900.00
5	Furnish and Install 12-inch Tee and (3) 12-inch Butterfly Valves, Including Fittings and Appurtenances	EA	1	\$12,000.00	\$12,000.00
6	Furnish and Install 2-inch Combination Air Vac Valve	EA	1	\$13,000.00	\$13,000.00
7	Connect to Water Main	EA	1	\$19,000.00	\$19,000.00
8	Disinfection and Testing Water Line	LF	3,950	\$0.55	\$2,172.50
9	Pavement Restoration	LF	3,950	\$6.70	\$26,465.00
10	Traffic Control	LS	1	\$35,000.00	\$35,000.00
Subtotal					\$491,062.50
Engineering, Surveying, and Construction Management and Inspection Costs (10%)					\$49,106.25
Total SR-112 Water Line Extension Cost					\$540,168.75
Southeast Water Line Project					
1	Mobilization	LS	1	\$65,000.00	\$65,000.00
2	Furnish and Install 12-inch Water Main Including Fittings and Appurtenances	LF	9,380	\$85.00	\$797,300.00
3	Furnish and Install 12-inch Isolation Valve	EA	7	\$2,300.00	\$16,100.00
4	Furnish and Install 2-inch Combination Air Vac Valve	EA	4	\$13,000.00	\$52,000.00
5	Furnish and Install 10-inch PRV Station	EA	2	\$100,000.00	\$200,000.00
6	Connect to Water Main	EA	1	\$19,000.00	\$19,000.00
7	Disinfection and Testing Water Line	LF	9,380	\$0.55	\$5,159.00
8	Revegetation	SF	375,200	\$0.06	\$22,512.00
9	Easement Acquisition	AC	4.306703398	\$45,000.00	\$193,801.65
Subtotal					\$1,370,872.65
Engineering, Surveying, and Construction Management and Inspection Costs (10%)					\$137,087.27
Total Southeast Water Line Project Cost					\$1,507,959.92
Public Works Improvements ³					
1	Mobilization	LS	1	\$114,000.00	\$114,000.00
2	Shop Area	SF	6,330	\$255.00	\$1,614,150.00
3	Equipment (Crane Rail, Pit Lift, Exhaust Removal System, etc.)	LS	1	\$170,000.00	\$170,000.00
4	Salt Shed	LS	1	\$500,000.00	\$500,000.00
Subtotal					\$2,398,150.00
Engineering, Surveying, and Construction Management and Inspection Costs (10%)					\$239,815.00
Total Public Works Improvements Cost					\$2,637,965.00
North Tank No. 3					
1	Mobilization	LS	1	\$177,000.00	\$177,000.00
2	Site Clearing and Grubbing	LS	1	\$16,000.00	\$16,000.00
3	Earthwork / Fine Grading	CY	10,000	\$11.50	\$115,000.00
4	Construct 2.0 M.G. Buried Tank	LS	1	\$3,000,000.00	\$3,000,000.00
5	Furnish and Install Tank Valve Vault	LS	1	\$130,000.00	\$130,000.00
6	Electrical and Telemetry	LS	1	\$125,000.00	\$125,000.00
7	Disinfection and Testing Tank	LS	1	\$21,000.00	\$21,000.00
8	Revegetation	LS	1	\$30,000.00	\$30,000.00
9	Furnish and Install 16-inch Water Main Including Fittings and Appurtenances	LF	500	\$115.00	\$57,500.00
11	Furnish and Install 16-inch Isolation Valve	EA	0	\$4,500.00	\$0.00

14	Furnish and Install 4-inch Combination Air Vac Valve	EA	0	\$17,000.00	\$0.00
15	Furnish and Install 16-inch PRV Station	EA	0	\$200,000.00	\$0.00
16	Connect to Water Main	EA	2	\$19,000.00	\$38,000.00
17	Disinfection and Testing Water Line	LF	500	\$0.55	\$275.00
18	Easement Acquisition	AC	0.23	\$45,000.00	\$10,330.58
Subtotal					\$3,720,105.58
Engineering, Surveying, and Construction Management and Inspection Costs (6.73%)					\$250,363.11
Total North Tank No. 3 Cost					\$3,970,468.68

¹ Unit costs are from the 2022 Grantsville CFP/IFA and inflated to current year (2025).

ENGINEERS ESTIMATE OF PROBABLE COSTS



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Project: Osborne Way Water Line Loop: Osborne Way to Cherry Wood Lane Project No.: 11637
 By: Ensign Engineering and Land Surveying Checked By: Robert Rousselle
 Date: 3/10/2026

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	COST
SITE WORK					
1	Mobilization	1	L.S.	\$3,500.00	\$3,500.00
				Sub Total	\$3,500.00
CULINARY WATER					
1	Furnish and Install 10-inch Water Line with Fittings and Appurtenances	425	L.F.	\$75.00	\$31,875.00
2	Cross with Four (4) Gate Valves	1	E.A.	\$10,500.00	\$10,500.00
3	Connect to Existing Water Line	2	E.A.	\$5,000.00	\$10,000.00
				Sub Total	\$52,375.00
MISCELLANEOUS ITEMS					
Traffic Control					
1	Traffic Control Implementation	1	L.S.	\$2,500.00	\$2,500.00
Erosion Control					
1	SWPPP/Maintenance	1	L.S.	\$1,500.00	\$1,500.00
				Sub Total	\$4,000.00
				Construction Subtotal	\$59,875.00
				Contingency (15%)	\$8,981.25
				Survey and Engineering (Design and CM)	\$7,500.00
				Construction Total	\$76,356.25

Desert Edge PH1 OFFSITE WATER LINE

FOCUS ENGINEERING & SURVEY

CONSTRUCTION BID 02/05/2025

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT PRICE	AMOUNT
WATER DISTRIBUTION SYSTEM					
1	Earthwork Haul Trench Spoils to Adjacent Properties	CY	4,400.00	\$5.90	\$25,960.00
2	Culinary Water 12" PVC W/ Fittings	LF	6,300.00	\$74.75	\$470,925.00
3	Culinary Water 8" PVC W/ Fittings	LF	300.00	\$51.80	\$15,540.00
4	Pipe Jacking / Boring 16" Casing For 8" PVC (blue grass crossing)	LF	40.00	\$2,762.10	\$110,484.00
5	Excavation Pothole Existing Utilities	EACH	72.00	\$750.00	\$54,000.00
6	Culinary Water 12" PVC Loop W/ Insulation Install With Steel Casing 24"	EACH	11.00	\$18,970.00	\$208,670.00
7	Culinary Water 12" Pressurized Reducing Valve -Cut In On Existing; Detail Provided For PRV	EACH	1.00	\$87,750.00	\$87,750.00
8	Culinary Water 12" PVC Loop - Lateral For PRV	EACH	1.00	\$7,405.00	\$7,405.00
9	Culinary Water 12" Gate Valve W/ Concrete Collar	EACH	18.00	\$5,830.00	\$104,940.00
10	Culinary Water 8" Gate Valve W/ Concrete Collar	EACH	4.00	\$3,385.00	\$13,540.00
11	CW End-Of-Line Connection 12" PVC	EACH	5.00	\$5,965.00	\$29,825.00
12	Fire Hydrant Assembly	EACH	12.00	\$10,275.00	\$123,300.00
13	Fire Hydrant Assembly - Cut In On Existing Line	EACH	2.00	\$11,860.00	\$23,720.00
14	CW Air Vac Assembly 2"	EACH	10.00	\$8,630.00	\$86,300.00
15	Culinary Water Import Select Backfill	TON	4,500.00	\$17.00	\$76,500.00
16	Asphalt Pavement 6" Remove & Replace	SF	750.00	\$31.00	\$23,250.00
17	Hold Power Poles For Waterline Install	EACH	7.00	\$1,750.00	\$12,250.00
TOTAL WATER IMPROVEMENTS:					\$1,474,359.00
GRAND TOTAL					\$ 1,474,359.00

ENGINEERS ESTIMATE OF PROBABLE COSTS



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Project: SR-138 Water Line Extension - Broken Arrow
 By: Ensign Engineering and Land Surveying
 Date: 3/10/2026

Project No.: 11637
 Checked By: Robert Rousselle

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	COST
SITE WORK					
1	Mobilization	1	L.S.	\$200,000.00	\$200,000.00
				Sub Total	\$200,000.00
CULINARY WATER					
1	16-inch C-900 PVC Culinary Water Line with Fittings and Appurtenances	21,700	L.F.	\$140.00	\$3,038,000.00
2	Steel Casing Sleeve at Drainage Crossings	2	E.A.	\$64,000.00	\$128,000.00
3	Fire Hydrant Assembly (Complete)	17	E.A.	\$7,500.00	\$127,500.00
4	2-inch Air/Vacuum Combination Valve Station	1	E.A.	\$10,000.00	\$10,000.00
5	Jack and Bore with Steel Casing at SR-112 and Sheep Lane	125	L.F.	\$1,600.00	\$200,000.00
6	Blow Off Valve	1	E.A.	\$5,000.00	\$5,000.00
7	Connect to Existing Water Line	3	E.A.	\$20,000.00	\$60,000.00
				Sub Total	\$3,568,500.00
MISCELLANEOUS ITEMS					
Traffic Control					
1	Traffic Control Implementation	1	L.S.	\$100,000.00	\$100,000.00
Erosion Control					
1	SWPPP/Maintenance	1	L.S.	\$80,000.00	\$80,000.00
				Sub Total	\$180,000.00
				Construction Subtotal	\$3,948,500.00
				Contingency (15%)	\$592,275.00
				Survey and Engineering (Design and CM)	\$257,837.05
				Construction Total	\$4,798,612.05

ENGINEERS ESTIMATE OF PROBABLE COSTS

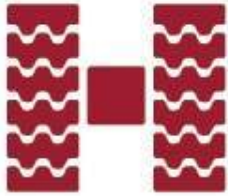


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Project: SR-138 Water Line Extension - Broken Arrow
 By: Ensign Engineering and Land Surveying
 Date: 3/10/2026

Project No.: 11637
 Checked By: Robert Rousselle

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	COST
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				Sub Total	\$200,000.00
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3	Fire Hydrant Assembly (Complete)	17	E.A.	\$7,500.00	\$127,500.00
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5	Jack and Bore with Steel Casing at SR-112 and Sheep Lane	125	L.F.	\$1,600.00	\$200,000.00
6	Blow Off Valve	1	E.A.	\$5,000.00	\$5,000.00
7	Connect to Existing Water Line	3	E.A.	\$20,000.00	\$60,000.00
				Sub Total	\$3,568,500.00
MISCELLANEOUS ITEMS					
Traffic Control					
1	Traffic Control Implementation	1	L.S.	\$100,000.00	\$100,000.00
Erosion Control					
1	SWPPP/Maintenance	1	L.S.	\$80,000.00	\$80,000.00
				Sub Total	\$180,000.00
				Construction Subtotal	\$3,948,500.00
				Contingency (15%)	\$592,275.00
				Survey and Engineering (Design and CM)	\$257,837.05
				Construction Total	\$4,798,612.05



HADCO
CONSTRUCTION
EST. 1989

1850 N 1450 W P.O. BOX 437
Lehi, UT 84043

office 801-766-7611
fax 801-766-7604

To: Grantsville	Contact:
Address: (Not Provided)	Phone: (801) 884-3411
	Fax:
Project Name: SR 138 Waterline Extension - BUDGET CONCEPT	Bid Number:
Project Location: SR138 Bluegrass - Clark, Grantsville, UT	Bid Date: 3/12/2025

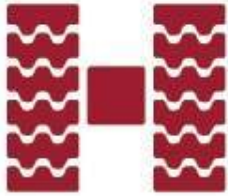
HADCO CONSTRUCTION CORDIALLY OFFERS THE FOLLOWING PROPOSAL

PRELIMINARY CONCEPT, SUBJECT TO CHANGE AND REVIEW WITH FINAL PLANS.

Line #	Item Description	Estimated Quantity	Unit	Unit Price	Total Price
SR138 EXTENSION					
1	Mobilization & Demobilization	1.00	LS	\$14,385.00	\$14,385.00
2	Traffic Control / Barricades	1.00	LS	\$5,315.00	\$5,315.00
3	Culinary Water 12" PVC	1,710.00	LF	\$91.90	\$157,149.00
4	Culinary Water 8" PVC	188.00	LF	\$80.40	\$15,115.20
5	Culinary Water 12" PVC Loop W/ Insulation Install With Steel Casing 24"	1.00	EACH	\$26,210.00	\$26,210.00
6	Culinary Water 12" Gate Valve W/ Concrete Collar	2.00	EACH	\$7,240.00	\$14,480.00
7	Culinary Water 8" Gate Valve W/ Concrete Collar	1.00	EACH	\$3,585.00	\$3,585.00
8	CW Inline Connection 8" PVC W/ Sleeve & Tee In Right-Of-Way	1.00	EACH	\$9,955.00	\$9,955.00
9	CW Fitting 8" Ductile Iron	3.00	EACH	\$1,425.00	\$4,275.00
10	CW Fitting 12" Ductile Iron	5.00	EACH	\$1,710.00	\$8,550.00
11	Fire Hydrant	4.00	EACH	\$11,165.00	\$44,660.00
12	CW Service 12x1" -Crossing Existing Roadway	1.00	EACH	\$5,110.00	\$5,110.00
13	Earthwork Haul Trench Spoils To Adjacent Properties	1,650.00	CY	\$14.50	\$23,925.00
14	Culinary Water Import Select Backfill	1,750.00	TON	\$19.50	\$34,125.00
15	Asphalt Pavement 6" Remove & Replace	1,800.00	SF	\$30.20	\$54,360.00
100	Traffic Control / Barricades -UDOT Permits	1.00	LS	\$3,705.00	\$3,705.00
Total Price for above SR138 EXTENSION Items:					\$424,904.20

BLUE GRASS UPSIZE					
101	CW Inline Connection 12" PVC W/ Sleeve, Gate Valve & 90 In Right-Of-Way	1.00	EACH	\$18,745.00	\$18,745.00
102	Demo & Remove Culinary Water Pipe 8" PVC / Casing -Install New Casing - Flowable Fill Backfill	50.00	LF	\$943.00	\$47,150.00
103	Culinary Water 12" PVC	50.00	LF	\$116.00	\$5,800.00
104	Demo & Remove Culinary Water Pipe 8" PVC	30.00	LF	\$22.70	\$681.00
105	CW Fitting 12" Ductile Iron	1.00	EACH	\$3,400.00	\$3,400.00
106	Culinary Water 12" Gate Valve W/ Concrete Collar	3.00	EACH	\$7,240.00	\$21,720.00
107	CW Fitting 8" Ductile Iron	4.00	EACH	\$226.00	\$904.00
108	Earthwork Haul Trench Spoils To Adjacent Properties	120.00	CY	\$14.50	\$1,740.00
109	Culinary Water Import Select Backfill	45.00	TON	\$19.50	\$877.50
110	Asphalt Pavement UDOT 7" Remove & Replace	500.00	SF	\$33.00	\$16,500.00
Total Price for above BLUE GRASS UPSIZE Items:					\$117,517.50

Total Bid Price: \$542,421.70



HADCO
CONSTRUCTION
EST. 1989

1850 N 1450 W P.O. BOX 437
Lehi, UT 84043

office 801-766-7611
fax 801-766-7604

To: Grantsville	Contact:
Address: (Not Provided)	Phone: (801) 884-3411
	Fax:
Project Name: SR 138 Waterline Extension - BUDGET CONCEPT	Bid Number:
Project Location: SR138 Bluegrass - Clark, Grantsville, UT	Bid Date: 3/12/2025

Notes:

- **ESCALATION FOR PVC, HDPE, ADS:** Due to the volatile nature of raw material supplies and the energy and transportation markets required for the production and delivery of these products, suppliers do not guarantee firm material pricing. It is Hadco's aim to maintain the quoted pricing. In the event of supplier price increases, Hadco reserves the right to adjust pricing based on pricing issued at the time of material shipment.
- The quoted asphalt paving price is based on the Asphalt Paving Subcontractor's ability to purchase the required materials, in particular liquid asphalt oil, at the quoted price. The quoted price for liquid asphalt oil (PG 64-22 or PG 58-28), at the date of this proposal, is \$640.00 per ton. Any increase in price, including freight and taxes, which the Asphalt Paving Subcontractor must pay, will be billed to and paid for by the Client/Owner.
- **Fuel Escalation/Surcharge:** Fuel pricing included in this proposal is based on the Rocky Mountain Fuel Index Dated [03/10/2025]. If fuel prices increase, each billing will include a 3% fuel surcharge for each \$.01 increase beyond the established baseline.
- Proposal based on plans set dated **CONCEPT NOTED GOOGLE MAP**
- Proposal includes only items specifically included in line item pricing above.
- Imported aggregate, soil and material will be billed by truck delivery tickets and/or pit scale weight tickets.
- Proposal includes no engineering nor surveying.
- Proposal excludes placement and installation of survey monuments.
- Amount paid to be based on actual quantities installed.
- Proposal excludes demolition and disposal of existing homes and structures.
- Proposal excludes tree removal and disposal.
- Proposal excludes municipal connection fees and impact fees.
- Trenching for power lines & dry utility crossings are estimated values only.
- Proposal excludes street lighting.
- Proposal includes grading in right-of-way only. Lot grading is excluded.
- Proposal excludes landscaping work, including restoration of existing landscaping disturbed and import of topsoil.
- Proposal excludes bonding.
- Proposal excludes rock excavation beyond standard machine capability.
- Proposal excludes dewatering.
- Prices are valid for 60 days from date of proposal.
- Proposal excludes provisions for ground heaters, blanketing and cold weather concrete placement (e.g. 7 bag mix, hot water admixture, etc.). If required, pricing will be provided for cold weather conditions prior to proceeding with the work.
- **PROPOSAL EXCLUDES THE FOLLOWING:** Engineering, Surveying, Structure Demolition, Tree Removal, Electrical, Telecommunications, Natural Gas, Landscaping

<p>ACCEPTED:</p> <p>The above prices, specifications and conditions are satisfactory and are hereby accepted.</p> <p>Buyer: _____</p> <p>Signature: _____</p> <p>Date of Acceptance: _____</p>	<p>CONFIRMED:</p> <p>HADCO CONSTRUCTION LLC</p> <p>Authorized Signature: _____</p> <p>Estimator: Kendall Page (801) 420-4750 KPage@HadcoConstruction.com</p>
--	--

From: Mat Wangsgaard <mwangsgaard@focus-es.com> on behalf of Mat Wangsgaard
Sent: Friday, January 17, 2025 10:24 AM
To: Shelby Moore
Cc: Sherrie Broadbent; ncritchlow@grantsvilleut.gov; Tysen Barker; Markus Seat; gmillward@grantsvilleut.gov; Christy Montierth; Cody Christensen; Braydee Baugh; Jason Smith; Robert Rousselle; Ben Duzett
Subject: RE: SR-138 Water Line Extension from Bluegrass to Clark Street - Concept Drawing

Shelby,

I wasn't able to get a contractor to give me a price for Robert's exhibit. They said they haven't had time to look at it yet. I am hoping they can get me numbers next week.

1. Our fee would be \$23,800 for survey of the area, final design, construction staking, record drawings and GIS.

I will push them to get the costs for items 2 & 3 as soon as possible.

Thanks,
Mat

From: Shelby Moore <smoore@grantsvilleut.gov>
Sent: Thursday, January 16, 2025 2:27 PM
To: Mat Wangsgaard <mwangsgaard@focus-es.com>
Cc: Sherrie Broadbent <sbroadbent@grantsvilleut.gov>; ncritchlow@grantsvilleut.gov; Tysen Barker <tbarker@grantsvilleut.gov>; Markus Seat <mseat@grantsvilleut.gov>; gmillward@grantsvilleut.gov; Christy Montierth <cmontierth@grantsvilleut.gov>; Cody Christensen <cchristensen@grantsvilleut.gov>; Braydee Baugh <bbaugh@grantsvilleut.gov>; Jason Smith <firechief@grantsvilleut.gov>; Robert Rousselle <rrousselle@ensignutah.com>
Subject: Re: SR-138 Water Line Extension from Bluegrass to Clark Street - Concept Drawing

Caution: This email originated from outside of FOCUS. Do not click links or open attachments unless you are positive of the sender's identity and have verified the content is safe.

Mat,

Do you have an update on this request?



SHELBY MOORE
Planning & Zoning Administrator
Department of Public Works
Office: (435) 884-4604
Email: Smoores@Grantsvilleut.gov

This e-mail may contain privileged and confidential information intended for the use of the individual or entity named above. If the reader of this message is not the intended recipient, or the employee or agent responsible to deliver it to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you received this communication in error, please immediately notify sender by telephone or reply e-mail, do not use or disclose the contents to others, and delete the message and all attachments from your computer, system, &/or network.

On Thu, Jan 9, 2025 at 6:52 PM Robert Rousselle <rrousselle@ensignutah.com> wrote:

Mat,

Good evening. Following up on our phone conversation yesterday, 1/8, attached is a concept drawing showing the scope for the SR-138 Water Line Extension from Bluegrass to Clark Street. Per our discussion, please provide the following costs so the City can review and make a decision on these costs which would be paid by the City.

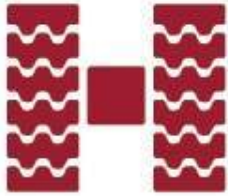
1. Engineering Design for SR-138 Extension to Clark Street
2. Construction Cost for Bluegrass Way and SR-138 Crossing Revisions
 - a. City will pay for upsize costs at this crossing.
 - b. As we discussed, this upsize will probably need to be updated on your drawings anyways as the plan is to connect and test fire hydrants after the connections are made at Bluegrass. If fire hydrants do have 1,000 gpm within The Highlands subdivision, then the Clark Street connection will not be made at this time.
3. Construction Cost from Bluegrass Way along SR-138 to Clark Street Connection

Please let me know if there are any questions. Please send me these costs by the end of next week, 1/17, if possible. Thank you.

Robert Roussele, P.E., LEED-AP | Senior Associate
Main 801.255.0529 | Cell 801.859.4759
roussele@ensignutah.com | ensignutah.com



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EST. 1989

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To: Grantsville	Contact:
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	Fax:
Project Name: SR 138 Waterline Extension - BUDGET CONCEPT	Bid Number:
Project Location: SR138 Bluegrass - Clark, Grantsville, UT	Bid Date: 3/12/2025

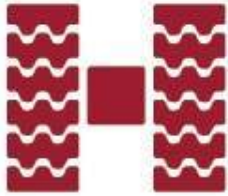
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5	Culinary Water 12" PVC Loop W/ Insulation Install With Steel Casing 24"	1.00	EACH	\$26,210.00	\$26,210.00
6	Culinary Water 12" Gate Valve W/ Concrete Collar	2.00	EACH	\$7,240.00	\$14,480.00
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15	Asphalt Pavement 6" Remove & Replace	1,800.00	SF	\$30.20	\$54,360.00
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Total Price for above BLUE GRASS UPSIZE Items:					\$117,517.50

Total Bid Price: \$542,421.70



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office 801-766-7611
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To: Grantsville	Contact:
Address: (Not Provided)	Phone: (801) 884-3411
	Fax:
Project Name: SR 138 Waterline Extension - BUDGET CONCEPT	Bid Number:
Project Location: SR138 Bluegrass - Clark, Grantsville, UT	Bid Date: 3/12/2025

Notes:

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- Proposal excludes tree removal and disposal.
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- Proposal excludes street lighting.
- Proposal includes grading in right-of-way only. Lot grading is excluded.
- Proposal excludes landscaping work, including restoration of existing landscaping disturbed and import of topsoil.
- Proposal excludes bonding.
- Proposal excludes rock excavation beyond standard machine capability.
- Proposal excludes dewatering.
- Prices are valid for 60 days from date of proposal.
- Proposal excludes provisions for ground heaters, blanketing and cold weather concrete placement (e.g. 7 bag mix, hot water admixture, etc.). If required, pricing will be provided for cold weather conditions prior to proceeding with the work.
- **PROPOSAL EXCLUDES THE FOLLOWING:** Engineering, Surveying, Structure Demolition, Tree Removal, Electrical, Telecommunications, Natural Gas, Landscaping

<p>ACCEPTED:</p> <p>The above prices, specifications and conditions are satisfactory and are hereby accepted.</p> <p>Buyer: _____</p> <p>Signature: _____</p> <p>Date of Acceptance: _____</p>	<p>CONFIRMED:</p> <p>HADCO CONSTRUCTION LLC</p> <p>Authorized Signature: _____</p> <p>Estimator: Kendall Page (801) 420-4750 KPage@HadcoConstruction.com</p>
--	--

From: Mat Wangsgaard <mwangsgaard@focus-es.com> on behalf of Mat Wangsgaard
Sent: Friday, January 17, 2025 10:24 AM
To: Shelby Moore
Cc: Sherrie Broadbent; ncritchlow@grantsvilleut.gov; Tysen Barker; Markus Seat; gmillward@grantsvilleut.gov; Christy Montierth; Cody Christensen; Braydee Baugh; Jason Smith; Robert Rousselle; Ben Duzett
Subject: RE: SR-138 Water Line Extension from Bluegrass to Clark Street - Concept Drawing

Shelby,

I wasn't able to get a contractor to give me a price for Robert's exhibit. They said they haven't had time to look at it yet. I am hoping they can get me numbers next week.

1. Our fee would be \$23,800 for survey of the area, final design, construction staking, record drawings and GIS.

I will push them to get the costs for items 2 & 3 as soon as possible.

Thanks,
Mat

From: Shelby Moore <smoore@grantsvilleut.gov>
Sent: Thursday, January 16, 2025 2:27 PM
To: Mat Wangsgaard <mwangsgaard@focus-es.com>
Cc: Sherrie Broadbent <sbroadbent@grantsvilleut.gov>; ncritchlow@grantsvilleut.gov; Tysen Barker <tbarker@grantsvilleut.gov>; Markus Seat <mseat@grantsvilleut.gov>; gmillward@grantsvilleut.gov; Christy Montierth <cmontierth@grantsvilleut.gov>; Cody Christensen <cchristensen@grantsvilleut.gov>; Braydee Baugh <bbaugh@grantsvilleut.gov>; Jason Smith <firechief@grantsvilleut.gov>; Robert Rousselle <rrousselle@ensignutah.com>
Subject: Re: SR-138 Water Line Extension from Bluegrass to Clark Street - Concept Drawing

Caution: This email originated from outside of FOCUS. Do not click links or open attachments unless you are positive of the sender's identity and have verified the content is safe.

Mat,

Do you have an update on this request?



SHELBY MOORE
Planning & Zoning Administrator
Department of Public Works
Office: (435) 884-4604
Email: Smoores@Grantsvilleut.gov

This e-mail may contain privileged and confidential information intended for the use of the individual or entity named above. If the reader of this message is not the intended recipient, or the employee or agent responsible to deliver it to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you received this communication in error, please immediately notify sender by telephone or reply e-mail, do not use or disclose the contents to others, and delete the message and all attachments from your computer, system, &/or network.

On Thu, Jan 9, 2025 at 6:52 PM Robert Rousselle <rrousselle@ensignutah.com> wrote:

Mat,

Good evening. Following up on our phone conversation yesterday, 1/8, attached is a concept drawing showing the scope for the SR-138 Water Line Extension from Bluegrass to Clark Street. Per our discussion, please provide the following costs so the City can review and make a decision on these costs which would be paid by the City.

1. Engineering Design for SR-138 Extension to Clark Street
2. Construction Cost for Bluegrass Way and SR-138 Crossing Revisions
 - a. City will pay for upsize costs at this crossing.
 - b. As we discussed, this upsize will probably need to be updated on your drawings anyways as the plan is to connect and test fire hydrants after the connections are made at Bluegrass. If fire hydrants do have 1,000 gpm within The Highlands subdivision, then the Clark Street connection will not be made at this time.
3. Construction Cost from Bluegrass Way along SR-138 to Clark Street Connection

Please let me know if there are any questions. Please send me these costs by the end of next week, 1/17, if possible. Thank you.

Robert Roussele, P.E., LEED-AP | Senior Associate
Main 801.255.0529 | Cell 801.859.4759
rrouselle@ensignutah.com | ensignutah.com



CONFIDENTIALITY NOTICE: The content of this email is confidential, proprietary, and privileged. If you are not the intended recipient, please destroy it.

ENGINEERS ESTIMATE OF PROBABLE COSTS



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Project: Apple Street Water Line Replacement: Hale Street to Park Street Project No.: 11637
 By: Ensign Engineering and Land Surveying Checked By: Robert Rousselle
 Date: 3/10/2026

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	COST
SITE WORK					
1	Mobilization	1	L.S.	\$12,500.00	\$12,500.00
2	3-inch Asphalt	7,776	S.F.	\$2.90	\$22,550.40
3	6-inch Untreated Base Course	7,776	S.F.	\$2.00	\$15,552.00
4	Sawcut and Remove Asphalt or Concrete	7,776	S.F.	\$1.60	\$12,441.60
5	Mill and Overlay	11,040	S.F.	\$2.50	\$27,600.00
6	24-inch Collection Curb and Gutter w/Base Course	20	L.F.	\$78.00	\$1,560.00
7	Striping	1	L.S.	\$5,000.00	\$5,000.00
Sub Total					\$97,204.00
CULINARY WATER					
1	8-inch C-900 PVC Culinary Water Line with Fittings and Appurtenances	920	L.F.	\$65.00	\$59,800.00
2	Reconnect 3/4-inch Culinary Water Service	21	E.A.	\$1,500.00	\$31,500.00
3	Fire Hydrant Assembly (Complete)	2	E.A.	\$7,500.00	\$15,000.00
4	Connect to Existing Water Line	4	E.A.	\$5,000.00	\$20,000.00
Sub Total					\$126,300.00
MISCELLANEOUS ITEMS					
Traffic Control					
1	Traffic Control Implementation	1	L.S.	\$13,000.00	\$13,000.00
Erosion Control					
1	SWPPP/Maintenance	1	L.S.	\$11,000.00	\$11,000.00
Sub Total					\$24,000.00
Construction Subtotal					\$247,504.00
Contingency (15%)					\$37,125.60
Survey and Engineering Design and CM					\$35,000.00
Construction Total					\$319,629.60

ENGINEERS ESTIMATE OF PROBABLE COSTS



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Project: Blaine Avenue Water Line Replacement: Clark to Main
 By: Ensign Engineering and Land Surveying
 Date: 3/10/2026

Project No.: 11637
 Checked By: Robert Rousselle

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	COST
SITE WORK					
1	Mobilization	1	L.S.	\$14,000.00	\$14,000.00
2	3-inch Asphalt	8,932	S.F.	\$2.90	\$25,902.80
3	6-inch Untreated Base Course	8,932	S.F.	\$2.00	\$17,864.00
4	Sawcut and Remove Asphalt or Concrete	8,932	S.F.	\$1.60	\$14,291.20
5	Mill and Overlay	12,840	S.F.	\$2.50	\$32,100.00
6	6-inch Thick Concrete Sidewalk w/ Base Course	50	S.F.	\$26.00	\$1,300.00
7	24-inch Collection Curb and Gutter w/Base Course	10	L.F.	\$78.00	\$780.00
8	4-foot Concrete Waterway	10	L.F.	\$90.00	\$900.00
9	Striping	1	L.S.	\$2,500.00	\$2,500.00
Sub Total					\$109,638.00
CULINARY WATER					
1	8-inch C-900 PVC Culinary Water Line with Fittings and Appurtenances	1,070	L.F.	\$65.00	\$69,550.00
2	Reconnect 3/4-inch Culinary Water Service	17	E.A.	\$1,500.00	\$25,500.00
3	Fire Hydrant Assembly (Complete)	3	E.A.	\$7,500.00	\$22,500.00
4	2-inch Air/Vacuum Combination Valve Station	1	E.A.	\$2,500.00	\$2,500.00
5	Connect to Existing Water Line	5	E.A.	\$5,000.00	\$25,000.00
Sub Total					\$145,050.00
MISCELLANEOUS ITEMS					
Traffic Control					
1	Traffic Control Implementation	1	L.S.	\$13,000.00	\$13,000.00
Erosion Control					
1	SWPPP/Maintenance	1	L.S.	\$11,000.00	\$11,000.00
Sub Total					\$24,000.00
Construction Subtotal					\$278,688.00
Contingency (15%)					\$41,803.20
Survey and Engineering (Design and CM)					\$37,500.00
Construction Total					\$357,991.20

ENGINEERS ESTIMATE OF PROBABLE COSTS



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Project: Hale Street Water Line Replacement: North Street to 528

Project No.: 11637

By: Ensign Engineering and Land Surveying

Checked By: Robert Rousselle

Date: 3/10/2026

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	COST
SITE WORK					
1	Mobilization	1	L.S.	\$36,000.00	\$36,000.00
2	3-inch Asphalt	26,536	S.F.	\$2.90	\$76,954.40
3	6-inch Untreated Base Course	26,536	S.F.	\$2.00	\$53,072.00
4	Sawcut and Remove Asphalt or Concrete	26,536	S.F.	\$1.60	\$42,457.60
5	Mill and Overlay	38,904	S.F.	\$2.50	\$97,260.00
6	6-inch Thick Concrete Sidewalk w/ Base Course	50	S.F.	\$26.00	\$1,300.00
7	24-inch Collection Curb and Gutter w/Base Course	10	L.F.	\$78.00	\$780.00
8	4-foot Concrete Waterway	10	L.F.	\$90.00	\$900.00
9	Striping	1	L.S.	\$2,500.00	\$2,500.00
Sub Total					\$311,224.00
CULINARY WATER					
1	8-inch C-900 PVC Culinary Water Line with Fittings and Appurtenances	3,242	L.F.	\$65.00	\$210,730.00
2	Reconnect 3/4-inch Culinary Water Service	35	E.A.	\$1,500.00	\$52,500.00
3	Fire Hydrant Assembly (Complete)	7	E.A.	\$7,500.00	\$52,500.00
4	2-inch Air/Vacuum Combination Valve Station	1	E.A.	\$2,500.00	\$2,500.00
5	Connect to Existing Water Line	2	E.A.	\$5,000.00	\$10,000.00
Sub Total					\$328,230.00
MISCELLANEOUS ITEMS					
Traffic Control					
1	Traffic Control Implementation	1	L.S.	\$39,000.00	\$39,000.00
Erosion Control					
1	SWPPP/Maintenance	1	L.S.	\$33,000.00	\$33,000.00
Sub Total					\$72,000.00
Construction Subtotal					\$711,454.00
Contingency (15%)					\$106,718.10
Survey and Engineering (Design and CM)					\$60,000.00
Construction Total					\$878,172.10

ENGINEERS ESTIMATE OF PROBABLE COSTS



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Project: 16-inch Water Transmission Line Replacement: South Willow Tank to Marshall Well (Phase 1)
 By: Ensign Engineering and Land Surveying
 Date: 3/10/2026

Project No.: 11637
 Checked By: Robert Rousselle

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	COST
SITE WORK					
1	Mobilization	1	L.S.	\$102,000.00	\$102,000.00
2	Gravel Surface Course	46,500	S.F.	\$2.50	\$116,250.00
Sub Total					\$218,250.00
CULINARY WATER					
1	16-inch C-900 PVC Culinary Water Line with Fittings and Appurtenances	9,300	L.F.	\$140.00	\$1,302,000.00
2	Steel Casing Sleeve at Drainage Crossings	3	E.A.	\$64,000.00	\$192,000.00
3	Fire Hydrant Assembly (Complete)	8	E.A.	\$7,500.00	\$60,340.91
4	2-inch Air/Vacuum Combination Valve Station and 16-inch Isolation Valve	8	E.A.	\$16,500.00	\$132,750.00
5	Connect to Existing Water Line	3	E.A.	\$20,000.00	\$60,000.00
Sub Total					\$1,747,090.91
MISCELLANEOUS ITEMS					
Traffic Control					
1	Traffic Control Implementation	1	L.S.	\$52,000.00	\$52,000.00
Erosion Control					
1	SWPPP/Maintenance	1	L.S.	\$42,000.00	\$42,000.00
Sub Total					\$94,000.00
Construction Subtotal					\$2,059,340.91
Contingency (15%)					\$308,901.14
Survey and Engineering (Design and CM)					\$142,712.33
Construction Total					\$2,510,954.37

ENGINEERS ESTIMATE OF PROBABLE COSTS



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Project: 16-inch Water Transmission Line Replacement: Marshall Well to Twenty Wells Connection (Phase 2)
 By: Ensign Engineering and Land Surveying
 Date: 3/10/2026

Project No.: 11637
 Checked By: Robert Rousselle

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	COST
SITE WORK					
1	Mobilization	1	L.S.	\$110,000.00	\$110,000.00
2	Gravel Surface Course	54,000	S.F.	\$2.50	\$135,000.00
Sub Total					\$245,000.00
CULINARY WATER					
1	16-inch C-900 PVC Culinary Water Line with Fittings and Appurtenances	10,800	L.F.	\$140.00	\$1,512,000.00
2	Steel Casing Sleeve at Drainage Crossings	1	E.A.	\$64,000.00	\$64,000.00
3	Fire Hydrant Assembly (Complete)	9	E.A.	\$7,500.00	\$68,863.64
4	2-inch Air/Vacuum Combination Valve Station and 16-inch Isolation Valve	9	E.A.	\$16,500.00	\$151,500.00
5	Connect to Existing Water Line	2	E.A.	\$20,000.00	\$40,000.00
Sub Total					\$1,836,363.64
MISCELLANEOUS ITEMS					
Traffic Control					
1	Traffic Control Implementation	1	L.S.	\$55,000.00	\$55,000.00
Erosion Control					
1	SWPPP/Maintenance	1	L.S.	\$45,000.00	\$45,000.00
Sub Total					\$100,000.00
Construction Subtotal					\$2,181,363.64
Contingency (15%)					\$327,204.55
Survey and Engineering (Design and CM)					\$151,168.50
Construction Total					\$2,659,736.68

ENGINEERS ESTIMATE OF PROBABLE COSTS



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Project: 16-inch Water Transmission Line Replacement: Twenty Wells Connection to Sheep Lane (Phase 3)
 By: Ensign Engineering and Land Surveying
 Date: 3/10/2026

Project No.: 11637
 Checked By: Robert Rousselle

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	COST
SITE WORK					
1	Mobilization	1	L.S.	\$180,000.00	\$180,000.00
2	Gravel Surface Course	74,500	S.F.	\$2.50	\$186,250.00
				Sub Total	\$366,250.00
CULINARY WATER					
1	16-inch C-900 PVC Culinary Water Line with Fittings and Appurtenances	14,900	L.F.	\$140.00	\$2,086,000.00
2	Steel Casing Sleeve at Drainage Crossings	2	E.A.	\$64,000.00	\$128,000.00
3	Fire Hydrant Assembly (Complete)	12	E.A.	\$7,500.00	\$92,159.09
4	2-inch Air/Vacuum Combination Valve Station and 16-inch Isolation Valve	12	E.A.	\$16,500.00	\$202,750.00
5	Jack and Bore with Steel Casing at SR-112 and Sheep Lane	250	L.F.	\$1,600.00	\$400,000.00
6	12-inch PRV Station	1	E.A.	\$175,000.00	\$175,000.00
7	Connect to Existing Water Line	2	E.A.	\$20,000.00	\$40,000.00
				Sub Total	\$3,123,909.09
MISCELLANEOUS ITEMS					
Traffic Control					
1	Traffic Control Implementation	1	L.S.	\$90,000.00	\$90,000.00
Erosion Control					
1	SWPPP/Maintenance	1	L.S.	\$71,500.00	\$71,500.00
				Sub Total	\$161,500.00
				Construction Subtotal	\$3,651,659.09
				Contingency (15%)	\$547,748.86
				Survey and Engineering (Design and CM)	\$238,453.34
				Construction Total	\$4,437,861.29

ENGINEERS ESTIMATE OF PROBABLE COSTS



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Project: Clark Street Water Line Extension Project No.: 11637
 By: Ensign Engineering and Land Surveying Checked By: Robert Rousselle
 Date: 3/10/2026

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	COST
SITE WORK					
1	Mobilization	1	L.S.	\$20,000.00	\$20,000.00
2	3-inch Asphalt	4,200	S.F.	\$2.90	\$12,180.00
2	6-inch Untreated Base Course	4,200	S.F.	\$2.00	\$8,400.00
2	Sawcut and Remove Asphalt or Concrete	4,200	S.F.	\$1.60	\$6,720.00
2	Mill and Overlay	6,144	S.F.	\$2.50	\$15,360.00
2	Striping	1	L.S.	\$2,500.00	\$2,500.00
Sub Total					\$65,160.00
CULINARY WATER					
1	12-inch C-900 PVC Culinary Water Line with Fittings and Appurtenances	612	L.F.	\$80.00	\$48,960.00
2	Reconnect 3/4-inch Culinary Water Service	4	E.A.	\$1,500.00	\$6,000.00
3	Fire Hydrant Assembly (Complete)	2	E.A.	\$7,500.00	\$15,000.00
4	10-inch PRV Station	1	E.A.	\$100,000.00	\$100,000.00
5	Jack and Bore with Steel Casing at SR-138 and Clark Street	100	L.F.	\$1,200.00	\$120,000.00
6	Connect to Existing Water Line	2	E.A.	\$7,500.00	\$15,000.00
Sub Total					\$304,960.00
MISCELLANEOUS ITEMS					
Traffic Control					
1	Traffic Control Implementation	1	L.S.	\$10,000.00	\$10,000.00
Erosion Control					
1	SWPPP/Maintenance	1	L.S.	\$7,500.00	\$7,500.00
Sub Total					\$17,500.00
Construction Subtotal					\$387,620.00
Contingency (15%)					\$58,143.00
Survey and Engineering (Design and CM)					\$34,536.94
Construction Total					\$480,299.94

ENGINEERS ESTIMATE OF PROBABLE COSTS



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Project: Quirk Street Water Line Replacement: Cherry Street to Durfee Street Project No.: 11637
 By: Ensign Engineering and Land Surveying Checked By: Robert Rousselle
 Date: 3/10/2026

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	COST
SITE WORK					
1	Mobilization	1	L.S.	\$16,000.00	\$16,000.00
2	3-inch Asphalt	9,900	S.F.	\$2.90	\$28,710.00
3	6-inch Untreated Base Course	9,900	S.F.	\$2.00	\$19,800.00
4	Sawcut and Remove Asphalt or Concrete	9,900	S.F.	\$1.60	\$15,840.00
5	Mill and Overlay	14,400	S.F.	\$2.50	\$36,000.00
6	24-inch Collection Curb and Gutter w/Base Course	20	L.F.	\$78.00	\$1,560.00
7	Striping	1	L.S.	\$5,000.00	\$5,000.00
Sub Total					\$122,910.00
CULINARY WATER					
1	8-inch C-900 PVC Culinary Water Line with Fittings and Appurtenances	1,200	L.F.	\$65.00	\$78,000.00
2	Reconnect 3/4-inch Culinary Water Service	10	E.A.	\$1,500.00	\$15,000.00
3	Fire Hydrant Assembly (Complete)	5	E.A.	\$7,500.00	\$37,500.00
4	Connect to Existing Water Line	7	E.A.	\$5,000.00	\$35,000.00
Sub Total					\$165,500.00
MISCELLANEOUS ITEMS					
Traffic Control					
1	Traffic Control Implementation	1	L.S.	\$15,500.00	\$15,500.00
Erosion Control					
1	SWPPP/Maintenance	1	L.S.	\$12,500.00	\$12,500.00
Sub Total					\$28,000.00
Construction Subtotal					\$316,410.00
Contingency (15%)					\$47,461.50
Survey and Engineering Design and CM					\$45,000.00
Construction Total					\$408,871.50

Total Project Estimate

Project Name: **Burmeister and Vegas Water Pipeline**

Engineer: **Civil Proj-Ex, Inc**

Location: **Grantsville, Utah**

Stage of Design: **100%**

ITEM NUMBER	CWS #	DESCRIPTION	UNIT	UNIT QTY	UNIT COST	TOTAL
	1	General Requirements				
0101	01 31 19	Preconstruction Conference and Progress Schedule	LS	1.0	\$2,500.00	\$ 2,500.00
0102	01 45 00	Quality Control (materials testing and documentation)	LS	1.0	\$9,170.14	\$ 9,170.14
0103	01 55 26	Traffic Control	LS	1.0	\$5,486.41	\$ 5,486.41
0104	01 57 00	Temporary Controls (SWPPP, Erosion Control)	LS	1.0	\$4,389.13	\$ 4,389.13
0105	01 71 13	Mobilization and Demobilization	LS	1.0	\$35,269.76	\$ 35,269.76
0107	01 78 39	Project Record Documents	LS	1.0	\$3,526.98	\$ 3,526.98
0108	01 78 50	Closeout Procedures	LS	1.0	\$1,959.43	\$ 1,959.43
		TOTAL GENERAL REQUIREMENTS				\$ 62,301.83
	2	EXISTING CONDITIONS				
0208	02 41 14	Pavement Removal	SF	7238.0	\$0.98	\$ 7,093.24
		TOTAL EXISTING CONDITIONS				\$ 7,093.24
	31	EARTHWORK				
3101	31 05 13	Trench Foundation Stabilization Material	CY	290.8	\$38.50	\$ 11,196.37
3104	31 11 00	Site Clearing	LS	1.0	\$37,025.00	\$ 37,025.00
3105	31 23 16	Locate Utilities	LS	1.0	\$5,000.00	\$ 5,000.00
		TOTAL EARTHWORK				\$ 53,221.37
	33	UTILITIES				
3303	33 05 25	Unpaved Road Restoration	SF	2993.0	\$0.86	\$ 2,573.98
3304	33 05 25	Pavement Restoration, PG64-22-DM-1/2	SF	7238.0	\$3.65	\$ 26,418.70
3305	33 05 07	PVC Pipe, 8-inch, C900 SDR 18 with import backfill	LF	14	\$43.25	\$ 605.50
3306	33 05 07	PVC Pipe, 12-inch, C900 SDR 18 with import backfill	LF	1565	\$55.35	\$ 86,622.75
3307	33 05 07	PVC Pipe, 8-inch, C900 SDR 18	LF	81	\$37.00	\$ 2,997.00
3308	33 05 07	PVC Pipe, 12-inch, C900 SDR 18	LF	6192	\$49.00	\$ 303,408.00
3310	33 12 16	Gate Valve, 12-inch, AWWA C509	EA	17.0	\$5,470.00	\$ 92,990.00
3311	33 12 16	Gate Valve, 8-inch, AWWA C509	EA	4.0	\$3,090.00	\$ 12,360.00
3312	33 12 19	Fire Hydrant, AWWA C502	EA	13.0	\$7,265.00	\$ 94,445.00
3333	33 12 33	Potable Water Service, 1-inch, CIY STD	EA	3.0	\$2,025.00	\$ 6,075.00
3345	34 41 00	CPP Storm Drain Pipe, 15-inch, APWA 382	LF	80.0	\$46.00	\$ 3,680.00
3349	34 41 00	"V" Ditch 1 FT Deep w/ 4:1 (H:V) Side Slopes	LF	4140.0	\$7.00	\$ 28,980.00
		TOTAL UTILITIES				\$ 661,155.93

Divisions Total \$ 783,772.37
 Contingency @ 20% \$ 156,754.47
Estimate Total \$ 940,526.85

ENGINEERS ESTIMATE OF PROBABLE COSTS



These costs are opinions only and should not be considered as a formal construction estimate. These quantities and costs are based on information derived from the design drawings and are therefore subject to change. Ensign has no control over costs of labor, materials, bidding procedures, unidentified field conditions, or other factors. Ensign cannot and does not make any warranty, promise, or guarantee as to the accuracy of this estimate.

Project: Centennial Way Water Line Project No.: 11637
 By: Ensign Engineering and Land Surveying Checked By: Robert Rousselle
 Date: 3/10/2026

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	COST
SITE WORK					
1	Mobilization	1	L.S.	\$15,000.00	\$15,000.00
2	3-inch Asphalt	6,552	S.F.	\$2.90	\$19,000.80
2	6-inch Untreated Base Course	6,552	S.F.	\$2.00	\$13,104.00
2	Sawcut and Remove Asphalt or Concrete	6,552	S.F.	\$1.60	\$10,483.20
2	Mill and Overlay	9,720	S.F.	\$2.50	\$24,300.00
2	Striping	1	L.S.	\$2,500.00	\$2,500.00
Sub Total					\$84,388.00
CULINARY WATER					
1	12-inch C-900 PVC Culinary Water Line with Fittings and Appurtenances	810	L.F.	\$80.00	\$64,800.00
2	Reconnect 3/4-inch Culinary Water Service	2	E.A.	\$1,500.00	\$3,000.00
3	Fire Hydrant Assembly (Complete)	1	E.A.	\$7,500.00	\$7,500.00
4	10-inch PRV Station	1	E.A.	\$100,000.00	\$100,000.00
5	Connect to Existing Water Line	2	E.A.	\$7,500.00	\$15,000.00
Sub Total					\$190,300.00
MISCELLANEOUS ITEMS					
Traffic Control					
1	Traffic Control Implementation	1	L.S.	\$7,500.00	\$7,500.00
Erosion Control					
1	SWPPP/Maintenance	1	L.S.	\$6,000.00	\$6,000.00
Sub Total					\$13,500.00
Construction Subtotal					\$288,188.00
Contingency (15%)					\$43,228.20
Survey and Engineering (Design and CM)					\$25,677.55
Construction Total					\$357,093.75

NORTHSTAR 2.0 MG TANK No. 1

3.02

3.02 *Unit Price Bids*

A. Bidder will perform the following Work at the indicated unit prices:

BID SCHEDULE					
Item No.	Item Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
1-1	Mobilization	L.S.	1	XXX	200,000.00
1-2	Quality Control Testing	L.S.	1	XXX	50,000.00
1-3	Survey Staking	L.S.	1	XXX	10,000.00
1-4	Clearing and Grubbing	L.S.	1	XXX	5,475.00
1-5	Tank Excavation and Site Grading	L.S.	1	XXX	265,000.00
1-6	Seeding (Plan Quantity)	Acre	1.44	7,187.50	10,350.00
1-7	6 Foot Chain Link Fencing	L.F.	975	50.00	48,750.00
1-8	Chain Link Double Gate 16 Feet	Each	1	2,050.00	2,050.00
1-9	Chain Link Single Gate 4 Feet	Each	1	500.00	500.00
1-10	Scada and Telemetry	L.S.	1	XXX	47,725.00
1-11	Concrete Headwall	L.S.	1	XXX	17,465.00
1-12	Riprap	C.Y.	10	351.00	3,510.00
1-13	16-Inch Dia. PVC Inlet/Outlet Pipe	L.F.	117	635.00	74,295.00
1-14	16-Inch Butterfly Valve	Each	3	15,630.00	46,890.00
1-15	8' x 18.75' Deep Precast Concrete Valve Vault (Inlet/Outlet Valves)	Each	1	32,000.00	32,000.00
1-16	8' x24.75' Deep Precast Concrete Valve Vault (Drain Valve)	Each	1	38,000.00	38,000.00
1-17	Inlet/Outlet Vault Piping (Detail C-501/D5)	L.S.	1	XXX	99,580.00
1-18	Drain Vault Piping (Detail C-501/A1)	L.S.	1	XXX	67,590.00
1-19	16-Inch Dia. PVC C900 Overflow Pipe	L.F.	805	170.00	136,850.00
1-20	12-Inch Gate Valve	Each	1	8,700.00	8,700.00
1-21	Air Valve Assembly	Each	1	8,430.00	8,430.00
1-22	12-Inch PVC C900 Drain Pipe	L.F.	44	167.00	7,348.00
1-23	16" Steel to PVC Coupler with Cathodic Protection	Each	3	7,400.00	22,200.00
1-24	16" 22.5 Bend with Cathodic Protection	Each	1	3,600.00	3,600.00
1-25	16" 11.25 Bend with Cathodic Protection	Each	1	3,350.00	3,350.00
1-26	16" 45/22.5 Bends with Cathodic Protection	Each	1	3,400.00	3,400.00
1-27	Cathodic Test Station for Steel Pipes	Each	3	22,700.00	68,100.00
Base Bid / Schedule 1 - Subtotal					1,281,158.00

(Remainder of page intentionally left blank.)

ADDITIVE ALTERNATIVE NO. 1					
2-1	2-Million Gallon Concrete Water Tank - Cast-in-Place Concrete Tank	L.S.	1	XXX	1,737,712.00
Additive Alternate No. 1 - Subtotal					1,737,712.00
Total Bid Price (Base + Alt No 1)					3,018,870.00
ADDITIVE ALTERNATIVE NO. 2					
2-2	Xypex Admixture for a Cast-in-Place Concrete Tank	L.S.	1	XXX	42,000.00
Additive Alternate No. 2 - Subtotal					42,000.00
Total Bid Price (Base + Alt No 1 & 2)					3,060,870.00
ADDITIVE ALTERNATIVE NO. 3					
3-1	2-Million Gallon Concrete Water Tank - AWWA D110 Type III Pretensioned Concrete Tank	L.S.	1	XXX	
Additive Alternate No. 3 - Subtotal					
Total Bid Price (Base + Alt No 3)					
ADDITIVE ALTERNATIVE NO. 4					
4-1	2-Million Gallon Concrete Water Tank - AWWA D115 Posttensioned Concrete Tank	L.S.	1	XXX	1,968,690.00
Additive Alternate No. 4 - Subtotal					1,968,690.00
Total Bid Price (Base + Alt No 4)					3,249,848.00

- B. Bidder acknowledges that:
- | | |
|-------------------------|-----------------------|
| Change Order No. 2 | (\$5,000.00) |
| Design | \$110,375.88 |
| Construction Management | \$32,000.00 |
| Project Total | \$3,387,223.88 |
1. each Bid Unit Price includes an amount for Contractor's overhead and profit for each separately identified item, and
 2. estimated quantities are not guaranteed and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Work will be based on actual quantities, determined as provided in the Contract Documents.

ARTICLE 4—BASIS OF BID—COST-PLUS FEE - DELETED

ARTICLE 5—PRICE-PLUS-TIME BID - DELETED

ARTICLE 6—TIME OF COMPLETION

6.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.

6.02 Deleted.

Appendix E Drinking Water Calculations

Single Family 5 Bed, 3 Bath = 1 ERC

Fixture	Fixture Count	Water Supply Fixture Units	Total Fixture Units
Kitchen sink, Private, Faucet	1	1.4	1.4
Dishwashing machine, Private, Automatic	1	1.4	1.4
Washing machine (8 lb), Private, Automatic	1	1.4	1.4
Exterior hose bib	3	2.2	6.6
Shower head, Private, Mixing valve	3	1.4	4.2
Lavatory, Private, Faucet	3	0.7	2.1
Water closet, Private, Flushtank	3	2.2	6.6
Total			24

MEMORANDUM



Date: March 21, 2025

To: Chris Martin and Mike Newberry
Utah Division of Drinking Water
195 N 1950 W
Salt Lake City, Utah 84116

Transmitted Via Email: cmartin@utah.gov, mnewberry@utah.gov
CC: cmontierth@grantsvilleut.gov, mseat@grantsvilleut.gov

From: Conor Dunkel, PE
Robert Rousselle, PE

**RE: Grantsville Engineering Report to Evaluate Minimum Sizing Standards
Grantsville, Utah
Ensign Engineering Project No.: 11637**

Ensign Engineering and Land Surveying has prepared this engineering report to assess Grantsville City's System-Specific Minimum Water Sizing Standards set by the Utah Department of Environmental Quality Division of Drinking Water (DDW). Calculations for current demands, methodology, data used, and assumptions are included.

1 - Current Standards

The current Grantsville City System-Specific Minimum Water Sizing Standards set in 2022 are:

Peak Day Source (Indoor and Outdoor) Demand (gal/day/ERC) – 1,416 gal/day/ERC
Average Annual (Indoor and Outdoor) Demand (gal/yr/ERC) – 201,531 gal/yr/ERC
Equalization Storage (gal/ERC) – 807 gal/ERC
Fire Storage (gal) – 492,000 gal

The current standards were calculated based on source production for indoor water usage and state standards for outdoor irrigation assuming 0.12-acres per ERC. Calculations for outdoor peak day demand and equalization storage assume irrigation will be supplied by City municipal water and not secondary water due to Grantsville Irrigation Company's reservoir being drawn down during drought years and users switching to municipal water provided by the City for irrigation.

2 – Number of Equivalent Residential Connections (ERCs)

The number of ERCs previously submitted to the Division of Drinking Water for 2016, 2017, 2018, 2019, 2020, and 2021 were 5,028; 5,340; 5,345, 5,206, 5,559, and 5,975 respectively. Tables 2-1 through 2-3 show the calculations for number of ERCs in 2022, 2023, and 2024 where demographics and water usage were calculated from monthly water meter use reports.

SANDY
45 W 10000 S, STE 500
Sandy, UT 84070
P: 801.255.0529

LAYTON
919 North 400 West
Layton, UT 84041
P: 801.547.1100

CEDAR CITY
88 E Fiddler's Canyon Rd, STE 210
Cedar City, UT 84721
P: 435.865.1453

TOOELE
169 N. Main St, Unit 1
Tooele, UT 84074
P: 435.843.3590

RICHFIELD
225 N 100 E
Richfield, UT 84701
P: 435.896.2983

Table 2-1: 2022 ERCs

Service Connection Type	Service Connections	Units	Usage (kgal)	ERCs	Annual Unit Demand (kgal/ERC)
Residential	4,121	4,123	399,293	4,123	96.85
Multi-Unit	47	276	12,904	152	
Trailer	10	223	25,428	252	
Commercial	106	144	97,571	1,140	
Church	10	11	4,773	102	
School	7	12	4,455	63	
Construction Water	17	17	9,211	82	
City Rate	5	34	34,251	292	
Totals	4,323	4,840	587,886	6,206	

Table 2-2: 2023 ERCs

Service Connection Type	Service Connections	Units	Usage (kgal)	ERCs	Annual Unit Demand (kgal/ERC)
Residential	4,267	4,274	384,155	4,274	89.88
Multi-Unit	47	291	12,335	160	
Trailer	9	216	20,591	245	
Commercial	107	146	91,529	1,156	
Church	10	11	6,145	102	
School	7	10	4,332	52	
Construction Water	13	13	5,703	63	
City Rate	5	34	28,808	292	
Totals	4,465	4,995	553,598	6,344	

Table 2-3: 2024 ERCs

Service Connection Type	Service Connections	Units	Usage (kgal)	ERCs	Annual Unit Demand (kgal/ERC)
Residential	4,495	4,503	461,244	4,503	102.43
Multi-Unit	46	290	12,698	142	
Trailer	9	212	26,256	240	
Commercial	109	152	109,186	1,117	
Church	10	11	6,525	50	
School	7	12	4,866	49	
Construction Water	18	18	6,813	121	
City Rate	5	33	46,394	349	
Totals	4,699	5,231	673,982	6,571	

Table 2-4 summarizes the number of ERCs from 2016 through 2024.

Table 2-4: Summary of ERCs

Year	ERCs
2016	5,028
2017	5,340
2018	5,345
2019	5,206
2020	5,559
2021	5,975
2022	6,206
2023	6,344
2024	6,571

3 – Average Day Demand

The average day demand for indoor use was calculated using the City's monthly water source data for November through March of 2016 to 2024 and shown in Appendix B. The mean indoor average day demand is 176 gpd per ERC and the maximum is 193 as shown in Table 3-1.

Table 3-1 Indoor Average Day Demand

Year	ERCs	Calculated November-March Average Day Indoor Demand (gpd)	Average Day Indoor Demand (gpd/ERC)
2016	5,028	923,673	183.7
2017	5,340	868,378	162.6
2018	5,345	894,044	167.3
2019	5,206	915,276	175.8
2020	5,559	1,015,736	182.7
2021	5,975	965,278	161.6
2022	6,206	1,092,774	176.1
2023	6,344	1,225,890	193.2
2024	6,571	1,108,958	168.8

(Maximum 193.2)

(Mean 175.7)

The current level of service set in 2022 is 195 gpd per ERC. The maximum average day demand is 193.2 gpd per ERC so the average day indoor demand of 195 gpd per ERC will continue to be used and will be adjusted in the future if future trends indicate an increase.

The average day demand for outdoor use was not calculated using the City's monthly water source data due to the variability of secondary water supplied by the Grantsville Irrigation Company. Instead, the outdoor demand was determined using the State Engineer's irrigation duty and assumptions about the City.

The State Engineer's irrigation duty of 4.0 acre-feet per irrigated acre per year with an irrigation efficiency of 50% was converted to 3.33 acre-feet per irrigated acre when considering an efficiency of 60% for sprinkler and drip irrigation systems. The previously determined average irrigated area of 0.12 acres per ERC with the irrigation season of 213 days per Utah Administrative Code R309-510-7 was used resulting in an outdoor average day demand of 612 gpd per ERC.

Table 3-2 Outdoor Average Day Demand

Irrigation Demand (ac-ft/irr. ac/yr)	Average Irrigated Area (ac/ERC)	Irrigated Days per Year	Outdoor Demand (gpd/ERC)
3.33	0.12	213	612

The average day indoor and outdoor demand, is $195 \text{ gpd/ERC} + 612 \text{ gpd/ERC} = 807 \text{ gpd/ERC}$, and is also the equalization storage. Assuming 213 days of outdoor water use and 365 days of indoor water use equates to an average annual demand of 201,531 gallons per year per ERC ($195 \text{ gpd/ERC} \times 365 + 612 \text{ gpd/ERC} \times 213 = 71,175 \text{ gal/yr/ERC} + 130,356 \text{ gal/yr/ERC} = 201,531 \text{ gal/yr/ERC} = 0.218 \text{ AF/yr/ERC} + 0.400 \text{ AF/yr/ERC} = 0.618 \text{ AF/yr/ERC}$).

4 – Peak Day Demand

The peak day demand for indoor use was calculated using the City's daily source water data for 2020 through 2024 and is not available earlier than 2020. Outlier data points for 2024 were excluded from the calculations when meter readings exceeded pump capacity or indicated unusually high water usage. Data for the months of November through March was analyzed to represent indoor usage when it is expected there is no irrigation and is shown in Appendix C. Table 4-1 shows the maximum indoor peak day demand of 281 gpd per ERC and a mean of 256 gpd per ERC.

Table 4-1 Indoor Peak Day Demand

Year	ERCs	Calculated November-March Peak Day Indoor Demand (gpd)	Peak Day Indoor Demand (gpd/ERC)
2020	5,559	1,212,300	218.1
2021	5,975	1,530,200	256.1
2022	6,206	1,745,300	281.2
2023	6,343	1,718,700	271.0
2024	6,571	1,657,400	252.2

(Maximum 281.2)

(Mean 255.7)

The current level of service set in 2022 is 275 gpd per ERC peak day indoor demand will continue to be used for the City. Year 2022 had greater peak day demand than 275 gpd, but the preceding 2 years were closer to 275 gpd. The City will continue to use 275 gpd for indoor peak day demand and will adjust if future trends indicate an increase.

The outdoor peak day demand was calculated using a net irrigation demand of 3.96 gpm per

irrigated acre per Utah Administrative Code R309-510-7 for Map Zone 4. A 60% irrigation efficiency and 0.12 irrigated acres per ERC were assumed, which were the same assumptions utilized for the average day demand calculations. A 60% efficiency equates to a gross irrigation demand of 6.6 gpm per irrigated acre.

Table 4-2 Outdoor Peak Day Demand

Irrigation Demand (gpm/irr. ac)	Average Irrigated Area (ac/ERC)	Outdoor Demand (gpd/ERC)
6.6	0.12	1,141

The peak day indoor and outdoor demand is 275 gpd/ERC + 1,141 gpd/ERC = 1,416 gpd per ERC.

5 – Fire Storage

As Grantsville City continues to grow including commercial development with larger buildings, the fire flow of 2,050 gpm for 4 hours (492,000 gallons) set in 2022 remains the required level of service. Discussions with Grantsville's Fire Chief Jason Smith confirmed that this is an adequate requirement to set for commercial buildings in other areas of the City as well.

Appendix A – References

1. Grantsville City Source and Water Usage Data, Grantsville City.
2. Grantsville Engineering Report to Update Minimum Sizing Standards Memo, Ensign Engineering and Land Surveying, dated March 8, 2022.
3. Utah Administrative Code Title R309-510-7. <https://casetext.com>
4. Lakeview Business Park Culinary Water and Wastewater Master Plan. AQUA Engineering, dated August 6, 2020.

Appendix B – Average Day Source Production Data

Month, Year	Total Water Use (gal)	Average Daily Water Use (gpd)
January, 2016	24,429,000	788,032
February, 2016	40,080,000	1,382,069
March, 2016	25,100,000	809,677
November, 2016	25,025,000	834,167
December, 2016	24,937,000	804,419
5-month avg:	27,914,200	923,673
January, 2017	27,183,000	876,871
February, 2017	24,723,000	882,964
March, 2017	27,304,000	880,774
November, 2017	26,452,000	881,733
December, 2017	25,406,000	819,548
5-month avg:	26,213,600	868,378
January, 2018	29,591,000	954,548
February, 2018	24,087,000	860,250
March, 2018	25,668,000	828,000
November, 2018	27,631,000	921,033
December, 2018	28,098,000	906,387
5-month avg:	27,015,000	894,044
January, 2019	29,771,000	960,355
February, 2019	26,596,000	949,857
March, 2019	27,769,000	895,774
November, 2019	23,413,000	780,433
December, 2019	30,688,783	989,961
5-month avg:	27,647,557	915,276
January, 2020	31,354,190	1,011,425
February, 2020	25,775,376	888,806
March, 2020	34,882,618	1,125,246
November, 2020	33,982,520	1,132,751
December, 2020	28,534,024	920,452
5-month avg:	30,905,746	1,015,736
January, 2021	27,393,864	883,673
February, 2021	25,298,272	903,510
March, 2021	32,604,168	1,051,747
November, 2021	30,671,000	1,022,367
December, 2021	29,917,904	965,094
5-month avg:	29,177,042	965,278
January, 2022	30,531,200	984,877
February, 2022	27,935,400	997,693
March, 2022	33,147,700	1,069,281

Month, Year	Total Water Use (gal)	Average Daily Water Use (gpd)
November, 2022	37,594,300	1,253,143
December, 2022	35,925,100	1,158,874
5-month avg:	33,026,740	1,092,774
January, 2023	39,636,700	1,278,603
February, 2023	38,866,000	1,388,071
March, 2023	41,480,700	1,338,087
November, 2023	31,693,500	1,056,450
December, 2023	33,115,400	1,068,239
5-month avg:	36,958,460	1,225,890
January, 2024	31,407,800	1,013,155
February, 2024	28,658,800	988,234
March, 2024	33,240,000	1,072,258
November, 2024	38,989,700	1,299,657
December, 2024	36,316,000	1,171,484
5-month avg:	33,722,460	1,108,958

Appendix C – Peak Day Source Production Data

Month, Year	Peak Day Total Use (kgal)
January, 2020	N/A
February, 2020	N/A
March, 2020	1,023.9
November, 2020	1,212.3
December, 2020	1,125.4
Max, 2020:	1,212.3
January, 2021	1,147.7
February, 2021	1,065.1
March, 2021	1,394.6
November, 2021	1,171.7
December, 2021	1,530.2
Max, 2021:	1,530.2
January, 2022	1,094.2
February, 2022	1,123.1
March, 2022	1,518.6
November, 2022	1,623.7
December, 2022	1,745.3
Max, 2022:	1,745.3
January, 2023	1,543.1
February, 2023	1,610.8
March, 2023	1,718.7
November, 2023	1,229.4
December, 2023	1,269.7
Max, 2023:	1,718.7
January, 2024	1,413.9
February, 2024	1,257.9
March, 2024	1,382.4
November, 2024	1,657.4
December, 2024	1,368.2
Max, 2024:	1,657.4

Appendix F Public Safety Calculations and Police Department Multiyear Plan



Grantsville City Police Department

Chief Robert Sager

50 North Bowery Street, Grantsville, UT 84029
(435)884.6881 Fax (435)884.0237



Multiyear plan

Summary

This guide was developed to assist in identifying and achieving departmental goals and objectives over the next five years 2024-2029. We looked at the police department facilities, current staffing levels for both civilian and sworn officers, studied the anticipated workload, population trend, personnel levels, capital improvements and equipment needs. This plan should be fluid and adjusted as needed to best serve our community and operational objectives.

Police Department Facilities Overview

Grantsville City contracted with Ensign Engineering to develop a Capital Facilities Plan. In that plan dated May of 2022, they provided an accurate summary of the Grantsville Justice Center. That plan is summarized as follows;

The Grantsville City Police Department operates from the Grantsville City Justice Center located at 50 North Bowery Street. The building is shared with the Grantsville City Justice Court (constructed in 2017) and consists of 12,947 square feet. The Police Department portion of the building occupies approximately 8,450 square feet and includes a one-vehicle sally port, two holding cell/interview rooms, a patrol operations room, two patrol supervisor offices, an evidence room, an evidence packaging room, a kitchen, a briefing room, locker room with two bathrooms/showers, an exercise room, an investigations area with three cubicles, two interview rooms, and two supervisor offices, a front desk reception area with four cubicles and a Chief's office, a records area, a lobby with an interview room and a multi-purpose room used for training. There is also a detached two-bay garage for vehicle and equipment storage and maintenance.

The Police Department is also tasked with operating, maintaining and staffing the Grantsville City Animal Shelter. There are current capital improvement plans for the design of a new Animal Shelter.

The Police Department operates a firearms range off the Mormon Trail, which consists of a pistol range, rifle range, competition shooting range, pavilion with picnic tables, and a storage compartment. Several law enforcement agencies use the range. However, recent construction of residential homes surrounding the range will soon render it unsafe to use. Outside agencies have been denied access to the range because of the encroaching residential homes.



Grantsville City Police Department

Chief Robert Sager

50 North Bowery Street, Grantsville, UT 84029

(435)884.6881 Fax (435)884.0237



Police Department Staffing Overview

As of June 2024, the Police Department is staffed as follows;

- 20 full-time officers, 1 full-time Administrative Assistant, 1 full-time and 1-part time Record Clerk, 1 full-time Victim Advocate, 1 part-time Animal Control Officer, 9-part time Crossing Guards and 4 Victim Advocate Volunteers.

The hierarchy of the sworn officer division of the police department consists of the following; Chief of Police, (1) Investigations Lieutenant, (1) Patrol Lieutenant, (1) Investigations Sergeant, (2) Patrol Sergeants, (3) Detectives including the School Resource Officer, 12 Patrol Officers and (1) K-9.

Foundational Goals and operational objectives

Training.

As a department we need to continue to provide continued education opportunities for our sworn and non-sworn staff while maintaining all Federal and State certificates. We will continually evaluate and improve department training programs and promote our staff to attend specialized training. Our training committee is dedicated to identifying, developing and implementing the tools needed for our staff to be safe and successful while providing quality service to the community that we serve. The Training Committee will be responsible for updating and maintaining all department lesson plans to adhere with current legislation, policy and best practice. The department has existing policy that account for at minimum an annual evaluation of the training program. The training committee will meet quarterly at minimum.

Professional Development.

Professional development, we will improve and develop clear career paths for all sworn and non-sworn staff at every level. The leaders today will mentor their subordinates, promote training, and support growth and advancement among staff.

Accountability

Our professional standards division will be fair, firm and consistent while ensuring integrity and adherence to ethical and policy standards.

Recruitment, hiring and retention.

First and foremost, Chief Sager believes we need to continue to invest in our people. Retaining staff has been a major hurdle over the years and is not unique to this department. Leadership



Grantsville City Police Department

Chief Robert Sager

50 North Bowery Street, Grantsville, UT 84029
(435)884.6881 Fax (435)884.0237



coupled with competitive benefits and pay will be paramount in the years to come. Over the next five years we should strive to improve attrition. Under the leadership of Chief Sager appointed in March of 2023 the attrition has slowed.

The last fiscal Year July 1, 2023 to July 1, 2024 there were two people who left the department, but they were terminated for cause. Prior to that, from 2017 to July 1, 2023, the department attrition averaged was 3.16 officers annually with an overall 95% turnover rate. It is imperative to build and constantly work to maintain a fully staffed police department.

The department needs to focus on continued recruitment efforts to attract qualified candidates for future and vacant roles. Recruitment correlates with improving benefits and pay, but deserves dedication from staff. Over the next year the department should develop and implement a recruitment committee while administrators strive to improve benefits and pay to remain competitive.

Community outreach and programs.

The department should focus on community oriented projects and partnerships. It is imperative that all staff engage the community to solve problems and improve trust. The department does not currently have a community outreach committee. Within the next year, the department should develop and implement a community outreach team.

There are two programs that have been partially implemented, RAD Women and NOVA Principals. The department should strive to fully implement these programs by July 1, 2025. Other programs such as a Citizen Police Academy and public education classes related to police use of force and other topics should be developed and offered to the public.

Transparency

Our police department will be dedicated to providing prompt and accurate information to the public. To do this we should proactively release month reports to include summaries of use of force incidents, citizen complaints, internal investigations, and the department budget. The department website and social media accounts should be revamped with updated information, links to state crime dashboards, crime mapping and prevention information.

Accreditation

The Grantsville City Police Department achieved accreditation from the Utah Chiefs of Police Association July of 2022. Our department is dedicated to maintaining accreditation by complying with all standards required of the department by The Utah Chiefs of Police Association.



Grantsville City Police Department

Chief Robert Sager

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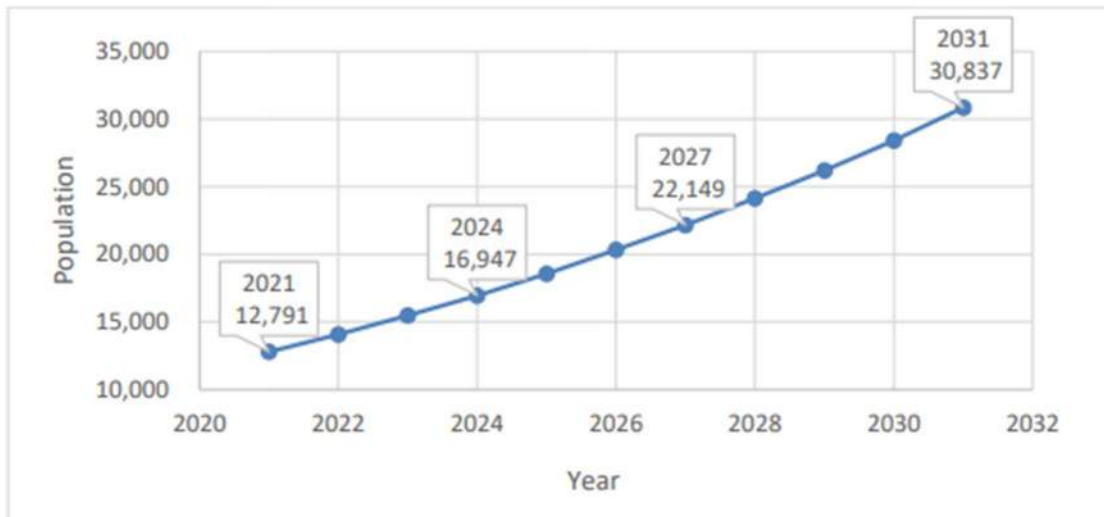


Anticipated workload and population trends

Grantsville City is projected to experience steady and consistent growth over the next ten years. As part of Ensign Engineering’s Capital Facility Plan (2022) they provided a ten-year population estimate. The graph provided by Ensign Engineering is included below (Figure E1).

In addition to population there are multiple warehouses and businesses projected to come into the city as part of the Twenty Wells Inland Port Projects. These businesses can increase the daytime population above the residential population.

Figure E1: Grantsville 10-Year Population Projection



Anticipated Workload

Year over year we have had an increased number of CAD calls. A CAD call includes everything that is populated, by dispatch, in Grantsville jurisdiction through our record management system. Generally, all CAD calls are handled by the Patrol Division and include officers’ proactive workload.

From 2017 to 2020 the average CAD calls per year was 7419. The average CAD calls per year from 2021 to 2023 is 9873 or a 33% increase from the previous three-year average. Over the next three years we anticipate steady population growth from 16,947 to 22,149 or a 31% increase. From year 2021 to 2023 we experienced 21% increase in population.



Grantsville City Police Department

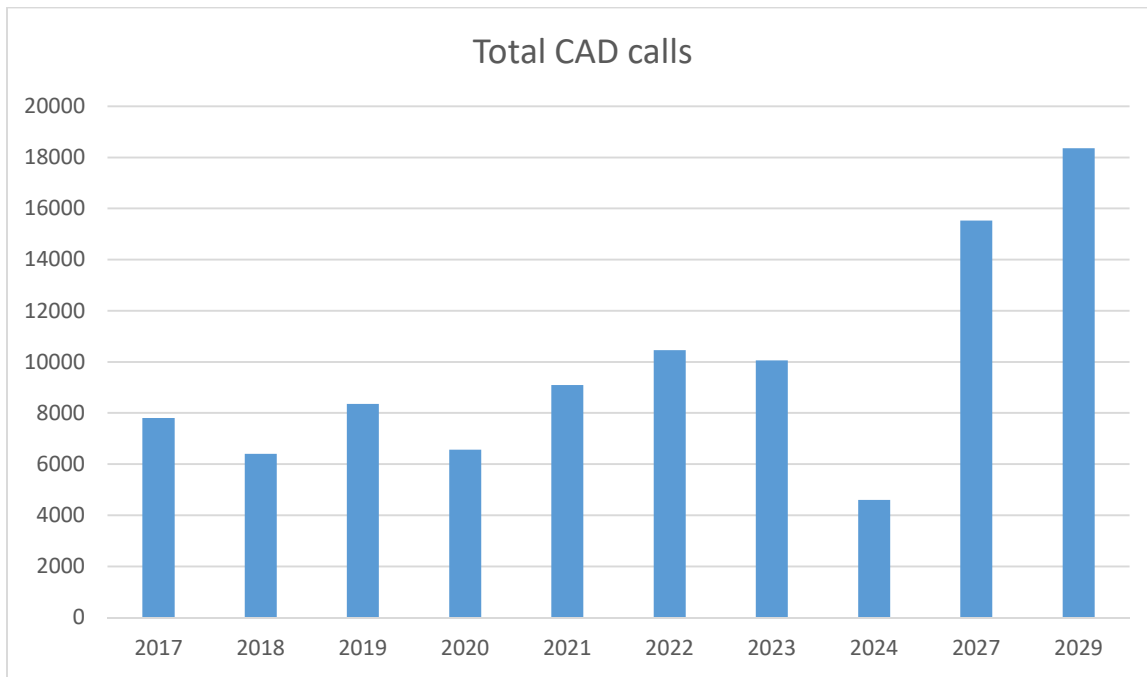
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The average ratio of CAD call to population per 1000 between 2021 and 2023 is 701 CAD/1000 population. If this average remains consistent we can average the number of CAD calls per year based on the projected growth chart.

In 2027, the population estimate is 22,149. Using the ratio above the department has the potential to handle 15,526 CAD calls. In 2029, the population estimate is 26,195, the department has the potential to handle 18,362 CAD calls. The average number of CAD calls in 2023 is 9873, within five years of this report or 2029 the estimated number of CAD calls is 18,362 or an approximate 86% increase in service.



There are cases that do not generate a CAD call, but will generate a law incident or case number. Typically, these cases are internally generated by the Investigation Division. The number of case numbers without CAD calls minimally impact the above listed estimates, but the numbers would be slightly increased.

The Investigation Division has averaged 150 active cases each month over the last two years. Working these cases include an Investigation Sergeant and three Detectives that includes the School Resource Officer.



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In 2023, there were 757 new cases assigned to investigators and 661 cases closed by investigators. This is approximately 189.25 cases per Investigator a year including the Sergeant. Most of the Sergeants time is devoted to working a case load, the department should strive to primarily shift the Sergeants responsibility from working cases to supervising. This would require one new Detective position to free up the Sergeant to allow more time for supervisor tasks. However, shifting the Sergeant's case workload to a detective will maintain the status quo outlined below.

As of June 30, 2024, there have been 332 new cases assigned to Detectives and they have closed 419 cases. We should expect the level of service to increase for the investigation division as population increases.

Investigators are scheduled to work 2080 hours a year or 208 days a year on a 4-10 schedule. After deducting the 13 paid holidays, investigators are scheduled to work 195 days a year. The 195 days do not account for any vacation, sick, or other time off. In 2023, Investigators averaged being assigned .97 cases a day, they also averaged closing 3.38 cases per day. As of June 30, 2024, the investigators have been scheduled to work 99 days. They are assigned an average of .83 new cases a day and have averaged closing 4.23 cases a day.

The number of cases closed per day has improved, but we maintain a backlog. We should expect the level of service to increase for the investigation division as population increases.

Anticipated sworn officer personnel Levels

As part of Ensign Engineering's capital facility assessment they provided a population estimate compared to the number of sworn officers needed at a ratio of 1.49 offers per 1000 population (Table 39 listed below). The number of officers estimated within the table below appears to be an accurate representation of the future need of sworn officers needed for this department at least over the next 3 years. These ratios, should be evaluated at least annually and compared to not only population, but other factors such as crime trends and staffing needs.

Currently at 20 full time officers we are operating at a ratio of approximately 1.18 offers per 1000 population, increasing at this rate over the next few years will maintain minimal staffing levels in patrol leaving little room for any vacancy and the investigation division active case load is currently 150. There is a need to follow the 1.49 ratio for at least a few years to maintain and start preparing for increased level of service.



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Since 2021, the police department has been operating with 19 full time officer positions. As of July 2024 there will be 20 sworn officer positions so we will use 20 sworn officers for analysis.

Table 39: Future Police Department Requirements

Year	Population	Rate of Police Officers per 1,000 Population	Police Officers Required	Building Area per Officer (sq ft)	Building Area Requirement (sq ft)
2021	12,791	1.49	19	118.6	2,260
2022	14,070	1.49	21	118.6	2,486
2023	15,477	1.49	23	118.6	2,735
2024	16,947	1.49	25	118.6	2,995
2025	18,557	1.49	28	118.6	3,279
2026	20,320	1.49	30	118.6	3,591
2027	22,149	1.49	33	118.6	3,914
2028	24,143	1.49	36	118.6	4,266
2029	26,195	1.49	39	118.6	4,629
2030	28,421	1.49	42	118.6	5,022
2031	30,837	1.49	46	118.6	5,449

Using the data from the chart above and discussions between command staff and first line supervisors, within 2-3 years the hierarchy of the police department will need to be adjusted. A need for an administrative supervisor and first line supervisors will be needed as both sworn and non-sworn staff increases. To accomplish this the department should look to create an Assistant Chief Position, (3) additional Sergeant positions and then change the Administrative Assistant to the Chief of Police into a supervisor position to help manage civilian staff to minimize the responsibility of sworn staff to non-sworn staff.

Currently, the Chief of Police, two Lieutenants, and three Sergeants make up the supervisory roles of the department. The total number of positions within the department including non-sworn staff (5), seasonal crossing guards (9), and volunteers (4) totals 37 people. Supervisors account for approximately 16% of the total department workforce. When including only sworn and non-sworn staff, supervisors make up approximately 24% of the workforce. When including only sworn staff supervisors make up approximately 30% of the department workforce. Currently, the percentage of supervision to sworn staff seems to be efficient and effective and should be a reference to gauge potential future supervisor positions.



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In three years the population estimate is 22,149 people in year 2027. With that population we are projected to need 33 sworn staff to operate. If the supervisors make up 30% we would need an additional 4 supervisor positions, these positions would be an Assistant Chief and three Sergeants mentioned above.

In the next year, 2025, we will need to adjust the Administrative Assistant position to a supervisor position to help mitigate the responsibilities of sworn personnel that manage non-sworn staff. This will allow the department to prepare for future growth and expansion within the non-sworn staff.

The future non-sworn staff increase over the next three years include; (1) full time records clerk, change the current part time record clerk to a full time position, (1) full time victim advocate and (1) part time evidence technician/record clerk.

Over the next 2-3 years we will need to add a full time Animal Control Officer in addition to keeping the current part-time position. These positions will also be responsible for code enforcement. Currently Officers are responsible for all code enforcement issues taking them away from other policing duties.

We do not believe an increase in crossing guards will be needed over the next three years. Currently there are no plans for any new schools and construction of a new school within three years without any current plans does not seem likely. However, the pay for crossing guards will need to be adjusted. Currently Grantsville is one of the lowest paid. Retention and dependability have been a major issue causing on duty officers to man many of the crossing guard shifts taking them from responding to other policing duties.

In years four and five it is suggested that we maintain as close to a 30% of the workforce as supervisors. And continue to evaluate if the ratio of 1.49 officers per 1000 population is sufficient or too many. We believe increasing the workforce at 1.49 ratio over the next three years is needed and will ready the department for the anticipated level of service increase and fulfill current staff shortages.

As a comparison to a local municipality, Tooele City Police Department (TCPD) provides service to an estimated population of 36,000 with 42 sworn officers and 11 non-sworn staff excluding seasonal crossing guards. The officer to 1000 population for TCPD is approximately 1.17.



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Supervisor roles include; Chief of Police, (1) Capitan, (3) Lieutenants and (7) Sergeants totaling 12 supervisor positions. TCPD operates with 53 staff including sworn and non-sworn members making approximately 23% of the total staff supervisors. This is comparable to Grantsville Police Department at 24%. When you look at supervisor to sworn staff TCPD's workforce is approximately 29% supervisors. Again this is comparable to Grantsville Police Department at 30%.

Anticipated Capital improvement and equipment needs

The currently capital facility plans by Ensign Engineering indicate that our current space is sufficient to operate 46 officers. However, that plan does not account for non-sworn support staff, investigators, or administrative office space. There is limited room to expand office space or workstations without dissolving other functional rooms that are used for other purposes. These rooms would include eliminating the briefing room, soft interview room, medium security interview room, locker room, gym, storage space, and the community room.

A meeting between the Chief of Police and Ensign Engineering occurred in June of 2024, to discuss the potential need for Capital Facility Improvements and expansion for the Justice Center. After the discussion and walk through, it was determined that a capital facility plan to add supervisor, detective, support staff, and storage space is likely needed. A plan was made so that Ensign Engineering will research and evaluate these needs and include them in the upcoming Capital Facility Plan.

The Police Department currently operates its own shooting range. However, the range is starting to be surrounded by residential homes and will soon render it unsafe to discharge firearms. There are firearm ranges in the County that can be utilized for training. Thus, the city has time to decide if we desire to maintain and operate our own range. Possible agreements in future annexation or developmental agreements could create opportunities for a new range.

Equipment

Over the next two years we will upgrade our duty pistols. As of June 2024 we have discussed and will be testing the Glock 45 with an optic for standard issue. Tooele County Sherriff Office recently switched to this platform and the firearm qualification score average improved. The current duty pistols are aging and we should consider replacing them. The department will also need to retire some of the rifles and replace them with a new system.



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Technology is ever evolving and can be utilized to enhance community safety and help the department be more efficient. The department should continually research products and equipment that helps to improve and enhance our level of service. Within the next five years the department should look to expand the Flock Safety System, implement a drone program, implement a server for digital evidence, purchase pole cameras, and evaluate data storage for body worn cameras. Along with body worn cameras the department should explore dash cameras for patrol vehicles.

The department should expand the less lethal weapon systems. Currently the department owns two pepper ball guns, one 40mm multi-launcher, one 37mm single launcher and shotguns that can be repurposed to less lethal platforms. Over the next two years the department should repurpose the shotguns and purchase at least one more pepper ball gun and multi-launcher to replace the single shot launcher. This would allow for each crew and the Investigations Division to always have access to a less lethal platform. The weapon systems are currently stored in the armory offering little access to patrol. The department should purchase a safe for the Sergeants office so that the weapons can be available for each shift.

The department should look to implement a mobile command center in all vehicles for Sergeants and command staff. The Investigation Division vehicles need lock boxes for equipment and weapon storage.

In conclusion we should evaluate this guide annually. The plan should remain fluid and adjust with the needs of the department, city, and most importantly maintaining quality service to our community.

Chief of Police
Robert Sager

Grantsville City Police Department

Year	Single Family			Multi-Unit			Non-Residential			Single Family Residential Calls Increase	Multi-Family Residential Calls Increase	Non-Residential Calls Increase	Total Calls Increase
	Units	Annual Unit Increase	Calls Increase	Units	Annual Unit Increase	Calls Increase	Units	Annual Unit Increase	Calls Increase				
2025	4,618	-	-	290	-	-	178	-	-	-	-	-	-
2026	4,780	162	94	300	10	20	179	1	3	94	20	3	117
2027	4,947	167	97	311	11	22	180	1	3	97	22	3	122
2028	5,145	198	114	323	12	24	184	4	10	114	24	10	148
2029	5,351	206	119	336	13	26	186	2	5	119	26	5	150
2030	5,565	214	124	349	13	26	190	4	10	124	26	10	160
2031	5,788	223	129	363	14	27	192	2	5	129	27	5	161
2032	6,020	232	134	378	15	29	196	4	10	134	29	10	173
2033	6,261	241	139	393	15	29	199	3	8	139	29	8	176
2034	6,511	250	144	409	16	31	202	3	8	144	31	8	183
2035	6,771	260	150	425	16	31	205	3	8	150	31	8	189
Total										1,244	265	70	1,579

Animal Shelter Required Physical Holding Capacity Calculation

Year 2021	Intake	Outake	Monthly Intake Avg	Daily Intake Avg
Dogs	146	136	12.17	0.400
Cats	79	76	6.58	0.216

	Avg Holding Period	RPHC
Dogs	16.8	6.7
Cats	21.2	4.6

Sept. 2021	Intake	Outake	Avg Holding Period	Daily Intake Avg
Dogs	15	15	21.60	0.500
Cats	10	10	15.11	0.333

Oct. 2021	Intake	Outake	Avg Holding Period	Daily Intake Avg
Dogs	9	9	25.56	0.290
Cats	9	9	22.33	0.290

Nov. 2021	Intake	Outake	Avg Holding Period	Daily Intake Avg
Dogs	7	7	1.14	0.233
Cats	12	12	26.17	0.400

Dec. 2021	Intake	Outake	Avg Holding Period	Daily Intake Avg
Dogs	8	8	19.00	0.258
Cats	1	0	N/A	0.032

Appendix G Public Safety Cost Estimates

ENGINEERS ESTIMATE OF PROBABLE COSTS



These costs are opinions only and should not be considered as a formal construction estimate. These quantities and costs are based on information derived from the master plan and are therefore subject to change. Ensign has no control over costs of labor, materials, bidding procedures, unidentified field conditions, or other factors. Ensign cannot and does not make any warranty, promise, or guarantee as to the accuracy of this estimate.

Project: Grantsville City CFP, IFFP, and IFA
 By: Dylan Cooper
 Date: 3/16/2026

Project No.: 11637
 Checked By: Robert Roussele

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT COST	COST
Satellite Fire Station East					
1	Mobilization	LS	1	\$145,000.00	\$145,000.00
2	Station Cost	SF	6,000	\$481.96 ¹	\$2,891,736.00
Subtotal					\$3,036,736.00
Engineering, Surveying, and Construction Management and Inspection Costs (10%)					\$303,673.60
Total Satellite Fire Station East Cost					\$3,340,409.60
Fire Vehicles					
1	Aerial Truck	EA	1	\$1,500,000.00 ²	\$1,500,000.00
2	Pumper Truck	EA	1	\$800,000.00 ²	\$800,000.00
3	Brush Truck	EA	1	\$170,000.00 ²	\$170,000.00
Total Fire Vehicles Cost					\$2,470,000.00
Animal Control Shelter					
1	Mobilization	LS	1	\$136,000.00	\$136,000.00
2	Shelter Cost	SF	4,500	\$603.14 ¹	\$2,714,148.00
Subtotal					\$2,850,148.00
Engineering, Surveying, and Construction Management and Inspection Costs (10%)					\$285,014.80
Total Animal Control Shelter Cost					\$1,567,581.40
Justice Center Renovations					
1	Mobilization	LS	1	\$1,000.00	\$1,000.00
2	Renovation Cost	SF	280	\$60.00	\$16,800.00
3	Cubicles	EA	5	\$3,600.00	\$18,000.00
Subtotal					\$17,800.00
Engineering, Surveying, and Construction Management and Inspection Costs (10%)					\$1,780.00
Total Justice Center Renovations Cost					\$19,580.00
Justice Center Police Expansion					
1	Mobilization	LS	1	\$54,000.00	\$54,000.00
2	Renovation Cost	SF	4,497	\$240.00	\$1,079,280.00
Subtotal					\$1,133,280.00
Engineering, Surveying, and Construction Management and Inspection Costs (10%)					\$113,328.00
Total Justice Center Police Expansion Cost					\$1,246,608.00
New City Hall Building					
1	Mobilization	LS	1	\$419,000.00	\$419,000.00
2	Building Cost	SF	20,000	\$413.11 ¹	\$8,262,240.00
3	Land Acquisition	AC	1	\$119,801.40 ¹	\$119,801.40
Subtotal					\$8,801,041.40
Engineering, Surveying, and Construction Management and Inspection Costs (10%)					\$880,104.14
Total New City Hall Building Cost					\$9,681,145.54
Existing City Hall Renovations					
1	Mobilization	LS	1	\$105,000.00	\$105,000.00
2	Renovation Cost	SF	7,000	\$300.00	\$2,100,000.00
Subtotal					\$2,205,000.00
Engineering, Surveying, and Construction Management and Inspection Costs (10%)					\$220,500.00
Total Existing City Hall Renovations Cost					\$2,425,500.00

¹ Unit costs are from the 2022 Grantsville CFP/IFA and inflated to current year (2025).

² Costs provided by Fire Chief Smith.

Appendix H Parks Cost Estimates

ENGINEERS ESTIMATE OF PROBABLE COSTS



These costs are opinions only and should not be considered as a formal construction estimate. These quantities and costs are based on information derived from the master plan and are therefore subject to change. Ensign has no control over costs of labor, materials, bidding procedures, unidentified field conditions, or other factors. Ensign cannot and does not make any warranty, promise, or guarantee as to the accuracy of this estimate.

Project: Grantsville City CFP, IFFP, and IFA
 By: Matthew Sanford
 Date: 4/2/2026

Project No.: 11637
 Checked By: Robert Rousselle

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT COST ¹	COST
West Street Park					
1	Mobilization	LS	1	\$13,000.00	\$13,000.00
2	Earthwork	CY	654	\$10.33	\$6,758.12
3	Erosion Control and Revegetation	LS	1	\$6,000.00	\$6,000.00
4	Fine Grading	SY	1,300	\$2.07	\$2,691.00
5	Gravel Parking Lot	SF	11,800	\$3.00	\$35,400.00
6	RV Dump Station	LS	1	\$110,000.00	\$110,000.00
7	Disc Golf	LS	1	\$18,000.00	\$18,000.00
8	Existing Trail Improvements	LF	6,581	\$12.00	\$78,972.00
9	Land Acquisition ⁴	AC	0	\$137,702.76	\$0.00
Subtotal					\$270,821.12
Engineering, Surveying, and Construction Management and Inspection Costs (10%)					\$27,082.11
Total West Street Park Cost					\$297,903.23
Scenic Slopes Park, Utilities, Pump Track, Site Improvements					
1	Mobilization	LS	1	\$65,000.00	\$65,000.00
2	Earthwork	CY	46,996	\$10.33	\$485,472.81
3	Erosion Control and Revegetation	LS	1	\$32,000.00	\$32,000.00
4	Fine Grading	SY	31,331	\$2.07	\$64,855.03
5	Hydroseed	SF	592,000	\$0.14	\$82,880.00
6	Gravel Parking Lot	SF	11,800	\$3.00	\$35,400.00
7	Lights	EA	8	\$8,124.46	\$64,995.68
8	Bike Pump Track	LS	1	\$528,602.40	\$528,602.40
9	Land Acquisition ⁴	AC	0	\$137,702.76	\$0.00
Subtotal					\$3,096,673.72
Engineering, Surveying, and Construction Management and Inspection Costs (10%)					\$74,295.61
Total Scenic Slopes Park, Utilities, Pump Track, Site Improvements Cost					\$3,170,969.33
Scenic Slopes Parking, Park Amenities, Ball Courts					
1	Mobilization	LS	1	\$106,000.00	\$106,000.00
2	Erosion Control and Revegetation	LS	1	\$52,000.00	\$52,000.00
3	Fine Grading	SY	9,680	\$2.07	\$20,037.60
4	Turf	SF	10,890	\$12.00	\$130,680.00
5	Irrigation System	SF	10,890	\$0.28	\$3,049.20
6	Restroom	LS	1	\$285,044.71	\$285,044.71
7	Paved Parking Lot	SF	11,800	\$6.20	\$73,160.00
8	Concrete (Sidewalk)	LF	1,500	\$11.61	\$17,419.35
9	Lights	EA	12	\$8,124.46	\$97,493.52
10	Amenities ²	LS	1	\$1,440,000.00	\$1,440,000.00
11	Land Acquisition ⁴	AC	0	\$137,702.76	\$0.00
Subtotal					\$2,224,884.38
Engineering, Surveying, and Construction Management and Inspection Costs (10%)					\$222,488.44
Total Scenic Slopes Parking, Park Amenities, Ball Courts Cost					\$2,447,372.82

Scenic Slopes Park Baseball and Soccer Field					
1	Mobilization	LS	1	\$138,000.00	\$138,000.00
2	Erosion Control and Revegetation	LS	1	\$68,000.00	\$68,000.00
3	Fine Grading	SY	52,982	\$2.07	\$109,672.46
4	Turf	SF	98,692	\$6.00	\$592,154.64
5	Irrigation System	SF	98,692	\$0.28	\$27,633.88
6	Baseball Park	LS	1	\$450,000.00	\$450,000.00
7	Dugouts	LS	1	\$144,000.00	\$144,000.00
8	Lights	LS	1	\$144,000.00	\$144,000.00
9	Stands	LS	1	\$14,400.00	\$14,400.00
10	Basketball Courts	LS	1	\$288,000.00	\$288,000.00
11	Soccer Goals	LS	1	\$90,000.00	\$90,000.00
12	Trails	LF	3,640	\$24.00	\$87,360.00
13	Lights	LS	1	\$165,000.00	\$165,000.00
14	Stands	LS	1	\$45,000.00	\$45,000.00
15	Paved Parking Lot	SF	80,000	\$6.20	\$496,000.00
16	Trees	EA	47	\$1,032.77	\$48,540.19
17	Land Acquisition *	AC	0	\$137,702.76	\$0.00
Subtotal					\$2,907,761.18
Engineering, Surveying, and Construction Management and Inspection Costs (10%)					\$290,776.12
Total Scenic Slopes Park Baseball and Soccer Field Cost					\$3,198,537.29
Desert Edge Park					
1	Mobilization	LS	1	\$115,000.00	\$115,000.00
2	Earthwork	CY	12,100	\$10.33	\$124,993.00
3	Erosion Control and Revegetation	LS	1	\$56,000.00	\$56,000.00
4	Fine Grading	SY	24,200	\$2.07	\$50,094.00
5	Hydroseed	SF	152,000	\$0.14	\$21,280.00
6	Irrigation System	SF	152,000	\$0.28	\$42,560.00
7	Restroom	LS	1	\$285,044.71	\$285,044.71
8	Group Pavilion	LS	1	\$240,000.00	\$240,000.00
9	Asphalt Trail	SF	22,211	\$4.13	\$91,805.47
10	Paved Parking Lot	SF	12,100	\$6.20	\$75,020.00
11	Trees	EA	52	\$1,032.77	\$53,704.04
12	Lights	EA	15	\$8,124.46	\$121,866.90
13	Hoseshot Pits	LS	1	\$36,000.00	\$36,000.00
14	Basketball Courts	LS	1	\$420,000.00	\$420,000.00
15	Land Acquisition	AC	5	\$137,702.76	\$688,513.80
Subtotal					\$2,421,881.92
Engineering, Surveying, and Construction Management and Inspection Costs (10%)					\$242,188.19
Total Desert Edge Park Cost					\$2,664,070.11
President's Park					
1	Mobilization	LS	1	\$73,000.00	\$73,000.00
2	Earthwork	CY	24,200	\$10.33	\$249,986.00
3	Erosion Control and Revegetation	LS	1	\$36,000.00	\$36,000.00
4	Fine Grading	SY	48,400	\$2.07	\$100,188.00
5	Hydroseed	SF	305,000	\$0.14	\$42,700.00
6	Irrigation System	SF	305,000	\$0.28	\$85,400.00
7	Restroom	LS	1	\$285,044.71	\$285,044.71
8	Paved Parking Lot	SF	11,800	\$6.20	\$73,160.00
9	Trees	EA	50	\$1,032.77	\$51,638.50
10	Lights	EA	30	\$8,124.46	\$243,733.80
11	Amenities ²	LS	1	\$300,880.50	\$300,880.50
12	Land Acquisition *	AC	0	\$137,702.76	\$0.00
Subtotal					\$1,541,731.51
Engineering, Surveying, and Construction Management and Inspection Costs (10%)					\$154,173.15
Total President's Park Cost					\$1,695,904.66

Twenty Wells Park ³					
1	Land Acquisition	LS	1	\$1,050,000.00	\$1,050,000.00
2	Landscaping / Scrapping / Haul Off-On	LS	1	\$1,700,000.00	\$1,700,000.00
3	Irrigation Lines	LS	1	\$600,000.00	\$600,000.00
4	Water Lines	LF	1,850	\$70.00	\$129,500.00
5	Sewer	LF	500	\$110.00	\$55,000.00
6	Storm Drain	LS	1	\$175,000.00	\$175,000.00
7	Buildings	LS	1	\$1,250,000.00	\$1,250,000.00
8	Pickle Ball Courts	LS	1	\$350,000.00	\$350,000.00
9	Baseball / Softball Fields	LS	1	\$750,000.00	\$750,000.00
10	Dugouts	LS	1	\$240,000.00	\$240,000.00
11	Fire Hydrants	LS	1	\$24,000.00	\$24,000.00
12	Fencing	LS	1	\$210,000.00	\$210,000.00
13	Concrete (Sidewalk)	LF	3,100	\$9.68	\$30,000.00
14	Concrete (C&G)	LF	4,350	\$25.29	\$110,000.00
15	Lights	LS	1	\$275,000.00	\$275,000.00
16	Stands	LS	1	\$75,000.00	\$75,000.00
17	Additional Sports Fields	LS	1	\$110,000.00	\$110,000.00
18	Goal Posts for Football	LS	1	\$200,000.00	\$200,000.00
19	Soccer Goals	LS	1	\$75,000.00	\$75,000.00
20	Score Board	LS	1	\$125,000.00	\$125,000.00
21	Parking Lot	SF	110,530	\$2.94	\$325,000.00
22	Parking Lot Lights	LS	1	\$45,000.00	\$45,000.00
23	Power	LS	1	\$125,000.00	\$125,000.00
24	Gas	LS	1	\$75,000.00	\$75,000.00
25	Materials	LS	1	\$525,000.00	\$525,000.00
Total Twenty Wells Park Cost					\$8,628,500.00
Highlands Park					
1	Mobilization	LS	1	\$147,000.00	\$147,000.00
2	Earthwork	CY	24,200	\$10.33	\$249,986.00
3	Erosion Control and Revegetation	LS	1	\$72,000.00	\$72,000.00
4	Fine Grading	SY	48,400	\$2.07	\$100,188.00
5	Hydroseed	SF	305,000	\$0.14	\$42,700.00
6	Irrigation System	SF	305,000	\$0.28	\$85,400.00
7	Restroom	LS	1	\$285,044.71	\$285,044.71
8	Paved Parking Lot	SF	11,800	\$6.20	\$73,160.00
9	Trees	EA	50	\$1,032.77	\$51,638.50
10	Lights	EA	30	\$8,124.46	\$243,733.80
11	Amenities ²	LS	1	\$356,374.72	\$356,374.72
12	Land Acquisition	AC	10	\$137,702.76	\$1,377,027.60
Subtotal					\$3,084,253.33
Engineering, Surveying, and Construction Management and Inspection Costs (10%)					\$308,425.33
Total Highlands Park Cost					\$3,392,678.66
Clark Farm Park					
1	Mobilization	LS	1	\$147,000.00	\$147,000.00
2	Earthwork	CY	72,600	\$10.33	\$749,958.00
3	Erosion Control and Revegetation	LS	1	\$72,000.00	\$72,000.00
4	Fine Grading	SY	145,200	\$2.07	\$300,564.00
5	Hydroseed	SF	915,000	\$0.14	\$128,100.00
6	Irrigation System	SF	915,000	\$0.28	\$256,200.00
7	Restroom	LS	1	\$285,044.71	\$285,044.71
8	Paved Parking Lot	SF	11,800	\$6.20	\$73,160.00
9	Trees	EA	150	\$1,032.77	\$154,915.50
10	Lights	EA	90	\$8,124.46	\$731,201.40
11	Amenities ²	LS	1	\$197,465.69	\$197,465.69
12	Land Acquisition ⁴	AC	0	\$137,702.76	\$0.00
Subtotal					\$3,095,609.30
Engineering, Surveying, and Construction Management and Inspection Costs (10%)					\$309,560.93
Total Clark Farm Park Cost					\$3,405,170.23

¹ Unit costs are generally from the 2022 Grantsville CFP/IFA and inflated to current year (2025).

² Amenities vary by park but generally include benches, playground equipment, sports fields, pavillions, etc.

³ Cost estimate provided by developer.

⁴ Land acquisition is not included because the City already owns the land or the land will be dedicated to the City.

Appendix I Wastewater Calculations

Single Family 5 Bed, 3 Bath = 1 ERC

Fixture	Fixture Count	Water Supply Fixture Units	Total Fixture Units
Kitchen sink, Private, Faucet	1	1.4	1.4
Dishwashing machine, Private, Automatic	1	1.4	1.4
Washing machine (8 lb), Private, Automatic	1	1.4	1.4
Exterior hose bib	3	2.2	6.6
Shower head, Private, Mixing valve	3	1.4	4.2
Lavatory, Private, Faucet	3	0.7	2.1
Water closet, Private, Flushtank	3	2.2	6.6
Total			24

Summary

Year	ERCs	Peak Instantaneous Flow (gpm/ERC)	Peak Day Flow (gpd/ERC)	Average Day Flow (gpd/ERC)	Sewer Units	Average Day Flow (gpd/Unit)
2021	5,975	0.397	163	136	4,082	199
2022	6,206	0.383	164	140	4,326	201
2023	6,344	0.374	163	143	4,592	197
2024	6,571	0.361	184	146	4,789	200
2025	6,717	0.354	203	147	4,958	199
Maximum		0.397	203	147		201
Average		0.374	175	142		199

Years 2021 Through 2025

Year 2021

Year	Peak Instantaneous Flow (gpm)	Peak Day Flow (MGD)	Peak Day Flow (gallons)	Average Day Flow (MGD)	Average Day Flow (gallons)
2021	2,375	0.971	971,000	0.811	811,025
Dec-21	1,943	0.922	922,000	0.846	846,032

ERCs	Peak Instantaneous Flow (gpm/ERC)	Peak Day Flow (gpd/ERC)	Average Day Flow (gpd/ERC)
5,975	0.397	163	136

Year 2022

Year	Peak Instantaneous Flow (gpm)	Peak Day Flow (MGD)	Peak Day Flow (gallons)	Average Day Flow (MGD)	Average Day Flow (gallons)
2022	2,375	1.017	1,017,000	0.871	870,995
Dec-22	1,699	0.969	969,000	0.876	876,258

ERCs	Peak Instantaneous Flow (gpm/ERC)	Peak Day Flow (gpd/ERC)	Average Day Flow (gpd/ERC)
6,206	0.383	164	140

Years 2021 Through 2025

Year 2023

Year	Peak Instantaneous Flow (gpm)	Peak Day Flow (MGD)	Peak Day Flow (gallons)	Average Day Flow (MGD)	Average Day Flow (gallons)
2023	2,375	1.037	1,037,000	0.906	906,438
Dec-23	2,118	1.022	1,022,000	0.921	921,226

ERCs	Peak Instantaneous Flow (gpm/ERC)	Peak Day Flow (gpd/ERC)	Average Day Flow (gpd/ERC)
6,344	0.374	163	143

Year 2024

Year	Peak Instantaneous Flow (gpm)	Peak Day Flow (MGD)	Peak Day Flow (gallons)	Average Day Flow (MGD)	Average Day Flow (gallons)
2024	2,375	1.206	1,206,000	0.960	959,579
Dec-24	1,872	1.059	1,059,000	0.975	975,484

ERCs	Peak Instantaneous Flow (gpm/ERC)	Peak Day Flow (gpd/ERC)	Average Day Flow (gpd/ERC)
6,571	0.361	184	146

Year 2025

Year	Peak Instantaneous Flow (gpm)	Peak Day Flow (MGD)	Peak Day Flow (gallons)	Average Day Flow (MGD)	Average Day Flow (gallons)
2025	2,375	1.366	1,366,000	0.988	987,929
Dec-25	1,759	1.095	1,095,000	0.999	999,323

ERCs	Peak Instantaneous Flow (gpm/ERC)	Peak Day Flow (gpd/ERC)	Average Day Flow (gpd/ERC)
6,717	0.354	203	147

Appendix J Wastewater Cost Estimates

ENGINEERS ESTIMATE OF PROBABLE COSTS



These costs are opinions only and should not be considered as a formal construction estimate. These quantities and costs are based on information derived from the master plan and are therefore subject to change. Ensign has no control over costs of labor, materials, bidding procedures, unidentified field conditions, or other factors. Ensign cannot and does not make any warranty, promise, or guarantee as to the accuracy of this estimate.

Project: Grantsville City CFP, IFFP,
and IFA
By: Dylan Cooper
Date: 4/2/2026

Project No.: 11637
Checked By: Robert Rousselle

ITEM	DESCRIPTION	UNIT	QUANTITY	COST PER LF
8-inch Diameter Sewer				
1	Mobilization and permits	LS/LF	1	\$18.36
2	Traffic control and flagging	LS/LF	1	\$9.35
3	De-watering	LS/LF	1	\$4.85
4	Saw cut, remove, and dispose of existing asphalt	LF	1	\$3.53
5	Remove and dispose of excavated material	CY/LF	8.43	\$59.18
6	Trench box 10'Hx16'L	LF	1	\$0.74
7	8-inch diameter sewer	LF	1	\$52.94
8	Bedding sand	CY/LF	1.19	\$2.08
9	Granular borrow	CY/LF	6.11	\$87.45
10	5-foot diameter concrete manhole on 6-foot x 6-foot concrete base (manhole spacing every 400-feet)	LF	0.0025	\$35.00
11	Untreated base course	CY/LF	0.50	\$28.27
12	Asphalt road (3-inch)	SY/LF	0.63	\$36.82
Subtotal				\$338.58
Engineering, Surveying, and Construction Management and Inspection Costs (10%)				\$33.86
Total 8-inch Diameter Sewer Cost per LF				\$372.43
10-inch Diameter Sewer				
1	Mobilization and permits	LS/LF	1	\$19.28
2	Traffic control and flagging	LS/LF	1	\$9.82
3	De-watering	LS/LF	1	\$5.09
4	Saw cut, remove, and dispose of existing asphalt	LF	1	\$3.53
5	Remove and dispose of excavated material	CY/LF	8.43	\$59.13
6	Trench box 10'Hx16'L	LF	1	\$0.78
7	10-inch diameter sewer	LF	1	\$59.59
8	Bedding sand	CY/LF	1.28	\$2.23
9	Granular borrow	CY/LF	6.02	\$86.13
10	5-foot diameter concrete manhole on 6-foot x 6-foot concrete base (manhole spacing every 400-feet)	LF	0.0025	\$34.65
11	Untreated base course	CY/LF	0.50	\$28.27
12	Asphalt road (3-inch)	SY/LF	0.63	\$36.82
Subtotal				\$345.32
Engineering, Surveying, and Construction Management and Inspection Costs (10%)				\$34.53
Total 10-inch Diameter Sewer Cost per LF				\$379.85

12-inch Diameter Sewer

1	Mobilization and permits	LS/LF	1	\$20.24
2	Traffic control and flagging	LS/LF	1	\$10.31
3	De-watering	LS/LF	1	\$5.35
4	Saw cut, remove, and dispose of existing asphalt	LF	1	\$3.53
5	Remove and dispose of excavated material	CY/LF	8.42	\$59.07
6	Trench box 10'Hx16'L	LF	1	\$0.82
7	12-inch diameter sewer	LF	1	\$66.27
8	Bedding sand	CY/LF	1.36	\$2.38
9	Granular borrow	CY/LF	5.93	\$84.80
10	5-foot diameter concrete manhole on 6-foot x 6-foot concrete base (manhole spacing every 400-feet)	LF	0.0025	\$34.65
11	Untreated base course	CY/LF	0.50	\$28.27
12	Asphalt road (3-inch)	SY/LF	0.63	\$36.82
Subtotal				\$352.51
Engineering, Surveying, and Construction Management and Inspection Costs (10%)				\$35.25
Total 12-inch Diameter Sewer Cost per LF				\$387.76

15-inch Diameter Sewer

1	Mobilization and permits	LS/LF	1	\$21.25
2	Traffic control and flagging	LS/LF	1	\$10.82
3	De-watering	LS/LF	1	\$5.61
4	Saw cut, remove, and dispose of existing asphalt	LF	1	\$3.53
5	Remove and dispose of excavated material	CY/LF	8.40	\$58.96
6	Trench box 10'Hx16'L	LF	1	\$0.86
7	15-inch diameter sewer	LF	1	\$104.98
8	Bedding sand	CY/LF	1.48	\$2.59
9	Granular borrow	CY/LF	5.79	\$82.81
10	5-foot diameter concrete manhole on 6-foot x 6-foot concrete base (manhole spacing every 400-feet)	LF	0.0025	\$34.65
11	Untreated base course	CY/LF	0.50	\$28.27
12	Asphalt road (3-inch)	SY/LF	0.63	\$36.82
Subtotal				\$391.17
Engineering, Surveying, and Construction Management and Inspection Costs (10%)				\$39.12
Total 15-inch Diameter Sewer Cost per LF				\$430.29

18-inch Diameter Sewer

1	Mobilization and permits	LS/LF	1	\$22.32
2	Traffic control and flagging	LS/LF	1	\$11.36
3	De-watering	LS/LF	1	\$5.90
4	Saw cut, remove, and dispose of existing asphalt	LF	1	\$3.53
5	Remove and dispose of excavated material	CY/LF	8.38	\$58.83
6	Trench box 10'Hx16'L	LF	1	\$0.90
7	18-inch diameter sewer	LF	1	\$112.47
8	Bedding sand	CY/LF	1.60	\$2.80
9	Granular borrow	CY/LF	5.65	\$80.83
10	5-foot diameter concrete manhole on 6-foot x 6-foot concrete base (manhole spacing every 400-feet)	LF	0.0025	\$34.65
11	Untreated base course	CY/LF	0.50	\$28.27

12	Asphalt road (3-inch)	SY/LF	0.63	\$36.82
Subtotal				\$398.68
Engineering, Surveying, and Construction Management and Inspection Costs (10%)				\$39.87
Total 18-inch Diameter Sewer Cost per LF				\$438.54
21-inch Diameter Sewer				
1	Mobilization and permits	LS/LF	1	\$22.32
2	Traffic control and flagging	LS/LF	1	\$11.36
3	De-watering	LS/LF	1	\$5.90
4	Saw cut, remove, and dispose of existing asphalt	LF	1	\$3.53
5	Remove and dispose of excavated material	CY/LF	9.91	\$69.58
6	Trench box 10'Hx16'L	LF	1	\$0.90
7	21-inch Diameter Sewer	LF	1	\$127.50
8	Bedding sand	CY/LF	2.08	\$3.63
9	Granular borrow	CY/LF	6.61	\$94.61
10	5-foot diameter concrete manhole on 6-foot x 6-foot concrete base (manhole spacing every 400-feet)	LF	0.0025	\$34.65
11	Untreated base course	CY/LF	0.56	\$31.41
12	Asphalt road (3-inch)	SY/LF	0.67	\$38.99
Subtotal				\$444.38
Engineering, Surveying, and Construction Management and Inspection Costs (10%)				\$44.44
Total 21-inch Diameter Sewer Cost per LF				\$488.82
24-inch Diameter Sewer				
1	Mobilization and permits	LS/LF	1	\$23.43
2	Traffic control and flagging	LS/LF	1	\$11.93
3	De-watering	LS/LF	1	\$6.19
4	Saw cut, remove, and dispose of existing asphalt	LF	1	\$3.53
5	Remove and dispose of excavated material	CY/LF	8.33	\$58.48
6	Trench box 10'Hx16'L	LF	1	\$0.95
7	24-inch diameter sewer	LF	1	\$127.50
8	Bedding sand	CY/LF	1.83	\$3.20
9	Granular borrow	CY/LF	5.37	\$76.85
10	5-foot diameter concrete manhole on 6-foot x 6-foot concrete base (manhole spacing every 400-feet)	LF	0.0025	\$34.65
11	Untreated base course	CY/LF	0.50	\$28.27
12	Asphalt road (3-inch)	SY/LF	0.63	\$36.82
Subtotal				\$411.81
Engineering, Surveying, and Construction Management and Inspection Costs (10%)				\$41.18
Total 24-inch Diameter Sewer Cost per LF				\$452.99
27-inch Diameter Sewer				
1	Mobilization and permits	LS/LF	1	\$24.60
2	Traffic control and flagging	LS/LF	1	\$12.53
3	De-watering	LS/LF	1	\$6.50
4	Saw cut, remove, and dispose of existing asphalt	LF	1	\$3.53
5	Remove and dispose of excavated material	CY/LF	9.86	\$69.19
6	Trench box 10'Hx16'L	LF	1	\$1.00
7	27-inch Diameter Sewer	LF	1	\$131.66
8	Bedding sand	CY/LF	2.36	\$4.12

9	Granular borrow	CY/LF	6.28	\$89.84
10	5-foot diameter concrete manhole on 6-foot x 6-foot concrete base (manhole spacing every 400-feet)	LF	0.0025	\$34.65
11	Untreated base course	CY/LF	0.56	\$31.41
12	Asphalt road (3-inch)	SY/LF	0.67	\$38.99
Subtotal				\$448.02
Engineering, Surveying, and Construction Management and Inspection Costs (10%)				\$44.80
Total 27-inch Diameter Sewer Cost per LF				\$492.82
30-inch Diameter Sewer				
1	Mobilization and permits	LS/LF	1	\$25.83
2	Traffic control and flagging	LS/LF	1	\$13.16
3	De-watering	LS/LF	1	\$6.82
4	Saw cut, remove, and dispose of existing asphalt	LF	1	\$3.53
5	Remove and dispose of excavated material	CY/LF	9.83	\$68.96
6	Trench box 10'Hx16'L	LF	1	\$1.05
7	30-inch Diameter Sewer	LF	1	\$135.82
8	Bedding sand	CY/LF	2.49	\$4.35
9	Granular borrow	CY/LF	6.11	\$87.45
10	5-foot diameter concrete manhole on 6-foot x 6-foot concrete base (manhole spacing every 400-feet)	LF	0.0025	\$34.65
11	Untreated base course	CY/LF	0.56	\$31.41
12	Asphalt road (3-inch)	SY/LF	0.67	\$38.99
Subtotal				\$452.03
Engineering, Surveying, and Construction Management and Inspection Costs (10%)				\$45.20
Total 30-inch Diameter Sewer Cost per LF				\$497.23
36-inch Diameter Sewer				
1	Mobilization and permits	LS/LF	1	\$27.13
2	Traffic control and flagging	LS/LF	1	\$13.81
3	De-watering	LS/LF	1	\$7.17
4	Saw cut, remove, and dispose of existing asphalt	LF	1	\$3.53
5	Remove and dispose of excavated material	CY/LF	9.75	\$68.43
6	Trench box 10'Hx16'L	LF	1	\$1.10
7	36-inch Diameter Sewer	LF	1	\$144.13
8	Bedding sand	CY/LF	2.75	\$4.80
9	Granular borrow	CY/LF	5.78	\$82.68
10	5-foot diameter concrete manhole on 6-foot x 6-foot concrete base (manhole spacing every 400-feet)	LF	0.0025	\$34.65
11	Untreated base course	CY/LF	0.56	\$31.41
12	Asphalt road (3-inch)	SY/LF	0.67	\$38.99
Subtotal				\$457.82
Engineering, Surveying, and Construction Management and Inspection Costs (10%)				\$45.78
Total 36-inch Diameter Sewer Cost per LF				\$503.60
42-inch Diameter Sewer				
1	Mobilization and permits	LS/LF	1	\$28.48
2	Traffic control and flagging	LS/LF	1	\$14.50
3	De-watering	LS/LF	1	\$7.52
4	Saw cut, remove, and dispose of existing asphalt	LF	1	\$3.53

5	Remove and dispose of excavated material	CY/LF	11.22	\$78.71
6	Trench box 10'Hx16'L	LF	1	\$1.15
7	42-inch diameter sewer	LF	1	\$152.45
8	Bedding sand	CY/LF	3.55	\$6.19
9	Granular borrow	CY/LF	6.35	\$90.90
10	5-foot diameter concrete manhole on 6-foot x 6-foot concrete base (manhole spacing every 400-feet)	LF	0.0025	\$34.65
11	Untreated base course	CY/LF	0.61	\$34.56
12	Asphalt road (3-inch)	SY/LF	0.70	\$41.16
Subtotal				\$493.80
Engineering, Surveying, and Construction Management and Inspection Costs (10%)				\$49.38
Total 42-inch Diameter Sewer Cost per LF				\$543.18

Appendix K Water Rights Calculations

Change	WR#	Owner	Diversion (AF)	Use
	15-1699	Grantsville City Corporation	10.86	Municipal
	15-1989	Grantsville City		Recreation
a37143	15-1060	Grantsville City	12	Municipal
a52141	15-376 15-516	Grantsville City	4488.6	Municipal
a21720a	15-4511	Grantsville City	513.5	Municipal
a26331	15-293 15-775 15-776 15-1139	Grantsville City	142	Municipal
a29351	15-4454	Grantsville City	20	Municipal
a29673	15-635 15-636	Grantsville City	112.88	Municipal
a30058	15-4524	Grantsville City Corporation	21.92	Municipal
a30059	15-4525	Grantsville City Corporation	18.98	Municipal
a30060	15-4528	Grantsville City Corporation	20	Municipal
a30879	15-829	Grantsville City	1.4	Municipal
a31746	15-4654	Grantsville City	10	Municipal
a31931	15-4668	Grantsville City	600	Municipal
a32189	15-4628	Grantsville City	2	Municipal
a33658	15-4890	Grantsville City	102.75	Municipal
a35140	15-381 15-638 15-639	Grantsville City	312.16	Municipal
a35295	15-5072	Grantsville City	50	Municipal
a36121	15-5099	Grantsville City	48.64	Municipal
a36121a	15-5571	Grantsville City	260	Municipal
a36647	15-814 15-815 15-1199 15-1201 15-1390 15-1391 15-1392 15-1393	Grantsville City Corporation	177.652	Municipal
a37143	15-1382 15-1383 15-1384 15-1385 15-5148 15-5149	Grantsville City	85	Municipal
a37829	15-5173	Grantsville City	10	Municipal
a39241	15-5228	Grantsville City	150	Municipal
a39288	15-5232	Grantsville City	100	Municipal
a39758	15-2625 15-4431 15-5246	Grantsville City	74.65	Municipal

Change	WR#	Owner	Diversion (AF)	Use
a42163	15-1033 15-4918	Grantsville City	3.84	Municipal
a42847	15-787 15-1053 15-1153 55-1154 55-1155 55-1156 55-1308 55-1309	Grantsville City	240.96	Municipal
a42849	15-5402	Grantsville City	65	Municipal
a43320	15-1292 15-2770 15-4656 15-4927	Grantsville City	139.556	Municipal
a44008	15-5345	Grantsville City	16.35	Municipal
a45179	15-965 15-1228 15-5535	Grantsville City	4.25	Municipal
a45190	15-5548	Grantsville City	42.65	Municipal
a45496	15-5573	Grantsville City	87.12	Municipal
a47317	15-938 15-940	Grantsville City	6.77	Municipal
a47419	15-505	Grantsville City	202	Municipal
a47802	15-91 15-477 15-506	Grantsville City	794.8023	Municipal
a47899	15-5668	Grantsville City	80.54	Municipal
a47904	15-1389 15-5689	Grantsville City	12.4275	Municipal
a47906	15-1388 15-4170 15-4201 15-5690	Grantsville City	93.34	Municipal
a47907	15-4526 15-5691	Grantsville City	55.788	Municipal
a47914	15-5701	Grantsville City	25	Municipal
a47959	15-399	Grantsville City	161.68	Municipal
a48032	15-5697	Grantsville City	40	Municipal
a48474	15-5436	Grantsville City	134	Municipal
a48683	15-5101	Grantsville City	24.6	Municipal
a48957	15-5393	Grantsville City	27.162	Municipal
a49085	15-4254	Grantsville City	15	Municipal
a49157	15-481	Grantsville City	294.56	Municipal
a49383	15-1938	Grantsville City	320	Municipal
a49832	15-5517	Grantsville City	49.64	Municipal
a50000	15-916 15-2791	Grantsville City	4.82	Municipal
TOTAL			10,286.8478	

GRANTSVILLE CITY

WATERWISE IRRIGATION DEMANDS (60% EFF)

AVERAGE GROWING SEASON: 213 Days (Conservative)
 (@ Elevation 4800 +/- feet average)

UTAH IRRIGATION ZONE: 4 UDDW
 (moderately high)

UTAH WATER RIGHTS DUTY ZONE (AF/ACRE) 4

* PEAK DAY CONSUMPTIVE USE (C.U./ET) Turf peak month July 5.08 in/month
 (NWS station at Tooele using data from Grantsville)

(115% * ave day of peak month) Turf grass = $0.16 \frac{\text{in}}{\text{day}} * 1.15 = 0.19$ in/day

* SEASONAL CONSUMPTIVE USE (C.U.) Turf grass = $24.3 \frac{\text{in}}{\text{yr}} * 1.00 = 24.28$ in/yr

SEASONAL GROSS REQUIREMENTS

SEASONAL CONSUMPTIVE USE (C.U.) = 24.28 in/yr

Less soil moisture - 0.75 in/yr

(fine sands 0.75 in/ft*1ft effective root zone)

Less rainfall average (during Irrigation season) 80% of rain during irrig season - 8.472 in/yr

NET SEASONAL CONSUMPTIVE USE (C.U.)/ET = 15.06 in/yr

GROSS IRRIGATION REQUIREMENTS

Assumed Efficiency = 60.0%
 Seasonal:

Net C.U./Efficiency $15.06 \frac{\text{in}}{\text{yr}} \div 60.0\% = 25.10$ in/yr

IF NO RAIN OCCURS AND NO SOIL MOISTURE (SEASONAL CONSUMPTIVE USE (C.U.)) $24.3 \frac{\text{in}}{\text{yr}} \div 60.0\% = 40.47$ in/yr

AC-FT/ACRE Conversion $40.47 \frac{\text{in}}{\text{yr}} * 43,560 \frac{\text{ft}^2}{\text{acre}} * 7.48 \frac{\text{gal}}{\text{ft}^3} / 12 \frac{\text{in}}{\text{ft}} * 325,851 \frac{\text{gal}}{\text{acre} \cdot \text{ft}} = 3.37$ ac-ft/acre

If conservation is practiced

Turf 35% 3.37 ac-ft/acre

Xeriscape 65% 1.69 ac-ft/acre (assumed 3)

Weighted Average 100% 2.28 ac-ft/acre

0.68351
0.31649

Peak Day

Peak C.U. / Efficiency $0.188 \frac{\text{in}}{\text{day}} \div 60.0\% = 0.314$ in/day

gpm/ac Conversion $0.314 \frac{\text{in}}{\text{day}} * 43,560 \frac{\text{ft}^2}{\text{acre}} * 7.48 \frac{\text{gal}}{\text{ft}^3} / 12 \frac{\text{in}}{\text{ft}} * 1,440 \frac{\text{min}}{\text{day}} = 5.92$ gpm/ac

If conservation is practiced

Turf 35% 5.92 gpm/acre

Xeriscape 65% 2.96 gpm/acre (assumed 3)

Weighted Average 100% 4.00 gpm/acre

gpd/ac Conversion with no conservation

$5.92 \frac{\text{gpm}}{\text{acre}} * 1,440 \frac{\text{min}}{\text{day}} = 8,530$ gpd/ac
 (Peak Day Demand)

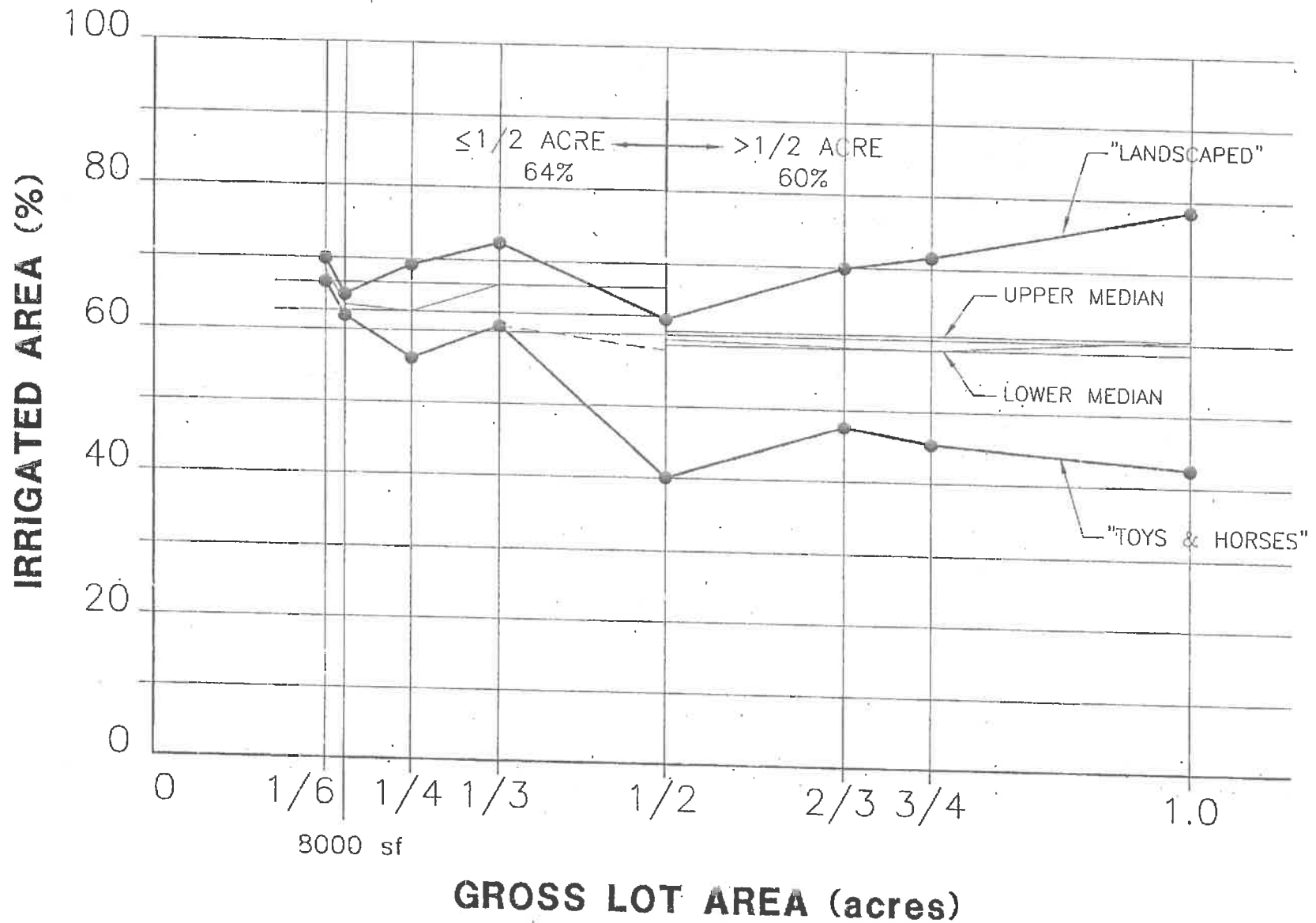
gpd/acre conversion if conservation practiced

$4.00 \frac{\text{gpm}}{\text{acre}} * 1,440 \frac{\text{min}}{\text{day}} = 5,760$ gpd/ac
 (Peak Day Demand)

* Data taken from the Utah Division of Water Rights Consumptive Use Tables
 (<http://nrwr1.nr.state.ut.us/techinfo/consumpt/default.htm>).

Ref: Ames Irrigation Handbook Third Edition 1967

PERCENTAGE OF LOT IRRIGATED



IRRIGATED ACREAGE WORKSHEET - 1/6 ACRE LAWN

LOT AREA (square feet)	7,200	80'x90' average lot size for very high density development
HOME FOOTPRINT	(1,200)	Assumes garage (25' x 25'), split level home (30' x 40')
DRIVEWAY	(600)	20' x 30'
PATIO	(225)	15' x 15'
SIDEWALK	(120)	4' by 30'
RV PAD	0	none
PLAY ITEMS	(100)	10' x 10' sand box
OUTBUILDINGS	(80)	8' x 10' tuff shed
ANIMAL CONTAINMENT	(72)	6' x 12' dog run
<u>PARK STRIP (length of frontage - drive width)</u>	<u>240</u>	<u>4' x (80' - 20')</u>
TOTAL IRRIGATED AREA (square feet)	5,043	70.0%

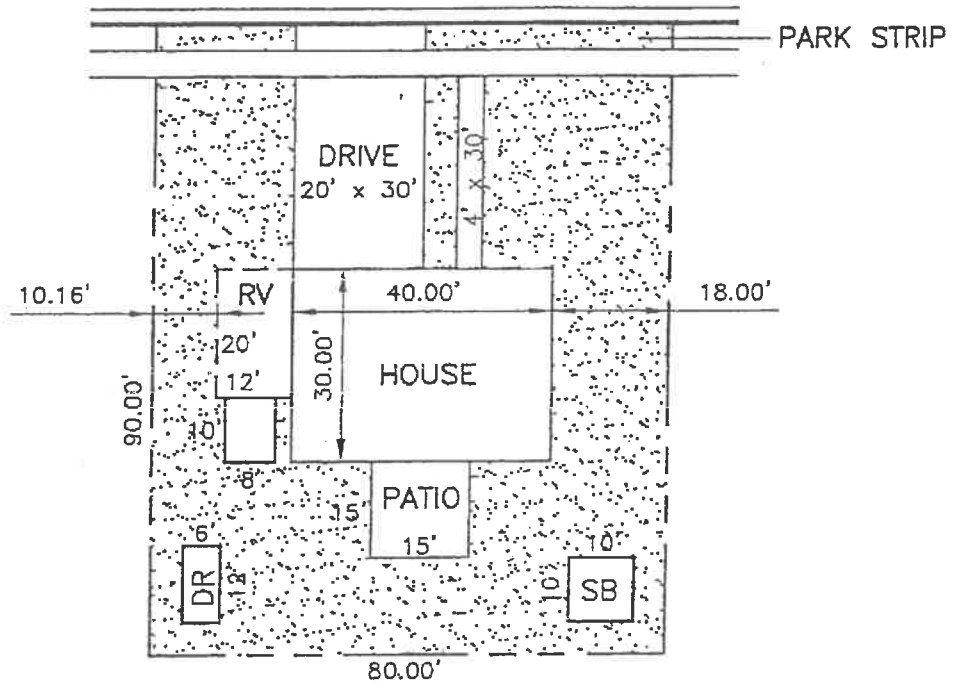
NOTE: Actual irrigated acreage will vary from lot to lot. This worksheet is intended to be an average only. Where actual data exists, it should be used.

IRRIGATED ACREAGE WORKSHEET - 1/6 ACRE RV

LOT AREA (square feet)	7,200	80'x90' average lot size for very high density development
HOME FOOTPRINT	(1,200)	Assumes garage (25' x 25'), split level home (30' x 40')
DRIVEWAY	(600)	20' x 30'
PATIO	(225)	15' x 15'
SIDEWALK	(120)	4' by 30'
RV PAD	(240)	12' x 20'
PLAY ITEMS	(100)	10' x 10' sand box
OUTBUILDINGS	(80)	8' x 10' tuff shed
ANIMAL CONTAINMENT	(72)	6' x 12' dog run
<u>PARK STRIP (length of frontage - drive width)</u>	<u>240</u>	<u>4' x (80' - 20')</u>
TOTAL IRRIGATED AREA (square feet)	4,803	66.7%

NOTE: Actual irrigated acreage will vary from lot to lot. This worksheet is intended to be an average only. Where actual data exists, it should be used.

1/6 ACRE - RV



IRRIGATED ACREAGE WORKSHEET - 8,000 SF LAWN

LOT AREA (square feet)	8,000	80' x 100' lot size for high density development
HOME FOOTPRINT	(1,600)	Assumes garage (25' x 25'), split level home (35' x 45.7')
DRIVEWAY	(750)	25' x 30'
PATIO	(300)	15' x 20'
SIDEWALK	(120)	4' by 30'
RV PAD	0	none
PLAY ITEMS	(100)	10' x 10' sandbox
OUTBUILDINGS	(80)	8' x 10' tuff shed
ANIMAL CONTAINMENT	(72)	6' x 12' dog run
PARK STRIP (length of frontage - drive width)	220	4' x (80' - 25')
TOTAL IRRIGATED AREA (square feet)	5,198	65.0%

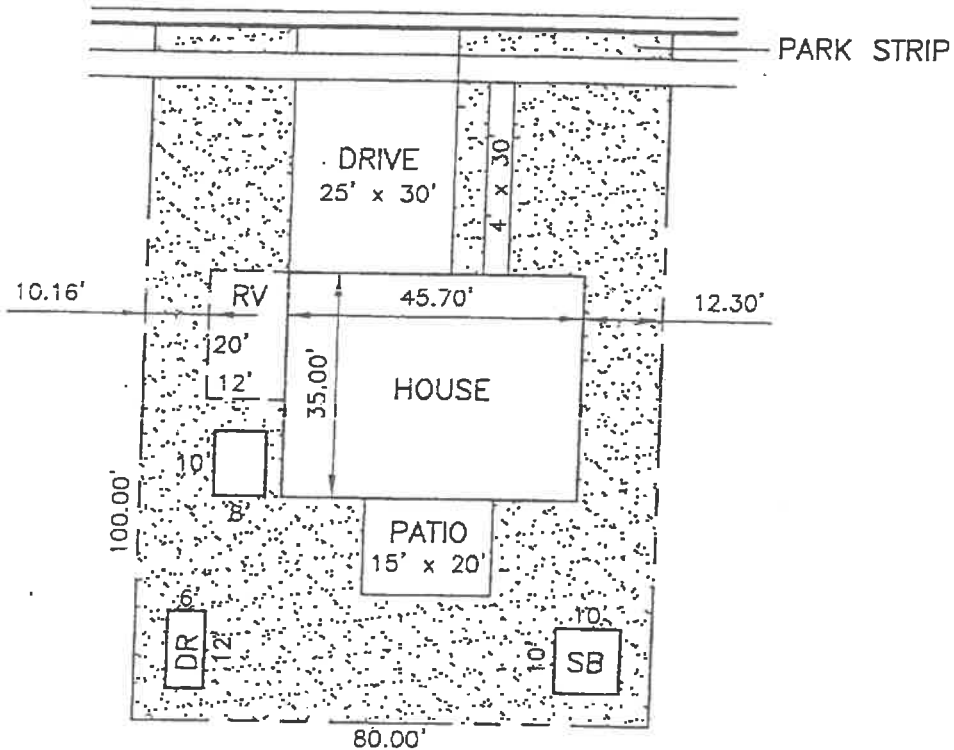
NOTE: Actual irrigated acreage will vary from lot to lot. This worksheet is intended to be an average only. Where actual data exists, it should be used.

IRRIGATED ACREAGE WORKSHEET - 8,000 SF RV

LOT AREA (square feet)	8,000	80' x 100' lot size for high density development
HOME FOOTPRINT	(1,600)	Assumes garage (25' x 25'), split level home (35' x 45.7')
DRIVEWAY	(750)	25' x 30'
PATIO	(300)	15' x 20'
SIDEWALK	(120)	4' by 30'
RV PAD	(240)	12' x 20'
PLAY ITEMS	(100)	10' x 10' sandbox
OUTBUILDINGS	(80)	8' x 10' tuff shed
ANIMAL CONTAINMENT	(72)	6' x 12' dog run
<u>PARK STRIP (length of frontage - drive width)</u>	<u>220</u>	<u>4' x (80' - 25')</u>
TOTAL IRRIGATED AREA (square feet)	4,958	62.0%

NOTE: Actual irrigated acreage will vary from lot to lot. This worksheet is intended to be an average only. Where actual data exists, it should be used.

8,000 SF - RV

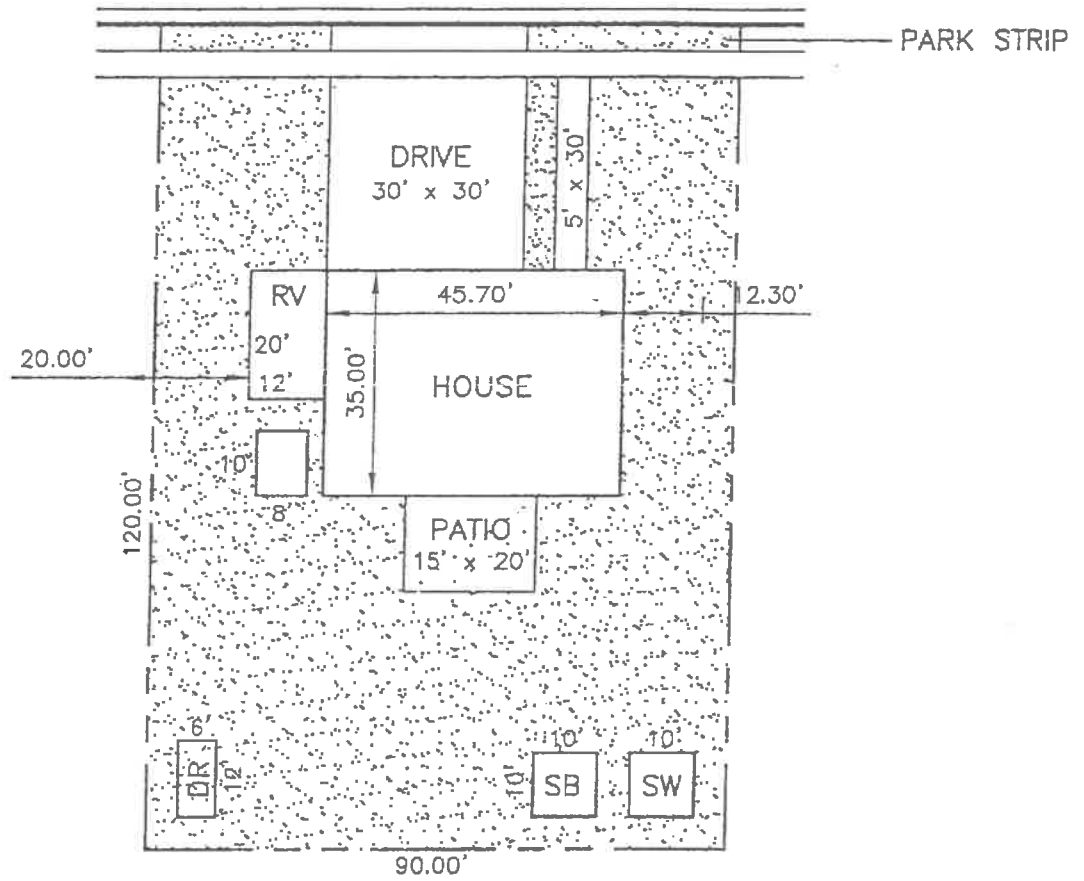


IRRIGATED ACREAGE WORKSHEET - 1/4 ACRE LAWN

LOT AREA (square feet)	10,800	90' x 120' average lot size for high density development
HOME FOOTPRINT	(1,600)	Assumes garage (25' x 35'), split level home (35' x 45.7')
DRIVEWAY	(900)	30' x 30'
PATIO	(300)	15' x 20'
SIDEWALK	(150)	5' by 30'
RV PAD	(240)	12' x 20'
PLAY ITEMS	(200)	10' x 10' sandbox, 10' x 10' swing set
OUTBUILDINGS	(80)	8' x 10' tuff shed
ANIMAL CONTAINMENT	(72)	6' x 12' dog run
<u>PARK STRIP (length of frontage - drive width)</u>	<u>240</u>	<u>4' x (90' - 30')</u>
TOTAL IRRIGATED AREA (square feet)	7,498	69.4%

NOTE: Actual irrigated acreage will vary from lot to lot. This worksheet is intended to be an average only. Where actual data exists, it should be used.

1/4 ACRE LOT - LAWN

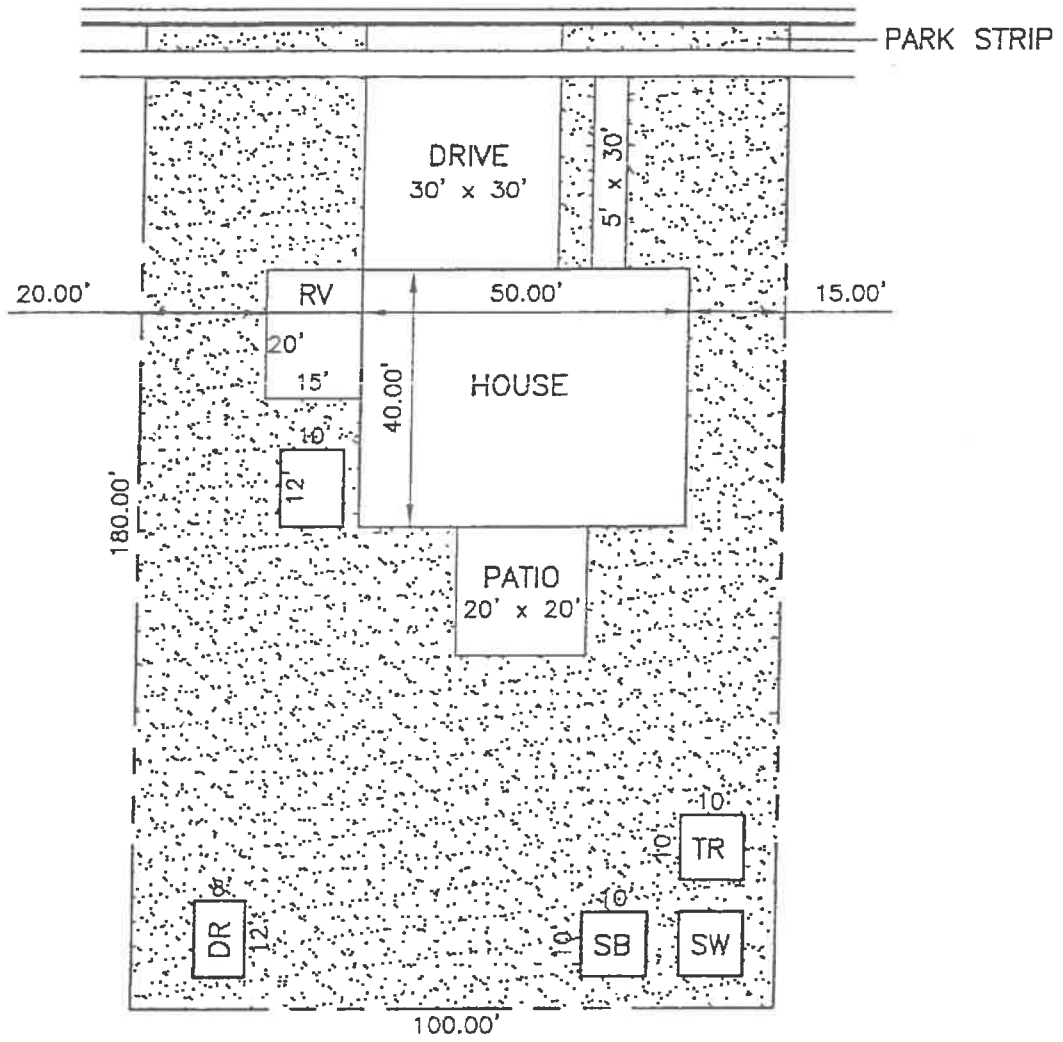


IRRIGATED ACREAGE WORKSHEET - 1/4 ACRE SHOP

LOT AREA (square feet)	10,800	90' x 120' average lot size for high density development
HOME FOOTPRINT	(1,600)	Assumes garage (25' x 35'), split level home (35' x 45.7')
DRIVEWAY	(900)	30' x 30'
PATIO	(300)	15' x 20'
SIDEWALK	(150)	5' by 30'
RV PAD	(240)	12' x 20'
PLAY ITEMS	(200)	10' x 10' sandbox, 10' x 10' swing set
OUTBUILDINGS	(1,500)	20' x 30' shop, 90' x 10' gravel access drive
ANIMAL CONTAINMENT	(72)	6' x 12' dog run
PARK STRIP (length of frontage - drive width)	240	4' x (90' - 30')
TOTAL IRRIGATED AREA (square feet)	6,078	56.3%

NOTE: Actual irrigated acreage will vary from lot to lot. This worksheet is intended to be an average only. Where actual data exists, it should be used.

1/3 ACRE LOT - LAWN

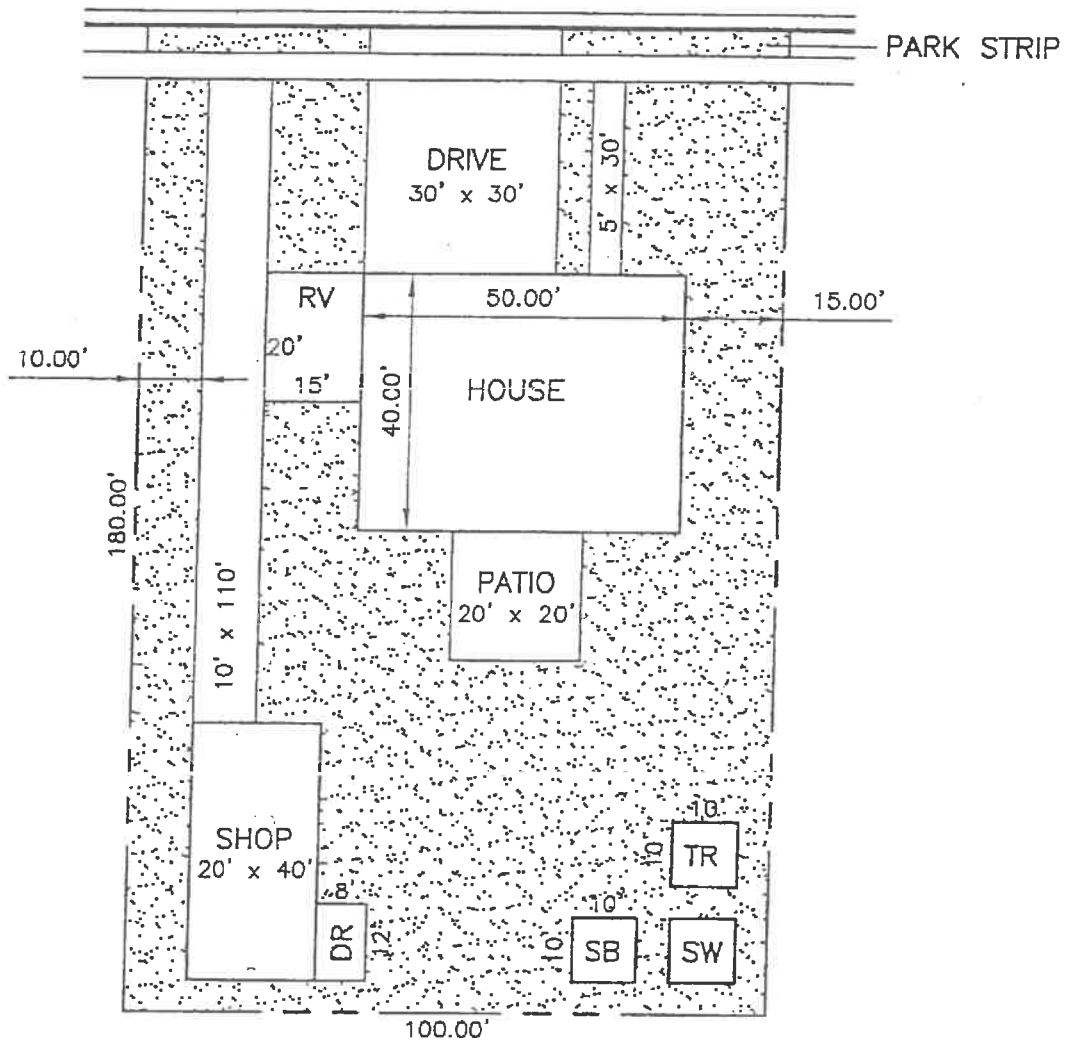


IRRIGATED ACREAGE WORKSHEET - 1/3 ACRE SHOP

LOT AREA (square feet)	14,500	100' x 145' average lot size for medium density development
HOME FOOTPRINT	(2,000)	Assumes garage (25' x 35'), split level home (40' x 50')
DRIVEWAY	(900)	30' x 30'
PATIO	(400)	20' x 20'
SIDEWALK	(150)	5' x 30'
RV PAD	(300)	15' x 20'
PLAY ITEMS	(300)	10' x 10' sandbox, 10' x 10' swing set, 10' x 10' trampoline
OUTBUILDINGS	(1,800)	20' x 40' shop 100' x 10' gravel access drive
ANIMAL CONTAINMENT	(96)	8' x 12' dog run
PARK STRIP (length of frontage - drive width)	280	4' x (100' - 30')
TOTAL IRRIGATED AREA (square feet)	8,834	60.9%

NOTE: Actual irrigated acreage will vary from lot to lot. This worksheet is intended to be an average only. Where actual data exists, it should be used.

1/3 ACRE LOT - SHOP



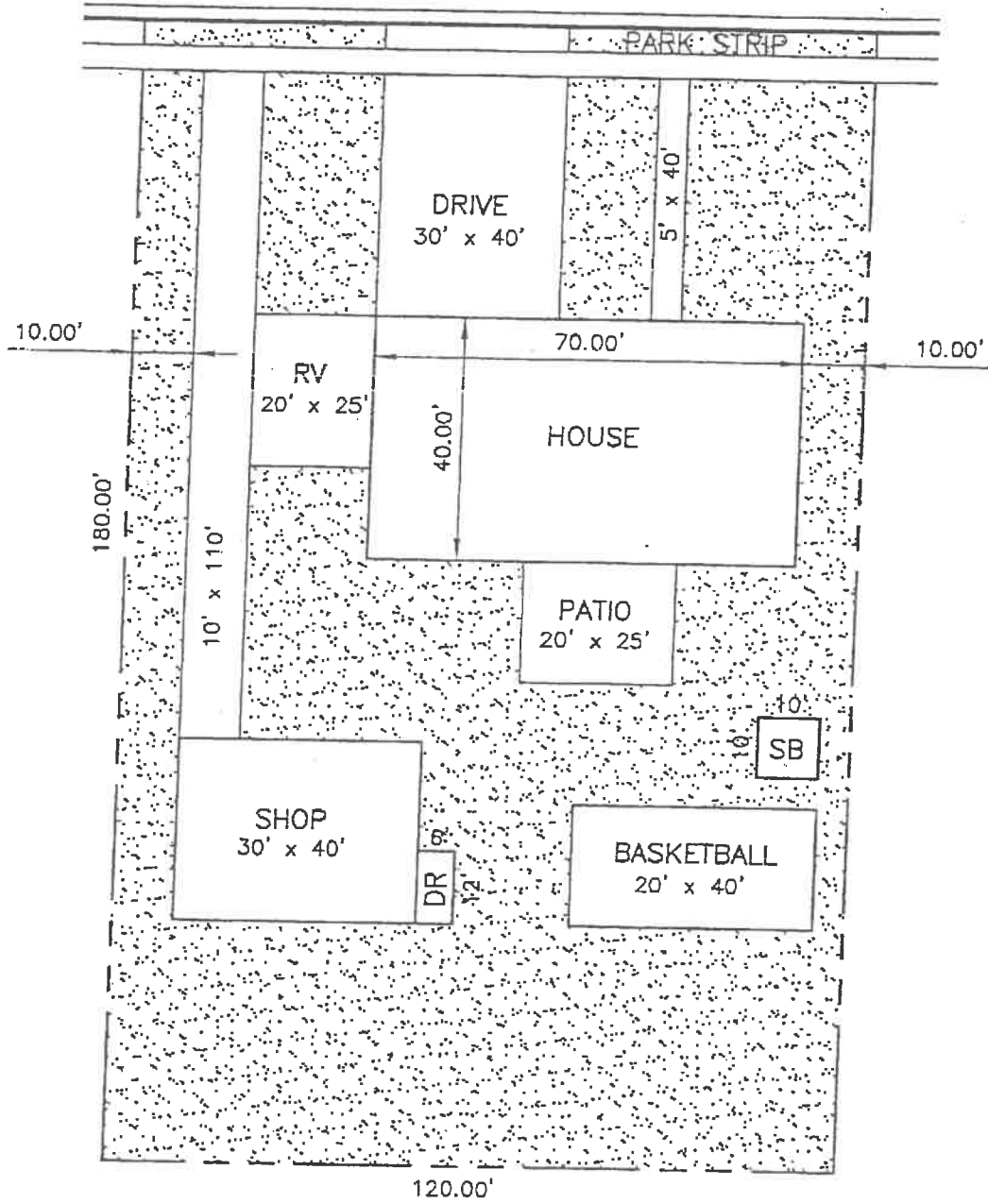
IRRIGATED ACREAGE WORKSHEET - 1/2 ACRE LAWN

LOT AREA (square feet)	21,600	120' x 180' average lot size for medium density development
HOME FOOTPRINT	(2,800)	Assumes garage (25' x 35'), split level home (40' x 70')
DRIVEWAY	(1,200)	30' x 40'
PATIO	(500)	25' x 20'
SIDEWALK	(200)	5' x 40'
RV PAD	(500)	20' x 25'
PLAY ITEMS	(900)	10' x 10' sandbox, 20' x 40' basketball court
OUTBUILDINGS	(2,300)	30' x 40' shop, 110' x 10' gravel access drive
ANIMAL CONTAINMENT	(72)	6' x 12' dog run
PARK STRIP (length of frontage - drive width)	360	4' x (120' - 30')
TOTAL IRRIGATED AREA (square feet)	13,488	62.4%

NOTE: Actual irrigated acreage will vary from lot to lot. This worksheet is intended to be an average only. Where actual data exists, it should be used.

Assumes that large animals are kept on property, along with feed storage for the animal.

1/2 ACRE LOT - LAWN



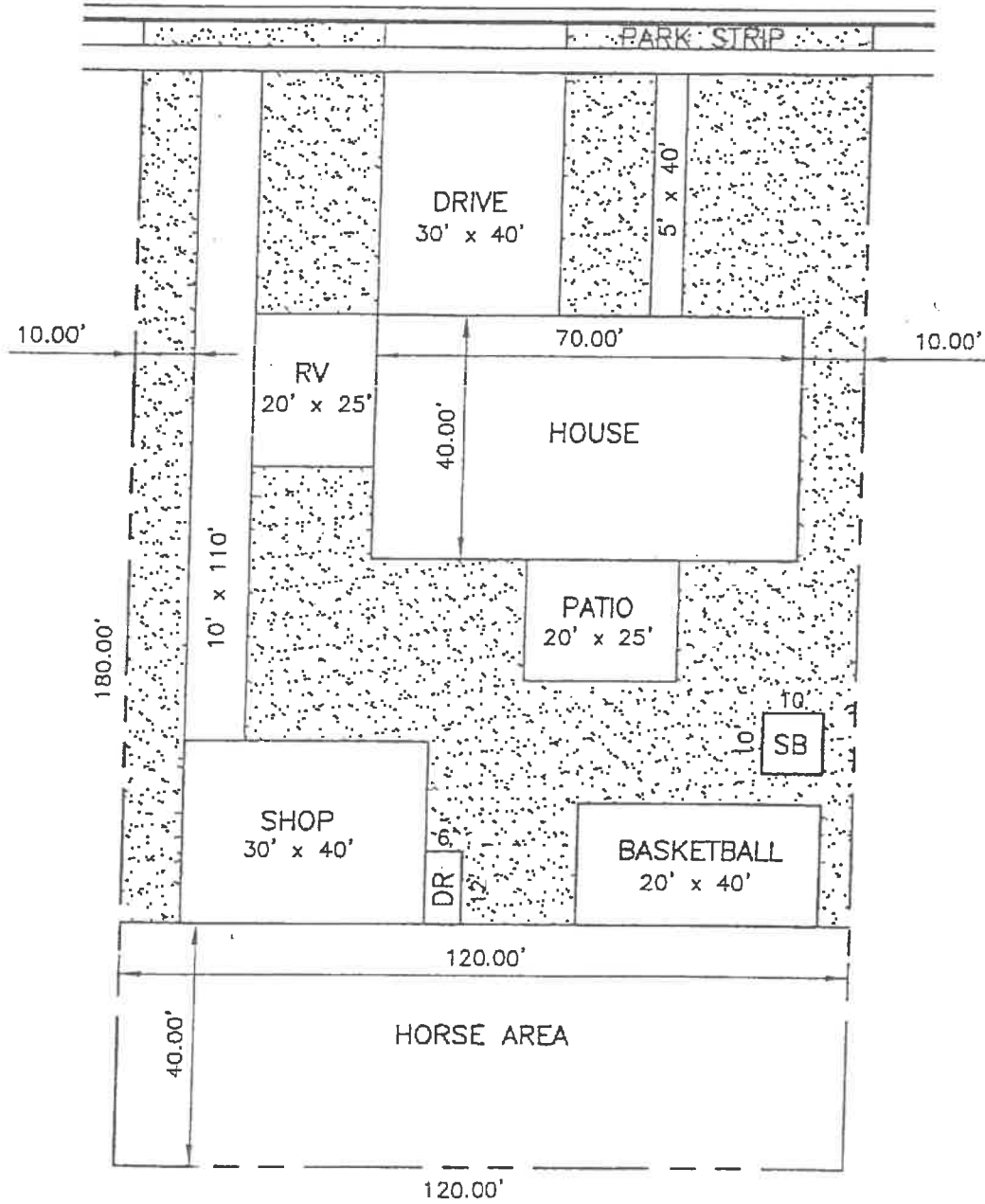
IRRIGATED ACREAGE WORKSHEET - 1/2 ACRE HORSE

LOT AREA (square feet)	21,600	120' x 180' average lot size for medium density development
HOME FOOTPRINT	(2,800)	Assumes garage (25' x 35'), split level home (40' x 70')
DRIVEWAY	(1,200)	30' x 40'
PATIO	(500)	25' x 20'
SIDEWALK	(200)	5' by 40'
RV PAD	(500)	20' x 25'
PLAY ITEMS	(900)	10' x 10' sandbox, 20' x 40' basketball court
OUTBUILDINGS	(2,300)	30' x 40' shop, 110' x 10' gravel access drive
ANIMAL CONTAINMENT	(4,872)	6' x 12' dog run, 40' x 120' large animal corral & support area
<u>PARK STRIP (length of frontage - drive width)</u>	<u>360</u>	<u>4' x (120' - 30')</u>
TOTAL IRRIGATED AREA (square feet)	8,688	40.2%

NOTE: Actual irrigated acreage will vary from lot to lot. This worksheet is intended to be an average only. Where actual data exists, it should be used.

Assumes that large animals are kept on property, along with feed storage for the animal, and no animal containment area (pasture) is irrigated.

1/2 ACRE LOT - HORSE

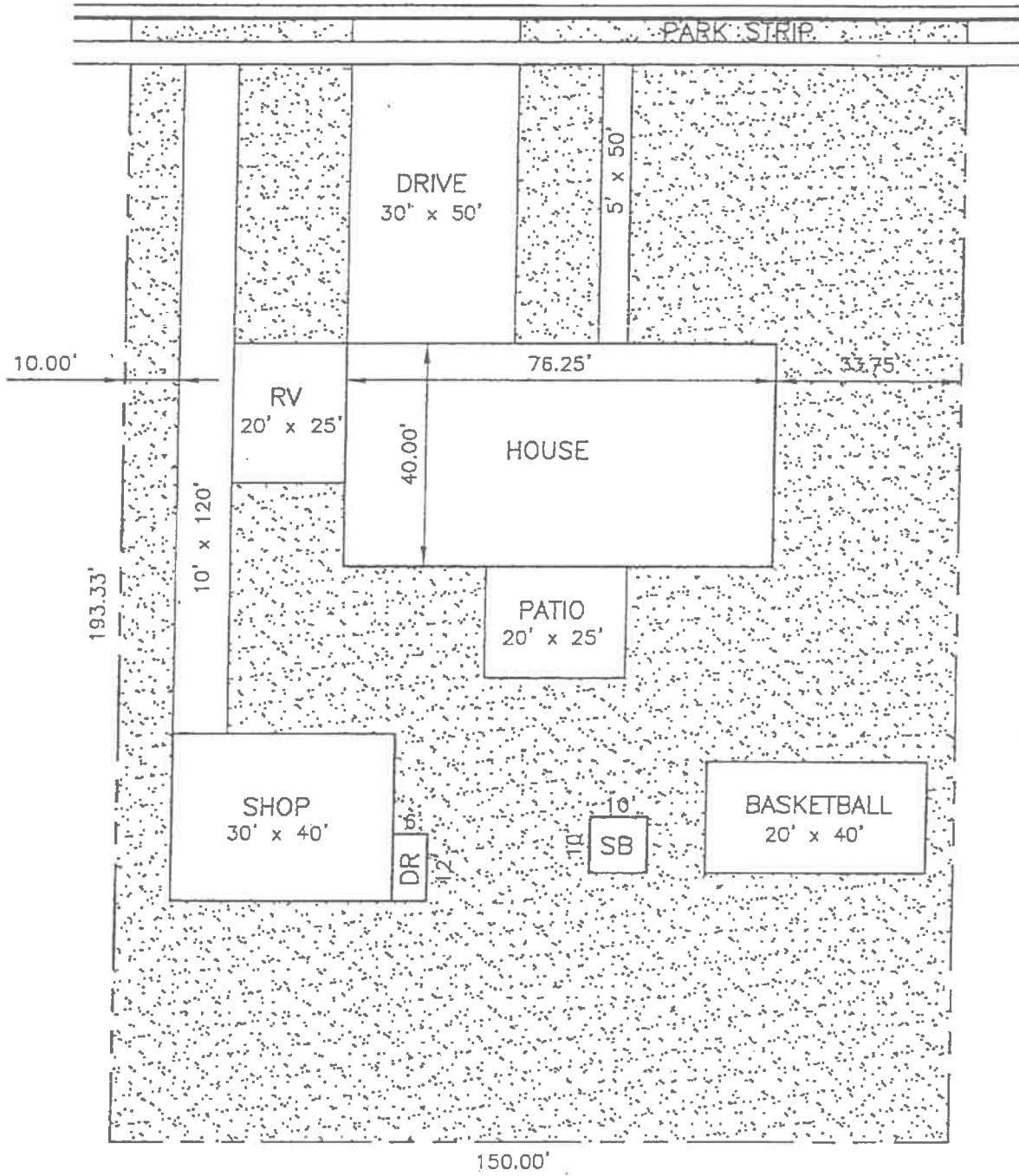


IRRIGATED ACREAGE WORKSHEET - 2/3 ACRE LAWN

LOT AREA (square feet)	29,000	150' x 193.33' average lot size for medium density developme
HOME FOOTPRINT	(3,050)	Assumes garage (25' x 35'), split level home (40' x 76.25')
DRIVEWAY	(1,500)	30' x 50'
PATIO	(500)	20' x 25'
SIDEWALK	(250)	5' by 50'
RV PAD	(500)	20' x 25'
PLAY ITEMS	(900)	10' x 10' sandbox, 20' x 40' basketball court
OUTBUILDINGS	(2,400)	30' x 40' shop, 120' x 10' gravel access drive
ANIMAL CONTAINMENT	(72)	6' x 12' dog run
PARK STRIP (length of frontage - drive width)	480	4' x (150' - 30')
TOTAL IRRIGATED AREA (square feet)	20,308	70.0%

NOTE: Actual irrigated acreage will vary from lot to lot. This worksheet is intended to be an average only. Where actual data exists, it should be used.

2/3 ACRE LOT - LAWN



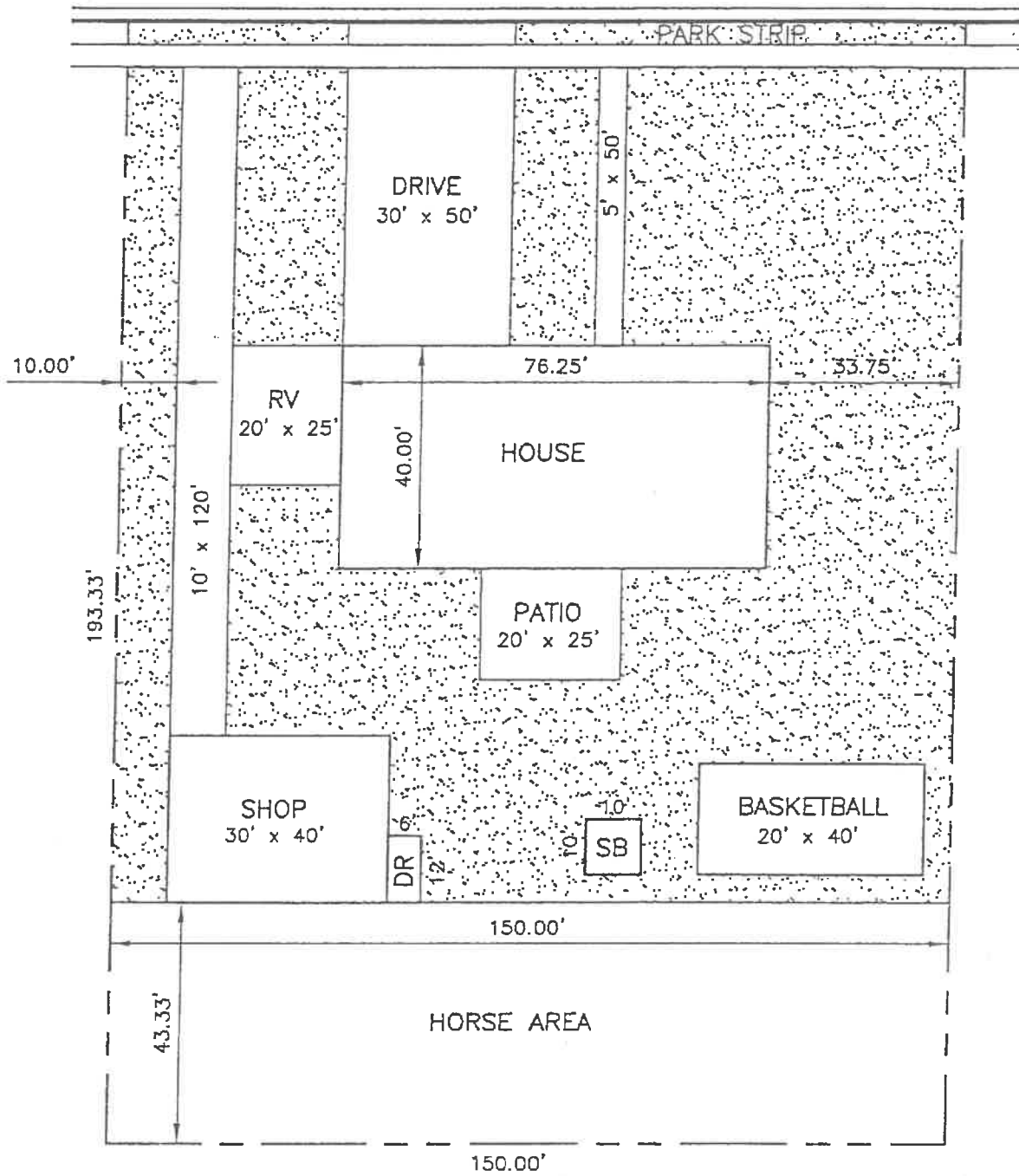
IRRIGATED ACREAGE WORKSHEET - 2/3 ACRE HORSE

LOT AREA (square feet)	29,000	150' x 193.33' average lot size for medium density developme
HOME FOOTPRINT	(3,050)	Assumes garage (25' x 35'), split level home (40' x 76.25')
DRIVEWAY	(1,500)	30' x 50'
PATIO	(500)	20' x 25'
SIDEWALK	(250)	5' by 50'
RV PAD	(500)	20' x 25'
PLAY ITEMS	(900)	10' x 10' sandbox, 20' x 40' basketball court
OUTBUILDINGS	(2,400)	30' x 40' shop, 120' x 10' gravel access drive
ANIMAL CONTAINMENT	(6,572)	6' x 12' dog run, 40' x 120' large animal corral & support area
PARK STRIP (length of frontage - drive width)	480	4' x (150' - 30')
TOTAL IRRIGATED AREA (square feet)	13,809	47.6%

NOTE: Actual irrigated acreage will vary from lot to lot. This worksheet is intended to be an average only. Where actual data exists, it should be used.

Assumes that large animals are kept on property, along with feed storage for the animal, and no animal containment area (pasture) is irrigated.

2/3 ACRE LOT - HORSE

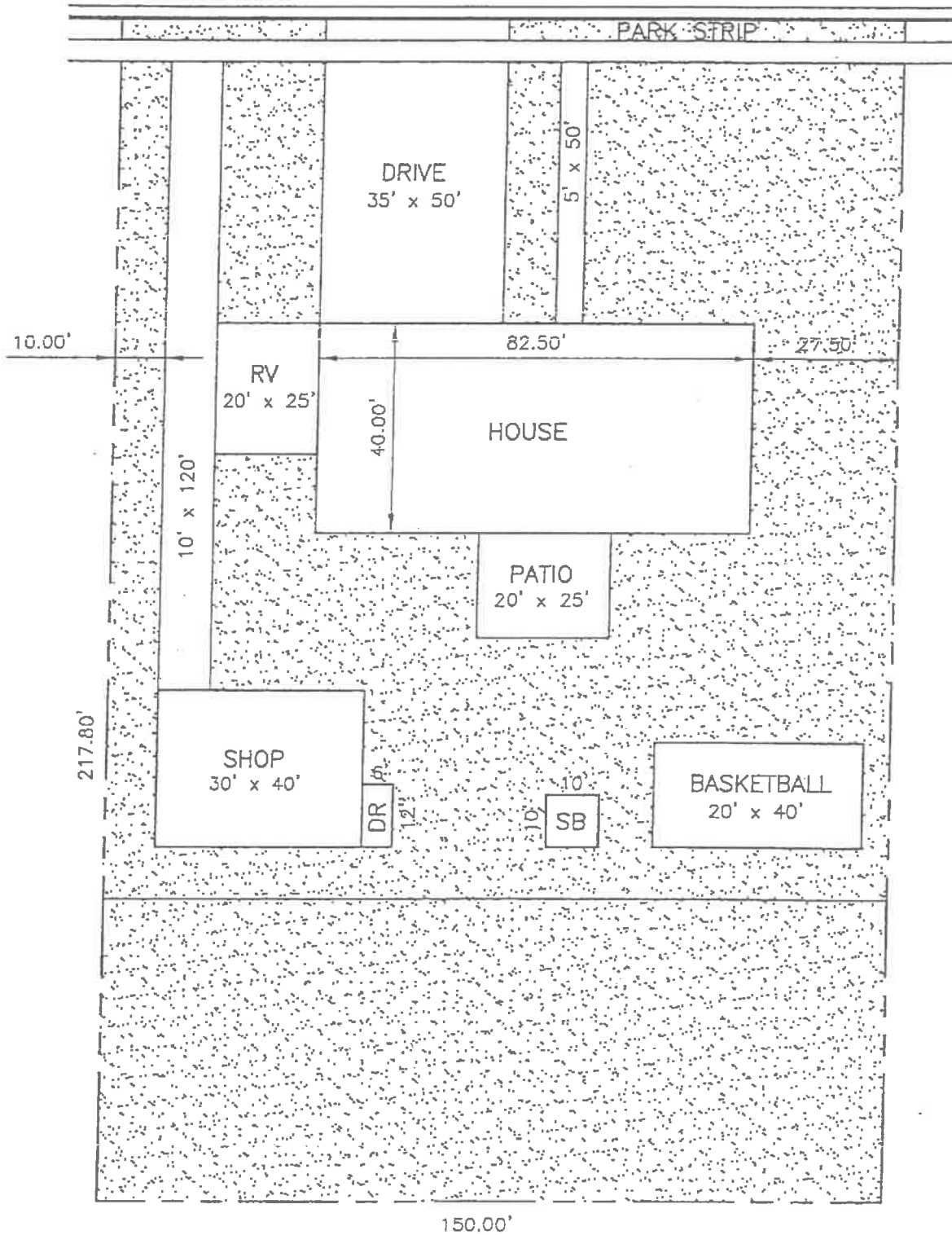


IRRIGATED ACREAGE WORKSHEET - 3/4 ACRE LAWN

LOT AREA (square feet)	32,670	150' x 217.8' average lot size for medium density development
HOME FOOTPRINT	(3,300)	Assumes garage (25' x 35'), split level home (40' x 82.5')
DRIVEWAY	(1,750)	35' x 50'
PATIO	(500)	20' x 25'
SIDEWALK	(250)	5' by 50'
RV PAD	(500)	20' x 25'
PLAY ITEMS	(900)	10' x 10' sandbox, 20' x 40' basketball court
OUTBUILDINGS	(2,400)	30' x 40' shop, 120' x 10' gravel access drive
ANIMAL CONTAINMENT	(72)	6' x 12' dog run
<u>PARK STRIP (length of frontage - drive width)</u>	<u>460</u>	<u>4' x (150' - 35')</u>
TOTAL IRRIGATED AREA (square feet)	23,458	71.8%

NOTE: Actual irrigated acreage will vary from lot to lot. This worksheet is intended to be an average only. Where actual data exists, it should be used.

3/4 ACRE LOT - LAWN



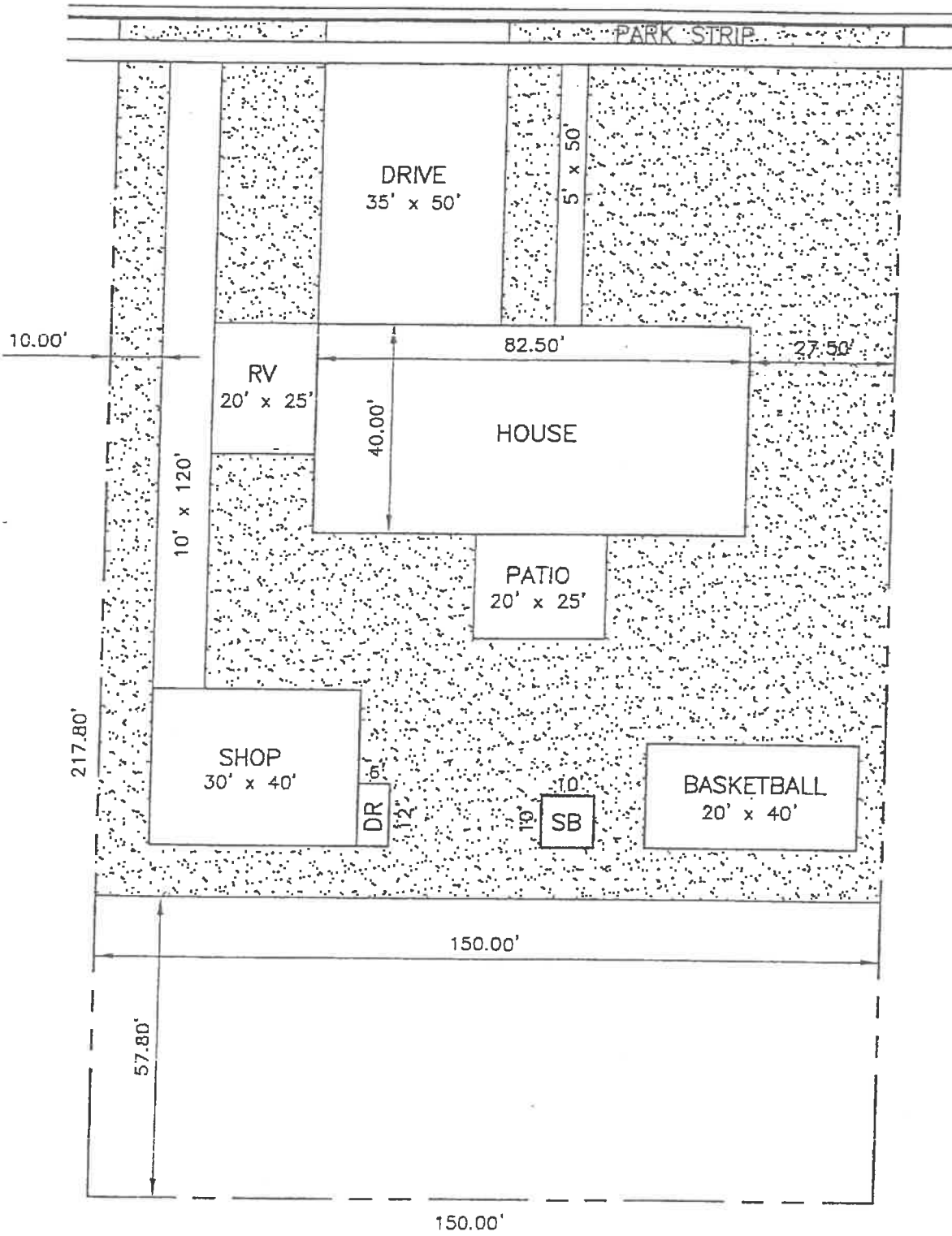
IRRIGATED ACREAGE WORKSHEET - 3/4 ACRE HORSE

LOT AREA (square feet)	32,670	150' x 217.8' average lot size for medium density development
HOME FOOTPRINT	(3,300)	Assumes garage (25' x 35'), split level home (40' x 82.5')
DRIVEWAY	(1,750)	35' x 50'
PATIO	(500)	20' x 25'
SIDEWALK	(250)	5' by 50'
RV PAD	(500)	20' x 25'
PLAY ITEMS	(900)	10' x 10' sandbox, 20' x 40' basketball court
OUTBUILDINGS	(2,400)	30' x 40' shop, 120' x 10' gravel access drive
ANIMAL CONTAINMENT	(8,742)	6' x 12' dog run, 57.5' x 150' large animal corral/support area
<u>PARK STRIP (length of frontage - drive width)</u>	<u>460</u>	<u>4' x (150' - 35')</u>
TOTAL IRRIGATED AREA (square feet)	14,788	45.3%

NOTE: Actual irrigated acreage will vary from lot to lot. This worksheet is intended to be an average only. Where actual data exists, it should be used.

Assumes that large animals are kept on property, along with feed storage for the animal, and no animal containment area (pasture) is irrigated.

3/4 ACRE LOT - HORSE

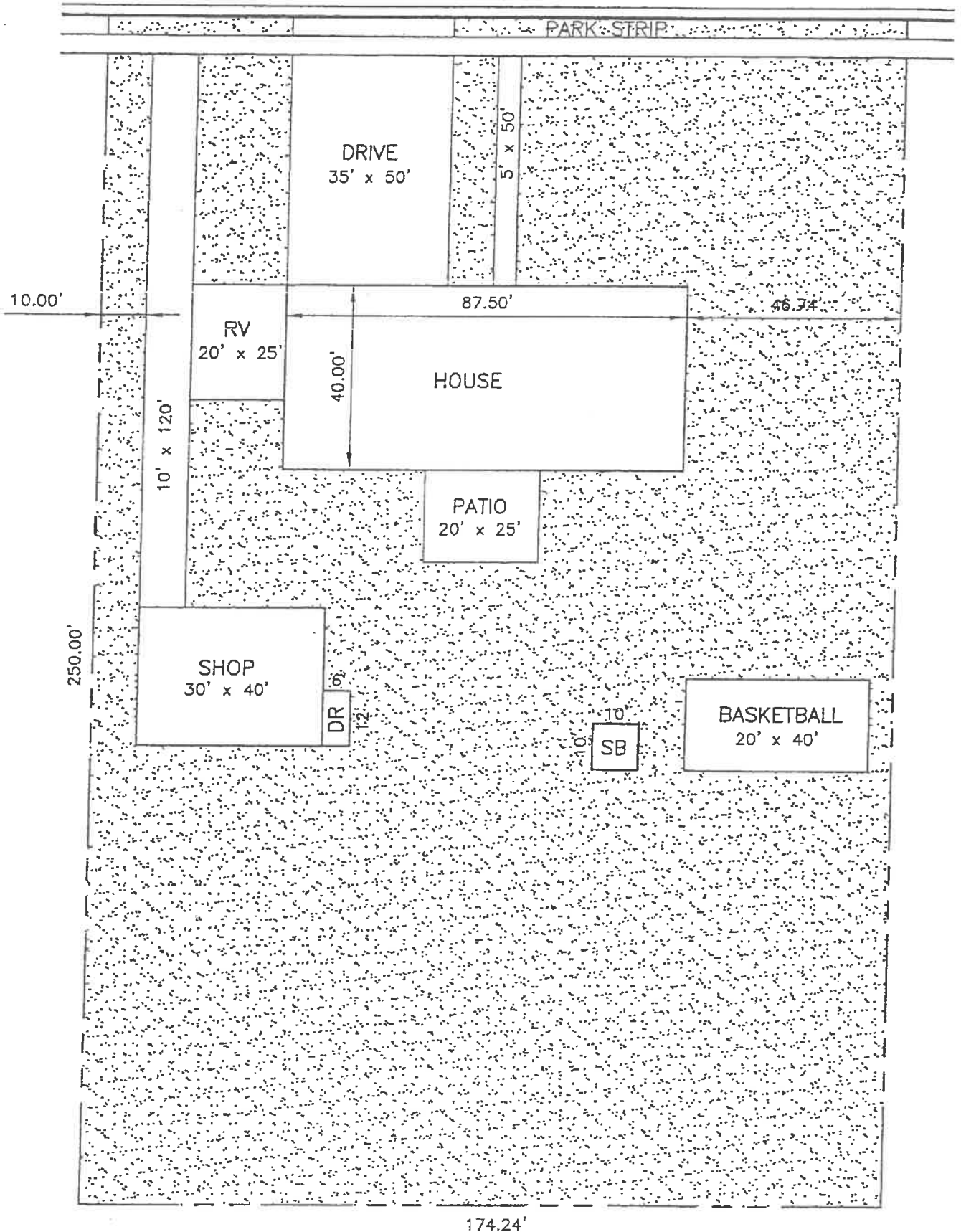


IRRIGATED ACREAGE WORKSHEET - 1 ACRE LAWN

LOT AREA (square feet)	43,560	174.24' x 250' average lot size for low density development
HOME FOOTPRINT	(3,500)	Assumes garage (25' x 35'), split level home (40' x 87.5')
DRIVEWAY	(1,750)	35' x 50'
PATIO	(500)	20' x 25'
SIDEWALK	(250)	5' by 50'
RV PAD	(500)	20' x 25'
PLAY ITEMS	(900)	10' x 10' sandbox, 20' x 40' basketball court
OUTBUILDINGS	(2,400)	30' x 40' shop, 120' x 10' gravel access drive
ANIMAL CONTAINMENT	(72)	6' x 12' dog run
PARK STRIP (length of frontage - drive width)	557	4' x (174.24' - 35')
TOTAL IRRIGATED AREA (square feet)	34,245	78.6%

NOTE: Actual irrigated acreage will vary from lot to lot. This worksheet is intended to be an average only. Where actual data exists, it should be used.

1 ACRE LOT - LAWN



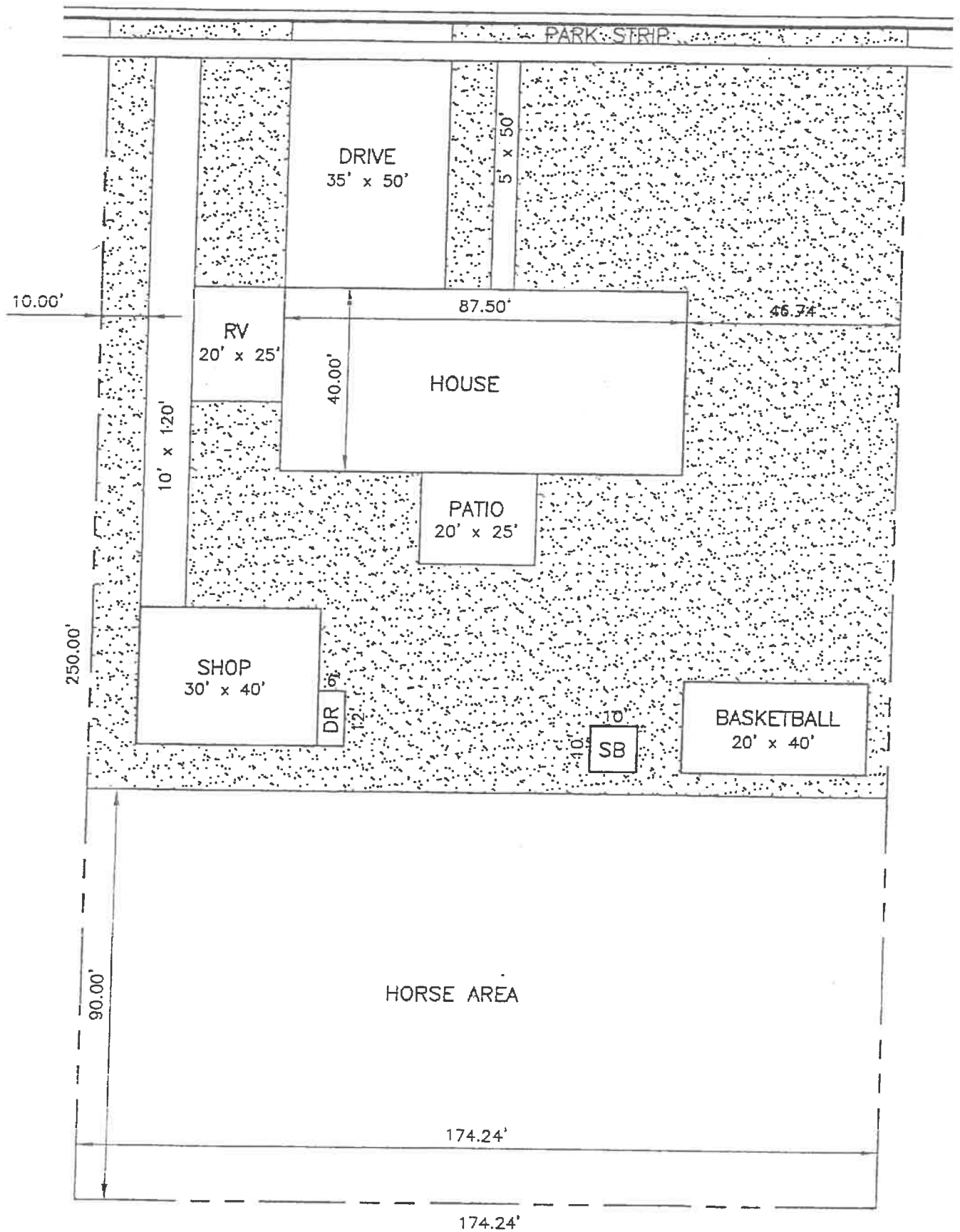
IRRIGATED ACREAGE WORKSHEET - 1 ACRE HORSE

LOT AREA (square feet)	43,560	174.24' x 250' average lot size for low density development
HOME FOOTPRINT	(3,500)	Assumes garage (25' x 35'), split level home (40' x 87.5')
DRIVEWAY	(1,750)	35' x 50'
PATIO	(500)	20' x 25'
SIDEWALK	(250)	5' by 50'
RV PAD	(500)	20' x 25'
PLAY ITEMS	(900)	10' x 10' sandbox, 20' x 40' basketball court
OUTBUILDINGS	(2,400)	30' x 40' shop, 120' x 10' gravel access drive
ANIMAL CONTAINMENT	(15,754)	6' x 12' dog run, 90' x 174.24' large animal corral/support area
PARK STRIP (length of frontage - drive width)	557	4' x (174.24' - 35')
TOTAL IRRIGATED AREA (square feet)	18,563	42.6%

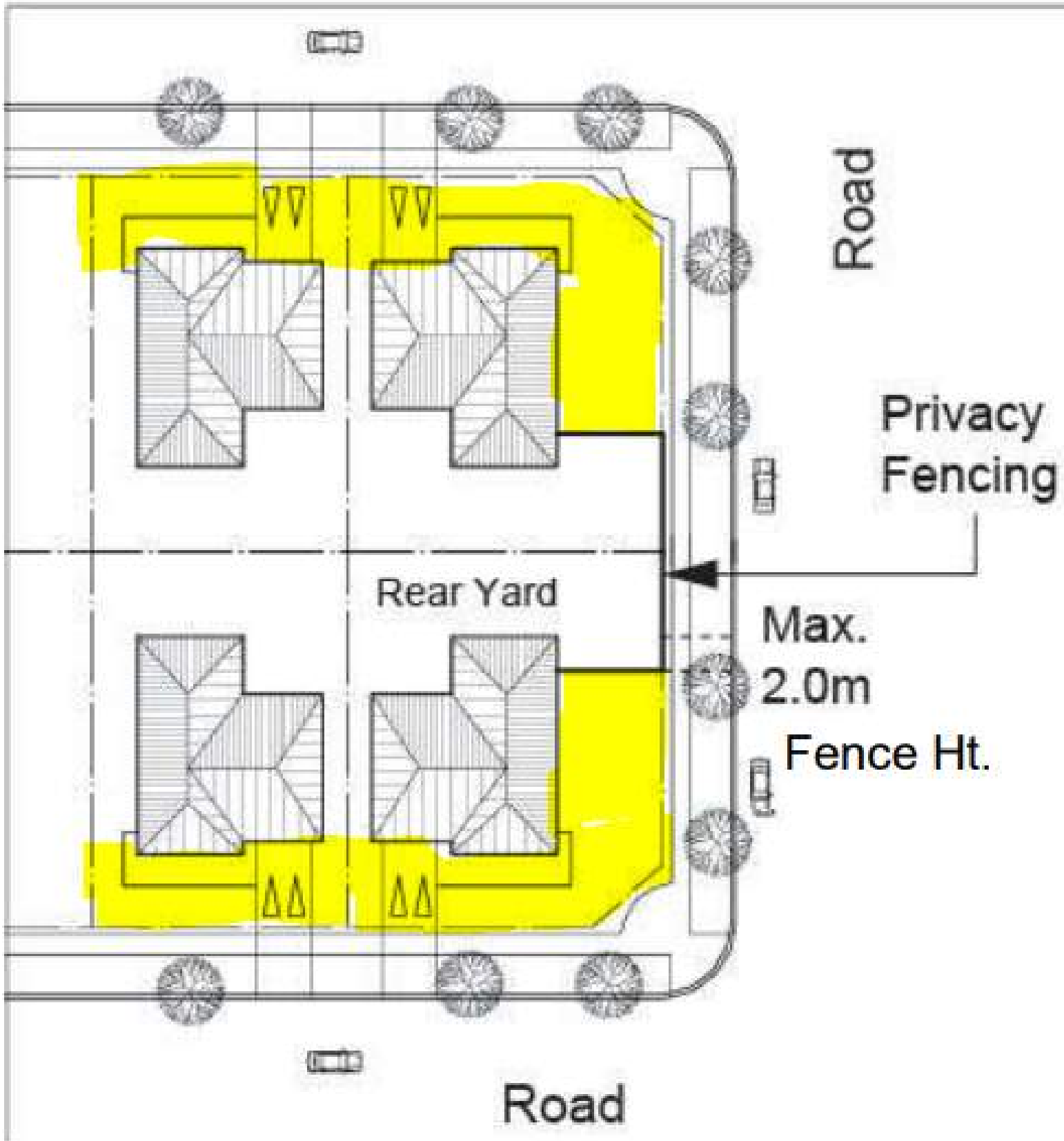
NOTE: Actual irrigated acreage will vary from lot to lot. This worksheet is intended to be an average only. Where actual data exists, it should be used.

Assumes that large animals are kept on property, along with feed storage for the animal, and no animal containment area (pasture) is irrigated.

1 ACRE LOT - HORSE



Front Yard Definition for Waterwise Landscaping



Appendix L Grantsville City Storm Drainage Design Guidelines



GRANTSVILLE CITY

STORM DRAINAGE DESIGN REQUIREMENTS

1. **Storm Water Collection System Requirements:**

a) **Design Storms:**

The storm water pipe collection system shall be designed to convey the 24-hour duration – Annual Exceedance Probability (AEP) 10-percent (10%) storm, 24-hour duration event if there is a continuous pathway to the Great Salt Lake. Collection systems for basin and street shall be sized for the AEP 1-percent (1%) storm, 24-hour duration event when discharging to an approved City release point.

Note: The AEP 10-percent (10%) storm is equivalent to a 10-year recurrence interval storm and an AEP 1-percent (1%) storm is equivalent to a 100-year recurrence interval storm. The 10-year and 100-year terms are not used by Grantsville City to reduce confusion and accurately convey such storms have a 10-percent or 1-percent chance of occurring in any given year, rather than implying these events happen once every 10-years or 100-years.

b) **Storm Water Runoff into Street Encroachment Requirements:**

- i. Flow from the AEP 10-percent (10%) storm shall not extend more than halfway into the travel lane adjacent to the curb and a minimum 12-foot wide travel lane shall be maintained for emergency vehicles. If there is a curb then total spread must be no more than 8-feet from the curb face.

c) **Easement and Access Requirements:**

- i. Easement widths and access for drainage channels, detention/ retention basins, lots line swales, and public storm drainage lines shall be reviewed and approved by the City Engineer. Access easements shall be a minimum width of 15-feet.

d) **Acceptable Pipe Materials:**

- i. Refer to the current City's preconstruction notes for acceptable pipe materials.

e) **Minimum Pipe Diameter and Slope:**

- i. The minimum pipe diameter for any public storm water collection system pipe is 15-inches with a minimum slope of 0.50 percent. If pipe diameter and slope is below the minimum standards then approval from the City Engineer is required.

f) **Manhole Spacing:**

- i. Minimum manhole spacing is 400-feet, unless otherwise approved by the City Engineer.

g) **Storm Drain Structure Drops:**

- i. Where changes in pipe sizes occur in a manhole, the inlet pipe crown must match or be higher than the larger outlet pipe crown.

h) **Cover:**

- i. Minimum cover is 18-inches or 6 inches below the pavement section whichever is greater, unless approved by City Engineer. Pipe cover must comply with pipe manufacturer's recommendations.

i) **Catch Basin Requirements:**

- i. Catch basins will not be allowed on the radius of curves at intersections.
- ii. Flow through catch basins shall not be allowed unless designed as a combination box with manhole lid access. Locked gate access with keys for designate basin maintenance personnel and for City emergency access shall be provided.
- iii. A manufactured snout or similar oil/debris/water separator is required prior to a detention basin, retention basin, or any other discharges from a development into a public drainage. Sump depth in



catch basin with snout shall be sized as recommended by snout manufacturer.

- iv. Catch basins shall be installed at maximum intervals of 400-feet where channelized flow is occurring.

j) Detention/Retention Basin Requirements:

- i. Public, private, or HOA detention/retention basins shall have 6-foot tall (finish grade to top of sign) telespar, or City approved, post with the following signs:
 - a. “Stormwater Basin” 12-inch x 18-inch Sign
 - b. “No Trespassing” 12-inch x 18-inch Sign
 - c. Each sign shall be RA Type I Engineering Grade Prismatic Reflective Sheeting on 0.080 aluminum.
- ii. Public detention/retention basins with amenities shall have 6-foot tall (finish grade to top of sign) telespar, or City approved, post with the following signs:
 - a. “No Dumping” 12-inch x 18-inch Sign
 - b. “Stormwater Basin
Designed to collect runoff from the local storm sewer system following either a rainfall or snowmelt event.
Basins temporarily hold this stormwater, provides treatment to remove pollutants, and then slowly release the water back to our waterways.
No swimming, use at your own risk.” 18-inch x 24-inch Sign
 - c. Each sign shall be RA Type I Engineering Grade Prismatic Reflective Sheeting on 0.080 aluminum.
- iii. Storm water drainage areas need to include front yards and rear yards in the developments calculations if they do not include individual lots detention/ retention basins.
- iv. Retention and detention basins shall completely infiltrate and drain within 72-hours from the beginning of a storm event for vector control. Infiltration tests shall be performed using the double ring infiltrometer test in accordance with ASTM D 3385 for all retention and detention basins. The test shall be completed at the elevation of the bottom of the basin where infiltration will occur. A factor of safety of two (2) shall be used for design and a minimum of two (2) tests shall be completed with a minimum of one (1) test per 10,000 square feet of infiltration area. These tests shall be submitted with drainage calculations to the City for review. If the retention or detention basin is constructed in gravel soils then a percolation test may be used to determine the infiltration rate. The infiltration rate shall be calculated as follows:

$$\text{Infiltration Rate} = (\text{Percolation Rate}) / (\text{Reduction Factor})$$

Where the Reduction Factor is given by**:

$$R_f = \frac{2d_1 - \Delta d}{DIA} + 1$$

With:

- d_1 = Initial Water Depth (in.)
- Δd = Average/Final Water Level Drop (in.)
- DIA = Diameter of the Percolation Hole (in.)

*** The area Reduction Factor accounts for the exfiltration occurring through the sides of percolation hole. It assumes that the percolation rate is affected by the depth of water in the hole and that the percolating surface of the hole is in uniform soil. If there are significant problems with either of these assumptions then other adjustments may be necessary.*



- v. Storm water dry wells, injections wells, or any underground storm water discharge structure is acceptable in the City, but shall comply with the Utah Department of Environmental Quality (UDEQ) Underground Injection Control (UIC) program requirements. Proof of an application pertaining to the development has been submitted under the UIC program shall be provided to the City for their records. Special consideration shall be given to water quality, groundwater depth, and other factors. Individual or single-family homes may be exempt from these requirements. Please contact the Utah Department of Environmental Quality - Water Quality for clarification. Developments may use percolation tests for underground systems which infiltrate in the horizontal and vertical planes.
 - vi. 1-foot freeboard minimum above the AEP 1-percent (1%) storm, 24-hour duration event when discharging water level through spillway is required. Spillway shall be reinforced with concrete per City Detail.
 - vii. Detention/retention basin minimum of top berm width shall be 3-feet.
 - viii. Maximum water depths shall be 30-inches with a maximum slope of 5:1 for small detention/retention basins serving single lots or less than 5-lots unless approved by the City Engineer. Large basins serving 5-lots or more shall have a maximum slope of 3:1 and, if deeper than 3-feet, shall be provided with ingress and egress at least 12-feet wide at less than 15% grade with a 15% grade all weather surface ramp into the basin.
 - ix. Vegetate basins with turf, if irrigated, or native seeded grass for maintenance purposes. If turf is installed, turf soil shall be free draining, not include clay soils, and not impact stormwater infiltration.
 - x. Rocks or gravel surfacing of detention/retention basins are not allowed without City approval.
 - xi. Detention/retention basins with amenities shall have accessible path to amenity which is a concrete sidewalk meeting ADA standard. Interior slope of detention/retention basin at ramp shall be between 8 Horizontal:1 Vertical to 12 Horizontal:1 Vertical slope.
 - xii. Detention/Retention basins with amenities shall have a sediment forebay and be able to pass the AEO 50-percent (50%) storm, 24-hour duration event through the basin without stormwater impacting amenities.
- k) Manning's n Values:**
- i. n value for linings shall be determined per an approved Engineers Manual based on size and placement of materials. Calculations shall include the reference used for the n value for review by the City Engineer.

Manning's Roughness n for Open Channels			
Channel Type	Manning n		
	Minimum	Normal	Maximum
1. Lined or Constructed Channels			
a. Cement:			
1. Neat, surface	0.01	0.011	0.013
2. Mortar	0.011	0.013	0.015
b. Concrete:			
1. Trowel finish	0.011	0.013	0.015
2. Float finish	0.013	0.015	0.016



Channel Type	Manning n		
	Minimum	Normal	Maximum
3. Finished, with gravel on bottom	0.015	0.017	0.02
4. Unfinished	0.014	0.017	0.02
5. Gunite, good section	0.016	0.019	0.023
6. Gunite, wavy section	0.018	0.022	0.025
7. On good excavated rock	0.017	0.02	-
8. On irregular excavated rock	0.022	0.027	-
c. Concrete Bottom Float Finish with sides of:			
1. Dressed stone in mortar	0.015	0.017	0.02
2. Random stone in mortar	0.017	0.02	0.024
3. Cement rubble masonry, plastered	0.016	0.02	0.024
4. Cement rubble masonry	0.02	0.025	0.03
5. Dry rubble or riprap	0.02	0.03	0.035
d. Gravel Bottom with sides of:			
1. Formed concrete	0.017	0.02	0.025
2. Random stone mortar	0.02	0.023	0.026
3. Dry rubble or riprap	0.023	0.033	0.036
e. Brick:			
1. Glazed	0.011	0.013	0.015
2. In cement mortar	0.012	0.015	0.018
f. Masonry:			
1. Cemented rubble	0.017	0.025	0.03
2. Dry rubble	0.023	0.032	0.035
g. Dressed Ashlar / Stone Paving			
	0.013	0.015	0.017
h. Asphalt:			
1. Smooth	0.013	0.013	0.017
2. Rough	0.016	0.016	0.017
i. Vegetal Lining			
	0.03	-	0.5
j. Wood:			
1. Planed, untreated	0.01	0.012	0.014
2. Planed, creosoted	0.011	0.012	0.015
3. Unplanned	0.011	0.013	0.015
4. Plank with battens	0.012	0.015	0.018
5. Lined with roofing paper	0.01	0.014	0.017



Channel Type	Manning n		
	Minimum	Normal	Maximum
2. Excavated or Dredged Channels			
a. Earth, Straight, and Uniform:			
1. Clean, recently completed	0.016	0.018	0.02
2. Clean, after weathering	0.018	0.022	0.025
3. Gravel, uniform section, clean	0.022	0.025	0.03
4. With short grass, few weeds	0.022	0.027	0.033
b. Earth Winding and Sluggish:			
1. No vegetation	0.023	0.025	0.03
2. Grass, some weeds	0.025	0.03	0.033
3. Dense weeds or aquatic plants in deep channels	0.03	0.035	0.04
4. Earth bottom and rubble sides	0.028	0.03	0.035
5. Stony bottom and weedy banks	0.025	0.035	0.04
6. Cobble bottom and clean sides	0.03	0.04	0.05
c. Dragline-Excavated or Dredged:			
1. No vegetation	0.025	0.028	0.033
2. Light brush on banks	0.035	0.05	0.06
d. Rock Cuts:			
1. Smooth and Uniform	0.025	0.035	0.04
2. Jagged and irregular	0.035	0.04	0.05
e. Channels not Maintained, Weeds and Brush Uncut:			
1. Dense weeds, high as flow depth	0.05	0.08	0.12
2. Clean bottom, brush on sides	0.04	0.05	0.08
3. Same as above, highest stage of flow	0.045	0.07	0.11
4. Dense brush, high stage	0.08	0.1	0.14
3. Main Channels			
a. Clean, straight, full stage, no rifts or deep pools	0.025	0.03	0.033
b. Same as above, but more stones and weeds	0.03	0.035	0.04
c. Clean, winding, some pools and shoals	0.033	0.04	0.045
d. Same as above, but some weeds and stones	0.035	0.045	0.05
e. Same as above, lower stages, more ineffective	0.04	0.048	0.055
f. Same as (d) with more stones	0.045	0.05	0.06
g. Sluggish reaches, weedy, deep pools	0.05	0.07	0.08
h. Very weedy reaches, deep pools, or floodways with heavy stand of timber and underbrush	0.075	0.1	0.15



Channel Type	Manning n		
	Minimum	Normal	Maximum
4. Mountain Streams, No Vegetation in Channel, Banks usually Steep, Trees and Brush along Banks Submerged at High Stages			
a. Bottom: gravels, cobbles, and few boulders	0.03	0.04	0.05
b. Bottom: cobbles with large boulders	0.04	0.05	0.07
Source:			
(1) ASCE, (1982), <i>Gravity Sanitary Sewer Design and Construction</i> , ASCE Manual of Practice No. 60, New York, NY.			
(2) Chow, V.T., (1959), <i>Open Channel Hydraulics</i> , McGraw-Hill, New York, NY.			

l) Riprap Sizing:

- i. Channel Riprap sizing calculation shall utilize Federal Highway Administration (FHWA) Hydraulic Engineering Circular (HEC) No. 14, Current Edition, Chapter 10 or equivalent standard.

m) Erosion Control:

- i. The developer shall provide a copy of their Fugitive Dust Mitigation Plan, Erosion Control Plans, SWPPP, Notice of Intent (NOI), and Notice of Termination (NOT) with the State if their construction project is greater than 1 acre. The SWPPP sign shall be posted on site and visible to adjacent public right-of-way.

2. Hydrology Requirements:

a) Rainfall Data:

- i. NOAA Atlas 14 shall be used for rainfall in the City of Grantsville (see https://hdsc.nws.noaa.gov/hdsc/pfds_map_cont.html)

b) Design Storms:

- i. To reduce post-development storm water runoff, developments must retain and treat the 80th percentile rainfall event. The 80th percentile rainfall event for Grantsville City is 0.50 inches. The Reese method, as shown below, shall be used to calculate the volumetric runoff coefficient used for determining the 80th percentile volume. For developments larger than 10 acres use the SCS Method to determine the 80th percentile volume.

- a. Sedimentation basin shall be provided for first flush/80th percentile rainfall events in retention/detention basins and shall be designed to be easily accessed and maintained.

i. Method 1- Reese Method:

- 1. Comparing the imperviousness of 44 nationwide sites to their respective calculated volumetric runoff coefficient, a simple linear regression equation was created to estimate the volumetric runoff coefficient for small urban catchments. Land uses for these sites were classified as residential, mixed, commercial, industrial, and urban open and nonurban (Schueler, *Controlling Urban Runoff: A Practical Manual for Planning and Designing Urban BMPs*, 1987). Outliers were removed from this dataset by Reese to derive the equation below. Removing outliers from the dataset reduces the impact of erroneous measurements (Reese, 2006). $RV=0.9Ii-0.0204$

Source: *A Guide to Low Impact Development within Utah*. Revised August 2020 by Michael Baker International.

- ii. Retain/Detain the AEP 1-percent (1%) storm, 24-hour duration event for project site.
- iii. Developments may detain the AEP 10-percent (10%) storm event, 24-hour duration if there is a



continuous pathway to the Great Salt Lake.

- iv. For West Bank drainage areas, developed drainage may discharge at the following rates if there is a continuous path to the Great Salt Lake:

Table 1: Unit Discharge Requirement for West Bank Watersheds

24-hour Duration Storm Event	Watershed's Peak Unit Discharge (cfs/acre)	All Other Watersheds Peak Unit Discharge (cfs/acre)
10 years	0.003	0.05
100 years	0.01	0.15

Source: Table 17 in Section 5 from the Storm Water Management Study for Baker and Pope Watersheds dated April 2015 by AQUA Engineering.

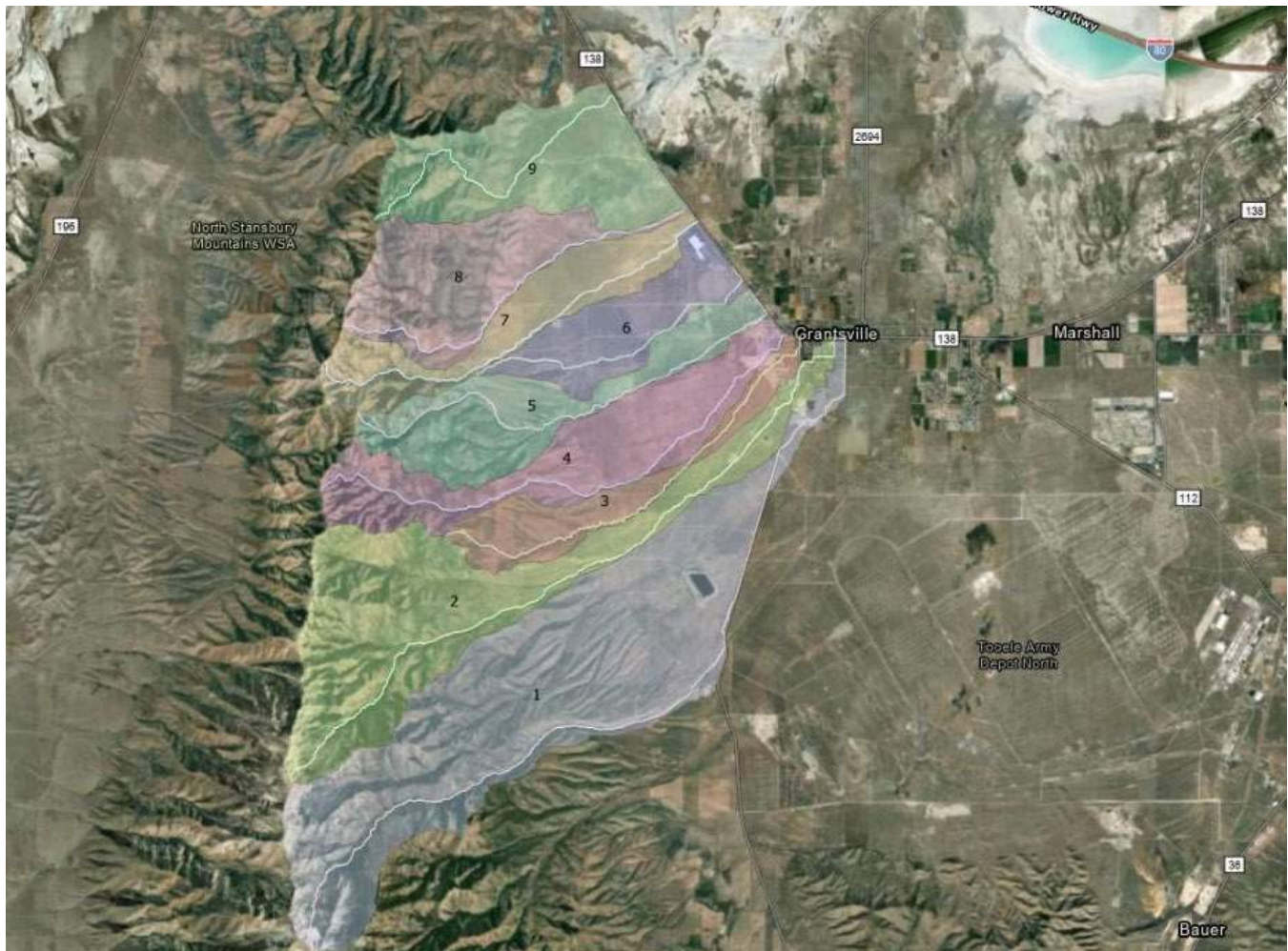
- v. Refer to Table 2 and Figure 1 for a map of West Bank Watersheds.

Table 2: West Bank Sub-basin Number and Name

Subbasin	Subbasin Name
1	South Willow and Coal Pit Canyon
2	North Willow Canyon
3	White Rocks
4	Baker Canyon
5	Pope Canyon
6	West Canyon 1
7	West Canyon 2
8	Dry Canyon
9	Unnamed

Source: Grantsville West Bank Development Stormwater Master Plan Report by Jones & DeMille Engineering

Figure 1: Map of West Bank Watersheds



Source: *Grantsville West Bank Development Stormwater Master Plan Report by Jones & DeMille Engineering*

- vi. The West Bank area consists of alluvial fans which are an accumulation of sediments fanning outwards from a concentrated source of sediments. Alluvial fans are typically formed where flow emerges from a confined channel and is free to spread and infiltrate. Due to these sediments, deposits in an alluvial fan can cause the defined channels to shift courses which is why it is important to construct sedimentation basins at the top of the alluvial fan and reinforce and define channels throughout the fan to discharge safely through existing and proposed development avoiding riverine flooding. Recently the West Bank Area has been identified as an alluvial fan Zone A based on a Base Level Engineering (BLE) analysis. This area is currently being studied by the State in more detail, but the results are currently not available. Channelization through the alluvial fan and sedimentation basins above the alluvial fan are improvements to allow storm water to flow through developments or mitigate alluvial fan hazards. Mitigation measures within the alluvial fan will need to be constructed to remove hazards either regionally or localized. Developers should coordinate with the State and FEMA MT-2 team (LOMR reviewers) along with the City and County to work through development in the alluvial fan.



3. Drainage Calculations or Report Requirements:

- a) If discharge will be above the allowed discharge per area rates shown on Table 1 then a pre and post development hydrologic analysis will be required showing flows will not cause a negative affect downstream. The Rational Method ($Q=CiA$) may be used in computations for the rate of runoff for urban and small watershed 100 acres or less.
 - i. Q = peak rate of runoff, cubic feet per second
 - ii. C = runoff coefficient
 - iii. i = average rainfall intensity, inches per hour
- b) The SCS method, SCS TR-55 “Urban Hydrology for Small Watershed”, HEC-1/HEC-HMS, or other methods shall be used for larger watersheds.
- c) Table 2 shall be used for runoff coefficients unless approved by the City Engineer.

Table 2: Runoff Coefficients

Land Use Type	Runoff Coefficients “C”
Rural	0.25-0.35
Single Family Residential	0.45-0.60
Multi-Residential	0.60-0.70
Neighborhood Commercial	0.85
Community Commercial	0.85
Tourist Commercial	0.85
Office	0.85
Manufacturing	0.85-0.90
Distribution and Warehousing	0.85-0.90
Public Facility	0.50-0.85
Pavement and Concrete Surfaces	0.90-0.95
Park	0.25
Open Space (0-5% grade – vegetated)	0.20-.030
Open Space (0-5% grade – no vegetation)	0.30-0.40
Open Space (5-15% grade – vegetated or unvegetated)	0.40-0.50
Open Space (Over 15% grade – sparsely vegetated, rock or clay soils	0.40-0.60

- i. Weighted values of the runoff coefficient “C” may be required where land use is most accurately described as a mixture of the land uses listed above or where it is a mixture of pervious and impervious areas and not represented by a single entry in Table 2.
- d) Intensity-Duration-Frequency curves for NOAA Atlas 14 shall be used for determining the applicable intensity. (see https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk=ut)
- e) Definition for Time of Concentration
 - i. $t_c = 10$ or $\frac{L}{V \times 60}$ whichever is greater

t_c = initial time of concentration at inlet, minutes

L = Flow line length from uppermost point of watershed to the discharge point, feet

V = channel or overland velocity, feet per second

* Velocity shall be calculated using NRCS Urban Hydrology for Small Watersheds, current edition, or equivalent standards.



ii. Given the time of concentration at a design point, the time of concentration at the next design point is determined by adding travel time, expressed as:

iii. $t = \frac{L}{V}$

$V \times 60$

t = travel time, minutes

L = length of channel or conduit between design points, feet

V = channel or conduit, feet per second

4. **Submittal Requirements for Drainage Drawings and Report**

a) **Project Drawings:**

- i. Hydraulic grade line (HGL) profiles, (see sample sheet).
- ii. Location and size of all existing and proposed structures.
- iii. Proposed materials.
- iv. Pertinent elevations and slopes.
- v. Pipe capacity, and the AEP 10-percent (10%) storm, and the AEP 1-percent (1%) storm, 24-hour flows, and velocities.

b) **Drainage Report or Calculations: (Shown on Drawings)** – The following standards apply to the Drainage Report or Calculations (public and private).

1. **Title Page:**

- a. Project name.
- b. Preparer's name, firm, date.
- c. Professional engineer's seal of preparer and signature.

2. **Introduction:**

a. **Site location:**

- i. Street location, parcel number(s), and section reference.
- ii. Adjacent developments.

b. **Site Description:**

- i. Topography, ground cover, etc.
 - ii. Existing drainage facilities, major drainage facilities, flood hazard areas, irrigation ditches, other site conditions that must be considered.
- c. Proposed project description.
- d. Other previous studies relevant to site.

3. Historic drainage system (discuss the following):

a. Major basins and offsite contributions:

- i. Relationship to major drainage facilities.
- ii. Major basin drainage characteristics (topography, runoff, cover, use, erosion, etc.).

b. Sub-basin and site drainage (i and ii may be tabulated on map):

- i. Minor AEP 10-percent (10%) storm and major AEP 1-percent (1%) storm, 24-hour storm flows for each sub-basin affecting the site.
- ii. Existing drainage patterns: channelized or overland flow, point of discharge, etc.
- iii. Effect of historic flows on adjacent properties.

4. **Proposed (developed) drainage system:** (discuss each of the following)

a. **Criteria:**

- i. Size of major basins, tributary sub-basins, and other offsite contributions.
- ii. Hydrologic method to be used for analysis (Rational, SCS, etc.).



- iii. Design storm intensities (minor AEP 10-percent (10%) storm, major the AEP 1-percent (1%) storm, 24-hour duration event,) or as required by the City Engineer.
- b. **Runoff And Other Contributions:**
 - i. Historic storm flow rates and paths.
 - ii. Developed storm flow rates and paths for minor and major storms.
 - iii. Contributions from open joined system.
 - iv. Demonstrate flows are routed to a public system with adequate capacity when/ if available.
- c. **Piping:**
 - i. Demonstrate the capacity of the storm drain system, including all downstream improvements.
 - ii. Verify storm flows and capacity from inlets to ultimate outlets of the drainage system.
- d. **Detention/Retention System Including:**
 - i. Volume required to hold the AEP 1-percent (1%) storm, 24-hour storm with 1-foot freeboard minimum above the AEP 1-percent (1%) storm, 24-hour event flowing water level through spillway.
 - ii. Show the overflow location for volumes over the AEP1-percent (1%) storm, 24-hour duration event when discharging to an approved City release point..
 - iii. Passage of storms exceeding the AEP 10-percent (10%) storm up to the AEP 1-percent (1%) storm, 24-hour duration event when discharging to an approved City release point..
 - iv. Engineer to provide detailed description of downstream constraints (or none) and design calculations on how to mitigate the problem.
 - v. Need for detention/retention shall be clearly identified in the preliminary or schematic report and the necessary detention/retention area shall be identified on preliminary plans.
- e. **Streets:** (This information may be shown on the plans.)
 - i. Depth and velocity of flow for major and minor storms. Demonstrate a 12-foot clear lane exists for emergency vehicles at all times.
 - ii. Drainage system.
- f. **Open Channel Flow:** (This information may be shown on the plans.)
 - i. Type.
 - ii. Depth and velocity.
 - iii. Freeboard.
 - iv. HEC-RAS analysis when required by the City Engineer.
- g. Storm drains and culverts (Show all data on plans.)

5. **Areas within flood hazard zone when applicable:**

- a) Impacts.
- b) Protection.
- c) Compliance with Federal Emergency Management Administration (FEMA) requirements, RMC 18.12 “Flood Hazard Areas”, and critical flood zones. Show existing and proposed CLOMR and LOMR information, and show status of submittal and review process.
- d) Provide elevation certificate for occupied structures within current BLE floodway determination. Coordinate with Utah Flood Hazards and Floodplain management for 2-D HEC-RAS model for BFE.
- e) Comply with Grantsville City Code, Chapter 5-3, Flood Damage Prevention Regulations.

6. **Conclusions:**

- a) Benefits.
- b) Adverse effects with solutions for mitigation of impacts.



7. **Appendices:**

a) **Hydrologic and hydraulic computations:**

- i. List and explain basin assumptions and input factors used.
 - 1) Tabularized and/or discussed as necessary.
 - 2) Indicate any sensitivity analysis performed.
 - 3) Include source tables and references for parameters, such as soil groups, SCS curve numbers, C values, n values, etc.

ii. **Historic Runoff:**

- 1) Off-site.
- 2) On-site.

iii. **Developed Runoff:**

- 1) Off-site – Flows that have been concentrated into one area from the project shall not flow higher than the project flow in that area.
 - 2) On-site.
- iv. Detention for up to the AEP 1-percent (1%) storm, 24-hour duration event when discharging to an approved City release point:

v. **Hydraulic Computations:**

- 1) Hydraulic grade line (HGL) minor storm.
- 2) Hydraulic grade line (HGL) major storm.
- 3) Inlet/outlet calculations.

vi. **Rip-rap sizing:**

b) **Drainage Plan:**

i. **Site Drainage Plan:**

- 1) Show the existing and proposed contours for the property.
- 2) The site drainage plan may be at the same scale as the grading plan but must meet legibility requirements for scanned documents. Show all sub-drainage areas per catch basin or channel and tabulate existing and proposed drainage showing length, calculated velocity and time of concentration on various runs of grass, gutters, etc., cumulative time of concentration, average rainfall intensity, area, runoff coefficient (weighted if necessary), and peak flows for the AEP 10-percent (10%) storm and the AEP 1-percent (1%) storm, 24-hour duration event when discharging to an approved City release point.
- 3) All inlets and manholes shall be labeled to correspond to tabular numbering system used in drainage report. Pipe sizes, grades, velocities, peak flows and hydraulic grade lines shall be shown for all parts of the system in a tabular form on the plans.
- 4) Both location plan (overall drainage) and sub-drainage plan shall be signed and sealed by a Utah Registered Civil Engineer and shall be included in the construction plans for the subdivision/development.
- 5) On grading plans show peak flows for the AEP 10-percent (10%) storm and the AEP 10-percent (10%) storm at inlets and other sub-basin points of concentration, at discharge points and in channels. Show peak flows entering and leaving the site; trace path leaving site to nearest major drainage facility without adverse impact to downstream owners.
- 6) On plan and profile sheets, show peak flows for the AEP 10-percent (10%) storm and the AEP 1-percent (1%) storm, 24-hour duration event when discharging to an approved City release point at all inlets and in pipes as per above, and in pipes show slope, velocity, and capacity, and hydraulic grade line if surcharged.
- 7) If the lot cannot drain the yard to the street, then a basin shall be located in the rear yard to



prevent storm runoff from draining to the neighbors from the back of the property.

- ii. Benchmarks – To be shown on plans with benchmarks to match the existing state approved benchmarks.
- iii. Existing and proposed property lines.
- iv. Existing and proposed drainage easements.
- v. Street names, grades, widths and rights-of-way or easements.
- vi. Routing and peak flow rate or volume at the upstream and downstream ends of the site and at various critical points on-site for both minor and major runoff. Depth and hydrograph for both storms for all sub basins.
- vii. Street cross sections showing the AEP 1-percent (1%) storm, 24-hour duration event when discharging to an approved City release point flood level, no more than one-half way into the outside travel lane for emergency vehicle clear lane.
- viii. Existing and proposed major drainage facilities.
- ix. **Open channel flow in major channels shall be provided with the following information on plans:**
 - 1) Channel and hydraulic grade line (HGL) profiles.
 - 2) Cross sections and required rights-of-way or easements at the AEP 1-percent (1%) storm, 24-hour duration event intervals or changes from the typical section.
 - 3) Location and size of all existing and proposed structures.
 - 4) Channel section and lining details.
 - 5) Freeboard for the AEP 1-percent (1%) storm, 24-hour duration event when discharging to an approved City release point.
 - 6) Channel capacity and storm flows, the AEP 10-percent (10%) storm and the AEP 1-percent (1%) storm, 24-hour duration event when discharging to an approved City release point flows and velocities.

Appendix M Storm Drainage Cost Estimates

Owner: Granstville City
Project: West Bank Stormwater Master Plan
Project #: 2205-048
PM: Matt Laurendeau
Date: 1/4/2024



1-800-748-5275
www.jonesanddemille.com

Alternative 4

ENGINEER'S OPINION OF PROBABLE COST					
Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Price
Construction					
1	Mobilization and Survey	LS	1	\$ 7,500,000	\$ 7,500,000
2	Channel Excavation	CY	530,000	\$ 10	\$ 5,300,000
3	Channel Riprap (9" D50 1.5' thick)	CY	225,000	\$ 90	\$ 20,250,000
4	Road Crossings	LS	1	\$ 2,000,000	\$ 2,000,000
5	Settlement Canyon Debris Basin	LS	1	\$ 18,517,000	\$ 18,517,000
6	Army Creek Debris Basin	LS	1	\$ 21,415,000	\$ 21,415,000
7	South Willow Debris Basin	LS	1	\$ 4,616,000	\$ 4,616,000
8	North Willow Debris Basin	LS	1	\$ 4,445,000	\$ 4,445,000
9	North Willow Div Debris Basin	LS	1	\$ 1,357,000	\$ 1,357,000
10	Baker Canyon Debris Basin	LS	1	\$ 1,428,000	\$ 1,428,000
11	Pope Canyon Debris Basin	LS	1	\$ 1,428,000	\$ 1,428,000
12	Dry Canyon Debris Basin	LS	1	\$ 2,856,000	\$ 2,856,000
13	Acquire Additional Channel ROW	Acre	340	\$ 10,000	\$ 3,400,000
14	General Site Improvements	LS	1	\$ 1,000,000	\$ 1,000,000
Construction Subtotal =					\$ 94,512,000
Professional Services and Permitting					
1	Engineering Design	LS	1	\$ 4,726,000	\$ 4,726,000
2	Construction Management	LS	1	\$ 5,671,000	\$ 5,671,000
3	Environmental Permitting	LS	1	\$ 500,000	\$ 500,000
Professional Services and Permitting Subtotal =					\$ 10,897,000
Contingency					
1	Construction Contingency (30%)	LS	1	\$ 28,354,000	\$ 28,354,000
2	Uncosted Items (10%)	LS	1	\$ 9,452,000	\$ 9,452,000
Contingencies Subtotal =					\$ 37,806,000
Total Probable Construction Cost					\$ 143,215,000

Figure 16. Stormwater Alternative 4 Cost Estimate

AGENDA ITEM #6

Approval of minutes from the
March 24, 2026 Planning
Commission Training Meeting.

Action Summary:

Agenda Item	Item Description	Action
#1	Training Topics	No action taken

MINUTES OF THE GRANTSVILLE CITY PLANNING COMMISSION, HELD ON MARCH 24, 2026, 2026 AT THE GRANTSVILLE CITY HALL, 429 EAST MAIN STREET, GRANTSVILLE, UTAH AND ON ZOOM. THE MEETING BEGAN AT 6:30 P.M.

Commission Members Present: Chair Sarah Moore, Vice Chair Hill, Commissioner Merrill, Commissioner Montgomery, Commissioner Moulton

On Zoom:

Commission Members Absent:

Appointed Officers and Employees Present: Planning and Zoning Administrator Shelby Moore, Community Development Director Bill Cobabe, City Council Member Derek Dalton, Planning and Zoning Administrative Assistant Nicole Ackman, City Planner/GIS Analyst Tae-Eun Ko, City Attorney Tysen Barker

On Zoom:

Citizens and Guests Present:

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Commission Chair Sarah Moore called the meeting to order at 6:30 PM.

PUBLIC NOTICE

The Grantsville City Planning Commission will hold a Regular Meeting at 6:30 p.m. on Tuesday, March 24, 2026 at 429 East Main Street, Grantsville, UT 84029. The agenda is as follows:

ROLL CALL

PLEDGE OF ALLEGIANCE

AGENDA

1. Training Topics

Presentation by City Attorney Tysen Barker – LUDMA, GLUDMC, OPMA, Best Practices

Attorney Tysen Barker began the training by outlining the legal framework governing land use decisions. He explained that LUDMA is State law, while the Grantsville Land Use Development Management Code (GLUDMC) is the City's local implementation. He emphasized that while the City has discretion to adopt its own ordinances, once adopted, the City is bound to follow them. He stressed that all decisions must be based on the code and supported by evidence in the record, not on personal opinion or public pressure.

Commissioner Montgomery asked whether one authority supersedes another. Attorney Barker explained the hierarchy of law, stating that the U.S. Constitution and Federal law are at the top, followed by the Utah Constitution, State law, local ordinances, and then Planning Commission decisions. He clarified that Commission decisions must align with all higher levels to be legally valid.

Attorney Barker then addressed the Open and Public Meetings Act (OPMA). He explained that State law requires a minimum 24-hour public notice, while Grantsville City requires a more stringent 10-day notice for public hearings, including mailed notice to property owners within 500 feet. He emphasized that failure to meet these notice requirements is a jurisdictional issue and could invalidate a decision.

Commissioner Hill asked whether the City must follow its 10-day notice requirement if State law only requires 24 hours. Attorney Barker confirmed that the City must follow the more stringent standard. Chair Sarah Moore summarized that the Commission should always default to the most stringent requirement, which Attorney Barker confirmed.

Attorney Barker provided an example scenario where proper 24-hour notice was given but the required 10-day mailed notice was not completed. He explained that even if State requirements were met, failure to meet local code would make the decision legally vulnerable.

He then transitioned to commissioner conduct and due process. He explained that applicants are entitled to a fair and impartial hearing, and commissioners must avoid *ex parte* communication, disclose conflicts of interest, and base decisions solely on the record. Commissioner Moulton asked what *ex parte* communication meant, and Attorney Barker explained that under the City's code, commissioners should not have outside communication with individuals either in favor of or opposed to an application.

Commissioner Hill asked about a situation where he had a casual conversation with someone who later became an applicant. Attorney Barker explained that this is acceptable as long as the commissioner discloses the relationship and confirms that no discussion of the application occurred.

Attorney Barker also addressed meeting transparency, explaining that meetings must be open to the public except in limited circumstances such as pending litigation, personnel matters, or

property negotiations. He explained that a “serial meeting” can occur when commissioners communicate through a chain of emails or indirect discussions that effectively result in deliberation outside of a public meeting.

Commissioners asked whether contacting staff would be considered a violation. Attorney Barker, along with Community Development Director Bill Cobabe, clarified that communication with staff is appropriate because staff provides information and does not constitute a meeting unless a quorum is deliberating collectively.

Presentation by Planning and Zoning Administrator Shelby Moore – Planning Commissions Role in Conditional Use Permits.

Planning and Zoning Administrator Shelby Moore explained that while State law and local ordinances establish the rules, the Commission’s responsibility is to consistently apply those rules through staff reports, discussion, and formal recommendations.

Shelby emphasized that staff reports are a critical part of the process. She explained that each report is structured to identify the applicable code sections, analyze whether the application meets those standards, and outline any deviations. She noted that the Commission should rely heavily on these reports, as they are intended to connect the proposal directly to the requirements in the code. However, she clarified that while staff provides recommendations, the final decision or recommendation to the City Council ultimately rests with the Commission.

She stressed the importance of making clear findings when taking action, especially in cases of denial. Shelby explained that if the Commission recommends denial, it must clearly state which specific code standards are not being met. She noted that simply stating general concerns is not sufficient and could create legal issues if the decision is challenged.

Shelby also reviewed the importance of following proper process. She explained that applications must be complete before moving forward and that items are typically reviewed through the Development Review Committee (DRC) prior to being scheduled for Planning Commission.

She explained that noticing requirements is another critical component. Shelby explained that staff is responsible for ensuring public notices, mailings, and postings are completed correctly, but the Commission should be aware that failure in this process can impact the hearing or decision. She noted that if there is ever uncertainty about noticing or process, it is appropriate to pause or continue an item to ensure compliance.

Shelby further explained that different application types require different levels of review. She noted that legislative items, such as rezones and code amendments, involve broader policy considerations and are ultimately decided by the City Council, while administrative or

quasi-judicial items, such as conditional use permits, require the Commission to apply specific standards to a particular application. She emphasized that in quasi-judicial matters, the Commission must remain impartial and base its decision strictly on the evidence presented.

She also discussed the importance of consistency in applying the code. Shelby explained that applying standards differently from one application to another can create confusion, undermine fairness, and expose the City to legal challenges. She encouraged the Commission to focus on the language of the ordinance and apply it as written, even in situations where there may be public pressure or differing opinions.

Presentation by Community Development Director Bill Cobabe – Meetings, Motions, and Applying GLUDMA.

Community Development Director Bill Cobabe explained the three branches of municipal government, identifying the City Council as the legislative body responsible for adopting ordinances and policies, the Mayor and staff as the executive branch responsible for implementing and administering those policies, and the courts as the judicial branch responsible for interpreting the law when disputes arise.

Bill explained that Utah operates as a home rule state, meaning municipalities are granted broad authority to govern local matters, including land use, as long as they operate within the framework of State law. He emphasized that this authority is what allows cities like Grantsville to adopt their own land use ordinances, zoning regulations, and development standards. However, he reiterated that once those ordinances are adopted, the City, including the Planning Commission, is bound to follow them.

He clarified that the Planning Commission itself is required by State law and plays a critical role in the land use process. He explained that the Commission's primary responsibilities include holding public meetings, reviewing development applications, making recommendations on legislative items such as rezones and code amendments, and participating in ongoing training. He noted that the Commission serves as an advisory body to the City Council on legislative matters.

Commissioner Montgomery asked about the relationship between the Planning Commission and the City Council, specifically whether the Council could act independently. Bill explained that for certain items, particularly legislative changes, the City Council cannot take action until it has received a formal recommendation from the Planning Commission. He clarified that while the Council is not required to follow the Commission's recommendation, the recommendation itself is a required step in the process.

Bill further explained the distinction between legislative and administrative roles. He noted that legislative decisions, such as rezones or amendments to the General Plan, involve broader policy considerations and are ultimately decided by the City Council. In contrast, administrative or

quasi-judicial decisions involve applying existing standards to specific applications, where the Planning Commission must focus on compliance with the code and the evidence presented.

He also addressed the role of public input in the process. Bill explained that while public comments are an important part of the process and provide valuable perspective, they do not override the requirements of the code. He emphasized that decisions must still be based on adopted standards, even when there is strong public opinion either in favor of or opposed to a project.

Bill highlighted the importance of the Planning Commission as a public-facing body. He explained that the Commission provides transparency in decision-making and serves as a forum where applicants and residents can be heard. He noted that this process helps build trust in the system, even when decisions may not align with every individual's preferences.

He also discussed how the Planning Commission contributes to long-term planning and implementation of the City's vision. He explained that tools such as the General Plan, zoning map, and development agreements work together to guide growth and development. He noted that while the General Plan is aspirational and outlines the City's long-term vision, zoning is what governs what is legally allowed on a property at a given time.

Bill concluded by reinforcing that the Planning Commission plays an essential role in bridging policy and implementation. He emphasized that the Commission ensures that applications are reviewed carefully, that recommendations are grounded in code, and that the process remains consistent, transparent, and legally defensible.

2. Questions and Discussion

Commissioner Montgomery asked about the role of the Planning Commission in relation to the City Council and how it differs from staff review. Community Development Director Bill Cobabe explained that while staff provides technical review and analysis, the Planning Commission serves as a public body that holds meetings, allows for public input, and makes formal recommendations. He clarified that for legislative items, the City Council cannot take action without first receiving a recommendation from the Planning Commission, although they are not required to follow that recommendation.

No additional questions were raised.

12. Adjourn.

Garry Merrill made a motion to adjourn. Cameron Moulton seconded the motion. The vote was as follows: Sarah Moore "Aye," John Montgomery "Aye," Jason Hill "Aye," "Gary Merrill "Aye" and Cameron Moulton "Aye." The meeting adjourned at 9:00 p.m.

with staff prior to the expiration, there was no issue with the timing and it was up to the city to determine the direction for the project by the 18th.

Derek Dalton made a motion to recommend approval of the consideration of a Request for an Extension of the Matthews Meadows Subdivision Phase 2 Plat Approval. Sarah Moore seconded the motion. The vote was as follows: Sarah Moore “Aye,” Deborah Dwyer “Aye,” Chris Horrocks “Aye,” Jason Hill “Aye,” Derek Dalton “Aye.” The motion was carried unanimously.

4. Consideration of the proposed Master Development Agreement with VT Grantsville Land Co, LLC, for the Deseret Subdivision.

Shaun Johnson was present to answer questions on this item. Nate Mitchell, outside counsel for Grantsville City, provided background and explained that the city retained him to assist in negotiating the master development agreement (MDA) with the developer proposing the Deseret project. He noted that the Deseret Zoning Overlay District (DZOD) had been adopted earlier in the year and explained that the MDA was intended to vest development rights, clarify long-term obligations, and support financing and construction of public infrastructure and amenities.

Nate presented a PowerPoint outlining the proposed town center, commercial areas, parks, trails, and the phased build-out of nearly 7,000 homes. He explained that the MDA required compliance with the DZOD, set maximum residential density, increased the developer’s moderate-income housing commitment from 20 to 25 acres, and allowed assignment of development rights to sub-developers while preserving responsibility for infrastructure and public amenities. He then reviewed vested rights provisions, exceptions for changes in state or federal law, modification processes, fee structures, termination mechanisms, and public infrastructure requirements, including the city’s commitment to a future water treatment plant. He noted that several timing and procedural items were still under negotiation before the upcoming City Council meeting.

Vice-Chair Sarah Moore raised questions regarding the unacquired road parcel and water rights, referencing prior correspondence indicating the developer would not obtain ownership of the parcel. She expressed concern about impacts to the phased development plan and stated that the city should not provide water rights to the developer. Nate deferred to Shaun Johnson for clarification. Shaun explained that the presence or absence of the road parcel did not alter the city’s requirements for how the project must proceed. Each phase is tied to a defined set of public improvements, and no development may occur within a phase until its associated roads, utilities, and infrastructure are fully constructed, inspected, and accepted by the city. He emphasized that this requirement applies regardless of internal ownership gaps. If a future phase relies on access through the unacquired parcel, that phase simply cannot advance until the right-of-way is secured

and improvements are completed. He noted that this approach is standard for large master-planned developments and prevents construction from outpacing essential services.

Vice-Chair Sarah Moore also asked about moderate-income housing metrics, sewer plant timing, and potential monetary damages. Nate explained the substantial-compliance standard used in large MDAs, the process for tracking moderate-income housing obligations over time, and the waiver provisions designed to protect the city from litigation, referencing past Utah cases where developers have obtained significant judgments.

Chairman Dalton expressed significant frustration with the MDA draft provided to the commission. He stated that the document contained numerous errors, formatting issues, and inconsistencies, and commented that it “looked like a child wrote it.” He emphasized that the commission should not be reviewing incomplete drafts on short notice prior to city council consideration and stressed the need for near-final versions to ensure meaningful review. Nate responded that the draft was provided to maintain momentum in the process and explained that city council specifically requested track changes and color-coding to show edits and contributions. Chairman Dalton reiterated that incomplete documents risk confusing council members and undermining the commission’s review role.

Commissioner Horrocks, then inquired about the financial waiver provisions. Nate explained that the waiver is intended to prevent developers from pursuing monetary claims against the city, referencing prior Utah cases in which cities faced significant financial judgments.

Additional questions from Vice-Chair Sarah Moore and other commissioners addressed infrastructure timing, the effect of unacquired parcels on development phases, and the referendum-related termination clause. Nate and Shaun provided further explanation on phased infrastructure requirements, the handling of unacquired parcels under the MDA structure, and the termination mechanism that allows the developer to exit the agreement in the event of a referendum.

Derek Dalton made a motion to table the proposed consideration of the proposed Master Development Agreement with VT Grantsville Land Co, LLC, for the Deseret Subdivision. Debra Dwyer seconded the motion. The vote was as follows: Sarah Moore “Aye,” Deborah Dwyer “Aye,” Chris Horrocks “Aye,” Jason Hill “Aye,” Derek Dalton “Aye.” The motion was carried unanimously.

5. Discussion of Proposed Amendments to Chapter 7 – Conditional Uses

Community and Economic Development Director Bill Cobabe introduced the proposed amendments to Chapter 7 of the Land Use Code. He explained that commissioners had expressed

concern about allowing the zoning administrator to approve minor modifications to conditional use permits. He stated that staff was comfortable either leaving the authority administratively or returning all modifications to the Commission, but he cautioned that some of the proposed language reflected misunderstandings about conditional use requirements under Utah law.

Bill reviewed that conditional use permits are administrative. If an applicant meets all written standards in the code, the city must approve the CUP. If the proposal does not meet those standards, it must be denied. He cited Utah Code 10-9a-509 and noted that an applicant is vested under the rules in place at the time of application. Unwritten or subjective conditions cannot be imposed, and all ambiguity must be interpreted in favor of the property owner. He provided an example involving split-zoned parcels and noted that guidance from the State Property Rights Ombudsman consistently reinforces this principle.

Chairman Dalton explained that the issue arose during the Arby's approval. The Commission had imposed conditions in a public meeting. Neighbors believed those conditions would be enforced. When a vinyl fence was later installed without public notice, residents felt blindsided and frustrated, and the appeal period had already passed.

Planning and Zoning Administrator Shelby Moore stated that the eight-foot precast fence the Commission attempted to require was not supported by written code standards. Chairman Dalton acknowledged that the concrete fence may have exceeded code, but emphasized that the lack of transparency was the problem. Residents saw a different fence erected and had no opportunity to respond.

Bill stated this example illustrated a gap between public expectations and the legal limits of CUP authority. Unless fencing requirements are written clearly into the ordinance, the city cannot require a specific fencing product. He noted that legislative code updates are the proper place to create enforceable standards.

Chairman Dalton responded that buffering requirements do exist, and that the Commission was not acting arbitrarily. Vice-Chair Sarah Moore summarized that conditional use review cannot involve subjective judgments. Chairman Dalton agreed but reiterated that changes to approved conditions should be handled publicly.

Bill restated that staff processed the modification because the original condition could not be legally enforced, Shelby explained that if the Commission wants more control over CUP conditions, those requirements must be written directly into each land use category. Otherwise, the proposed language would not work as intended.

Bill also suggested eliminating the public hearing requirement for CUPs to reduce confusion, explaining that hearings imply that public testimony can influence the outcome when the Commission is legally limited to applying written standards. Chairman Dalton opposed removing

hearings, stating that residents may not always receive the outcome they want, but they should never lose the chance to speak.

Chairman Dalton stated that his only non-negotiable point was this: when a CUP is approved with conditions in a public meeting, any proposed modification to those conditions should return to the Planning Commission for a public review.

Attorney Tysen Barker advised caution. Requiring all amendments to return to the Commission could create delays and could lead to legal challenges if imposed conditions were unlawful exactions. He suggested a hybrid system where administrative modifications would trigger public notice. If residents or commissioners objected, they could file an appeal, which would pause the modification until the appeal was resolved.

Chairman Dalton noted the difficulty of defining major versus minor modifications. Bill agreed and said the Commission would need clearer definitions. He supported Attorney Barker's suggestion of using public notice as a transparency tool while still allowing administrative efficiency.

6. Approval of minutes from the October 2, 2025 Planning Commission Regular Meeting.

Motion Derek Sarah second all in favor

Derek Dalton made a motion to approve the Planning Commission Regular Meeting Minutes from October 2, 2025. Sarah Moore seconded the motion. The vote was as follows: Sarah Moore "Aye," Deborah Dwyer "Aye," Derek Dalton "Aye." The motion was carried unanimously.

7. Report from City Staff.

Planning and Zoning Administrator Shelby Moore reminded the commission about the upcoming session on November 18, 2025 at 6 p.m.

8. Open Forum for Planning Commissioners.

No discussion.

9. Report from City Council.

City Council Member Rhett Butler addressed the commission, noting the council's meeting the next day and asking if commissioners had any items for him to bring back. He mentioned fencing but considered holding that discussion for later.

Chairman Dalton and City Council Member Rhett Butler questioned the Arby's decision noting previously agreed conditions were not followed. Attorney Tysen Barker clarified the developer

had not formally agreed but had asked about vinyl versus concrete fencing without receiving a clear answer. Community and Development Director Bill Cobabe explained the city can only enforce code requirements and cannot impose conditions beyond those in effect when the application was submitted. City Council Member Butler questioned Section 6.16 regarding fencing and why vinyl fencing was allowed. Bill noted the code allows “masonry or” fencing, leaving the choice to the developer, while Attorney Barker added that requiring masonry could significantly increase costs without clear benefits.

10. Adjourn.

Derek Dalton made a motion to adjourn. Debra Dwyer seconded the motion. The vote was as follows: Sarah Moore “Aye,” Deborah Dwyer “Aye,” Derek Dalton “Aye.” The motion was carried unanimously. The meeting adjourned at 7:34 p.m.

Jordan Cullimore, Lead Attorney for the Property Rights Ombudsman's Office, led training for the Planning Commission and City Council, focusing on conditional use permits. He explained the difference between legislative and administrative land use decisions. Legislative decisions create or change laws, like general plans or zone changes. In these cases, the commission advises, and courts generally respect decisions that are reasonable and in the public interest. Administrative decisions apply existing rules to specific applications, like subdivisions or conditional use permits (CUPs). Jordan emphasized that applications that meet the rules must be approved, and decisions should be based on facts, not public opinion.

He explained that CUPs are for uses that are usually allowed but may have special impacts, like traffic, noise, or light, and that need review. The goal is to reduce potential negative effects with reasonable conditions. Rules should have clear standards to guide decisions and avoid arbitrary choices. Conditions must be reasonable, directly related to expected impacts, and applied fairly.

The CUP process has four steps: identify potential impacts, check the rules for standards, apply reasonable conditions, and record the decision with evidence. Denying a CUP is rare and requires strong proof that no condition could fix the issue.

Jordan said cities are moving toward turning common conditions into regular rules, so fewer things need a CUP. He also explained that a CUP is a permitted use with conditions, while a variance is a rare exception for unusual land features, like wetlands or odd terrain, that cause hardship.

2. Adjourn.

Derek Dalton made a motion to adjourn. Sarah Moore seconded the motion. The vote was as follows: Sarah Moore "Aye," Jason Hill "Aye," Derek Dalton "Aye." The motion was carried unanimously. The meeting adjourned at 6:48p.m.

AGENDA ITEM #7

Report from City staff.

AGENDA ITEM #8

Open Forum for Planning Commissioners

AGENDA ITEM #9

Report from City Council.

AGENDA ITEM #10

Adjourn.