PUBLIC NOTICE

The Grantsville City Planning Commission will hold a Regular Meeting at 7:00 p.m. on Thursday, May 15, 2025 at 429 East Main Street, Grantsville, UT 84029. The agenda is as follows:

PLEDGE OF ALLEGIANCE

ROLL CALL

PUBLIC HEARING

a) Consideration of the proposed amendments to Chapter 12 Planned Unit Developments (PUD) of the Grantsville City Land Use Management Code, along with conforming, technical, and related changes to sections of Chapters 3, 4, 6, 8, 16, 19a, and 21.
b) Consideration of the amendments to the GLUMDC for chapter 4.
c) Consideration of the amendments to the GLUMDC for chapter 7.
d) Consideration of the amendments to the GLUMDC for chapter 8.
e) Consideration for the proposed Preliminary Plat application for Townhomes on Willow, located at approximately 132 S. Willow St.

AGENDA

1. Consideration for the proposed Preliminary Plat application for Townhomes on Willow, located at approximately 132 S. Willow St.
2. Consideration of the proposed amendments to Chapter 12 Planned Unit Developments (PUD) of the Grantsville City Land Use Management Code.
3. Consideration of the proposed conforming, technical, and related changes to sections of Chapters 3, 4, 6, 8, 16, 19a, and 21. These are amendments to the Grantsville City Land Use Management Code in relation to Chapter 12 Planned Unit Developments (PUD.
4. Discussion of the amendments to the GLUMDC for chapter 2.
5. Consideration of the amendments to the GLUMDC for chapter 4.
6. Consideration of the amendments to the GLUMDC for chapter 7.
7. Consideration of the amendments to the GLUMDC for chapter 8.
8. Report from Zoning Administrator
9. Open Forum for Planning Commissioners.
10. Report from City Council.
11. Adjourn.

Shelby Moore
Zoning Administrator
Grantsville City Community & Economic Development

Scan QR code to join Zoom meeting.

Join Zoom Meeting
https://us02web.zoom.us/j/86290004540
Meeting ID: 862 9000 4540

In compliance with the Americans with Disability Act, Grantsville City will accommodate reasonable requests to assist persons with disabilities to participate in meetings. Requests for assistance may be made by calling City Hall (435) 884-3411 at least 3 days in advance of a meeting.

CERTIFICATE OF POSTING: This agenda was posted on the Grantsville City Hall Notice Boards, the State Public Notice website at www.utah.gov/pmn/index.html, and the Grantsville City website at www.grantsvilleut.gov. Notification was sent to the Tooele Transcript Bulletin.

Amended 5-9

Grantsville City Planning Commission
May 15, 2025
Public Hearing

The Grantsville City Planning Commission will hold a Public Hearing to receive public comment regarding proposed amendments to the Grantsville City Land Use Management Code, including:

- Substantial updates to Chapter 12 – Planned Unit Developments (PUD)
- Conforming, technical, and related changes to the following chapters and sections:
  - Chapter 3: Sections 3.6, 3.8, and 3.18
  - Chapter 4: Sections 4.5 and 4.12
    - Chapter 6: Section 6.15
    - Chapter 8: Section 8.9
  - Chapter 16: Sections 16.2 and 16.4
    - Chapter 19A
  - Chapter 21: Various sections throughout

The purpose of these amendments is to update standards and procedures for Planned Unit Developments and ensure consistency across related code sections.

Notice is hereby given that, in accordance with the provisions of Sections §10-9A-205 and §10-9A-502 of the Utah Code, the Grantsville Planning Commission will hold a discussion and public hearing on **May 15, 2025, at 7:00 p.m.** at Grantsville City Hall. The meeting will also be broadcast on Zoom. The discussion, public hearing, and meeting are to receive public input and consider action on the **consideration of the proposed amendments to Chapter 12 Planned Unit Developments (PUD) of the Grantsville City Land Use Management Code, along with conforming, technical, and related changes to sections of Chapters 3, 4, 6, 8, 16, 19a, and 21.**

You can view a copy of the agenda and packet online by 5:00pm on **May 9, 2025** at the link below:
https://cms9.revize.com/revize/grantsvilleut/departments/community___economic_development/current_public_notices.php

Or by emailing pzcommission@grantsvilleut.gov. All comments and concerns need to be sent in writing through email or mail and received no later than **12:00pm on May 14, 2025.**

Dated this 30th day of April, 2025

BY ORDER OF THE GRANTSVILLE PLANNING COMMISSION

Shelby Moore
Zoning Administrator

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Grantsville City Planning Commission

May 15, 2025
Public Hearing

Consideration of the proposed amendment to the Grantsville City Land Use and Management Code Chapter 4, 7, and 8.

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Dated this 2nd day of May, 2025

BY ORDER OF THE GRANTSVILLE PLANNING COMMISSION

Shelby Moore
Zoning Administrator

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Grantsville City Planning Commission

May 15th, 2025
PUBLIC NOTICE

Public hearing for consideration of the proposed Preliminary Plat application for Townhomes on Willow, located at approximately 132 S. Willow St.

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Zoning Administrator

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AGENDA ITEM #1

Consideration of the proposed Preliminary Plat application for Townhomes on Willow, located at approximately 132 S. Willow St.

Grantsville City Planning Commission

May 15th, 2025
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Shelby Moore
Zoning Administrator

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Meeting ID: 862 9000 4540

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

Permit # 23027

Staff Report Summary for
Townhomes on Willow PUD application.

Parcel ID(s): 01-105-0-0087
Property Address: 132 S. Willow St.
Applicant Name: Todd Castagno
Request: 96 Townhomes
Prepared By: Shelby Moore

Meeting Date: 4-15-25
Public Hearing Date: 4-15-25
Current Zone: RM-7
Proposed Density: 93D/U
Acres: 13.45

PLANNING STAFF ANALYSIS AND COMMENTS

Project Summary:

Townhomes on Willow submitted an application in 2022 for the development of 13.45 acres, proposing the construction of 93 townhomes. The applicant has submitted a plan that meets the public road Right-of-Way (ROW) requirements and is willing to connect the water line through Warner's property for looping purposes. Additionally, the applicant is committed to repairing the offsite sewer line in multiple locations and obtaining an easement for the waterline on Warner's property.

Timeline:

1. 2/25/2022: Preliminary Plat submitted – public hearing and discussion held.
2. 2022: Reviewed by previous staff and DRC.
3. 1/19/2023: Scheduled public hearing (no discussion; item pulled).
4. 5/14/2024: Sewer line assessment completed.
5. 8/7/2024: Sewer line repair plans submitted.
6. 3/6/2025: PUD recommended for approval by Planning Commission
7. 5/7/2025: PUD and MDA Approved by City Council.

Project Details:

- **Acreage:** 13.45 acres
- **Proposed Units:** 93 townhomes
- **Public Road ROW Compliance:** Plan meets the public road ROW requirements.
- **Water Line Connection:** Applicant is willing to connect the water line through Warner's property for looping purposes.

- **Off-site Sewer Line Repairs:** Applicant is committed to repairing the off-site sewer line in multiple locations.
- **Easement:** Applicant is supposed to obtain an easement for the waterline on Warner's property.
- **Off-site Sidewalk:** The applicant has proposed to extend the sidewalk, south of development, to Durfee Street.

PUD Standards for Determination 12-14-2:

As the PUD is a type of conditional use, it is required to consider the standards for determination found in Section 7.8 of the Conditional Use Ordinance. The applicant's responses to the standards are located in the attached PUD Application Worksheet. The applicant has addressed all of the standards that they feel are applicable. Standards H and I are determined by the Planning Commission. Those standards are:

(h) That some form of a guarantee is made assuring compliance to all conditions that are imposed;

(i) That the conditions imposed are not capricious, arbitrary, or contrary to any precedence set by the Planning Commission on prior permits, which are similar in use and district, unless prior approvals were not in accordance with the provisions and standards of this ordinance

Exceptions Requested:

The applicant has provided a table of deviations to the ordinances (see attached) and noted some of the same deviations on the PUD Application Worksheet.
It is recognized that the specific exceptions requested are not referencing specific ordinances. Many of these items may be addressed in multiple ordinances and by considering the specific request without reference to a specific ordinance, it will apply to any ordinance that inadvertently did not get referenced. This will lessen the conflicts as each of these exceptions is specific to the item requested, not the remainder of the language in the ordinance.
Please review the table and discuss which exceptions on the applicant's table are acceptable, and which are not.

Buffer:

GLUDMC Chapter 9 discusses Landscaping and buffers between disparate uses. GLUDMC Section 4.17 discusses the need for fencing. While this application was submitted before the current Amendments to Chapter 12 were approved. This will also require a landscaped buffer, fencing and controls on lights and types of uses to mitigate the potential negative effects on the neighboring residents.

Parking:

Per GLUDMC Chapter 12.2 1 notes that the Planning Commission does not have authority to waive public health and safety issues such as the quantity of parking required by the code. Parking is considered a public health and safety issue because inadequate parking availability

typically leads to vehicles parking in restricted areas such as in front of fire hydrants, driveways, sticking out in the street blocking sidewalks and impeding traffic and other restricted areas which impedes the ability for emergency ingress and egress. Therefore, it will be important that the proposed development comply with the necessary parking requirements found in GLUDMC Chapter 6 off-street parking and loading and GLUDMC Section 4.34 Multi-Unit Residential Development.

Site Triangle:

The site triangle is another public health and safety issue that Planning Commission is not allowed to waive. GLUDMC 4.16 regulates this requirement. At intersections the site triangle must be 30 feet along the inside of the sidewalk running both directions. A driveway may not encroach in the site triangle. Public Utility and Access Easements: Provision of utilities and services public services requires easements on lots. The easement requirements are described in GLUDMC Section 21.6.8 As there is not a great deal of detail and specificity at this point it is assumed that the proposed project will comply with dimensions found in the code for the required easements. This again is considered a public health and safety issue that Planning Commission is not allowed to waive.

Staff Analysis:

1. **Compliance with Public Road ROW:**
    - The submitted plan meets the public road ROW requirements, ensuring proper access and connectivity for the proposed development.
2. **Water Line Connection:**
    - The applicant's willingness to connect the water line through Warner's property for looping purposes is a positive step towards ensuring adequate water supply and distribution for the development.
3. **Offsite Sewer Line Repairs:**
    - The commitment to repairing the offsite sewer line in multiple locations demonstrates the applicant's responsibility towards maintaining and improving the existing infrastructure.
4. **Easement Acquisition:**
    - Obtaining an easement for the waterline on Warner's property is essential for the successful implementation of the water line connection. This condition must be met before final approval.

Conclusion:

The proposed development of Townhomes on Willow aligns with the city's planning goals and meets the necessary requirements for public road ROW compliance, water line connection, and offsite sewer line repairs. The applicant's commitment to obtaining the necessary easement from Mr. Warner further supports the feasibility of the project.

*** 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.

TECHNICAL MEMORANDUM

TO:	Shelby Moore
FROM:	Shay Stark, Planner
DATE:	February 28, 2025
SUBJECT:	Townhomes on Willow Subdivision PUD Application – Planning Commission
PROJECT NO.:	00270.C Phase 009 Task 001 Homes on Willow

AQUA Engineering has reviewed the documents provided for the Townhomes on Willow Subdivision PUD. As the application for this project was initially submitted in February of 2022 and was brought before Planning Commission in January of 2023 it is helpful to include some background information and supplementary documents to better understand where this project has been and the direction that Planning Commission was guiding the applicant to go with the project. The following documents were part of the review:

PUD Application Documents:

- Townhomes on Willow PUD Overall Site Plan, Project Engineer: Ensign Engineering, Print Date: August 28, 2024.Submitted to Grantsville City, August 29, 2024.
- Planned Unit Development Application (Responses to Chapter 12 PUD requirements 12.2 (1)(a) and 12.4(2) (a) provide a written statement addressing each of the applicable standards of Section 7.8 to show that they have been met. As well 12.4(2) (b) a written statement indicating specifically any change alteration, modification or waiver of any Zoning or development regulation that is being sought by the developer. Undated
- Townhomes on Willow - Traffic Impact Study, completed by Hales Engineering and Dated February 13, 2021.
- South Willow Townhomes - Willow Street Traffic Impact Study, completed by A-Trans Transportation Engineering and Dated November 13, 2024.
- Townhomes on Willow – Three Plex Rendition (Mountain Valley Townhomes), Architect: JZW Architects, Dated September 30, 2019
- Townhomes on Willow – Five Plex Rendition (Mountain Valley Townhomes), Architect: JZW Architects, Dated October 17, 2019
- Townhomes on Willow – Six Plex Rendition (Mountain Valley Townhomes), Architect: JZW Architects, Dated October 7, 2019
- Report Geotechnical Study - Proposed Townhomes on Willow Subdivision – 299 South Willow Street – Grantsville, Utah, GSH Geotechnical, Inc., December 9, 2021
- Grantsville City Master Development Agreement for the Townhome on Willow – Draft Undated.
- Townhome on Willow Subdivision PUD – PUD Deviations table, Undated
- Townhomes on Willow PUD - Willow Street Sewer Repairs – Drawing Set – Ensign Engineering – August 6, 2024
- Townhomes on Willow PUD – Offsite Cherry Street Water – Ensign Engineering – Dated January 30, 2023.

Supplemental Supporting Documents:
These documents are not part of the PUD application but are part of the record of the Preliminary Application and have been utilized to better understand the background of the project and to help check the proposed deviations and justifications.

- Grantsville City Planning Commission Minutes January 5, 2023 (Public Hearing and Project Discussion)
- Grantsville City Planning Commission Minutes January 19, 2023 (Public Hearing assumed for PUD Application as both were submitted at the same time but the PUD application did not get in the packet for the first meeting.)
- Townhomes on Willow PUD Preliminary Plan Set, Project Engineer: Ensign Engineering, Print Date: August 28, 2024.Submitted to Grantsville City, August 29, 2024.
- Townhomes on Willow Subdivision – Grantsville Wastewater Capacity Analysis Memo, Completed by Ensign Engineering and Dated August 19, 2024

Background

- Property Location: Approximately 200 South Willow Street
- Size: 13.34 Acres
- Zoning: RM-7
- Number of Units Proposed: 93
- Density: 7 units per gross acre. 93.24 units is 7 units per gross acre.
- Preliminary Application Date: 2/25/2022 and Accepted 3/30/2022
- PUD Application Date: 2/25/2022 and Accepted 3/30/2022
- Public Hearing Dates: January 5, 2023 & January 19, 2023

Also attached is a review memo provided by AQUA Engineering Dated January 6, 2025. The purpose of this review was to consider previous events in the project history to help determine what had been addressed and what was still in question. The memo was provided to the applicant. There were several items that were addressed by previous staff members that we did not have complete information about. Those items are only described as to what is currently known. Some of these items have since been clarified with the applicant. The January 6, 2025, memo is included for informational purposes as supporting documentation.

GLUDMC Chapter 12 PUD

At the time the PUD application was submitted in February 2022, the language in GLUDMC Chapter 12 was very different from the recent versions. As the code is always being updated, the 2022 language has been pieced together from amendment records the 2022 language is attached in the Planning Commission packet.

One major difference with the 2022 language versus more recent language is that in 2022 PUD process was staged. In 12.4 the applicant is directed to provide the Determination table (GLUDMC 7.8 Conditional Use Determination) filled out with their responses and the list of proposed deviations with the Preliminary Application. 12.4 then directs that the approval of the final plan or final plat if required include the special conditions applicable to the PUD. The applicant submitted both the Preliminary application, and the PUD application concurrently as required including the annotated 7.8 Determination Table and list of proposed deviations. As has been previously discussed in Planning Commission requiring the applicant to submit a Preliminary Application at the same time as the PUD requires the applicant to do a lot of extra work that may be for naught if the PUD is not approved as proposed. Staff is currently reviewing the Preliminary application

but has put the PUD application forward in the interest of not requiring multiple reviews and changes of the Preliminary application that may not be applicable depending on the outcome of the PUD consideration with Planning Commission.

GLUDMC Section 7.8 Determination

The applicant has submitted their responses to the Conditional Use Determination standards found in 7.8 as required by 12.4-2(a) and are provided below:

Section 7.8 Determination

(a) The proposed use is one of the conditional uses specifically listed in the zoning district in which it is to be located;

The proposed use is a Planned Unit Development with townhomes and a club house. The underlying zone is RM-7 which allows townhomes as conditional use and a club house as permitted.

(b) That such use will not, under the circumstances of the particular case, be detrimental to the health, safety, comfort, order or general welfare of persons residing or working in the vicinity;

The proposed use will not be detrimental to the health, safety, comfort, order or general welfare of persons residing or working in the vicinity.

(c) That the use will comply with the intent, spirit, and regulations of these ordinances and is compatible with and implements the planning goals and objectives of the City, including applicable City master plans;

The use will comply with the intent, spirit, and regulations of these ordinances, is compatible with, and implements the planning goals and objectives of the City, including applicable City master plans.

(d) Make the use harmonious with the neighboring uses in the zoning district in which it is to be located;

All adjacent zones are RM-7 and adjacent uses are residential and agricultural.

(e) That nuisances which would not be in harmony with the neighboring uses, will be abated by the conditions imposed;

The proposed improvements are in harmony with the neighboring uses, any nuisances, if any, will be abated by the conditions imposed.

(f) That protection of property values, the environment, and the tax base for Grantsville City will be assured;

The proposed improvements will increase the surrounding property values.

(g) That the conditions shall be in compliance with the current comprehensive General Plan of Grantsville City;

The development complies with the current comprehensive General Plan of Grantsville City.

(h) That some form of a guarantee is made assuring compliance to all conditions that are imposed;

The guarantee assuring compliance to all conditions that are imposed can be recorded with the related documents to the Plat, CC&R, and the HOA.

(i) That the conditions imposed are not capricious, arbitrary or contrary to any precedence set by the Planning Commission on prior permits, which are similar in use and district, unless prior approvals were not in accordance with the provisions and standards of this ordinance;

The conditions imposed are not capricious, arbitrary or contrary to any precedence set by the Planning Commission on prior permits, which are similar in use and district.

(j) The internal circulation system of the proposed development is properly designed;

The internal circulation system was designed by a licensed civil engineer and a 3rd party traffic study conducted to ensure proper design.

(k) Existing and proposed utility services are adequate for the proposed development;

The proposed utility services are adequate for the proposed development.

(l) Appropriate buffering is provided to protect adjacent land uses from light, noise and visual impacts;

Large amounts of open space is provided that improve the improve the visual impacts, all lighting is internal to the development and the noise levels will match the surrounding areas.

(m) Architecture and building materials are consistent with the development and compatible with the adjacent neighborhood;

The architecture and building materials are consistent with the development and compatible with the adjacent neighborhood.

(n) Landscaping is appropriate for the scale of the development;

Landscaping and design is appropriate for the scale of the development.

(o) The proposed use preserves historical, architectural and environmental features of the property;

There are no historical structures on the property and there are no significant environmental features of the property.

(p) Operating and delivery hours are compatible with adjacent land uses.

The hours of operating and delivery hours match the surrounding areas.

Proposed Deviations

The list of proposed Deviations to GLUDMC 15.4 RM-7 District is:

Development Name - Grantsville, UT Development Standards			
Grantsville City Residential Uses	Grantsville City Residential Uses	RM-7 - 2022	Zoning Designation
	Description	**Description**	**Devations**
	Max Density	7 DU/A	7 DU/A
	Minimum Lot Size	7,000 sq. ft.	6181 sq. ft.
	Minimum Size Corner Lots	10,000 sq. ft.	6181 sq. ft.
	Minumum Lot Frontage	45'	24'
	Minimum Dwelling Unit SF	-	-
	Minimum Front Yard Setbacks		**Devations**
	Front Yard	25'	25'
	Driveway	25'	25'
	Corner Front Yard	25'	9'9"
	Rear Yard		**Devations**
	Main Building	20'	20'
	Accessory Building	1'	1'
	Side Yard		**Devations**
	Main Building	7.5'	7.5'
	Accessory Building	4'	4'
	Multi-Unit Building Spacing	-	10'
	Corner Side Yard	-	25'
	Maximum Building Height	35'	35'

* Since this project is a PUD which has previously been approved the underlying zoning applies when a varience was not addressed. The PUD approval has been made based on a concept drawing which determines where each type of use will be applied. The lot size was determined off of Gross area, because the code did not dictate that.

GLUDMC 15.4 RM-7 District & 15.7 Table

Like Chapter 12 PUD the language in 15.4 and 15.7 has significantly changed since February 2022. Here again the 2022 language has been pieced together from amendment documents and has been provided in the Planning Commission Packet.

A significant difference between the current ordinance and the 2022 RM-7 District is language noting a maximum density of 7 dwelling units per acre. The City has since removed this language from both the zoning map and the description of the district and now uses only lot sizes to determine the number of unit allowable. The current language in the RM-7 District provides reference to section 4.34 for multi-unit dwellings to specifically address those types of uses. The challenge in the 2022 language is that while it allows multi-unit housing, also called multi-family, it was not clearly defined. The lot sizes do not reflect the actual zero lot line condition that occurs in multi-unit housing and the density does not clearly state whether it is gross density or net density.

There is a definition for density in GLUDMC Chapter 2 Definitions that was also in place in 2022: *(74) DENSITY. Density is a measure of the number of dwelling units per acre. It shall be expressed dwelling units per acre (DU/acre). Unbuildable land (as defined by the Planning Commission) is land with a slope greater than 25%, subject to inundation, or other geological hazards.*

This definition mentions unbuildable land, but it does not explain how that condition effects the calculation of density. Should the density be calculated on gross acreage or does the area of unbuildable land need to be removed before calculating a net density? This definition also does not discuss streets or open space.

According to state law 10-9a-306 Land Use Authority Requirements – Nature of Land Use Decision:

1. *A land use authority shall apply the plain language of land use regulations.*
2. *If a land use regulation does not plainly restrict a land use application, the land use authority shall interpret and apply the land use regulation to favor the land use application.*

In this case neither the definition of density nor the description of the density in the 2022 RM-7 District ordinance are clear on the application of gross acreage or net acreage excluding the open space or the streets. **The Planning Commission must apply the plan language of the regulation and interpret the language to the favor of the application if there is no specific restriction in the language.** The lot size language is equally ambiguous when applied to multi-unit dwellings. In calculating the number of dwelling units that could be built on the property, the applicant interpreted the language from the 2022 RM-7 District to mean gross density of the property.

Other language in the RM-7 Zone is less ambiguous and therefore straight forward. As can be seen in the deviation table the applicant is asking for some deviations to setbacks and minimum frontage widths.

Design Specific Items

Unit and Lots Sizes:
The proposed units are 24 feet in width. As previous applicants have noted, this width is a standard maximum unit width for townhouses. The reason this is the case is that bedrooms require a window and the interior units in a building only have the option for windows on the front and back of the unit. A typical bedroom is 10 to 12 feet wide. Additional width also causes the floor plans to have a larger area in the interior of the home that does not have windows so it limits what the floor space can used for. If the goal is affordability, then extra space is just extra cost.

The Deviation Table notes a lot size of 6,181 square feet. This is calculated based off of the gross area of the property divided by the total number of units allowed by density. Again, the actual lot lines are the walls of the units and sometimes a small back patio or private area. The property beyond the buildings is typically held in common and so trying to use the lot sizes listed in the RM-7 Zone as the measure for calculating the number of units allowed is an exercise in ambiguous interpretation.

Streets:

Willow Street: The currently (Adopted March 15, 2025) Grantsville City Transportation Master Plan designates this section of Willow Street as a Collector Street. Previous versions of the Transportation Master Plan designate this section of Willow Street as a Local Street. It is important to note that in many areas along the street the right-of-way is as narrow as 57 feet and currently very little is over 60 feet in width. If the street is widened to 90 feet to meet the Collector requirement the edge of right-of-way will literally be at the porches of several homes on the street. Even at 66 feet of width of the Local Street designation right of way will be required from every property owner along the street to build it out.

The applicant has agreed to improve the west side of the street with sidewalk, curb and gutter and extended width pavement not only along the project frontage but offsite from the project frontage south to Durfee Street. This will provide a safe route to school for the children that live in this neighborhood.

The improvement of Willow Street beyond the project frontage should be credited as a benefit provided by the project.

Interior Streets: The interior streets are all proposed to be constructed at the Local Street width (66 feet). Two street stubs have been included for Cherry Street and Carly Way to extend across the field to the Look Out Pass Subdivision at a future date. **Please clarify if the streets are public or private.**

Setbacks and Site Triangles: The corner setbacks and the side setbacks between buildings in may locations are very tight. The corner setbacks are always a concern as this affects the site triangles at intersections. The Chapter 12 PUD requirements in place at the time the project was submitted in February 2022 do not restrict Planning Commission from approving deviations to the code for specific items such as site triangles and parking. There is not language in the code stating that the site triangle cannot encroach into driveways. The code is only concerned about obstructions within the site triangle. Site triangles and to a lesser extent corner setbacks are a safety issue that should not be ignored. It is also important to note that the site triangle definition of 30 feet each direction at the property lines.

Grantsville chose to implement a set sight triangle size to keep considerations simple. However, per guidance in the ASHTO Highways and Streets Manual, “Stopping sight distance and passing sight distance are a direct function of the design speed.” There are also other conditions that factor in but at the most basic level design speed is the controlling factor in sight distance. Because of speed the sight triangle on SR-112 or SR-138 will look very different than in a residential neighborhood. The reverse is also true. Speed limits can be determined by the available sight distance.

Setting speed limits based upon site distance may be the way to address sight-distance issues in townhome developments and other multi-unit type residential uses. If a 10 mile per hour speed limit were to be imposed on the streets within the townhome development, it would not only help mitigate the sight distance issues but would also be beneficial as children may dart out into the street to get to the open space areas or may ride their bikes in the street. Also, with driveways closer together the slower speed will reduce the risk of collision as a driver will have longer to react if a vehicle enters the street from a driveway. With the numerous driveways and parking stalls along the street in the proposed development a reduced speed is justified.

If the City is willing to reduce the speed to 10 miles per hour, the developers engineer should calculate the site triangles based upon a 10 mile an hour speed limit and adjust the corner setbacks on the residential units to meet allow for the calculated site triangle.

Open Space: Ten percent improved open space is required as part of the PUD. The required open space is 1.33 Acres. If a portion of Common Area E containing the recreation area in the center of the development and a portion of Common Area A including the clubhouse and add those together minus the 20-foot distance from the lot lines of the units (GLUDMC 21.1.16) there is well over two acres of improved open space.

HOA: The project landscaping and amenities will be maintained by an HOA.

Improvements to be included in the MDA:

The MDA should note each of the offsite improvements being provided by the MDA. The MDA should clearly define the scope of the improvements, who responsibility it is to provide or complete the improvements and the timing of completion of improvements with respect to the phasing of the project.

Some of the offsite improvements that should be included in the MDA are:

- Surface Improvements on Willow Street along the frontage of the project and extending to Durfee Street. These improvements include:
  1. Construction of approximately 1,250 linear feet of sidewalk, curb and gutter aligned along the west right-of-way line in the configuration detailed in the project drawings.
  2. Replacement and extension of pavement from the east edge of the trench patch for the new 8” water line or the west edge of existing pavement after being sawcut to clean the edge up, which ever is the greater distance, with pavement extended to lip of curb on the west side of the street. The intent is to have only a single patch joint between new and existing.
  3. Mill and overlay of existing pavement where there are multiple patches crossing the street to protect the pavement joints by minimizing the number of joints exposed to weather and wear. The configuration of this item will need to be determined in consultation with the appropriate City staff including the City Public Works Director,

City Inspector, and City Engineer, with contact through the City Inspector.
4. Others?

- Sanitary Sewer Line Repair on Durfee Street, Willow Street and Main Street as detailed in the project drawings to improve sewer line capacity.

- Construction of 8" Culinary Water Line on Willow Street for approximately 1,350 linear feet beginning at a tie in point on the existing culinary water line in the Durfee Street Intersection and extending north through the frontage of the Townhomes on Willow development with reconnection to the 6" culinary water line in Willow Street as detailed in the project drawings. The existing 6" culinary water line shall be disconnected from the active system and abandoned in place with the appropriate protections to the active water system in coordination with the City Water Department staff, City Inspector and City Engineer, with contact through the City Inspector.

- Reconnection of Culinary Water Services (13 verify) and Fire Hydrants (2 verify) to the new 8" waterline in Willow Street. In order to minimize leaks and protect the water system from contamination a new service line shall be run from the existing water meter to the 8" culinary water line. Existing water services shall be abandoned in place. Fire Hydrants shall also be connected to the new 8" waterline. This work shall be coordinated with the City Water Department staff, City Inspector and City Engineer, with contact through the City Inspector. See note #3 Surface Improvements on Willow Street concerning the final surface finish of the trench patches.

- Extend 8" culinary water line for approximately 250 linear feet across Mike Warners property along the Cherry Street alignment between the Townhomes on Willow development to tie in with existing water line in the Look Out Pass Development. The purpose of this connection is to loop the system to provide adequate flow and pressure for peak and fire flows. This work shall be completed per the project plans in an easement that the applicant has obtained from Mike Warner. Tie into the City system shall be coordinated with the City Water Department staff, City Inspector and City Engineer, with contact through the City Inspector.

- Safe Routes to Schools and Pedestrian Crossing Improvements along Willow Street including but not limited to concrete pathways, smooth pavement surfaces in crossings, ADA ramps, signage, lights and paint markings shall be constructed to meet the safe routes to schools and ADA standards and requirements with configuration, alignment and placement per project plans.

- Other Off-site Improvements?

Approved deviations to ordinances and standards should also be defined in the MDA. If there are any other special terms and conditions such as a description of the amenities that will be provided in the recreation areas in the development and associated timing of providing these amenities, ownership and maintenance of open space and common areas, etc, these should also be defined in the MDA.

Deviations to code to be noted in MDA.
Please note that the proposed deviations are based upon the requirements found in GLUDMC 15.4 RM-7 Zone in effect when the application was submitted in February 2022. The following

table notes the proposed deviations from the RM-7 Zone Requirements:

Development Name - Grantsville, UT Development Standards			
Grantsville City Residential Uses	Grantsville City Residential Uses	RM-7 - 2022	Zoning Designation
	Description	**Description**	**Devations**
	Max Density	7 DU/A	7 DU/A
	Minimum Lot Size	7,000 sq. ft.	6181 sq. ft.
	Minimum Size Corner Lots	10,000 sq. ft.	6181 sq. ft.
	Minumum Lot Frontage	45'	24'
	Minimum Dwelling Unit SF	-	-
	Minimum Front Yard Setbacks		**Devations**
	Front Yard	25'	25'
	Driveway	25'	25'
	Corner Front Yard	25'	9'9"
	Rear Yard		**Devations**
	Main Building	20'	20'
	Accessory Building	1'	1'
	Side Yard		**Devations**
	Main Building	7.5'	7.5'
	Accessory Building	4'	4'
	Multi-Unit Building Spacing	-	10'
	Corner Side Yard	-	25'
	Maximum Building Height	35'	35'
* Since this project is a PUD which has previously been approved the underlying zoning applies when a varience was not addressed. The PUD approval has been made based on a concept drawing which determines where each type of use will be applied. The lot size was determined off of Gross area, because the code did not dictate that.			

Other MDA Items

- Timing of completion of clubhouse area and recreation area in the center of the development.
- Phasing
- Timing and completion of landscaping around units.
- Other?

END

Development Name - Grantsville, UT Development Standards			
Grantsville City Residential Uses	Grantsville City Residential Uses	RM-7 - 2022	Zoning Designation
	Description	**Description**	**Devations**
	Max Density	7 DU/A	7 DU/A
	Minimum Lot Size	7,000 sq. ft.	6181 sq. ft.
	Minimum Size Corner Lots	10,000 sq.	6181 sq. ft.
	Minumum Lot Frontage	45'	24'
	Minimum Dwelling Unit SF	-	-
	Minimum Front Yard Setbacks		**Devations**
	Front Yard	25'	25'
	Driveway	25'	25'
	Corner Front Yard	25'	15'
	Rear Yard		**Devations**
	Main Building	20'	20'
	Accessory Building	1'	1'
	Side Yard		**Devations**
	Main Building	7.5'	7.5'
	Accessory Building	4'	4'
	Multi-Unit Building Spacing	-	10'
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* Since this project is a PUD which has previously been approved the underlying zoning applies when a varience was not addressed. The PUD approval has been made based on a concept drawing which determines where each type of use will be applied. The lot size was determined off of gross area, because the code did not dictate that at the time of the application.

811 Know what's below. Call before you dig.

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

BENCHMARK

SOUTHWEST QUARTER CORNER OF SECTION 31, TOWNSHIP 2 SOUTH, RANGE 5 WEST SALT LAKE BASE AND MERIDIAN (FOUND 2.5" BRASS DISC)

ELEV = 4360.80'

Grantsville City Development Review
Submittal # 4 05/06/2025

APPROVED
Shelby Moore
Planning Department
05/06/2025

Approved
Bodee Paulick
Grantsville Irrigation Co.
05/06/2025

APPROVED
Cody Christensen
Public Works
05/06/2025

APPROVED
Shay Stark
Planning Department
05/06/2025

APPROVED
Hayden Karren
AQUA Engineering
05/06/2025

TOWNHOMES ON WILLOW PUD

WILLOW STREET
GRANTSVILLE, UTAH

INDEX OF DRAWINGS

1 OF 2	PLAT	C-203	GRADING AND DRAINAGE PLAN
2 OF 2	PLAT	C-204	GRADING AND DRAINAGE PLAN
C-001	GENERAL NOTES	C-205	GRADING AND DRAINAGE PLAN
C-002	GRANTSVILLE CITY GENERAL NOTES	C-206	GRADING AND DRAINAGE PLAN
C-003	GRANTSVILLE CITY GENERAL NOTES	C-207	DRAINAGE CALCULATIONS
C-004	CONSTRUCTION GENERAL NOTES	C-300	OVERALL UTILITY PLAN
C-100	OVERALL SITE PLAN	C-301	UTILITY PLAN
C-101	SITE PLAN	C-302	UTILITY PLAN
C-102	SITE PLAN	C-400	EROSION CONTROL PLAN
C-103	AASHTO SITE TRIANGLES	C-500	DETAILS
C-200	OVERALL GRADING AND DRAINAGE PLAN	C-501	DETAILS
C-201	GRADING AND DRAINAGE PLAN	C-502	DETAILS
C-202	GRADING AND DRAINAGE PLAN		

FOR REVIEW
NOT FOR CONSTRUCTION

DATE PRINTED
May 6, 2025

NOTICE TO CONTRACTOR

ALL CONTRACTORS AND SUBCONTRACTORS PERFORMING WORK SHOWN ON OR RELATED TO THESE PLANS SHALL CONDUCT THEIR OPERATIONS SO THAT ALL EMPLOYEES ARE PROVIDED A SAFE PLACE TO WORK AND THE PUBLIC IS PROTECTED. ALL CONTRACTORS AND SUBCONTRACTORS SHALL COMPLY WITH THE "OCCUPATIONAL SAFETY AND HEALTH REGULATIONS OF THE U.S. DEPARTMENT OF LABOR AND THE STATE OF UTAH DEPARTMENT OF INDUSTRIAL RELATIONS CONSTRUCTION SAFETY ORDERS." THE CIVIL ENGINEER SHALL NOT BE RESPONSIBLE IN ANY WAY FOR THE CONTRACTORS AND SUBCONTRACTORS COMPLIANCE WITH SAID REGULATIONS AND ORDERS.

CONTRACTOR FURTHER AGREES TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB-SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE CIVIL ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.

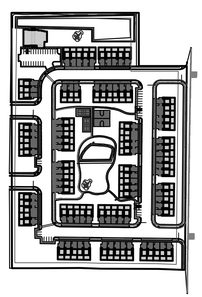
NOTICE TO DEVELOPER/ CONTRACTOR

UNAPPROVED DRAWINGS REPRESENT WORK IN PROGRESS, ARE SUBJECT TO CHANGE, AND DO NOT CONSTITUTE A FINISHED ENGINEERING PRODUCT. ANY WORK UNDERTAKEN BY DEVELOPER OR CONTRACTOR BEFORE PLANS ARE APPROVED IS UNDERTAKEN AT THE SOLE RISK OF THE DEVELOPER, INCLUDING BUT NOT LIMITED TO BIDS, ESTIMATION, FINANCING, BONDING, SITE CLEARING, GRADING, INFRASTRUCTURE CONSTRUCTION, ETC.

UTILITY DISCLAIMER

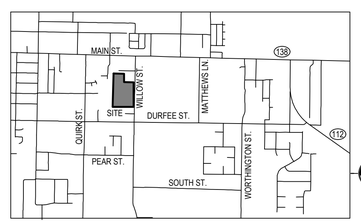
THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND / OR ELEVATIONS OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

KEY MAP



NO SCALE

VICINITY MAP



NO SCALE

GENERAL NOTES

1. ALL WORK SHALL CONFORM TO GRANTSVILLE CITY STANDARDS & SPECIFICATIONS.
2. CALL BLUE STAKES AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES.

NOTES:
- APPROVED BY CITY COUNCIL ON: _____.
- PRE-CONSTRUCTION MEETING DATE: _____.

APPROVED FOR CONSTRUCTION ON THIS _____ DAY OF _____, 20___.

_____
GRANTSVILLE CITY PUBLIC WORKS DIRECTOR

APPROVED BY CITY ENGINEER: GRANTSVILLE CITY, UTAH
FOR PUBLIC IMPROVEMENTS ONLY (SHEETS_____)

_____ _____
CITY ENGINEER DATE

APPROVAL OF THESE PLANS DOES NOT RELEASE THE DEVELOPER FROM RESPONSIBILITY FOR CORRECTION OF MISTAKES, ERRORS OR OMISSIONS CONTAINED THEREIN. IF DURING THE COURSE OF CONSTRUCTION THE PUBLIC INTEREST REQUIRES A MODIFICATION OR A DEPARTURE FROM THE CITY SPECIFICATIONS, OR THE APPROVED PLANS, THE CITY SHALL HAVE THE AUTHORITY TO REQUIRE SUCH MODIFICATION OR A DEPARTURE, AND TO SPECIFY THE MANNER WHICH THE SAME IS MADE.

ENSIGN
THE STANDARD IN ENGINEERING

TOOELE
169 N. Main Street, Unit 1
Tooele, UT. 84074
Phone: 435.843.3590

SALT LAKE CITY
Phone: 801.255.0529

LAYTON
Phone: 801.547.1100

CEDAR CITY
Phone: 435.865.1453

RICHFIELD
Phone: 435.896.2983

WWW.ENSIGNENG.COM

FOR:
ICON DEVELOPMENT LLC
3410 NORTH MOYLE LANE
ERDA, UTAH 84074
CONTACT:
SEAN PERKINS
PHONE: 435-850-8436

TOWNHOMES ON WILLOW PUD
WILLOW STREET
GRANTSVILLE, UTAH

PROFESSIONAL ENGINEER
10924116-2202
COREY J. CHILD
STATE OF UTAH
5-04-25

COVER

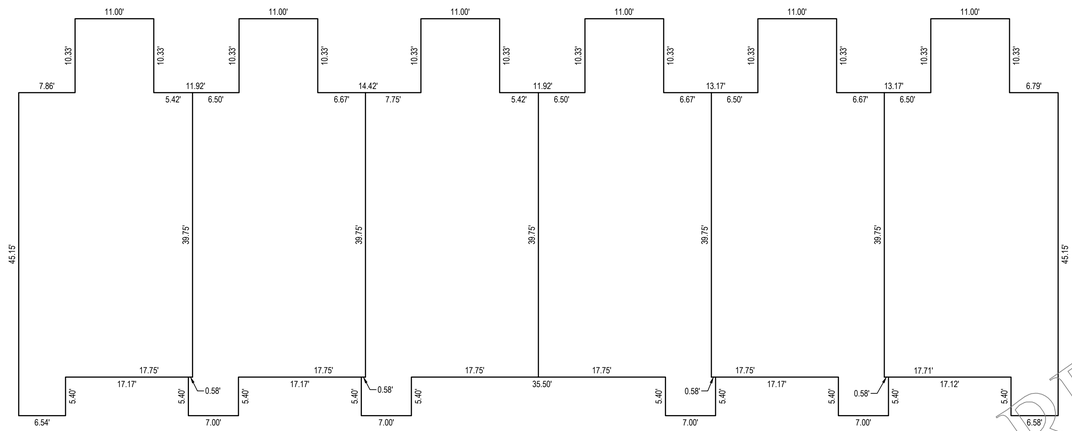
PROJECT NUMBER 10898A
PRINT DATE 2025-05-06
DRAWN BY H. CARTER
CHECKED BY C. CHILD
PROJECT MANAGER C. CHILD

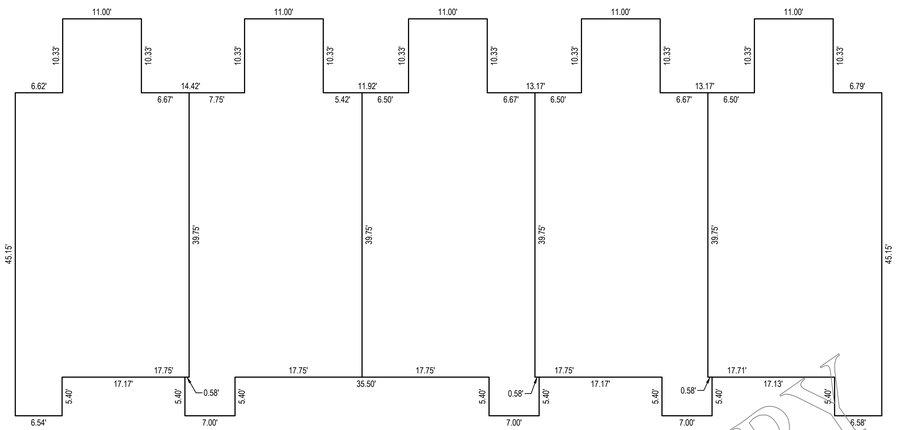
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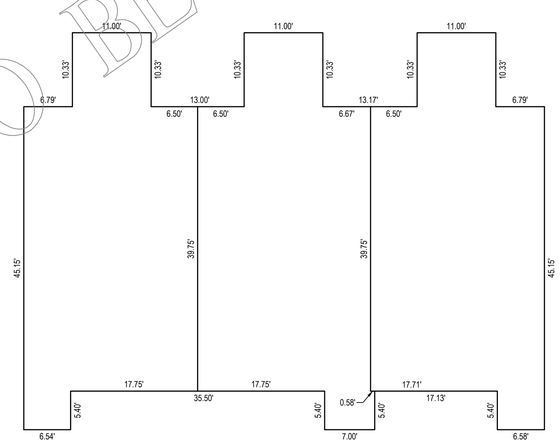
TOWNHOMES ON WILLOW SUBDIVISION PUD
PRELIMINARY PLAT

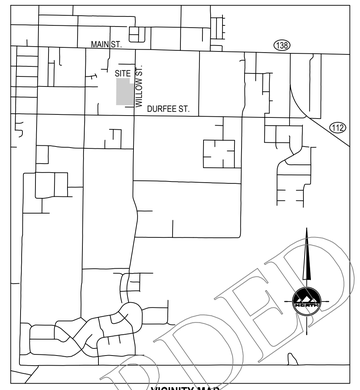
LOCATED IN THE SOUTHEAST QUARTER OF SECTION 31, TOWNSHIP 2 SOUTH, RANGE 5 WEST, SALT LAKE BASE AND MERIDIAN, GRANTSVILLE CITY, TOOELE COUNTY, UTAH

CURVE TABLE					
CURVE	RADIUS	LENGTH	DELTA	BEARING	CHORD
C1	81.00'	127.37'	90°05'38"	S44°57'19"W	114.65'
C2	81.00'	89.55'	63°20'39"	S58°19'48"W	85.06'
C3	81.00'	37.82'	26°44'58"	S13°16'59"W	37.47'
C6	15.00'	23.68'	90°26'29"	N45°07'44"E	21.29'
C7	15.00'	23.59'	90°05'38"	S44°57'19"W	21.23'
C8	15.00'	23.45'	89°33'31"	N44°52'16"W	21.13'
C9	15.00'	23.68'	90°26'29"	N45°07'44"E	21.29'
C11	15.00'	23.45'	89°33'31"	N44°52'16"W	21.13'
C13	15.00'	23.36'	89°13'02"	S44°42'01"E	21.07'
C14	15.00'	23.52'	89°50'49"	N44°23'08"W	21.18'
C15	15.00'	23.60'	90°09'11"	N45°36'52"E	21.24'
C16	15.00'	23.52'	89°50'49"	S44°23'08"E	21.18'
C17	15.00'	23.60'	90°09'11"	N45°36'52"E	21.24'
C18	15.00'	23.70'	90°32'09"	N44°43'48"W	21.31'
C19	15.00'	23.42'	89°27'51"	S45°16'12"W	21.11'
C20	15.00'	23.70'	90°32'09"	N44°43'48"W	21.31'









VICINITY MAP
NOT TO SCALE

PRELIMINARY - NOT TO BE RECORDED

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 17-23-17, have verified all measurements, and have subdivided said tract of land into lots and streets, together with easements, hereafter to be known as **TOWNHOMES ON WILLOW SUBDIVISION PUD**, and that the same has been correctly surveyed and monumented on the ground as shown on this plat. I further certify that all lots meet frontage width and area requirements of the applicable zoning ordinances.

BOUNDARY DESCRIPTION

A parcel of land, situate in the Southeast Quarter of Section 31, Township 2 South, Range 5 West, Salt Lake Base and Meridian, said parcel also located in Grantsville, Utah, more particularly described as follows:

Beginning at a point on the West line of Willow Street, point also being South 89°49'52" West 521.20 feet to the said West line of Willow Street and North 0°32'16" East 251.27 feet along said West line from the Southeast Corner of Section 31, Township 2 South, Range 5 West, Salt Lake Base and Meridian, and running:

thence North 87°52'39" West 96.51 feet, generally along an existing fence line the following 8 calls;
thence North 89°48'17" West 114.71 feet;
thence North 89°25'48" West 99.12 feet;
thence North 88°08'20" West 58.83 feet;
thence South 89°53'51" West 179.90 feet;
thence North 89°59'53" West 95.35 feet;
thence North 0°00'07" East 186.50 feet;
thence North 0°06'53" West 172.09 feet;
thence North 0°44'39" East 593.69 feet;
thence South 89°59'53" East 465.51 feet;
thence South 0°00'07" West 198.00 feet;
thence South 89°59'53" East 178.57 feet, to the West line of Willow Street;
thence South 0°32'16" West 760.78 feet, along said South line to the Point of Beginning.

Contains 581,242 square feet or 13.34 acres

APRIL 29, 2025
Date
Douglas J Kinsman
License no. 334575

PROFESSIONAL LAND SURVEYOR
No. 334575
DOUGLAS J KINSMAN
STATE OF UTAH

OWNER'S DEDICATION

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 divided into lots and streets together with easements as set forth hereafter to be known as:

TOWNHOMES ON WILLOW SUBDIVISION PUD

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 any and 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 hereby dedicate any other easements as shown and/or noted on this plat to the parties indicated and for the purpose shown hereon.

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

By: _____ By: _____

By: _____ By: _____

By: _____ By: _____

LIMITED LIABILITY COMPANY ACKNOWLEDGMENT

STATE OF UTAH)
County of Tooele)S.S.

On the _____ day of _____ A.D., 20_____ personally appeared before me, the undersigned Notary Public, in and for said County of _____ in the State of Utah, who after being duly sworn, acknowledged to me that He/She is the _____ of _____ a Limited Liability Company and that He/She signed the Owner's Dedication freely and voluntarily for and in behalf of said Limited Liability Company for the purposes therein mentioned and acknowledged to me that said Corporation executed the same.

MY COMMISSION EXPIRES: _____.

_____ RESIDING IN _____ COUNTY.
NOTARY PUBLIC

IRRIGATION SHARE ASSIGNMENT

LOT NUMBER	NUMBER OF SHARES	SHARE CERTIFICATE NUMBER

SUBMITTED WITH FINAL PLAT

HORIZONTAL GRAPHIC SCALE

10 0 5 10 20
(IN FEET)
HORZ: 1 inch = 10 ft.

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

CITY MAYOR APPROVAL

APPROVED THIS _____ DAY OF _____, 20_____, BY THE GRANTSVILLE CITY MAYOR.

GRANTSVILLE CITY MAYOR — ATTEST: GRANTSVILLE CITY RECORDER

CITY ATTORNEY'S APPROVAL

APPROVED THIS _____ DAY OF _____, 20_____, BY THE GRANTSVILLE CITY ATTORNEY.

GRANTSVILLE CITY ATTORNEY

TOWNHOMES ON WILLOW SUBDIVISION PUD

LOCATED IN THE SOUTHEAST QUARTER OF SECTION 31, TOWNSHIP 2 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

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

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 #2008-0061 AND 2016-0006

TOOELE COUNTY SURVEY DEPT. DIRECTOR

CITY ENGINEER'S APPROVAL

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

DEVELOPER
ICON DEVELOPMENT
3410 N. MOYLE LANE
ERDA, UT 84074
SEAN PERKINS
435-850-8436

SHEET 1 OF 2

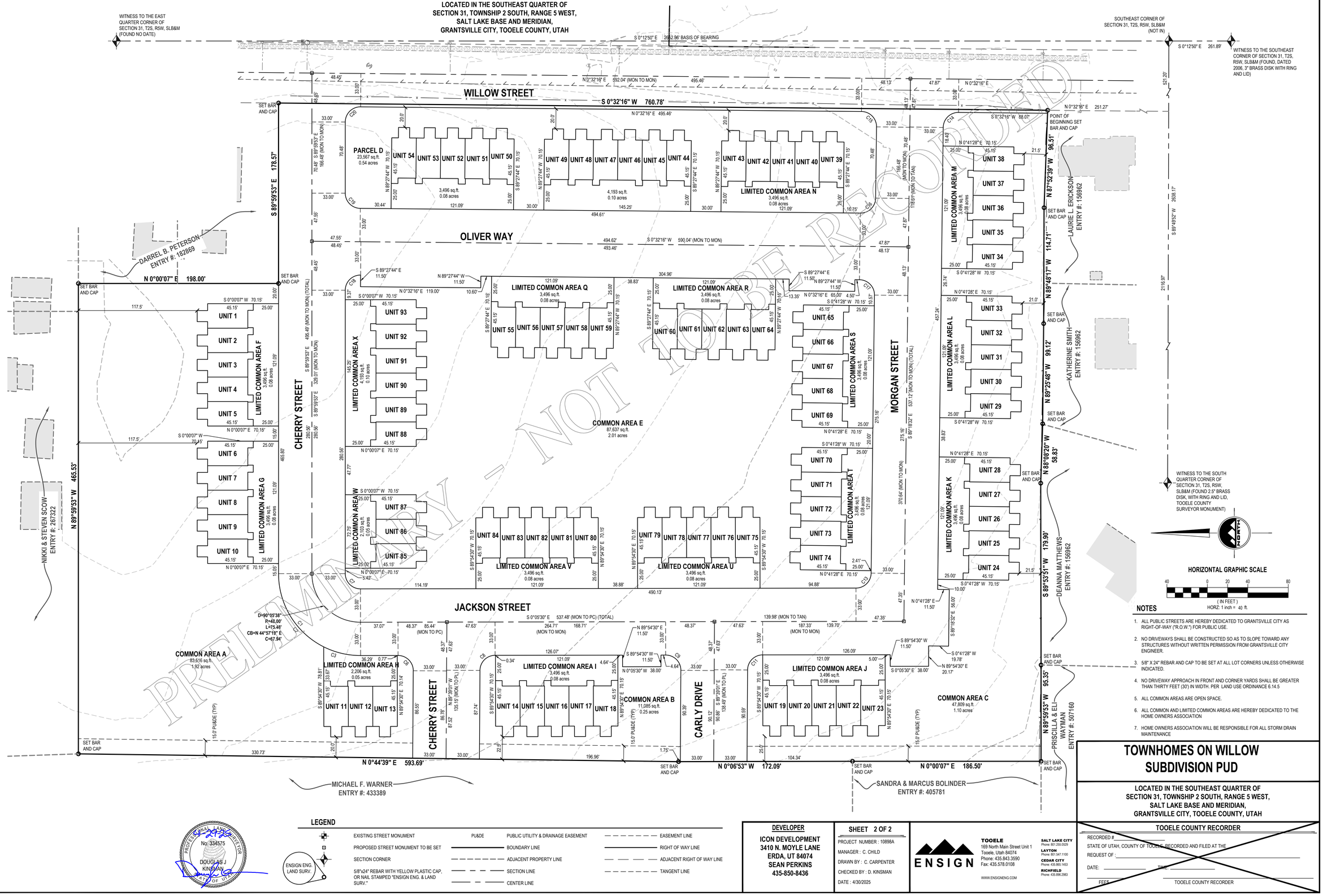
PROJECT NUMBER : 10898A
MANAGER : C. CHILD
DRAWN BY : C. CARPENTER
CHECKED BY : D. KINSMAN
DATE : 4/30/2025

ENSIGN
TOOELE
169 North Main Street Unit 1
Tooele, Utah 84074
Phone: 435.843.3590
Fax: 435.578.0108
WWW.ENSIGNENG.COM

SALT LAKE CITY
Phone: 801.255.0529
LAYTON
Phone: 801.547.1100
CEDAR CITY
Phone: 435.865.1453
RICHFIELD
Phone: 435.896.2983

TOWNHOMES ON WILLOW SUBDIVISION PUD
PRELIMINARY PLAT

LOCATED IN THE SOUTHEAST QUARTER OF
SECTION 31, TOWNSHIP 2 SOUTH, RANGE 5 WEST,
SALT LAKE BASE AND MERIDIAN,
GRANTSVILLE CITY, TOOELE COUNTY, UTAH



PRELIMINARY
NOT TO BE RECORDED

NOTES

1. ALL PUBLIC STREETS ARE HEREBY DEDICATED TO GRANTSVILLE CITY AS RIGHT-OF-WAY ("R.O.W.") FOR PUBLIC USE.
2. NO DRIVEWAYS SHALL BE CONSTRUCTED SO AS TO SLOPE TOWARD ANY STRUCTURES WITHOUT WRITTEN PERMISSION FROM GRANTSVILLE CITY ENGINEER.
3. 5/8" X 24" REBAR AND CAP TO BE SET AT ALL LOT CORNERS UNLESS OTHERWISE INDICATED.
4. NO DRIVEWAY APPROACH IN FRONT AND CORNER YARDS SHALL BE GREATER THAN THIRTY FEET (30') IN WIDTH. PER LAND USE ORDINANCE 6.14.5
5. ALL COMMON AREAS ARE OPEN SPACE.
6. ALL COMMON AND LIMITED COMMON AREAS ARE HEREBY DEDICATED TO THE HOME OWNERS ASSOCIATION
7. HOME OWNERS ASSOCIATION WILL BE RESPONSIBLE FOR ALL STORM DRAIN MAINTENANCE

LEGEND

- EXISTING STREET MONUMENT
- PROPOSED STREET MONUMENT TO BE SET
- SECTION CORNER
- 5/8"x24" REBAR WITH YELLOW PLASTIC CAP, OR NAIL STAMPED "ENSIGN ENG. & LAND SURV."
- PU&DE — PUBLIC UTILITY & DRAINAGE EASEMENT
- BOUNDARY LINE
- ADJACENT PROPERTY LINE
- SECTION LINE
- CENTER LINE
- EASEMENT LINE
- RIGHT OF WAY LINE
- ADJACENT RIGHT OF WAY LINE
- TANGENT LINE

PROFESSIONAL LAND SURVEYOR
No. 334575
DOUGLAS J KINSMAN
STATE OF UTAH

ENSIGN ENG. LAND SURV.

DEVELOPER
ICON DEVELOPMENT
3410 N. MOYLE LANE
ERDA, UT 84074
SEAN PERKINS
435-850-8436

SHEET 2 OF 2
PROJECT NUMBER : 10898A
MANAGER : C. CHILD
DRAWN BY : C. CARPENTER
CHECKED BY : D. KINSMAN
DATE : 4/30/2025

ENSIGN
TOOELE
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TOWNHOMES ON WILLOW SUBDIVISION PUD

LOCATED IN THE SOUTHEAST QUARTER OF
SECTION 31, TOWNSHIP 2 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

GRANTSVILLE GENERAL NOTES

1. ALL WORK DONE OR IMPROVEMENTS INSTALLED WITHIN GRANTSVILLE CITY INCLUDING BUT NOT LIMITED TO EXCAVATION, CONSTRUCTION, ROADWORK AND UTILITIES SHALL CONFORM TO THE GRANTSVILLE CITY CONSTRUCTION STANDARDS AND SPECIFICATIONS, CITY MUNICIPAL CODE, THE LATEST EDITION OF THE APWA MANUAL OF STANDARD SPECIFICATIONS AND MANUAL OF STANDARD PLANS, THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND ANY STATE OR FEDERAL REGULATIONS AND PERMIT REQUIREMENTS OF VARIOUS GOVERNING BODIES. THE CONTRACTOR IS RESPONSIBLE TO HAVE A COPY OF THESE SPECIFICATIONS AND TO KNOW AND CONFORM TO THE APPROPRIATE CODES, REGULATIONS, DRAWINGS, STANDARDS AND SPECIFICATIONS.
2. THE EXISTENCE AND LOCATION OF ANY OVERHEAD OR UNDERGROUND UTILITY LINES, PIPES, OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A RESEARCH OF THE AVAILABLE RECORDS. EXISTING UTILITIES ARE LOCATED ON PLANS ONLY FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR SHALL BEAR FULL RESPONSIBILITY FOR THE PROTECTION OF UTILITIES AND THE ENGINEER BEARS NO RESPONSIBILITY FOR UTILITIES NOT SHOWN ON THE PLANS OR NOT IN THE LOCATION SHOWN ON THE PLANS. THIS INCLUDES ALL SERVICE LATERALS OF ANY KIND. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, LOCATE ALL UNDERGROUND AND OVERHEAD INTERFERENCES, WHICH MAY AFFECT HIS OPERATION DURING CONSTRUCTION AND SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE OF THE SAME. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING NEAR OVERHEAD UTILITIES SO AS TO SAFELY PROTECT ALL PERSONNEL AND EQUIPMENT, AND SHALL BE RESPONSIBLE FOR ALL COST AND LIABILITY IN CONNECTION THEREWITH.
3. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING UTILITY LINES, STRUCTURES, SURVEY MONUMENTS AND STREET IMPROVEMENTS WHICH ARE TO REMAIN IN PLACE, FROM DAMAGE, AND ALL SUCH IMPROVEMENTS OR STRUCTURES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED SATISFACTORY TO THE CITY ENGINEER AND OWNING UTILITY COMPANY AT THE EXPENSE OF THE CONTRACTOR.
4. ALL CONSTRUCTION SHALL BE AS SHOWN ON THESE PLANS, ANY REVISIONS SHALL HAVE THE PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER AND PUBLIC WORKS DIRECTOR.
5. PERMITS ARE REQUIRED FOR ANY WORK IN THE PUBLIC WAY. THE CONTRACTOR SHALL SECURE ALL PERMITS AND INSPECTIONS REQUIRED FOR THIS CONSTRUCTION.
6. CURB, GUTTER, AND SIDEWALK, FOUND TO BE UNACCEPTABLE PER CITY STANDARDS AND APWA SHALL BE REMOVED AND REPLACED.
7. CONTRACTOR SHALL PROVIDE ALL NECESSARY HORIZONTAL AND VERTICAL TRANSITIONS BETWEEN NEW CONSTRUCTION AND EXISTING SURFACES TO PROVIDE FOR PROPER DRAINAGE AND FOR INGRESS AND EGRESS TO NEW CONSTRUCTION. THE EXTENT OF TRANSITIONS TO BE AS SHOWN ON PLANS.
8. ANY SURVEY MONUMENTS DISTURBED SHALL BE REPLACED AND ADJUSTED PER TOOELE COUNTY SURVEYORS REQUIREMENTS.
9. ALL PRIVACY WALLS, NEW OR EXISTING, ARE ONLY SHOWN ON CIVIL PLANS FOR THE PURPOSE OF REVIEWING GRADING RELATIONSHIPS; FLOOD CONTROL AND SIGHT DISTANCE AT INTERSECTIONS. ALL WALLS SHALL HAVE A MINIMUM 2 FT X 2 FT X 30 INCH DEEP SPOT FOOTINGS. BOTTOM OF ALL FOOTINGS ON ALL WALLS SHALL BE A MINIMUM OF 30 INCHES BELOW FINISHED GRADE. WALLS GREATER THAN 6 FEET REQUIRE A SEPARATE PERMIT AND INSPECTION BY THE BUILDING DEPARTMENT.
10. ALL CONSTRUCTION MATERIALS PER APWA MUST BE SUBMITTED AND APPROVED BY THE CITY ENGINEER PRIOR TO THE PLACEMENT OF ASPHALT WITHIN CITY RIGHT OF WAY. GRANTSVILLE PUBLIC WORKS WILL APPROVE PIPE ZONE MATERIAL TO BE PLACED.
11. REQUEST FOR INSPECTION BY THE GRANTSVILLE CITY ENGINEERING DEPT. SHALL BE MADE BY THE CONTRACTOR AT LEAST 48 HOURS BEFORE THE INSPECTION SERVICES WILL BE REQUIRED.
12. WORK IN PUBLIC WAY, ONCE BEGUN, SHALL BE PROSECUTED TO COMPLETION WITHOUT DELAY AS TO PROVIDE MINIMUM INCONVENIENCE TO ADJACENT PROPERTY OWNERS AND TO THE TRAVELING PUBLIC. PLEASE SEE CODE 17 GENERAL PROVISIONS FOR MORE DETAILS.
13. THE CONTRACTOR SHALL TAKE ALL NECESSARY AND PROPER PRECAUTIONS TO PROTECT ADJACENT PROPERTIES FROM ANY AND ALL DAMAGE THAT MAY OCCUR FROM STORM WATER RUNOFF AND/OR DEPOSITION OF DEBRIS RESULTING FROM ANY AND ALL WORK IN CONNECTION WITH CONSTRUCTION.
14. POWER POLES AND/OR OTHER EXISTING FACILITIES NOT IN PROPER LOCATION BASED ON PROPOSED IMPROVEMENTS SHOWN HEREON WILL BE RELOCATED AT NO EXPENSE TO THE GRANTSVILLE CITY. POWER LINES AND ALL OTHER AERIAL UTILITIES ARE TO BE BURIED AND POLES REMOVED AS DETERMINED BY THE CITY ENGINEER.
15. CURB AND GUTTER WITH A GRADE OF LESS THAN FOUR-TENTHS OF ONE PERCENT SHALL BE CONSTRUCTED BY FORMING. EACH JOINT SHALL BE CHECKED FOR A GRADE PRIOR TO CONSTRUCTION AND WATER TESTED AS SOON AS POSSIBLE AFTER CONSTRUCTION.
16. CONTRACTOR TO FOLLOW GRANTSVILLE CITY NOISE ORDINANCE STANDARDS CODE ORDINANCE 2018-19
17. CONTRACTORS ARE RESPONSIBLE FOR ALL OSHA REQUIREMENTS ON THE PROJECT SITE.
18. A UPDES (UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM) PERMIT IS REQUIRED FOR ALL CONSTRUCTION ACTIVITIES AS PER STATE LAW AS WELL AS PROVIDING A STORM WATER POLLUTION PREVENTION PLAN TO THE CITY.
19. ALL CITY MAINTAINED UTILITIES INCLUDING; WATERLINE, FIRE HYDRANTS, STREETLIGHT WIRING, AND STORM DRAIN MUST BE IN PUBLIC RIGHT OF WAY OR IN RECORDED EASEMENTS.
20. CONTRACTOR SHALL WORK GRANTSVILLE CITY REGULAR WORKING HOURS OF MONDAY THROUGH FRIDAY 7:00 AM TO 4:00 PM
21. PRIOR TO 90% BOND RELEASE, A LEGIBLE AS-BUILT DRAWING MUST BE SUBMITTED TO THE GRANTSVILLE CITY STAMPED AND SIGNED BY A PROFESSIONAL ENGINEER. AS-BUILTS MUST SHOW ALL CHANGES AND ACTUAL FIELD LOCATIONS OF STORM DRAINAGE, WATERLINES, IRRIGATION, STREET LIGHTING, AND POWER. AS-BUILTS WILL BE HELD TO THE SAME STANDARD AS APPROVED DESIGN DRAWINGS, NO "REDLINED PLANS" ALLOWED. IN THE ABSENCE OF CHANGES, COPIES OF THE APPROVED DRAWINGS WILL BE REQUIRED STATING "INSTALLED AS PER DRAWINGS". AS-BUILT DRAWINGS FOR NEW DEVELOPMENTS SHALL BE SUBMITTED TO THE CITY IN THE FOLLOWING FORMATS AND QUANTITIES PRIOR TO THE 90% BOND RELEASE. 1 .DXF COPY, 1 .PDF COPY, AND 1 GIS SHAPE FILE CONTAINING THE SAME.
22. FILTER FABRIC WRAPPED AROUND AN INLET GRATE IS NOT AN ACCEPTABLE INLET SEDIMENT BARRIER. SEE GRANTSVILLE CITY CONSTRUCTION STANDARDS AND SPECIFICATIONS FOR DETAILS OF APPROVED STORM WATER BMPS WHICH SPECIFICALLY STATES THE UTILIZATION OF AN OIL WATER SNOUT SEPARATOR.
23. ASPHALT PAVING IS NOT ALLOWED WITHOUT A WRITTEN EXCEPTION FROM THE ENGINEERING DEPARTMENT AND PUBLIC WORKS DEPARTMENT BELOW AN AMBIENT TEMPERATURE OF 50 DEGREES AND RISING.
24. TO ENSURE PROPER PLANTING, PROTECTION AND IRRIGATION OF TREES, MITIGATING RISK OF TREE FAILURE OR FUTURE DAMAGE TO INFRASTRUCTURE, CONTRACTORS ARE REQUIRED TO FOLLOW THE STANDARDS AND SPECIFICATIONS OF THE ISA - INTERNATIONAL SOCIETY OF ARBORICULTURE.
25. WHEN A PROPOSED DEVELOPMENT BORDERS A COLLECTOR, MINOR COLLECTOR OR ARTERIAL STREET AND IS REQUIRED TO CONSTRUCT COLLECTOR STREET FENCING ALONG THE BACK OF SIDEWALK, THE DEVELOPMENT SHALL ALSO BE REQUIRED PUT IN A CONCRETE MOW STRIP FROM THE BACK OF SIDEWALK TO UNDERNEATH THE FENCE PANELS. CONCRETE MOW STRIPS SHALL ALSO BE REQUIRED BETWEEN THE SIDEWALK AND FENCING ALONG THE REAR OF DOUBLE FRONTAGE LOTS.
26. CONCRETE FOR ALL SURFACE IMPROVEMENTS INCLUDING BUT NOT LIMITED TO; SIDEWALK, DRIVEWAY ENTRANCES, PEDESTRIAN RAMPS, CURB AND GUTTER, WATER WAYS, MANHOLE, VAULT AND VALVE COLLARS, AND ANY OTHER CAST IN PLACE SURFACE CONCRETE FEATURES SHALL BE CONSTRUCTED WITH MINIMUM 4,500 PSI CONCRETE.
27. CULINARY WATER AND SEWER SERVICE LATERALS SHALL BE MARKED ON THE TOP BACK OF CURB AND LIP OF CURB AT THEIR ACTUAL LOCATION OF CROSSING THE CURB AND GUTTER. PINS OR STAMPS SHALL BE USED AND MUST BE INSTALLED WHILE THE CONCRETE IS STILL WET AND WILL READILY ACCEPT THE MARKER. GRINDING MARKING DUE TO DRY CEMENT IS NOT ALLOWED.

GRANTSVILLE CITY GRADING NOTES

1. IN THE EVENT THAT ANY UNFORESEEN CONDITIONS NOT COVERED BY THESE NOTES ARE ENCOUNTERED DURING GRADING OPERATIONS, THE OWNER AND CITY ENGINEER SHALL BE IMMEDIATELY NOTIFIED FOR DIRECTION.
2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ALL NECESSARY CUTS AND FILLS WITHIN THE LIMITS OF THIS PROJECT AND THE RELATED OFF-SITE WORK, SO AS TO GENERATE THE DESIRED SUBGRADE, FINISH GRADES AND SLOPES SHOWN.
3. CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ALL EXCAVATION. ADEQUATE SHORING SHALL BE DESIGNED AND PROVIDED BY THE CONTRACTOR TO PREVENT UNDERMINING OF ANY ADJACENT FEATURES OR FACILITIES AND/OR CAVING OF THE EXCAVATION.
4. THE CONTRACTOR IS WARNED THAT AN EARTHWORK BALANCE WAS NOT NECESSARILY THE INTENT OF THIS PROJECT. ANY ADDITIONAL MATERIAL REQUIRED OR LEFTOVER MATERIAL FOLLOWING EARTHWORK OPERATIONS BECOMES THE RESPONSIBILITY OF THE CONTRACTOR.
5. CONTRACTOR SHALL GRADE THE PAVEMENT AREA SUBGRADE TO THE LINES (HORIZONTAL) AND ELEVATIONS (VERTICAL) SHOWN ON THE PLANS WITHIN A TOLERANCE OF 0.1 + TO 0.1 -.
6. ALL CUT AND FILL SLOPES SHALL BE PROTECTED UNTIL EFFECTIVE EROSION CONTROL HAS BEEN ESTABLISHED.
7. THE USE OF POTABLE WATER WITHOUT A SPECIAL PERMIT FOR BUILDING OR CONSTRUCTION PURPOSES INCLUDING CONSOLIDATION OF BACKFILL OR DUST CONTROL IS PROHIBITED. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR CONSTRUCTION WATER FROM GRANTSVILLE CITY ENGINEERING AND UTILITIES DEPARTMENT.
8. THE CONTRACTOR SHALL MAINTAIN THE STREETS, SIDEWALKS AND ALL OTHER PUBLIC RIGHT-OF WAY IN A CLEAN, SAFE AND USABLE CONDITION. ALL SPILLS OF SOIL, ROCK OR CONSTRUCTION DEBRIS SHALL BE PROMPTLY REMOVED FROM THE PUBLICLY OWNED PROPERTY DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT. ALL ADJACENT PROPERTY, PRIVATE OR PUBLIC SHALL BE MAINTAINED IN A CLEAN, SAFE AND USABLE CONDITION.
9. IN THE EVENT THAT ANY TEMPORARY CONSTRUCTION ITEM IS REQUIRED THAT IS NOT SHOWN ON THESE DRAWINGS, THE DEVELOPER AGREES TO PROVIDE AND INSTALL SUCH ITEM AT HIS OWN EXPENSE AND AT THE DIRECTION OF THE CITY ENGINEER. TEMPORARY CONSTRUCTION INCLUDES DITCHES, BERMS, ROAD SIGNS AND BARRICADES, ETC.
10. ALL GRADING WORK SHALL CONFORM TO THE SOILS REPORT AS PREPARED BY THE SOILS ENGINEER AND APPROVED BY THE CITY ENGINEER, AND AS SHOWN ON THESE PLANS.
11. ALL QUALITY CONTROL TESTING SHALL BE PERFORMED BY AN INDEPENDENT LICENSED AND CERTIFIED THIRD-PARTY TESTING SERVICE.

GRANTSVILLE CITY TRAFFIC NOTES

1. WHEN A DESIGNATED "SAFE ROUTE TO SCHOOL" IS ENCROACHED UPON BY A CONSTRUCTION WORK ZONE THE SAFE ROUTE SHALL BE MAINTAINED IN A MANNER ACCEPTABLE TO GRANTSVILLE CITY.
2. IF THE IMPROVEMENTS NECESSITATE THE OBLITERATION, TEMPORARY OBSTRUCTION, TEMPORARY REMOVAL OR RELOCATION OF ANY EXISTING TRAFFIC PAVEMENT MARKING, SUCH PAVEMENT MARKING SHALL BE RESTORED OR REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE CITY ENGINEER, PUBLIC WORKS DIRECTOR OR DESIGNEE.
3. THE STREET SIGN CONTRACTOR SHALL OBTAIN STREET NAMES AND BLOCK NUMBERING FROM THE PLANNING DEPARTMENT PRIOR TO CONSTRUCTION.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL PERMANENT SIGNS SHOWN ON THE PLANS. STREET NAME SIGNS SHALL CONFORM IN THEIR ENTIRETY TO CURRENT CITY STANDARDS AND THE LATEST MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) MANUAL. ALL OTHER SIGNS SHALL BE STANDARD SIZE UNLESS OTHERWISE SPECIFIED ON THE PLANS. ALL SIGN POSTS SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT CITY STANDARDS AND THE LATEST MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) MANUAL.
5. ALL PERMANENT TRAFFIC CONTROL DEVICES CALLED FOR HEREON SHALL BE IN PLACE AND IN FINAL POSITION PRIOR TO ALLOWING ANY PUBLIC TRAFFIC ONTO THE PORTIONS OF THE ROAD(S) BEING IMPROVED HEREUNDER, REGARDLESS OF THE STATUS OF COMPLETION OF PAVING OR OTHER OFF-SITE IMPROVEMENTS CALLED FOR PER APPROVED CONSTRUCTION DRAWINGS UNLESS APPROVED BY THE CITY ENGINEER & PUBLIC WORKS DIRECTOR.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING UTAH TRANSIT AUTHORITY (UTA) IF APPLICABLE, IF THE CONSTRUCTION INTERRUPTS OR RELOCATES A BUS STOP OR HAS AN ADVERSE EFFECT ON BUS SERVICE ON THAT STREET TO ARRANGE FOR TEMPORARY RELOCATION OF STOP.
7. BEFORE ANY WORK IS STARTED IN THE RIGHT-OF-WAY, THE CONTRACTOR SHALL INSTALL ALL ADVANCE WARNING SIGNS FOR THE CONSTRUCTION ZONE. THE CONTRACTOR SHALL INSTALL TEMPORARY STOP SIGNS AT ALL NEW STREET ENCROACHMENTS INTO EXISTING PUBLIC STREETS. ALL CONSTRUCTION SIGNING, BARRICADING, AND TRAFFIC DELINEATION SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) PER THE CURRENT EDITION ADOPTED BY UDOT AND BE APPROVED BY THE GRANTSVILLE CITY BEFORE CONSTRUCTION BEGINS. TRAFFIC CONTROL PLANS SHALL BE SUBMITTED AS PART OF THE ENGINEERING CONSTRUCTION PACKAGE AND APPROVED BY THE GRANTSVILLE CITY ENGINEER AND PUBLIC WORKS DIRECTOR.
8. ALL SIGNS LARGER THAN 36" X 36" OR 1296 SQUARE INCHES PER SIGN POLE SHALL BE MOUNTED ON A SLIP BASE SYSTEM PER UDOT STANDARD DRAWING SN 10B (DETAIL DRAWING ATTACHED TO STANDARD DRAWINGS) WITH A "Z" BAR BACKING. SIGNS OF THIS SIZE ARE NOT ALLOWED TO BE MOUNTED ON A YIELDING POLE.
9. SIGN COMPONENTS SUCH AS SHEETING, EC FILM, INKS, LETTERS AND BORDERS ARE ALL REQUIRED TO BE FROM THE SAME MANUFACTURER. ONLY EC FILM MAY BE USED TO ACHIEVE COLOR. VINYL EC FILM IS NOT ACCEPTED.
10. ALL NEW ROUNDABOUTS, CROSSWALKS, STOP BARS AND LEGENDS SHALL BE INSTALLED WITH PAINT AND GLASS BEAD.
11. PAVING ASPHALT BINDER GRADE SHALL BE PG 58-28 UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER. ASPHALT AGGREGATE SIZE SHALL BE ½ INCH FOR RESIDENTIAL AND COLLECTOR ROADS. NO MORE THAN 15% RAP (RECLAIMED ASPHALT PAVEMENT) BY WEIGHT WILL BE ALLOWED IN THE ASPHALT MIX DESIGN FOR THE PAVING OF PUBLIC AND PRIVATE STREETS. UP TO THE 15 PERCENT WILL BE ALLOWED WITH NO CHANGE IN THE SPECIFIC BINDER GRADE. THE ASPHALT MIX DESIGN SHALL HAVE NO MORE THAN 3½ % AIR VOIDS.
14. POTHOLING: ALL POTHOLES MUST BE SAW CUT SQUARE AND HAVE A MINIMUM SIZE OF 1 SQUARE FOOT. WHEN REPAIRING A POTHOLE, SAND OR PEA GRAVEL MEETING GRANTSVILLE CITY STANDARDS SHALL BE PLACED OVER THE EXPOSED UTILITY TO A DEPTH OF 6 INCHES. FOLLOWING THE PEA GRAVEL WILL BE FLOWABLE FILL UP TO 1 INCH BELOW THE BOTTOM EDGE OF THE EXISTING ASPHALT. THE REMAINING PORTION OF THE HOLE SHALL BE FILLED WITH ASPHALT, WHICH WILL HAVE AN OVERALL THICKNESS OF THE EXISTING ASPHALT PLUS 1 INCH.
15. ALL FILL WITHIN THE PUBLIC RIGHT OF WAY SHALL BE A-1-A TO A-3, WITH THE EXCEPTION OF TOP SOIL IN THE PARK STRIP FOR LANDSCAPING AND TRENCH BACKFILL. TRENCH BACKFILL MATERIAL UNDER PAVEMENTS OR SURFACE IMPROVEMENTS SHALL BE CLEAN, NONCLUMPING, GRANULAR AND FLOWABLE, 2" MINUS, A-1-A TO A-2-7 SOILS ACCORDING TO AASHTO 145 SOIL CLASSIFICATION SYSTEM. LIME TREATED FLOWABLE FILLS, IF APPROVED, SHALL HAVE A 28-DAY STRENGTH OF 65 PSI. 16. ALL TRAFFIC ROAD CLOSURES INVOLVING 1 OR MORE LANES OF TRAFFIC MUST RECEIVE PRIOR APPROVAL FROM THE CITY ENGINEER, PUBLIC WORKS DIRECTOR OR HIS/HER REPRESENTATIVE. VMS PCMS BOARDS MUST BE PLACED A MINIMUM OF 7 DAYS IN ADVANCE OF ANY LANE CLOSURE ON COLLECTOR, MINOR COLLECTOR OR ARTERIAL STREET. VMS PCMS BOARDS MUST ALSO BE PLACED IN ADVANCE OF ANY LANE CLOSURES ON A SUBDIVISION STREET PER THE CITY ENGINEER'S DIRECTION.
17. ROUNDABOUTS, INCLUDING THEIR INGRESS AND EGRESS, SHALL BE CONSTRUCTED WITH CONCRETE PAVEMENT. ENGINEER SHALL DESIGN CROSS SECTION AND SUBMIT TO THE CITY FOR REVIEW AND APPROVAL.

GRANTSVILLE CITY WATER NOTES

1. THE FOLLOWING GRANTSVILLE CITY WATER NOTES ARE INTENDED FOR GENERAL WATER STANDARDS ONLY AND ARE NOT ALL INCLUSIVE. THE CITY HAS INCLUDED THE CULINARY WATER DESIGN AND CONSTRUCTION STANDARDS WITHIN THE CITY CONSTRUCTION STANDARDS AND SPECIFICATIONS.
2. NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN RELEASED FOR CONSTRUCTION BY THE ENGINEERING DEPARTMENT. FOLLOWING WATER PLAN APPROVAL, FORTY-EIGHT (48) HOUR NOTICE SHALL BE GIVEN TO THE ENGINEERING DEPARTMENT AND THE PUBLIC WORKS DEPARTMENT PRIOR TO THE START OF CONSTRUCTION. NOTICE MUST BE GIVEN BY 2:00 P.M. THE BUSINESS DAY PRIOR TO AN INSPECTION.
3. ALL WORK WITHIN GRANTSVILLE CITY SHALL CONFORM TO GRANTSVILLE CITY STANDARDS AND SPECIFICATIONS, AWWA AND APWA.
4. FOR RESIDENTIAL DEVELOPMENTS - THE DEVELOPER SHALL PURCHASE AND INSTALL METER BOXES AND SETTERS ACCORDING TO CITY STANDARDS ON NEWLY DEVELOPED LOTS AND REAL PROPERTY AT THE TIME OF WATER MAIN INSTALLATION. WATER METERS WILL BE SUPPLIED AND INSTALLED BY THE GRANTSVILLE UTILITIES DEPARTMENT (AT DEVELOPER'S EXPENSE). THE DEVELOPER SHALL ALSO PROVIDE THE SITE ADDRESS, LOT NUMBER, METER SIZE AND PAY METER FEES PRIOR TO BUILDING PERMIT APPROVAL. THE DEVELOPER SHOULD ALSO PAY FOR RENTAL OF A HYDRANT METER, AND/OR USE THE GRANTSVILLE CITY PUBLIC WATER STANDPIPE LOCATED BY THE PUBLIC WORKS BUILDING.
5. FOR COMMERCIAL AND CONDOMINIUM DEVELOPMENTS - THE DEVELOPER SHALL PURCHASE AND INSTALL METER BOXES AND SETTERS ACCORDING TO CITY STANDARDS. WATER METERS WILL BE SUPPLIED BY GRANTSVILLE CITY PUBLIC WORKS DEPARTMENT (AT DEVELOPER'S EXPENSE) AND INSTALLED BY DEVELOPER.
6. ALL WATER FACILITIES SHALL BE FILLED, DISINFECTED, PRESSURE TESTED, FLUSHED, FILLED AND AN ACCEPTABLE WATER SAMPLE OBTAINED PRIOR TO COMMISSIONING THE NEW WATER LINE TO THE GRANTSVILLE CITY CULINARY WATER DISTRIBUTION SYSTEM.
7. GRANTSVILLE CITY UTILITIES DEPARTMENT MUST APPROVE WATER SHUT DOWN WHICH MAY REQUIRE EVENING AND WEEKEND SHUT DOWN AS DEEMED NECESSARY, REQUIRING THE CONTRACTOR TO BE BILLED FOR OVERTIME. 48 HOUR NOTICE IS REQUIRED.
8. WATER STUB-OUT INSTALLATIONS WILL NOT BE CONSTRUED AS A COMMITMENT FOR WATER SERVICE.
9. CONDITIONAL APPROVAL OF VALVED OUTLET (6" AND LARGER): IN THE EVENT THE WATER PLANS SHOW ONE OR MORE VALVED OUTLETS EXTENDING OUT OF PAVED AREAS, INSTALLATIONS OF THESE OUTLETS IS ACCEPTABLE, HOWEVER, IF THE OUTLETS ARE INCORRECTLY LOCATED OR NOT USED FOR ANY REASON WHEN THE PROPERTY IS DEVELOPED, THE DEVELOPER SHALL ABANDON THE OUTLETS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH THE CITY STANDARDS AND AT THE DEVELOPER'S EXPENSE.
10. ALL LINES TO BE PRESSURE TESTED ACCORDING TO GRANTSVILLE CITY AND AWWA STANDARDS AND CHLORINATED PRIOR TO USE AND FINAL ACCEPTANCE.
11. ALL FITTINGS TO BE COATED WITH POLY FM GREASE AND WRAPPED WITH 8-MIL THICK POLYETHYLENE.
12. NO OTHER UTILITY LINES MAY BE PLACED IN THE SAME TRENCH WITH WATER LINE UNLESS APPROVED BY THE CITY ENGINEER.
13. ANY CONFLICT WITH EXISTING UTILITIES SHALL BE IMMEDIATELY CALLED TO THE ATTENTION OF THE CITY ENGINEER OR DESIGNEE.
14. ALL WATER VAULTS WILL BE CONSTRUCTED PER GRANTSVILLE CITY STANDARD DRAWINGS AND SPECIFICATIONS. NO VAULTS ARE ALLOWED IN TRAFFIC AREAS WITHOUT PRIOR APPROVAL OF THE CITY ENGINEER.
15. LANDSCAPING AND IRRIGATION ADJACENT TO VAULTS SHALL DRAIN AWAY FROM VAULTS.
16. ONCE THE WATERLINE HAS BEEN TESTED, APPROVED AND CITY WATER IS FLOWING THROUGH THE PIPE, ONLY CITY PERSONNEL ARE AUTHORIZED TO SHUT DOWN AND CHARGE THE WATERLINE.
17. MEGALUG FOLLOWING RING OR AN APPROVED EQUIVALENT SHALL BE USED ON ALL FITTINGS.
18. APWA PLAN 562, CITY REQUIRES STAINLESS STEEL TIE-DOWN RESTRAINTS WITH TURNBUCKLES ONLY. 5/8" REBAR IS NOT ACCEPTABLE. MEGALUG FOLLOWERS REQUIRED ON ALL FITTINGS AND ALL DIMENSIONS OF THRUST BLOCKING STILL APPLY. THRUST BLOCKS MAY BE ELIMINATED IF HORIZONTAL TIE DOWN RESTRAINTS HAVE BEEN PRE-ENGINEERED AND RECEIVE PRIOR CITY APPROVAL.
19. WATER MAINS WILL BE HOT TAPPED AS CALLED OUT ON THE APPROVED PLANS. UNDER SPECIAL CIRCUMSTANCES, WHEN A CONTRACTOR SUBMITS A REQUEST FOR A SHUTDOWN CONTRARY TO THE APPROVED PLANS AND THE REQUEST IS APPROVED AT THE DISCRETION OF THE CITY ENGINEER OR DESIGNEE, THE CONTRACTOR MUST PROVIDE 48-HOUR NOTICE TO NEIGHBORS AND THOSE AFFECTED. IF BUSINESSES ARE IMPACTED BY THE SHUTDOWN IT WILL BE DONE AFTER HOURS AND ALL OVERTIME FEES FOR CITY PERSONNEL, EQUIPMENT AND VEHICLES MUST BE PAID IN ADVANCE.
20. CONTRACTORS ARE REQUIRED TO WRITE THE LOT NUMBER WITH A BLACK PERMANENT MARKER ON THE INSIDE OF THE WATER METER BARRELS AS THEY ARE INSTALLED.

GRANSTVILLE CITY FIRE DEPARTMENT NOTES

1. ON ANY NEW HOME OR BUILDING INSTALLATION, ACCESSIBLE FIRE HYDRANTS SHALL BE INSTALLED BEFORE COMBUSTIBLE CONSTRUCTION COMMENCES AND SAID FIRE HYDRANTS SHALL BE IN GOOD WORKING ORDER WITH AN ADEQUATE WATER SUPPLY.
2. CONTRACTOR SHALL CALL THE PUBLIC WORKS DEPARTMENT AND ENGINEERING DEPARTMENT FOR UNDERGROUND INSPECTION, PRESSURE AND FLUSH VERIFICATION OF ALL FIRE HYDRANTS AND FIRE LINES BEFORE BACK FILLING.
3. PAINTING OF THE CURBS AND HYDRANT AND ANY WORK NECESSARY FOR PROTECTION OF HYDRANTS FROM PHYSICAL DAMAGE SHALL BE APPROVED BEFORE BEING CONSTRUCTED. HYDRA-FINDERS WILL BE INSTALLED PER GRANTSVILLE CITY STANDARDS DETAIL.
4. A FLOW TEST MUST BE WITNESSED BY THE FIRE DEPARTMENT PRIOR TO OCCUPANCY FOR VERIFICATION OF REQUIRED ON-SITE WATER SUPPLY.
5. ALL ON-SITE FIRE MAIN MATERIALS MUST BE U.L. LISTED AND A.W.W.A. APPROVED.
6. THE TURNING RADIUS FOR ANY FIRE APPARATUS ACCESS ROAD AND/OR FIRE LANE, PUBLIC OR PRIVATE, SHALL BE NOT LESS THAN FORTY-EIGHT FEET (48') OUTSIDE RADIUS EQUALING 96' OR LARGER AND TWENTY-TWO FEET (22') INSIDE RADIUS AND SHALL BE PAVED.
7. A FIRE APPARATUS ROAD SHALL BE REQUIRED WHEN ANY PORTION OF AN EXTERIOR WALL OF THE FIRST STORY IS LOCATED MORE THAN ONE-HUNDRED FIFTY FEET (150') FROM FIRE DEPARTMENT VEHICLE ACCESS ROADS AND/OR FIRE LANES, PUBLIC OR PRIVATE, IN EXCESS OF ONE HUNDRED FIFTY FEET (150') IN LENGTH SHALL BE PROVIDED WITH AN APPROVED TURN AROUND AREA. CONTRACTOR/ENGINEER SHALL FOLLOW LATEST INTERNATIONAL FIRE CODE REGULATIONS AT ALL TIMES IN REGARDS TO DISTANCE.
8. ACCESS ROADS SHALL BE MARKED BY PLACING APPROVED SIGNS AT THE START OF THE DESIGNATED FIRE LANE, ONE SIGN AT THE END OF THE FIRE LANE AND WIDTH SIGNS AT INTERVALS OF ONE-HUNDRED FEET (100') ALONG ALL DESIGNATED FIRE LANES. SIGNS TO BE PLACED ON BOTH SIDES OF AN ACCESS ROADWAY IF NEEDED TO PREVENT PARKING ON EITHER SIDE. SIGNS SHALL BE INSTALLED AT LEAST 5', MEASURED FROM THE BOTTOM EDGE OF THE SIGN TO THE NEAR EDGE OF PAVEMENT. WHERE PARKING OR PEDESTRIAN MOVEMENTS OCCUR, THE CLEARANCE TO THE BOTTOM OF THE SIGN SHALL BE AT LEAST 7'. THE CURB ALONG OR ON THE PAVEMENT OR CEMENT IF CURB IS NOT PRESENT, SHALL BE PAINTED WITH RED WEATHER RESISTANT PAINT IN ADDITION TO THE SIGNS.
9. ELECTRICALLY CONTROLLED ACCESS GATES SHALL BE PROVIDED WITH AN APPROVED EMERGENCY VEHICLE DETECTOR/RECEIVER SYSTEM. SAID SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE GRANTSVILLE CITY F.D. APPROVAL. GATES ARE ONLY ALLOWED WITH PRIOR APPROVAL.
10. ALL PRIVATE UNDERGROUND FIRE LINES THAT SERVICE AUTOMATIC FIRE SPRINKLER SYSTEMS SHALL BE NO SMALLER THAN EIGHT (8) INCHES IN DIAMETER AND HAVE A POST INDICATOR VALVE (PIV) BETWEEN THE WATER MAIN AND THE BUILDING. IF A PIV ISN'T FEASIBLE DUE TO SITE CONSTRAINTS, A WATER INDICATOR VALVE (WIV) MAY BE USED WITH THE APPROVAL OF THE CITY ENGINEER OR FIRE CODE OFFICIAL. FOR A WIV TO BE ALLOWED, ANOTHER VALVE MUST BE INSTALLED ON THE FIRE SERVICE LINE BACK AT THE CONNECTION TO THE WATER MAIN, WHICH WILL BE MAINTAINED BY THE CITY AS PART OF IT'S CULINARY WATER SYSTEM. ALL FIRE LINES MATERIAL SHALL BE DUCTILE IRON. (DUCTILE IRON FROM THE PIV TO THE BUILDING SHALL BE PERMITTED OR DUCTILE IRON FROM THE MAIN WATER LINE TO THE WIV).
11. POST INDICATOR VALVES (PIV) SHALL BE BETWEEN 6 AND 40 FEET FROM BUILDINGS NOT EXCEEDING THREE STORIES OR EQUIVALENT IN HEIGHT AND BETWEEN 30 AND 40 FEET ON BUILDINGS IN EXCESS OF THREE OR MORE STORIES IN HEIGHT OR EQUIVALENT.
12. ROADS AND ACCESSES SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF FIRE APPARATUS. SURFACE SHALL BE PAVED BEFORE THE APPLICATION OF COMBUSTIBLE MATERIAL.
13. ALL NEW BUILDINGS EQUIPPED WITH A FIRE DEPARTMENT CONNECTION (FDC) MUST HAVE INLETS SECURED WITH KNOX BRAND LOCKING FDC CAP(S) WITH A SWIVEL COLLAR. ALL NEW BUILDINGS ARE ALSO REQUIRED TO HAVE A KNOX BRAND KEY LOCK BOX MOUNTED ON THE EXTERIOR BUILDING, SUCH THAT FIRE DEPARTMENT PERSONNEL MAY GAIN ACCESS IN CASE OF AN EMERGENCY.

ABBREVIATIONS

APWA	AMERICAN PUBLIC WORKS ASSOCIATION
AR	ACCESSIBLE ROUTE
ASTM	AMERICAN SOCIETY FOR TEST

CHAPTER 1 STANDARD NOTES

The Grantsville City Standard Notes are required to be included as part of all construction plans for residential or commercial development. Plans submitted by public or private entities for all other types of projects within City right-of-way, its easements or property shall reference the Grantsville City Standard Notes and Specifications.

1.1 Grantsville City General Notes

1. All work done or improvements installed within Grantsville City including but not limited to excavation, construction, roadwork and utilities shall conform to the Grantsville City Construction Standards and Specifications, City Municipal Code, the latest edition of the APWA Manual of Standard Specifications and Manual of Standard Plans, the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD) and any state or federal regulations and permit requirements of various governing bodies. The contractor is responsible to have a copy of these specifications and to know and conform to the appropriate codes, regulations, drawings, standards and specifications.

2. The existence and location of any overhead or underground utility lines, pipes, or structures shown on these plans are obtained by research of the available records. Existing utilities are located on plans only for the convenience of the Contractor. The contractor shall bear full responsibility for the protection of utilities and the engineer bears no responsibility for utilities not shown on the plans or not in the location shown on the plans. This includes all service laterals of any kind. The Contractor shall, at his own expense, locate all underground and overhead interferences, which may affect his operation during construction and shall take all necessary precautions to avoid damage of the same. The Contractor shall use extreme caution when working near overhead utilities so as to safely protect all personnel and equipment, and shall be responsible for all cost and liability in connection therewith.

3. The Contractor shall take all precautionary measures necessary to protect existing utility lines, structures, survey monuments and street improvements which are to remain in place, from damage, and all such improvements or structures damaged by the Contractor's operations shall be repaired or replaced satisfactory to the City Engineer and owning utility company at the expense of the Contractor.

4. All construction shall be as shown on these plans, any revisions shall have the prior written approval of the City Engineer and Public Works Director.

5. Permits are required for any work in the public way.The Contractor shall secure all permits and inspections required for this construction.

6. Curb, gutter, and sidewalk, found to be unacceptable per City Standards and APWA shall be removed and replaced.

7. Contractor shall provide all necessary horizontal and vertical transitions between new construction and existing surfaces to provide for proper drainage and for ingress and egress to new construction. The extent of transitions to be as shown on plans.

8. Any survey monuments disturbed shall be replaced and adjusted per Tooele County Surveyors requirements.

9. All privacy walls, new or existing, are only shown on civil plans for the purpose of reviewing grading relationships; flood control and sight distance at intersections. All walls shall have a minimum 2 ft x 2 ft x 30-inch-deep spot footings. Bottom of all footings on all walls shall be a minimum of 30 inches below finished grade. Walls greater than 6 feet require a separate permit and inspection by the Building Department.

10. All construction materials per APWA must be submitted and approved by the City Engineer prior to the placement of asphalt within City Right of Way. Grantsville Public Works will approve pipe zone material to be placed.

11. Request for inspection by the Grantsville City Engineering Dept. shall be made by the contractor at least 48 hours before the inspection services will be required.

12. Work in public way, once begun, shall be prosecuted to completion without delay as to provide minimum inconvenience to adjacent property owners and to the traveling public. Please see Code 17 General Provisions for more details.

13. The Contractor shall take all necessary and proper precautions to protect adjacent properties from any and all damage that may occur from storm water runoff and/or deposition of debris resulting from any and all work in connection with construction.

14. Power poles and/or other existing facilities not in proper location based on proposed improvements shown hereon will be relocated at no expense to the Grantsville City. Power lines and all other aerial utilities are to be buried and poles removed as determined by the City Engineer. If any core is located in concrete, or if a portion of concrete is removed, flow fill to subgrade and the entire concrete section (from joint to joint) must be replaced.

15. Curb and gutter with agrade of less than four-tenths of one percent shall be constructed by forming. Each joint shall be checked for a grade prior to construction and water tested as soon as possible after construction.

16. Contractor to follow Grantsville City Noise Ordinance Standards Code Ordinance 2018-19

17. Contractors are responsible for all OSHA requirements on the project site.

18. A UPDES (Utah Pollutant Discharge Elimination System) permit is required for all construction activities as per state law as well as providing a Storm Water Pollution Prevention Plan to the City.

19. All City maintained utilities including; waterline, fire hydrants, streetlight wiring, and storm drain must be in public right of way or in recorded easements.

20. Contractor shall work Grantsville City regular working hours of Monday through Friday 7:00 am to 4:00 pm

21. Prior to 90% bond release, a legible as-built drawing must be submitted to the Grantsville City. As-builts must show all changes and actual field locations of storm drainage, waterlines, irrigation, street lighting, and power. As-builts will be held to the same standard as approved design drawings, no "redlined plans" allowed. In the absence of changes, copies of the approved drawings will be required stating "installed as per drawings". As-built drawings for new developments shall be submitted to the City in the following formats and quantities prior to the 90% bond release: 1 .dxf copy, 1 .pdf copy, and 1 GIS Shape file containing the same.

22. Filter fabric wrapped around an inlet grate is not an acceptable inlet sediment barrier. See Grantsville City Construction Standards and Specifications for details of approved storm water BMPs which specifically states the utilization of an Oil Water Snout Separator.

23. Asphalt paving is not allowed without a written exception from the Engineering Department and Public Works Department below an ambient temperature of 50 degrees and rising.

24. To ensure proper planting, protection and irrigation of trees, mitigating risk of tree failure or future damage to infrastructure, contractors are required to follow the standards and specifications of the ISA – International Society of Arboriculture.

25. When a proposed development borders a collector, minor collector or arterial street and is required to construct collector street fencing along the back of sidewalk, the development shall also be required put in a concrete mow strip from the back of sidewalk to underneath the fence panels. Concrete mow strips shall also be required between the sidewalk and fencing along the rear of double frontage lots.

26. Concrete for all surface improvements including but not limited to; sidewalk, driveway entrances, pedestrian ramps, curb and gutter, water ways, manhole, vault and valve collars, and any other cast in place surface concrete features shall be constructed with minimum 4,500 psi concrete.

27. Culinary Water and Sewer service laterals shall be marked on the top back of curb and lip of curb at their actual location of crossing the curb and gutter. Pins or stamps shall be used and must be installed while the concrete is still wet and will readily accept the marker. Grinding marking due to dry cement is not allowed.

1.2 Grantsville City Traffic Notes

1. When a designated "Safe Route To School" is encroached upon by a construction work zone the safe route shall be maintained in a manner acceptable to Grantsville City.

2. If the improvements necessitate the obliteration, temporary obstruction, temporary removal or relocation of any existing traffic pavement marking, such pavement marking shall be restored or replaced with like materials to the satisfaction of the City Engineer, Public Works Director or designee.

3. The street Sign Contractor shall obtain street names and block numbering from the Planning Department prior to construction.

4. The Contractor shall be responsible for providing and installing all permanent signs shown on the plans. Street name signs shall conform in their entirety to current City Standards and the latest Manual of Uniform Traffic Control Devices (MUTCD) manual. All other signs shall be standard size unless otherwise specified on the plans. All sign posts shall be installed in accordance with the current City Standards and the latest Manual of Uniform Traffic Control Devices (MUTCD) manual.

5. All permanent traffic control devices called for hereon shall be in place and in final position prior to allowing any public traffic onto the portions of the road(s) being improved hereunder, regardless of the status of completion of paving or other off-site improvements called for per approved construction drawings unless approved by the City Engineer & Public Works Director.

6. The Contractor shall be responsible for notifying Utah Transit Authority (UTA) if applicable, if the construction interrupts or relocates a bus stop or has an adverse effect on bus service on that street to arrange for temporary relocation of stop.

7. Before any work is started in the right-of-way, the contractor shall install all advance warning signs for the construction zone. The contractor shall install temporary stop signs at all new street encroachments into existing public streets. All construction signing, barricading, and traffic delineation shall conform to the Manual of Uniform Traffic Control Devices (MUTCD) per the current edition adopted by UDOT and be approved by the Grantsville City before construction begins. Traffic control plans shall be submitted as part of the engineering construction package and approved by the Grantsville City Engineer and Public Works Director.

8. All signs larger than 36" X 36" or 1296 square inches per sign pole shall be mounted on a Slip Base system per UDOT standard drawing SN 10B (detail drawing attached to standard drawings) with a "Z" bar backing. Signs of this size are not allowed to be mounted on a yielding pole.

9. Sign components such as sheeting, EC film, inks, letters and borders are all required to be from the same manufacturer. Only EC film may be used to achieve color. Vinyl EC film is not accepted.

10. All new roundabouts, crosswalks, stop bars and legends shall be installed with Paint and Glass Bead.

11. Paving asphalt binder grade shall be PG 58-28 unless otherwise approved by the City Engineer. Asphalt aggregate size shall be ½ inch for residential and collector roads. No more than 15% RAP (reclaimed asphalt pavement) by weight will be allowed in the asphalt mix design for the paving of public and private streets. Up to the 15 percent will be allowed with no change in the specific binder grade. The asphalt mix design shall have no more than 3½ % air voids.

14. Potholing: All potholes must be saw cut square and have a minimum size of 1 square foot or remove and retain round core. When repairing a pothole, sand or pea gravel meeting Grantsville City standard shall be placed over the exposed utility to a depth of 6 inches. The pothole shall be filled with flow fill, and the round core shall be replaced in the flow fill, with epoxy seal applied around the joint. For larger cuts, following the pea gravel will be flowable fill up to 1 inch below the bottom edge of the existing asphalt. The remaining portion of the hole shall be filled with asphalt, which will have an overall thickness of the existing asphalt plus 1 inch.

15. All fill within the public right of way shall be A-1-a 3-inch minus, unless approved by the City Public Works Director or the City Engineer. with the exception of top soil in the park strip for landscaping and trench backfill. Trench backfill material under pavements or surface improvements shall be clean, nonclumping, granular and flowable, 3-inch minus, A-1-a soils according to AASHTO 145 soil Classification System, unless approved by the City Public Works Director or the City Engineer. Lime treated flowable fills, if approved, shall have a 28-day strength of 65 PSI. If the developer chooses to utilize material other than A-1-a 3-inch minus for trench back fill, then a City approved Geotechnical Engineer Company is required to approve the material is suitable for fill. Any fill material used shall be 3 inch minus material. The developer is required to pay the City's contracted independent Geotechnical Engineering Company per the City fee schedule and to be on site at all times during fill placement, compaction, and testing. If the fill being used on the project does not meet A-1-a standards or is not the same material the contracted Geotechnical Engineer approved for the project then the City Inspector can shut down the project with a stop work order. Work shall not resume until unsuitable fill material has been removed and replaced by the developer's contractor at the developer's expense. If the independent Geotechnical Engineering Company observing the fill placement, compaction, and testing is not on site then the City Inspector can shut down the project with a stop work order. Work shall not resume until the independent geotechnical engineering company observing fill placement, compaction, and testing is on site.

16. All traffic road closures involving 1 or more lanes of traffic must receive prior approval from the City Engineer, Public Works Director or his/her representative. VMS PCMS boards must be placed a minimum of 7 days in advance of any lane closure on collector, minor collector or arterial street. VMS PCMS boards must also be placed in advance of any lane closures on a subdivision street per the City Engineer's direction.

17. Roundabouts, including their ingress and egress, shall be constructed with concrete pavement. Engineer shall design cross section and submit to the City for review and approval.

1.3 Grantsville City Grading Notes

1. In the event that any unforeseen conditions not covered by these notes are encountered during grading operations, the Owner and City Engineer shall be immediately notified for direction.

2. It shall be the responsibility of the Contractor to perform all necessary cuts and fills within the limits of this project and the related off-site work, so as to generate the desired subgrade, finish grades and slopes shown.

3. Contractor shall take full responsibility for all excavation. Adequate shoring shall be designed and provided by the Contractor to prevent undermining of any adjacent features or facilities and/or caving of the excavation.

4. The Contractor is warned that an earthwork balance was not necessarily the intent of this project. Any additional material required or leftover material following earthwork operations becomes the responsibility of the Contractor.

5. Contractor shall grade the pavement area subgrade to the lines (horizontal) and elevations (vertical) shown on the plans within a tolerance of 0.1 + to 0.1 -.

6. All cut and fill slopes shall be protected until effective erosion control has been established.

7. The Contractor shall obtain all necessary permits for construction water from Grantsville City Engineering and Utilities Department.

8. The Contractor shall maintain the streets, sidewalks and all other public right-of way in a clean, safe and usable condition. All spills of soil, rock or construction debris shall be promptly removed from the publicly owned property during construction and upon completion of the project. All adjacent property, private or public shall be maintained in a clean, safe and usable condition.

9. In the event that any temporary construction item is required that is not shown on these drawings, the Developer agrees to provide and install such item at his own expense and at the direction of the City Engineer. Temporary construction includes ditches, berms, road signs and barricades, etc.

10. All grading work shall conform to the soils report as prepared by the Soils Engineer and approved by the City Engineer, and as shown on these plans.

11. All quality control testing shall be performed by an independent licensed and Certified third-party testing service.

1.5 Grantsville City Fire Department Notes

1. On any new home or building installation, accessible fire hydrants shall be installed before combustible construction commences and said fire hydrants shall be in good working order with an adequate water supply.

2. Contractor shall call the Public Works Department and Engineering Department for underground inspection, pressure and flush verification of all fire hydrants and fire lines before backfilling.

3. Painting of the curbs and hydrant and any work necessary for protection of hydrants from physical damage shall be approved before being constructed. Hydra-finders will be installed per Grantsville City Standards detail.

4. A flow test must be witnessed by the Fire Department prior to occupancy for verification of required on-site water supply.

5. All on-site fire main materials must be U.L. listed and A.W.W.A. approved.

6. The turning radius for any fire apparatus access road and/or fire lane, public or private, shall be not less than forty-eight feet (48') outside radius equaling 96' or larger and twenty-two feet (22') inside radius and shall be paved.

7. A fire apparatus road shall be required when any portion of an exterior wall of the first story is located more than one-hundred fifty feet (150') from Fire Department vehicle access roads and/or fire lanes, public or private, in excess of one hundred fifty feet (150') in length shall be provided with an approved turn around area. Contractor/Engineer shall follow latest International Fire Code regulations at all times in regards to distance.

8. Access roads shall be marked by placing approved signs at the start of the designated fire lane, one sign at the end of the fire lane and width signs at intervals of one-hundred feet (100') along all designated fire lanes. Signs to be placed on both sides of an access roadway if needed to prevent parking on either side. Signs shall be installed at least 5', measured from the bottom edge of the sign to the near edge of pavement. Where parking or pedestrian movements occur, the clearance to the bottom of the sign shall be at least 7'. The curb along or on the pavement or cement if curb is not present, shall be painted with red weather resistant paint in addition to the signs.

9. Electrically controlled access gates shall be provided with an approved emergency vehicle detector/receiver system. Said system shall be installed in accordance with the Grantsville City F.D. approval. Gates are only allowed with prior approval.

10. All private underground fire lines that service automatic fire sprinkler systems shall be no smaller than eight (8) inches in diameter and have a Post Indicator Valve (PIV) between the water main and the building. If a PIV isn't feasible due to site constraints, a Water Indicator Valve (WIV) may be used with the approval of the City Engineer or Fire Code Official. For a WIV to be allowed, another valve must be installed on the fire service line back at the connection to the water main, which will be maintained by the City as part of its culinary water system. All fire lines material shall be Ductile Iron. (Ductile Iron from the PIV to the building shall be permitted or Ductile Iron from the main water line to the WIV).

11. Post Indicator Valves (PIV) shall be between 6 and 40 feet from buildings not exceeding three stories or equivalent in height and between 30 and 40 feet on buildings in excess of three or more stories in height or equivalent.

12. Roads and accesses shall be designed and maintained to support the imposed loads of fire apparatus. Surface shall be paved before the application of combustible material.

13. All new buildings equipped with a Fire Department Connection (FDC) must have inlets secured with Knox brand locking FDC cap(s) with a swivel collar. All new buildings are also required to have a Knox brand key lock box mounted on the exterior building, such that Fire Department personnel may gain access in case of an emergency.

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TOWNHOMES ON WILLOW PUD

WILLOW STREET
GRANTSVILLE, UTAH

PROFESSIONAL ENGINEER
04-30-25
10924116-2202
COREY J. CHILD
STATE OF UTAH

GENERAL NOTES

PROJECT NUMBER 10898A
PRINT DATE 2025-04-30
DRAWN BY H. CARTER
CHECKED BY C. CHILD
PROJECT MANAGER C. CHILD

C-002

1.6 Grantsville City Water Notes

1. The following Grantsville City Water Notes are intended for general water standards only and are not all inclusive. The City has included the Culinary Water Design and Construction Standards within the City Construction Standards and Specifications.

2. No work shall begin until the water plans have been released for construction by the Engineering Department. Following water plan approval, forty-eight (48) hour notice shall be given to the Engineering Department and the Public Works Department prior to the start of construction. Notice must be given by 2:00 P.M. the business day prior to an inspection.

3. All work within Grantsville City shall conform to Grantsville City Standards and Specifications, AWWA and APWA.

4. For Residential Developments - The developer shall purchase and install meter boxes and setters according to City Standards on newly developed lots and real property at the time of water main installation. Water meters will be supplied and installed by the Grantsville Utilities Department (at Developer's expense). The developer shall also provide the site address, lot number, meter size and pay meter fees prior to building permit approval. The developer should also pay for rental of a hydrant meter, and/or use the Grantsville City Public Water Standpipe located by the Public Works Building.

5. For Commercial and Condominium Developments - The developer shall purchase and install meter boxes and setters according to City Standards. Water meters will be supplied by Grantsville City Public Works Department (at Developer's expense) and installed by Developer.

6. All water facilities shall be filled, disinfected, pressure tested, flushed, filled and a series of Bac-T testing performed by the City shall be obtained prior to commissioning the new water line to the Grantsville City Culinary Water Distribution System.

7. Grantsville City Utilities Department must approve water shut down which may require evening and weekend shut down as deemed necessary, requiring the contractor to be billed for overtime. 48 hour notice is required.

8. Water stub-out installations will not be construed as a commitment for water service.

9. Conditional Approval of Valved Outlet (6" and Larger): In the event the water plans show one or more valved outlets extending out of paved areas, installations of these outlets is acceptable, however, if the outlets are incorrectly located or not used for any reason when the property is developed, the developer shall abandon the outlets at the connection to the active main in accordance with the city standards and at the developer's expense.

10. All lines to be pressure tested according to Grantsville City and AWWA standards and chlorinated prior to use and final acceptance.

11. All fittings to be coated with poly fm grease and wrapped with 8-mil thick polyethylene.

12. No other utility lines may be placed in the same trench with water line unless approved by the City Engineer.

13. Any conflict with existing utilities shall be immediately called to the attention of the City Engineer or designee.

14. All water vaults will be constructed per Grantsville City standard drawings and specifications. No vaults are allowed in traffic areas without prior approval of the City Engineer.

15. Landscaping and irrigation adjacent to vaults shall drain away from vaults.

16. Once the waterline has been tested, approved and city water is flowing through the pipe, only City personnel are authorized to shut down and charge the waterline.

17. Megalug following ring or an approved equivalent shall be used on all fittings.

18. APWA plan 562, stainless steel tie-down restraints with turnbuckles or 5/8" epoxy green rebar is acceptable. Megalug followers required on all fittings and all dimensions of thrust blocking still apply.

19. Water mains will be hot tapped as called out on the approved plans. Under special circumstances, when a contractor submits a request for a shutdown contrary to the approved plans and the request is approved at the discretion of the City Engineer or designee, the contractor must provide 48-hour notice to neighbors and those affected. If businesses are impacted by the shutdown it will be done after hours and all overtime fees for City personnel, equipment and vehicles must be paid in advance.

20. Contractors are required to write the lot number with a black permanent marker on the inside of the water meter barrels as they are installed.

Revision 10/29/2024

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TOWNHOMES ON WILLOW PUD

WILLOW STREET
GRANTSVILLE, UTAH

PROFESSIONAL ENGINEER
10924116-2202
COREY J. CHILD
STATE OF UTAH
05-04-25

GENERAL NOTES

PROJECT NUMBER 10898A
PRINT DATE 2025-04-30
DRAWN BY H. CARTER
CHECKED BY C. CHILD
PROJECT MANAGER C. CHILD

C-003

Chain of Communication

- First Contact: Cody Christensen, Public Works Inspector (CPII)
- Second Contact: Markus Seat, Deputy Public Works Director; when Cody is not available.
- CC: Christy Montierth, Public Works Director, Markus Seat, Deputy Public Works Director

Please communicate through e-mail to maintain a written record.

Construction Staking

- Surveying & Staking: _____
- Staking must be complete as provided in plans to ensure alignment of utilities.

Geotechnical

- Compaction Geo Technician: _____
- Does the Contractor have a copy of the Geotechnical Report and is he familiar with the requirements?
- Provide the City Inspector a copy of the Geotechnical Report.
- A Geo-tech will be required should the City need additional information on excavations or backfills.

Construction Submittals

- The Contractor shall provide construction submittals for material to the City for approval prior to purchase of materials and installation. Submit to City Inspector Cody Christensen, cc: Christy Montierth, and Markus Seat.
- Refer to Grantsville City's General Notes for additional construction submittal requirements.

Emergency Services

- Clear and install a silt fence 5 feet out around live fire hydrants and electrical transformers. This clear space must be maintained for emergency services during construction.
- Install required temporary signage at the beginning of work on the site.
- Park only on one side of access roads so emergency access is clear.
- Coordinate with Fire Chief for his inspections.

Sewer

- Pipe Material: PVC ASTM D-3034 SDR-35
- Follow OSHA requirements for trenching (4 foot vertical with 1:1 sloping or stepping or use trench boxes).
- Sewer laterals per City standard (APWA431).

- Utah State requirement of 10-foot horizontal separation between sewer and water laterals.
- 18 inches minimum vertical separation between water and sewer.
- Crushed Rock ¾ inch in pipe zone (pea gravel is not allowed by the City).
- Sewer laterals - gravel bedding to be extended to dwelling.
- **NO** native soils may be used above the pipe zone, A-1-a 3-inch minus soils are to be used for trench backfill unless a Geotechnical Engineering Company approved by the City Public Works Director or the City Engineer, verifies the suitability of an alternative material. (See City General Notes)
- Offset tees for sewer laterals; gasket type.
- Compaction requirements – 95 percent in ROW, 90 percent out of ROW (ASTM D-1557, Modified Proctor).
- Underground Installation of Gravity-Flow Applications as per ASTM D-2321.
- All precast manholes to be provided with rubber boots and stainless-steel bands at pipe penetrations.
- Interior pipe penetrations in all sewer manholes shall be grouted.
- Tracer wire extending from main to lateral stub on all laterals and extended to surface at stub marker. Include an extra 30 feet to extend along the service to the dwelling.
- Stamp (**When Wet**) or pin (**Do Not Grind**) gutter both at the lip and top of curb an "S" at all service laterals located at exact crossing of the curb (two places for each service).
- Extend utility lateral stub markers beyond the 15-foot PU&DE (15 feet behind back of walk).
- End of sewer laterals shall be plugged.

Testing:

- Air Test mandatory – certification required.
- Manhole Vacuum Test mandatory – certification required.
- Video inspection after flushing mandatory – the City does not need to observe the video inspection. Video record to be provided for City review.
- Provide the City 48 hours' notice prior to testing.

Culinary Water

- Pipe Material: PVC C900 DR18
- Use bedding sand for backfill in the pipe zone (sand bedding must be preapproved). The City can provide an example.
- Water laterals - sand bedding shall be extended to the dwelling.
- **NO** native soils may be used above the pipe zone, A-1-a 3-inch minus soils are to be used for trench backfill unless a Geotechnical Engineering Company approved by the City Public Works Director or the City Engineer, verifies the suitability of an alternative material. (See City General Notes)
- Valves shall be clustered in intersections.
- 10-inch valves or smaller are to be gate valves, 12 inches or larger are to be butterfly valves.
- Valves are to be located at the dead-end main of phase lines to allow for flushing, isolation,

and continued service to existing connections when future phases are constructed. Blow offs are to be located in the green space.

- Meter and services shall be ¾ inch polyethylene SIDR-7 IPS. Install service laterals and meters within 5 feet of lot lines (as close to lot line as practicable), one on each side of common lot line (alternate with secondary water).
- Use 150# corp stops.
- 10-foot horizontal separation of water and sewer lateral per state requirements.
- 18-inch minimum vertical separation between water and sewer and storm drain.
- 10-foot horizontal separation of water and stormwater.
- Meter barrels shall be 21 inch diameter white corrugated polyethylene.
- Developers cannot swing meter boxes to accommodate the driveway. Plan Accordingly.
- Meter to be installed 18 inches to 22 inches below the lid.
- Place sand around the water service setter bases and above to stabilize setter and provide insulation. **Gravel is not allowed.**
- Tapping saddles shall be brass with double stainless steel or brass straps.
- Use dual check and heavy-duty angle valves for all service setters.
- Install tracer wire (on the pipe) and locating tape above the water main.
- Install tracer wire from the main connection through the meter pit to stub marker with 30 feet excess to extend to the dwelling.
- Stamp (**When Wet)** or pin (**Do Not Grind**) gutter both at the lip and top of curb with a "W" at all service laterals located at exact crossing of the curb (two places for each service).
- Thrust blocks need to be inspected by the City prior to backfill. Size based on water pressure and pipe size.
- Fire hydrants shall be installed 18 inches minimum back of curb in green space. Break away must be 4 inches above curb or manufacturer's specifications.
- Paint curb red 10 feet either direction of the fire hydrants (20 feet total).
- 5 foot hydrant markers (whips) shall be installed on all hydrants.

Testing:

- Hydrostatic Pressure Test:
  - Water main without tapping saddles - 200 psi for a minimum of 2 hours.
  - Water main with tapping saddles, corporations, and service laterals - 150 psi for a minimum of 2 hours.
  - The water distribution shall be tested in entirety from main line to setter connections.
  - Inspector (Cody Christensen or assigned City Inspector) must be present for the entire duration of the test.

Disinfection:

- Hypochlorite powder shall be used.
- Chlorine residuals will be tested by the City before flushing.
- One series of Bac-T testing will be performed by the City to accept water lines.
- Developer shall pay for retests if necessary.

- The City will grab all samples initial or retests.
  - Per AWWA C651, Bac-T testing shall be completed for every 1,200 feet of new water main, at the end of the line, and at each branch. Two consecutive sample sets shall be collected at the aforementioned locations at least 24 hours apart.

Storm Water

Pipe Material:

- Reinforced Concrete (RCP) or High-Performance storm polypropylene pipe (HP storm).
- Installation and compaction to follow manufacturer's recommendations.
- All catch basin boxes include a sump. For boxes with snouts the sump depth is based upon the snout model manufacturer's recommendation. For all other catch basins, the depth is 12 inches below the flow line of the pipes.

Franchise Utilities

- Gas: Dominion Energy
- Power: Rocky Mountain Power
- Cable: Comcast
- Phone: Century Link
- Stubs shall be installed for franchised utilities. New streets and concrete will not be cut. If stubs are missed, only boring will be allowed.

Surface Improvements

Pavement:

- Asphalt paving is allowed when temperatures are 50 degrees Fahrenheit ambient and rising.
- City Standard pavement section is 3 inches asphalt on 6 inches UBC on 8 inches granular borrow or per approved drawings whichever is greater.
- 58/28 PG mix at maximum, 15 percent RAP ½ inch granulated mix required for paving
- Road base and cross-section per approved drawings.
- Provide proper signage per Utah MUTCD.
- Provide stops bars at stop signs (retroreflective paint per MUTCD standard).
- Use APWA Detail 255 for pavement T-patch.

Concrete:

- 4,500 psi concrete for all surface improvements.
- Sidewalk section is 6 inches PCC on 6 inches road base.
- ADA Rib Composite Tile (without screws) truncated dome inserts shall be yellow in pedestrian ramps.
- Tile to touch curb line (2-inch max setback) and 5-foot width.
- Air test every 50 yards (5 percent – 7 percent). If out of spec, air test every truck load.
- 3 cylinders every 50 yards.

Earthwork:

- Provide compaction and sieve analysis on all initial proctors and new material.
- Compaction tests every 100 feet of pipe trench. Vary depths to provide results throughout the strata.
- Road structure shall be tested every 200 feet – along both shoulders and centerline (95 percent compaction).
- Proof roll trenches, subgrade, and base to be inspected by City Inspector.
- Minimum of four compaction tests around each manhole and cleanout.
- Compact all fill in 8-inch lifts.

Testing and QA/QC

- 48-hour notice is required prior to any testing. Make sure the test is scheduled.
- Inspector(s) representing the City must be present for all testing including those performed by an independent agency.
- Public Works hours are 7:00 am to 3:30 pm Monday through Friday. If deemed necessary, the City will work with Contractor when working outside these hours. Give 48-hour notice.

Construction Water

- Contractor shall obtain water for construction from a City approved fire hydrant using a hydrant meter rented from the City.
- $1600 refundable deposit, $35 account set up fee, $75 a month rental charge, $6 per 1000 gallons for all water used, $50 buried meter fee if usage is not reported monthly, $1000 theft of service and $50 tampering fee if meter is not used.
- Do not damage the meters or take anything off the meters.
- Contact Emalee Tripp at City Hall, in the Utilities Department.

Erosion Control / Storm Water System Protection

- Minimize potential for off-site run-off.
- Minimize disturbed areas.
- Keep working area wetted to minimize dust.
- Provide silt fence to prevent sediment transport downstream.
- Contain all sediment on site. Clean roads of sediment tracking.
- Maintain BMPs as per SWPPP.
- SWPPP to be on-site at all times.
- The City will check with the contractor after an event.
- Inspect after rainfall and other events (weather, and construction around BMPs) that may affect BMPs.
- Make sure to follow the SWPPP as shown on the plans.
- Put the SWPPP sign on site and visible so the State can see it on a drive by.

- Show a copy of the Dust Mitigation Plan that was submitted to the Utah Department of Environmental Quality (DEQ).

Construction Debris Disposal

- Maintain a work site that is clean and properly dispose of debris and trash.
- **No garbage pits allowed.**
- Establish or rent a suitable washout area and remove all washout materials from the site at the project's conclusion.

Site Safety

- Conform to OSHA Standards.
- Close trenches at night.
- Secure open trenches and plug lines.

Security

- Secure construction equipment when not in use. Security is the responsibility of the developer.

Sanitation

- Clean and properly maintained portable restrooms on site at all times.

Hazardous Material Storage on Site

- If there are hazardous materials on site, make sure the City has approved it and that it has secondary containment. The Fire Chief needs to know what is on site, how it is secured, and where it is located.

Site Access

- As shown on the SWPPP do not deviate from it.

Construction Observation

- City personnel will inspect regularly as needed and at the City's discretion.

Construction Drawings

- Provide City with one 24-inch x 36 inch and two 11-inch x 17 inch For Construction prints. (Don't print any plans until all changes have been made and you have received a copy of the signed plans from the city.)

- Keep an accurate set of As-Builts.
- Provide a copy of As-Builts at completion of project prior to occupancy. (Printed 24-inch x 36 inch)
- Changes in as-builts shall be previously approved and in engineering format (not drawn in).
- Provide digital set of As-Builts (PDF, DWG and Shape Files are required) for City prior to occupancy.
- If there are questions about the plans and conditions on the ground request the design engineer's interpretation first, and bring that interpretation to the City when questions come up. The onsite inspectors cannot make approvals to changes; or document changes.

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TOWNHOMES OF WILLOW PUD

WILLOW STREET
GRANTSVILLE, UTAH

PROFESSIONAL ENGINEER
2025-04-30
10924116-2202
COREY J. CHILD
STATE OF UTAH

PRECONSTRUCTION GENERAL NOTES

PROJECT NUMBER	PRINT DATE
10898A	2025-04-30
DRAWN BY	CHECKED BY
H. CARTER	C. CHILD
PROJECT MANAGER	
C. CHILD	

C-004

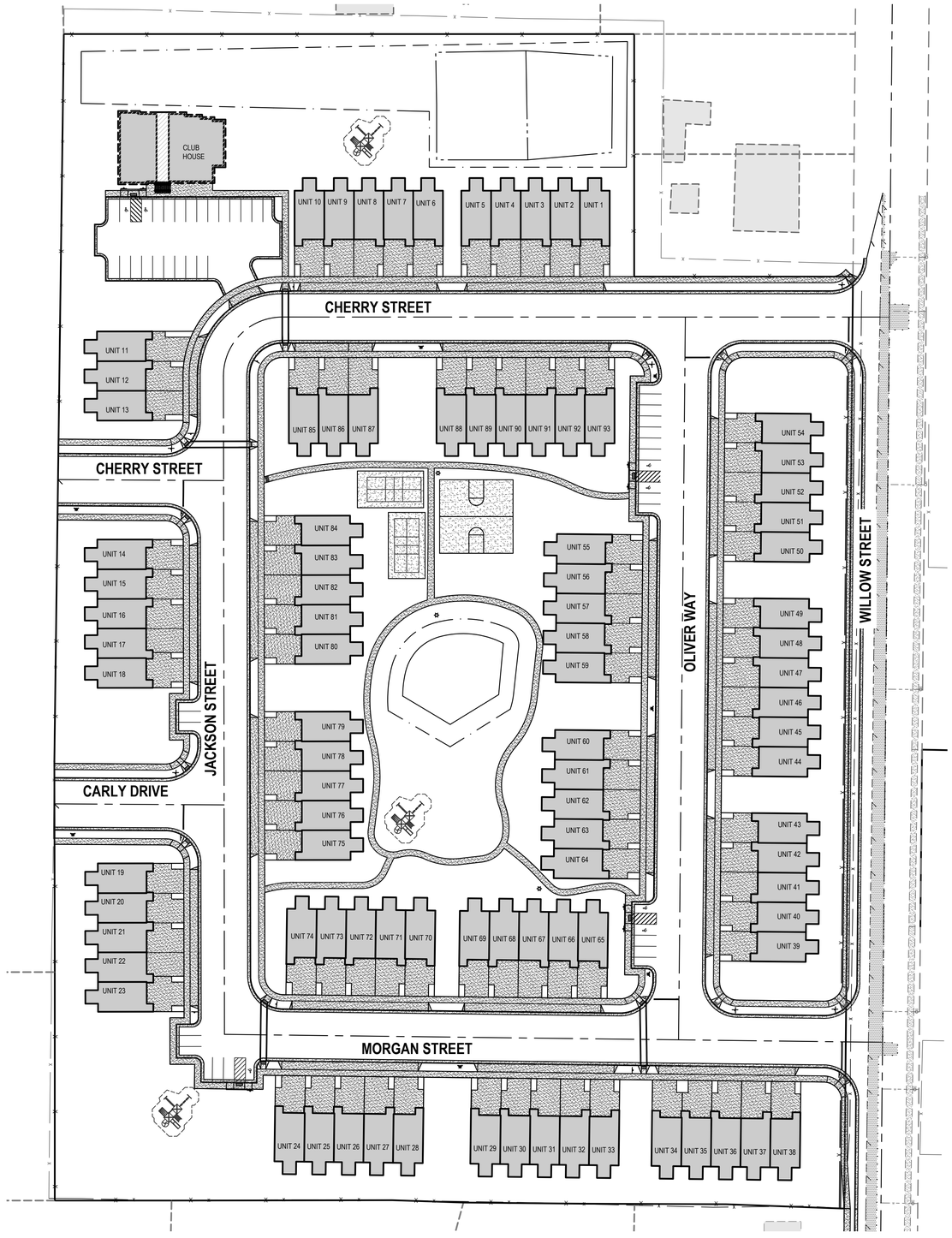
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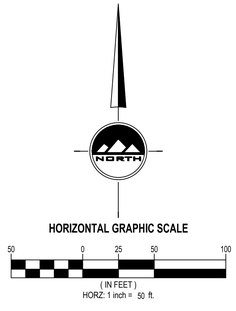
SOUTHWEST QUARTER CORNER OF SECTION 31, TOWNSHIP 2 SOUTH, RANGE 5 WEST SALT LAKE BASE AND MERIDIAN (FOUND 2.5" BRASS DISC)

ELEV = 4360.80'



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TOWNHOMES ON WILLOW PUD

WILLOW STREET
GRANTSVILLE, UTAH

PROFESSIONAL ENGINEER 10924116-2202 COREY J. CHILD STATE OF UTAH
5-04-25

OVERALL SITE PLAN

PROJECT NUMBER	PRINT DATE
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DRAWN BY	CHECKED BY
H. CARTER	C. CHILD
PROJECT MANAGER	
C. CHILD	

C-100

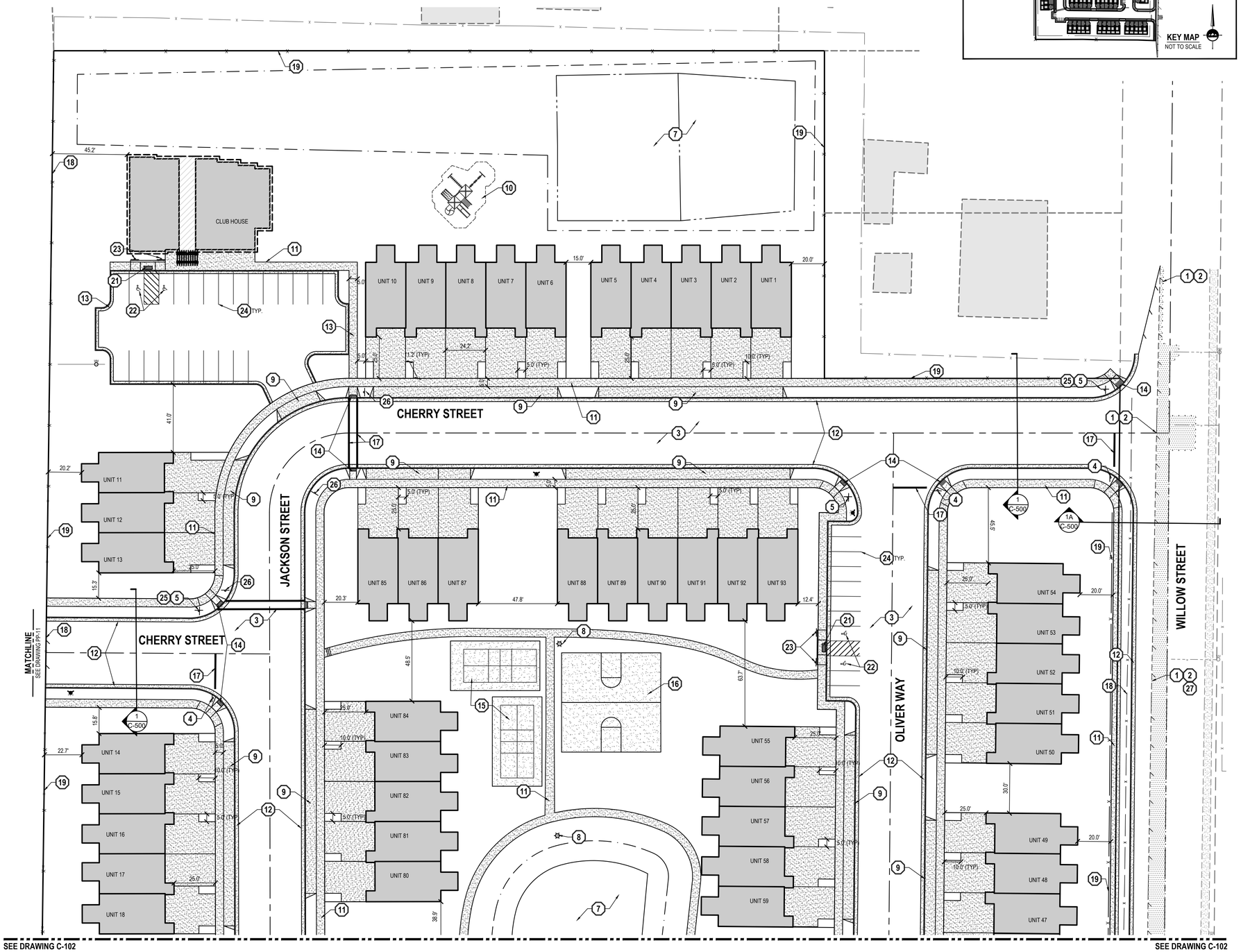
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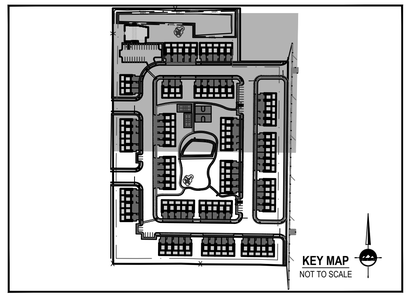
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2. REMOVE AND PROPERLY DISPOSE OF EXISTING ASPHALT PAVEMENT.
3. ASPHALT PAVEMENT PER GEOTECHNICAL REPORT AND DETAIL 2/C-500.
4. "STOP" SIGN W4-4P PER GRANTSVILLE CITY STANDARDS, APWA PLAN NO. 292, AND M.U.T.C.D. STANDARD PLANS.
5. STREET SIGN PER GRANTSVILLE CITY STANDARDS, APWA PLAN NO. 292 AND SPECIFICATIONS.
6. NOT USED.
7. STORM DRAIN BASIN SEE GRADING PLAN.
8. ONSITE LIGHTING PER APWA PLAN NO. 730 AND SPECIFICATIONS.
9. DRIVEWAY APPROACH PER GRANTSVILLE CITY STANDARDS AND APWA PLAN NO. 221.1. WIDTH PER PLAN.
10. PLAYGROUND AREA PER IPEMA STANDARDS, DESIGNED BY OTHERS, SEE PLANS FOR PLAYGROUND EQUIPMENT & GROUND COVER.
11. 6" THICK CONCRETE SIDEWALK PER APWA STANDARD PLAN NO. 231 AND SPECIFICATIONS.
12. 30" TYPE "A" CURB AND GUTTER PER APWA STANDARD PLAN NO. 205 AND SPECIFICATIONS.
13. 24" TYPE "E" CURB AND GUTTER PER APWA STANDARD PLAN NO. 205 AND SPECIFICATIONS.
14. HANDICAP ACCESS RAMP PER APWA STANDARD PLAN NO. 235 WITH DETECTABLE WARNING SURFACE PER APWA STANDARD PLAN NO. 238 STYLE T AND SPECIFICATIONS.
15. PICKLEBALL COURT, DESIGNED BY OTHERS.
16. BASKETBALL COURT, DESIGNED BY OTHERS.
17. STREET MARKING PER M.U.T.C.D. STANDARD PLANS.
18. REMOVE AND PROPERLY DISPOSE OF EXISTING FENCE.
19. INSTALL FENCE PER DETAIL 9/C-500.
20. NOT USED.
21. ADA RAMP PER APWA PLAN NO. 236.3 AND SPECIFICATIONS.
22. HANDICAP SYMBOL PER M.U.T.C.D. STANDARD PLANS.
23. VAN ACCESSIBLE HANDICAP SIGN PER DETAIL12/C-500.
24. PARKING STALL LINE PER M.U.T.C.D. STANDARD PLANS.
25. "SLOW CHILDREN AT PLAY" SIGN W9-12 PER GRANTSVILLE CITY STANDARDS, AND M.U.T.C.D. STANDARD PLANS.
26. PEDESTRIAN CROSSING SIGNS W11-2 AND W16-7P PER GRANTSVILLE CITY STANDARDS, AND M.U.T.C.D. STANDARD PLANS.
27. CONTRACTOR TO VERIFY THAT THE EXISTING PAVEMENT AND SUB PAVEMENT MEETS GRANTSVILE CITY STANDARDS AND SPECIFICATIONS. AREAS THAT DO NOT MEET THE STANDARDS MUST BE REPLACED TO THE CENTER LINE OF THE ROAD.

NOTE: MAY CONTAIN KEYNOTES THAT ARE NOT USED ON THIS SHEET.

NORTH

HORIZONTAL GRAPHIC SCALE

30 0 15 30 60

(IN FEET)

HORZ: 1 inch = 30 ft.

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WILLOW STREET
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PROFESSIONAL ENGINEER
25-04-
10924116-2202
COREY J. CHILD
STATE OF UTAH

SITE PLAN

PROJECT NUMBER	PRINT DATE
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DRAWN BY	CHECKED BY
H. CARTER	C. CHILD
PROJECT MANAGER	
C. CHILD	

C-101

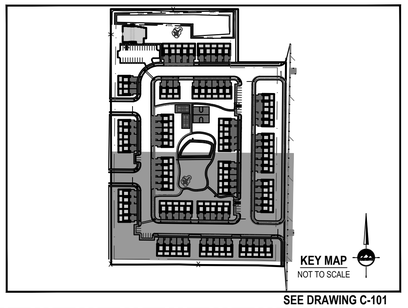
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SEE DRAWING C-101

SEE DRAWING C-101



GENERAL NOTES

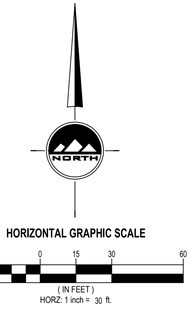
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5. STREET SIGN PER GRANTSVILLE CITY STANDARDS, APWA PLAN NO. 292 AND SPECIFICATIONS.
6. NOT USED.
7. STORM DRAIN BASIN SEE GRADING PLAN.
8. ONSITE LIGHTING PER APWA PLAN NO. 730 AND SPECIFICATIONS.
9. DRIVEWAY APPROACH PER GRANTSVILLE CITY STANDARDS AND APWA PLAN NO. 221.1. WIDTH PER PLAN.
10. PLAYGROUND AREA PER IPEMA STANDARDS, DESIGNED BY OTHERS, SEE PLANS FOR PLAYGROUND EQUIPMENT & GROUND COVER.
11. 6" THICK CONCRETE SIDEWALK PER APWA STANDARD PLAN NO. 231 AND SPECIFICATIONS.
12. 30" TYPE "A" CURB AND GUTTER PER APWA STANDARD PLAN NO. 205 AND SPECIFICATIONS.
13. 24" TYPE "E" CURB AND GUTTER PER APWA STANDARD PLAN NO. 205 AND SPECIFICATIONS.
14. HANDICAP ACCESS RAMP PER APWA STANDARD PLAN NO. 235 WITH DETECTABLE WARNING SURFACE PER APWA STANDARD PLAN NO. 238 STYLE T AND SPECIFICATIONS.
15. PICKLEBALL COURT, DESIGNED BY OTHERS.
16. BASKETBALL COURT, DESIGNED BY OTHERS.
17. STREET MARKING PER M.U.T.C.D. STANDARD PLANS.
18. REMOVE AND PROPERLY DISPOSE OF EXISTING FENCE.
19. INSTALL FENCE PER DETAIL 9/C-500.
20. NOT USED.
21. ADA RAMP PER APWA PLAN NO. 236.3 AND SPECIFICATIONS.
22. HANDICAP SYMBOL PER M.U.T.C.D. STANDARD PLANS.
23. VAN ACCESSIBLE HANDICAP SIGN PER DETAIL12/C-500.
24. PARKING STALL LINE PER M.U.T.C.D. STANDARD PLANS.
25. "SLOW CHILDREN AT PLAY" SIGN W9-12 PER GRANTSVILLE CITY STANDARDS, AND M.U.T.C.D. STANDARD PLANS.
26. PEDESTRIAN CROSSING SIGNS W11-2 AND W16-7P PER GRANTSVILLE CITY STANDARDS, AND M.U.T.C.D. STANDARD PLANS.
27. CONTRACTOR TO VERIFY THAT THE EXISTING PAVEMENT AND SUB PAVEMENT MEETS GRANTSVILE CITY STANDARDS AND SPECIFICATIONS. AREAS THAT DO NOT MEET THE STANDARDS MUST BE REPLACED TO THE CENTER LINE OF THE ROAD.

NOTE: MAY CONTAIN KEYNOTES THAT ARE NOT USED ON THIS SHEET.



HORIZONTAL GRAPHIC SCALE

30 0 15 30 60

(IN FEET)
HORZ: 1 inch = 30 ft.

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SEAN PERKINS
PHONE: 435-850-8436

TOWNHOMES ON WILLOW PUD

WILLOW STREET
GRANTSVILLE, UTAH

PROFESSIONAL ENGINEER
10924116-2202
COREY J. CHILD
STATE OF UTAH
2025-04-30

SITE PLAN

PROJECT NUMBER 10898A
PRINT DATE 2025-04-30
DRAWN BY H. CARTER
CHECKED BY C. CHILD
PROJECT MANAGER C. CHILD

C-102

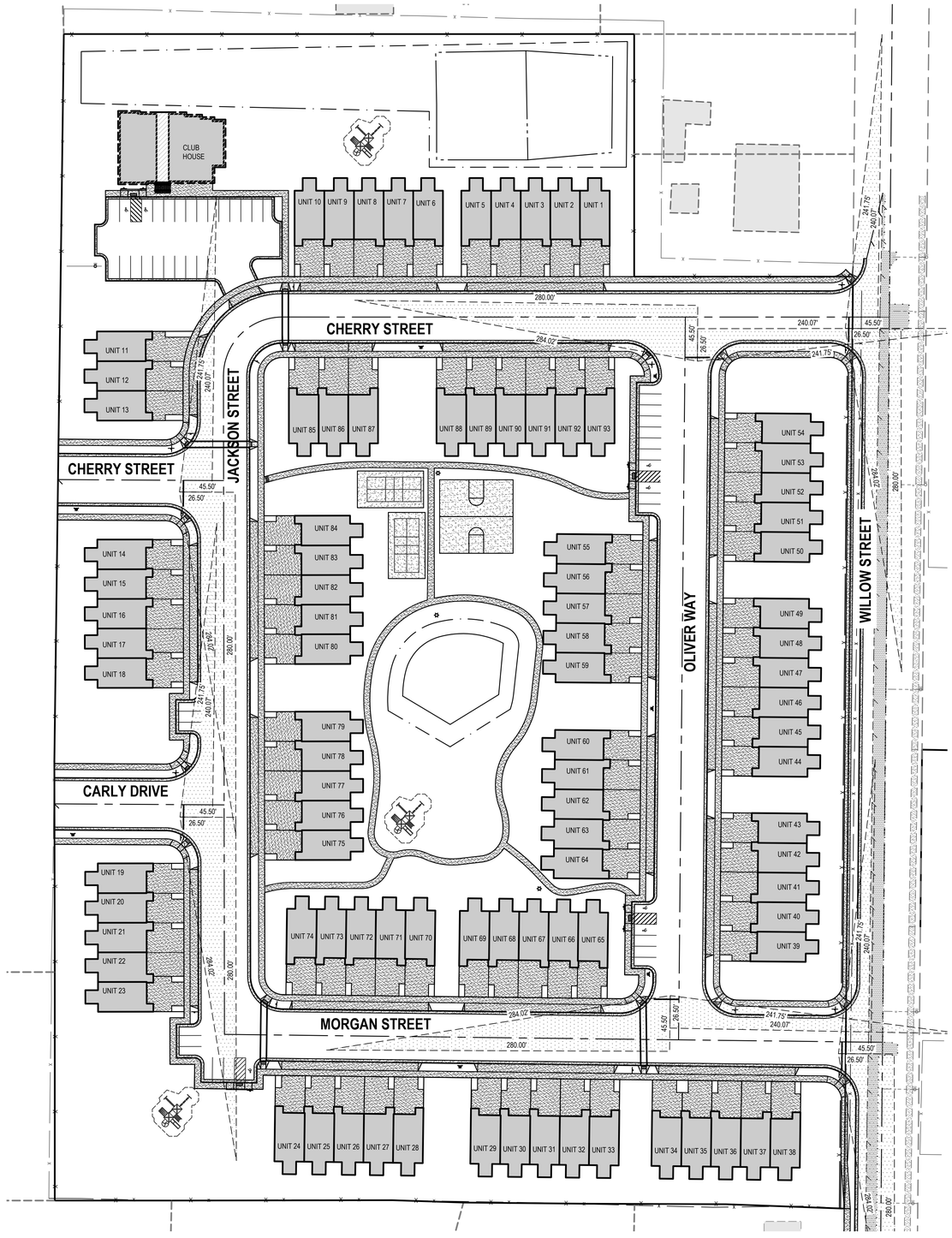
811 Know what's below. Call before you dig.

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BENCHMARK

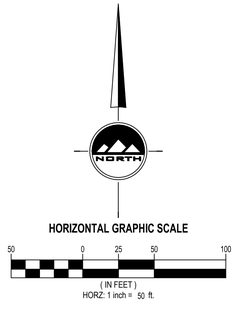
SOUTHWEST QUARTER CORNER OF SECTION 31, TOWNSHIP 2 SOUTH, RANGE 5 WEST SALT LAKE BASE AND MERIDIAN (FOUND 2.5" BRASS DISC)

ELEV = 4360.80'



GENERAL NOTES

1. ALL WORK TO COMPLY WITH THE GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
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3. ALL SURFACE IMPROVEMENTS DISTURBED BY CONSTRUCTION SHALL BE RESTORED OR REPLACED, INCLUDING TREES AND DECORATIVE SHRUBS, SOD, FENCES, WALLS AND STRUCTURES, WHETHER OR NOT THEY ARE SPECIFICALLY SHOWN ON THE CONTRACT DOCUMENTS.
4. ALL CONSTRUCTION SIGNAGE, BARRICADES, TRAFFIC CONTROL DEVICES, ETC. SHALL CONFORM TO THE LATEST EDITION OF THE M.U.T.C.D. THE CONTRACTOR WILL MAINTAIN SUCH SO THAT THEY ARE PROPERLY PLACED AND VISIBLE AT ALL TIMES.
5. SIDEWALKS AND CURBS DESIGNATED TO BE DEMOLISHED SHALL BE DEMOLISHED TO THE NEAREST EXPANSION JOINT, MATCHING THESE PLANS AS CLOSELY AS POSSIBLE.
6. ALL IMPROVEMENTS MUST COMPLY WITH ADA STANDARDS AND RECOMMENDATIONS.
7. SEE LANDSCAPE/ARCHITECTURAL PLANS FOR CONCRETE MATERIAL, COLOR, FINISH, AND SCORE PATTERNS THROUGHOUT SITE.
8. ALL PAVEMENT MARKINGS SHALL CONFORM TO THE LATEST EDITION OF THE M.U.T.C.D. (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES).
9. ALL SURFACE IMPROVEMENTS DISTURBED BY CONSTRUCTION SHALL BE RESTORED OR REPLACED, INCLUDING TREES AND DECORATIVE SHRUBS, SOD, FENCES, WALLS AND STRUCTURES, WHETHER OR NOT THEY ARE SPECIFICALLY SHOWN ON THE CONTRACT DOCUMENTS.
10. NOTIFY ENGINEER OF ANY DISCREPANCIES IN DESIGN OR STAKING BEFORE PLACING CONCRETE OR ASPHALT.
11. THE CONTRACTOR IS TO PROTECT AND PRESERVE ALL EXISTING IMPROVEMENTS, UTILITIES, AND SIGNS, ETC. UNLESS OTHERWISE NOTED ON THESE PLANS.
12. COMBINED DRIVEWAYS WILL BE ALLOWED AS AN EXCEPTION ON THIS PROJECT



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TOWNHOMES ON WILLOW PUD

WILLOW STREET
GRANTSVILLE, UTAH

PROFESSIONAL ENGINEER 10924116-2202 COREY J. CHILD STATE OF UTAH
2025-04-30

AASHTO SITE TRIANGLES

PROJECT NUMBER	PRINT DATE
10898A	2025-04-30
DRAWN BY	CHECKED BY
H. CARTER	C. CHILD
PROJECT MANAGER	
C. CHILD	

C-103

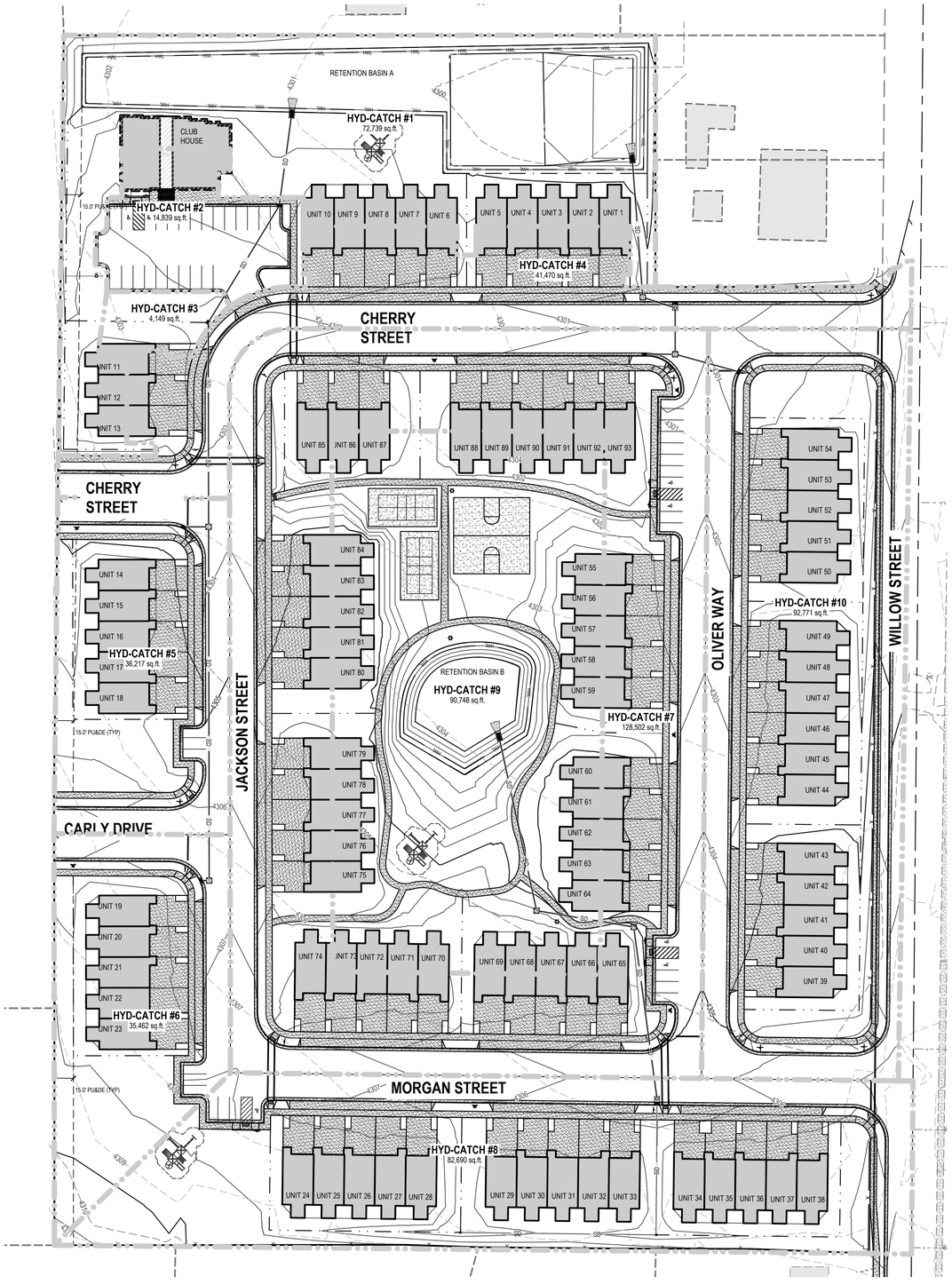
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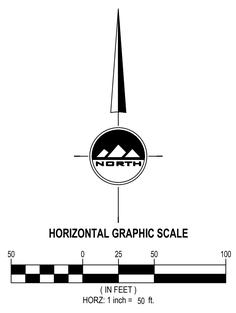
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BENCHMARK

SOUTHWEST QUARTER CORNER OF SECTION 31, TOWNSHIP 2 SOUTH, RANGE 5 WEST SALT LAKE BASE AND MERIDIAN (FOUND 2.5" BRASS DISC)

ELEV = 4360.80'





GENERAL NOTES

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3. ALL WORK SHALL COMPLY WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER POSSIBLY INCLUDING, BUT NOT LIMITED TO, REMOVAL OF UNCONSOLIDATED FILL, ORGANICS, AND DEBRIS, PLACEMENT OF SUBSURFACE DRAIN LINES AND GEOTEXTILE, AND OVEREXCAVATION OF UNSUITABLE BEARING MATERIALS AND PLACEMENT OF ACCEPTABLE FILL MATERIAL.
4. THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE EXISTING SOIL CONDITIONS.
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7. ALL STORM DRAIN INFRASTRUCTURE TO BE INSTALLED PER GOVERNING AGENCY OR APWA STANDARD PLANS AND SPECIFICATIONS.
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TOWNHOMES ON WILLOW PUD

WILLOW STREET
GRANTSVILLE, UTAH

PROFESSIONAL ENGINEER 10924116-2202 COREY J. CHILD STATE OF UTAH
2025-04-30

OVERALL GRADING AND DRAINAGE PLAN

PROJECT NUMBER	PRINT DATE
10898A	2025-04-30
DRAWN BY	CHECKED BY
H. CARTER	C. CHILD
PROJECT MANAGER	
C. CHILD	

C-200

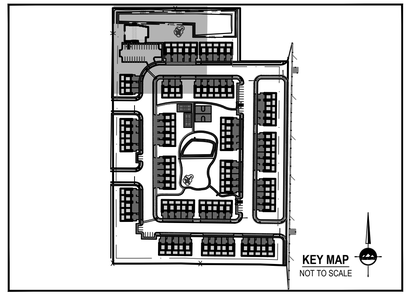
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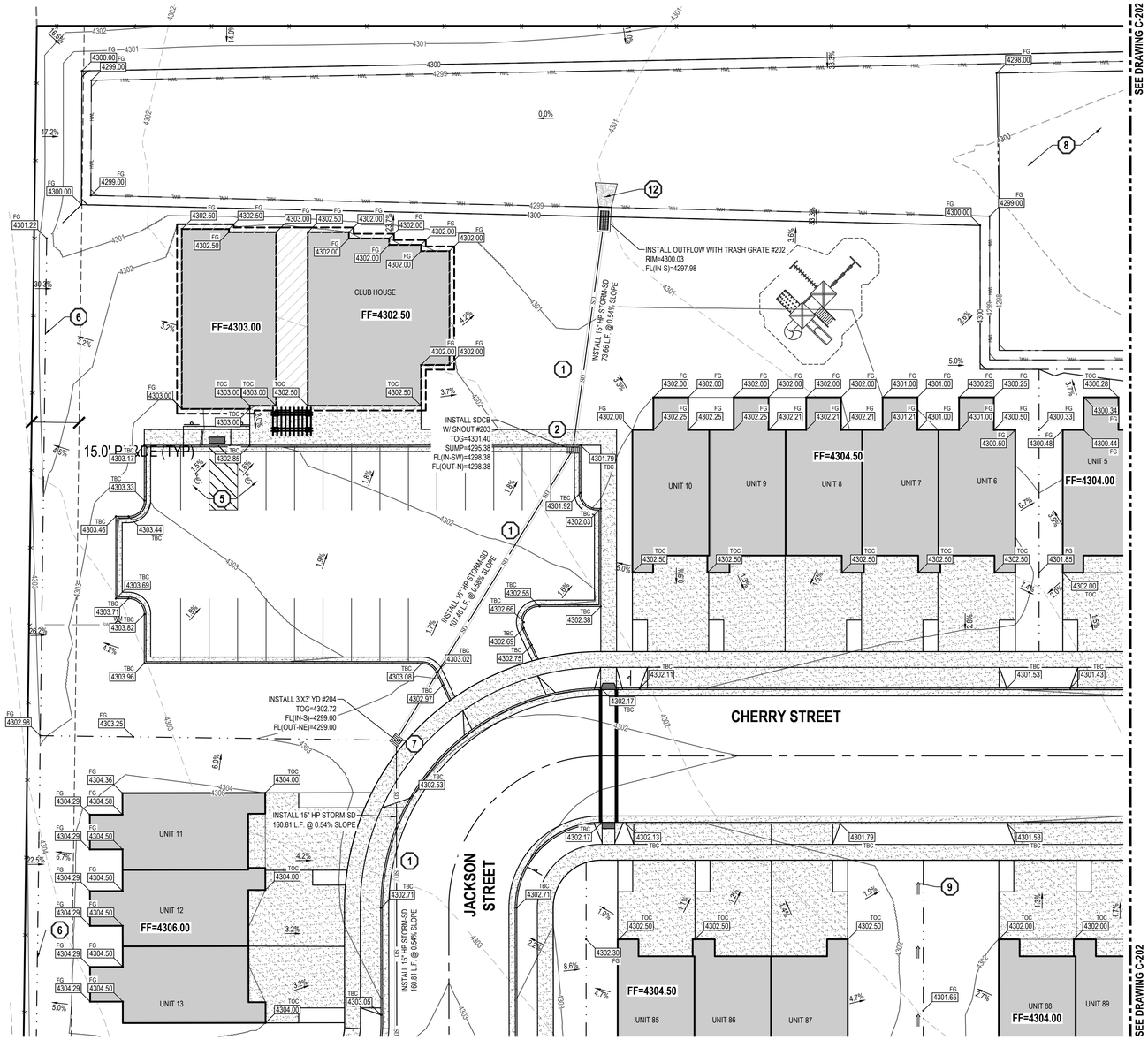
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BENCHMARK

SOUTHWEST QUARTER CORNER OF SECTION 31, TOWNSHIP 2 SOUTH, RANGE 5 WEST SALT LAKE BASE AND MERIDIAN (FOUND 2.5" BRASS DISC)

ELEV = 4360.80'





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SCOPE OF WORK:

PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:

1. STORM DRAIN LINE. INSTALLATION AND TRENCHING PER GRANTSVILLE CITY STANDARDS AND SPECIFICATIONS. LENGTH AND SLOPE PER PLAN AND PROFILES.
2. CATCH BASIN. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
3. CATCH BASIN COMBO BOX, PER APWA PLAN NO. 331 OR 332. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
4. CLEANOUT BOX, PER APWA PLAN NO. 331 OR 332. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
5. DO NOT EXCEED 2% SLOPE IN PAVING ACROSS ADA STALLS (TYP.)
6. DRAINAGE SWELL 4' BY 1.0' DEEP. SEE DETAIL 13/C-500.
7. 3'x3' CATCH BASIN. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

RETENTION BASIN A

8. BASIN TOP = 4300.00 FT
   HIGH-WATER ELEVATION = 4299.00 FT
   BASING BOTTOM = 4296.00 FT
   REQUIRED VOLUME = 40,300 C.F.
   PROVIDED VOLUME = 41,742 C.F.
9. 100 YEAR AND 200 YEAR FLOW PATHS.
10. NOT USED

RETENTION BASIN B

11. BASIN TOP = 4300.00 FT
    HIGH-WATER ELEVATION = 4299.00 FT
    BASIN BOTTOM = 4295.00 FT
    REQUIRED VOLUME = 14,991 C.F.
    PROVIDED VOLUME = 17,593 C.F.
12. INSTALL RIP RAP 6" D50 12" THICK OVER WEED BARRIER MIRAFI 150 N

NOTE: MAY CONTAIN KEYNOTES THAT ARE NOT USED ON THIS SHEET.

HORIZONTAL GRAPHIC SCALE

20 0 10 20 40

(IN FEET)
HORZ: 1 inch = 20 ft.

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TOWNHOMES ON WILLOW PUD

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GRANTSVILLE, UTAH

PROFESSIONAL ENGINEER 10924116-2202 COREY J. CHILD STATE OF UTAH
2025-04-30

GRADING AND DRAINAGE PLAN

PROJECT NUMBER	PRINT DATE
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DRAWN BY	CHECKED BY
H. CARTER	C. CHILD
PROJECT MANAGER	
C. CHILD	

C-201

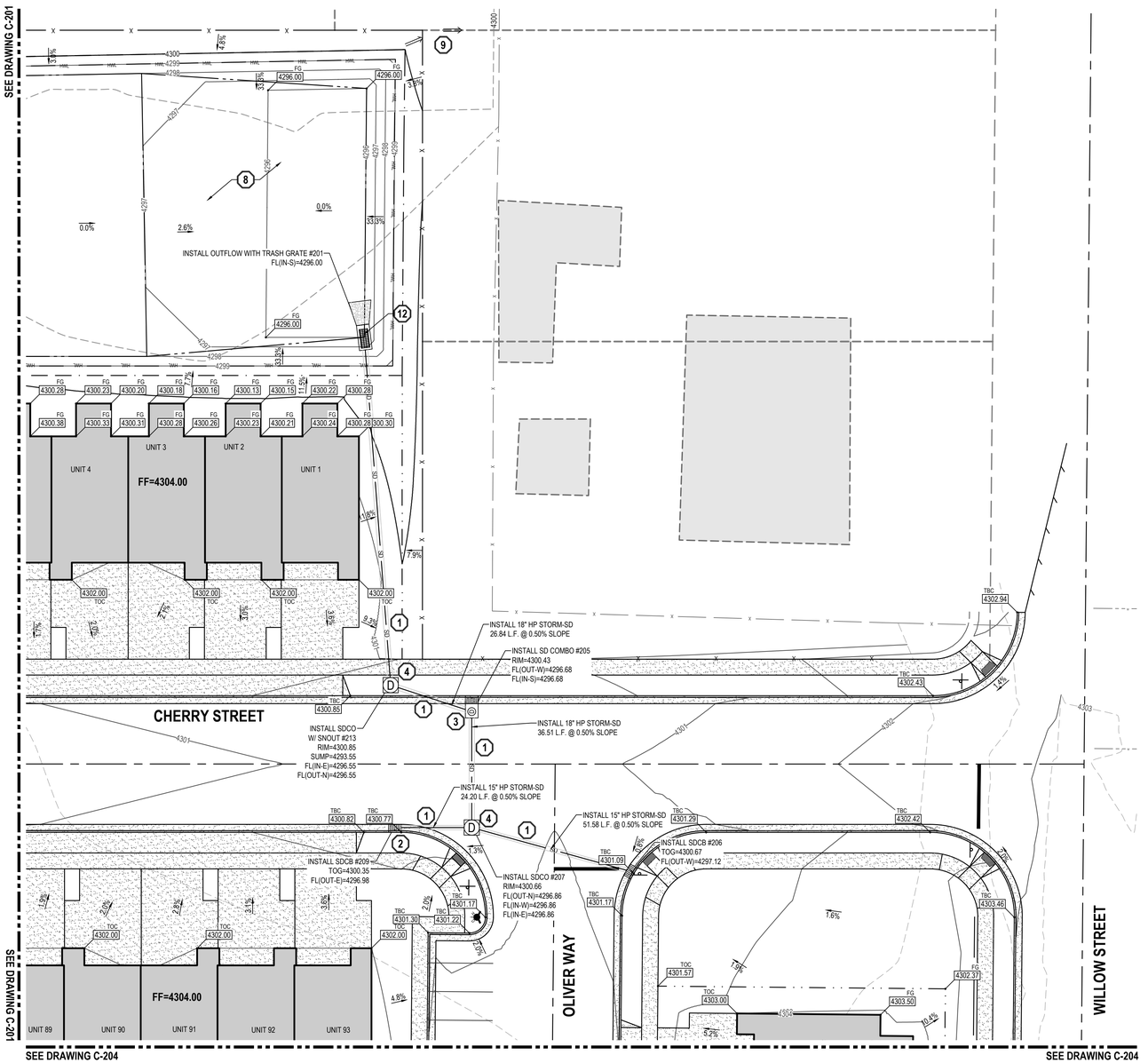
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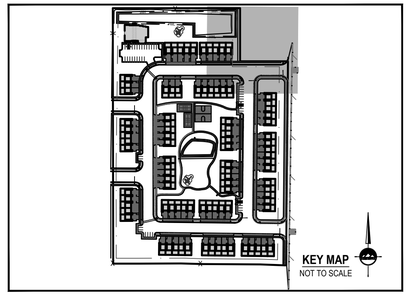
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SOUTHWEST QUARTER CORNER OF SECTION 31, TOWNSHIP 2 SOUTH, RANGE 5 WEST SALT LAKE BASE AND MERIDIAN (FOUND 2.5" BRASS DISC)

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7. 3'x3' CATCH BASIN. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

RETENTION BASIN A

8. BASIN TOP = 4300.00 FT
   HIGH-WATER ELEVATION = 4299.00 FT
   BASING BOTTOM = 4296.00 FT
   REQUIRED VOLUME = 40,300 C.F.
   PROVIDED VOLUME = 41,742 C.F.
9. 100 YEAR AND 200 YEAR FLOW PATHS.
10. NOT USED

RETENTION BASIN B

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    HIGH-WATER ELEVATION = 4299.00 FT
    BASIN BOTTOM = 4295.00 FT
    REQUIRED VOLUME = 14,991 C.F.
    PROVIDED VOLUME = 17,593 C.F.
12. INSTALL RIP RAP 6" D50 12" THICK OVER WEED BARRIER MIRAFI 150 N

NOTE: MAY CONTAIN KEYNOTES THAT ARE NOT USED ON THIS SHEET.

HORIZONTAL GRAPHIC SCALE

20 0 10 20 40

(IN FEET)
HORZ: 1 inch = 20 ft.

ENSIGN
THE STANDARD IN ENGINEERING

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CONTACT:
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PHONE: 435-850-8436

TOWNHOMES ON WILLOW PUD

WILLOW STREET
GRANTSVILLE, UTAH

PROFESSIONAL ENGINEER
10924116-2202
COREY J. CHILD
STATE OF UTAH
5-04-25

GRADING AND DRAINAGE PLAN

PROJECT NUMBER	PRINT DATE
10898A	2025-04-30
DRAWN BY	CHECKED BY
H. CARTER	C. CHILD
PROJECT MANAGER	
C. CHILD	

C-202

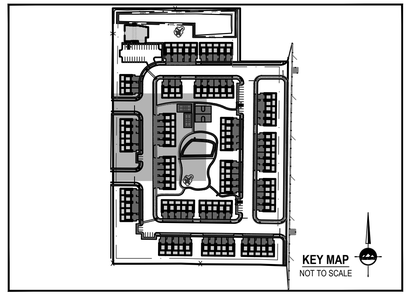
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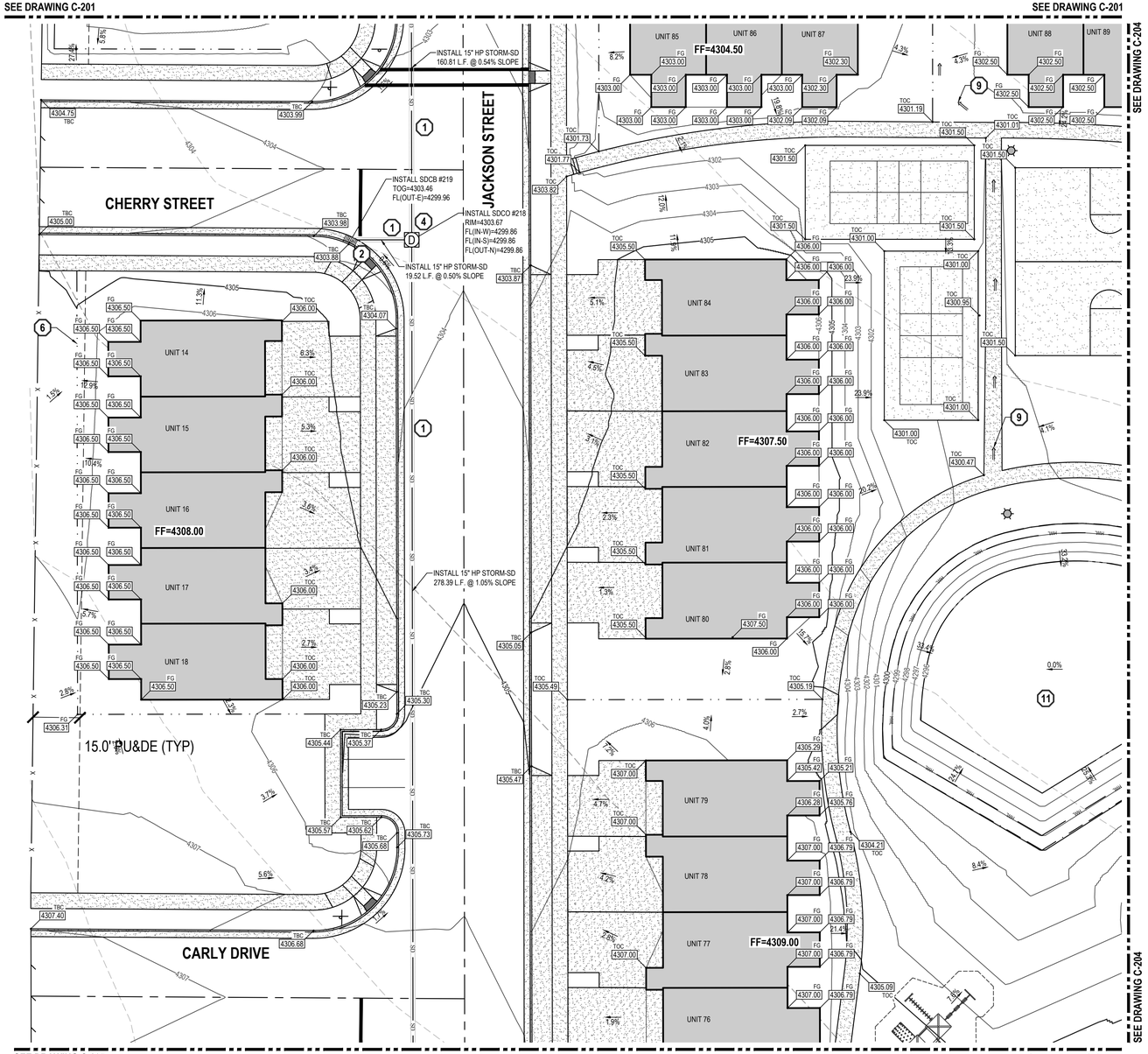
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BENCHMARK

SOUTHWEST QUARTER CORNER OF SECTION 31, TOWNSHIP 2 SOUTH, RANGE 5 WEST SALT LAKE BASE AND MERIDIAN (FOUND 2.5" BRASS DISC)

ELEV = 4360.80'





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NORTH

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5-04-25

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PROJECT NUMBER	PRINT DATE
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DRAWN BY	CHECKED BY
H. CARTER	C. CHILD

PROJECT MANAGER
C. CHILD

C-203

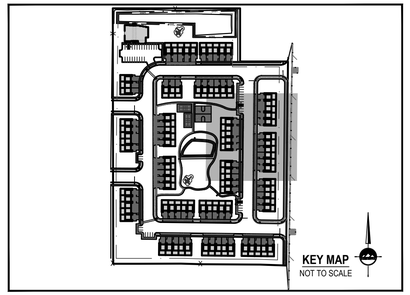
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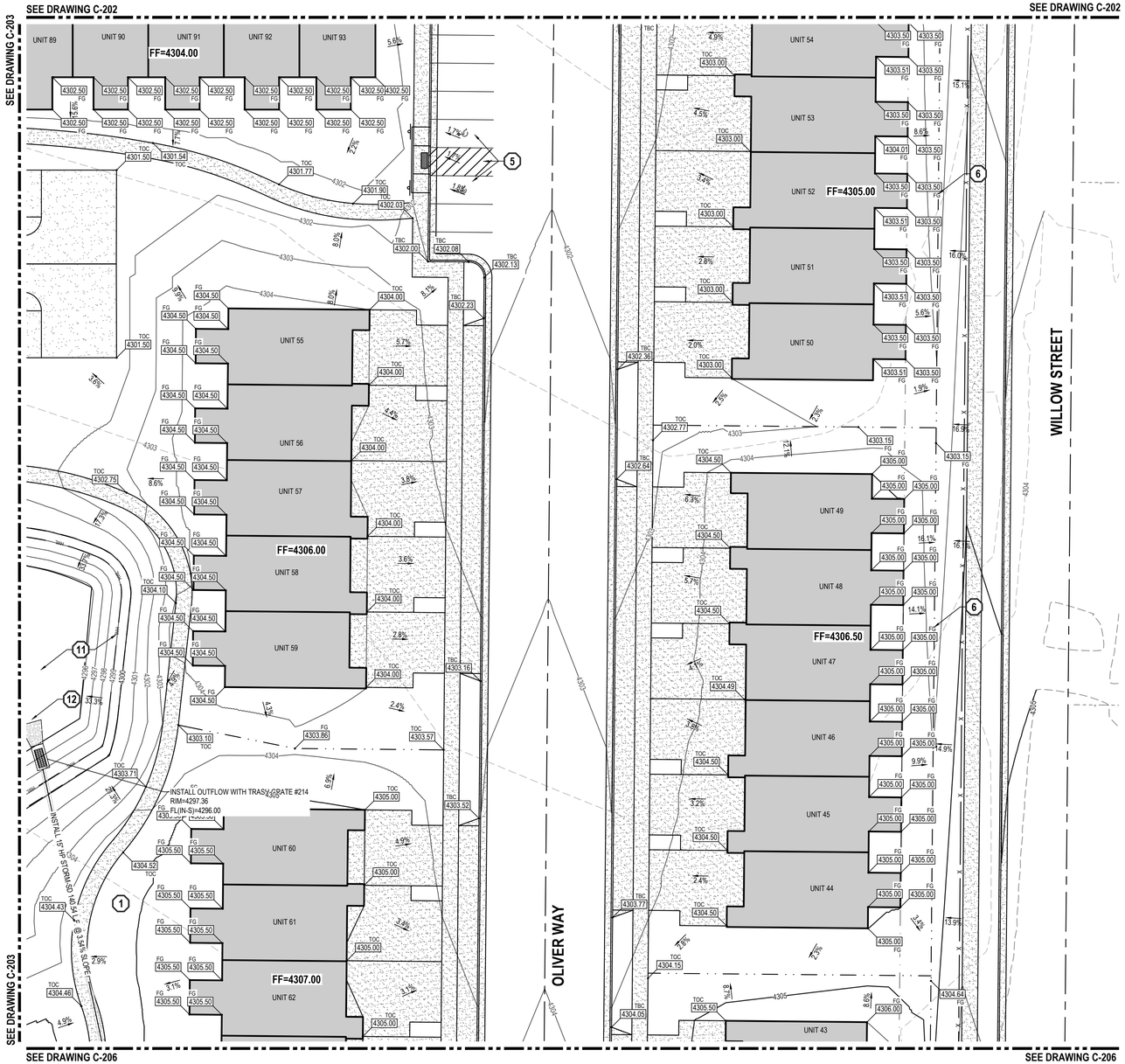
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RETENTION BASIN A

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WILLOW STREET
GRANTSVILLE, UTAH

PROFESSIONAL ENGINEER
10924116-2202
2025-04-30
COREY J. CHILD
STATE OF UTAH

GRADING AND DRAINAGE PLAN

PROJECT NUMBER	PRINT DATE
10868A	2025-04-30
DRAWN BY	CHECKED BY
H. CARTER	C. CHILD
PROJECT MANAGER	
C. CHILD	

C-204

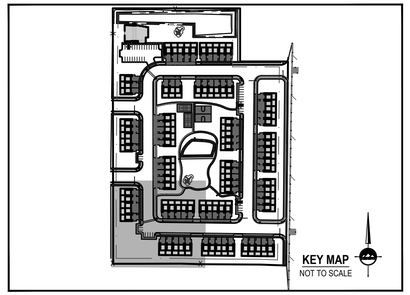
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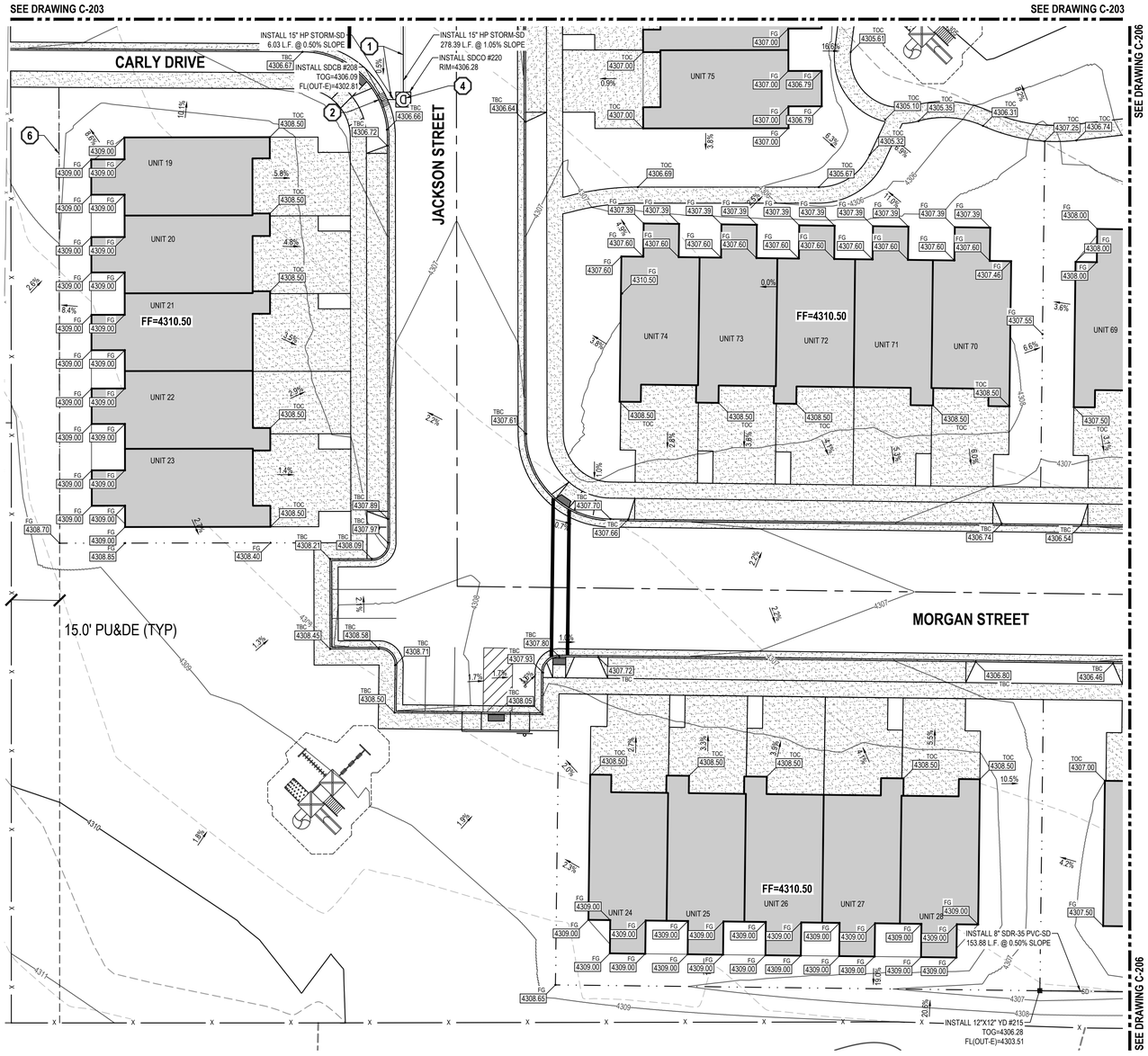
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2025-04-30

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PROJECT NUMBER	PRINT DATE
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DRAWN BY	CHECKED BY
H. CARTER	C. CHILD
PROJECT MANAGER	
C. CHILD	

C-205

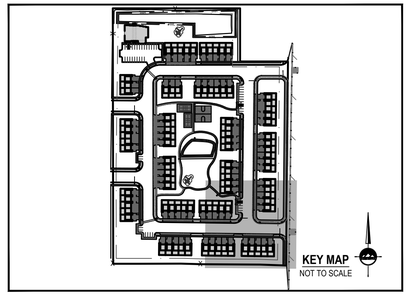
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7. ALL STORM DRAIN INFRASTRUCTURE TO BE INSTALLED PER GOVERNING AGENCY OR APWA STANDARD PLANS AND SPECIFICATIONS.
8. ENSURE MINIMUM COVER OVER ALL STORM DRAIN PIPES PER MANUFACTURER'S RECOMMENDATIONS. NOTIFY ENGINEER IF MINIMUM COVER CANNOT BE ATTAINED.
9. ALL FACILITIES WITH DOWNSPOUTS/ROOF DRAINS SHALL BE CONNECTED TO THE STORM DRAIN SYSTEM. SEE PLUMBING PLANS FOR DOWNSPOUT/ROOF DRAIN LOCATIONS AND SIZES. ALL ROOF DRAINS TO HAVE MINIMUM 1% SLOPE.
10. THE CONTRACTOR SHALL ADJUST TO GRADE ALL EXISTING UTILITIES AS NEEDED PER LOCAL GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
11. NOTIFY ENGINEER OF ANY DISCREPANCIES IN DESIGN OR STAKING BEFORE PLACING CONCRETE, ASPHALT, OR STORM DRAIN STRUCTURES OR PIPES.
12. THE CONTRACTOR IS TO PROTECT AND PRESERVE ALL EXISTING IMPROVEMENTS, UTILITIES, AND SIGNS, ETC. UNLESS OTHERWISE NOTED ON THESE PLANS.

SCOPE OF WORK:

PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:

(1) STORM DRAIN LINE. INSTALLATION AND TRENCHING PER GRANTSVILLE CITY STANDARDS AND SPECIFICATIONS. LENGTH AND SLOPE PER PLAN AND PROFILES.

(2) CATCH BASIN. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

(3) CATCH BASIN COMBO BOX, PER APWA PLAN NO. 331 OR 332. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

(4) CLEANOUT BOX, PER APWA PLAN NO. 331 OR 332. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

(5) DO NOT EXCEED 2% SLOPE IN PAVING ACROSS ADA STALLS (TYP.)

(6) DRAINAGE SWELL 4' BY 1.0' DEEP. SEE DETAIL 13/C-500.

(7) 3'x3' CATCH BASIN. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

RETENTION BASIN A

(8) BASIN TOP = 4300.00 FT
HIGH-WATER ELEVATION = 4299.00 FT
BASING BOTTOM = 4296.00 FT
REQUIRED VOLUME = 40,300 C.F.
PROVIDED VOLUME = 41,742 C.F.

(9) 100 YEAR AND 200 YEAR FLOW PATHS.

(10) NOT USED

RETENTION BASIN B

(11) BASIN TOP = 4300.00 FT
HIGH-WATER ELEVATION = 4299.00 FT
BASIN BOTTOM = 4295.00 FT
REQUIRED VOLUME = 14,991 C.F.
PROVIDED VOLUME = 17,593 C.F.

(12) INSTALL RIP RAP 6" D50 12" THICK OVER WEED BARRIER MIRAFI 150 N

NOTE: MAY CONTAIN KEYNOTES THAT ARE NOT USED ON THIS SHEET.

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SEAN PERKINS
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TOWNHOMES ON WILLOW PUD

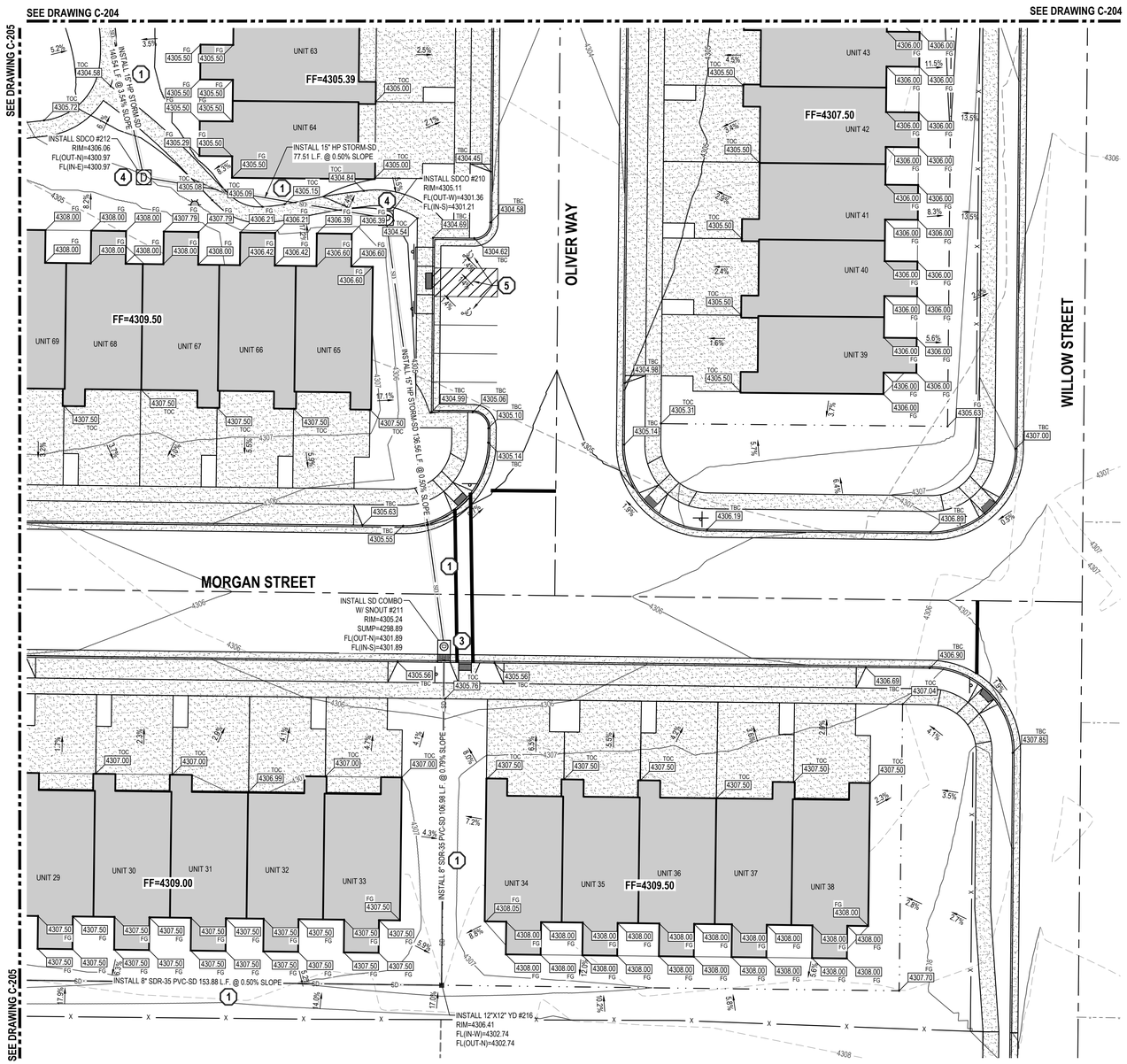
WILLOW STREET
GRANTSVILLE, UTAH

PROFESSIONAL ENGINEER
2025-04-30
10924116-2202
COREY J. CHILD
STATE OF UTAH

GRADING AND DRAINAGE PLAN

PROJECT NUMBER 10698A
PRINT DATE 2025-04-30
DRAWN BY H. CARTER
CHECKED BY C. CHILD
PROJECT MANAGER C. CHILD

C-206



HORIZONTAL GRAPHIC SCALE

20 0 10 20 40

(IN FEET)
HORZ: 1 inch = 20 ft.

BASIN A

Study Summary Statistics

No. of BUILDINGS	79
Roof SF/Lot	1112
Drive SF/Lot	788
Total Lots Hardscape, SF	150100
Road Length, FT	2725
Total Road Hardscape SF	117175
Total Hardscape, SF	267275
Total Area, SF	426149
Landscaped Area, SF	158874
Weighted Average C	0.59

Retention Calculations (200-year storm)

Basin Tributary Area	426,149	SF
Runoff coefficient C:	0.589	
Basin Area	6,768	SF
Allowable Discharge Rate	-	cfs/acre
Total Discharge	-	cfs
Infiltration Rate 2.5 in/hr safety factor of 2:	1.3	in/hr

Time (min)	i (in/hr)	Cumulative Runoff to Basin (cf)	Infiltration (cf)	Required Storage (cf)
5	7.26	12,655	59	12,597
10	5.53	19,279	118	19,162
15	4.57	23,899	176	23,722
30	3.07	32,109	353	31,756
60	1.90	39,744	705	39,039
120	1.00	41,710	1,410	**40,300**
180	0.67	41,731	2,115	39,616
360	0.34	43,175	4,230	38,945
720	0.19	46,438	8,460	37,978
1440	0.01	2,510	16,920	(14,410)
		Required Retention:		40,300
		Provided Retention:		41,742

Retention Basin Drainage Calculations (100-year storm)

Basin Tributary Area	426,149	SF
Runoff coefficient C:	0.589	
Basin Area	6,768	SF
Allowable Discharge Rate	-	cfs/acre
Total Discharge	-	cfs
Infiltration Rate 2.5 in/hr safety factor of 2:	1.3	in/hr

Time (min)	Time (days)	Cumulative Runoff to Basin (cf)	Infiltration (cf)	Required Storage (cf)
0	0.000	33,732	-	33,732
5	0.003	33,732	59	33,673
10	0.007	33,673	118	33,556
15	0.010	33,556	176	33,380
30	0.021	33,380	353	33,027
60	0.042	33,027	705	32,322
120	0.083	32,322	1,410	30,912
180	0.125	30,912	2,115	28,797
360	0.250	28,797	4,230	24,567
720	0.500	24,567	8,460	16,107
1440	1.00	16,107	16,920	(813)

BASIN B

Study Summary Statistics

No. of BUILDINGS	54
Roof SF/Lot	1112
Drive SF/Lot	788
Total Lots Hardscape, SF	102600
Road Length, FT	672
Total Road Hardscape SF	20786
Total Hardscape, SF	123386
Total Area, SF	173438
Landscaped Area, SF	50052
Weighted Average C	0.65

Retention Calculations (100-year storm)

Basin Tributary Area	173,438	SF
Runoff coefficient C:	0.648	
Basin Area	3,568	SF
Allowable Discharge Rate	-	cfs/acre
Total Discharge	-	cfs
Infiltration Rate 2.5 in/hr safety factor of 2:	1.3	in/hr

Time (min)	i (in/hr)	Cumulative Runoff to Basin (cf)	Infiltration (cf)	Required Storage (cf)
5	6.07	4,737	31	4,706
10	4.62	7,211	62	7,149
15	3.82	8,944	93	8,851
30	2.57	12,035	186	11,849
60	1.59	14,891	372	14,519
120	0.84	15,734	743	**14,991**
180	0.56	15,790	1,115	14,675
360	0.30	16,633	2,230	14,403
720	0.17	18,768	4,460	14,308
1440	0.10	21,803	8,920	12,883
		Required Retention:		14,991
		Provided Retention:		17,593

Retention Basin Drainage Calculations (100-year storm)

Basin Tributary Area	173,438	SF
Runoff coefficient C:	0.648	
Basin Area	3,568	SF
Allowable Discharge Rate	-	cfs/acre
Total Discharge	-	cfs
Infiltration Rate 2.5 in/hr safety factor of 2:	1.3	in/hr

Time (min)	Time (days)	Cumulative Runoff to Basin (cf)	Infiltration (cf)	Required Storage (cf)
0	0.000	14,991	-	14,991
5	0.003	14,991	31	14,960
10	0.007	14,960	62	14,898
15	0.010	14,898	93	14,805
30	0.021	14,805	186	14,619
60	0.042	14,619	372	14,247
120	0.083	14,247	743	13,504
180	0.125	13,504	1,115	12,389
360	0.250	12,389	2,230	10,159
720	0.500	10,159	4,460	5,699
1440	1.00	5,699	8,920	(3,221)

Catchment Calculations (10-year storm)

Time of Concentration:	30	min
Rainfall Intensity I:	1.34	in/hr
PVC Manning's N	0.009	

Catchment	Area (SF)	C	Flow (CFS)	Destination
1	72,524	0.250	0.562	BASIN A
2	15,190	0.860	0.405	203
3	4,149	0.100	0.013	204
4	41,334	0.840	1.077	205
5	36,217	0.640	0.719	219
6	35,462	0.560	0.616	208
7	128,502	0.760	3.029	209
8	82,690	0.580	1.488	211
9	90,748	0.440	1.239	BASIN B
10	92,771	0.660	1.899	206

Pipe Design (10-year storm)

Pipe	Tributary Basins	Surface Flow	Upstream	Pipe Flow	Total Flow	Pipe Slope	Diameter (IN)	Full Flow	% of Full-Flow
211-210	8	1.488	215-216, 216-211	0.000	1.488	0.50%	15	6.616	22.5%
210-212	-	0.000	211-210	1.488	1.488	0.50%	15	6.616	22.5%
212-214	-	0.000	210-212	1.488	1.488	0.67%	15	7.658	19.4%
208-220	6	0.616	None	0.000	0.616	0.50%	15	6.616	9.3%
220-218	-	0.000	208-220	0.616	0.616	1.08%	15	9.723	6.3%
219-218	5	0.719	None	0.000	0.719	0.50%	15	6.616	10.9%
218-204	-	0.000	219-218, 220-218	1.335	1.335	0.54%	15	6.875	19.4%
204-203	3	0.013	218-204	1.335	1.348	0.58%	15	7.125	18.9%
203-202	2	0.405	204-203	1.348	1.753	0.50%	15	6.616	26.5%
206-207	10	1.899	None	0.000	1.899	0.50%	15	6.616	28.7%
209-207	7	3.029	None	0.000	3.029	0.50%	15	6.616	45.8%
207-205	-	0.000	209-207, 206-207	4.929	4.929	0.50%	18	10.758	45.8%
205-213	4	1.077	207-205	4.929	6.006	0.50%	18	10.758	55.8%
213-201	-	0.000	205-213	6.006	6.006	0.50%	18	10.758	55.8%

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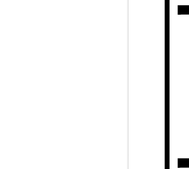
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TOWNHOMES ON WILLOW PUD
WILLOW STREET
GRANTSVILLE, UTAH



DRAINAGE CALCULATIONS

PROJECT NUMBER	PRINT DATE
10898A	2025-04-30
DRAWN BY	CHECKED BY
H. CARTER	C. CHILD
PROJECT MANAGER	
C. CHILD	

C-207

NOAA Atlas 14, Volume 1, Version 5
Location name: Grantsville, Utah, USA*
Latitude: 40.595°, Longitude: -112.4504°
Elevation: mft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches/hour)[1]

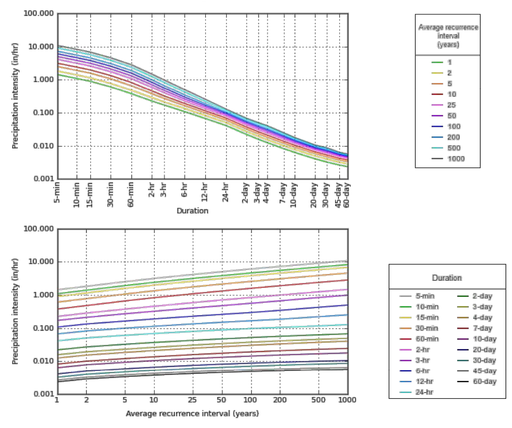
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	1.44 (1.26-1.62)	1.82 (1.62-2.09)	2.52 (2.23-2.87)	3.16 (2.77-3.59)	4.15 (3.58-4.73)	5.03 (4.22-5.77)	6.07 (4.97-7.06)	7.26 (5.75-8.58)	9.13 (6.90-11.0)	10.8 (7.87-13.3)
10-min	1.09 (0.960-1.24)	1.39 (1.24-1.58)	1.92 (1.70-2.18)	2.41 (2.11-2.73)	3.16 (2.72-3.60)	3.82 (3.21-4.40)	4.62 (3.78-5.37)	5.53 (4.37-6.53)	6.95 (5.26-8.37)	8.24 (5.99-10.1)
15-min	0.904 (0.792-1.02)	1.15 (1.02-1.31)	1.59 (1.41-1.81)	1.99 (1.75-2.26)	2.61 (2.25-2.98)	3.16 (2.66-3.63)	3.82 (3.12-4.44)	4.57 (3.62-5.40)	5.74 (4.34-6.92)	6.82 (4.96-8.36)
30-min	0.608 (0.534-0.688)	0.774 (0.688-0.882)	1.07 (0.948-1.22)	1.34 (1.18-1.52)	1.76 (1.51-2.00)	2.13 (1.79-2.45)	2.57 (2.11-2.99)	3.07 (2.43-3.63)	3.87 (2.92-4.66)	4.59 (3.34-5.53)
60-min	0.376 (0.330-0.426)	0.479 (0.426-0.546)	0.661 (0.587-0.753)	0.828 (0.728-0.940)	1.09 (0.937-1.24)	1.32 (1.11-1.51)	1.59 (1.30-1.85)	1.90 (1.51-2.25)	2.39 (1.81-2.88)	2.84 (2.06-3.48)
2-hr	0.225 (0.204-0.251)	0.284 (0.258-0.318)	0.374 (0.340-0.418)	0.456 (0.410-0.509)	0.586 (0.516-0.656)	0.704 (0.605-0.795)	0.840 (0.702-0.958)	0.997 (0.808-1.16)	1.25 (0.958-1.49)	1.47 (1.09-1.79)
3-hr	0.171 (0.158-0.188)	0.212 (0.194-0.234)	0.271 (0.249-0.299)	0.322 (0.293-0.355)	0.405 (0.361-0.445)	0.475 (0.416-0.535)	0.562 (0.480-0.645)	0.665 (0.554-0.780)	0.839 (0.661-0.999)	0.990 (0.751-1.20)
6-hr	0.108 (0.100-0.117)	0.134 (0.124-0.144)	0.163 (0.152-0.176)	0.190 (0.176-0.204)	0.228 (0.209-0.246)	0.260 (0.234-0.282)	0.296 (0.262-0.325)	0.344 (0.298-0.395)	0.426 (0.357-0.506)	0.497 (0.408-0.609)
12-hr	0.067 (0.063-0.072)	0.082 (0.077-0.089)	0.100 (0.093-0.108)	0.114 (0.106-0.123)	0.134 (0.124-0.145)	0.150 (0.137-0.164)	0.167 (0.150-0.184)	0.185 (0.164-0.207)	0.222 (0.192-0.252)	0.252 (0.213-0.306)
24-hr	0.041 (0.038-0.044)	0.051 (0.047-0.055)	0.061 (0.056-0.066)	0.069 (0.064-0.075)	0.080 (0.074-0.087)	0.088 (0.081-0.096)	0.097 (0.089-0.105)	0.105 (0.096-0.114)	0.117 (0.106-0.128)	0.128 (0.113-0.155)
2-day	0.022 (0.021-0.024)	0.027 (0.025-0.029)	0.033 (0.030-0.035)	0.037 (0.034-0.040)	0.043 (0.040-0.048)	0.047 (0.044-0.051)	0.052 (0.049-0.056)	0.057 (0.052-0.061)	0.063 (0.057-0.068)	0.068 (0.061-0.078)
3-day	0.016 (0.015-0.017)	0.019 (0.018-0.021)	0.023 (0.022-0.025)	0.026 (0.025-0.028)	0.031 (0.029-0.033)	0.034 (0.032-0.037)	0.038 (0.035-0.041)	0.041 (0.038-0.044)	0.046 (0.042-0.050)	0.050 (0.045-0.055)
4-day	0.013 (0.012-0.014)	0.015 (0.014-0.017)	0.018 (0.017-0.020)	0.021 (0.020-0.023)	0.025 (0.023-0.027)	0.027 (0.025-0.030)	0.030 (0.028-0.033)	0.033 (0.030-0.036)	0.037 (0.034-0.040)	0.040 (0.036-0.044)
7-day	0.008 (0.008-0.009)	0.010 (0.009-0.011)	0.012 (0.011-0.013)	0.014 (0.013-0.015)	0.016 (0.015-0.017)	0.017 (0.016-0.019)	0.019 (0.018-0.021)	0.021 (0.019-0.022)	0.023 (0.021-0.025)	0.025 (0.022-0.027)
10-day	0.006 (0.006-0.007)	0.008 (0.007-0.008)	0.009 (0.009-0.010)	0.010 (0.010-0.011)	0.012 (0.011-0.013)	0.013 (0.012-0.014)	0.014 (0.013-0.015)	0.015 (0.014-0.017)	0.017 (0.016-0.018)	0.018 (0.016-0.019)
20-day	0.004 (0.004-0.004)	0.005 (0.005-0.005)	0.006 (0.006-0.006)	0.007 (0.006-0.007)	0.008 (0.007-0.008)	0.008 (0.008-0.009)	0.009 (0.008-0.009)	0.009 (0.009-0.010)	0.010 (0.009-0.011)	0.011 (0.010-0.011)
30-day	0.003 (0.003-0.003)	0.004 (0.004-0.004)	0.005 (0.004-0.005)	0.005 (0.005-0.006)	0.006 (0.006-0.006)	0.007 (0.006-0.007)	0.007 (0.007-0.008)	0.008 (0.007-0.008)	0.008 (0.008-0.009)	0.009 (0.008-0.009)
45-day	0.003 (0.002-0.003)	0.003 (0.003-0.003)	0.004 (0.004-0.004)	0.004 (0.004-0.004)	0.005 (0.005-0.005)	0.005 (0.005-0.005)	0.006 (0.005-0.006)	0.006 (0.005-0.006)	0.006 (0.006-0.007)	0.006 (0.006-0.007)
60-day	0.002 (0.002-0.003)	0.003 (0.003-0.003)	0.003 (0.003-0.004)	0.004 (0.004-0.004)	0.004 (0.004-0.004)	0.005 (0.004-0.005)	0.005 (0.005-0.005)	0.005 (0.005-0.005)	0.005 (0.005-0.006)	0.006 (0.005-0.006)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).
Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.
Please refer to NOAA Atlas 14 document for more information.

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PF graphical

PDS-based intensity-duration-frequency (IDF) curves
Latitude: 40.5950°, Longitude: -112.4504°





NOAA Atlas 14, Volume 1, Version 5 Created (GMT): Wed Feb 16 21:12:19 2022

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Maps & aerials

Small scale terrain

Retention Calculations (100-year storm)

$I_{Rate} := 2.5 \frac{in}{hr}$ $Infiltration_{Rate} := \frac{I_{Rate}}{2}$

Weighted Average $C := 0.589$

$BasinTributary_{Area} := 426149\ ft^2$ $Basin_{Side} := 26795\ ft^2$ $Basin_{FloorArea} := 18326\ ft^2$

$Total_{Discharge} := AllowableDischarge_{Rate} \frac{1\ acre}{43560\ ft^2} \cdot Basin_{FloorArea}$

$AllowableDischarge_{Rate} := \frac{0\ ft^3\ sec}{acre}$

$Total_{Discharge} = 0\ ft^3\ sec$

Time 5 (min) (Factor of Safety with basin floor Only)

$Time := 5\ min$ $Intensity := 6.07 \frac{in}{hr}$

Culmulative Runoff to Basin $Run_{off} := Intensity \frac{1\ ft}{12\ in} \cdot Time \frac{1\ hr}{60\ min} \cdot BasinTributary_{Area} \cdot C$ $Run_{off} = 10580.4215\ ft^3$

Infiltration $Infiltration_{Basin} := Infiltration_{Rate} \frac{1\ ft}{12\ in} \cdot Basin_{FloorArea} \cdot Time \frac{1\ hr}{60\ min} + Time \frac{1\ hr}{60\ min} \cdot Total_{Discharge}$ $Infiltration_{Basin} = 159.0799\ ft^3$

Required Storage $Required_{Stoarge} := Run_{off} - Infiltration_{Basin}$ $Required_{Stoarge} = 10421.3416\ ft^3$

Time 5 (min) (Basin floor & sides)

$Time := 5\ min$ $Intensity := 6.07 \frac{in}{hr}$ $Basin_{WetArea} := Basin_{FloorArea} + Basin_{Side}$

Culmulative Runoff to Basin $Run_{off} := Intensity \frac{1\ ft}{12\ in} \cdot Time \frac{1\ hr}{60\ min} \cdot BasinTributary_{Area} \cdot C$ $Run_{off} = 10580.4215\ ft^3$

Infiltration $Infiltration_{Basin} := Infiltration_{Rate} \frac{1\ ft}{12\ in} \cdot Basin_{WetArea} \cdot Time \frac{1\ hr}{60\ min} + Time \frac{1\ hr}{60\ min} \cdot Total_{Discharge}$ $Infiltration_{Basin} = 391.6753\ ft^3$

Required Storage $Required_{Stoarge} := Run_{off} - Infiltration_{Basin}$ $Required_{Stoarge} = 10188.7461\ ft^3$

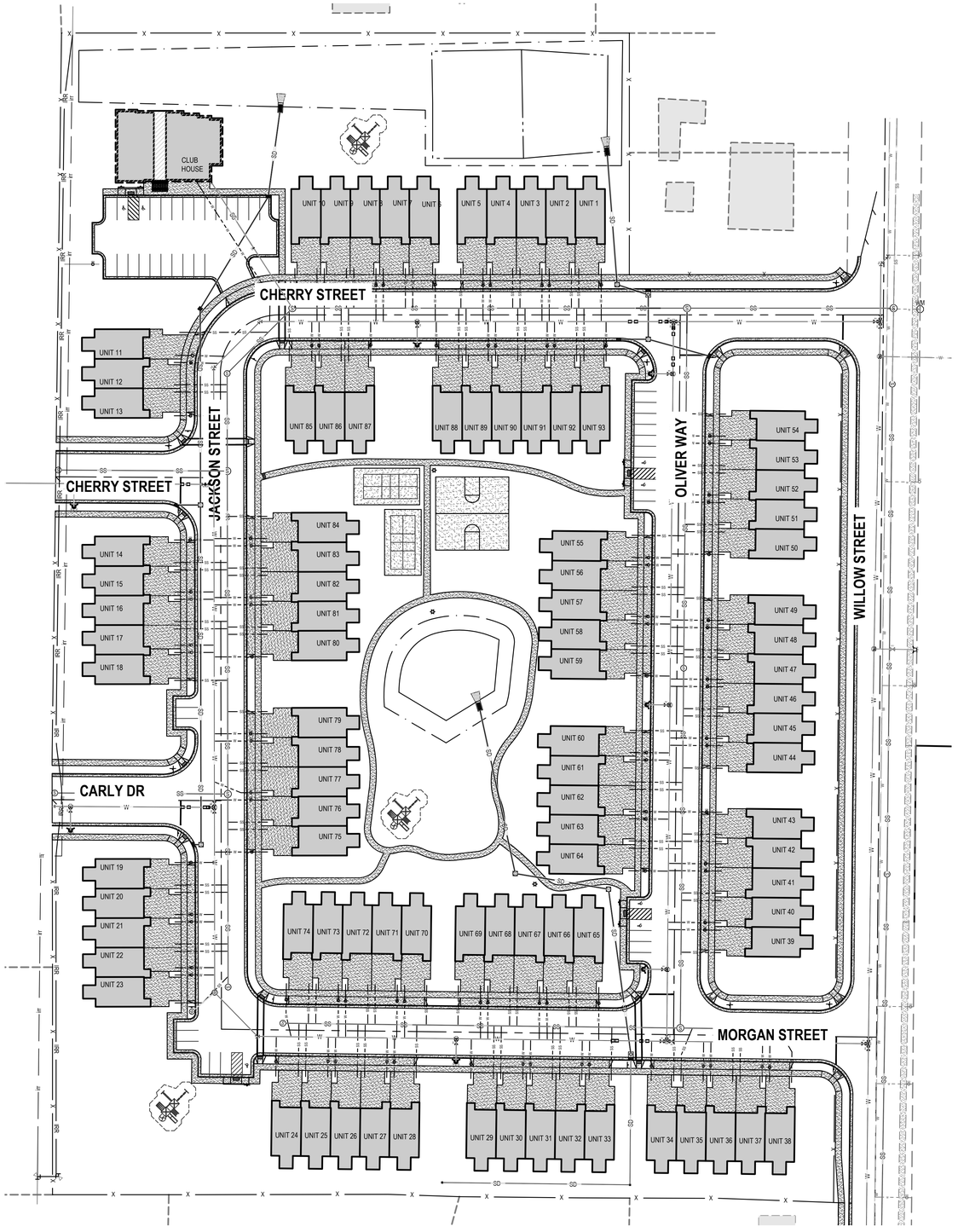
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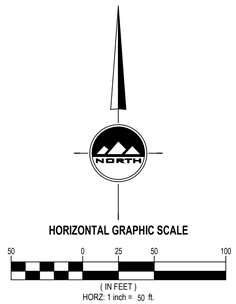
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BENCHMARK

SOUTHWEST QUARTER CORNER OF SECTION 31, TOWNSHIP 2 SOUTH, RANGE 5 WEST SALT LAKE BASE AND MERIDIAN (FOUND 2.5" BRASS DISC)

ELEV = 4360.80'





GENERAL NOTES

1. ALL WORK TO COMPLY WITH THE GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
2. EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATIONS BASED UPON RECORD INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. LOCATIONS MAY NOT HAVE BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND LOCATION OF THE UTILITIES SHOWN ON THESE PLANS OR INDICATED IN THE FIELD BY LOCATING SERVICES. ANY ADDITIONAL COSTS INCURRED AS A RESULT OF THE CONTRACTOR'S FAILURE TO VERIFY THE LOCATIONS OF EXISTING UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION IN THEIR VICINITY SHALL BE BORNE BY THE CONTRACTOR AND ASSUMED INCLUDED IN THE CONTRACT. THE CONTRACTOR IS TO VERIFY ALL CONNECTION POINTS WITH THE EXISTING UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED TO THE EXISTING UTILITIES AND UTILITY STRUCTURES THAT ARE TO REMAIN. IF CONFLICTS WITH EXISTING UTILITIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONSTRUCTION TO DETERMINE IF ANY FIELD ADJUSTMENTS SHOULD BE MADE.
3. ALL SANITARY SEWER INFRASTRUCTURE TO BE INSTALLED PER GOVERNING AGENCY STANDARD PLANS AND SPECIFICATIONS.
4. ALL WATER INFRASTRUCTURE TO BE INSTALLED PER GOVERNING AGENCY OR APWA STANDARD PLANS AND SPECIFICATIONS.
6. DEFLECT OR LOOP ALL WATERLINES TO AVOID CONFLICTS WITH OTHER UTILITIES PER GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
7. PROJECT SHALL COMPLY WITH ALL UTAH DIVISION OF DRINKING WATER RULES AND REGULATIONS INCLUDING, BUT NOT LIMITED TO, THOSE PERTAINING TO BACKFLOW PROTECTION AND CROSS CONNECTION PREVENTION.
8. THE CONTRACTOR IS TO COORDINATE ALL UTILITIES WITH MECHANICAL/PLUMBING PLANS.
9. NOTIFY ENGINEER OF ANY DISCREPANCIES IN DESIGN OR STAKING BEFORE PLACING UTILITY STRUCTURES OR PIPES.
10. THE CONTRACTOR SHALL ADJUST TO GRADE ALL EXISTING UTILITIES AS NEEDED PER LOCAL GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
11. THE CONTRACTOR IS TO PROTECT AND PRESERVE ALL EXISTING IMPROVEMENTS, UTILITIES, AND SIGNS, ETC. UNLESS OTHERWISE NOTED ON THESE PLANS.

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TOWNHOMES ON WILLOW PUD

WILLOW STREET
GRANTSVILLE, UTAH

PROFESSIONAL ENGINEER
10924116-2202
COREY J. CHILD
STATE OF UTAH
2025-04-30

OVERALL UTILITY PLAN

PROJECT NUMBER	PRINT DATE
10898A	2025-04-30
DRAWN BY	CHECKED BY
H. CARTER	C. CHILD
PROJECT MANAGER	
C. CHILD	

C-300

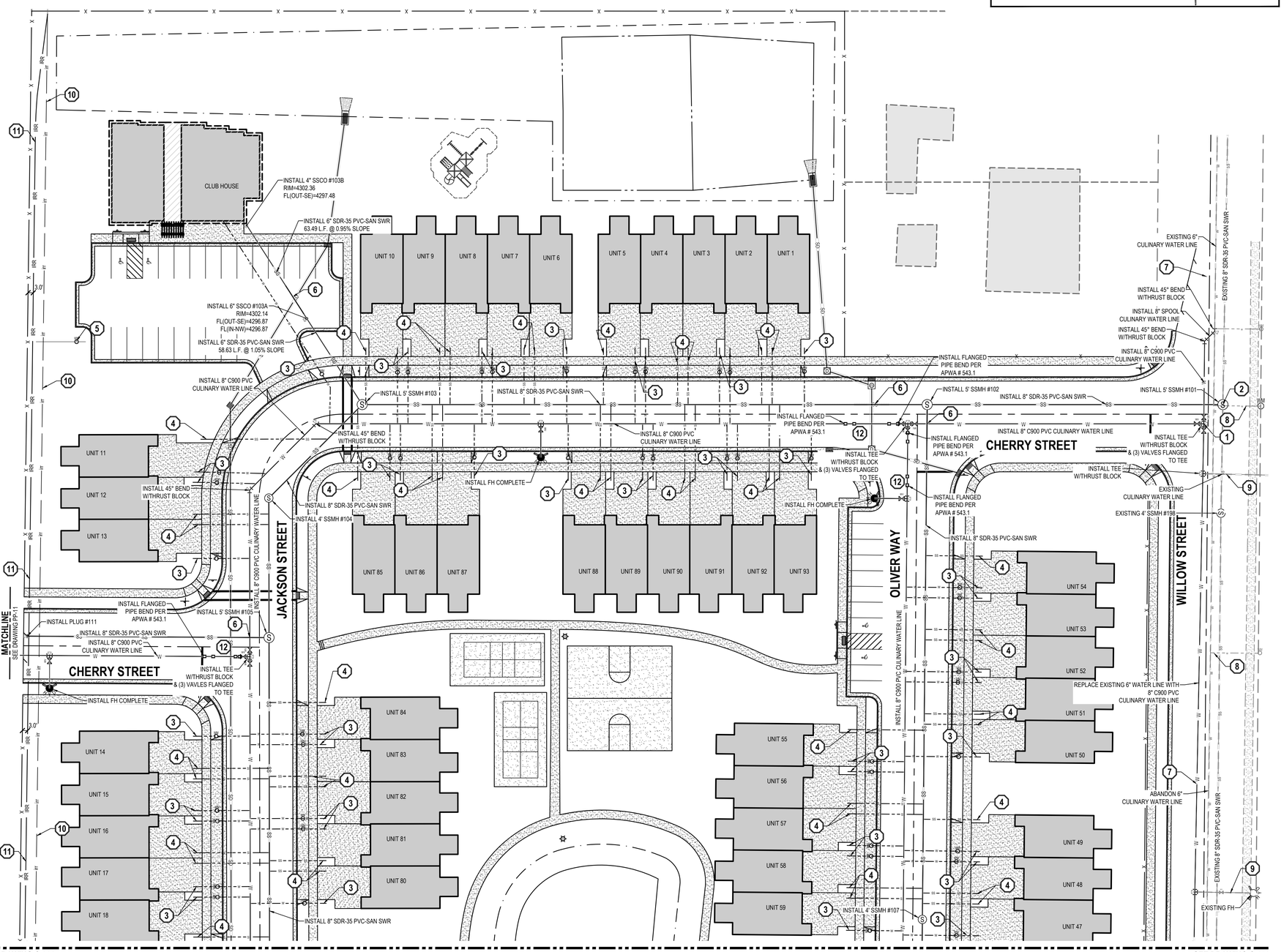
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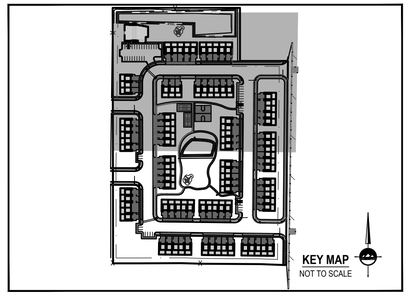
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BENCHMARK

SOUTHWEST QUARTER CORNER OF SECTION 31, TOWNSHIP 2 SOUTH, RANGE 5 WEST SALT LAKE BASE AND MERIDIAN (FOUND 2.5" BRASS DISC)

ELEV = 4360.80'





GENERAL NOTES

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SCOPE OF WORK:

PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:

1. CONNECT TO EXISTING WATER LINE PER GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
2. CONNECT TO EXISTING SANITARY SEWER LINE PER GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
3. INSTALL 1" HDPE SDR 9 CULINARY WATER SERVICE LATERAL AND 1" METER SET PER APWA STANDARD PLAN NO. 521, LOCATED APPROX. 3' FROM LOT CORNER, TYPICAL. INSTALL METER IN CONCRETE TRAFFIC RATED VAULT WHERE LOCATED IN DRIVEWAY. INSTALL PVC CASING TWICE THE SIZE OF LATERAL ON ALL LATERALS THAT DONT HAVE MIN 18" OF SEPARATION ABOVE OR BELOW SEWER LINE OR WATER LINE. 20' IN LENGTH CENTERED ON CROSSING WITH 10-FT ON EACH SIDE. JOINTS ON WATERLINE MUST BE 10-FT MINIMUM AWAY FROM CROSSING.
4. INSTALL 4" SANITARY SEWER SERVICE LATERAL @ 2.0% MINIMUM SLOPE PER APWA PLAN NO. 431, TYPICAL. INSTALL PVC CASING TWICE THE SIZE OF LATERAL ON ALL LATERALS THAT DONT HAVE MIN 18" OF SEPARATION ABOVE OR BELOW SEWER LINE OR WATER LINE. 20' IN LENGTH CENTERED ON CROSSING WITH 10-FT ON EACH SIDE. JOINTS ON WATERLINE MUST BE 10-FT MINIMUM AWAY FROM CROSSING.
5. INSTALL SECONDARY 1.5" WATER METER PER AWPA 522 AND 1.5" SDR 9 250 PSI BLUE ULTRA CTS POLY PIPE SECONDARY SERVICE LATERAL PER GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS. CONTRACTOR TO VERIFY EXISTING SIZE AND EXISTING LOCATION. SEE L-200 FOR IRRIGATION DETAILS.
6. WATER LINE SEWER CROSSING . INSTALL SDR-35 PVC CASING, 20-FT IN LENGTH CENTERED ON CROSSING WITH 10-FT ON EACH SIDE. CASING DIAM. TO BE 4-INCHES LARGER THAN CARRIER PIPE. JOINTS ON WATERLINE MUST BE 10-FT MINIMUM AWAY FROM CROSSING.
7. CONTRACTOR TO COORDINATE WITH GRANTSVILLE CITY ON REPLACE WATER LINE IN WILLOW STREET WITH 8" WATERLINE.
8. ABANDON LATERAL AND INSTALL 1" HDPE SDR 9 CULINARY WATER SERVICE LATERAL CONNECTED TO THE NEW 8" WATERLINE.
9. RECONNECT EXISTING WATER LINE AND FIRE HYDRANTS, MATCH EXISTING VALVE COUNT. COORDINATE WITH GRANTSVILLE CITY.
10. EXISTING 8" IRRIGATION MAIN TO BE REMOVED CONTRACTOR TO FIELD VERIFY LOCATION. CURRENT LOCATION BETWEEN 10' - 15' OF PROPERTY LINE
11. CONTRACTOR TO COORDINATE WITH GRANTSVILLE IRRIAGTION CO. ON INSTALLING NEW 8" C900 IRRIGATION MAIN 5' FROM PROPERTY, MIN 4' DEEP.
12. CONTRACTOR TO MAINTAIN 18" OF SEPARATION BETWEEN INTERSECTING PIPE LINES. IOP CULINARY WATER LINE PER GRANSTVILLE CITY AND APWA PLAN # 543.1, #543.2, #562 STANDARDS AND SPECIFICATIONS.

NOTE: MAY CONTAIN KEYNOTES THAT ARE NOT USED ON THIS SHEET.



HORIZONTAL GRAPHIC SCALE

30 0 15 30 60

(IN FEET)

HORZ: 1 inch = 30 ft.

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PROFESSIONAL ENGINEER
10924116-2202
5-04-25
COREY J. CHILD
STATE OF UTAH

UTILITY PLAN

PROJECT NUMBER	PRINT DATE
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H. CARTER	C. CHILD
PROJECT MANAGER	
C. CHILD	

C-301

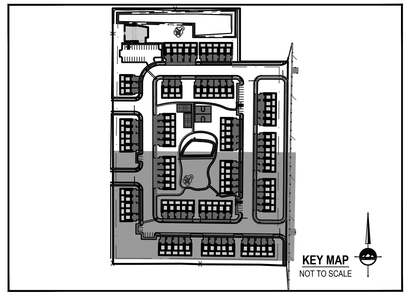
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BENCHMARK

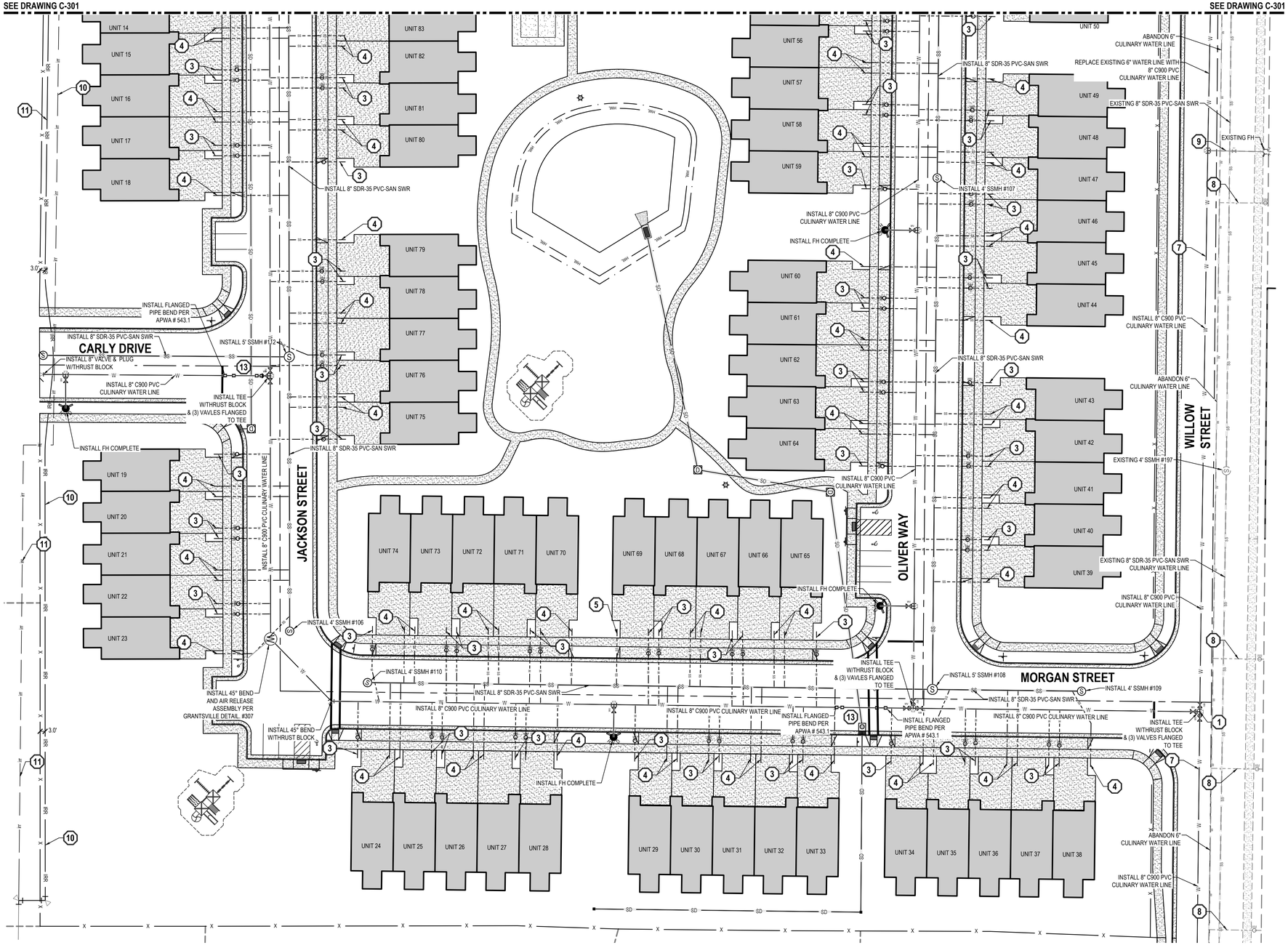
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SEE DRAWING C-301

SEE DRAWING C-301



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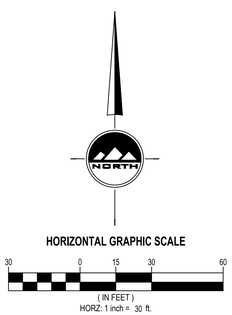
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UTILITY PLAN



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C-302

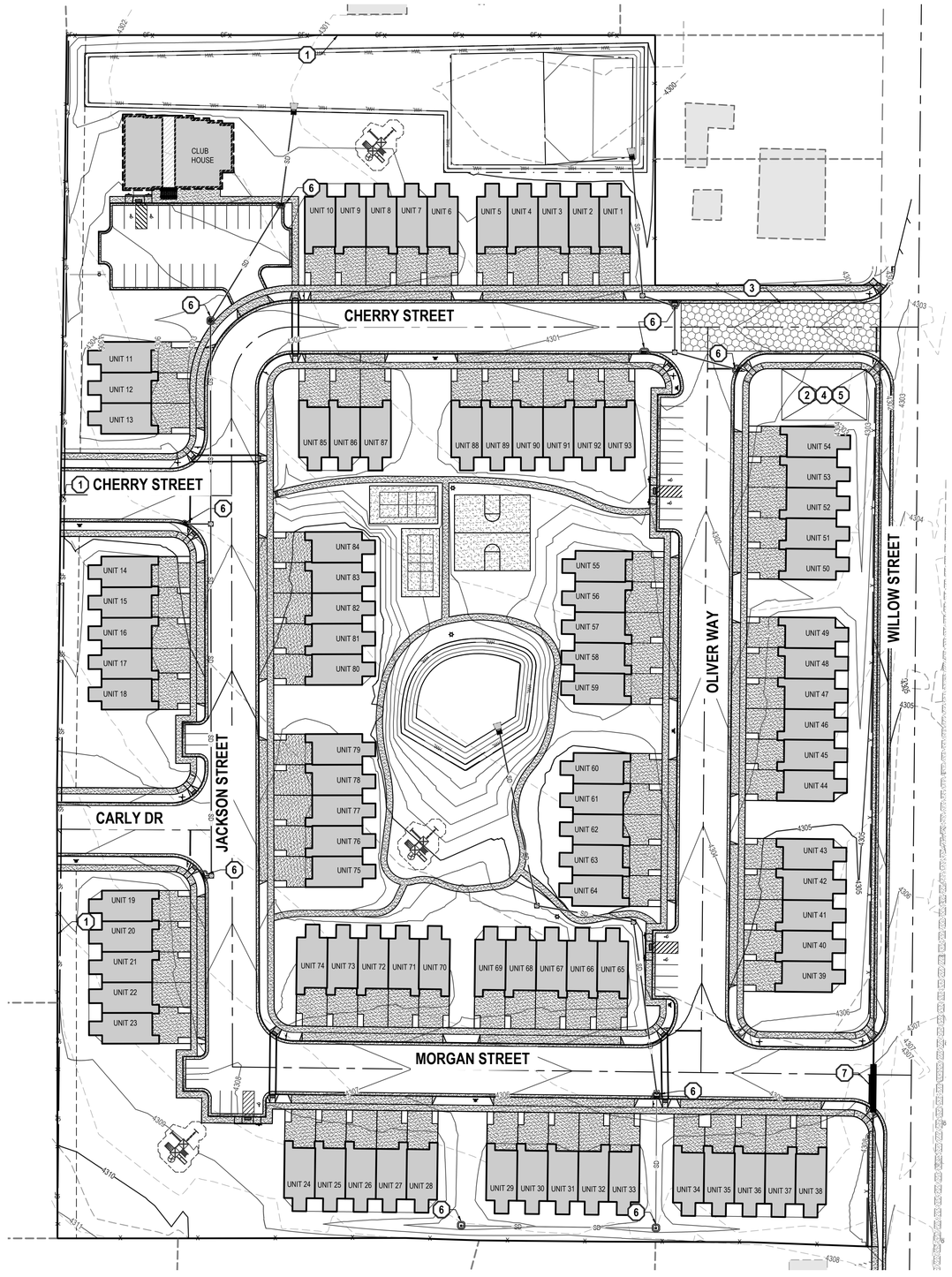
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ELEV = 4360.80'



GENERAL NOTES

1. THIS PLAN IS DESIGNED AS A FIRST APPRAISAL OF NECESSARY MEANS TO PROTECT THE WATERS OF THE STATE FROM POTENTIAL POLLUTION. IT IS THE RESPONSIBILITY OF THE OWNER/OPERATOR TO ADD WARRANTED BEST MANAGEMENT PRACTICES (BMP'S) AS NECESSARY, MODIFY THOSE SHOWN AS APPROPRIATE, AND DELETE FROM THE PROJECT THOSE FOUND TO BE UNNECESSARY. FEDERAL AND STATE LAW ALLOWS THESE UPDATES TO BE MADE BY THE OWNER/OPERATOR ONSITE AND RECORDED BY THE OWNER/OPERATOR ON THE COPY OF THE SWPPP KEPT ONSITE.
2. DISTURBED LAND SHALL BE KEPT TO A MINIMUM. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. HOWEVER, WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 21 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.
3. RESEED DISTURBED LAND WITH NATIVE GRASS MIXTURE WITHIN 14 CALENDAR DAYS OF ACHIEVEMENT OF FINISH GRADE TO STABILIZE SOILS IF LAND IS NOT TO BE RE-WORKED WITHIN 14 CALENDAR DAYS OF THE CESSATION OF CONSTRUCTION ACTIVITIES AT THAT LOCATION.
4. DETAILS SHOWN ARE TO BE EMPLOYED TO PROTECT RUNOFF AS APPROPRIATE DURING CONSTRUCTION. NOT ALL DETAILS ARE NECESSARY AT ALL PHASES OF THE PROJECT. IT SHALL BE THE RESPONSIBILITY OF THE OWNER/OPERATOR TO USE APPROPRIATE BEST MANAGEMENT PRACTICES AT THE APPROPRIATE PHASE OF CONSTRUCTION. SEE SWPPP FOR BMP IMPLEMENTATION SCHEDULE.
5. VARIOUS BEST MANAGEMENT PRACTICES HAVE BEEN SHOWN ON THE PLANS AT SUGGESTED LOCATIONS. THE CONTRACTOR MAY MOVE AND RECONFIGURE THESE BMP'S TO OTHER LOCATIONS IF PREFERRED, PROVIDED THE INTENT OF THE DESIGN IS PRESERVED.
6. NOT ALL POSSIBLE BMP'S HAVE BEEN SHOWN. THE CONTRACTOR IS RESPONSIBLE TO APPLY CORRECT MEASURES TO PREVENT THE POLLUTION OF STORM WATER PER PROJECT SWPPP.

SCOPE OF WORK:

PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:

1. SILT FENCE OR BERM PER DETAIL 3/C-500.
2. PORTABLE TOILET PER DETAIL 5/C-500.
3. VEHICLE WASHDOWN AND STABILIZED CONSTRUCTION ENTRANCE PER DETAIL 4/C-500.
4. SUGGESTED TEMPORARY CONSTRUCTION SITE PARKING, STAGING, DUMPSTER, AND MATERIAL STORAGE AREA.
5. SUGGESTED STOCKPILE AREA.
6. INLET PROTECTION PER DETAIL 6/C-500.
7. BARRICADE ENTRANCE DURING CONSTRUCTION.

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REVISION SCHEDULE

NUMBER	DATE	AUTHOR	COMPANY REPRESENTATIVE SIGNATURE
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			

NORTH

HORIZONTAL GRAPHIC SCALE

50 0 25 50 100

(IN FEET)

HORZ: 1 inch = 50 ft.

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PHONE: 435-850-8436

TOWNHOMES ON WILLOW PUD

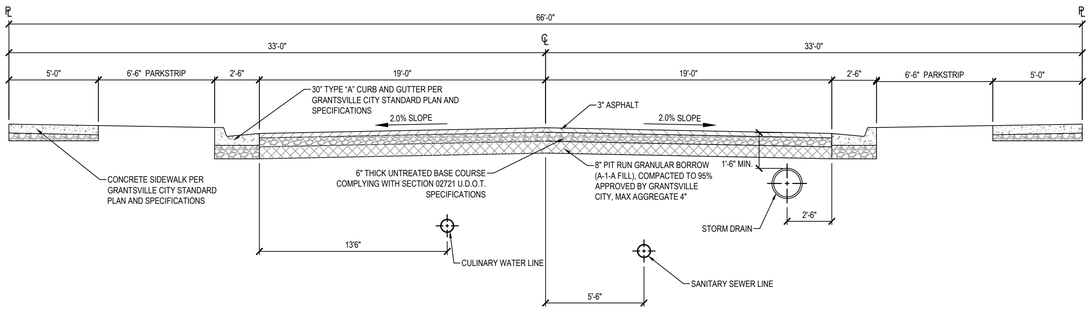
WILLOW STREET
GRANTSVILLE, UTAH

PROFESSIONAL ENGINEER 10924116-2202 COREY J. CHILD STATE OF UTAH
25-04-30

EROSION CONTROL PLAN

PROJECT NUMBER 10898A
PRINT DATE 2025-04-30
DRAWN BY H. CARTER
CHECKED BY C. CHILD
PROJECT MANAGER C. CHILD

C-400

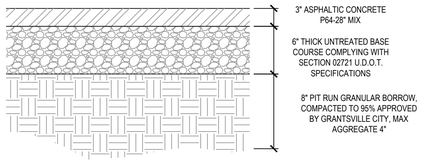


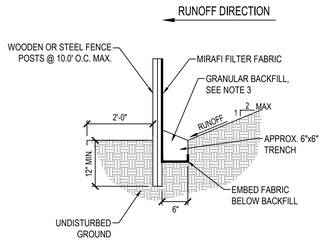
1 TYPICAL 66 FOOT ROAD CROSS SECTION

SCALE: NONE

ASPHALT NOTES

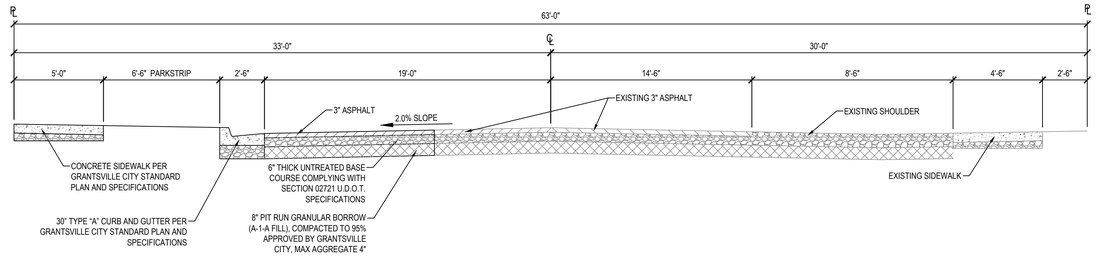
1. ALL PAVING TO BE PLACED OVER PROPERLY PREPARED NATURAL SOILS AND/OR PROPERLY PREPARED EXISTING FILL SOILS AND PROPERLY COMPACTED STRUCTURAL FILL WHERE SPECIFIED.
2. ALL STRUCTURAL FILL TO BE COMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE AASHTO T-180 (D-1557) METHOD OF COMPACTION. LIFTS SHOULD NOT EXCEED 8" IN LOOSE THICKNESS.
3. REMOVE SURFACE VEGETATION AND OTHER DELETERIOUS MATERIALS OVER THE ENTIRE SITE IN PREPARATION OF PROPOSED IMPROVEMENTS.





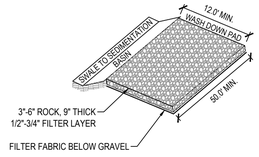
NOTES:

1. EXCAVATE 6"x6" TRENCH ALONG LIMITS OF DISTURBANCE AS SHOWN ON CONSTRUCTION DRAWINGS.
2. POSTS SHALL BE POSITIONED ON DOWNSTREAM SIDE OF FENCE.
3. LAY TOE-IN FABRIC FLAP IN BOTTOM OF TRENCH. BACKFILL TRENCH WITH FREE DRAINING GRANULAR MATERIAL. COMPACT TRENCH TO SATISFACTION OF THE ENGINEER OF RECORD.
4. SILT FENCE GEOTEXTILE SHALL MEET AASHTO M288-92 REQUIREMENTS.
5. REMOVE & DISPOSE OF SEDIMENT WHEN ACCUMULATION IS 50% OF EXPOSED FENCE HEIGHT.
6. 10' MAX. SPACING BETWEEN STAKES.
7. SILT FENCES SHALL BE INSTALLED ALONG CONTOURS, NOT UP AND DOWN SLOPES, WITH 10' OVERLAP AT BREAKS.



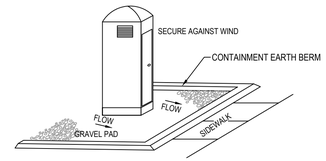
1A WILLOW STREET 63 FOOT ROAD CROSS SECTION

SCALE: NONE



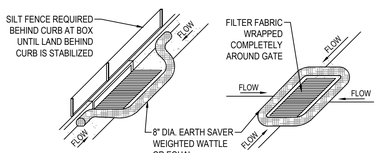
NOTE:

1. PLACE SIGN ADJACENT TO ENTRANCE " CONSTRUCTION TRAFFIC ONLY - ALL CONSTRUCTION TRAFFIC SHALL ENTER AND EXIT SITE AT THIS LOCATION"

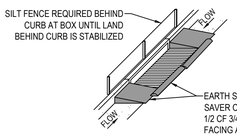


2 STANDARD ASPHALT SECTION

SCALE: NONE



WATTLE OPTION



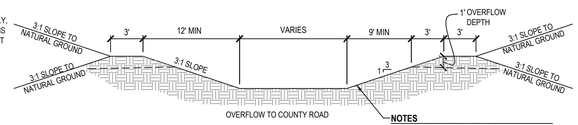
SANDBAG OPTION

NOTES:

1. PLACE WATTLES OR GRAVEL BAGS TIGHT AGAINST CURB TO PREVENT SEDIMENT-LADEN WATER FROM GETTING BETWEEN CURB AND WATTLE/BAG.
2. PLACE WATTLES OR GRAVEL BAGS SUCH THAT FLOW DOES NOT OVERTOP CURB OR ROAD CENTERLINE.
3. INSPECT INLET PROTECTION AFTER EVERY LARGE STORM EVENT AND AT LEAST BI-WEEKLY, OR PER SWPPP REQUIREMENTS, WHICHEVER IS MORE STRINGENT, TO ENSURE THAT SEDIMENT CONTROL IS MEETING ITS DESIGN INTENT. MAINTAIN AND/OR REPLACE AS NEEDED.
4. REMOVE SEDIMENT ACCUMULATED WHEN IT REACHES 50% OF GRAVEL BAG OR WATTLE HEIGHT.
5. CONTRACTOR MAY SUBMIT AN ALTERNATIVE METHOD OF INLET PROTECTION. THE ALTERNATIVE METHOD SHALL BE APPROVED BY THE CITY INSPECTOR AND THE ENGINEER OF RECORD.
6. BEFORE PLACEMENT OF CURB, STABILIZATION OF LAND BEHIND CURB, AND/OR PAVING, MAINTAIN TOP OF INLET AT 6" ABOVE GRADE, AND SURROUND WITH SILT FENCE FOR SEDIMENTATION AROUND BOX. MAINTAIN SILT FENCE BEHIND BOX UNTIL LAND BEHIND CURB IS STABILIZED.

3 TEMPORARY SILT FENCE

SCALE: NONE

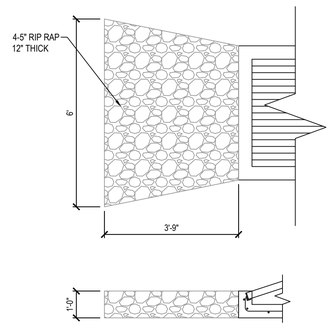


NOTES

- BASIN NEEDS TO BE RE-ESTABLISHED WITH NATIVE SEED/PLANTS.
- OWNERS MAY CHANGE LANDSCAPING PLANTS/SEED.
- OWNERS SHALL NOT BE ALLOWED TO REDUCE THE CAPACITY OF THE RETENTION BASINS IN ANY WAY.

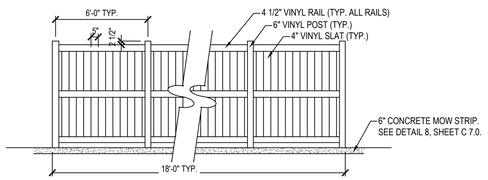
4 STABILIZED CONSTRUCTION ENTRANCE

SCALE: NONE



5 PORTABLE TOILET

SCALE: NONE



NOTES:
6' SOLID VINYL FENCE TO BE CONSTRUCTED PER GRANTSVILLE CITY STANDARDS AND SPECIFICATIONS

6 SAG INLET PROTECTION

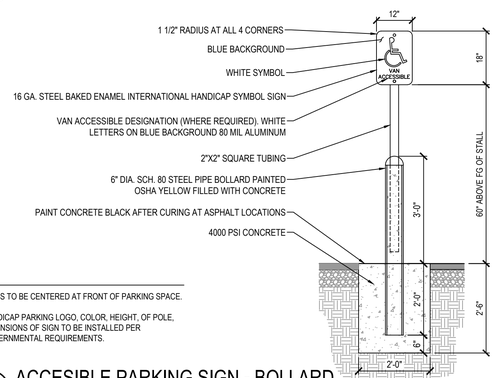
SCALE: NONE

7 RETENTION BASIN LAYOUT

SCALE: NONE

8 RIP RAP DETAIL

SCALE: NONE

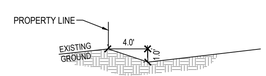


NOTES:

1. SIGNS TO BE CENTERED AT FRONT OF PARKING SPACE.
2. HANDICAP PARKING LOGO, COLOR, HEIGHT, OF POLE, DIMENSIONS OF SIGN TO BE INSTALLED PER GOVERNMENTAL REQUIREMENTS.

9 6' VINYL FENCE WITH MOW STRIP

SCALE: NONE



NOTES:
1. PROTECT CHANNEL FROM EROSION AS NECESSARY WITH RIP RAP, EROSION CONTROL MATS AND /OR ROCK CHECK DAMS
2. SEDIMENT TRAPS REQUIRED AT 200' SPACING OR AS SHOWN ON PLANS, WHICHEVER IS MORE STRINGENT.
3. FOR SWALES STEEPER THAN 5%, STABILIZE SWALES WITH RIP RAP LINING IN SWALE AND ROCK CHECK DAMS SPACED AT EVERY THREE FEET OF DROP IN FLOWLINE.

10 NOT USED

SCALE: NONE

11 NOT USED

SCALE: NONE

12 ACCESIBLE PARKING SIGN - BOLLARD

SCALE: NONE

13 DRAINAGE SWALE

SCALE: NONE

ENSIGN
THE STANDARD IN ENGINEERING

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SALT LAKE CITY
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TOWNHOMES ON WILLOW PUD

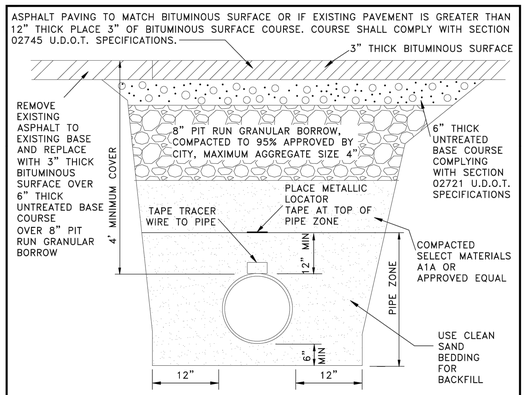
WILLOW STREET
GRANTSVILLE, UTAH

PROFESSIONAL ENGINEER
2025-04-30
10924116-2202
COREY J. CHILD
STATE OF UTAH

DETAILS

PROJECT NUMBER	PRINT DATE
10898A	2025-04-30
DRAWN BY	CHECKED BY
H. CARTER	C. CHILD
PROJECT MANAGER	
C. CHILD	

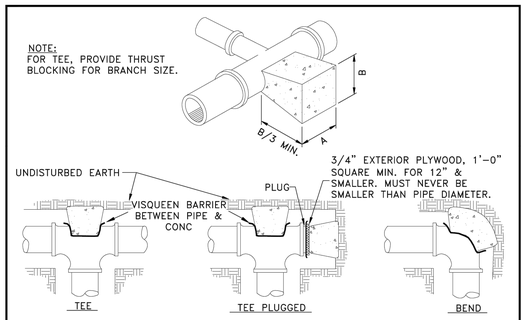
C-500



NOTES:
1. PIPES & FITTINGS SHALL BE LEAD FREE.
2. ASBESTOS CEMENT PIPE SHALL NOT BE ALLOWED.
3. WATER MAINS & SEWER LINES SHALL NOT BE INSTALLED IN THE SAME TRENCH.
4. ALL PIPES, FITTINGS & APPURTENANCES SHALL BE NSF-61 CERTIFIED.
5. ALL NEW OR REPLACED WATER LINES SHALL BE FLUSHED & DISINFECTED PER AWWA STANDARD C651 LATEST EDITION.
6. MATERIAL THICKNESS MAY CHANGE AS DIRECTED BY THE CITY ENGINEER BASED UPON FINDINGS AND RECOMMENDATIONS IN GEOTECHNICAL REPORT.
7. FOR WATER METERS NOT CONNECTED TO FIRE HYDRANTS, THE MINIMUM LINE SIZE SHALL BE 4" IN DIAMETER, UNLESS THEY SERVE PICNIC SITES, PARKS, SEMI-DEVELOPED CAMPS, PRIMITIVE CAMPS, OR ROADWAY REST-STOPS. MINIMUM WATER MAIN SIZE SERVICING A FIRE HYDRANT LATERAL SHALL BE 8 INCHES IN DIAMETER UNLESS A HYDRAULIC ANALYSIS INDICATES THAT REQUIRED FLOW AND PRESSURES CAN BE MAINTAINED BY 6" LINES. [UAC R309-550-5(4)].
8. ALL TYPES OF INSTALLED PIPE SHALL BE PRESSURE TESTED AND LEAKAGE TESTED IN ACCORDANCE WITH AWWA C600 (LATEST EDITION).
9. UNDER NO CIRCUMSTANCES SHALL THE PIPE OR ACCESSORIES BE DROPPED INTO THE TRENCH.

LOCATED IN SURFACED ROAD

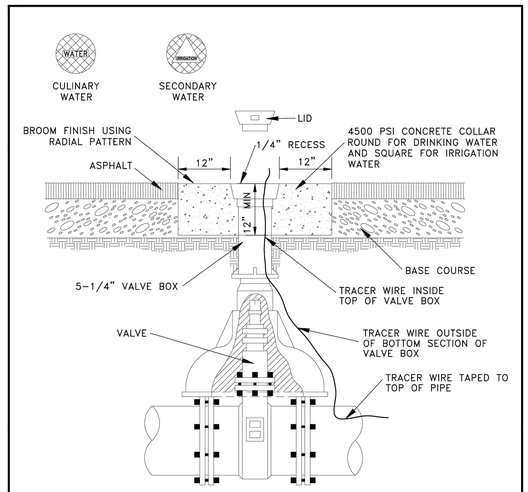
SCALE:			SHEET
NTS	GRANTSVILLE	GRANTSVILLE CITY	6-41
10/15/2024		UTILITY TRENCH FOR WATER MAIN	



DIMENSIONS FOR THRUST BLOCKING								
FITTING	TEES & PLUGS		90° BENDS		45° BENDS & "Y"S		22 1/2° BENDS	
SIZES	A	B	A	B	A	B	A	B
4"	1'-6"	1'-6"	1'-6"	1'-9"	1'-3"	0'-6"	1'-0"	0'-6"
6"	2'-0"	1'-0"	2'-0"	2'-0"	1'-3"	1'-6"	1'-0"	1'-5"
8"	2'-0"	1'-6"	2'-3"	2'-3"	1'-8"	1'-8"	1'-0"	1'-3"
10"	2'-6"	2'-3"	2'-9"	2'-10"	2'-3"	1'-10"	1'-3"	2'-0"
12"	3'-0"	2'-9"	3'-6"	3'-3"	2'-6"	2'-4"	2'-0"	1'-6"
14"	3'-5"	3'-0"	4'-0"	3'-8"	3'-6"	2'-4"	2'-0"	2'-3"
16"	4'-0"	3'-6"	5'-0"	4'-0"	3'-6"	3'-0"	2'-6"	2'-3"
18"	4'-0"	4'-3"	6'-0"	4'-0"	4'-0"	3'-3"	2'-9"	2'-6"
20"	5'-0"	4'-3"	6'-0"	5'-0"	4'-3"	4'-0"	3'-0"	2'-9"
24"	6'-0"	5'-3"	8'-0"	5'-6"	6'-0"	4'-0"	4'-0"	3'-0"

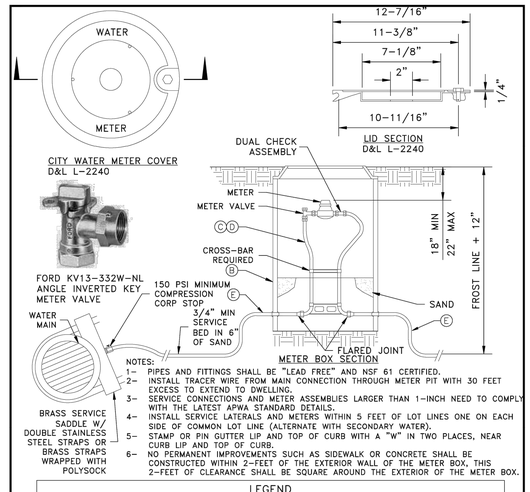
NOTES:
1. THIS TABLE IS BASED ON 200 P.S.I. MAIN PRESSURE AND 2000 P.S.F. SOIL BEARING PRESSURE. ADJUST BEARING AREAS IN ACCORDANCE WITH SOIL CONDITIONS AND PRESSURES ENCOUNTERED.
2. USE POLYETHYLENE ENCASEMENT BETWEEN CONCRETE AND PIPE.
3. REFER TO CONCRETE STANDARD SPECIFICATIONS.
4. THE "THRUST BLOCKING DETAILS" IN NO WAY LIMITS THE LOCATION OR SIZE OF ADDITIONAL BLOCKING WHEN SO WARRANTED OR REQUIRED BY THE ENGINEER.
5. THRUST BLOCKS NEED TO BE INSPECTED BY CITY PRIOR TO BACKFILL.

SCALE:			SHEET
NTS	GRANTSVILLE	GRANTSVILLE CITY	6-42
10/15/2024		THRUST BLOCK DETAIL	



NOTES:
1. RAISE VALVE BOX AND PLACE CONCRETE COLLAR AFTER PAVING OPERATION IS COMPLETED.
2. ALL PIPES, FITTINGS & APPURTENANCES SHALL BE NSF-61 CERTIFIED.
3. BURIED GATE VALVES SHALL BE USED FOR LINES 10-INCHES AND SMALLER. BURIED BUTTERFLY VALVES SHALL BE USED FOR LINES 12-INCHES AND LARGER.
4. ISOLATION VALVES SHALL BE PROVIDED AT NO MORE THAN 500-FOOT INTERVALS IN COMMERCIAL DISTRICTS AND AT NOT MORE THAN ONE BLOCK OR 800-FOOT INTERVALS IN OTHER DISTRICTS, [UAC 309-550-5(8)].

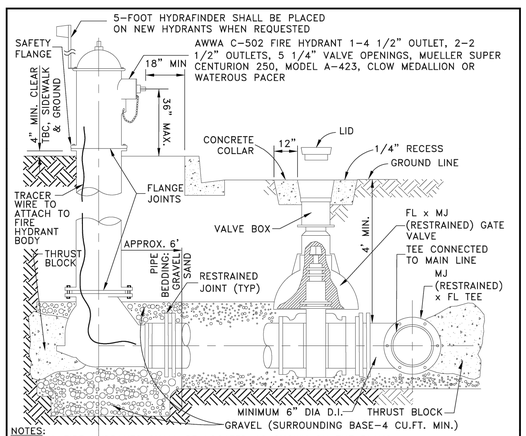
SCALE:			SHEET
NTS	GRANTSVILLE	GRANTSVILLE CITY	6-43
10/15/2024		VALVE BOX COLLAR DETAIL	



NOTES:
1- PIPES AND FITTINGS SHALL BE "LEAD FREE" AND NSF 61 CERTIFIED.
2- INSTALL TRACER WIRE FROM MAIN CONNECTION THROUGH METER PIT WITH 30 FEET EXCESS TO EXTEND TO DWELLING.
3- SERVICE CONNECTIONS AND METER ASSEMBLIES LARGER THAN 1-INCH NEED TO COMPLY WITH THE LATEST APWA STANDARD DETAILS.
4- INSTALL SERVICE LATERALS AND METERS WITHIN 5 FEET OF LOT LINES ONE ON EACH SIDE OF COMMON LOT LINE (ALTERNATE WITH SECONDARY WATER).
5- STAMP OR PIN GUTTER LIP AND TOP OF CURB WITH A "W" IN TWO PLACES, NEAR CURB LIP AND TOP OF CURB.
6- NO PERMANENT IMPROVEMENTS SUCH AS SIDEWALK OR CONCRETE SHALL BE CONSTRUCTED WITHIN 2-FEET OF THE EXTERIOR WALL OF THE METER BOX, THIS 2-FEET OF CLEARANCE SHALL BE SQUARE AROUND THE EXTERIOR OF THE METER BOX.

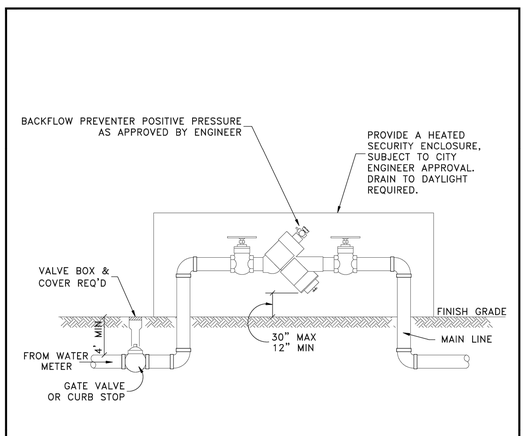
LEGEND			
No	*	ITEM	DESCRIPTION
(A)		FRAME AND COVER	CAST IRON COVER (GRASS) DUCTILE IRON COVER (DRIVEWAY)
(B)		METER BOX (21" DIAMETER) (30" TO 36" DEEP)	WHITE CORRUGATED PE
(C)		3/4" METER YOKE	DUAL CHECK ASSEMBLY REQUIRED
(D)		1" METER YOKE	OPTIONAL BACKFLOW PROTECTION PER AGENCY REQUIREMENTS
(E)		3/4" AND 1" SERVICE LINE	HDPE IPS SIDR 7

SCALE:			SHEET
NTS	GRANTSVILLE	GRANTSVILLE CITY	6-44
10/15/2024		SERVICE CONNECTION & METER ASSEMBLY	



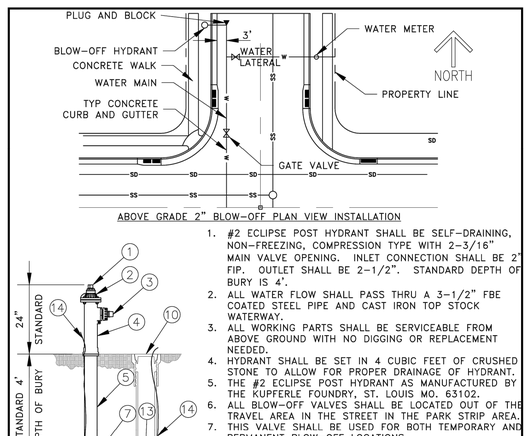
NOTES:
1. ALL FIRE HYDRANTS SHALL BE LOCATED AS SHOWN ON THE PLANS.
2. ALL FIRE HYDRANTS WILL STAND PLUMB WITH THE PUMPER NOZZLE FACING THE STREET.
3. THE VALVE WILL BE LOCATED AS APPROVED BY CITY. PIPE MATERIAL SHALL BE DUCTILE.
4. FOR DETAILED INFORMATION SEE SPECIFICATIONS.
5. RESTRAIN ALL JOINTS FROM MAIN TO FIRE HYDRANT.
6. CONCRETE VALVE COLLAR SHALL BE BROOM FINISHED IN RADIAL PATTERN.
7. ALL NEW OR REPLACED WATER LINES SHALL BE FLUSHED & DISINFECTED PER AWWA STANDARD C651 LATEST EDITION.
8. PROVIDE 3-FOOT CLEAR SPACE AROUND THE CIRCUMFERENCE OF FIRE HYDRANTS (IFC 507.5.5)
9. HYDRANT DRAINS SHALL NOT BE CONNECTED TO, OR LOCATED WITHIN, 10 FEET OF SANITARY SEWERS. WHERE POSSIBLE, HYDRANT DRAINS SHALL NOT BE LOCATED WITHIN 10 FEET OF STORM DRAINS. [UAC R309-550-6(5)(a)]
10. MINIMUM WATER MAIN SIZE SERVICING A FIRE HYDRANT LATERAL SHALL BE 8 INCHES IN DIAMETER UNLESS A HYDRAULIC ANALYSIS INDICATES THAT REQUIRED FLOW AND PRESSURES CAN BE MAINTAINED BY 6" LINES. [UAC R309-550-5(4)]

SCALE:			SHEET
NTS	GRANTSVILLE	GRANTSVILLE CITY	6-46
10/15/2024		FIRE HYDRANT ASSEMBLY	



NOTES:
1. ALL PIPES, FITTING & APPURTENANCES SHALL BE NSF-61 CERTIFIED.
2. ALL NEW OR REPLACED WATER LINES SHALL BE FLUSHED & DISINFECTED PER AWWA STANDARD C651 LATEST EDITION.

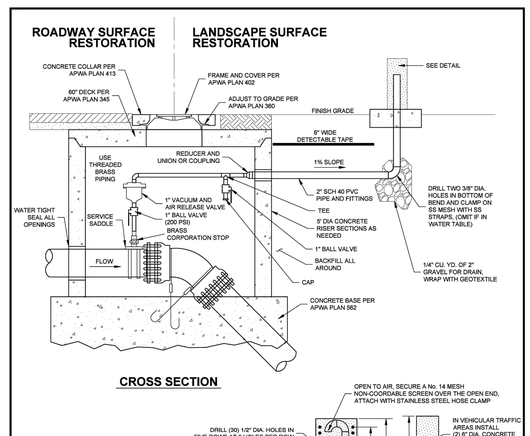
SCALE:			SHEET
NTS	GRANTSVILLE	GRANTSVILLE CITY	6-54
10/15/2024		TYPICAL BACKFLOW PREVENTER INSTALLATION	



1. #2 ECLIPSE POST HYDRANT SHALL BE SELF-DRAINING, NON-FREEZING, COMPRESSION TYPE WITH 2-3/16" MAIN VALVE OPENING. INLET CONNECTION SHALL BE 2" FIP. OUTLET SHALL BE 2-1/2". STANDARD DEPTH OF BURY IS 4'.
2. ALL WATER FLOW SHALL PASS THRU A 3-1/2" FBE COATED STEEL PIPE AND CAST IRON TOP STOCK WATERWAY.
3. ALL WORKING PARTS SHALL BE SERVICEABLE FROM ABOVE GROUND WITH NO DIGGING OR REPLACEMENT NEEDED.
4. HYDRANT SHALL BE SET IN 4 CUBIC FEET OF CRUSHED STONE TO ALLOW FOR PROPER DRAINAGE OF HYDRANT.
5. THE #2 ECLIPSE POST HYDRANT AS MANUFACTURED BY THE KUPFERLE FOUNDRY, ST. LOUIS MO. 63102.
6. ALL BLOW-OFF VALVES SHALL BE LOCATED OUT OF THE TRAVEL AREA IN THE STREET IN THE PARK STRIP AREA.
7. THIS VALVE SHALL BE USED FOR BOTH TEMPORARY AND PERMANENT BLOW-OFF LOCATIONS.

ITEM	ITEM/DESCRIPTION
1	OPERATING SCREW
2	TOP CAP
3	SIDE CAP
4	TOP STOCK
5	3-1/2" FBE COATED STEEL PIPE
6	DRAIN HOLE
7	COUPLING
8	INLET VALVE BODY
9	UNDISTURBED EARTH
10	VALVE BOX
11	THRUST BLOCK
12	CRUSHED ROCK
13	HYDRANT SHUT-OFF VALVE
14	TRACER WIRE

SCALE:			SHEET
NTS	GRANTSVILLE	GRANTSVILLE CITY	6-56
10/15/2024		ABOVE GRADE 2" BLOW-OFF INSTALLATION	



SCALE:			SHEET
NTS	GRANTSVILLE	GRANTSVILLE CITY	6-51
10/15/2024		AIR RELEASE ASSEMBLY	

ENSIGN
THE STANDARD IN ENGINEERING

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PHONE: 435-850-8436

TOWNHOMES ON WILLOW PUD

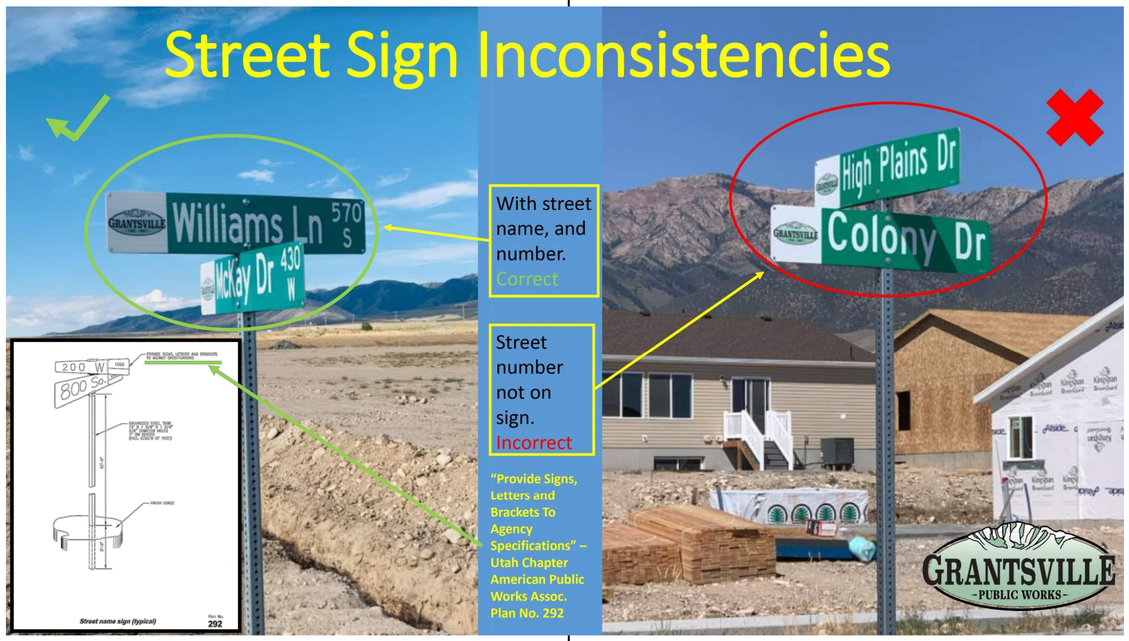
WILLOW STREET
GRANTSVILLE, UTAH

PROFESSIONAL ENGINEER
10924116-2202
2025-04-30
COREY J. CHILD
STATE OF UTAH

DETAILS

PROJECT NUMBER	PRINT DATE
10898A	2025-04-30
DRAWN BY	CHECKED BY
H. CARTER	C. CHILD
PROJECT MANAGER	
C. CHILD	

C-501



MODIFICATIONS TO APWA PLAN DETAILS

APWA PLAN NO.	GRANTSVILLE CITY MODIFICATION
205.1	USE TYPE "A" UNLESS APPROVED OTHERWISE.
205.1	2.C. CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 4500 PSI.
211	2.C. CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 4500 PSI.
213	2.C. CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 4500 PSI.
215	2.C. CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 4500 PSI.
216	2.C. CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 4500 PSI.
221.1	2.C. CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 4500 PSI.
221.2	2.C. CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 4500 PSI.
225	2.C. CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 4500 PSI.
231	THE MINIMUM CONCRETE THICKNESS SHALL BE 6 INCHES AND THE MINIMUM BASE COURSE THICKNESS SHALL BE 6 INCHES.
231	THE MINIMUM WIDTH OF THE SIDEWALK SHALL BE 5 FT.
231	2.C. CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 4500 PSI.
235.1	THE MINIMUM CONCRETE THICKNESS SHALL BE 6 INCHES AND THE MINIMUM BASE COURSE THICKNESS SHALL BE 6 INCHES.
235.1	THE MINIMUM WIDTH OF THE SIDEWALK SHALL BE 5 FT.
235.1	2.D. CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 4500 PSI.
235.2	THE MINIMUM CONCRETE THICKNESS SHALL BE 6 INCHES AND THE MINIMUM BASE COURSE THICKNESS SHALL BE 6 INCHES.
235.2	THE MINIMUM WIDTH OF THE SIDEWALK SHALL BE 5 FT.
235.2	2.D. CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 4500 PSI.
235.3	THE MINIMUM CONCRETE THICKNESS SHALL BE 6 INCHES AND THE MINIMUM BASE COURSE THICKNESS SHALL BE 6 INCHES.
235.3	THE MINIMUM WIDTH OF THE SIDEWALK SHALL BE 5 FT.
235.3	2.D. CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 4500 PSI.
235.4	THE MINIMUM CONCRETE THICKNESS SHALL BE 6 INCHES AND THE MINIMUM BASE COURSE THICKNESS SHALL BE 6 INCHES.
235.4	2.D. CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 4500 PSI.
236.1	THE MINIMUM CONCRETE THICKNESS SHALL BE 6 INCHES AND THE MINIMUM BASE COURSE THICKNESS SHALL BE 6 INCHES.
236.1	THE MINIMUM WIDTH OF THE SIDEWALK SHALL BE 5 FT.
236.1	2.D. CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 4500 PSI.
236.2	THE MINIMUM CONCRETE THICKNESS SHALL BE 6 INCHES AND THE MINIMUM BASE COURSE THICKNESS SHALL BE 6 INCHES.
236.2	THE MINIMUM WIDTH OF THE SIDEWALK SHALL BE 5 FT.
236.2	2.D. CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 4500 PSI.
236.3	THE MINIMUM CONCRETE THICKNESS SHALL BE 6 INCHES AND THE MINIMUM BASE COURSE THICKNESS SHALL BE 6 INCHES.
236.3	THE MINIMUM WIDTH OF THE SIDEWALK SHALL BE 5 FT.

APWA cont.

APWA PLAN NO.	GRANTSVILLE CITY MODIFICATION
236.3	2.D. CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 4500 PSI.
237	ALL EXPOSED CONCRETE SHALL BE 4500 PSI MINIMUM STRENGTH.
238	GRANTSVILLE CITY IS REQUIRING TYPE "B", CAST-IN-PLACE, NO SCREWS.
245	2.B. BACKFILL SHALL BE A-1-a OR AS APPROVED BY THE CITY.
256.2	ALL EXPOSED CONCRETE SHALL BE 4500 PSI MINIMUM STRENGTH.
274	2.C. CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 4500 PSI.
275	2.A. CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 4500 PSI.
292	USE GRANTSVILLE CITY STANDARD.
315.1	ALL EXPOSED CONCRETE SHALL BE 4500 PSI MINIMUM STRENGTH.
315.1	2.D. REBAR SHALL BE EPOXY COATED.
315.1	2.B. BACKFILL AND BASE COURSE SHALL BE A-1-a OR AS APPROVED BY THE CITY.
315.2	ALL EXPOSED CONCRETE SHALL BE 4500 PSI MINIMUM STRENGTH.
315.2	2.D. REBAR SHALL BE EPOXY COATED.
315.2	2.B. BACKFILL SHALL BE A-1-a OR AS APPROVED BY THE CITY.
316	ALL EXPOSED CONCRETE SHALL BE 4500 PSI MINIMUM STRENGTH.
316	2.D. REBAR SHALL BE EPOXY COATED.
316	2.B. BACKFILL AND BASE COURSE SHALL BE A-1-a OR AS APPROVED BY THE CITY.
317	ALL EXPOSED CONCRETE SHALL BE 4500 PSI MINIMUM STRENGTH.
317	2.D. REBAR SHALL BE EPOXY COATED.
317	2.B. BACKFILL AND BASE COURSE SHALL BE A-1-a OR AS APPROVED BY THE CITY.
320	DEBRIS GRATE INLET SHALL BE GALVANIZED
322	ALL EXPOSED CONCRETE SHALL BE 4500 PSI MINIMUM STRENGTH.
322	2.D. REBAR SHALL BE EPOXY COATED.

APWA cont.

APWA PLAN NO.	GRANTSVILLE CITY MODIFICATION
322	2.B. BACKFILL AND BASE COURSE SHALL BE A-1-a OR AS APPROVED BY THE CITY.
322	ALL EXPOSED CONCRETE SHALL BE 4500 PSI MINIMUM STRENGTH.
323.3	2.B. BACKFILL AND BASE COURSE SHALL BE A-1-a OR AS APPROVED BY THE CITY.
323.3	ALL EXPOSED CONCRETE SHALL BE 4500 PSI MINIMUM STRENGTH.
331.1	ALL EXPOSED CONCRETE SHALL BE 4500 PSI MINIMUM STRENGTH.
331.1	2.D. REBAR SHALL BE EPOXY COATED.
331.1	2.B. BACKFILL SHALL BE A-1-a OR AS APPROVED BY THE CITY.
331.2	ALL EXPOSED CONCRETE SHALL BE 4500 PSI MINIMUM STRENGTH.
331.2	2.D. REBAR SHALL BE EPOXY COATED.
331.2	2.B. BACKFILL SHALL BE A-1-a OR AS APPROVED BY THE CITY.
331.3	ALL EXPOSED CONCRETE SHALL BE 4500 PSI MINIMUM STRENGTH.
331.3	2.D. REBAR SHALL BE EPOXY COATED.
331.3	2.B. BACKFILL SHALL BE A-1-a OR AS APPROVED BY THE CITY.
332	ALL EXPOSED CONCRETE SHALL BE 4500 PSI MINIMUM STRENGTH.
332	2.D. REBAR SHALL BE EPOXY COATED.
332	ALL EXPOSED CONCRETE SHALL BE 4500 PSI MINIMUM STRENGTH
332	2.B. BACKFILL SHALL BE A-1-a OR AS APPROVED BY THE CITY.
335	ALL EXPOSED CONCRETE SHALL BE 4500 PSI MINIMUM STRENGTH.
335	2.B. BACKFILL SHALL BE A-1-a OR AS APPROVED BY THE CITY.
335	2.D. REBAR SHALL BE EPOXY COATED.
341.1	ALL EXPOSED CONCRETE SHALL BE 4500 PSI MINIMUM STRENGTH.

APWA cont.

APWA PLAN NO.	GRANTSVILLE CITY MODIFICATION
341.1	2.B. BACKFILL SHALL BE A-1-a OR AS APPROVED BY THE CITY.
341.2	ALL EXPOSED CONCRETE SHALL BE 4500 PSI MINIMUM STRENGTH.
341.2	2.B. BACKFILL SHALL BE A-1-a OR AS APPROVED BY THE CITY.
362	ALL EXPOSED CONCRETE SHALL BE 4500 PSI MINIMUM STRENGTH.
381	2.A. BACKFILL SHALL BE A-1-a OR AS APPROVED BY THE CITY.
382	PIPE ZONE MATERIAL FOR SANITARY SEWER PIPE SALL BE ¾" DRAIN ROCK. DETAIL – SEWER PIPE SHALL BE SDR-35.
382	2.B. BACKFILL SHALL BE A-1-a OR AS APPROVED BY THE CITY.
411	ALL EXPOSED CONCRETE SHALL BE 4500 PSI MINIMUM STRENGTH.
411	2.B. BACKFILL SHALL BE A-1-a OR AS APPROVED BY THE CITY.
413	ALL EXPOSED CONCRETE SHALL BE 4500 PSI MINIMUM STRENGTH.
431	2.B. BACKFILL SHALL BE A-1-a OR AS APPROVED BY THE CITY. DETAIL - SEWER PIPE SHALL BE SDR-35 PIPE MATERIAL
432	2.B. BACKFILL SHALL BE A-1-a OR AS APPROVED BY THE CITY. DETAIL - SEWER PIPE SHALL BE SDR-35 PIPE MATERIAL
505	ALL EXPOSED CONCRETE SHALL BE 4500 PSI MINIMUM STRENGTH.
505	2.B. BACKFILL SHALL BE A-1-a OR AS APPROVED BY THE CITY.
511	REFER TO GRANTSVILLE CITY STANDARD DETAIL.
521	REFER TO GRANTSVILLE CITY STANDARD DETAIL.
522	REFER TO GRANTSVILLE CITY STANDARD DETAIL.
523	REFER TO GRANTSVILLE CITY STANDARD DETAIL.
525	REFER TO GRANTSVILLE CITY STANDARD DETAIL.
527	REFER TO GRANTSVILLE CITY STANDARD DETAIL.

APWA cont.

APWA PLAN NO.	GRANTSVILLE CITY MODIFICATION
529	REFER TO GRANTSVILLE CITY STANDARD DETAIL.
541	REFER TO GRANTSVILLE CITY STANDARD DETAIL.
542	REFER TO GRANTSVILLE CITY STANDARD DETAIL.
543.1	2.E. BACKFILL SHALL BE A-1-a WITH 18 INCHES VERTICAL SEPARATION BETWEEN WATER AND ALL OTHER WET UTILITIES.
543.2	2.E. BACKFILL SHALL BE A-1-a WITH 18 INCHES VERTICAL SEPARATION BETWEEN WATER AND ALL OTHER WET UTILITIES.
546	6 INCH LATERAL FOR FIRE HYDRANT.
546	2.D. BACKFILL SHALL BE A-1-a OR AS APPROVED BY THE CITY.
551	REFER TO GRANTSVILLE CITY STANDARD DETAIL.
552	REFER TO GRANTSVILLE CITY STANDARD DETAIL.
561	2.B. BACKFILL SHALL BE A-1-a OR AS APPROVED BY THE CITY.
562	2.B. BACKFILL SHALL BE A-1-a OR AS APPROVED BY THE CITY.
571	REFER TO GRANTSVILLE CITY STANDARD DETAIL.
572	REFER TO GRANTSVILLE CITY STANDARD DETAIL.
573	REFER TO GRANTSVILLE CITY STANDARD DETAIL.
574	REFER TO GRANTSVILLE CITY STANDARD DETAIL.
575	REFER TO GRANTSVILLE CITY STANDARD DETAIL.

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TOWNHOMES ON WILLOW PUD

WILLOW STREET
GRANTSVILLE, UTAH

PROFESSIONAL ENGINEER
10924116-2202
COREY J. CHILD
STATE OF UTAH
25-04-30

DETAILS

PROJECT NUMBER 10898A
PRINT DATE 2025-04-30
DRAWN BY H. CARTER
CHECKED BY C. CHILD
PROJECT MANAGER C. CHILD

C-502

TECHNICAL MEMORANDUM

TO:	Shelby Moore, Grantsville City Planning and Zoning Administrator
FROM:	Shay Stark, Planner
DATE:	January 7, 2025
SUBJECT:	Townhomes on Willow Subdivision PUD Application – Project Review
PROJECT NO.:	00270.C Phase 009 Task 001 Homes on Willow

AQUA Engineering has reviewed the documents provided for the Townhomes on Willow Subdivision. As the application for this project was initially submitted in January of 2022 and was brought before Planning Commission in January of 2023 it is helpful to include some background information and supplementary documents to better understand where this project has been and the direction that Planning Commission was guiding the applicant to go with the project. The following documents were part of the review:

PUD Application Documents:

- Townhomes on Willow PUD Overall Site Plan, Project Engineer: Ensign Engineering, Print Date: August 28, 2024.Submitted to Grantsville City, August 29, 2024.
- Planned Unit Development Application, Responses to Chapter 12 PUD requirements 12.2 (1)(a) and 12.4(2) (a) to provide a written statement addressing each of the applicable standards of Section 7.8 to show that they have been met. Also, 12.4(2) (b) to provide a written statement indicating specifically any change alteration, modification or waiver of any Zoning or development regulation that is being sought by the developer. Undated
- Townhomes on Willow - Traffic Impact Study, completed by Hales Engineering and Dated February 13, 2021.
- South Willow Townhomes - Willow Street Traffic Impact Study, completed by A-Trans Transportation Engineering and Dated November 13, 2024.
- Townhomes on Willow – Three Plex Rendition (Mountain Valley Townhomes), Architect: JZW Architects, Dated September 30, 2019
- Townhomes on Willow – Five Plex Rendition (Mountain Valley Townhomes), Architect: JZW Architects, Dated October 17, 2019
- Townhomes on Willow – Six Plex Rendition (Mountain Valley Townhomes), Architect: JZW Architects, Dated October 7, 2019
- Report Geotechnical Study - Proposed Townhomes on Willow Subdivision – 299 South Willow Street – Grantsville, Utah, GSH Geotechnical, Inc., December 9, 2021
- Grantsville City Master Development Agreement for the Townhome on Willow – Draft Undated.
- Townhome on Willow Subdivision PUD – PUD Deviations table, Undated
- Townhomes on Willow PUD - Willow Street Sewer Repairs – Drawing Set – Ensign Engineering – August 6, 2024
- Townhomes on Willow PUD – Offsite Cherry Street Water – Ensign Engineering – Dated January 30, 2023.

Supplemental Supporting Documents:

These documents are not part of the PUD application but are part of the record of the Preliminary Application and have been utilized to better understand the background of the project and to help check the proposed deviations and justifications.

- Grantsville City Planning Commission Minutes January 5, 2023 (Public Hearing and Project Discussion)
- Grantsville City Planning Commission Minutes January 19, 2023 (Public Hearing assumed for PUD Application as both were submitted at the same time but the PUD application did not get in the packet for the first meeting.)
- Townhomes on Willow PUD Preliminary Plan Set, Project Engineer: Ensign Engineering, Print Date: August 28, 2024.Submitted to Grantsville City, August 29, 2024.
- Townhomes on Willow Subdivision – Grantsville Wastewater Capacity Analysis Memo, Completed by Ensign Engineering and Dated: August 19, 2024

Background

- Property Location: Approximately 200 South Willow Street
- Size: 13.34 Acres
- Zoning: RM-7
- Number of Units Proposed: 93
- Density: 7 units per gross acre.
- Preliminary Application Date: 2/25/2022 and Accepted 3/30/2022
- PUD Application Date: 2/25/2022 and Accepted 3/30/2022
- Public Hearing Dates: January 5, 2023 & January 19, 2023

The Townhomes on Willow went before the Grantsville City Planning Commission on January 5, 2023. The discussion in the Planning Commission is enlightening. The main issues that were brought up in the Planning Commission Meeting included:

> Density: Discussion bounces around but could be summarized as applicant has based their proposed density off the gross acreage instead of taking out the streets and 10% open space (open space was not discussed). There were comments about Chapter 4.34, but that language had not yet been adopted at the time this application was sent in.
> Setbacks: Some of the setbacks don't meet the requirements of the RM-7 District.
>
> Parking: There was a question about adequate parking. There were conflicting statements that yes there was adequate parking and no there was not. This needs to be verified again.
>
> Water: There was a public comment about low water pressure to the west of the proposed subdivision. The City did fire flow tests and found the existing 6" line in Willow Street line was inadequate to provide fire flow. An upsized line is required to address the fire flow. There were questions of who was responsible to pay for this line beyond the project frontage. The Applicant stated they were willing to construct a line across Mike Warners property to tie into Cherry Street in the Lookout Pass Subdivision to improve the water pressure. It is not clear if any conclusion was achieved on the Willow Street water line other than the discussion talked about upsizing the line to Durfee which subsequent drawings have that upsize to an 8" line shown on the project plans.

Sewer: The Planning Commission and City Staff discussed concerns about the sanitary sewer line in Willow Street and the need to flow test the line to determine what the actual capacity is.

Offsite Street Improvements: Traffic is a big concern as the existing pavement is narrow and the street has few improvements. The traffic study was discussed and the numbers shown in the trip generation study seemed very low as they were less than the total number of units in the AM and PM trip generation projections. Widening the pavement by improving the west side of Willow Street from Durfee Street through the frontage of the project was discussed but as with the water line there were still questions as to how much of the improvements could the applicant be required to construct and pay for.

Park Amenities: The Planning Commission asked if the pickle ball court and other park amenities could be used by the public. The discussion led to the question of what is legal when the amenities are owned, maintained and insured by the HOA. There was also the question of the benefit to the City is for those improvements if they public could not use them.

All of the items in question needed to be addressed before the project came back to the Planning Commission.

Since the January 2023 Planning Commission Meeting, the applicant has been working with staff to try to resolve the questions. Most of this effort has taken place with the applicant and previous staff members. Unfortunately, we no longer have their input to better understand everything that has happened since the January 2023 Planning Commission Meetings.

In August of 2024 a drawing package was submitted to the City which shows no overall changes to density, setbacks or parking. Improvements to Willow Street include sidewalk curb and gutter and pavement widening on the west side from Durfee Street through the project frontage. A new 8” water line is also shown as part of the street improvements. As there are no specifics in the Draft Master Development Agreement yet, it is not clear how all of these offsite improvements are being addressed.

As part of the PUD package provided to staff, drawings have been submitted for repairs in the sewer line. The drawings show repairs beyond Willow Street this also needs clarification as to what work is being completed as part of the project.

Also, submitted with the latest PUD submission is a drawing for the water line proposed to run across Mike Warners property to tie into Cherry Street in the Lookout Pass Subdivision. This line should benefit pressures and flows for both areas. It is stated that there is an agreement with the Warner’s for an easement across the field. The draft easement will need to be provided with the Preliminary approval and should be noted in the Development Agreement.

Conclusion:

Many if not all of the items discussed in Planning Commission have been addressed in some form or another. However, due to staff turnover and the length of time it has taken to resolve these issues the specifics of the solutions are unknown to current staff. It is suggested that additional information and, in some cases, revisions be provided for the following items:

- Density: The language in the code in place at the time the applications were submitted and accepted reads “Maximum Density 7 d.u. per acre.” The definition of Density in GLUDMC Chapter 2 Definitions at the time of application states: *(74) DENSITY. Density is a measure of the number of dwelling units per acre. It shall be expressed dwelling units per acre (DU/acre). Unbuildable land (as defined by the Planning Commission) is land with a slope greater than 25%, subject to inundation, or other geological hazards.*
  The definition does not distinguish gross density vs. net density due to roads, open space and other limiting factors. The applicant has interpreted this code to mean that they are entitled to 7 units per acre based on gross acreage of the parcel.

- Setbacks: On the Preliminary Layout there seem to be a few locations where the setbacks either need to be adjusted or there needs to be additional information added to the deviation table. Those spots include:
  a) There is only 10 feet between units 5 and 6 the code requires 7.5 feet for each side. With two sides 15 feet is required.
  b) The requirement for corner lots is “On corner lots 2 front yards and 2 side yards are required.” The two lots fronting streets both must meet the front setback requirement which is 25 feet. The back and side can meet side setbacks of 7.5 feet for each side.
  c) Units 13, 14, 19, 74, 85 & 93 do not meet the 25-foot side setback.
  d) Units 65 -74 and 85-93 may be able to be adjusted with the 15 foot space between buildings to better meet the corner lot requirements.
  e) Units 14 – 18 and 19 – 23 look like they are limited due to the visitor parking on the street. Please note the reasoning for why the corner setbacks are not being met.
  f) The limited side setbacks also affect the 30-foot site triangle requirement as driveway will cars in them block the clear view area in the site triangle (GLUDMC 4.16 Clear View of Intersection Streets). The issue should also be addressed on the table of deviations.

     Townhouses are unique in that the units are all part of one building so it may not make sense to construct an end unit that has a 7.5 foot rear setback on a corner and all other units a 20 foot setback.

  Planning Commission: It is very important that we follow the Chapter 12 PUD requirements that were in place when the application was submitted and not the current language. The two are very different in that the previous versions of the PUD do not restrict the Planning Commission from considering requests for items such as parking and site triangles. Safety is still important and a valid reason to turn down a requested deviation, but if there are ways to mitigate an issue those solutions need to be considered.

- Lot size: The RM-7 Zone requires minimum lot sizes of 7,000 square feet for the first unit and 6,000 for each additional unit. There is no language in the code at the time of application that provided restrictions on how this is calculated. In fact, a previous townhouse project that is contemporary to the Townhouses on Willow and also located on Willow Street used the total area minus the streets. This was allowed because most Townhouses are actually zero lot line, meaning that the property line for each unit is at the

wall of the building. Thus, the square footage of the minimum lot is really an aggregate of the actual lots size per unit plus the setback and common areas. Streets are not included in the square footage. In this case of 93 units, the overall lots size must be at least 559,000 square feet or 12.83 acres. That only leaves ½ acre for streets which is clearly not the case so this item should be listed on the deviation table.

- Offsite Sewer Line Improvements: The drawings reviewed with the PUD application include a set of drawings showing locations on the existing sewer line in Durfee Street, Willow Street and Main Street that require repairs to make the line adequate to serve the proposed subdivision. It is understood that these repairs have been agreed to by the applicant and this needs to be clearly defined in the Development Agreement and should be noted with the PUD consideration.

- Offsite Water Line Upsize (Willow Street): The drawing package dated August 29, 2024, includes the construction of an 8” water line tying in to the existing water line on Durfee street and running south along Willow Street for approximately 1,300 feet to the north street frontage boundary of the Townhomes on Willow. This project should improve the fire flow issues on Willow Street, at least through the length of the upgrade, and needs to be clearly defined in the Development Agreement and should be noted with the PUD consideration.

- Offsite Water Line Extension (Cherry Street Alignment): The applicant has included a drawing that shows construction of an 8” water line between the proposed project and the Lookout Pass Subdivision in line with the Cherry Street alignment across Mr. Michael Warners Pasture. This waterline is in response to public comments from residents in the Lookout Pass Subdivision expressing concern with already low pressure and flows. The proposed line would loop the system in this area, which should help to improve pressure and flow to a small degree. The Applicant proposed this line extension, and it should be considered as a benefit to the City and the surrounding neighborhoods. The proposed line would require an easement from Mr. Warner which the applicant has stated he would provide. This proposed line needs to be clearly defined in the Development Agreement and should be noted with the PUD consideration.

- Offsite Street Improvements: The applicants drawings dated August 29, 2024, include plans to widen the west half of Willow Street from Durfee Street through the frontage of the proposed project. The widening includes additional pavement width sidewalk, curb and gutter. The additional pavement width will vary due to the meandering of the existing street but should improve the travel experience on the street and improve safety with additional sidewalk on the west side of the street.

  Public comment included statements that the pavement on Willow Street is narrow, and it gets a lot of traffic. The actual traffic counts of the traffic studies that have been completed are not high but certainly traffic is more significant than a typical residential street located in a subdivision. Willow Street is home to an elementary school located further south and has multiple subdivisions adding traffic south of Durfee Street. Those using Willow Street south of Durfee Street will travel on the section of Willow Street that the proposed project is fronting to get to Main Street or vice versa.

While ideally the street would be widened for the full length of Willow Street in this area that is 2,700 feet and includes several obstacles due to encroachment which if required is disproportionate to the impact of the proposed development and would therefore require significant City participation.

The offsite street improvement should be clearly defined in the Development Agreement and noted in the PUD consideration.

- Traffic Impact Study: A memo has been included reviewing the traffic studies that have been provided. In summary the original Traffic Impact Study (TIS) completed by Hales Engineering and dated February 11, 2022, did not consider the two closest intersections with major streets at the Intersection of Durfee Street and Willow Street and Main Street and Willow Street. Thus, a second TIS specifically addressing these intersections was requested by the City and provided by the applicant. The second TIS was completed by A-Trans Transportation Engineering and is dated November 2024.

  Upon review of both studies there is one major concern that requires additional clarification. The Hales Engineering study utilizes the ITE Trip Generation data which is considered an industry standard. However, the numbers: 44 morning peak hour trips and 52 evening peak hour trips raise red flags. Grantsville is not an urban area with abundant transit and close proximity to employment and goods and services. When compared with traffic studies for single family home subdivisions in the area these counts do not make sense. The residents of these townhomes will find it needful to drive just like residents in other nearby single-family subdivisions. These trip generation numbers were carried over into the 2024 study. The trip generation numbers need to be reconsidered and adjusted to better reflect the local conditions or justification provided to help the City understand why these numbers are an accurate reflection of what will occur.

- In General: Requests for deviations or offsite improvements that are required in order to mitigate the impact of the proposed project on existing facilities and utilities should be clearly described in a Development Agreement and noted in the PUD consideration.

Please have the applicant address these issues before sending this project to the Planning Commission.

Planned Unit Development Application

Section 7.8 Determination

(a) The proposed use is one of the conditional uses specifically listed in the zoning district in which it is to be located;

The proposed use is a Planned Unit Development with townhomes and a club house. The underlying zone is RM-7 which allows townhomes as conditional use and a club house as permitted.

(b) That such use will not, under the circumstances of the particular case, be detrimental to the health, safety, comfort, order or general welfare of persons residing or working in the vicinity;

The proposed use will not be detrimental to the health, safety, comfort, order or general welfare of persons residing or working in the vicinity.

(c) That the use will comply with the intent, spirit, and regulations of these ordinances and is compatible with and implements the planning goals and objectives of the City, including applicable City master plans;

The use will comply with the intent, spirit, and regulations of these ordinances, is compatible with, and implements the planning goals and objectives of the City, including applicable City master plans.

(d) Make the use harmonious with the neighboring uses in the zoning district in which it is to be located;

All adjacent zones are RM-7 and adjacent uses are residential and agricultural.

(e) That nuisances which would not be in harmony with the neighboring uses, will be abated by the conditions imposed;

The proposed improvements are in harmony with the neighboring uses, any nuisances, if any, will be abated by the conditions imposed.

(f) That protection of property values, the environment, and the tax base for Grantsville City will be assured;

The proposed improvements will increase the surrounding property values.

(g) That the conditions shall be in compliance with the current comprehensive General Plan of Grantsville City;

The development complies with the current comprehensive General Plan of Grantsville City.

(h) That some form of a guarantee is made assuring compliance to all conditions that are imposed;

The guarantee assuring compliance to all conditions that are imposed can be recorded with the related documents to the Plat, CC&R, and the HOA.

(i) That the conditions imposed are not capricious, arbitrary or contrary to any precedence set by the Planning Commission on prior permits, which are similar in use and district, unless prior approvals were not in accordance with the provisions and standards of this ordinance;

The conditions imposed are not capricious, arbitrary or contrary to any precedence set by the Planning Commission on prior permits, which are similar in use and district.

(j) The internal circulation system of the proposed development is properly designed;

The internal circulation system was designed by a licensed civil engineer and a 3rd party traffic study conducted to ensure proper design.

(k) Existing and proposed utility services are adequate for the proposed development;

The proposed utility services are adequate for the proposed development.

(l) Appropriate buffering is provided to protect adjacent land uses from light, noise and visual impacts;

Large amounts of open space is provided that improve the improve the visual impacts, all lighting is internal to the development and the noise levels will match the surrounding areas.

(m) Architecture and building materials are consistent with the development and compatible with the adjacent neighborhood;

The architecture and building materials are consistent with the development and compatible with the adjacent neighborhood.

(n) Landscaping is appropriate for the scale of the development;

Landscaping and design is appropriate for the scale of the development.

(o) The proposed use preserves historical, architectural and environmental features of the property;

There are no historical structures on the property and there are no significant environmental features of the property.

(p) Operating and delivery hours are compatible with adjacent land uses.

The hours of operating and delivery hours match the surrounding areas.

Change, alteration, modification, or waiver of zoning or development regulations

- *15.4 Multiple Residential District RM-7, Maximum Density 7 d.u./acre*
    - The max units per acre in Grantsville is 15, which would allow this development to have 200 units. The development proposed has 93 units. Less than half the max allowed. This is done to provide open space and to provide a clubhouse.
- *4.34 Multi Unit Residential Development*

  b.(i) Minimum lot size shall be calculated as 7,000 square feet (sq) for the first unit and an additional 4,000 square feet (sq) for each additional ground level unit in the structure. The minimum lot size for units within a structure adjacent to a street corner shall be 10,000 square feet (sq).

  - The proposed units have a property boundary that matches the footprint of the building. This has been done to increase the open space available to everyone.

  iv. Minimum front yard setback will be twenty-five feet (25')

  vi. Minimum side yard setback will be twenty feet (20')

  vii. For corner lots, there shall be two front yard setbacks.

  - The proposed units meet the setbacks listed in most situations but there are some places where they have been reduced in order to provide more distributed parking.

Townhomes on Willow

P.U.D application

Variance:

As part of the P.U.D. application for the Townhomes on Willow Subdivision we are asking for variance in lot size down to approximately 1,000 square feet. We are not asking for an increase in density. The reduced lot size will accommodate townhome ownership to include the building footprint of each unit.

Objectives:

This variance will allow for a Townhome plan with an HOA to accomplish the following:

1. HOA will be responsible for all exterior maintenance of the buildings.
2. 47% or 6.33 acres will be common area open space.
3. All landscaping will be maintained by the HOA.
4. HOA maintained amenities:
    a. Clubhouse
    b. Basketball Court
    c. Pickleball Courts
    d. Playgrounds.
    e. Walking Paths.

GLUDMC Chapter 12 PUD as it was in February 2022

There is not a complete file of Chapter 12 in February 2022 so this is a pieced together version that includes pre amendment language from Resolution 2024-05 Resolution 2019-18 as compared with earlier language from a copy of the ordinance in 2018 that is available.

2024-05 BEFORE AMENDMENT

12.1 Purpose

(1) A planned development is a distinct category of conditional use. As such, it is intended to encourage the efficient use of land and resources, promote greater efficiency in public and utility services, preservation of open space, efficient use of alternative transportation and encouraging innovation in the planning and building of all types of development. Through the flexibility of the planned unit development technique, the City and developer will seek to achieve the following specific objectives:

(a) Creation of a more desirable environment than would be possible through strict application of other City land use regulations through promotion of a creative approach to the use of land and related physical facilities resulting in better design and development, including aesthetic amenities. The developer shall detail the proposed variation from Grantsville City ordinance requirements and explain how this variation will lead to a more desirable environment;

(b) The use of design, landscape or architectural features to create a pleasing environment while preserving desirable site characteristics such as natural topography, vegetation and geologic features as open space and providing recreational facilities. For projects containing a residential component containing more than a single dwelling unit at least 10% of the total parcel acreage shall be open space. (Resolution 2019-18 Removes) ~~All Planned Unit Development projects shall conform at a minimum with open space and improved open space requirements found in Chapter 21.~~ Topography with slopes greater than 30% on average with a site area greater than 5,000 square feet, natural water bodies and drainages shall be protected;

(c) Preservation of buildings which are architecturally or historically significant contribute to the character of the City;

(d) Establishment of interconnecting paths and trails for alternative transportation routes which lead to common and popular destinations and interface with automobile traffic at few and specific points. Onsite paths and trails shall connect to the citywide trail system. Trails connecting to the citywide system shall be considered public trails allowing for public use; and

(e) Elimination of blighted structures or incompatible uses through redevelopment or rehabilitation.

2024-05 BEFORE AMENDMENT

12.2 Authority To Modify Regulations

(1) The Planning Commission shall have the authority in approving any planned development to change, alter, modify or waive any provisions of this Code as they apply to the proposed planned development. No such change, alteration, modification or waiver shall be approved unless the Planning Commission shall find that the proposed planned unit development:

(a) Will achieve the purposes for which a planned development may be approved pursuant to Section 12.1.

(b) Will not violate the general purposes, goals and objectives of this Code and of any plans adopted by the Planning Commission or the City Council.

2024-05 BEFORE REPEAL

12.3 Minimum Area

(1) A planned development proposed for any parcel or tract of land under single ownership or control shall have a contiguous minimum net site area for each zoning district as set forth below:

Zoning District	**Minimum Planned Development Size**
Agriculture District, A	80 Acres
Rural Residential District, RR-5	20 Acres
Rural Residential District, RR-1	10 Acres
Residential District, R-1-21	10 Acres
Residential District, R-1-12	5 Acres
Multiple Residential District, RM-7	5 Acres
Multiple Residential District, RM-15	5 Acres

(2) Not withstanding any provision herein to the contrary, any lot or parcel legally created or existing as of the effective date of this Code (July 15, 1996), that is currently

located in a commercial or industrial zoning district, may in the discretion of the Planning Commission and City Council, be developed as a Planned Unit Development, even if said lot or parcel does not contain the above stated minimum net site area, provided said development is determined to comply with the other requirements of this Chapter.

2024-05 BEFORE AMENDMENT

12.4 Application Procedure

(1) Except as required by this section, the application and approval procedures for planned unit developments are the same as is specified in the Subdivision Regulations contained in Section 2 and Section 4 of Chapter 21 of this Code. Planned unit developments shall also comply with the other provisions of Chapter 21, where applicable, including design standards for subdivision.

(2) In addition to the application requirements for subdivisions, an applicant for a planned unit development shall submit the following information with the Preliminary Plat application:

(a) At the preliminary phase, the applicant shall submit a written statement addressing each of the standards set forth in Section 7.8 herein entitled, Determination, when applicable and how the proposed development will promote the objectives set forth in Section 12.1 pf this Chapter. The statement shall explain specifically how the proposed planned unit development relates to each such standard and promotes a listed objective;

(b) At the preliminary phase, the applicant shall submit a written statement indicating specifically what change, alteration, modification or waiver of any zoning or development regulations is being sought by the developer, if any.

(3) The approval of the final plan or final plat (if required) shall include approval of the final development plan and all special conditions applicable to the planned unit development. The final plan or plat together with the final development plan and special conditions for the planned unit development, rather than any other provision of this Code, shall constitute the use, parking. loading, sign, bulk, space and yard and other regulations applicable to the subject property, and no use or development, other than a home occupation or temporary uses, not allowed by the final plan or plat development plan and conditions shall be permitted within the area of the planned unit development. The final plan or final plat shall include a notation of any changes, alterations, modifications or waivers of the regular standards of the zoning district and of this Code and shall list any special conditions.

(4) Any party aggrieved by the final decision of the Planning Commission, regarding a planned unit development, with respect to a concept phase, preliminary plan or plat, final plan or plat, the development plan or changes, alterations, modifications or waivers

either granted or denied, may appeal such decision to the City Council, whose decision shall then be final. All appeals to the City Council must be in writing and filed with the Zoning Administrator within thirty (30) days of the date of the decision appealed from and prior to any further consideration by the Planning Commission of a subsequent step in the planned unit development approval process. Only the final decision of the City Council with respect to the Final Plan or plat, Development Plan or changes, alterations, modifications or waivers either granted or denied may be appealed to the District Court, provided such appeal is filed within thirty (30) days of the decision of the City Council. Said appeal shall be filed with the City Recorder and with the Clerk of the District Court. No planned unit development final plan (that does not include a subdivision) shall be valid for a period longer than one year unless a building permit has been issued, construction has actually begun within that period and construction has been diligently pursued. Upon written request of the applicant, the one year period may be extended by the Planning Commission for such time as it shall determine for good cause shown, without further hearing.

2024-05 BEFORE AMENDMENT

12.5 Adjustments To Development Plan

(1) No major alteration or amendment to the final development plan shall be made without a new application being filed and processed pursuant to the provisions of this Chapter. Minor alterations to a development plan that do not include a subdivision of land, may be made subject to written approval of the Planning Commission when such adjustments appear necessary in light of technical or engineering considerations. Such minor adjustments shall be limited to the following elements:

(a) Adjusting the distance as shown on the approved final Development Plan between any one structure or group of structures, and any other structure or group of structures, or any vehicular circulation element or any boundary of the site;

(b) Adjusting the location of any open space. The size or amount of open space that was approved shall not be compromised.

(c) Adjusting any final grade, and

(d) Altering the types of landscaping elements and their arrangement within the required landscaping buffer area.

(2) Such minor adjustments shall be consistent with the intent and purpose of the Code and the Final Development Plan as approved, and shall be the minimum necessary to overcome the particular difficulty and shall not be approved if such adjustments would result in a violation of any standard or requirement of this Code.

(3) Any adjustment to the approved Final Development Plan not authorized by this Section, shall be considered to be a major adjustment. The Planning Commission following notice to at least all adjoining property owners, may approve an application for a major adjustment of the Final Development Plan, not requiring a modification of written conditions of approval or recorded easements, upon finding that any changes in the plan as approved will be in substantial conformity with the final Development Plan. If the Planning Commission determines that a major adjustment is not in substantial conformity with the Final Development Plan as approved, then the Planning Commission shall review the request in accordance with the procedures set forth in Section 12.4.

GLUDMC Chapter 15.4 RM-7 District as it was in February 2022

There is not a complete file of Chapter 15.4 in February 2022 so this is a pieced together version that includes pre amendment language from Resolution 2022-14 as compared with earlier language from a copy of the ordinance in 2018 that is available.

2022-14 BEFORE AMENDMENT

15.4 Multiple Residential District RM-7

Effective June 4, 1999 no application to extend, enlarge or re-zone property to a RM-7 zoning district designation will be considered by Grantsville City. Areas previously designated with a RM-7 zoning district designation may continue after June 4, 1999 and the uses in these district's may continue subject to the following regulations.

(1) The RM-7 Zoning District is intended to provide areas for medium density single family and multi-family residential with the opportunity for varied housing styles and character.

Minimum Lot Size..... 7,000 sq. feet Minimum Lot Size for Corner Lots .....10,000 sq. feet Additional lot area for each additional dwelling unit .....6,000 sq. feet

Maximum Density ..... 7 d.u./acre Lots shall comply with Chapter 4: Supplementary and Qualifying Regulations - Section 4.5: Lots Standards and Street Frontage.

Minimum Frontage (on a public street or an approved private street) 45 feet.

Minimum Yard Setback Requirements: (Amended 2000, 9/01) Front Yard ..... 25 feet. Rear Yard for Main Buildings.....20 feet Rear Yard for Accessory Buildings..... 1 foot Side Yard for Main Building, Each Side.....7.5 feet Side Yard for Accessory Buildings.....4 feet

Set backs for Accessory Buildings on a corner lot: On the side of the Main Building .....4 feet On the rear of the Main Building .....1 foot On corner lots 2 front yards and 2 side yards are required.

Maximum Building Height..... 35 feet Maximum Building Coverage .....35 percent

Required Improvements:

Street grading Street base Surface drainage facilities Curb and Gutter Sidewalk Culinary water facilities Surface drainage facilities Waste water disposal Street name signs Fire hydrants Street monuments Shade trees (along public streets) Street lights

GLUDMC 15.7

2022-14

BEFORE AMENDMENT

15.7 Codes And Symbols And Use Table 15.1

(1) In the following sections of this chapter, uses of land or buildings which are allowed in various districts are shown as "permitted uses," indicated by a "P" in the appropriate column, or as a "conditional use," indicated by a "C" in the appropriate column. A conditional use that can be issued by the Zoning Administrator by guidelines issued by the Planning Commission is indicated by a "CA" in the appropriate column. If a use is not allowed in a given district, it is either not named in the use list or it is indicated in the appropriate column by a dash, "-." If a regulation applies in a given district, it is indicated in the appropriate column by a numeral to show the linear or square feet required, or by the letter "A." If the regulation does not apply, it is indicated in the appropriate column by a dash, "-." No building, structure or land shall be used and no building or structure shall be hereafter erected, structurally altered, enlarged or maintained in the multiple use, agricultural, or rural residential districts except as provided in this Code.

Table 15.1 Use Regulations

USE	R-1-8	R-1-12	R-1-21	RM-7	RM-15
Accessory buildings and uses customarily incidental to permitted residential uses, when the residential use has been previously established or is constructed simultaneously with the residential use.	P	P	P	P	P
Accessory buildings and uses customarily incidental to permitted uses, when the residential use has not previously been established.	C	C	C	C	C
Accessory buildings and uses customarily incidental to conditional uses.	C	C	C	C	C
The tilling of the soil, the raising of crops, horticulture and home gardening.	P	P	P	P	P
Fruit/Vegetable Stand	-	C	C	-	C
Farm	**R-1-8**	**R-1-12**	**R-1-21**	**RM-7**	**RM-15**
Accessory Farm Employee Housing. Each accessory farm employee housing unit must be located on a contiguous parcel that contains at least 10 acres or more for each such unit and which must have at least 10 additional acres if it is located on the same property as the primary residential dwelling.	-	C	C	C	-
Family Food Production and the Raising of Horses. The first large animal (fully grown) shall have 10,000 sq ft of open area, each additional large animal shall have an additional 2,000 sq ft of open area; each medium sized animal (fully grown) shall have 4,000 sq ft of open area and each small sized animal (fully grown) shall have 500 sq ft of open area. The area of stables, barns and pens accessible to regulate	-	C	C	C	-

animals may count towards the open area requirements. No animal shall be kept, corralled, penned, or raised within 100' from any pre-existing residential dwelling located on an adjoining lot. There is no setback requirement from neighboring residential dwellings if a C.U.P. has been issued prior to the start of construction of a residential dwelling on an adjoining lot.					
Class "A" Kennel (3-15 animals only). No animal shall be kept, penned, or raised within 100' from an adjoining residence or dwelling and it must have 4,000 sq ft for each additional animal over 5.	-	C	C	C	-
Sportsmans Permit for 3-5 dogs. No dog shall be kept, penned, or raised within 100' of an adjoining residence or dwelling.	-	C	C	C	C
Raising of Rabbits, Ducks, Chickens (hens only), or Turkeys with not more than six (6) such animals in any combination, provided that appropriate cages, pens, coops, houses, etc. shall be provided for when these animals are kept outdoors. (Amended 04/11, 02/13)	P	P	P	P	P
RESIDENTIAL	**R-1-8**	**R-1-12**	**R-1-21**	**RM-7**	**RM-15**
Single-Family Dwellings Detached	P	P	P	P	P
Single-Family Attached Dwellings	P	P	P	P	P
Two-Family Dwelling (Amended 5/97)	-	C	C	P	P
Twin Home Dwellings (Amended 5/97)	-	C	C	C	C
Multiple Family Dwellings	-	-	-	C	C
Congregate Care Facility	-	-	C	C	C
Nursing Care Facility	-	-	C	C	C
Group Home, Small	-	-	P	P	P

Group Home, Large	-	-	-	-	P
Transitional Treatment Home, Small	-	-	C	C	C
Mobile Home Parks	-	-	-	C	C
Mobile Home Subdivisions	C	C	C	C	C
Residential facilities for handicapped or elderly	P	P	P	P	P
HOME OCCUPATION	CA	CA	CA	CA	CA
Household pets, other than Sportsman Permit	P	P	P	P	P
INSTITUTIONAL	**R-1-8**	**R-1-12**	**R-1-21**	**RM-7**	**RM-15**
Adult Day Care Center	-	-	C	C	P
Child Day Care Center (in a home, no more than 12 children at any one time with 1 provider and up to 16 with 2 providers, including those residing in the home with no more than 2 children under the age of two)	C	C	C	C	C
Commercial Day Care Center (not in a home) no more than 20 children at any one time	-	C	C	-	P
Child Day Care Facility (a commercial operation, not in a home, no more than 100 children at any one time)	-	-	C	-	P
Hospital	-	-	-	-	C
Medical or dental clinic	-	C	C	-	C
Nursing Care Facility	-	-	-	-	C
Places of Worship	C	C	C	C	C
Preschool (in a home, no more than 10 children from the ages of 4 to 6 years in age, including those residing in the home, with a maximum length of four hours for those who do not reside there)	C	C	C	C	C
Preschool (a commercial operation, not in a home, no more than 20 children					

from the ages of 4 to 6 years in age, at any one time, for a period not to exceed four hours)	-	-	C	-	C
Private educational institution having a curriculum similar to the public schools, grades K-12	C	C	C	C	C
Schools of higher education, community colleges, off campus facilities	-	-	C	-	C
Schools, professional and vocational	-	-	C	-	-
POWER GENERATION	**R-1-8**	**R-1-12**	**R-1-21**	**RM-7**	**RM-15**
Solar	P	P	P	P	P
RECREATION, CULTURAL & ENTERTAINMENT					
Private Recreational Grounds and Facilities not open to the public, in which no admission charge is made	C	C	C	C	C
Natural Open Space Areas	P	P	P	P	P
Community & Recreation Centers	C	C	C	C	C
Parks and Playgrounds, Public and Private	P	P	P	P	P
Pedestrian Pathways, Trails & Greenways	P	P	P	P	P
Community Gardens	P	P	P	P	P
MISCELLANEOUS	**R-1-8**	**R-1-12**	**R-1-21**	**RM-7**	**RM-15**
Public/Private Utility Transmission Wires, Lines, Pipes and Poles	P	P	P	P	P
Public/Private Utility Buildings and Structures	C	C	C	C	C
Cluster subdivision or Planned Unit Developments	C	C	C	C	C
Cemetery	C	C	C	C	C
Golf Course	C	C	C	C	C
Government Uses and Facilities	C	C	C	C	C

Municipal Service Uses, including City utility uses, Police and Fire Stations	C	C	C	C	C
Temporary Buildings for uses incidental to construction work, including living quarters for guard or night watchman, which buildings must be removed upon completion or abandonment of the construction work	CA	CA	CA	CA	CA
Correctional Facility, Detention Center, Jail, Penitentiary, Prison, Penal Institution (1 -249 beds)	-	-	-	-	-
Correctional Facility, Detention Center, Jail, Penitentiary, Prison, Penal Institution (250 or more beds)	-	-	-	-	-

Amended 08/02 by Ord. 2002-15, 10/02 by Ord. 2002-20, 02/09 by Ord. 2008-43, 02/11 by Ord. 2010-27, 04/11 by Ord. 2011-14, 08/11 by Ord. 2011-26, 09/11 by Ord. 2011-30, 09/11 by Ord. 2011-31, 09/12 by Ord. 2012-16, 03/15 by Ord. 2015-05

South Willow Townhomes
Willow Street
Traffic Impact Study

Grantsville, Utah

November 2024

TRAFFIC STUDY

TRANSPORTATION ENGINEERING

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South Willow Townhomes
Willow Street
Traffic Impact Analysis

Grantsville, Utah

Category II

November 2024

Prepared by:

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I. Introduction and Summary

This traffic impact analysis is for the proposed south willow townhome development located on the west side of Willow Street between Main Street and Durfee Street in Grantsville, Utah. The development is planning to include 93 residential townhomes. The new land use site is projected to generate 44 AM and 52 PM peak hour trips with 660 daily trips and is planning two accesses on Willow Street.

A traffic study was completed by Hales Engineering. The purpose of this study is to expand of that study and include intersections that were not included in that study. Because only these AM analysis is included in that study, this is the only period included for this study. The intersections analyzed include:

- Main Street and Willow Street
- Durfee Street and Willow Street

Table 1 shows the results of the analysis.

Table 1: Analysis Results and Summary

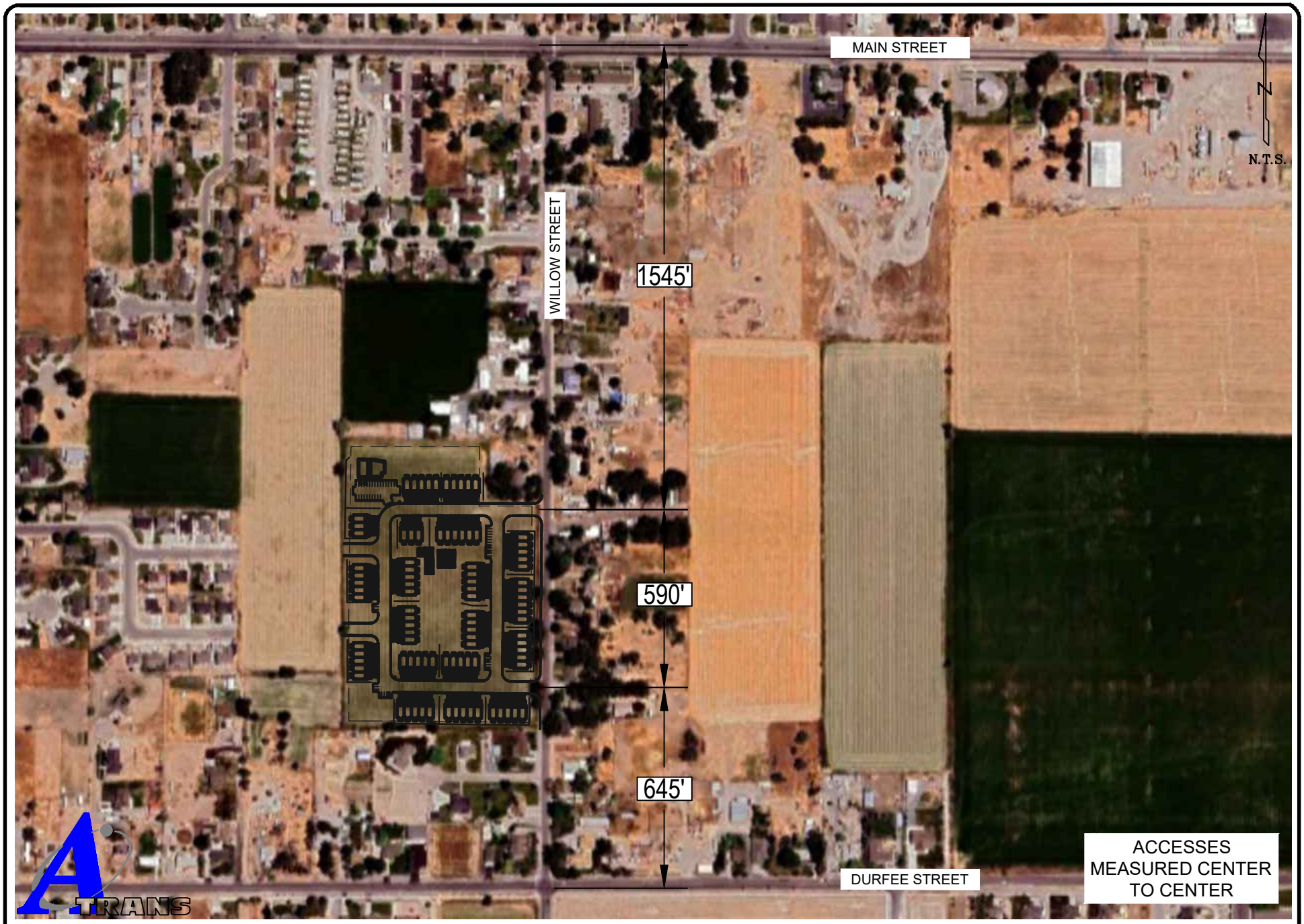
		2024 Existing	2025 Total	2030 Background	2030 Total
Willow Street / Main Street	AM	NB delay at LOS 18.5 C	NB delay at LOS 19.9 C	NB delay at LOS 23.2 C	NB delay at LOS 25.7 D
Willow Street / Durfee Street	AM	WB delay at LOS 10.9 B	WB delay at LOS 10.8 B	WB delay at LOS 11.9 B	WB delay at LOS 12.2 B

Recommendations:
No geometric mitigation is recommended.

II. Proposed Project

This traffic impact analysis is for the proposed south willow townhome development located on the west side of Willow Street between Main Street and Durfee Street in Grantsville, Utah. The development is planning to include 93 residential townhomes. The new land use site is projected to generate 44 AM and 52 PM peak hour trips with 660 daily trips and is planning two accesses on Willow Street. The northern access will be approximately 1545 feet south of Main Street, the southern access will be approximately 645 feet north of Durfee Street. The accesses were measured from center of intersection to center of intersection. Since this study is a follow up from the original Hales study, completed in February 2022, only the AM peak was analyzed.

The proposed conceptual site plan and access spacing are shown in Figure 1.



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Figure 1

Conceptual Site Plan

III. Study Area Conditions

The study area includes the following intersection.

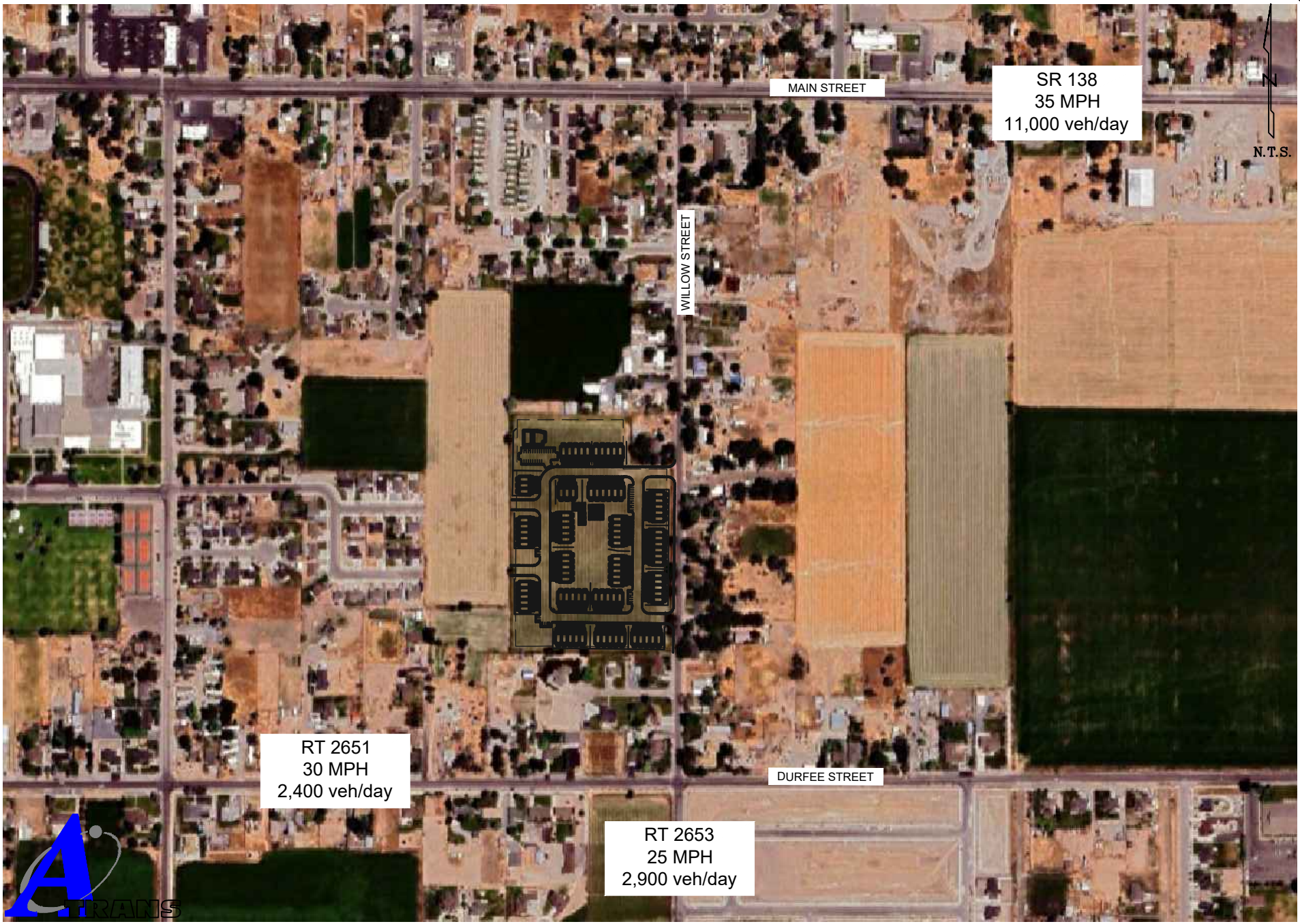
- Main Street / Willow Street
- Willow Street / Durfee Street

Figure 2 shows the location of the site. Figure 3 shows existing intersection geometry.

Main Street
Main Street (SR 138) is a 4 lane facility with two lanes for the west bound traffic, one lane for the east bound traffic with a drop lane, and a two way left turn lane. The 2023 AADT is 11,000 vehicles per day with a posted speed limit of 35 MPH. UDOT classifies SR 138 as a Category 5 roadway.

Willow Street
Willow Street (RT 2653) is a residential street with no striping with a single lane for each direction. The 2023 AADT is 2,900 vehicles per day with a posted speed limit of 25 MPH.

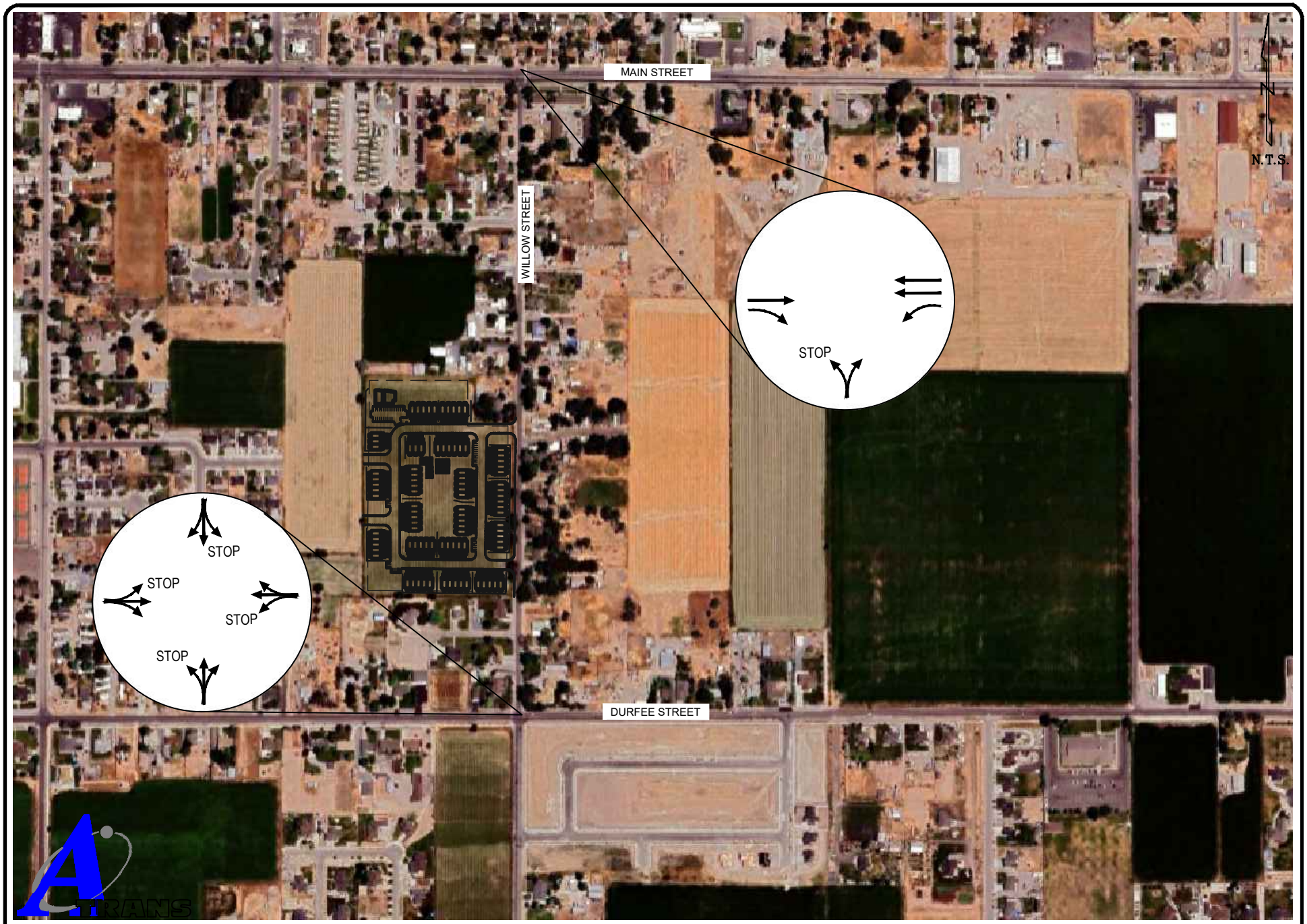
Durfee Street
Durfee Street (RT 2651) is a 2 lane facility with one lane in each direction. The 2023 AADT is 2,400 vehicles per day with a posted speed limit of 30 MPH.



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Figure 2

Site Location



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Figure 3

Existing Geometry

IV. Analysis of Existing Condition

The existing traffic counts were performed October 24 – October 25, 2024 during the AM (7:00 – 9:00 AM) peak period. 2023 Existing Traffic volumes used in the study are shown in Figure 4.

The Highway Capacity Manual defines the Level of Service (LOS) for both signalized and unsignalized intersections as a range of average experienced delay. LOS is a qualitative rating of traveler satisfaction from A to F whereby LOS A is good and LOS F poor. Table 2 shows the LOS range by delay for unsignalized and signalized intersections and accesses.

Table 2: Intersection LOS-Delay Relationship

	Unsignalized	Signalized
Level of Service	Total Delay per Vehicle (sec)	Total Delay per Vehicle (sec)
A	$\leq$ 10.0	$\leq$ 10.0
B	> 10.0 and $\leq$ 15.0	> 10.0 and $\leq$ 20.0
C	> 15.0 and $\leq$ 25.0	> 20.0 and $\leq$ 35.0
D	> 25.0 and $\leq$ 35.0	> 35.0 and $\leq$ 55.0
E	> 35.0 and $\leq$ 50.0	> 55.0 and $\leq$ 80.0
F	> 50.0	> 80.0

The analysis shows that Willow Street / Main Street operates with side street delay at LOS C in the AM Peak Period, and Willow Street / Durfee Street operates with side street delay at LOS B in the AM Peak Period. Table 3 shows the Existing LOS.

Table 3: Existing Level of Service

	Willow Street / Main Street (NB)		Willow Street / Durfee Street (WB)	
AM	18.5	C	10.9	B



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Figure 4

Existing Traffic

V. Projected Traffic

A. Trip Generation

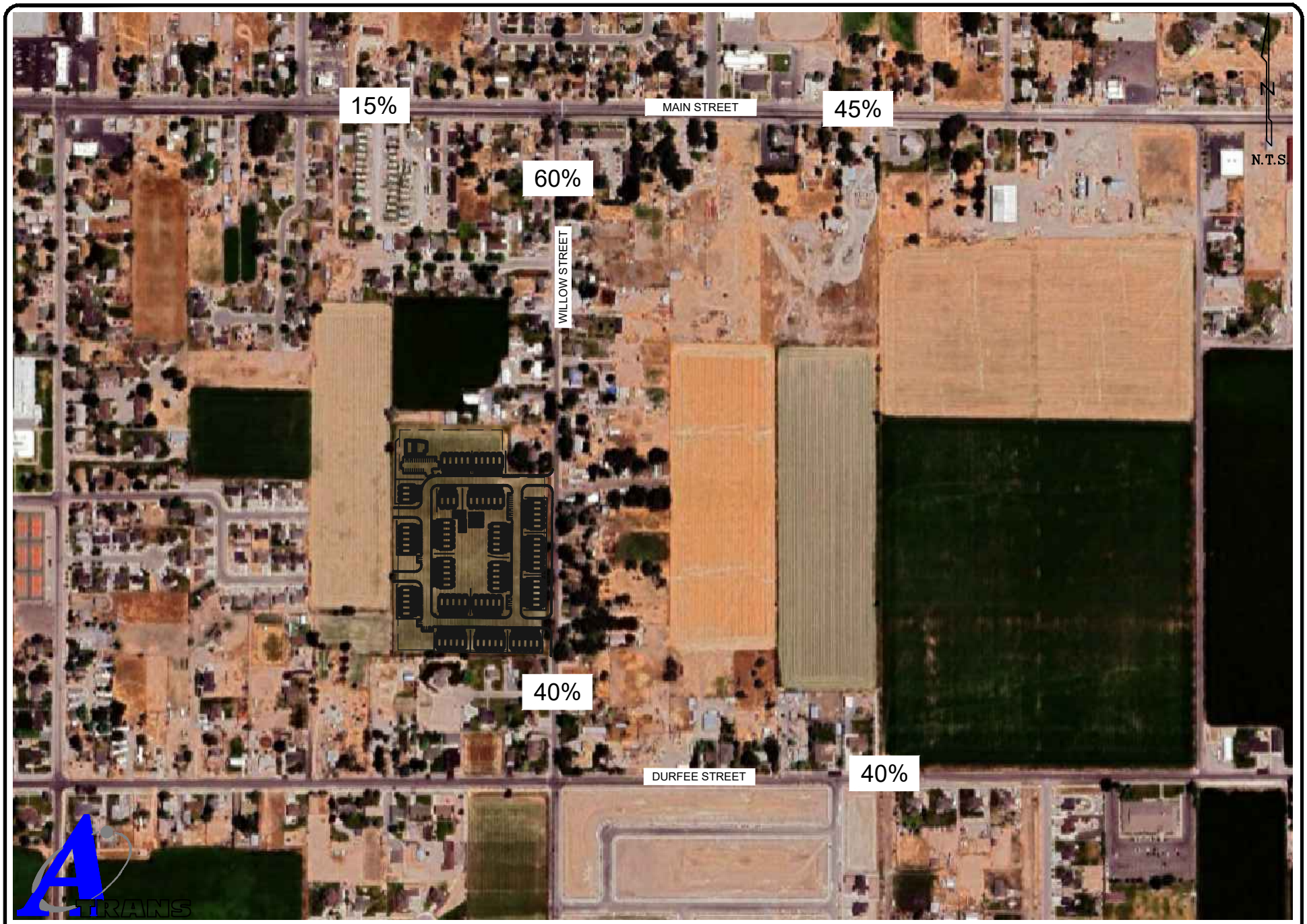
Trip generation for the site was done using The Institute of Transportation Engineers (ITE) *Trip Generation* (11th Edition) handbook. The site is planning 93 units. The site is projected to generate 44 AM and 52 PM peak hour trips with 660 daily trips as identified in the prior Hales Engineering Study.

B. Trip Distribution

Origin-destination was determined from evaluating the location of neighboring residential development and commercial centers as well as the existing traffic patterns of trips at the counted intersections. This was used as a baseline for origin destination and engineering judgment was applied to this to determine the following OD for the site.

- 60% to/from north on Willow Street
- 40% to/from south on Willow Street

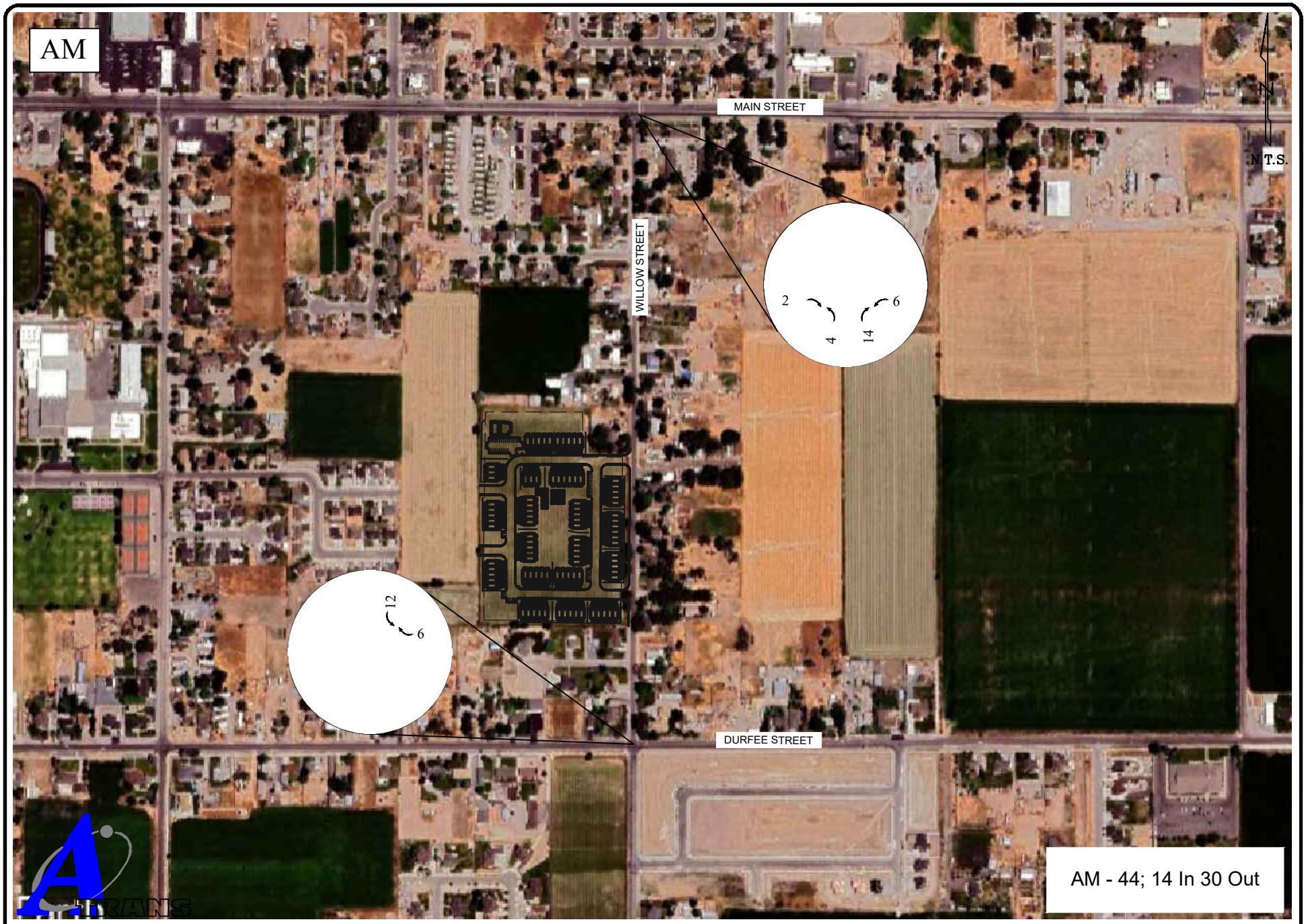
Origin Destination is shown in Figure 5. Site trip distribution is shown in Figure 6.



A-TRANS TRANSPORTATION ENGINEERING
P.O. BOX 521651, SLC, UT 84152
Phone: 801-949-0348 Fax: 801-582-6252

Figure 5

Origin Destination



A-TRANS TRANSPORTATION ENGINEERING
P.O. BOX 521651, SLC, UT 84152
Phone: 801-949-0348 Fax: 801-582-6252

Figure 6

Site Trip Distribution

VI. Growth

Growth in the area was determined from UDOT's Traffic on Utah Highways and projections from WFRC. The volumes and utilized to determine growth is shown in Appendix A. Based on this data an average growth of 2.6% is assumed. The 2030 growth factor is 1.14.

Background traffic is determined by multiplying the existing traffic by the growth factor for 2030. 2030 Background Traffic is shown in Figure 7. Total traffic in the area for the future projection years is derived by adding the non-site volume forecasts (background traffic) to the site generated traffic. Opening Day Total Traffic is shown in Figure 8. 2030 Total Traffic is shown in Figure 9.



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Figure 7

2030 Background Traffic



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Phone: 801-949-0348 Fax: 801-582-6252

Figure 8

2025 Total Traffic



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Figure 9

2030 Total Traffic

VII. Traffic Analysis

A. Level of Service Analysis

The intersection and access analysis evaluates the performance of each intersection and access using the measure of performance of delay and level of service (LOS). Table 6 provides a summary of the analysis. Tables 4-6 show the intersection and access analysis.

Table 4: Analysis Results

		2024 Existing	2025 Total	2030 Background	2030 Total
Willow Street / Main Street	AM	NB delay at LOS 18.5 C	NB delay at LOS 19.9 C	NB delay at LOS 23.2 C	NB delay at LOS 25.7 D
Willow Street / Durfee Street	AM	WB delay at LOS 10.9 B	WB delay at LOS 10.8 B	WB delay at LOS 11.9 B	WB delay at LOS 12.2 B

Table 5: Willow Street / Main Street Intersection Analysis

		NB		WBL	
2024 Existing	AM	18.5	C	9.5	A
2030 Background	AM	23.2	C	10.0	A
2025 Total	AM	19.9	C	9.5	A
2030 Total	AM	25.7	D	10.0	B

Table 6: Willow Street / Durfee Street Intersection Analysis

		NBLTR		EBLTR		WBLTR		SBLTR	
2024 Existing	AM	9.7	A	10.3	B	10.6	B	9.2	A
2030 Background	AM	10.5	B	11.5	B	11.9	B	9.7	A
2025 Total	AM	9.8	A	10.4	B	10.8	B	9.4	A
2030 Total	AM	10.6	B	11.7	B	12.2	B	10.0	A

VIII. Conclusions

This traffic impact analysis is for the proposed South Willow townhome development located on the west side of Willow Street between Main Street and Durfee Street in Grantsville, Utah. The development is planning to include 93 residential townhomes. The new land use site is projected to generate 44 AM and 52 PM peak hour trips with 660 daily trips and is planning two accesses on Willow Street. The northern access will be approximately 1550 feet south of main street, the southern access will be approximately 600 feet north of Durfee Street. The accesses were measured from center of intersection to center of intersection.

Since this study is a follow up from the original Hales study, completed in February 2022, only the AM peak was analyzed.

The purpose of this analysis is to identify the proposed developments impact on the Willow / Main Street and the Durfee / Willow intersections. The results show the critical movements all operate at a LOS D or better and most individual movement changes are less than one second. The northbound movement at Main Street is projected to change by less than two seconds.

Main Street has right turn and left turn lanes to accommodate the increase in traffic at Willow Street.

There are no off site recommendations made to accommodate the site traffic.

APPENDICES

Appendix A Traffic Counts and Projections
Appendix B Intersection Analyses

Appendix A Traffic Counts and Projections

AM PEAK HOUR VOLUMES

Ped = 0

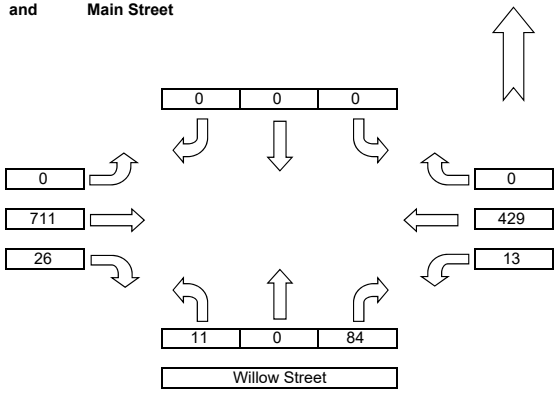
INTERSECTION: **Willow Street** **and** **Main Street**

N-S STREET: **Willow Street**
E-W STREET: **Main Street**

COUNT DATE: **October 24, 2024**
Day of the Week: **Thursday**
NOTES:

COUNT TIME:
FROM: **7:00 AM**
TO: **9:00 AM**

PK HR VOLUME:	1,274
PHF:	0.88
PEAK HOUR:	
FROM:	TO:
7:10 AM	8:10 AM



AM Traffic

COUNT DATA INPUT: Name: Julie Name: Julie Name: Julie Name: Julie

TIME PERIOD		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			TOTAL 5'	TOTAL 15'	PEDESTRIAN	
FROM:	TO:	NBL	NBT	NBR	EBL	EBT	EBR	SBL	SBT	SBR	WBL	WBT	WBR	VOLUMES	VOLUMES	E/W	N/S
7:00 AM	7:05 AM	1	0	5	0	27	0	0	1	0	0	14	0	48	209	0	0
7:05 AM	7:10 AM	1	0	8	0	48	1	0	0	0	0	17	0	75	236	0	0
7:10 AM	7:15 AM	1	0	7	0	52	1	0	0	0	2	23	0	86	248	0	0
7:15 AM	7:20 AM	1	0	9	0	44	2	0	0	0	1	18	0	75	265	0	0
7:20 AM	7:25 AM	0	0	6	0	56	0	0	0	0	0	25	0	87	298	0	0
7:25 AM	7:30 AM	1	0	6	0	60	1	0	0	0	2	33	0	103	327	0	0
7:30 AM	7:35 AM	0	0	12	0	58	1	0	0	0	2	35	0	108	341	0	0
7:35 AM	7:40 AM	1	0	5	0	66	2	0	0	0	1	41	0	116	354	0	0
7:40 AM	7:45 AM	1	0	4	0	65	3	0	0	0	0	44	0	117	362	0	0
7:45 AM	7:50 AM	3	0	5	0	66	2	0	0	0	1	44	0	121	356	0	0
7:50 AM	7:55 AM	0	0	7	0	64	4	0	0	0	2	47	0	124	362	0	0
7:55 AM	8:00 AM	0	0	10	0	57	1	0	0	0	0	43	0	111	337	0	0
8:00 AM	8:05 AM	3	0	5	0	70	4	0	0	0	2	43	0	127	311	0	0
8:05 AM	8:10 AM	0	0	8	0	53	5	0	0	0	0	33	0	99	244	0	0
8:10 AM	8:15 AM	0	0	9	0	36	2	0	0	0	6	32	0	85	238	0	0
8:15 AM	8:20 AM	1	0	2	0	33	2	0	0	0	2	20	0	60	251	0	0
8:20 AM	8:25 AM	1	0	3	0	43	5	0	0	0	4	37	0	93	290	0	0
8:25 AM	8:30 AM	3	0	6	0	41	5	0	0	0	4	39	0	98	298	0	0
8:30 AM	8:35 AM	1	0	7	0	53	4	0	0	0	3	31	0	99	289	0	0
8:35 AM	8:40 AM	4	0	9	0	44	14	0	0	0	4	26	0	101	283	0	0
8:40 AM	8:45 AM	3	0	4	0	39	9	0	0	0	3	31	0	89	298	0	0
8:45 AM	8:50 AM	5	0	3	0	43	8	0	0	0	6	28	0	93	295	0	0
8:50 AM	8:55 AM	7	0	10	0	52	7	0	0	0	3	37	0	116	202	0	0
8:55 AM	9:00 AM	4	0	10	0	47	3	0	0	0	0	22	0	86	86	0	1

AM PEAK HOUR VOLUMES

Ped = 2

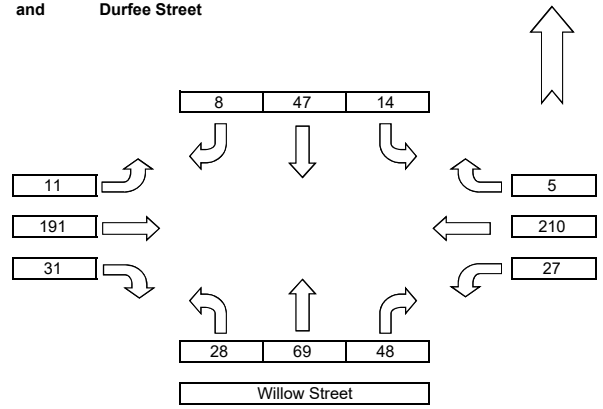
INTERSECTION: **Willow Street** **and** **Durfee Street**

N-S STREET: **Willow Street**
E-W STREET: **Durfee Street**

COUNT DATE: **October 25, 2024**
Day of the Week: **Friday**
NOTES:

COUNT TIME:
FROM: **7:00 AM**
TO: **9:00 AM**

PK HR VOLUME:	689
PHF:	0.69
PEAK HOUR:	
FROM:	TO:
7:35 AM	8:35 AM



AM Traffic

COUNT DATA INPUT: Name: Heather Name: Heather Name: Heather Name: Heather

TIME PERIOD		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			TOTAL 5'	TOTAL 15'	PEDESTRIAN	
FROM:	TO:	NBL	NBT	NBR	EBL	EBT	EBR	SBL	SBT	SBR	WBL	WBT	WBR	VOLUMES	VOLUMES	E/W	N/S
7:00 AM	7:05 AM	0	3	4	1	1	0	2	2	0	1	5	0	19	50	0	0
7:05 AM	7:10 AM	0	4	2	0	2	0	0	0	0	0	2	0	10	53	0	0
7:10 AM	7:15 AM	0	8	0	0	4	0	0	1	0	3	5	0	21	61	0	0
7:15 AM	7:20 AM	0	9	1	0	5	1	0	1	0	0	4	1	22	82	0	0
7:20 AM	7:25 AM	1	3	2	0	3	0	0	1	0	1	7	0	18	112	2	0
7:25 AM	7:30 AM	3	7	7	1	5	0	0	1	1	1	16	0	42	173	0	0
7:30 AM	7:35 AM	3	4	7	0	9	0	1	2	4	0	21	1	52	210	0	0
7:35 AM	7:40 AM	3	10	7	1	11	5	3	1	2	5	31	0	79	248	0	0
7:40 AM	7:45 AM	2	2	7	2	20	4	1	3	0	1	37	0	79	235	0	0
7:45 AM	7:50 AM	4	8	2	1	27	2	0	1	0	1	43	1	90	230	0	1
7:50 AM	7:55 AM	3	9	3	2	18	3	1	1	0	2	23	1	66	190	1	0
7:55 AM	8:00 AM	1	3	4	1	29	3	2	6	4	3	18	0	74	162	0	0
8:00 AM	8:05 AM	3	3	1	0	24	2	1	0	0	1	14	1	50	134	0	0
8:05 AM	8:10 AM	0	7	6	0	15	0	0	0	1	0	9	0	38	107	0	0
8:10 AM	8:15 AM	1	3	3	2	14	2	2	5	0	3	10	1	46	107	0	0
8:15 AM	8:20 AM	2	5	3	0	3	0	0	4	1	1	3	1	23	109	0	0
8:20 AM	8:25 AM	0	5	1	2	12	2	2	7	0	0	7	0	38	144	0	0
8:25 AM	8:30 AM	3	8	4	0	7	4	2	10	0	5	5	0	48	166	0	0
8:30 AM	8:35 AM	6	6	7	0	11	4	0	9	0	5	10	0	58	199	0	0
8:35 AM	8:40 AM	5	8	7	1	8	12	1	11	1	0	5	1	60	199	0	0
8:40 AM	8:45 AM	4	17	9	0	13	5	2	14	1	3	13	0	81	184	0	0
8:45 AM	8:50 AM	7	14	3	0	9	2	2	5	3	3	9	1	58	136	0	0
8:50 AM	8:55 AM	4	5	3	0	9	2	0	1	1	3	17	0	45	78	0	1
8:55 AM	9:00 AM	0	4	2	0	5	1	0	4	0	2	13	2	33	33	0	0

Historic Growth

2.59%	Growth Factor	Years	Analysis Year
	1.00	0	2024
	1.14	5	2030
	1.99	27	2050

Straight line growth assumed within the study horizon
Source: Traffic on Utah Highways

Road:	Road A	
Year	AADT	Growth
2013	8,700	
2014	9,000	3%
2015	9,500	6%
2016	9,900	4%
2017	11,000	11%
2018	11,000	0%
2019	11,000	0%
2020	9,700	-12%
2021	11,000	13%
2022	11,000	0%
2023	11,000	0%
Average		**2.6%**

Trip Distribution

1	Main Street / Willow			1.14	
	2024	Site	2025	2030	2030
AM	Existing	Phase I	Total	Background	Total
EBL			0	0	0
EBT	711		711	811	811
EBR	26	2	28	30	32
WBL	13	6	19	15	21
WBT	429		429	489	489
WBR			0	0	0
NBL	11	4	15	13	17
NBT			0	0	0
NBR	84	14	98	96	110
SBL			0	0	0
SBT			0	0	0
SBR			0	0	0

% Increase
1

1	Durfee / Willow			1.14	
	2024	Site	2025	2030	2030
AM	Existing	Phase I	Total	Background	Total
EBL	11		11	13	13
EBT	191		191	218	218
EBR	31		31	35	35
WBL	27		27	31	31
WBT	210		210	239	239
WBR	5	6	11	6	12
NBL	28		28	32	32
NBT	69		69	79	79
NBR	48		48	55	55
SBL	14	12	26	16	28
SBT	47		47	54	54
SBR	8		8	9	9

Appendix B Intersection Analyses

Intersection	
Int Delay, s/veh	1.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	711	26	13	429	11	84
Future Vol, veh/h	711	26	13	429	11	84
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	300	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	773	28	14	466	12	91

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	801	0	1034	773
Stage 1	-	-	-	-	773	-
Stage 2	-	-	-	-	261	-
Critical Hdwy	-	-	4.13	-	6.63	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.83	-
Follow-up Hdwy	-	-	2.219	-	3.519	3.319
Pot Cap-1 Maneuver	-	-	820	-	242	398
Stage 1	-	-	-	-	454	-
Stage 2	-	-	-	-	760	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	820	-	238	398
Mov Cap-2 Maneuver	-	-	-	-	238	-
Stage 1	-	-	-	-	454	-
Stage 2	-	-	-	-	747	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	18.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	369	-	-	820	-
HCM Lane V/C Ratio	0.28	-	-	0.017	-
HCM Control Delay (s)	18.5	-	-	9.5	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	1.1	-	-	0.1	-

Intersection	
Intersection Delay, s/veh	10.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	191	31	27	210	5	28	69	48	14	47	8
Future Vol, veh/h	11	191	31	27	210	5	28	69	48	14	47	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	208	34	29	228	5	30	75	52	15	51	9
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10.3	10.6	9.7	9.2
HCM LOS	B	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	19%	5%	11%	20%
Vol Thru, %	48%	82%	87%	68%
Vol Right, %	33%	13%	2%	12%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	145	233	242	69
LT Vol	28	11	27	14
Through Vol	69	191	210	47
RT Vol	48	31	5	8
Lane Flow Rate	158	253	263	75
Geometry Grp	1	1	1	1
Degree of Util (X)	0.223	0.336	0.354	0.114
Departure Headway (Hd)	5.095	4.783	4.846	5.454
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	697	745	734	662
Service Time	3.185	2.862	2.925	3.454
HCM Lane V/C Ratio	0.227	0.34	0.358	0.113
HCM Control Delay	9.7	10.3	10.6	9.2
HCM Lane LOS	A	B	B	A
HCM 95th-tile Q	0.9	1.5	1.6	0.4

Intersection	
Int Delay, s/veh	1.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	711	28	19	429	15	98
Future Vol, veh/h	711	28	19	429	15	98
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	300	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	773	30	21	466	16	107

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	803	0	1048	773
Stage 1	-	-	-	-	773	-
Stage 2	-	-	-	-	275	-
Critical Hdwy	-	-	4.13	-	6.63	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.83	-
Follow-up Hdwy	-	-	2.219	-	3.519	3.319
Pot Cap-1 Maneuver	-	-	819	-	237	398
Stage 1	-	-	-	-	454	-
Stage 2	-	-	-	-	747	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	819	-	231	398
Mov Cap-2 Maneuver	-	-	-	-	231	-
Stage 1	-	-	-	-	454	-
Stage 2	-	-	-	-	728	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	19.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	363	-	-	819	-
HCM Lane V/C Ratio	0.338	-	-	0.025	-
HCM Control Delay (s)	19.9	-	-	9.5	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	1.5	-	-	0.1	-

Intersection	
Intersection Delay, s/veh	10.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	191	31	27	210	11	28	69	48	26	47	8
Future Vol, veh/h	11	191	31	27	210	11	28	69	48	26	47	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	208	34	29	228	12	30	75	52	28	51	9
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10.4	10.8	9.8	9.4
HCM LOS	B	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	19%	5%	11%	32%
Vol Thru, %	48%	82%	85%	58%
Vol Right, %	33%	13%	4%	10%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	145	233	248	81
LT Vol	28	11	27	26
Through Vol	69	191	210	47
RT Vol	48	31	11	8
Lane Flow Rate	158	253	270	88
Geometry Grp	1	1	1	1
Degree of Util (X)	0.229	0.34	0.365	0.135
Departure Headway (Hd)	5.235	4.83	4.872	5.519
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	690	734	728	653
Service Time	3.238	2.928	2.969	3.524
HCM Lane V/C Ratio	0.229	0.345	0.371	0.135
HCM Control Delay	9.8	10.4	10.8	9.4
HCM Lane LOS	A	B	B	A
HCM 95th-tile Q	0.9	1.5	1.7	0.5

Intersection	
Int Delay, s/veh	1.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	811	30	15	489	13	96
Future Vol, veh/h	811	30	15	489	13	96
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	300	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	882	33	16	532	14	104

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	915	0	1180	882
Stage 1	-	-	-	-	882	-
Stage 2	-	-	-	-	298	-
Critical Hdwy	-	-	4.13	-	6.63	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.83	-
Follow-up Hdwy	-	-	2.219	-	3.519	3.319
Pot Cap-1 Maneuver	-	-	743	-	196	344
Stage 1	-	-	-	-	404	-
Stage 2	-	-	-	-	728	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	743	-	192	344
Mov Cap-2 Maneuver	-	-	-	-	192	-
Stage 1	-	-	-	-	404	-
Stage 2	-	-	-	-	712	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	23.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	314	-	-	743	-
HCM Lane V/C Ratio	0.377	-	-	0.022	-
HCM Control Delay (s)	23.2	-	-	10	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	1.7	-	-	0.1	-

Intersection	
Intersection Delay, s/veh	11.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	218	35	31	239	6	32	79	55	16	54	9
Future Vol, veh/h	13	218	35	31	239	6	32	79	55	16	54	9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	237	38	34	260	7	35	86	60	17	59	10
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	11.5	11.9	10.5	9.7
HCM LOS	B	B	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	19%	5%	11%	20%
Vol Thru, %	48%	82%	87%	68%
Vol Right, %	33%	13%	2%	11%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	166	266	276	79
LT Vol	32	13	31	16
Through Vol	79	218	239	54
RT Vol	55	35	6	9
Lane Flow Rate	180	289	300	86
Geometry Grp	1	1	1	1
Degree of Util (X)	0.272	0.406	0.427	0.137
Departure Headway (Hd)	5.435	5.058	5.118	5.748
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	660	711	705	623
Service Time	3.471	3.087	3.145	3.79
HCM Lane V/C Ratio	0.273	0.406	0.426	0.138
HCM Control Delay	10.5	11.5	11.9	9.7
HCM Lane LOS	B	B	B	A
HCM 95th-tile Q	1.1	2	2.1	0.5

Intersection	
Int Delay, s/veh	2.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	811	32	21	489	17	110
Future Vol, veh/h	811	32	21	489	17	110
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	300	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	882	35	23	532	18	120

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	917	0	1194	882
Stage 1	-	-	-	-	882	-
Stage 2	-	-	-	-	312	-
Critical Hdwy	-	-	4.13	-	6.63	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.83	-
Follow-up Hdwy	-	-	2.219	-	3.519	3.319
Pot Cap-1 Maneuver	-	-	742	-	192	344
Stage 1	-	-	-	-	404	-
Stage 2	-	-	-	-	716	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	742	-	186	344
Mov Cap-2 Maneuver	-	-	-	-	186	-
Stage 1	-	-	-	-	404	-
Stage 2	-	-	-	-	694	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	25.7
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	309	-	-	742	-
HCM Lane V/C Ratio	0.447	-	-	0.031	-
HCM Control Delay (s)	25.7	-	-	10	-
HCM Lane LOS	D	-	-	B	-
HCM 95th %tile Q(veh)	2.2	-	-	0.1	-

Intersection	
Intersection Delay, s/veh	11.5
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	218	35	31	239	12	32	79	55	28	54	9
Future Vol, veh/h	13	218	35	31	239	12	32	79	55	28	54	9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	237	38	34	260	13	35	86	60	30	59	10
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	11.7	12.2	10.6	10
HCM LOS	B	B	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	19%	5%	11%	31%
Vol Thru, %	48%	82%	85%	59%
Vol Right, %	33%	13%	4%	10%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	166	266	282	91
LT Vol	32	13	31	28
Through Vol	79	218	239	54
RT Vol	55	35	12	9
Lane Flow Rate	180	289	307	99
Geometry Grp	1	1	1	1
Degree of Util (X)	0.275	0.411	0.439	0.16
Departure Headway (Hd)	5.492	5.118	5.156	5.811
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	653	703	699	616
Service Time	3.533	3.154	3.191	3.857
HCM Lane V/C Ratio	0.276	0.411	0.439	0.161
HCM Control Delay	10.6	11.7	12.2	10
HCM Lane LOS	B	B	B	A
HCM 95th-tile Q	1.1	2	2.2	0.6

January 17, 2025

TRANSPORTATION ENGINEERING

RE: Townhomes on Willow Subdivision PUD– Traffic Impact Study Comment Response– Grantsville, UT

There is a comment from the January 7, 2025 review from AQUA Engineering on Page 6 regarding the need to address the applied trip generation. The following comment is offered as clarification.

Comment

Traffic Impact Study: A memo has been included reviewing the traffic studies that have been provided. In summary the original Traffic Impact Study (TIS) completed by Hales Engineering and dated February 11, 2022, did not consider the two closest intersections with major streets at the Intersection of Durfee Street and Willow Street and Main Street and Willow Street. Thus, a second TIS specifically addressing these intersections was requested by the City and provided by the applicant. The second TIS was completed by A-Trans Transportation Engineering and is dated November 2024.

Upon review of both studies there is one major concern that requires additional clarification. The Hales Engineering study utilizes the ITE Trip Generation data which is considered an industry standard. However, the numbers: 44 morning peak hour trips and 52 evening peak hour trips raise red flags. Grantsville is not an urban area with abundant transit and close proximity to employment and goods and services. When compared with traffic studies for single family home subdivisions in the area these counts do not make sense. The residents of these townhomes will find it needful to drive just like residents in other nearby single-family subdivisions. These trip generation numbers were carried over into the 2024 study. The trip generation numbers need to be reconsidered and adjusted to better reflect the local conditions or justification provided to help the City understand why these numbers are an accurate reflection of what will occur.

Response

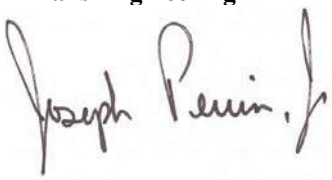
This is primarily a comment for the original Hales Traffic study which identified this trip rate and was used in the expanded study but the comment has the following impacts. First, it would have been nice to have this comment in the first review and not after a supplemental traffic study was requested because the use of a different trip rate requires an entirely new study as site trip rate is the basis for all future analysis after the existing condition. Further, this will impact all future traffic studies because if Grantsville is deciding that it wants to deviate from the standard national practice of applying ITE rates for traffic studies and instead use single family for multi-family units, then this needs to be conveyed to future multi-family developments and should be adopted into City policy. Also, below identifies that the actual rate used by the Hales Study was single family attached housing not townhomes or the detached single family homes. It should also be noted that the land use from ITE that was applied is classified as General Urban/Suburban and NOT dense multi-use urban. Further, there is no rural land use trip rate but an argument can be made that the trip rate for more rural homes is actually less than for urban/suburban because there is much more likely to be trip chaining for rural areas because there is more effort in making the trips as they are usually longer and take more time. I believe that the Hales Study used the appropriate trip rate based on the available data and best practices. Further, the results are unlikely to change even if single family homes trip rate is applied as the difference is going to be an additional 20 AM peak trips (1 per 3 minutes) and an

additional 34 PM peak trips (1 per 2 minutes). Once these trips are directional split into inbound and outbound, the increase in traffic by movement will not likely be noticeable and with the analysis indicating that the intersections operate at a LOS B for the critical movement at Dufree and a LOS D for the critical movement at Main Street (25.7 seconds) just into the LOS D range and this range goes to 35 seconds, the analysis results are unlikely to change any recommendations as auxiliary lanes already exist on Main Street.

			Trip Rate			Trips		
ITE 11th Edition	Size	Land Use	AM	PM	Daily	AM	PM	Daily
Attached Single Family	93	215	0.48	0.57	7.20	45	53	670
Single Family Detached	93	210	0.70	0.94	9.43	65	87	877
Townhomes	93	220	0.40	0.51	6.74	37	47	627

Please let me know if you have any questions.

Sincerely,
A-Trans Engineering



Joseph Perrin, PhD, PE, PTOE
Principal

REPORT
GEOTECHNICAL STUDY
PROPOSED TOWNHOMES ON WILLOW SUBDIVISION
299 SOUTH WILLOW STREET
GRANTSVILLE, UTAH

Submitted To:

Iconic Development, LLC
3410 North Moyle Lane
Erda, Utah 84074

Submitted By:

GSH Geotechnical, Inc.
473 West 4800 South
Salt Lake City, Utah 84123

December 9, 2021

Job No. 3431-001-21

December 9, 2021
Job No. 3431-001-21

Mr. Sean Perkins
Iconic Development, LLC
3410 North Moyle Lane
Erda, Utah 84074

Mr. Perkins:

Re: Report
Geotechnical Study
Proposed Townhomes on Willow Subdivision
299 South Willow Street
Grantsville, Utah

1. INTRODUCTION

1.1 GENERAL

This report presents the results of our geotechnical study performed at the site of the proposed townhome subdivision to be located at approximately 299 South Willow Street in Grantsville, Utah. The general location of the site with respect to existing roadways, as of 2021, is presented on Figure 1, Vicinity Map. A more detailed layout of the site showing an aerial image, existing roadways, and the test pits excavated in conjunction with this study is presented on Figure 2, Site Plan.

1.2 OBJECTIVES AND SCOPE

The objectives and scope of the study were planned in discussions between Mr. Sean Perkins of Iconic Development, LLC and Mr. Robert Gifford of GSH Geotechnical, Inc. (GSH).

In general, the objectives of this study were to:

1. Define and evaluate the subsurface soil and groundwater conditions across the site.

2. Provide appropriate foundation, earthwork, pavement, stormwater percolation, and geoseismic recommendations to be utilized in the design and construction of the proposed facilities.

In accomplishing these objectives, our scope has included the following:

1. A field program consisting of the excavating, logging, and sampling of 6 exploration test pits, as well as performing a stormwater percolation test.

2. A laboratory testing program.

3. An office program consisting of the correlation of available data, engineering analysis, and the preparation of this summary report.

1.3 AUTHORIZATION

Authorization was provided by returning a signed copy of the Professional Services Agreement No. 21-1043 dated November 10, 2021.

1.4 PROFESSIONAL STATEMENTS

Supporting data upon which our recommendations are based are presented in subsequent sections of this report. Recommendations presented herein are governed by the physical properties of the soils encountered in the exploration test pits, projected groundwater conditions, and the layout and design data discussed in Section 2, Proposed Construction. If subsurface conditions other than those described in this report are encountered and/or if design and layout changes are implemented, GSH must be informed so that our recommendations can be reviewed and amended, if necessary.

Our professional services have been performed, our findings developed, and our recommendations prepared in accordance with generally accepted engineering principles and practices in this area at this time.

2. PROPOSED CONSTRUCTION

The site is proposed to be developed for the construction of multiple townhome structures and associated pavements. The residential structures are anticipated to be 2- to 3-stories above grade with full or partial depth basements, supported upon conventional spread and continuous wall footings.

Maximum real column and wall loads are anticipated to be on the order of up to 60 kips and 2 to 4 kips per lineal foot, respectively. Real loads are defined as the total of all dead plus frequently applied (reduced) live loads.

Paved flatwork areas and residential roadways are planned around the structures. Projected traffic in these areas is anticipated to consist of a light volume of automobiles and light trucks and occasional medium- and heavy-weight trucks (school buses).

Site development will require some earthwork in the form of minor cutting and filling. At this time, we anticipate that maximum site grading cuts and fills, excluding utilities, will be on the order of 1 to 3 feet.

3. SITE INVESTIGATIONS

3.1 GENERAL

Subsurface conditions in unexplored locations or at other times may vary from those encountered at specific test pit locations. If such variations are noted during construction or if project development plans are changed, GSH must review the changes and amend our recommendations, if necessary.

Test pit locations were established by estimating distances and angles from site landmarks. If increased accuracy is desired by the client, we recommend that the test pit locations and elevations be surveyed.

3.2 FIELD PROGRAM

To define and evaluate the subsurface soil and groundwater conditions across the site, 6 test pits were excavated within the accessible areas. These test pits were completed to depths ranging from 10 to 15 feet with a moderate-sized rubber track-mounted excavator. The approximate locations of the test pits are presented on Figure 2. Additionally, a stormwater percolation test to determine the percolation rate was performed near 10 West Street at a depth of 5 feet.

The field portion of our study was under the direct control and continual supervision of an experienced member of our geotechnical staff. During the course of the drilling operations, a continuous log of the subsurface conditions encountered was maintained. In addition, samples of the typical soils encountered were obtained for subsequent laboratory testing and examination. The soils were classified in the field based upon visual and textural examination. These classifications were supplemented by subsequent inspection and testing in our laboratory. Graphical representation of the subsurface conditions encountered is presented on Figures 3A through 3F, Test Pit Logs. Soils were classified in accordance with the nomenclature described on Figure 4, Key to Test Pit Log (USCS).

A 2.42-inch inside diameter thin-wall drive sampler was utilized at select locations and depths within the test pit excavations to collect soil samples for further examination and laboratory testing.

Following completion of excavation operations, 1.25-inch diameter slotted PVC pipe was installed in Test Pits TP-2, TP-4, and TP-6 to provide a means of monitoring the groundwater fluctuations. The test pits were then backfilled. Although an effort was made to compact the backfill with the excavator, backfill was not placed in uniform lifts and compacted to a specific density. Consequently, settlement of the backfill with time is likely to occur.

3.3 LABORATORY TESTING

3.3.1 General

To provide data necessary for our engineering analysis, a laboratory testing program was performed. This program included moisture, density, Atterberg limits, consolidation, and chemical tests. The following paragraphs describe the tests and summarize the test data.

3.3.2 Moisture and Density Tests

To provide index parameters and to correlate other test data, moisture and density tests were performed on selected samples. The results of these tests are presented on the test pit logs, Figures 3A through 3F.

3.3.3 Atterberg Limits Test

To aid in classifying the soils, an Atterberg limits test was performed on a sample of the fine-grained cohesive soils. Results of the test are tabulated below and presented on the test pit logs, Figures 3A through 3F:

Test Pit No.	Depth (feet)	Liquid Limit (percent)	Plastic Limit (percent)	Plasticity Index (percent)	Soil Classification
TP-2	10.0	41	18	23	CL

3.3.4 Consolidation Tests

To provide data necessary for our settlement analysis, consolidation testing was performed on 2 representative samples of the natural fine-grained clay soils encountered at the site. The results of these tests indicate that the samples tested were moderately over-consolidated and will exhibit moderate strength and compressibility characteristics under the anticipated loading. Detailed results of the tests are maintained within our files and can be transmitted to you, upon your request.

3.3.5 Chemical Tests

To determine if the site soils will react detrimentally with concrete, chemical tests were performed on a representative sample of the near-surface soil encountered at the site. The results of the chemical tests are tabulated below:

Test Pit No.	Depth (feet)	Soil Classification	pH	Total Water Soluble Sulfate (mg/kg-dry)
TP-4	1.0	CL	8.20	<6.03

4. SITE CONDITIONS

4.1 SURFACE

The site is located at approximately 299 South Willow Street in Grantsville, Utah. The site is currently vacant agricultural land. The topography of the site is relatively flat, grading down to the north with a total relief of approximately 6 to 8 feet. Site vegetation consists of agricultural grass fields and mature trees located around the perimeter of the site.

The site is bounded to the north by single-family residential structures along with agricultural grass fields; to the east by Willow Street followed by single-family residential structures; to the south by single-family residential structures followed by Durfee Street; and to the west by agricultural grass fields followed by single-family residential structures.

4.2 SUBSURFACE SOIL

The following paragraphs provide generalized descriptions of the subsurface profiles and soil conditions encountered within the test pits conducted during this study. As previously noted, soil conditions may vary in unexplored locations.

The test pits were excavated to depths ranging from 10 to 15 feet. The soil conditions encountered in each of the test pits, to the depths explored, were generally similar across the test pit locations.

- Approximately 12 to 18 inches of topsoil was encountered in the test pits. Topsoil thickness is frequently erratic and thicker zones of topsoil should be anticipated.

- Natural soils were encountered below the ground surface in all test pit locations. The natural soils consisted primarily of silty clay with varying sand and gravel content.

The natural clay soils were soft to hard, slightly moist to moist, light brown, brown, and gray in color, and moderately over-consolidated. The natural clay soils are anticipated to exhibit moderate strength and compressibility characteristics under the anticipated loading.

For a more descriptive interpretation of subsurface conditions, please refer to Figures 3A through 3F, Test Pit Logs. The lines designating the interface between soil types on the test pit logs generally represent approximate boundaries. In situ, the transition between soil types may be gradual.

4.3 GROUNDWATER

Groundwater was not encountered to the depths explored in the test pits completed at the site.

Groundwater levels vary with changes in season and rainfall, construction activity, irrigation, snow melt, surface water run-off, and other site-specific factors.

5. DISCUSSIONS AND RECOMMENDATIONS

5.1 SUMMARY OF FINDINGS

The proposed structures may be supported upon conventional spread and continuous wall foundations supported upon suitable natural soils and/or structural fill extending to suitable natural soils.

The most significant geotechnical aspects at the site are:

1. The potential to encounter non-engineered fills at the site.

2. The existing topsoil/vegetation blanketing the site.

Prior to proceeding with construction, removal of any existing debris, surface vegetation, root systems, topsoil, non-engineered fill (if encountered), and any deleterious materials from beneath an area extending out at least 5 feet from the perimeter of the proposed structure footprints and 3 feet beyond pavements and exterior flatwork areas will be required. All existing utility locations should be reviewed to assess their impact on the proposed construction and abandoned and/or relocated as appropriate.

Due to the developed nature of this site and the surrounding area, non-engineered fills may exist in unexplored areas of the site. Based on our experience, non-engineered fills are frequently erratic in composition and consistency. All surficial loose/disturbed soils and non-engineered fills must be removed below all footings, floor slabs, and pavements.

Detailed discussions pertaining to earthwork, foundations, pavements, and the geoseismic setting of the site are presented in the following sections.

5.2 EARTHWORK

5.2.1 Site Preparation

Initial site preparation will consist of the removal of any existing debris, non-engineered fills (if encountered), surface vegetation, root systems, topsoil, and any deleterious materials from beneath an area extending out at least 5 feet from the perimeter of the proposed structure footprint and 3

feet beyond pavements and exterior flatwork areas. All existing utility locations should be reviewed to assess their impact on the proposed construction and abandoned and/or relocated as appropriate.

It must be noted that from a handling and compaction standpoint, soils containing high amounts of fines (silts and clays) are inherently more difficult to rework and are very sensitive to changes in moisture content, requiring very close moisture control during placement and compaction. This will be very difficult, if not impossible, during wet and cold periods of the year. Additionally, the on-site soils are likely above optimum moisture content for compacting at present and would require some drying prior to re-compacting.

Subsequent to stripping and prior to the placement of floor slabs, foundations, structural site grading fills, exterior flatwork, and pavements, the exposed subgrade must be proof rolled by passing moderate-weight rubber tire-mounted construction equipment over the surface at least twice. If excessively soft or otherwise unsuitable soils are encountered beneath footings, they must be completely removed. If removal depth required is greater than 2 feet below footings, GSH must be notified to provide further recommendations. In pavement, floor slab, and outside flatwork areas, unsuitable natural soils should be removed to a maximum depth of 2 feet and replaced with compacted granular structural fill.

Subgrade preparation as described must be completed prior to placing overlying structural site grading fills.

GSH must be notified prior to the placement of structural site grading fills, floor slabs, footings, and pavements to verify that all loose/disturbed soils and non-engineered fills have been completely removed.

5.2.2 Temporary Excavations

Temporary excavations up to 8 feet deep in fine-grained cohesive soils, above or below the water table, may be constructed with sideslopes no steeper than one-half horizontal to one vertical (0.5H:1.0V). Excavations deeper than 8 feet are not anticipated at the site.

For granular (cohesionless) soils, construction excavations above the water table, not exceeding 4 feet, should be no steeper than one-half horizontal to one vertical (0.5H:1.0V). For excavations up to 8 feet, in granular soils and above the water table, the slopes should be no steeper than one horizontal to one vertical (1H:1V). Excavations encountering saturated cohesionless soils will be very difficult and will require very flat sideslopes and/or shoring, bracing, and dewatering.

All excavations must be inspected periodically by qualified personnel. If any signs of instability or excessive sloughing are noted, immediate remedial action must be initiated.

5.2.3 Structural Fill

Structural fill is defined as all fill which will ultimately be subjected to structural loadings, such as imposed by footings, floor slabs, pavements, etc. Structural fill will be required as backfill over foundations and utilities, as site grading fill, and as replacement fill below footings. All structural fill must be free of surface vegetation, root systems, rubbish, topsoil, frozen soil, and other deleterious materials.

Structural site grading fill is defined as structural fill placed over relatively large open areas to raise the overall grade. For structural site grading fill, the maximum particle size shall not exceed 4 inches; although, occasional larger particles, not exceeding 8 inches in diameter, may be incorporated if placed randomly in a manner such that "honeycombing" does not occur and the desired degree of compaction can be achieved. The maximum particle size within structural fill placed within confined areas shall be restricted to 2 inches.

On-site soils may be re-utilized as structural site grading fill if they do not contain construction debris or deleterious material and meet the requirements of structural fill. Fine-grained soils will require very close moisture control and may be very difficult, if not impossible, to properly place and compact during wet and cold periods of the year.

Imported structural fill below foundations and floor slabs shall consist of a well graded sand and gravel mixture with less than 30 percent retained on the three-quarter-inch sieve and less than 20 percent passing the No. 200 Sieve (clays and silts).

To stabilize soft subgrade conditions (if encountered) or where structural fill is required to be placed closer than 2.0 feet above the water table at the time of construction, a mixture of coarse angular gravels and cobbles and/or 1.5- to 2.0-inch gravel (stabilizing fill) should be utilized. It may also help to utilize a stabilization fabric, such as Mirafi 600X or equivalent, placed on the natural ground if 1.5- to 2.0-inch gravel is used as stabilizing fill.

5.2.4 Fill Placement and Compaction

All structural fill shall be placed in lifts not exceeding 8 inches in loose thickness. Structural fills shall be compacted in accordance with the percent of the maximum dry density as determined by the AASHTO[1] T180 (ASTM[2] D1557) compaction criteria in accordance with the table on the following page.

[1] American Association of State Highway and Transportation Officials
[2] American Society for Testing and Materials

Location	Total Fill Thickness (feet)	Minimum Percentage of Maximum Dry Density
Beneath an area extending at least 5 feet beyond the perimeter of the structure	0 to 10	95
Site grading fills outside area defined above	0 to 5	90
Site grading fills outside area defined above	5 to 10	95
Utility trenches within structural areas	--	96
Road base	--	96

Structural fills greater than 10 feet thick are not anticipated at the site.

Subsequent to stripping and prior to the placement of structural site grading fill, the subgrade shall be prepared as discussed in Section 5.2.1, Site Preparation, of this report. In confined areas, subgrade preparation should consist of the removal of all loose or disturbed soils.

Coarse angular gravel and cobble mixtures (stabilizing fill), if utilized, shall be end dumped, spread to a maximum loose lift thickness of 15 inches, and compacted by dropping a backhoe bucket onto the surface continuously at least twice. As an alternative, the stabilizing fill may be compacted by passing moderately heavy construction equipment or large self-propelled compaction equipment at least twice. Subsequent fill material placed over the coarse gravels and cobbles shall be adequately compacted so that the "fines" are "worked into" the voids in the underlying coarser gravels and cobbles. Where soil fill materials are to be placed directly over more than about 18 inches of clean gravel, a separation geofabric, such as Mirafi 140N or equivalent, is recommended to be placed between the gravel and subsequent soil fills.

Non-structural fill may be placed in lifts not exceeding 12 inches in loose thickness and compacted by passing construction, spreading, or hauling equipment over the surface at least twice.

5.2.5 Utility Trenches

All utility trench backfill material below structurally loaded facilities (footings, floor slabs, flatwork, pavements, etc.) shall be placed at the same density requirements established for structural fill. If the surface of the backfill becomes disturbed during the course of construction, the backfill shall be proof rolled and/or properly compacted prior to the construction of any exterior flatwork over a backfilled trench. Proof rolling shall be performed by passing moderately loaded rubber tire-mounted construction equipment uniformly over the surface at least twice. If excessively loose or soft areas are encountered during proof rolling, they shall be removed to a maximum depth of 2 feet below design finish grade and replaced with structural fill.

Many utility companies and City-County governments are now requiring that Type A-1a or A-1b (AASHTO Designation – granular soils with limited fines) soils be used as backfill over utilities. These organizations are also requiring that in public roadways, the backfill over major utilities be compacted over the full depth of fill to at least 96 percent of the maximum dry density as determined by the AASHTO T180 (ASTM D1557) method of compaction. GSH recommends that as the major utilities continue onto the site that these compaction specifications are followed.

Fine-grained soils, such as silts and clays, are not recommended for utility trench backfill in structural areas.

5.3 GROUNDWATER

Groundwater was not encountered to the depths explored in the test pits completed at the site.

The groundwater measurements presented are conditions at the time of the field exploration and may not be representative of other times or locations. Groundwater levels may vary seasonally and with precipitation, as well as other factors including irrigation. Evaluation of these factors is beyond the scope of this study. Groundwater levels may, therefore, be at shallower or deeper depths than those measured during this study, including during construction and over the life of the structure.

The extent and nature of any dewatering required during construction will be dependent on the actual groundwater conditions prevalent at the time of construction and the effectiveness of construction drainage to prevent run-off into open excavations.

5.3.1 Stormwater Percolation Test

A stormwater percolation test was performed at a depth of approximately 5 feet in the representative natural clay soils near 10 West Street. The measured percolation rate was 20 minutes per inch. This design percolation rate should be considered typical for the soils at the site.

5.4 SPREAD AND CONTINUOUS WALL FOUNDATIONS

5.4.1 Design Data

The results of our analysis indicate that the proposed structures may be supported upon conventional spread and continuous wall foundations established upon suitable natural soils and/or structural fill extending to suitable natural soils. Under no circumstances shall foundations be established over non-engineered fills (if encountered), loose or disturbed soils, topsoil, surface vegetation, root systems, rubbish, construction debris, other deleterious materials, frozen soils, or within ponded water. For design, the following parameters are provided:

Minimum Recommended Depth of Embedment for Frost Protection	-	30 inches
Minimum Recommended Depth of Embedment for Non-frost Conditions	-	15 inches
Recommended Minimum Width for Continuous Wall Footings	-	18 inches
Minimum Recommended Width for Isolated Spread Footings	-	24 inches
Recommended Net Bearing Capacity for Real Load Conditions	-	1,500 pounds per square foot
Bearing Capacity Increase for Seismic Loading	-	50 percent

The term "net bearing capacity" refers to the allowable pressure imposed by the portion of the structure located above lowest adjacent final grade. Therefore, the weight of the footing and backfill to lowest adjacent final grade need not be considered. Real loads are defined as the total of all dead plus frequently applied live loads. Total load includes all dead and live loads, including seismic and wind.

5.4.2 Installation

Under no circumstances shall the footings be installed upon non-engineered fills (if encountered), loose or disturbed soils, topsoil, surface vegetation, root systems, rubbish, construction debris, or other deleterious materials. If unsuitable soils are encountered, they must be removed and replaced with compacted granular fill. If granular soils become loose or disturbed, they must be recompacted prior to pouring the concrete.

The width of structural replacement fill below footings should be equal to the width of the footing plus one foot for each foot of fill thickness.

5.4.3 Settlements

Based on column loadings, soil bearing capacities, and the foundation recommendations as discussed above, we expect primary total settlement beneath individual foundations to be less than one inch.

The amount of differential settlement is difficult to predict because the subsurface and foundation loading conditions can vary considerably across the site. However, we anticipate differential

settlement between adjacent foundations could vary from 0.5 to 0.75 inch. The final deflected shape of the structure will be dependent on actual foundation locations and loading.

5.5 LATERAL RESISTANCE

Lateral loads imposed upon foundations due to wind or seismic forces may be resisted by the development of passive earth pressures and friction between the base of the footings and the supporting soils. In determining frictional resistance, a coefficient of friction of 0.35 may be utilized for the footing interface with in-situ natural clay soils and 0.40 for footing interface with granular structural fill. Passive resistance provided by properly placed and compacted granular structural fill above the water table may be considered equivalent to a fluid with a density of 300 pounds per cubic foot. Below the water table, this granular soil should be considered equivalent to a fluid with a density of 150 pounds per cubic foot.

A combination of passive earth resistance and friction may be utilized provided that the friction component of the total is divided by 1.5.

5.6 LATERAL PRESSURES

Parameters, as presented within this section, are for backfills which will consist of drained soil placed and compacted in accordance with the recommendations presented herein.

The lateral pressures imposed upon subgrade facilities will, therefore, be basically dependent upon the relative rigidity and movement of the backfilled structure. For active walls, such as retaining walls which can move outward (away from the backfill), drained backfill may be considered equivalent to a fluid with a density of 40 pounds per cubic foot in computing lateral pressures. For more rigid subgrade walls that are not more than 10 inches thick, granular backfill may be considered equivalent to a fluid with a density of 50 pounds per cubic foot. For very rigid non-yielding walls, granular backfill should be considered equivalent to a fluid with a density of at least 60 pounds per cubic foot. The above values assume that the surface of the soils slope behind the wall is horizontal and that the granular fill within 3 feet of the wall will be compacted with hand-operated compacting equipment.

For seismic loading of below-grade walls, the uniform lateral pressures on the following page, in pounds per square foot (psf), should be added based on wall depth and wall case:

Uniform Lateral Pressures			
Wall Height (Feet)	**Active Pressure Case (psf)**	**Moderately Yielding Case (psf)**	**At Rest/Non-Yielding Case (psf)**
4	12	32	51
6	18	47	77
8	24	63	103
10	30	79	128

5.7 FLOOR SLABS

Floor slabs may be established upon suitable natural subgrade soils or structural fill extending to suitable natural soils. Under no circumstances shall floor slabs be established directly over non-engineered fills (if encountered), loose or disturbed soils, sod, rubbish, construction debris, other deleterious materials, frozen soils, or within ponded water.

To facilitate curing of the concrete and to provide a capillary moisture break, it is recommended that floor slabs be directly underlain by at least 4 inches of "free-draining" fill, such as "pea" gravel or three-quarters to one inch minus clean gap-graded gravel.

Settlement of lightly loaded floor slabs designed according to previous recommendations (average uniform pressure of 200 pounds per square foot or less) is anticipated to be less than one-quarter of an inch.

5.8 PAVEMENTS

The natural clay soils will exhibit poor pavement support characteristics when saturated. All pavement areas must be prepared as previously discussed (see Section 5.2.1, Site Preparation). Under no circumstances shall pavements be established over non-engineered fills (if encountered), loose or disturbed soils, topsoil, surface vegetation, root systems, rubbish, construction debris, other deleterious materials, frozen soils, or within ponded water. With the subgrade soils and the estimated projected traffic as discussed in Section 2, Proposed Construction, the following pavement sections are recommended:

Paved Areas

(Light Volume of Automobiles and Light Trucks and
Occasional Medium- and Heavy-
Weight Trucks)
[7 equivalent 18-kip axle loads per day]

Flexible Pavements:
(Asphalt Concrete)

3.0 inches	Asphalt concrete
8.0 inches	Aggregate base
Over	Properly prepared natural subgrade soils and/or structural site grading fill extending to properly prepared natural subgrade soils

Rigid Pavements:
(Non-reinforced Concrete)

5.0 inches	Portland cement concrete (non-reinforced)
5.0 inches	Aggregate base
Over	Properly prepared and natural subgrade soils, and/or structural site grading fill extending to properly prepared natural subgrade soils

These above rigid pavement sections are for non-reinforced Portland cement concrete. Concrete should be designed in accordance with the American Concrete Institute (ACI) and joint details should conform to the Portland Cement Association (PCA) guidelines. The concrete should have a minimum 28-day unconfined compressive strength of 4,000 pounds per square inch and contain 6 percent ±1 percent air-entrainment.

The crushed stone should conform to applicable sections of the current Utah Department of Transportation (UDOT) Standard Specifications. All asphalt material and paving operations should meet applicable specifications of the Asphalt Institute and UDOT. A GSH technician shall observe placement and perform density testing of the base course material and asphalt.

Please note that the recommended pavement section is based on estimated post-construction traffic loading. If the pavement is to be constructed and utilized by construction traffic, the above pavement section may prove insufficient for heavy truck traffic, such as concrete trucks or tractor-trailers used for construction delivery. Unexpected distress, reduced pavement life, and/or premature failure of the pavement section could result if subjected to heavy construction traffic and the owner should be made aware of this risk. If the estimated traffic loading stated herein is not correct, GSH must review actual pavement loading conditions to determine if revisions to these recommendations are warranted.

5.9 CEMENT TYPES

The laboratory tests indicate that the natural soils tested contain a negligible amount of sulfates. Based on our test results, concrete in contact with the on-site soil will have a low potential for sulfate reaction (ACI 318, Table 4.3.1). Therefore, all concrete which will be in contact with the site soils may be prepared using Type I or IA cement.

5.10 GEOSEISMIC SETTING

5.10.1 General

Utah municipalities have adopted the International Building Code (IBC) 2018. The IBC 2018 code refers to ASCE 7-16 Minimum Design Loads and Associated Criteria for Buildings and Other Structures (ASCE 7-16) determines the seismic hazard for a site based upon mapping of bedrock accelerations prepared by the United States Geologic Survey (USGS) and the soil site class. The USGS values are presented on maps incorporated into the IBC code and are also available based on latitude and longitude coordinates (grid points).

5.10.2 Faulting

Based on our review of available literature, no active faults pass through or immediately adjacent to the site. The nearest active mapped fault consists of the Oquirrh fault, located about 10.2 miles to the east of the site.

5.10.3 Soil Class

For dynamic structural analysis, the Site Class D - Stiff Soil Profile as defined in Chapter 20 of ASCE 7-16 (per Section 1613.3.2, Site Class Definitions, of IBC 2018) can be utilized.

5.10.4 Ground Motions

The IBC 2018 code is based on USGS mapping, which provides values of short and long period accelerations for average bedrock values for the Western United States and must be corrected for local soil conditions. The following table summarizes the peak ground and short and long period accelerations for the MCE event and incorporates the appropriate soil amplification factor for a

Site Class D – Stiff Soil Based on the site latitude and longitude (40.5949 degrees north and 112.4506 degrees west, respectively), the values for this site are tabulated below:

Spectral Acceleration Value, T	Bedrock Boundary [mapped values] (% g)	Site Coefficient	Site Class D [adjusted for site class effects] (% g)	Design Values* (% g)
0.2 Seconds (Short Period Acceleration)	S_S = 61.0	F_a = 1.312	S_{MS} = 80.0	S_{DS} = 53.4
1.0 Second (Long Period Acceleration)	S_1 = 22.0	F_v = 2.160	S_{M1} = 47.5	S_{D1} = 31.7

5.10.5 Liquefaction

The site is located in an area that has been identified by the Utah Geological Survey (UGS) as being a "low" liquefaction potential zone. Liquefaction is defined as the condition when saturated, loose, granular soils lose their support capabilities because of excessive pore water pressure, which develops during a seismic event. Clayey soils, even if saturated, will generally not liquefy during a major seismic event.

Due to the clayey nature of the soils, liquefaction is not anticipated to occur within the soils encountered at this site.

5.11 SITE VISITS

GSH must verify that all topsoil/disturbed soils and any other unsuitable soils have been removed, that non-engineered fills (if encountered) have been removed, and that suitable soils have been encountered prior to placing site grading fills, footings, slabs, and pavements. Additionally, GSH must observe fill placement and verify in-place moisture content and density of fill materials placed at the site.

6. CLOSURE

If you have any questions or would like to discuss these items further, please feel free to contact us at (801) 685-9190.

Respectfully submitted,

GSH Geotechnical, Inc.

Giavanna Lonardo, E.I.T.
Staff Engineer

Reviewed by:

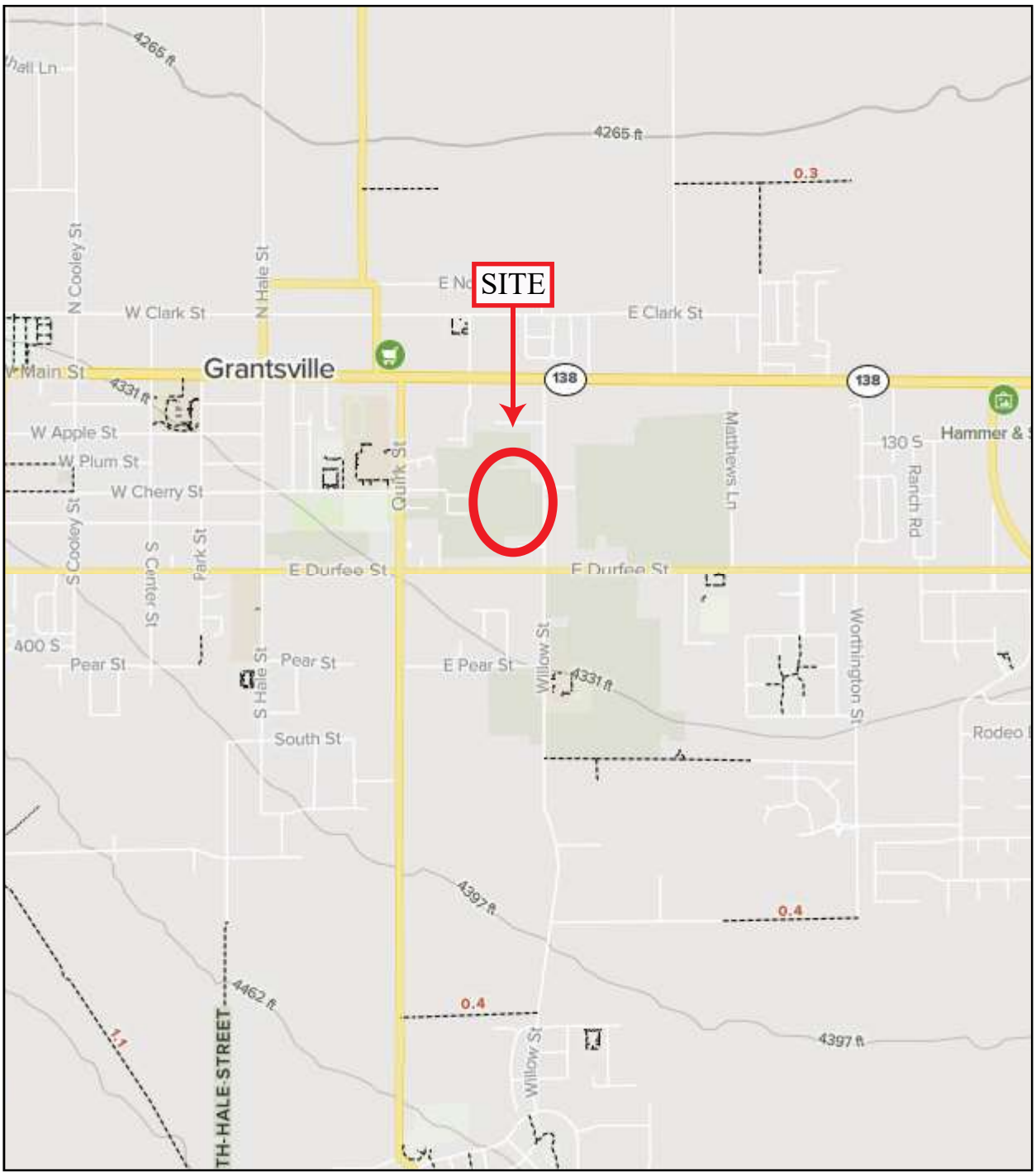
Alan D. Spilker, P.E.
State of Utah No. 334228
President/Senior Geotechnical Engineer

GAL/ADS:ea

Encl. Figure 1, Vicinity Map
Figure 2, Site Plan
Figures 3A through 3F, Test Pit Logs
Figure 4, Key to Test Pit Log (USCS)

Addressee (email)

ICONIC DEVELOPMENT, LLC
JOB NO. 3431-001-21



0.5 0 0.5 1 KM 1.5

0.2 0 0.2 0.4 0.6 0.8 1 MI 1.2

FIGURE 1
VICINITY MAP

REFERENCE:
ALL TRAILS - NATIONAL GEOGRAPHIC TERRAIN
DATED 2021

GSH

ICONIC DEVELOPMENT, LLC
JOB NO. 3431-001-21



FIGURE 2
SITE PLAN

REFERENCE:
ADAPTED FROM AERIAL PHOTOGRAPH
DOWNLOADED FROM GOOGLE EARTH
IMAGERY DATED 11/2018

GSH

TEST PIT LOG

Page: 1 of 1

TEST PIT: TP-1

CLIENT: Iconic Development, LLC | PROJECT NUMBER: 3431-001-21

PROJECT: Proposed Townhomes on Willow Subdivision | DATE STARTED: 11/16/21 | DATE FINISHED: 11/16/21

LOCATION: Approximately 299 South Willow Street, Grantsville, Utah | GSH FIELD REP.: SS

EXCAVATING METHOD/EQUIPMENT: 6-ton Kubota

GROUNDWATER DEPTH: Not Encountered (11/16/21) | ELEVATION: ---

WATER LEVEL	USCS	DESCRIPTION	DEPTH (FT.)	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0							
	CL	SILTY CLAY with trace fine sand; major roots (topsoil) to 18"; brown								slightly moist soft
					7.7	98				
			5							slightly moist medium stiff
		grades with some fine sand; light brown	10							
		End of exploration at 10.0'. No significant sidewall caving. No groundwater encountered at time of excavation.								
			15							
			20							
			25							

See Subsurface Conditions section in the report for additional information.

FIGURE 3A

TEST PIT LOG

Page: 1 of 1

TEST PIT: TP-2

CLIENT: Iconic Development, LLC — PROJECT NUMBER: 3431-001-21

PROJECT: Proposed Townhomes on Willow Subdivision — DATE STARTED: 11/16/21 — DATE FINISHED: 11/16/21

LOCATION: Approximately 299 South Willow Street, Grantsville, Utah — GSH FIELD REP.: SS

EXCAVATING METHOD/EQUIPMENT: 6-ton Kubota

GROUNDWATER DEPTH: Not Encountered (12/2/21) — ELEVATION: ---

WATER LEVEL	USCS	DESCRIPTION	DEPTH (FT.)	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0							
	CL	SILTY CLAY with trace fine sand; major roots (topsoil) to 18"; brown/light brown								slightly moist soft
			5							
		grades light brown	10					41	23	moist
		grades light brown/gray	15							medium stiff
		End of exploration at 15.0'. No significant sidewall caving. No groundwater encountered at time of excavation. Installed 1.25" diameter slotted PVC pipe to 15.0'.	20							
			25							

See Subsurface Conditions section in the report for additional information.

FIGURE 3B

TEST PIT LOG

Page: 1 of 1

TEST PIT: TP-3

CLIENT: Iconic Development, LLC | PROJECT NUMBER: 3431-001-21

PROJECT: Proposed Townhomes on Willow Subdivision | DATE STARTED: 11/16/21 | DATE FINISHED: 11/16/21

LOCATION: Approximately 299 South Willow Street, Grantsville, Utah | GSH FIELD REP.: SS

EXCAVATING METHOD/EQUIPMENT: 6-ton Kubota

GROUNDWATER DEPTH: Not Encountered (11/16/21) | ELEVATION: ---

WATER LEVEL	USCS	DESCRIPTION	DEPTH (FT.)	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0							
	CL	SILTY CLAY with trace fine sand; major roots (topsoil) to 12"; brown								moist medium stiff
					19.9	85				
			5							
		grades with some fine to medium sand and trace fine gravel; light brown								
		End of exploration at 10.0'. No significant sidewall caving. No groundwater encountered at time of excavation.	10							
			15							
			20							
			25							

See Subsurface Conditions section in the report for additional information.

FIGURE 3C

TEST PIT LOG

Page: 1 of 1

TEST PIT: TP-4

CLIENT: Iconic Development, LLC | PROJECT NUMBER: 3431-001-21

PROJECT: Proposed Townhomes on Willow Subdivision | DATE STARTED: 11/16/21 | DATE FINISHED: 11/16/21

LOCATION: Approximately 299 South Willow Street, Grantsville, Utah | GSH FIELD REP.: SS

EXCAVATING METHOD/EQUIPMENT: 6-ton Kubota

GROUNDWATER DEPTH: Not Encountered (12/2/21) | ELEVATION: ---

WATER LEVEL	USCS	DESCRIPTION	DEPTH (FT.)	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0							
	CL	SILTY CLAY with trace fine sand; major roots (topsoil) to 18"; brown			22.9	68				moist soft
		grades with some fine sand	5							stiff
		grades with trace fine to medium sand	15							hard
		End of exploration at 15.0'. No significant sidewall caving. No groundwater encountered at time of excavation. Installed 1.25" diameter slotted PVC pipe to 15.0'.	20							
			25							

See Subsurface Conditions section in the report for additional information.

FIGURE 3D

TEST PIT LOG

Page: 1 of 1

TEST PIT: TP-5

CLIENT: Iconic Development, LLC | PROJECT NUMBER: 3431-001-21

PROJECT: Proposed Townhomes on Willow Subdivision | DATE STARTED: 11/16/21 | DATE FINISHED: 11/16/21

LOCATION: Approximately 299 South Willow Street, Grantsville, Utah | GSH FIELD REP.: SS

EXCAVATING METHOD/EQUIPMENT: 6-ton Kubota

GROUNDWATER DEPTH: Not Encountered (11/16/21) | ELEVATION: ---

WATER LEVEL	USCS	DESCRIPTION	DEPTH (FT.)	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0							
	CL	SILTY CLAY with some fine sand; major roots (topsoil) to 12"; brown								moist medium stiff
					18.9	76				
			5							
		grades with some fine to medium sand; light brown	10							moist soft
		End of exploration at 10.0'. No significant sidewall caving. No groundwater encountered at time of excavation.								
			15							
			20							
			25							

See Subsurface Conditions section in the report for additional information.

FIGURE 3E

TEST PIT LOG

Page: 1 of 1

TEST PIT: TP-6

CLIENT: Iconic Development, LLC | PROJECT NUMBER: 3431-001-21

PROJECT: Proposed Townhomes on Willow Subdivision | DATE STARTED: 11/16/21 | DATE FINISHED: 11/16/21

LOCATION: Approximately 299 South Willow Street, Grantsville, Utah | GSH FIELD REP.: SS

EXCAVATING METHOD/EQUIPMENT: 6-ton Kubota

GROUNDWATER DEPTH: Not Encountered (12/2/21) | ELEVATION: ---

WATER LEVEL	USCS	DESCRIPTION	DEPTH (FT.)	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
		Ground Surface	0							
	CL	SILTY CLAY with trace fine sand; major roots (topsoil) to 12"; brown								slightly moist medium stiff
			5		15.2	90				
			10							
		grades with trace fine gravel; white								moist stiff
		End of exploration at 15.0'. No significant sidewall caving. No groundwater encountered at time of excavation. Installed 1.25" diameter slotted PVC pipe to 15.0'.	15							
			20							
			25							

See Subsurface Conditions section in the report for additional information.

FIGURE 3F

CLIENT: Iconic Development, LLC
PROJECT: Proposed Townhomes on Willow Subdivision
PROJECT NUMBER: 3431-001-21

KEY TO TEST PIT LOG

WATER LEVEL	USCS	DESCRIPTION	DEPTH (FT.)	SAMPLE SYMBOL	MOISTURE (%)	DRY DENSITY (PCF)	% PASSING 200	LIQUID LIMIT (%)	PLASTICITY INDEX	REMARKS
①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪

COLUMN DESCRIPTIONS

① **Water Level:** Depth to measured groundwater table. See symbol below.

② **USCS:** (Unified Soil Classification System) Description of soils encountered; typical symbols are explained below.

③ **Description:** Description of material encountered; may include color, moisture, grain size, density/consistency,

④ **Depth (ft.):** Depth in feet below the ground surface.

⑤ **Sample Symbol:** Type of soil sample collected at depth interval shown; sampler symbols are explained below.

⑥ **Moisture (%):** Water content of soil sample measured in laboratory; expressed as percentage of dryweight of

⑦ **Dry Density (pcf):** The density of a soil measured in laboratory; expressed in pounds per cubic foot.

⑧ **% Passing 200:** Fines content of soils sample passing a No. 200 sieve; expressed as a percentage.

⑨ **Liquid Limit (%):** Water content at which a soil changes from plastic to liquid behavior.

⑩ **Plasticity Index (%):** Range of water content at which a soil exhibits plastic properties.

⑪ **Remarks:** Comments and observations regarding drilling or sampling made by driller or field personnel. May include other field and laboratory test results using the following abbreviations:

CEMENTATION:

Weakly: Crumbles or breaks with handling or slight finger pressure.

Moderately: Crumbles or breaks with considerable finger pressure.

Strongly: Will not crumble or break with finger pressure.

MODIFIERS:

Trace <5%

Some 5-12%

With > 12%

MOISTURE CONTENT (FIELD TEST):

Dry: Absence of moisture, dusty, dry to the touch.

Moist: Damp but no visible water.

Saturated: Visible water, usually soil below water table.

Descriptions and stratum lines are interpretive; field descriptions may have been modified to reflect lab test results. Descriptions on the logs apply only at the specific boring locations and at the time the borings were advanced; they are not warranted to be representative of subsurface conditions at other locations or times.

UNIFIED SOIL CLASSIFICATION SYSTEM (USCS)

MAJOR DIVISIONS			USCS SYMBOLS	TYPICAL DESCRIPTIONS
COARSE-GRAINED SOILS: More than 50% of material is larger than No. 200 sieve size.	GRAVELS: More than 50% of coarse fraction retained on No. 4 sieve.	CLEAN GRAVELS (little or no fines)	GW	Well-Graded Gravels, Gravel-Sand Mixtures, Little or No Fines
			GP	Poorly-Graded Gravels, Gravel-Sand Mixtures, Little or No Fines
		GRAVELS WITH FINES (appreciable amount of fines)	GM	Silty Gravels, Gravel-Sand-Silt Mixtures
			GC	Clayey Gravels, Gravel-Sand-Clay Mixtures
	SANDS: More than 50% of coarse fraction passing through No. 4 sieve.	CLEAN SANDS (little or no fines)	SW	Well-Graded Sands, Gravelly Sands, Little or No Fines
			SP	Poorly-Graded Sands, Gravelly Sands, Little or No Fines
		SANDS WITH FINES (appreciable amount of fines)	SM	Silty Sands, Sand-Silt Mixtures
			SC	Clayey Sands, Sand-Clay Mixtures
FINE-GRAINED SOILS: More than 50% of material is smaller than No. 200 sieve size.	SILTS AND CLAYS Liquid Limit less than 50%		ML	Inorganic Silts and Very Fine Sands, Rock Flour, Silty or Clayey Fine Sands or Clayey Silts with Slight Plasticity
			CL	Inorganic Clays of Low to Medium Plasticity, Gravelly Clays, Sandy Clays, Silty Clays, Lean Clays
			OL	Organic Silts and Organic Silty Clays o f Low Plasticity
	SILTS AND CLAYS Liquid Limit greater than 50%		MH	Inorganic Silts, Micacious or Diatomacious Fine Sand or Silty Soils
			CH	Inorganic Clays of High Plasticity, Fat Clays
			OH	Organic Silts and Organic Clays of Medium to High Plasticity
HIGHLY ORGANIC SOILS			PT	Peat, Humus, Swamp Soils with High Organic Contents

Note: Dual Symbols are used to indicate borderline soil classifications.

STRATIFICATION:

DESCRIPTION	THICKNESS
Seam	up to 1/8"
Layer	1/8" to 12"

Occasional: One or less per 6" of thickness

Numerous; More than one per 6" of thickness

TYPICAL SAMPLER GRAPHIC SYMBOLS

- Bulk/Bag Sample
- Standard Penetration Split Spoon Sampler
- Rock Core
- No Recovery
- 3.25" OD, 2.42" ID D&M Sampler
- 3.0" OD, 2.42" ID D&M Sampler
- California Sampler
- Thin Wall

WATER SYMBOL

- Water Level

FIGURE 4

GSH

TECHNICAL MEMORANDUM

TO:	Shelby Moore, Grantsville City Planning and Zoning Administrator
FROM:	Hayden Karren
DATE:	January 6, 2025
SUBJECT:	Townhomes on Willow PUD - Review of Traffic Study
PROJECT NO.:	00270.C Phase 009 Task 001 Homes on Willow

Aqua Engineering reviewed the submitted traffic impact study which was prepared by Hales Engineering along with the latest edition completed by A-Trans Engineering for the project developer of the Townhomes on Willow development project.

As indicated in the submitted report, the analysis methodology used is based on the Highway Capacity Manual (HCM), 7th Edition, 2022 and is consistent with professional standards.

The traffic impact study was based upon but not limited to the following project conditions.

- The development will consist of residential townhomes.
- The project is anticipated to generate approximately 660 weekday daily trips, including 44 trips in the morning peak hour, and 52 trips in the evening peak hour.

It is important to note that both reports used these project conditions as indicated above. The A-Trans Engineering report expanded the study to include intersections that were not included in the Hales Engineering report.

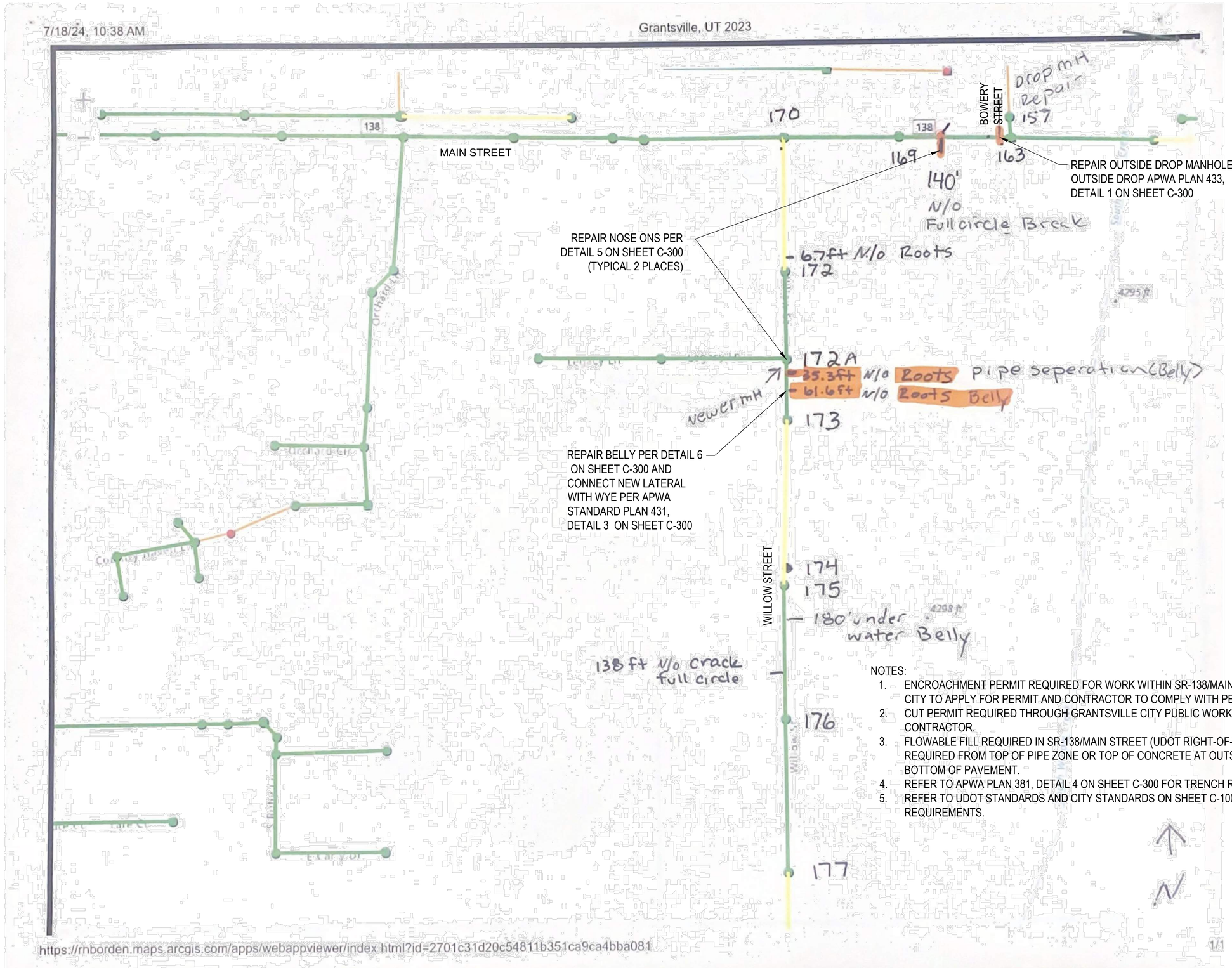
The report studies conclude that an acceptable Level of Service (LOS) was found at all studied intersections.

In review of the submitted traffic impact study reports there is concern regarding the proposed project conditions numbers. It is understood that this proposed data is based upon the Institute of Transportation Engineers (ITE) Trip Generation, 11th Edition, 2021. These numbers being the proposed 660 Daily Trips, 44 trips in the morning peak hour, and 52 trips in the evening peak hour being used throughout both reports.

Given Grantsville City's demographics, additional justification for the proposed project conditions should be greatly considered prior to moving forward with the project.

Regards,

Hayden Karren



NOTES:

1. ENCROACHMENT PERMIT REQUIRED FOR WORK WITHIN SR-138/MAIN STREET (UDOT RIGHT OF WAY). CITY TO APPLY FOR PERMIT AND CONTRACTOR TO COMPLY WITH PERMIT REQUIREMENTS.
2. CUT PERMIT REQUIRED THROUGH GRANTSVILLE CITY PUBLIC WORKS AT NO CHARGE TO CONTRACTOR.
3. FLOWABLE FILL REQUIRED IN SR-138/MAIN STREET (UDOT RIGHT-OF-WAY). FLOWABLE FILL IS REQUIRED FROM TOP OF PIPE ZONE OR TOP OF CONCRETE AT OUTSIDE DROP MANHOLE TO BOTTOM OF PAVEMENT.
4. REFER TO APWA PLAN 381, DETAIL 4 ON SHEET C-300 FOR TRENCH REQUIREMENTS.
5. REFER TO UDOT STANDARDS AND CITY STANDARDS ON SHEET C-100 AND C-200 FOR ADDITIONAL REQUIREMENTS.

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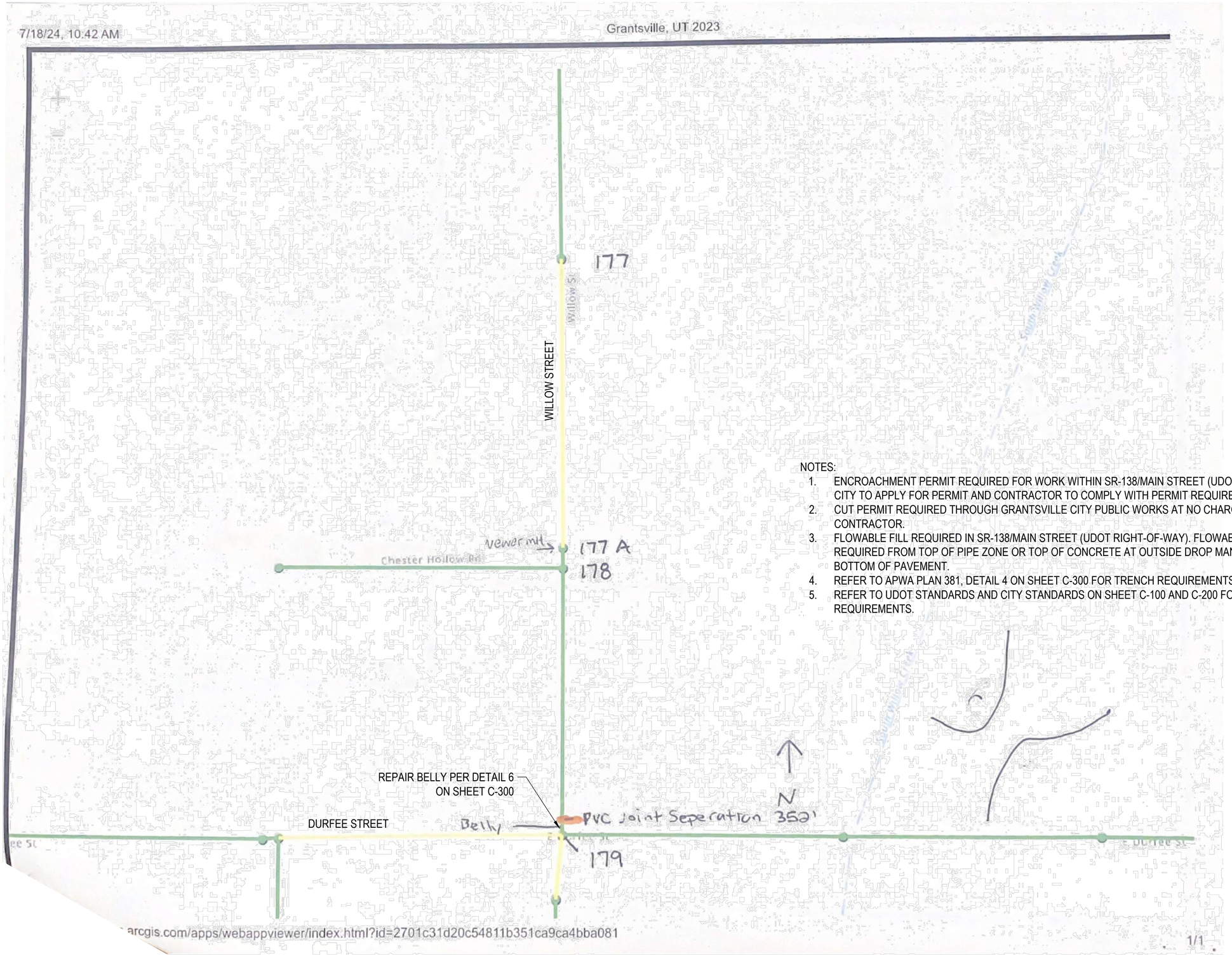
WILLOW STREET SEWER REPAIRS

GRANTSVILLE
TOOELE COUNTY, UTAH

EXHIBIT 1

PROJECT NUMBER 11637
PRINT DATE 2024-08-06
PROJECT MANAGER R. ROUSSELLE
DESIGNED BY D. COOPER

EXHIBIT 1



NOTES:

1. ENCROACHMENT PERMIT REQUIRED FOR WORK WITHIN SR-138/MAIN STREET (UDOT RIGHT OF WAY). CITY TO APPLY FOR PERMIT AND CONTRACTOR TO COMPLY WITH PERMIT REQUIREMENTS.
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WILLOW STREET SEWER REPAIRS

GRANTSVILLE
TOOELE COUNTY, UTAH

EXHIBIT 2

PROJECT NUMBER 11637
PRINT DATE 2024-08-06
PROJECT MANAGER R. ROUSSELLE
DESIGNED BY D. COOPER

EXHIBIT 2

GRANTSVILLE SEWER SYSTEM

PIPE AND MANHOLE INFORMATION

Manhole/Pipe (#)	Rim El. (ft)	Length (ft)	Size (in)	US Invert (ft)	DS Invert (ft)	Slope (%)	Map Location
151	4295.49	431	8	4283.24	4280.39	0.66	J15
152	4296.30	400	8	4285.20	4283.24	0.49	J15
153	4293.53	472	8	4281.53	4280.39	0.24	J16
154	4300.85	325	8	4290.70	4286.70	1.23	J13
155	4293.90	399	8	4281.70	4273.90	1.95	I13
156	4284.47	526	10	4272.72	4268.01	0.90	J18
157	4289.87	424	10	4276.76	4272.72	0.95	J18
158	4296.40	145	8	4279.00	4277.09	1.31	J17
159	4290.95	340	8	4281.00	4279.00	0.59	J17
160	4289.63	451	8	4281.00	4279.00	0.44	J17
161	4287.69	430	8	4279.24	4277.45	0.42	J18
162	4288.38	321	8	4282.38	4279.24	0.98	J18
163	4290.13	55	12	4276.88	4276.36	0.95	J18
164	4288.22	386	8	4279.07	4276.98	0.54	J18
165	4287.66	402	8	4279.81	4279.07	0.18	J18
166	4288.59	452	8	4282.34	4279.81	0.56	J19
167	4289.33	396	8	4284.53	4283.19	0.34	J19
168	4288.95	400	8	4285.70	4284.63	0.27	K20
169	4290.64	315	8	4281.19	4280.03	0.37	J17
170	4292.08	309	10	4282.18	4281.14	0.34	J17
171	4292.13	389	8	4285.00	4282.23	0.71	J16
172	4293.53	369	8	4284.05	4282.33	0.47	J17
173	4294.97	396	8	4286.12	4283.94	0.55	K17
174	4296.72	399	8	4288.17	4286.12	0.51	K17
175	4298.36	49	8	4288.71	4288.17	1.11	K17
176	4300.34	351	8	4290.59	4288.71	0.54	L17
177	4303.01	402	8	4293.71	4290.64	0.76	L17
178	4306.27	401	8	4297.22	4293.71	0.88	L17
179	4311.14	382	8	4301.04	4297.27	0.99	M17
180	4312.48	401	8	4303.28	4301.19	0.52	M16
181	4315.24	399	8	4305.59	4303.38	0.55	M16
182	4319.02	401	8	4308.02	4305.59	0.61	M16
183	4323.30	400	8	4313.15	4308.02	1.28	M15
184	4328.68	460	8	4318.28	4303.15	3.29	M15
185	4331.50	365	8	4321.15	4318.28	0.79	M14
186	4334.86	352	8	4324.76	4321.20	1.01	M14
187	4334.86	349	8	4328.18	4324.17	1.15	M14
188	4341.82	265	8	4330.92	4328.23	1.01	M13
189	4347.45	435	8	4337.10	4330.92	1.42	M13
190	4332.11	399	8	4321.26	4318.43	0.71	M15
191	4337.36	404	8	4324.11	4321.26	0.71	N15
192	4343.31	399	8	4330.41	4323.91	1.63	N15
193	4346.84	401	8	4333.99	4330.46	0.88	N15
194	4352.02	398	8	4339.57	4333.89	1.43	O15
195	4358.46	397	10	4346.46	4339.42	1.77	O15
196	4365.22	404	10	4353.97	4346.31	1.90	P15
197	4293.27	57	10	4280.77	4280.14	1.10	J16
198	4292.95	307	8	4284.55	4281.22	1.08	J16
199	4294.07	333	8	4286.17	4281.27	1.47	J15
200	4295.12	349	10	4283.82	4286.17	-0.67	J15

GRANTSVILLE CITY GENERAL NOTES

CHAPTER 1 STANDARD NOTES

The Grantsville City Standard Notes are required to be included as part of all construction plans for residential or commercial development. Plans submitted by public or private entities for all other types of projects within City right-of-way, its easements or property shall reference the Grantsville City Standard Notes and Specifications.

1.1 Grantsville City General Notes

1. All work done or improvements installed within Grantsville City including but not limited to excavation, construction, roadwork and utilities shall conform to the Grantsville City Construction Standards and Specifications, City Municipal Code, the latest edition of the APWA Manual of Standard Specifications and Manual of Standard Plans, the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD) and any state or federal regulations and permit requirements of various governing bodies. The contractor is responsible to have a copy of these specifications and to know and conform to the appropriate codes, regulations, drawings, standards and specifications.

2. The existence and location of any overhead or underground utility lines, pipes, or structures shown on these plans are obtained by a research of the available records. Existing utilities are located on plans only for the convenience of the Contractor. The contractor shall bear full responsibility for the protection of utilities and the engineer bears no responsibility for utilities not shown on the plans or not in the location shown on the plans. This includes all service laterals of any kind. The Contractor shall, at his own expense, locate all underground and overhead interferences, which may affect his operation during construction and shall take all necessary precautions to avoid damage of the same. The Contractor shall use extreme caution when working near overhead utilities so as to safely protect all personnel and equipment, and shall be responsible for all cost and liability in connection therewith.

3. The Contractor shall take all precautionary measures necessary to protect existing utility lines, structures, survey monuments and street improvements which are to remain in place, from damage, and all such improvements or structures damaged by the Contractor's operations shall be repaired or replaced satisfactory to the City Engineer and owning utility company at the expense of the Contractor.

4. All construction shall be as shown on these plans, any revisions shall have the prior written approval of the City Engineer and Public Works Director.

5. Permits are required for any work in the public way. The Contractor shall secure all permits and inspections required for this construction.

6. Curb, gutter, and sidewalk, found to be unacceptable per City Standards and APWA shall be removed and replaced.

7. Contractor shall provide all necessary horizontal and vertical transitions between new construction and existing surfaces to provide for proper drainage and for ingress and egress to new construction. The extent of transitions to be as shown on plans.

8. Any survey monuments disturbed shall be replaced and adjusted per Tooele County Surveyors requirements.

9. All privacy walls, new or existing, are only shown on civil plans for the purpose of reviewing grading relationships; flood control and sight distance at intersections. All walls shall have a minimum 2 ft x 2 ft x 30 inch deep spot footings. Bottom of all footings on all walls shall be a minimum of 30 inches below finished grade. Walls greater than 6 feet require a separate permit and inspection by the Building Department.

10. All construction materials per APWA must be submitted and approved by the City Engineer prior to the placement of asphalt within City Right of Way. Grantsville Public Works will approve pipe zone material to be placed.

11. Request for inspection by the Grantsville City Engineering Dept. shall be made by the contractor at least 48 hours before the inspection services will be required.

12. Work in public way, once begun, shall be prosecuted to completion without delay as to provide minimum inconvenience to adjacent property owners and to the traveling public. Please see Code 17 General Provisions for more details.

13. The Contractor shall take all necessary and proper precautions to protect adjacent properties from any and all damage that may occur from storm water runoff and/or deposition of debris resulting from any and all work in connection with construction.

14. Power poles and/or other existing facilities not in proper location based on proposed improvements shown hereon will be relocated at no expense to the Grantsville City. Power lines and all other aerial utilities are to be buried and poles removed as determined by the City Engineer.

15. Curb and gutter with a grade of less than four-tenths of one percent shall be constructed by forming. Each joint shall be checked for a grade prior to construction and water tested as soon as possible after construction.

16. Contractor to follow Grantsville City Noise Ordinance Standards Code Ordinance 2018-19

17. Contractors are responsible for all OSHA requirements on the project site.

18. A UPDES (Utah Pollutant Discharge Elimination System) permit is required for all construction activities as per state law as well as providing a Storm Water Pollution Prevention Plan to the City.

19. All City maintained utilities including; waterline, fire hydrants, streetlight wiring, and storm drain must be in public right of way or in recorded easements.

20. Contractor shall work Grantsville City regular working hours of Monday through Friday 7:00 am to 4:00 pm

21. Prior to 90% bond release, a legible as-built drawing must be submitted to the Grantsville City stamped and signed by a professional engineer. As-builts must show all changes and actual field locations of storm drainage, waterlines, irrigation, street lighting, and power. As-builts will be held to the same standard as approved design drawings, no "redlined plans" allowed. In the absence of changes, copies of the approved drawings will be required stating "installed as per drawings". As-built drawings for new developments shall be submitted to the City in the following formats and quantities prior to the 90% bond release: 1 .dxf copy, 1 .pdf copy, and 1 GIS Shape file containing the same.

22. Filter fabric wrapped around an inlet grate is not an acceptable inlet sediment barrier. See Grantsville City Construction Standards and Specifications for details of approved storm water BMPs which specifically states the utilization of an Oil Water Snout Separator.

23. Asphalt paving is not allowed without a written exception from the Engineering Department and Public Works Department below an ambient temperature of 50 degrees and rising.

24. To ensure proper planting, protection and irrigation of trees, mitigating risk of tree failure or future damage to infrastructure, contractors are required to follow the standards and specifications of the ISA – International Society of Arboriculture.

25. When a proposed development borders a collector, minor collector or arterial street and is required to construct collector street fencing along the back of sidewalk, the development shall also be required put in a concrete mow strip from the back of sidewalk to underneath the fence panels. Concrete mow strips shall also be required between the sidewalk and fencing along the rear of double frontage lots.

26. Concrete for all surface improvements including but not limited to; sidewalk, driveway entrances, pedestrian ramps, curb and gutter, water ways, manhole, vault and valve collars, and any other cast in place surface concrete features shall be constructed with minimum 4,500 psi concrete.

27. Culinary Water and Sewer service laterals shall be marked on the top back of curb and lip of curb at their actual location of crossing the curb and gutter. Pins or stamps shall be used and must be installed while the concrete is still wet and will readily accept the marker. Grinding marking due to dry cement is not allowed.

1.2 Grantsville City Traffic Notes

1. When a designated "Safe Route To School" is encroached upon by a construction work zone the safe route shall be maintained in a manner acceptable to Grantsville City.

2. if the improvements necessitate the obliteration, temporary obstruction, temporary removal or relocation of any existing traffic pavement marking, such pavement marking shall be restored or replaced with like materials to the satisfaction of the City Engineer, Public Works Director or designee.

3. The street Sign Contractor shall obtain street names and block numbering from the Planning Department prior to construction.

4. The Contractor shall be responsible for providing and installing all permanent signs shown on the plans. Street name signs shall conform in their entirety to current City Standards and the latest Manual of Uniform Traffic Control Devices (MUTCD) manual. All other signs shall be standard size unless otherwise specified on the plans. All sign posts shall be installed in accordance with the current City Standards and the latest Manual of Uniform Traffic Control Devices (MUTCD) manual.

5. All permanent traffic control devices called for hereon shall be in place and in final position prior to allowing any public traffic onto the portions of the road(s) being improved hereunder, regardless of the status of completion of paving or other off-site improvements called for per approved construction drawings unless approved by the City Engineer & Public Works Director.

6. The Contractor shall be responsible for notifying Utah Transit Authority (UTA) if applicable, if the construction interrupts or relocates a bus stop or has an adverse effect on bus service on that street to arrange for temporary relocation of stop.

7. Before any work is started in the right-of-way, the contractor shall install all advance warning signs for the construction zone. The contractor shall install temporary stop signs at all new street encroachments into existing public streets. All construction signing, barricading, and traffic delineation shall conform to the Manual of Uniform Traffic Control Devices (MUTCD) per the current edition adopted by UDOT and be approved by the Grantsville City before construction begins. Traffic control plans shall be submitted as part of the engineering construction package and approved by the Grantsville City Engineer and Public Works Director.

8. All signs larger than 36" X 36" or 1296 square inches per sign pole shall be mounted on a Slip Base system per UDOT standard drawing SN 10B (detail drawing attached to standard drawings) with a "Z" bar backing. Signs of this size are not allowed to be mounted on a yielding pole.

9. Sign components such as sheeting, EC film, inks, letters and borders are all required to be from the same manufacturer. Only EC film may be used to achieve color. Vinyl EC film is not accepted.

10. All new roundabouts, crosswalks, stop bars and legends shall be installed with Paint and Glass Bead.

11. Paving asphalt binder grade shall be PG 58-28 unless otherwise approved by the City Engineer. Asphalt aggregate size shall be ½ inch for residential and collector roads. No more than 15% RAP (reclaimed asphalt pavement) by weight will be allowed in the asphalt mix design for the paving of public and private streets. Up to the 15 percent will be allowed with no change in the specific binder grade. The asphalt mix design shall have no more than 3½ % air voids.

14. Potholing: All potholes must be saw cut square and have a minimum size of 1 square foot or remove and retain round core. When repairing a pothole, sand or pea gravel meeting Grantsville City standards shall be placed over the exposed utility to a depth of 6 inches. The pothole shall be filled with flow fill, and the round core shall be replaced in the flow fill, with epoxy seal applied around the joint. For larger cuts, following the pea gravel will be flowable fill up to 1 inch below the bottom edge of the existing asphalt. The remaining portion of the hole shall be filled with asphalt, which will have an overall thickness of the existing asphalt plus 1 inch.

15. All fill within the public right of way shall be A-1-a, with the exception of top soil in the park strip for landscaping and trench backfill. Trench backfill material under pavements or surface improvements shall be clean, nonclumping, granular and flowable, 3" minus, A-1-a soils according to AASHTO 145 soil Classification System. Lime treated flowable fills, if approved, shall have a 28-day strength of 65 PSI.

16. All traffic road closures involving 1 or more lanes of traffic must receive prior approval from the City Engineer, Public Works Director or his/her representative. VMS PCMS boards must be placed a minimum of 7 days in advance of any lane closure on collector, minor collector or arterial street. VMS PCMS boards must also be placed in advance of any lane closures on a subdivision street per the City Engineer's direction.

17.Roundabouts, including their ingress and egress, shall be constructed with concrete pavement. Engineer shall design cross section and submit to the City for review and approval.

1.3 Grantsville City Grading Notes

1. In the event that any unforeseen conditions not covered by these notes are encountered during grading operations, the Owner and City Engineer shall be immediately notified for direction.

2. it shall be the responsibility of the Contractor to perform all necessary cuts and fills within the limits of this project and the related off-site work, so as to generate the desired subgrade, finish grades and slopes shown.

3. Contractor shall take full responsibility for all excavation. Adequate shoring shall be designed and provided by the Contractor to prevent undermining of any adjacent features or facilities and/or caving of the excavation.

4. The Contractor is warned that an earthwork balance was not necessarily the intent of this project. Any additional material required or leftover material following earthwork operations becomes the responsibility of the Contractor.

5. Contractor shall grade the pavement area subgrade to the lines (horizontal) and elevations (vertical) shown on the plans within a tolerance of 0.1 + to 0.1 -.

6. All cut and fill slopes shall be protected until effective erosion control has been established.

7. The Contractor shall obtain all necessary permits for construction water from Grantsville City Engineering and Utilities Department.

8. The Contractor shall maintain the streets, sidewalks and all other public right-of way in a clean, safe and usable condition. All spills of soil, rock or construction debris shall be promptly removed from the publicly owned property during construction and upon completion of the project. All adjacent property, private or public shall be maintained in a clean, safe and usable condition.

9. In the event that any temporary construction item is required that is not shown on these drawings, the Developer agrees to provide and install such item at his own expense and at the direction of the City Engineer. Temporary construction includes ditches, berms, road signs and barricades, etc.

10. All grading work shall conform to the soils report as prepared by the Soils Engineer and approved by the City Engineer, and as shown on these plans.

11. All quality control testing shall be performed by an independent licensed and Certified third-party testing service.

1.5 Grantsville City Fire Department Notes

1. On any new home or building installation, accessible fire hydrants shall be installed before combustible construction commences and said fire hydrants shall be in good working order with an adequate water supply.

2. Contractor shall call the Public Works Department and Engineering Department for underground inspection, pressure and flush verification of all fire hydrants and fire lines before back filling.

3. Painting of the curbs and hydrant and any work necessary for protection of hydrants from physical damage shall be approved before being constructed. Hydra-finders will be installed per Grantsville City Standards detail.

4. A flow test must be witnessed by the Fire Department prior to occupancy for verification of required on-site water supply.

5. All on-site fire main materials must be U.L. listed and A.W.W.A. approved.

6. The turning radius for any fire apparatus access road and/or fire lane, public or private, shall be not less than forty-eight feet (48') outside radius equaling 96' or larger and twenty-two feet (22') inside radius and shall be paved.

7. A fire apparatus road shall be required when any portion of an exterior wall of the first story is located more than one-hundred fifty feet (150') from Fire Department vehicle access roads and/or fire lanes, public or private, in excess of one hundred fifty feet (150') in length shall be provided with an approved turn around area. Contractor/Engineer shall follow latest International Fire Code regulations at all times in regards to distance.

8. Access roads shall be marked by placing approved signs at the start of the designated fire lane, one sign at the end of the fire lane and width signs at intervals of one-hundred feet (100') along all designated fire lanes. Signs to be placed on both sides of an access roadway if needed to prevent parking on either side. Signs shall be installed at least 5', measured from the bottom edge of the sign to the near edge of pavement. Where parking or pedestrian movements occur, the clearance to the bottom of the sign shall be at least 7'. The curb along or on the pavement or cement if curb is not present, shall be painted with red weather resistant paint in addition to the signs.

9. Electrically controlled access gates shall be provided with an approved emergency vehicle detector/receiver system. Said system shall be installed in accordance with the Grantsville City F.D. approval. Gates are only allowed with prior approval.

10. All private underground fire lines that service automatic fire sprinkler systems shall be no smaller than eight (8) inches in diameter and have a Post Indicator Valve (PIV) between the water main and the building. If a PIV isn't feasible due to site constraints, a Water Indicator Valve (WIV) may be used with the approval of the City Engineer or Fire Code Official. For a WIV to be allowed, another valve must be installed on the fire service line back at the connection to the water main, which will be maintained by the City as part of its culinary water system. All fire lines material shall be Ductile Iron. (Ductile Iron from the PIV to the building shall be permitted or Ductile Iron from the main water line to the WIV).

11. Post Indicator Valves (PIV) shall be between 6 and 40 feet from buildings not exceeding three stories or equivalent in height and between 30 and 40 feet on buildings in excess of three or more stories in height or equivalent.

12. Roads and accesses shall be designed and maintained to support the imposed loads of fire apparatus. Surface shall be paved before the application of combustible material.

13. All new buildings equipped with a Fire Department Connection (FDC) must have inlets secured with Knox brand locking FDC cap(s) with a swivel collar. All new buildings are also required to have a Knox brand key lock box mounted on the exterior building, such that Fire Department personnel may gain access in case of an emergency.

1.6 Grantsville City Water Notes

1. The following Grantsville City Water Notes are intended for general water standards only and are not all inclusive. The City has included the Culinary Water Design and Construction Standards within the City Construction Standards and Specifications.

2. No work shall begin until the water plans have been released for construction by the Engineering Department. Following water plan approval, forty-eight (48) hour notice shall be given to the Engineering Department and the Public Works Department prior to the start of construction. Notice must be given by 2:00 P.M. the business day prior to an inspection.

3. All work within Grantsville City shall conform to Grantsville City Standards and Specifications, AWWA and APWA.

4. For Residential Developments - The developer shall purchase and install meter boxes and setters according to City Standards on newly developed lots and real property at the time of water main installation. Water meters will be supplied and installed by the Grantsville Utilities Department (at Developer's expense). The developer shall also provide the site address, lot number, meter size and pay meter fees prior to building permit approval. The developer should also pay for rental of a hydrant meter, and/or use the Grantsville City Public Water Standpipe located by the Public Works Building.

5. For Commercial and Condominium Developments - The developer shall purchase and install meter boxes and setters according to City Standards. Water meters will be supplied by Grantsville City Public Works Department (at Developer's expense) and installed by Developer.

6. All water facilities shall be filled, disinfected, pressure tested, flushed, filled and a series of Bac-T testing performed by the City shall be obtained prior to commissioning the new water line to the Grantsville City Culinary Water Distribution System.

7. Grantsville City Utilities Department must approve water shut down which may require evening and weekend shut down as deemed necessary, requiring the contractor to be billed for overtime. 48 hour notice is required.

8. Water stub-out installations will not be construed as a commitment for water service.

9. Conditional Approval of Valved Outlet (6" and Larger): In the event the water plans show one or more valved outlets extending out of paved areas, installations of these outlets is acceptable, however, if the outlets are incorrectly located or not used for any reason when the property is developed, the developer shall abandon the outlets at the connection to the active main in accordance with the city standards and at the developer's expense.

10. All lines to be pressure tested according to Grantsville City and AWWA standards and chlorinated prior to use and final acceptance.

11. All fittings to be coated with poly fm grease and wrapped with 8-mil thick polyethylene.

12. No other utility lines may be placed in the same trench with water line unless approved by the City Engineer.

13. Any conflict with existing utilities shall be immediately called to the attention of the City Engineer or designee.

14. All water vaults will be constructed per Grantsville City standard drawings and specifications. No vaults are allowed in traffic areas without prior approval of the City Engineer.

15. Landscaping and irrigation adjacent to vaults shall drain away from vaults.

16. Once the waterline has been tested, approved and city water is flowing through the pipe, only City personnel are authorized to shut down and charge the waterline.

17. Megalug following ring or an approved equivalent shall be used on all fittings.

18. APWA plan 562, stainless steel tie-down restraints with turnbuckles or 5/8" epoxy green rebar is acceptable. Megalug followers required on all fittings and all dimensions of thrust blocking still apply.

19. Water mains will be hot tapped as called out on the approved plans. Under special circumstances, when a contractor submits a request for a shutdown contrary to the approved plans and the request is approved at the discretion of the City Engineer or designee, the contractor must provide 48-hour notice to neighbors and those affected. If businesses are impacted by the shutdown it will be done after hours and all overtime fees for City personnel, equipment and vehicles must be paid in advance.

20. Contractors are required to write the lot number with a black permanent marker on the inside of the water meter barrels as they are installed.

Grantsville City Construction Submittals

1. Construction submittals will not be accepted or reviewed until after a pre-construction conference is held with the City.
2. Contractor shall provide construction submittals for material to the City for compliance with Construction Documents and City Standards prior to purchase of materials and installation. Refer to preconstruction notes for a list of City Personnel the submittals need to be submitted to for review.
3. Before submitting a Shop Drawing or Sample, Contractor shall:
   a. review and coordinate the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contruction Documents;
   b. determine and verify:
      i. all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect to the Submittal;
      ii. the suitability of all materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
      iii. all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto;
      iv. confirm that the Submittal is complete with respect to all related data included in the Submittal.
4. With each Shop Drawing or Sample, Contractor shall provide City specific written notice of any variations that the Submittal may have from the requirements of the Construction Documents. This notice must be set forth in a written communication separate from the Submittal; and, in addition, in the case of a Shop Drawing by a specific notation made on the Shop Drawing itself.
5. City's Review of Shop Drawings and Samples
   a. City will provide timely review of Shop Drawings and Samples. City's review will be only to determine if the items covered by the Submittals will, after installation or incorporation in the Work, comply with the requirements of the Construction Documents, and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Construction Documents.
   b. City's review will not extend to means, methods, techniques, sequences, or procedures of construction, or to safety precautions or programs incident thereto.
   c. City's review of a separate item as such will not indicate approval of the assembly in which the item functions.
6. Resubmittal Procedures for Shop Drawings and Samples
   a. Contractor shall make corrections required by City and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and consideration. Contractor shall direct specific attention in writing to revisions other than the corrections called for by City on previous Submittals.
   b. Contractor shall furnish required Shop Drawing and Sample submittals with sufficient information and accuracy to obtain required review of an item.

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LAYTON
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TOOELE
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CEDAR CITY
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RICHFIELD
Phone: 435.896.2983

WWW.ENSIGNENG.COM

FOR:
CLIENT
CLIENT'S ADDRESS
CLIENT CITY STATE ZIP

CONTACT:
CLIENT CONTACT
PHONE: 801.000.0000

WILLOW STREET SEWER REPAIR

GRANTSVILLE
TOOELE COUNTY, UTAH

GENERAL NOTES

PROJECT NUMBER 11637
PRINT DATE 2024-08-05
PROJECT MANAGER R. ROUSSELLE
DESIGNED BY D. COOPER

C-100

GRANTSVILLE CITY PRE-CONSTRUCTION NOTES

Chain of Communication

- First Contact: Cody Christensen, Public Works Inspector (CPII)
- Second Contact: Markus Seat, Field Operations Lead; when Cody is not available.
- CC: James Waltz, Public Works Director; Christy Montierth, Deputy Public Works Director

Please communicate through e-mail to maintain a written record.

Construction Staking

- Surveying & Staking: _____
- Staking must be complete as provided in plans to ensure alignment of utilities.

Geotechnical

- Compaction Geo Technician: _____
- Does the Contractor have a copy of the Geotechnical Report and is he familiar with the requirements?
- Provide the City Inspector a copy of the Geotechnical Report.
- A Geo-tech will be required should the City need additional information on excavations or backfills.

Construction Submittals

- The Contractor shall provide construction submittals for material to the City for approval prior to purchase of materials and installation. Submit to City Inspector Cody Christensen, cc: James Waltz, Christy Montierth, and Markus Seat.
- Refer to Grantsville City's General Notes for additional construction submittal requirements.

Emergency Services

- Clear and install a silt fence 5 feet out around live fire hydrants and electrical transformers. This clear space must be maintained for emergency services during construction.
- Install required temporary signage at the beginning of work on the site.
- Park only on one side of access roads so emergency access is clear.
- Coordinate with Fire Chief for his inspections.

Sewer

- Pipe Material: PVC ASTM D-3034 SDR-35
- Follow OSHA requirements for trenching (4 foot vertical with 1:1 sloping or stepping or use trench boxes).
- Sewer laterals per City standard (APWA 431).
- Utah State requirement of 10 foot horizontal separation between sewer and water laterals.
- 18 inches minimum vertical separation between water and sewer.
- Crushed Rock ¾ inch in pipe zone (pea gravel is not allowed by the City).
- Sewer laterals - gravel bedding to be extended to dwelling.
- **NO** native soils may be used above the pipe zone.
- A-1-a 3 inch minus soils are to be used for trench backfill.
- Offset tees for sewer laterals; gasket type.
- Compaction requirements – 95 percent in ROW, 90 percent out of ROW (ASTM D-1557, Modified Proctor).
- Underground Installation of Gravity-Flow Applications as per ASTM D-2321.
- All precast manholes to be provided with rubber boots and stainless-steel bands at pipe penetrations.
- Interior pipe penetrations in all sewer manholes shall be grouted.
- Tracer wire extending from main to lateral stub on all laterals and extended to surface at stub marker. Include an extra 30 feet to extend along the service to the dwelling.
- Stamp (**When Wet**) or pin (**Do Not Grind**) gutter both at the lip and top of curb an "S" at all service laterals located at exact crossing of the curb (two places for each service).
- Extend utility lateral stub markers beyond the 15 foot PU&DE (15 feet behind back of walk).
- End of sewer laterals shall be plugged.

Testing:

- Air Test mandatory – certification required.
- Manhole Vacuum Test mandatory – certification required.
- Video inspection after flushing mandatory – the City does not need to observe the video inspection. Video record to be provided for City review.
- Provide the City 48 hours' notice prior to testing.

Culinary Water

- Pipe Material: PVC C900 DR18
- Use bedding sand for backfill in the pipe zone (sand bedding must be preapproved). The City can provide an example.
- Water laterals - sand bedding shall be extended to the dwelling.
- NO native soils may be used above the pipe zone.
- A-1-a 3 inch minus soils are to be used for trench backfill.
- Valves shall be clustered in intersections.
- 10 inch valves or smaller are to be gate valves, 12 inches or larger are to be butterfly valves.
- Valves are to be located at the dead-end main of phase lines to allow for flushing, isolation, and continued service to existing connections when future phases are constructed. Blow offs are to be located in the green space.
- Meter and services shall be ¾ inch polyethylene SIDR-7 IPS. Install service laterals and meters within 5 feet of lot lines (as close to lot line as practicable), one on each side of common lot line (alternate with secondary water).
- Use 150# corp stops.
- 10 foot horizontal separation of water and sewer lateral per state requirements.
- 18 inch minimum vertical separation between water and sewer and storm drain.
- 10 foot horizontal separation of water and stormwater.
- Meter barrels shall be 21 inch diameter white corrugated polyethylene.
- Developers cannot swing meter boxes to accommodate the driveway. Plan Accordingly.
- Meter to be installed 18 inches to 22 inches below the lid.
- Place sand around the water service setter bases and above to stabilize setter and provide insulation. **Gravel is not allowed.**
- Tapping saddles shall be brass with double stainless steel or brass straps.
- Use dual check and heavy-duty angle valves for all service setters.
- Install tracer wire (on the pipe) and locating tape above the water main.
- Install tracer wire from the main connection through the meter pit to stub marker with 30 feet excess to extend to the dwelling.
- Stamp (**When Wet)** or pin (**Do Not Grind**) gutter both at the lip and top of curb with a "W" at all service laterals located at exact crossing of the curb (two places for each service).
- Thrust blocks need to be inspected by the City prior to backfill. Size based on water pressure and pipe size.
- Fire hydrants shall be installed 18 inches minimum back of curb in green space. Break away must be 4 inches above curb or manufacturer's specifications.
- Paint curb red 10 feet either direction of the fire hydrants (20 feet total).
- 5 foot hydrant markers (whips) shall be installed on all hydrants.

Testing:

- Hydrostatic Pressure Test:
  - Water main without tapping saddles - 200 psi for a minimum of 2 hours.
  - Water main with tapping saddles, corporations, and service laterals - 150 psi for a minimum of 2 hours.
  - The water distribution shall be tested in entirety from main line to setter connections.
  - Inspector (Cody Christensen or assigned City Inspector) must be present for the entire duration of the test.

Disinfection:

- Hypochlorite powder shall be used.
- Chlorine residuals will be tested by the City before flushing.
- One series of Bac-T testing will be performed by the City to accept water lines.
- Developer shall pay for retests if necessary.
- The City will grab all samples initial or retests.
  - Per AWWA C651, Bac-T testing shall be completed for every 1,200 feet of new water main, at the end of the line, and at each branch. Two consecutive sample sets shall be collected at the aforementioned locations at least 24 hours apart.

Storm Water

Pipe Material:

- Reinforced Concrete (RCP) or High Performance storm polypropylene pipe (HP storm).
- Installation and compaction to follow manufacturer's recommendations.
- All catch basin boxes include a sump. For boxes with snouts the sump depth is based upon the snout model manufacturer's recommendation. For all other catch basins the depth is 12 inches below the flow line of the pipes.

Franchise Utilities

- Gas: Dominion Energy
- Power: Rocky Mountain Power
- Cable: Comcast
- Phone: Century Link
- Stubs shall be installed for franchised utilities. New streets and concrete will not be cut. If stubs are missed, only boring will be allowed.

Surface Improvements

Pavement:

- Asphalt paving is allowed when temperatures are 50 degrees Fahrenheit ambient and rising.
- City Standard pavement section is 3 inches asphalt on 6 inches UBC on 8 inches granular borrow or per approved drawings whichever is greater.
- 58/28 PG mix at maximum, 15 percent RAP ½ inch granulated mix required for paving
- Road base and cross-section per approved drawings.
- Provide proper signage per Utah MUTCD.
- Provide stops bars at stop signs (retroreflective paint per MUTCD standard).
- Use APWA Detail 255 for pavement T-patch.

Concrete:

- 4,500 psi concrete for all surface improvements.
- Sidewalk section is 6 inches PCC on 6 inches roadbase.
- ADA Rib Composite Tile (without screws) truncated dome inserts shall be yellow in pedestrian ramps.
- Tile to touch curb line (2 inch max setback) and 5 foot width.
- Air test every 50 yards (5 percent – 7 percent). If out of spec, air test every truck load.
- 3 cylinders every 50 yards.

Earthwork:

- Provide compaction and sieve analysis on all initial proctors and new material.
- Compaction tests every 100 feet of pipe trench. Vary depths to provide results throughout the strata.
- Road structure shall be tested every 200 feet – along both shoulders and centerline (95 percent compaction).
- Proof roll trenches, subgrade, and base to be inspected by City Inspector.
- Minimum of four compaction tests around each manhole and cleanout.
- Compact all fill in 8 inch lifts.

Testing and QA/QC

- 48-hour notice is required prior to any testing. Make sure the test is scheduled.
- Inspector(s) representing the City must be present for all testing including those performed by an independent agency.
- Public Works hours are 7:00 am to 3:30 pm Monday through Friday. If deemed necessary, the City will work with Contractor when working outside these hours. Give 48 hour notice.

Construction Water

- Contractor shall obtain water for construction from a City approved fire hydrant using a hydrant meter rented from the City.
- $1600 refundable deposit, $35 account set up fee, $75 a month rental charge, $6 per 1000 gallons for all water used, $50 buried meter fee if usage is not reported monthly, $1000 theft of service and $50 tampering fee if meter is not used.
- Do not damage the meters or take anything off the meters.
- Contact Brooke Gill at City Hall Utilities.

Erosion Control / Storm Water System Protection

- Minimize potential for off-site run-off.
- Minimize disturbed areas.
- Keep working area wetted to minimize dust.
- Provide silt fence to prevent sediment transport downstream.
- Contain all sediment on site. Clean roads of sediment tracking.
- Maintain BMPs as per SWPPP.
- SWPPP to be on-site at all times.
- The City will check with the contractor after an event.
- Inspect after rainfall and other events (weather, and construction around BMPs) that may affect BMPs.
- Make sure to follow the SWPPP as shown on the plans.
- Put the SWPPP sign on site and visible so the State can see it on a drive by.

Construction Debris Disposal

- Maintain a work site that is clean and properly dispose of debris and trash.
- **No garbage pits allowed.**
- Establish or rent a suitable washout area and remove all washout materials from the site at the project's conclusion.

Site Safety

- Conform to OSHA Standards.
- Close trenches at night.
- Secure open trenches and plug lines.

Security

- Secure construction equipment when not in use. Security is the responsibility of the developer.

Sanitation

- Clean and properly maintained portable restrooms on site at all times.

Hazardous Material Storage on Site

- If there are hazardous materials on site, make sure the City has approved it and that it has secondary containment. The Fire Chief needs to know what is on site, how it is secured, and where it is located.

Site Access

- As shown on the SWPPP do not deviate from it.

Construction Observation

- City personnel will inspect regularly as needed and at the City's discretion.

Construction Drawings

- Provide City with one 24 inch x 36 inch and two 11 inch x 17 inch For Construction prints. (Don't print any plans until all changes have been made and you have received a copy of the signed plans from the city.)
- Keep an accurate set of As-Builts.

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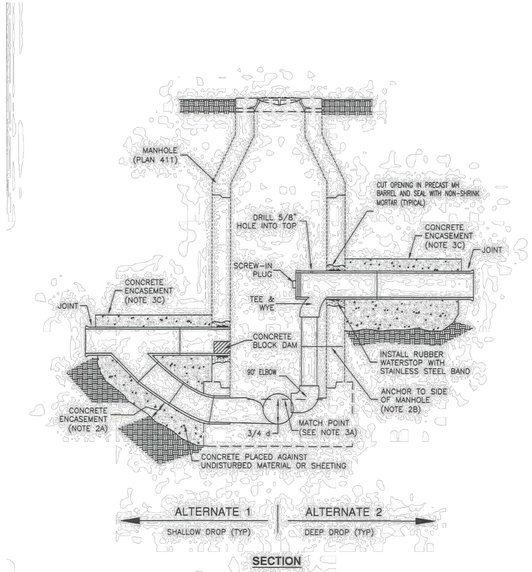
WILLOW STREET SEWER REPAIR

GRANTSVILLE
TOOELE COUNTY, UTAH

PRE-CONSTRUCTION NOTES

PROJECT NUMBER 11637
PRINT DATE 2024-08-05
PROJECT MANAGER R. ROUSSELLE
DESIGNED BY D. COOPER

C-200



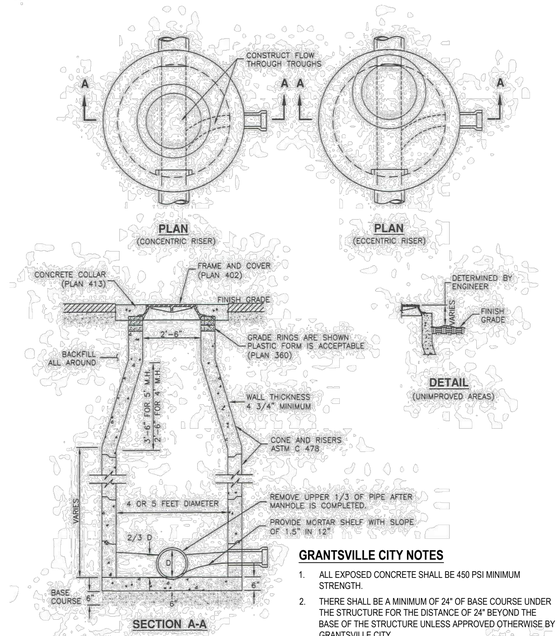
GRANTSVILLE CITY NOTES

1. TRENCH BACKFILL SHALL BE A-1-a OR AS APPROVED BY THE CITY.

APWA Utah Chapter — *Pipe drop* — Plan 433 April 1997

1 PIPE DROP DETAIL

SCALE: NONE



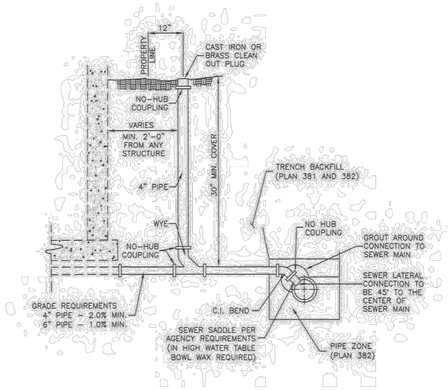
GRANTSVILLE CITY NOTES

1. ALL EXPOSED CONCRETE SHALL BE 450 PSI MINIMUM STRENGTH.
2. THERE SHALL BE A MINIMUM OF 24" OF BASE COURSE UNDER THE STRUCTURE FOR THE DISTANCE OF 24" BEYOND THE BASE OF THE STRUCTURE UNLESS APPROVED OTHERWISE BY GRANTSVILLE CITY.

APWA Utah Chapter — *Sanitary sewer manhole* — Plan 411 April 2011

2 SANITARY SEWER MANHOLE DETAIL

SCALE: NONE



GRANTSVILLE CITY NOTES

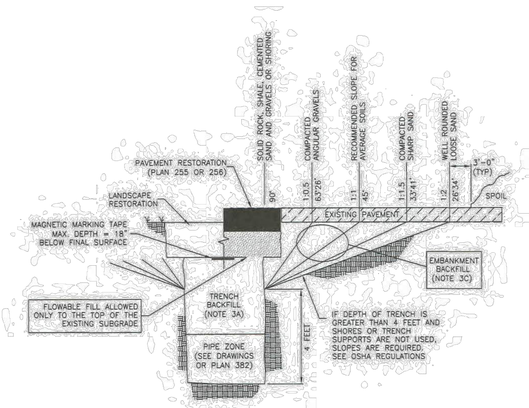
1. TRECH BACKFILL SHALL BE A-1-a OR AS APPROVED BY THE CITY.
2. SEWER PIPE AND FITTINGS SHALL BE SDR-35 PVC PIPE MATERIAL.
3. LATERALS SHALL BE CONNECTED TO EXISTING CONCRETE PIPE WITH NOSE-ONS AND NEW PVC PIPE WITH WYES.

APWA Utah Chapter — *Sewer lateral connection* — Plan 431 January 2011

3 SEWER LATERAL CONNECTION DETAIL

SCALE: NONE

NARRATIVE: THIS PLAN SHOWS VARIOUS SLOPES RECOMMENDED FOR VARIOUS TYPES OF SLOPE STABILITY PROBLEMS. THE VERTICAL TEXT INDICATES VARIOUS MATERIALS THAT MAY BE ENCOUNTERED. THE SERVICES OF A PROFESSIONAL SOILS ENGINEER SHOULD BE USED TO VERIFY SLOPE STABILITY.



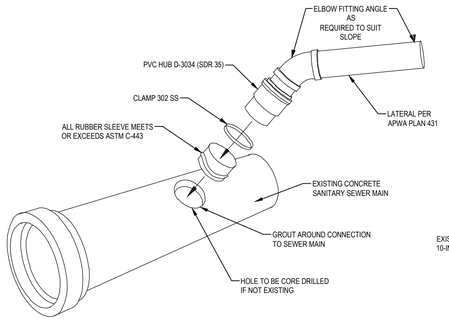
GRANTSVILLE CITY NOTES

1. TRENCH BACKFILL SHALL BE A-1-a OR AS APPROVED BY THE CITY.

APWA Utah Chapter — *Trench backfill* — Plan 381 July 2016

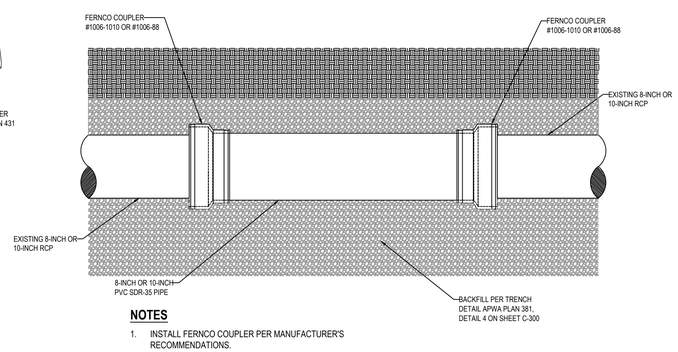
4 TRENCH BACKFILL DETAIL

SCALE: NONE



5 NOSE-ON DETAIL

SCALE: NONE



NOTES

1. INSTALL FERNCO COUPLER PER MANUFACTURER'S RECOMMENDATIONS.

6 PIPE BELLY REPAIR DETAIL

SCALE: NONE

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WILLOW STREET SEWER REPAIR

GRANTSVILLE
TOOELE COUNTY, UTAH

DETAILS

PROJECT NUMBER 11637
PRINT DATE 2024-08-06
PROJECT MANAGER R. ROUSSELLE
DESIGNED BY D. COOPER

C-300

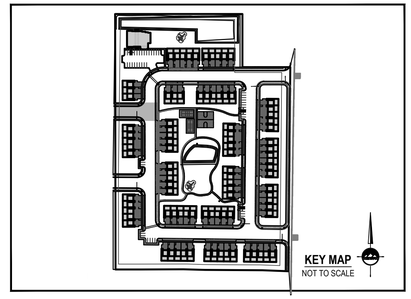
811 Know what's below. Call before you dig.

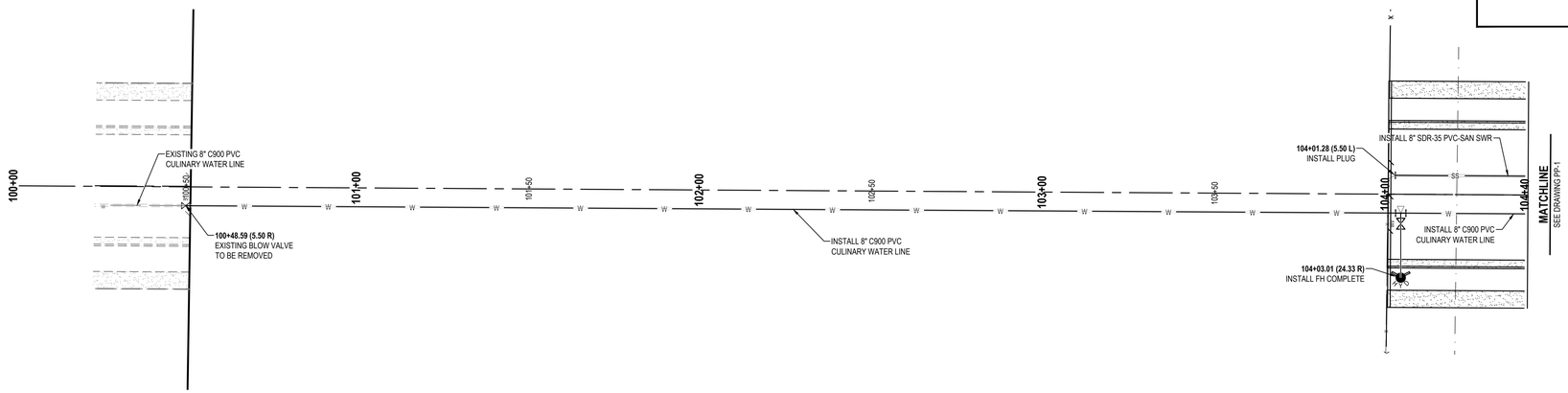
CALL BLUESTAKES @ 811 AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

BENCHMARK

SOUTHWEST QUARTER CORNER OF SECTION 31, TOWNSHIP 2 SOUTH, RANGE 5 WEST SALT LAKE BASE AND MERIDIAN (FOUND 2.5" BRASS DISC)

ELEV = 4360.80'





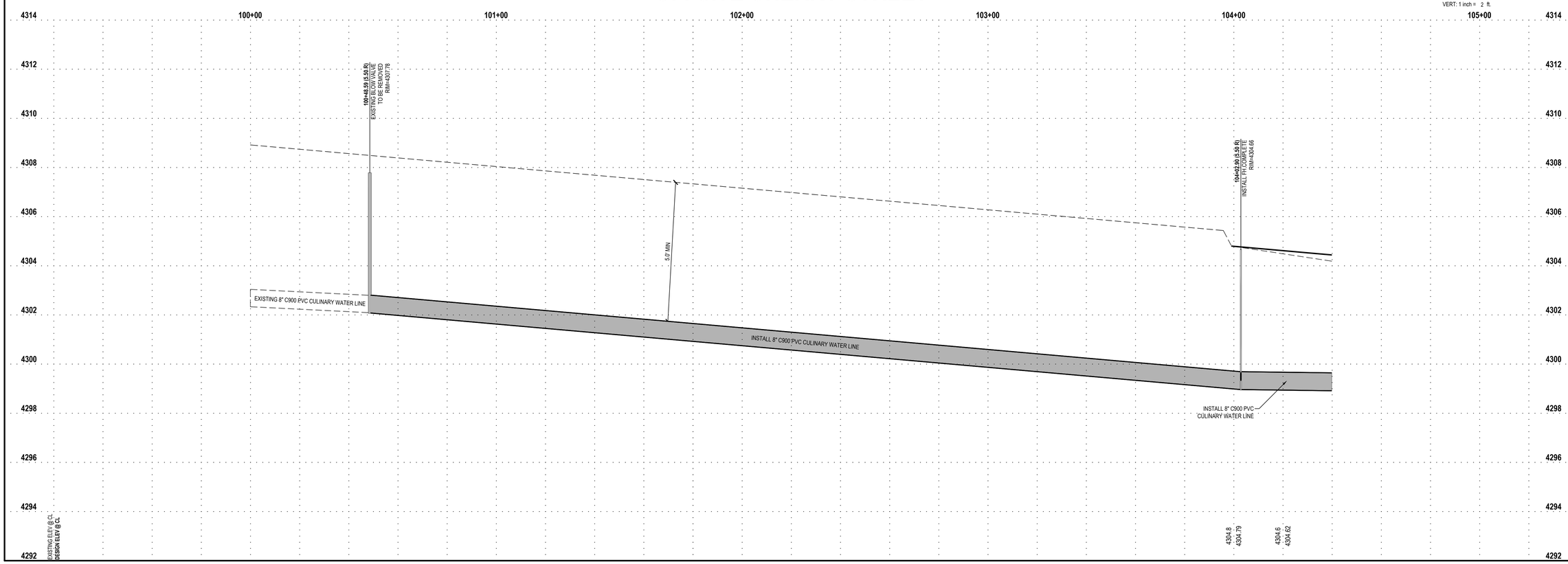
OFFSITE CHERRY STREET



HORIZONTAL GRAPHIC SCALE

20 0 10 20 40

(IN FEET)
HORZ: 1 inch = 20 ft.
VERT: 1 inch = 2 ft.



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FOR:
ICON DEVELOPMENT LLC
3410 NORTH MOYLE LANE
ERDA, UTAH 84074
CONTACT:
SEAN PERKINS
PHONE: 435-850-8436

TOWNHOMES ON WILLOW PUD

WILLOW STREET
GRANTSVILLE, UTAH

For Review
01/30/2023 5:06:36 PM

PLAN AND PROFILE

PROJECT NUMBER 10898A
PRINT DATE 2023-01-30
DRAWN BY H. CARTER
CHECKED BY C. CHILD
PROJECT MANAGER C. CHILD

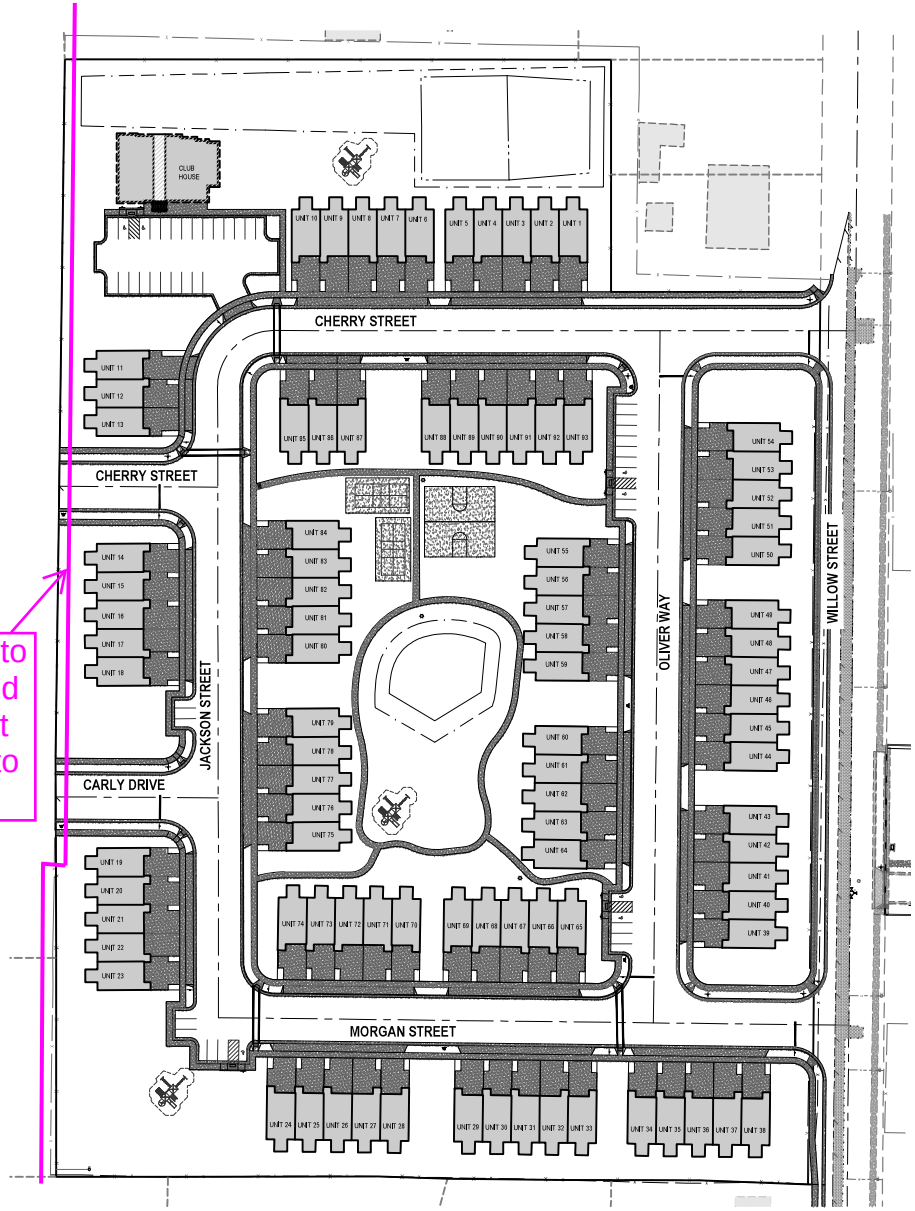
PP-11

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

BENCHMARK

SOUTHWEST QUARTER CORNER OF SECTION 31, TOWNSHIP 2 SOUTH, RANGE 5 WEST SALT LAKE BASE AND MERIDIAN (FOUND 2.5" BRASS DISC)

ELEV = 4360.87



8" irrigation main needs to be upgraded to C900 and moved to property line. It is currently 10' to 15' onto the property.

Please see the two memos provided by AQUA Engineering for comments on the PUD Application documents.

Check Scaling

HORIZONTAL GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
HORZ: 1 inch = 50 ft.

GENERAL NOTES

1. ALL WORK TO COMPLY WITH THE GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
2. EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATIONS BASED UPON RECORD INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. LOCATIONS MAY NOT HAVE BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND LOCATION OF THE UTILITIES SHOWN ON THESE PLANS OR INDICATED IN THE FIELD BY LOCATING SERVICES. ANY ADDITIONAL COSTS INCURRED AS A RESULT OF THE CONTRACTOR'S FAILURE TO VERIFY THE LOCATIONS OF EXISTING UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION IN THEIR VICINITY SHALL BE BORNE BY THE CONTRACTOR AND ASSUMED INCLUDED IN THE CONTRACT. THE CONTRACTOR IS TO VERIFY ALL CONNECTION POINTS WITH THE EXISTING UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED TO THE EXISTING UTILITIES AND UTILITY STRUCTURES THAT ARE TO REMAIN. IF CONFLICTS WITH EXISTING UTILITIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONSTRUCTION TO DETERMINE IF ANY FIELD ADJUSTMENTS SHOULD BE MADE.
3. ALL SURFACE IMPROVEMENTS DISTURBED BY CONSTRUCTION SHALL BE RESTORED OR REPLACED, INCLUDING TREES AND DECORATIVE SHRUBS, SOD, FENCES, WALLS AND STRUCTURES, WHETHER OR NOT THEY ARE SPECIFICALLY SHOWN ON THE CONTRACT DOCUMENTS.
4. ALL CONSTRUCTION SIGNAGE, BARRICADES, TRAFFIC CONTROL DEVICES, ETC, SHALL CONFORM TO THE LATEST EDITION OF THE M.U.T.C.D. THE CONTRACTOR WILL MAINTAIN SUCH SO THAT THEY ARE PROPERLY PLACED AND VISIBLE AT ALL TIMES.
5. SIDEWALKS AND CURBS DESIGNATED TO BE DEMOLISHED SHALL BE DEMOLISHED TO THE NEAREST EXPANSION JOINT, MATCHING THESE PLANS AS CLOSELY AS POSSIBLE.
6. ALL IMPROVEMENTS MUST COMPLY WITH ADA STANDARDS AND RECOMMENDATIONS.
7. SEE LANDSCAPE/ARCHITECTURAL PLANS FOR CONCRETE MATERIAL, COLOR, FINISH, AND SCORE PATTERNS THROUGHOUT SITE.
8. ALL PAVEMENT MARKINGS SHALL CONFORM TO THE LATEST EDITION OF THE M.U.T.C.D. (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES).
9. ALL SURFACE IMPROVEMENTS DISTURBED BY CONSTRUCTION SHALL BE RESTORED OR REPLACED, INCLUDING TREES AND DECORATIVE SHRUBS, SOD, FENCES, WALLS AND STRUCTURES, WHETHER OR NOT THEY ARE SPECIFICALLY SHOWN ON THE CONTRACT DOCUMENTS.
10. NOTIFY ENGINEER OF ANY DISCREPANCIES IN DESIGN OR STAKING BEFORE PLACING CONCRETE OR ASPHALT.
11. THE CONTRACTOR IS TO PROTECT AND PRESERVE ALL EXISTING IMPROVEMENTS, UTILITIES, AND SIGNS, ETC, UNLESS OTHERWISE NOTED ON THESE PLANS.
12. COMBINED DRIVEWAYS WILL BE ALLOWED AS AN EXCEPTION ON THIS PROJECT

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CONTACT:
SEAN PERKINS
PHONE: 435-851-8436

TOWNHOMES ON WILLOW PUD

WILLOW STREET
GRANTSVILLE, UTAH

PROFESSIONAL ENGINEER 10924116-2202 COREY J. CHILD STATE OF UTAH
8-28-24

OVERALL SITE PLAN

PROJECT NUMBER: 10898A
PRINT DATE: 2024-08-28
DRAWN BY: H. CARTER
ENGINEER: C. CHILD
PROJECT MANAGER: C. CHILD

C-100

Grantsville City Development Review
Submittal # 1 12/12/2024

REVISIONS
Shelby Moore
Planning Department
01/02/2025

REVISIONS
Jason Smith
Fire Department
01/02/2025

REVISIONS
Bodee Paulick
Grantsville Irrigation Co.
01/02/2025

REVISIONS
Shay Stark
Planning Department
01/07/2025

AGENDA ITEM #2

Consideration of the proposed amendments to Chapter 12 Planned Unit Developments (PUD) of the Grantsville City Land Use Management Code

Grantsville City Planning Commission
May 15, 2025
Public Hearing

The Grantsville City Planning Commission will hold a Public Hearing to receive public comment regarding proposed amendments to the Grantsville City Land Use Management Code, including:

- Substantial updates to Chapter 12 – Planned Unit Developments (PUD)
- Conforming, technical, and related changes to the following chapters and sections:
  - Chapter 3: Sections 3.6, 3.8, and 3.18
  - Chapter 4: Sections 4.5 and 4.12
  - Chapter 6: Section 6.15
  - Chapter 8: Section 8.9
  - Chapter 16: Sections 16.2 and 16.4
  - Chapter 19A
  - Chapter 21: Various sections throughout

The purpose of these amendments is to update standards and procedures for Planned Unit Developments and ensure consistency across related code sections.

Notice is hereby given that, in accordance with the provisions of Sections §10-9A-205 and §10-9A-502 of the Utah Code, the Grantsville Planning Commission will hold a discussion and public hearing on **May 15, 2025, at 7:00 p.m.** at Grantsville City Hall. The meeting will also be broadcast on Zoom. The discussion, public hearing, and meeting are to receive public input and consider action on the **consideration of the proposed amendments to Chapter 12 Planned Unit Developments (PUD) of the Grantsville City Land Use Management Code, along with conforming, technical, and related changes to sections of Chapters 3, 4, 6, 8, 16, 19a, and 21.**

You can view a copy of the agenda and packet online by 5:00pm on **May 9, 2025** at the link below:
https://cms9.revize.com/revize/grantsvilleut/departments/community___economic_development/current_public_notices.php

Or by emailing pzcommission@grantsvilleut.gov. All comments and concerns need to be sent in writing through email or mail and received no later than **12:00pm on May 14, 2025.**

Dated this 30th day of April, 2025

BY ORDER OF THE GRANTSVILLE PLANNING COMMISSION

Shelby Moore
Zoning Administrator

Scan the QR code above or use the link below to join the Zoom meeting.
https://us02web.zoom.us/j/86290004540
Meeting ID: 862 9000 4540

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

STAFF REPORT
To: Planning Commission
Public Hearing: May 15, 2025
Date: May 15, 2025
Subject: Consideration of the proposed amendments to Chapter 12 Planned Unit Developments (PUD) of the Grantsville City Land Use Management Code.

Background

On January 30, 2025, the City Council made a formal motion to repeal Chapter 12 of the municipal code, which governs Planned Unit Developments (PUDs). As part of that action, Council directed staff to coordinate a joint work session with the Planning Commission by April 30, 2025, to present proposed updated PUD language for review and discussion.

This staff report provides a detailed summary of the collaborative meetings, drafting efforts, and preparatory steps completed to fulfill that directive and outlines the path forward for finalizing and adopting revised PUD regulations.

Timeline of Events

January 30, 2025:
City Council approved a motion to repeal Chapter 12 and directed staff to present revised PUD language at a joint work session by April 30.

February 4–26, 2025:
Staff conducted initial and follow-up meetings with key stakeholders, including Jay Springer, Shelby, and Tysen, to define project goals, draft initial concepts, and establish a structured revision process.

March 12 & 27, 2025:
Staff reviewed and incorporated feedback from internal departments, resolving outstanding comments and refining the draft language.

April 9–21, 2025:
Final edits and formatting were completed, resulting in a packet-ready draft of the proposed PUD language.

April 23, 2025:
Staff confirmed logistics for the April 30 joint work session, including agenda finalization and document distribution.

April 30, 2025 (Scheduled):
Joint work session with City Council and Planning Commission to present the draft PUD amendments, gather feedback, and receive direction on further revisions.

May 15, 2025 (Scheduled):
Planning Commission public hearing and formal consideration of the proposed PUD language amendments.

Next Steps

1. The joint work meeting on April 30, 2025, will serve as the primary forum for review and feedback from both the City Council and Planning Commission.
2. Based on the discussion and direction provided, staff will make further revisions to the proposed language as needed.
3. A formal **Planning Commission public hearing** is scheduled for **May 15, 2025**, to review and consider recommending adoption of the revised PUD language.

Chapter 12 Planned Unit Development Overlay District

12.1 Purpose and Intent

(1) The Planned Unit Development District (PUD District) is an overlay district requiring legislative approval by the City Council. The PUD District is a discretionary and optional tool available to applicants for large-scale developments involving multiple components or land uses, mixed use projects, or any project seeking any deviation from design standards in an underlying zone, particularly projects with both residential and commercial components. Approval of any PUD District application is not guaranteed.

(2) This district is intended to encourage the efficient use of land and resources, promote greater efficiency in public and utility services, preservation of open space, efficient use of alternative transportation and encouraging innovation in the planning and building of all types of development. Through the flexibility of the PUD District, the City and developer will seek to achieve the following specific objectives:

(a) to create a more desirable environment than would be possible through strict application of other City land use regulations through promotion of a creative approach to the use of land and related physical facilities resulting in urban design and development, including aesthetic factors and recreational amenities;

(b) to create a pleasing environment while preserving desirable site characteristics through the use of design, landscape, or architectural features such as natural topography, vegetation and geologic features as open space;

(c) to preserve buildings which are architecturally or historically significant and contribute to the character of the City;

(d) to establish interconnecting paths and trails for alternative transportation routes which lead to common and popular destinations and interface with automobile traffic at few and specific points;

(e) to eliminate blighted structures or incompatible uses through redevelopment or rehabilitation;

(f) to provide residential housing that conforms with the State moderate income requirements;

(g) to establish a well-rounded community with a mix of housing types;

(h) to establish and improve commercial centers along main thoroughfares in the City, specifically along Main Street;

(i) to integrate residential and commercial components into harmonious developments or communities; and

(j) to foster development compatible with existing or anticipated uses on the surrounding properties.

12.2 Eligibility.

(1) Single ownership of all land within the proposed PUD District is required. If the application is submitted by any person other than the owner, the owner shall provide written authorization to the City for the applicant to act on the owner's behalf with respect to the application

(2) In determining whether to approve a PUD District, the City Council may consider:

(a) the size and location of the proposed development;

(b) the nature and extent of proposed deviations or variations from existing City code and development standards;

(c) the underlying zone for the property, including the proposed use or mix of uses in relation to the existing underlying zone;

(d) any and all considerations identified in the current General Plan, and Future Use Map or similar guiding documents adopted by the City; and/or

(e) any other factors the Council deems relevant.

12.3 Land Use Designations. Each PUD District shall allow those uses allowed in the underlying zoning districts as permitted or conditional uses as specified in the regulations for the underlying districts, as well as any additional residential or commercial uses identified in the PUD District approval by reference. Additional uses may be allowed by the City Council as permitted or conditional uses as part of the PUD District approval. Any use not listed or expressly identified as a permitted or conditional use is prohibited. If a PUD District is established over more than one underlying zoning district, the most restrictive combination of use restrictions and development standards provided by the underlying zones shall govern unless otherwise specified. The City Council may restrict uses allowed in underlying zones that are not compatible with the PUD District plan as presented by so specifying in the PUD District approval.

12.4 Development Standards.

Unless otherwise specified in the PUD District approval by the City Council, and notwithstanding anything to the contrary in other portions of the City Code, all development in PUD Districts shall be in accordance with the most restrictive of either (i) the standards of the underlying zone or (ii) those found in this chapter.

(1) **Minimum Lot Sizes.** The minimum lot size for single family and twin-home dwellings is 4,000 square feet per unit. Attached dwelling unit residential development shall meet the minimum lot requirements found in GLUMDC 4.34.

(2) **Setbacks/Yard Requirements.** Setbacks/yard requirements are intended to describe the amount of space required between buildings and property lines. All buildings in this zone, including accessory buildings, are required to maintain a minimum distance from property lines as follows:

(a) Front: 20 feet.

(b) Sides (single family and twin homes): 7.5/10 feet or PUE dimensions, whichever is greater. If twin-homes are attached to the property line, each side shall include a setback of 15 feet (15').

(c) Rear: 25 feet.

(d) Corner lots (single family and twin homes): In order to maintain an adequate site triangle, there shall be a minimum setback on corner lots as follows: 25 feet on each side fronting a street, with 10-foot setback for the interior side.

(e) All accessory buildings in this zone are required to maintain distances from property lines and other dwelling units as follows: sides and rear 7.5 feet.

(f) Mixed-use buildings fronting Main Street and containing main floor commercial uses may allow the commercial uses to abut the street side property line with a portion of the building containing the main entrance to the commercial use, if an adjacent street side property is currently similarly configured.

(g) Commercial buildings (excluding residential) shall conform to the commercial requirements found in the applicable commercial district (CN, CS & CG) for the equivalent type of use and size.

(h) Attached dwelling unit residential development shall meet the setbacks/yard requirements found in GLUMDC 4.34 or the underlying zone.

(3) **Minimum Lot Frontage**

(a) For single family and twin homes, the minimum lot frontage/lot width may not be less than 50 feet.

(b) Attached dwelling unit residential development shall meet the requirements found in GLUMDC 4.34.

(c) All other uses in this district shall have at least 100 feet of frontage along a public street.

(4) **Maximum Height Of Structures.** No residential structure in this zone may exceed a maximum of three (3) stories in height or 35 feet above grade at the street frontage for the lot. Commercial buildings shall conform to the commercial requirements found in the applicable commercial district (CN, CS & CG) for the equivalent type of use and size.

(5) **Minimum Dwelling Size.** Every dwelling unit in this zone shall contain a minimum of 900 square feet of living space.

(6) **Landscaping; Open Space.** Open space is required for all developments in Grantsville.

(a) All residential projects developed in PUD Districts shall have a minimum of 20% of the total project area to be used for landscaping or open space. This requirement may be calculated by including open space, landscaped setback areas and landscaped common areas. Required stormwater facilities may not be considered as part of the minimum open space.

(b) All sensitive lands shall be protected as part of the landscaped and open space area of any development. Onsite paths and trails shall connect to the citywide trail system. Trails connecting to the citywide system shall be considered open space and shall be dedicated public trails allowing for public use.

(c) For all projects containing a residential component containing more than 4 dwelling units defined as a level 4 and level 5 subdivisions in Chapter 21 of this code at least 10% of the total parcel acreage shall be improved, fully landscaped, amenity rich, active open space. All planned unit development projects shall conform at a minimum with open space and improved open space requirements found in Chapter 4.34. Topography with slopes greater than 30% on average with a site area greater than 5,000 square feet, natural water bodies and drainages shall be protected.

(7) **Density**. Any request resulting in increased density relative to the most restrictive standard applicable in the underlying zone(s) shall be determined on a case by case basis by the City Council in its full discretion. The applicant shall provide a written justification for any requested increase.

(8) **Commercial Component Required**. All PUD Districts that are one acre or greater shall include at least 25% of the land area as a commercial use, which may be reduced by the City Council in its full discretion. The commercial use shall be located fronting the major street. Master planning of multiple contiguous properties is encouraged in order to integrate the proposed development harmoniously into the surrounding neighborhood. Properties of less than one acre fronting major streets such as Main Street shall be developed as either commercial or a commercial/residential mix with the commercial fronting the street. Upon approval of a PUD District, the commercial area(s) shall be automatically committed to commercial use, as more fully described in Section 12.6, unless otherwise modified in accordance with GLUDMC or another zoning action by the City Council.

(9) **Balanced Residential Mix**. Residential development within a PUD District shall include a balanced mix of residential types that reflect the character of Grantsville and provide housing opportunities for people

of all ages and economic backgrounds. The PUD District application shall identify all residential use types intended to be included in the PUD. No single residential type may comprise more than 70% of the total residential units within the development, and no included type may constitute less than 10%, unless a different ratio is approved by the City Council based on site-specific factors and the overall goals of the PUD.

(10) **Compatibility and Integration**. Architectural design, massing, scale and heights of development shall be designed to fit the scale and aesthetics of the surrounding properties. Where proposed uses are different than surrounding properties, buffering and transition of uses and architectural design shall be incorporated to mitigate potential conflicts of use and appearance. Where proposed uses do not match uses on adjoining properties, a continuation of the adjoining use shall be implemented for lots against the lot boundary, or a passive-use landscaped buffer of at least 30' feet wide containing trees and privacy fencing shall be included. No lighting shall be allowed to reside in the 30-foot buffer and no light shall escape onto adjacent properties. Landscaped buffer areas may be counted as open space if the open space complies with the requirements found in GLUDMC Section 21.1. For commercial properties that are not in use at night, parking may encroach into the buffer area but trees and fencing are still required between the parking and the property boundary. Properties smaller than three acres or containing narrow areas of less than 200 feet may be granted modifications to the buffer width in those narrow areas if applicants and Planning Commission agree on an acceptable alternative such as transitions in architectural design that complement the neighboring issues.

(11) **Moderate-income Housing**. PUD Districts that do not seek to increase the overall density allowed within the most restrictive of the underlying district for the applicable residential unit type may be eligible for a reduction in any moderate-income housing element requirements. For residential projects requesting increases in density, at least 50% of the requested additional units shall:

(i) Be owner occupied for not less than 10 years;

(ii) Be reserved for occupancy by households with gross household income equal to or less than 80% of the median gross income for households of the same size in the County; and

(iii) Be subject to deed-restrictions or similar recorded documents in a form acceptable to the City Attorney to assure these conditions are enforced.

12.5 Application Procedure.

(1) **PUD District Application**. Each PUD District application shall include the following:

(a) a "PUD District Map and Plan", which shall include, at a minimum:

(i) a depiction of the total area proposed to be covered by the PUD District identifying the general location of residential and nonresidential uses within the proposed PUD District; and

(ii) a list identifying the number of residential units and unit types and the square feet of nonresidential development; and

(iii) all information required in the City's online application portal;

(b) a "PUD Development Plan," that is drawn to scale and is legible if printed on an 11 x 17 sheet. At a minimum, the PUD Development Plan shall include:

(i) site plan contents from GLUDMC Chapter 11;

(ii) the proposed configuration of lots and types of uses proposed for the property;

(iii) the general location of major roadways, main utility infrastructure, and open space networks; and

(iv) a proposed phasing plan showing the sequence and general location of phases including estimated number of units by unit type, minimum lot sizes, nonresidential square footage for each phase throughout the PUD District;

(c) a land use table outlining proposed permitted and conditional uses (either by incorporation of the underlying zones or proposed deviations, as applicable), including an explanation of how any proposed deviations benefits the development and the surrounding community and any other justifications for the proposed deviations from the City Code;

(d) a table of development standards outlining proposed deviations from underlying City Code or development standards, including references to the existing code, including an explanation of how any proposed deviations benefits the development and the surrounding community and any other justifications for the proposed deviations from the City Code (the proposed deviations shall include specific references to the affected ordinances and a comparison of the requirement and proposed deviations);

(e) a proposed development agreement applicable to the entire PUD District (contact the City offices for the latest form);

(f) a geotechnical report;

(g) a traffic study and report for the entire proposed development; and

(h) a written statement addressing how the proposed development will promote the objectives set forth in Section 12.1 of this Chapter. The statement shall explain specifically how the proposed PUD District relates to and promotes each listed objective.

(i) A written notification and explanation of any known easement or access issues affecting properties directly affected by or related to the proposed PUD District. The applicant shall provide a written update to the Planning and Zoning Administrator promptly upon learning of any easement or access issues after the application is submitted and at any point throughout the application and review process;

(2) **PUD District Application Review**.

(a) The PUD District application shall be submitted to the Planning Commission for review and recommendation to the City Council. The Planning Commission shall notice and hold a public hearing prior to making a recommendation to the City Council. The Planning Commission shall have the authority to recommend to the City Council reasonable and appropriate conditions in any PUD District application, including recommendations to change, alter, modify or waive of the standards and uses of the underlying zone as they apply to the proposed PUD District. Public health and safety issues including but not limited to: line of site; public utilities and associated easements; secondary and emergency access; and quantity of required parking are outside of the Planning Commission authority to recommend for modification or waiver. The Planning Commission's recommendations are not binding upon the City Council, but the City Council shall consider the recommendations.

(b) Upon receiving a recommendation by the Planning Commission, the City Council shall review the PUD District application as a legislative land use regulation application. In the event the

applicant has included revisions based on discussion and/or recommendations from the Planning Commission, City staff shall include in its report or presentation to the City Council discussion of the latest revisions as they relate to the application presented to the Planning Commission. The applicant may not make significant or material revisions to the application after the Planning Commission's recommendation that are not directly related to addressing concerns identified at the Planning Commission. The City Council may determine, in its discretion, that the revisions introduced after the Planning Commission held its public hearing are material and require a subsequent public hearing at the Planning Commission on the revisions prior to acting on the revised plan.

(c) The approval of the PUD District application shall include approval of all special conditions applicable to the PUD District. All special conditions and approved variations to the GLUDMC shall be included in the Development Agreement which shall be approved by Planning Commission and City Council, as applicable. The development agreement shall also include the phasing plan required in the PUD Development Plan.

(d) The City may allow or require the development agreement for the PUD District application to be processed and approved separately from the PUD District itself. If the development agreement does not modify any rights of the City or developer with respect to land use development, it may be approved by the City administratively, without a public hearing at the planning commission. Otherwise, the development agreement shall be processed as a land use regulation under Utah Code 10-9a-501, et seq. and applicable Grantsville City Code.

(3) **PUD Development Plan or Development Agreement Modification**. While the PUD Development Plan is submitted and approved with the PUD District Application, it is anticipated that the PUD Development Plan be adjusted as the development proceeds and is refined. Major modifications and minor changes are handled differently.

(a) Major Modifications. Any adjustment to the PUD Development Plan that would alter or expand the intent of the provisions in the PUD Development Plan, including the phasing plan, is a major modification. A major modification is initiated by the applicant submitting a separate application to modify the PUD Development Plan. The separate application shall supersede the initial application in all respects so there may not be multiple approvals pending on the same proposed PUD District. The Planning Commission may recommend approval (with or without conditions) or denial of a request for a major modification to the City Council, upon finding that any changes in the plan as approved will be in substantial conformity with the PUD District Map and Plan. The development agreement shall be amended or supplemented to account for any major modifications to the PUD Development Plan.

(b) Minor Changes. Minor changes to a PUD Development Plan that do not include a subdivision of land may be made subject to approval of the City Engineer and Public Works department when such adjustments appear necessary in light of technical or engineering considerations. Such minor changes shall be limited to the following elements:

(i) Adjusting the distance as shown on the approved Plan between any one structure or group of structures, and any other structure or group of structures, or any vehicular circulation element or any boundary of the site;

(b) Adjusting the location of any open space. The size or amount of open space that was approved shall not be compromised;

(c) Adjusting any final grade; and

(d) Altering the types of landscaping elements and their arrangement within the required landscaping buffer area.

(c) Minor changes shall be consistent with the intent and purpose of GLUDMC and the PUD District Map and Plan provisions as approved, and shall be the minimum necessary to overcome the particular difficulty and shall not be approved if such adjustments would result in a violation of any standard or requirement of this Code.

(d) Any proposed change to the PUD District Map and Plan and any proposed change which would require a modification of the PUD District Map and Plan to remain consistent with the PUD District approval shall constitute a new application and shall be processed in accordance with this Chapter.

(e) Non-substantive amendments to the development agreement not otherwise addressed in this section may be made administratively following confirmation of the City Attorney that the amendments do not affect substantive rights with respect to development of land.

(4) **Subdivision and Site Plan Approval**. Each phase shall follow the appropriate site plan or subdivision approval procedure in GLUDMC, except that the City shall also review those applications for compliance with the PUD District Map and plan and the PUD Development Plan. If the City determines that an amendment to the PUD District Map and Plan or PUD Development Plan is required for the site plan or subdivision application to comply, the preliminary site plan or preliminary subdivision application will be rejected.

12.6 Effect of PUD District Approval.

(1) **Distinct Zones**. Each PUD District is unique and may be governed by its own standards at approval and any applicable development agreements.

(2) **Commercial Rezone**. Upon approval of a PUD District, the underlying zone(s) in effect for the commercial area(s) shall be automatically rezoned to an appropriate commercial zone as designated by the City Council to provide assurance that the areas anticipated to be developed as commercial are retained for that purpose going forward. The City may record a notice of the zoning change against the commercial area(s) in its discretion.

(3) **Diligence**. A PUD District approval shall automatically expire after any period of one year during which no building permit, certificate of occupancy, or preliminary or final subdivision or site plan approval is granted. Upon written request of the applicant, the one-year period may be extended by the Planning and Zoning Administrator for up to one year for good cause shown. The applicant may appeal a denial of an extension request to the City Council. After an extension has been granted by the Planning and Zoning Administrator, the City Council may further extend the expiration of a PUD District approval for good cause shown. Upon expiration, the zoning shall revert to the underlying zones, after the zoning change for commercial areas identified in this Chapter and Section 12.6(2), in effect at the time of approval of the PUD District without any development rights or entitlements persisting after reversion.

(4) **Permanent Effect upon Buildout**. A PUD District approval may not expire after the final subdivision plat approval or site plan approval covered by the PUD District Map and Plan and its phasing plan is approved.

(5) **Joint Consideration**. With respect to any subsequent application subject to a PUD District Map and Plan or PUD Development Plan, including site plan and subdivision plat applications, the City may consider each and every other phase, plan, or application previously, currently, or anticipated to be submitted that is governed by the same PUD District Map and Plan or PUD Development Plan.

12.7 Appeals.

(1) **Appeal of PUD District Application or Major Modification of PUD Development Plan**. Any party aggrieved by the final decision of the City Council regarding a PUD District application or a major modification of a PUD Development Plan may appeal such decision to the City's Land Use Hearing Officer, whose decision shall then be final. All appeals to the City's Land Use Hearing Officer shall be in writing and filed with the Zoning Administrator within thirty (30) days of the date of the decision appealed from and prior to any further consideration by the City of a subsequent step in the PUD Application or subsequent approval processes. Only the final decision of the City's Land Use Hearing Officer with respect to the PUD District application may be appealed to the District Court, provided such appeal is filed within thirty (30) days of the decision of the City Council. Said appeal shall be filed with the City Recorder and with the Clerk of the District Court. The City's Land Use Hearing Officer shall be qualified in law or a related field and have relevant expertise as reasonably determined by the City Council, and be appointed by the City Council.

(2) **Appeal of Site Plan and Subdivision Plats**. Appeals of site plan and subdivision plat applications shall be made in accordance with those applicable sections of GLUDMC.

(3) **Other Appeals**. Appeals of any other final actions made by City staff or the Planning Commission not otherwise addressed may be appealed to the City Council by filing a written appeal with the Zoning Administrator within thirty (30) days of the date of the decision appealed from.

AGENDA ITEM #3

Consideration of the proposed conforming, technical, and related changes to sections of Chapters 3, 4, 6, 8, 16, 19a, and 21. These are amendments to the Grantsville City Land Use Management Code in relation to Chapter 12 Planned Unit Developments (PUD.

Grantsville City Planning Commission
May 15, 2025
Public Hearing

The Grantsville City Planning Commission will hold a Public Hearing to receive public comment regarding proposed amendments to the Grantsville City Land Use Management Code, including:

- Substantial updates to Chapter 12 – Planned Unit Developments (PUD)
- Conforming, technical, and related changes to the following chapters and sections:
  - Chapter 3: Sections 3.6, 3.8, and 3.18
  - Chapter 4: Sections 4.5 and 4.12
  - Chapter 6: Section 6.15
  - Chapter 8: Section 8.9
  - Chapter 16: Sections 16.2 and 16.4
  - Chapter 19A
  - Chapter 21: Various sections throughout

The purpose of these amendments is to update standards and procedures for Planned Unit Developments and ensure consistency across related code sections.

Notice is hereby given that, in accordance with the provisions of Sections §10-9A-205 and §10-9A-502 of the Utah Code, the Grantsville Planning Commission will hold a discussion and public hearing on **May 15, 2025, at 7:00 p.m.** at Grantsville City Hall. The meeting will also be broadcast on Zoom. The discussion, public hearing, and meeting are to receive public input and consider action on the **consideration of the proposed amendments to Chapter 12 Planned Unit Developments (PUD) of the Grantsville City Land Use Management Code, along with conforming, technical, and related changes to sections of Chapters 3, 4, 6, 8, 16, 19a, and 21.**

You can view a copy of the agenda and packet online by 5:00pm on **May 9, 2025** at the link below:
https://cms9.revize.com/revize/grantsvilleut/departments/community___economic_development/current_public_notices.php

Or by emailing pzcommission@grantsvilleut.gov. All comments and concerns need to be sent in writing through email or mail and received no later than **12:00pm on May 14, 2025.**

Dated this 30th day of April, 2025

BY ORDER OF THE GRANTSVILLE PLANNING COMMISSION

Shelby Moore
Zoning Administrator

Scan the QR code above or use the link below to join the Zoom meeting.
https://us02web.zoom.us/j/86290004540
Meeting ID: 862 9000 4540

STAFF REPORT
To: Planning Commission
From: Planning Department
Public Hearing: May 15, 2025
Date: May 15, 2025
Subject: Proposed Amendments to Grantsville Land Use Management and Development Code (GLUMDC) –Related Sections to Planned Unit Developments (PUDs)

I. PURPOSE

The purpose of this report is to present proposed amendments to multiple chapters and sections of the **Grantsville Land Use Management and Development Code (GLUMDC)**. The intent of these amendments is to modernize and clarify the standards and procedures governing **Planned Unit Developments (PUDs)** and to ensure consistency and integration across related regulatory sections.

II. BACKGROUND

The GLUMDC provides the legal framework for zoning, subdivision, and land development in Grantsville City. Over time, the City has identified a need to improve the clarity and coordination of standards for PUDs—an important tool for encouraging flexible, innovative development while ensuring high-quality design and compatibility with surrounding land uses.

The proposed changes address inconsistencies across chapters, improve procedural transparency, and ensure that the standards governing PUDs align with the City's goals for sustainable growth and orderly development.

III. SUMMARY OF PROPOSED AMENDMENTS

Chapter 3 – Administrative Procedures

- **Section 3.6 – Ex Parte Contact**
  Adds language to ensure proper disclosure of communications between decision-makers and interested parties, particularly in proceedings involving PUD applications.
- **Section 3.8 – Document Submission and Review Procedures**
  Encourages pre-submission reviews.
- **Section 3.18 – Amendments and Rezoning**
  Establishes clearer criteria and procedures for PUD-related rezoning, including public notice, hearings, and evaluation standards.

Chapter 4 – Site Development Standards

- **Section 4.5 – Lot Standards and Street Frontage**
  Defines lot layout standards while maintaining access and safety requirements.

  Section 4.12 – Minimum Height of Dwellings
  clarifies varied building heights.

Chapter 6 – Access and Circulation

- **Section 6.15 – Access Requirements for Non-Residential Lots**
  Clarifies access and improvements for subdivisions.

Chapter 8 – Development Review

- **Section 8.9 – City Council Review and Approval of Certain Developments Required**
  Defines when City Council shall review and approval of certain developments.

Chapter 16 – Commercial Districts

- **Section 16.2 – Commercial Shopping District (C-S)**
  Integrates language to allow PUD overlays and mixed-use formats consistent with commercial district intent.
- **Section 16.4 – Central Development District (C-D)**
  Supports design flexibility and mixed-use potential in the C-D zone through incorporation of PUD principles.

Chapter 19A – Mixed Use District

- Substantial updates to allow PUD-based development patterns that encourage vertical and horizontal mixed-use, pedestrian connectivity, and compatibility with adjacent uses.

Chapter 21 – Subdivision Regulations

- **Various Sections Throughout**
  Modifies subdivision processes to support PUDs, including block length, infrastructure phasing, open space requirements, and flexible lot design.

IV. ANALYSIS

These updates are intended to:

- Improve coordination between zoning and subdivision standards.
- Encourage high-quality, context-sensitive development through the PUD process.
- Reduce conflicts within the GLUMDC by aligning language and procedures across chapters.

- Improve application review efficiency for both staff and applicants.
- Support diverse housing options, mixed-use neighborhoods, and adaptable urban design.

The proposed changes maintain all necessary safeguards while providing developers and planners with clearer expectations and increased flexibility.

Working Draft of Proposed Amendment to Grantsville City Code For Planning Commission Public Hearing, May 2025
Chapter 3 Conforming Revisions related to Planned Unit Developments

Chapter 3 Decision Making Bodies, And Officials

3.6 Ex Parte Contact

(1) Ex parte contact between planning commission members and opposing parties involved in litigation with Grantsville City involving land use issues shall be prohibited. Planning commission members ~~shall~~ may not participate in site or office visits, electronic communication, written communication, or verbal conversation either face-to-face or over the telephone, with any individual or any representative of a company or entity involved in legal proceedings with Grantsville City involving land use issues. This prohibition shall include plaintiffs who have filed suit against Grantsville City, claimants who have served a Notice of Claim on Grantsville City, and defendants in actions filed by Grantsville City, such as those in violation of provisions of the Grantsville City Ordinance or the Grantsville Land Use Management and Development Code.

(2) Planning commission members shall be restricted from ex parte contact, including site or office visits, electronic communication, written communication, and verbal conversation either face-to-face or over the telephone, with any individual or representative of a company or entity when such interaction involves a request for a conditional use permit, planned unit development, a request for approval of a subdivision, or for an exception to the Grantsville Land Use Management and Development Code. Interaction between applicants and ~~those in opposition to~~ planning commissioners or council members who may vote on or decide on an application ~~shall~~ may only occur at a legally scheduled meetings where the public has received legal notice. This restriction on ex parte contact applies to all conditional use permit approval requests, planned unit development or subdivision requests, after an application for such is filed with the Grantsville City, while the application is under review by the planning commission, after a decision or recommendation on the application has been made by the planning commission, while the application is under review by the Grantsville City Council, or while the application is under appeal, if an appeal is filed. Planning commissioners ~~shall~~ may not participate in ex parte contact with individuals or representatives of a company or entity opposed to a request for a conditional use permit, planned unit development or a subdivision approval, or an exception to the Grantsville Land Use Management and Development Code.

(3) If ex parte contact as described in Subsections (1) or (2) occurs, it shall be disclosed at the next meeting of the planning commission and the planning commission member who had such contact shall neither participate in the discussion nor vote on the matter.

(4) ~~Receipt of w~~Written information regarding an active request for a conditional use permit, planned unit development or a subdivision, or an exception to the Grantsville Land Use Management and Development Code ~~shall~~ may only be submitted for consideration through the appropriate channels as identified in the applicable portions of that Code. ~~be permitted, provided such written information is disclosed at the next meeting of the planning commission and submitted as a part of the record of that meeting.~~

3.8 Document Submission And Review Procedures

(1) Pre-Submission Procedures. To facilitate the handling of applications, the Planning Commission may adopt pre-submission procedures to allow for adequate investigations and staff review and may require compliance with such pre-submission review procedures as a prerequisite to formal receipt and action by the Planning Commission, provided such pre-submission review is not inconsistent with state law. Pre-submission review shall in no way be interpreted to mean review by the Planning Commission.

(2) Initial Contact for Planned Unit Developments. Applicants seeking a planned unit development are encouraged to submit preliminary information and obtain initial comments from the Zoning Administrator, Planning Commission, and/or City Council prior to submitting an application.

(~~2~~3) Submission and Docketing for Review. Upon receipt of all required fees and information for any specific step of the review procedure, the Zoning Administrator and other members of the Technical Review Committee if established, shall review the application for completeness and compliance with the provisions of this Code and other pertinent municipal regulations. When the Zoning Administrator determines that the application is ready for Planning Commission review, the Zoning Administrator will docket the application for review at the next regular public meeting of the Planning Commission. Incomplete applications shall not be docketed for Planning Commission review.

(~~3~~4) Applications and concept plans are required for all land uses.

3.18 Amendments And Rezoning

(1) The City Council may amend;

(a) The number, shape, boundaries, or area of any zoning district;

(b) any regulation of or within the zoning district, or

(c) any other provision of a land use ordinance.

(2) The City ~~council~~ Council may not make any amendment authorized by this subsection unless the amendment was proposed by the ~~planning~~ Planning ~~commission~~ Commission or was first submitted to the planning commission for its recommendation.

(3) The ~~city~~ City ~~council~~ Council shall comply with the procedure specified in Section 3.15 for land use regulations~~, and~~ 3.16 for zoning maps, and Chapter 12 for PUD District enactment, in preparing and adopting any amendment or new regulation.

(4) No application for an amendment to the land use regulations or zoning map designations ~~shall~~ may be reconsidered by the City Council or the Planning Commission within two years of the final decision of the City Council upon the prior application, if the new application proposes the same amendment to the land use regulations or includes the same zoning map designation and includes any of the same property that was described in the previous application. The restrictions contained in this subsection ~~shall~~ may not apply to a requested zoning map amendment~~,~~ if the previous application included a proposed zone and a specific proposed use in that zone and the new application includes the same zoning district, but the proposed use has been changed by the applicant. Any application for a zoning map amendment that includes a specific proposed use as a part of the application, shall only be approved on condition that the actual use of the property is limited to the proposed use specified in the application. The Zoning Administrator shall make an initial determination as to whether or not an application should be considered pursuant to this subsection. If the application is denied by the Zoning Administrator as being in violation of this subsection, the applicant may appeal that decision to the Planning Commission~~,~~ by filing a written notice of appeal with the Zoning Administrator within seven (7) days of receipt of the Zoning Administrator's decision. If the application is accepted by the Zoning Administrator and an affected party does not agree with said decision, that party may file a written appeal with the Planning Commission, provided that the appeal is filed with the Zoning Administrator at least seven (7) days prior to the time the Planning Commission is scheduled to make its final recommendation on the application. Any party aggrieved by the decision of the Planning Commission with respect to this subsection, may file a written appeal with the City Council, provided that the appeal is filed with the City Recorder within seven (7) days of the decision of the Planning Commission. If the City Council overturns the decision of the Planning Commission that terminates consideration of an

application because it was deemed to be in violation of the provisions of this subsection, the City Council shall remand the matter back to the Planning Commission for a recommendation on the application. The Planning Commission and City Council may also terminate consideration of an application at any time, if it determines that the application is prohibited by this subsection. The Decision of the City Council on a determination of whether or not an application is in conformity with the provisions of this subsection shall be final.

Working Draft of Proposed Amendment to Grantsville City Code For Planning Commission Public Hearing, May 2025
Chapter 4 Conforming Revisions related to Planned Unit Developments

Chapter 4 Supplementary And Qualifying Regulations

4.5 Lot Standards And Street Frontage

Except ~~for planned unit developments, condominiums, and~~ as otherwise provided in this Code, every lot presently existing or hereafter created shall have such area, width, and depth as required by this Code for the district in which such lot is located and shall have frontage upon a public street or upon a private street or right-of-way approved by the Planning Commission, before a building permit may be issued, provided that no lot containing 1/2 acres or less shall be created which is more than 3 times as long as it is wide.

4.12 Minimum Height Of Dwellings

No dwelling shall be erected to a height less than 1 story above grade~~, except in a planned unit development~~.

Working Draft of Proposed Amendment to Grantsville City Code For Planning Commission Public Hearing, May 2025
Chapter 6 Conforming Revisions related to Planned Unit Developments

Chapter 6 Off-Street Parking And Loading

6.15 Access Requirements For Other Than Residential Lots

(1) In all cases where there is an existing curb and gutter or sidewalk on the street, the applicant for a permit shall provide a parking strip, with a minimum width of ten (10) feet, along the entire frontage of the property, except for the permitted driveways. On the street side of the parking strip a concrete curb shall be constructed, the height and type is a six (6) inch high back, unless another specification has been approved by the Planning Commission.

(4) In ~~Planned Unit Developments (when required) and~~ subdivisions that have a density greater than one (1) acre lots, and there is no existing curb and gutter or sidewalk, the applicant shall install a parking strip, sidewalk, curb and gutter, unless this requirement is waived by the Planning Commission.

Working Draft of Proposed Amendment to Grantsville City Code For Planning Commission Public Hearing, May 2025
Chapter 8 Conforming Revisions related to Planned Unit Developments

Chapter 8 Regulation Of General Applicability

8.9 City Council Review And Approval Of Certain Developments Required

(1) Notwithstanding any other provision to the contrary in this Code or under any other Grantsville city Ordinance, all new developments or construction projects having ~~an estimated new construction value of over $250,000.00, all~~ multiple occupancy, non-residential structures with over four separate occupants or uses and all apartment or condominium structures or developments having more than two residential units, shall be first reviewed and approved by the City Council prior to the commencement or construction.

(2) The City Council review and approval required by this Section shall take place prior to the issuance of any building permits for the proposed project or development. ~~The Building Official's determination of valuation under Section 5- 2 of the Grantsville City Code shall be used to determine if the construction value of a project is over $250,000.00 under this Section.~~ This ~~development~~ requirement does not otherwise modify any other~~also requires the~~ review and approval requirements by~~of~~ the Zoning Administrator or the Planning Commission~~,~~. ~~said~~ The standard review and approval procedures ~~review and approval~~ shall be completed prior to the review and approval by the City Council under this Section.

(3) The review and approval by the City Council under this Section shall be conducted in an effort to ensure that all departments of the City are notified of the proposed project prior to construction, that all applicable building and zoning regulations have been complied with, that utilities are efficiently provided to the property and that any negative impacts to the neighborhood or community are mitigated. The City ~~council~~ Council may impose such reasonable conditions and requirements as it deems necessary in order to achieve the foregoing objectives and to ensure that ~~city~~ City planning issues are raised and resolved prior to construction.

Working Draft of Proposed Amendment to Grantsville City Code For Planning Commission Public Hearing, May 2025
Chapter 16 Conforming Revisions related to Planned Unit Developments

Chapter 16 Commercial And Industrial Districts

16.2 Commercial Shopping District (C-S)

(1) The purpose of the C-S Commercial Shopping District is to provide an environment for efficient and attractive shopping center development at a community level scale. Rezone requests for the C-S Commercial Shopping District are encouraged to be included in Planned Unit Developments under Chapter 12. ~~Development in the C-S Commercial Shopping District may be approved only as a planned development in conformance with the provisions of Chapter 12, Planned Unit Developments~~.

Minimum Lot Size: .....60,000 sq. ft.

Minimum Width at Front and Rear Setback .....150 feet

Minimum Yard Setback Requirements:

Front Yard and Corner Side Yard .....30 feet
Interior Side Yard .....15 feet
Rear Yard .....30 feet
Buffer Yards required in accordance with Chapter 9, Landscaping, on any lot abutting a lot in a residential district.

Maximum Building Height .....45 feet

Access restriction of one driveway per 150 feet of frontage on arterial or major collector streets in order to maintain safe traffic conditions.

Building sides visible from a street shall submit building face plans to the City to review and approve the artistic look of the building that will be seen by the public.

16.4 Central Development District (C-D)

(1) The purpose of the C-D Central Development District is to provide high intensity public, quasi-public, commercial, office, and multiple-family uses which may center in harmonious relationships based on planned development for mutual benefit. The district shall only allow those uses that are allowed in the R- M-30, R-M-7, C-N, C-S, C-G and M-D districts by conditional use.

(2) ~~Any parcel larger than one acre at the time of passage of this ordinance may be divided or developed only under a Planned Unit Development (PUD) approval.~~ No new lot smaller than one acre may be created.

(3) All uses within this district are conditional, and every conditional use permit ~~or Planned Unit Development~~ approval shall be based primarily on how the development, as proposed in the application, will contribute to compatibility and mutual private and public benefit from existing, proposed, and potential buildings and uses in the area; the efficient, effective and aesthetic use of land, buildings, landscaping, and amenities; and the improvements to be made in land use; building construction and appearance, traffic safety and control, landscaping and drainage.

(4) Minimum Lot Size: - Shall be set by the applicable zoning district regulation that allows the use that is intended for the lot.

Minimum Width at Front and Rear Setback .....by approval

Minimum Yard Setback Requirements:

Front Yard and Corner Side Yard .....by approval

Interior Side Yard .....by approval

Rear Yard .....by approval

Building sides visible from a street shall submit building face plans to the City to review and approve the artistic look of the building that will be seen by the public. Buffer Yards required in accordance with Chapter 9, Landscaping, on any lot abutting a lot in a residential district.

Maximum Building Height.....by approval

Working Draft of Proposed Amendment to Grantsville City Code For Planning Commission Public Hearing, May 2025
Chapter 19a Conforming Revisions related to Planned Unit Developments

Chapter 19a Mixed Use District

19a.1 Purpose And Intent

(1) The purpose of the Mixed-Use District is to allow for the establishment of commercial properties integrated with subordinate residential uses. Planned Unit Developments are ~~required~~ encouraged in this zone. Developments in the Mixed-Use zone shall be designed so as to integrate the residential and commercial components into one harmonious development and to be compatible with the existing or anticipated uses on the surrounding properties.

(2) While achieving a mix of commercial and residential uses in Mixed Use developments is the goal, the priority is to create a commercial core that is located on the City's major streets, and specifically along Main Street. To accomplish this goal, properties of less than one acre fronting major streets such as Main Street shall be developed as commercial only or a commercial/residential mix with the commercial fronting the street. All properties developed under the Mixed-Use District that are one acre or greater shall include at least 50% of the land area as commercial fronting the major street. Master planning of multiple contiguous properties is encouraged in order to integrate the proposed development harmoniously into the surrounding neighborhood.

(3) This land use district, in conjunction with the City's Land Use Element, recognizes that in order for the City to be a well-rounded community, many different housing styles, types and sizes should be permitted.

(4) Architectural design, scale and heights of development are designed to fit the scale and aesthetics of the surrounding properties in the district.~~.~~

19a.2 Permitted Uses

(1) This district shall allow single family and townhome residential developments as permitted uses and those uses allowed in the C-N, C-S, and C-G districts as permitted or conditional uses as specified in the regulations for these districts.

19a.10 Maximum Building Coverage.

Building coverage area for any lot in this District may not exceed 50%.

Working Draft of Proposed Amendment to Grantsville City Code For Planning Commission Public Hearing, May 2025
Chapter 21 Conforming Revisions related to Planned Unit Developments

Chapter 21 Subdivision Regulations

21.1.15 Open Space Requirements

(1) Each subdivision or site plan shall provide a minimum of 10% of its total parcel acreage as open space. The open space shall be designated on the preliminary plan or site plan and recorded on the final plat. The minimum restricted open space shall comprise at least 10% of the total parcel acreage. The open space shall be held and maintained in a private protective trust. In limited cases such as the provision of a minimum of ten-acre public park the City Council at its discretion may, by finding of a beneficial public purpose, choose to accept the dedication of such parcels and improvements.

(2) Above-ground utility rights-of-way and small areas of impervious surface may be included within the protected open space but cannot be counted towards the 10% minimum area requirement except that historic structures and existing trails with public access may be counted. Areas greater than 10% of the total open space area that is covered with any impervious surface shall be excluded from the open space calculation.

(3) At least 75% of the open space shall be in a contiguous or interconnecting tract. The open space shall be designed in such a way that it adjoins any neighboring areas of open space, other protected areas, and non-protected natural areas that would be candidates for inclusion as part of a future area of protected open space. If there is no defined or identified open space on adjoining land, then the open space shall provide areas for the eventual connection with future development as practicable.

(4) The open space shall be directly accessible to the largest practicable number of lots within the subdivision. The type of open space shall be taken into consideration when making the determination of direct accessibility. Open space parcels that are preserved as active agriculture or pasture land may have limited direct accessibility as the use requires restricted access, but it is expected that such uses shall be located along the sides of public streets or trails so that the open space will provide for the benefit and enjoyment of residents as it reserves the open rural atmosphere desired by the residents. Historic features or other unique natural features due to the nature of their location, characteristics and configuration may also limit direct accessibility but shall be showcased in such a way that it may provide for the benefit and enjoyment of residents as it preserves the open rural atmosphere desired by the residents. Non-adjoining lots shall be provided with safe, convenient access to the open space. Trails are encouraged in the subdivision to access both natural open space areas within the subdivision and those that may be located nearby. Just as with streets, trail connections for connectivity and access with future subdivisions and the City-wide trails system shall be considered.

(5) For developments ~~which are not Planned Unit Developments, and the~~with a total ~~aggregared~~aggregated development acreage is less than 20 acres, developers may pay in lieu of, or in a proportional combination with, the provision of 10% of the total parcel acreage as open space, The amount of the fee-in-lieu is determined ~~byapply~~by applying 10% of the predeveloped value of the total parcel acreage, as determined through a current owner provided appraisal by a certified real estate appraiser. The fees collected shall be used within 1 mile of the proposed development, or the nearest park to benefit the residents of the development.

(6) Land dedicated for use as a public park may be no smaller than ten acres and may not be located any closer than three quarters of a mile from another public park. The City Council may make exceptions to the minimum distance if walkability and other accessibility issues limit the residents of the proposed subdivision from safely or conveniently accessing the nearest public park. Requiring improvements that

remove the accessibility barriers may be considered proportionally not exceeding the appraised value of the predeveloped value of the total parcel acreage as detailed in 21.1.15.5.

21.2.11 Determination Of Appropriate Process

In recognition that not all land use actions are of the same magnitude and therefore may not require the same level of detail for consideration, Grantsville City has provided multiple application processes. For this purpose, the application processes have been organized as level with each level requiring greater detail and additional steps for consideration and approval. The applicant shall choose the application process that best fits their proposed land use action:

Development process Levels 1 through 4 are only applicable for use with single use residential development applications as defined in GLUDMC Chapter 2, Definitions, and shall meet all requirements of Utah Code Ann. 10-9a-604.1 (2023) and Utah Code Ann. 10-9a-604.2 (2023).

1. Level 1 - Single Lot Development: The purpose of this process is to convert an undeveloped parcel into a legal zoning lot. The applicant shall submit an application meeting the requirements for the Single Lot Development as described in Chapter 24 of the Grantsville Land Use Development and Management Code. The City staff is authorized by the City Council to approve the application.
2. Level 2 - Minor Subdivision: The purpose of this process is to divide property into up to 4 lots with all lots fronting an existing street containing the necessary utilities to serve the proposed lots. By utilizing this process, the applicant agrees to make the required improvements to bring the street frontage up to code and is not asking for any waivers or exceptions.
    a. The applicant will not be required to complete improvements that are greater than the greatest level of improvements found on an adjacent parcel or lot unless:
        i. There is a compelling reason affecting the Health, Safety or Welfare of the public; or
        ii. An adjacent property is currently in an application process which will increase the level of improvement to the street, or
        iii. The City has a current project that is increasing the level of improvement to the street.
    b. Level 2: Minor Subdivisions shall not be required to provide open space or fee in lieu for open space but shall be assessed the applicable park impact fee with each building permit.
    c. The Application for a Level 2 Minor Subdivision shall include the information and documents found on the Minor Subdivision Checklist that is attached to the Minor Subdivision Application that shall be provided by the City upon request. The Minor Subdivision requirements found on the Minor Subdivisions Checklist and subsequent amendments to the checklist have been approved by the Grantsville City Council by resolution.
    d. If no street improvements are required beyond additional utility service laterals, the only engineered drawings required will be:
        i. A record of survey, and
        ii. A plat. Depicting the lots, together with individual metes and bounds legal descriptions for each lot, and the overall boundary description for the subdivision, and
        iii. A site drawing showing the proposed locations of proposed utility service laterals and any required surface improvements, with finish grade elevations as appropriate

and specifically referencing each of the appropriate City standard details that are necessary for the work.

e. If upon review, the City staff finds:
    i. That application to be complete, and
    ii. Meets the intent of the General Plan, and
    iii. Fully complies with the City zoning and land use ordinances, and
    iv. The existing public infrastructure along with the proposed improvements are adequate to serve the project and protect the health, safety and welfare of the public.
f. Then, the City staff is authorized by the City Council to approve the application.
g. If the application is found deficient in meeting the requirements in clause 5 (a-d), the City staff shall inform the applicant of the discrepancies; and allows the applicant to choose to modify the application to bring the application into compliance, or to withdraw the application and submit a new application under the applicable level of process.
h. If the applicant chooses to withdraw the application due to an incorrect fit with the requirements of the Level 2 Minor Subdivision and submit a new application under the appropriate process level, the fees paid for the original application shall be credited toward the new application fees.
i. The Level 2 Minor Subdivision process may only be used once to divide a parcel. Subsequent applications to divide the property shall utilize the Level 3 or Level 4 process. If the lot to be divided is part of a platted subdivision, the subdivision amendment process found in Section 21.8 of this Chapter is the appropriate application.
j. The Minor Subdivision property owner may construct the required utility service connections with each building permit unless the required improvements include extension of pavement, curb and gutter, and/or sidewalk along the frontage of the properties. Where surface improvements are required and in order to keep the surface improvements consistent, all improvements to the property frontages of each lot shall be completed by the property owners under the first building permit issued for any lot in the Minor Subdivision.
k. After approval, and in accordance with Utah State Code 19-91-605(3)(a), documents dividing property by a metes and bounds description, including the required certificate of written approval from Grantsville City attached, shall be recorded in the County Recorder's.

3. Level 3 - Subdivision 4 lots or less: The purpose of this process is to divide property into 4 lots or less where dedication of additional utilities or public improvements are required to serve the property. The applicant shall submit an application which meets the requirements for a final plat subdivision process as described in Section 21.2.8, 21.2.9 and 21.4.7 of this Chapter. A public hearing shall be held in a public Planning Commission meeting to fulfill the State requirements. Approval of the Level 3 application shall occur with Planning Commission.
    a. Level 3 Subdivisions of four lots or less shall not be required to provide physical open space or fee in lieu for open space but shall be assessed the applicable park impact fee with each building permit.
4. Level 4 - Subdivision 5 lots or greater: The purpose of this process is to divide property into 5 or more lots or any division of property that requires dedication of offsite utilities or public improvements. The applicant shall submit an application meeting the requirements for a preliminary plan as described in Section 21.2.7 and 21.4.5 of this Chapter. Once the Preliminary Application has been approved by the Planning Commission, the applicant can then move forward

with submittal of an application for a Final Plat process as described in Section 21.2.8, 21.2.9 and 21.4.7 of this Chapter. The Final Plat shall be approved by the Planning Commission. ~~The Applicant may be required to submit an application for a Planned Unit Development prior to submission of a Preliminary Application if the proposed project meets any of the criteria found in Section 21.5.~~

5. Level 5 - Subdivisions: The purpose of this process is to allow for the division of property as necessary for land uses other than those residential uses defined as single use residential development. These uses may include but are not limited to commercial, industrial, institutional, multifamily residential, residential projects with a mix of types of residential uses, and mixed use projects. The applicant shall submit an application which meets the requirements for a preliminary plan as described in Section 21.2.7 and 21.4.5 of this Chapter. Once the Preliminary Application has been approved by staff, Planning Commission and the City Council, in that order, the applicant can then move forward with submittal of an application for a final plat process as described in Section 21.2.8, 21.2.9 and 21.4.7 of this Chapter. The Final Plat shall be considered for recommendation by the Planning Commission and approved by the City Council.
    a. Specific phases of a Level 5 Final Plat may qualify as, and be subject to Level 4 Final Plat requirements, if the specific phase application contains only residential uses that meet the definition of single use residential development as defined in GLUDMC Chapter 2 Definitions.

21.6.2 Lots

(1) No single lot may be divided by a municipal, or county boundary line.

(2) A lot may not be divided by a street or another lot.

(3) Side lot lines shall be at substantially right angles or radial to road lines.

(4) All lots shall front on a publicly dedicated street or private roads approved by the planning commission.

(5) ~~Unless approved under the provisions of a planned unit development, a~~All lots shall conform to area and dimensional minimum requirements of the existing zoning district.

(6) If the development is located in an area served by or to be served by fire hydrants, the fire hydrants shall be installed and at operational pressure before construction on a structure proceeds beyond footings and foundation.

AGENDA ITEM #4

Discussion of the amendments to the GLUMDC for chapter 2.

STAFF REPORT
To: Planning Commission
From: Planning Department
Date: May 15, 2025
Subject: Discussion of Proposed Amendment to Definition 74 – Density and Addition of Net Density Provision

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I. PURPOSE

The purpose of this report is to present for consideration an amendment to the existing Definition 74 – *Density* and to introduce a new sub-definition titled *Net Density and Developable Acreage*. These changes aim to clarify how residential density is calculated by differentiating between gross and net developable land.

II. BACKGROUND

Currently, Definition 74 defines density as:

"Density is a measure of the number of dwelling units per developable acre. It shall be expressed as dwelling units per acre (DU/acre). Unbuildable land (as defined by the Planning Commission) is land with a slope greater than 25%, subject to inundation, or other geological hazards."

However, this definition lacks detail regarding what constitutes *developable acreage* and does not distinguish between *gross* and *net density*—a distinction that is critical for accurately determining appropriate residential densities, especially in projects involving significant environmental or infrastructure constraints.

III. PROPOSED AMENDMENT

Amendment to Definition 74 – Density:

(74) DENSITY. Density is a measure of the number of dwelling units per developable acre. It shall be expressed as dwelling units per acre (DU/acre).

The last sentence referencing unbuildable land is proposed to be removed to streamline the definition and avoid redundancy, as this will be addressed in the new sub-definition.

Addition of 74(a) – Net Density and Developable Acreage:

(74a) Net Density and Developable Acreage:
Net Density shall be determined by using the developable acreage of the entire proposed development. Developable acreage is land which is capable of being improved with landscaping or Dwelling Units.

Land allocated to or containing the following purposes or features may not be considered developable acreage and shall be omitted from the total acreage used to determine density:
a. Street rights of way (not including public utility easements situated entirely on individual lots);
b. Public open space;
c. Commercial uses;
d. Detention/Retention Basins;
e. Geological Hazards and/or related environmental protection zones;
f. Slopes of 25% or greater; or
g. Land otherwise restricted from being developed for landscaping or with Dwelling Units by contract or law.

IV. ANALYSIS

This amendment provides a clear and standardized methodology for calculating residential density. By excluding areas that cannot be developed, the amendment promotes responsible land use planning and aligns with best practices in zoning and subdivision regulation.

Key benefits include:

- **Consistency** in density calculations across all developments.
- **Improved accuracy** in assessing development potential.
- **Support for environmentally sensitive planning** by recognizing unbuildable areas.
- **Transparency** for developers, staff, and the public.

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(74) DENSITY. Density is a measure of the number of dwelling units per developable acre. It shall be expressed as dwelling units per acre (DU/acre). ~~Unbuildable land (as defined by the Planning Commission) is land with a slope greater than 25%, subject to inundation, or other geological hazards.~~

(74 a) Net Density and Developable Acreage: Net Density shall be determined by using the developable acreage of the entire proposed development. Developable acreage is land which is capable of being improved with landscaping or Dwelling Units.

1. Land allocated to or containing the following purposes or features may not be considered developable acreage and shall be omitted from the total acreage used to determine density:
    a. Street rights of way (not including public utility easements situated entirely on individual lots);
    b. Public open space;
    c. Commercial uses;
    d. Detention/Retention Basins;
    e. Geological Hazards and/or related environmental protection zones;
    f. Slopes of 25% or greater; or
    g. Is otherwise restricted from being developed for landscaping or with Dwelling Units by contract or law.

AGENDA ITEM #5

Consideration of the amendments to the Grantsville City Land Use and Management Code Chapter 4.18 (Maximum Height of Fences, Wall, and Hedges).

Grantsville City Planning Commission

May 15, 2025
Public Hearing

Consideration of the proposed amendment to the Grantsville City Land Use and Management Code Chapter 4, 7, and 8.

Notice is hereby given that, in accordance with the provisions of Sections §10-9A-205 and §10-9A-502 of the Utah Code, the Grantsville Planning Commission will hold a discussion and public hearing on **May 15, 2025, at 7:00 p.m.** at Grantsville City Hall. The meeting will also be broadcast on Zoom. The discussion, public hearing, and meeting are to receive public input and consider action on the **consideration of the proposed amendment to the Grantsville City Land Use and Management Code Chapter 4, 7, and 8.**

You can view a copy of the agenda and packet online by 5:00pm on **May 9, 2025** at the link below:
https://cms9.revize.com/revize/grantsvilleut/departments/community___economic_development/current_public_notices.php

Or by emailing pzcommission@grantsvilleut.gov. All comments and concerns need to be sent in writing through email or mail and received no later than **12:00pm on May 14, 2025.**

Dated this 2nd day of May, 2025

BY ORDER OF THE GRANTSVILLE PLANNING COMMISSION

Shelby Moore
Zoning Administrator

Scan the QR code above or use the link below to join the Zoom meeting.
https://us02web.zoom.us/j/86290004540
Meeting ID: 862 9000 4540

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

Staff Report Summary the amendment to Amendment to Chapter 4.18 – Maximum Height of Fences, Walls, and Hedges.

Staff Report Summary

Subject: Amendment to Chapter 4.18– Maximum Height of Fences, Walls and Hedges.

Overview:
The proposed amendment to Chapter 4.18 of the City Code pertains to the **maximum height of fences, walls, and hedges.** The amendment increases the allowable height from 6 feet to 7 feet. This change aligns with both the commercial and residential code Section 105.2, as adopted by the State, which exempts fences under 7 feet in height from permitting requirements.

Key Changes:

- Increases the maximum allowable height for fences, walls, and hedges from 6 feet to 7 feet.
- Aligns City regulations with State-adopted code Section 105.2, which exempts fences under 7 feet from permit requirements.
- Enhances flexibility for property owners while maintaining safety and neighborhood character.

Before Amendment

4.18 Maximum Height of Fences, Wall, And Hedges

(1) Fences, walls, and hedges may be erected or allowed to the permitted building height in the district when located within the required buildable area. Fences, walls, and hedges may not exceed 6 feet in height within any required rear yard or interior side yard. No view-obscuring fence, wall or hedge exceeding 3 feet in height shall be erected or allowed closer to any street line than the required building setback line. Non- view-obscuring fences or walls may be erected to a maximum height of 4 feet within the front yard. For the purpose of this section, single shrub planting shall not constitute a hedge if the closest distance between the foliage of any 2 plants is and remain at least 5 feet.

(a) Where a fence, wall, or hedge is located along a property line separating 2 lots and there is a difference in the grade of the properties on the two sides of the property line, the fence, wall, or hedge may be erected or allowed to the maximum height permitted on either side of the property line.

(b) All fence construction higher than six feet requires a building permit to be issued by the City Building Official.

(c) There shall be no fence nor hedge within 3 feet of any fire hydrant.

After Amendment

4.18 Maximum Height of Fences, Wall, And Hedges

(1) Fences, walls, and hedges may be erected or allowed to the permitted building height in the district when located within the required buildable area. Fences, walls, and hedges may not exceed ~~6~~ 7 feet in height within any required rear yard or interior side yard. No view-obscuring fence, wall or hedge exceeding 3 feet in height shall be erected or allowed closer to any street line than the required building setback line. Non-view-obscuring fences or walls may be erected to a maximum height of 4 feet within the front yard. For the purpose of this section, single shrub planting shall not constitute a hedge if the closest distance between the foliage of any 2 plants is and remain at least 5 feet.

(a) Where a fence, wall, or hedge is located along a property line separating 2 lots and there is a difference in the grade of the properties on the two sides of the property line, the fence, wall, or hedge may be erected or allowed to the maximum height permitted on either side of the property line.

(b) All fence construction higher than six seven feet requires a building permit to be issued by the City Building Official.

(c) There shall be no fence nor hedge within 3 feet of any fire hydrant.

AGENDA ITEM #6

Consideration of the proposed amendment to the Grantsville City Land Use and Management Code Chapter 7.

Grantsville City Planning Commission

May 15, 2025
Public Hearing

Consideration of the proposed amendment to the Grantsville City Land Use and Management Code Chapter 4, 7, and 8.

Notice is hereby given that, in accordance with the provisions of Sections §10-9A-205 and §10-9A-502 of the Utah Code, the Grantsville Planning Commission will hold a discussion and public hearing on **May 15, 2025, at 7:00 p.m.** at Grantsville City Hall. The meeting will also be broadcast on Zoom. The discussion, public hearing, and meeting are to receive public input and consider action on the **consideration of the proposed amendment to the Grantsville City Land Use and Management Code Chapter 4, 7, and 8.**

You can view a copy of the agenda and packet online by 5:00pm on **May 9, 2025** at the link below:
https://cms9.revize.com/revize/grantsvilleut/departments/community___economic_development/current_public_notices.php

Or by emailing pzcommission@grantsvilleut.gov. All comments and concerns need to be sent in writing through email or mail and received no later than **12:00pm on May 14, 2025.**

Dated this 2nd day of May, 2025

BY ORDER OF THE GRANTSVILLE PLANNING COMMISSION

Shelby Moore
Zoning Administrator

Scan the QR code above or use the link below to join the Zoom meeting.
https://us02web.zoom.us/j/86290004540
Meeting ID: 862 9000 4540

STAFF REPORT

To: Planning Commission
From: Shelby Moore
Meeting Date: 5/15/2025
Public Hearing: 5/15/2025
Subject: Summary of Revisions Chapter 7 – Conditional Use Permit

Purpose:

The purpose of this report is to summarize recent amendments to the Zoning Code, specifically to Chapter 7, conditional use permit (CUP) procedures. These changes aim to enhance clarity, improve development review efficiency, and ensure consistency with city planning standards.

Summary of Changes:

1. Chapter 7 – Conditional Use Permits
2. Section 7.8 – Determination (Amended)
3. New Two-Tier Approval System Implemented:
4. Level 1 CUP – Administrative Approval
5. Approved By: Planning and Zoning Administrator

For low-impact uses that clearly comply with code standards. Examples:

1. Code-compliant home-based occupations.
2. Low-traffic commercial uses not requiring new construction Kennel or animal permits meeting city ordinance.
3. Applications with fewer than five public comments.

Level 2 CUP – Planning Commission Approval
Approved By: Planning Commission
For uses with greater complexity or impact on the community or infrastructure. Examples:

1. Large-scale commercial or retail
2. Dwelling construction
3. Group Homes
4. Mining operations

Projects requiring infrastructure upgrades Encroachments on public utility easements

Conclusion:
These amendments provide clearer guidance for applicants and staff, reduce the administrative burden for minor requests, and improve development compatibility through more defined setback and access standards.

Chapter 7 Conditional Uses

7.1 Definition Of Conditional Use

A conditional use permit is a land use that, because of its unique characteristics or potential impact on the city, surrounding neighbors or adjacent land uses, may not be compatible in some areas or may be compatible only if certain conditions are required that mitigate or eliminate the detrimental impacts.

As a condition of approval, all conditional uses must comply with all other applicable codes and regulations. Additionally, the property must have sufficient land area to accommodate the proposed use.

7.2 No Presumption Of Approval

The listing of a conditional use in any table of permitted and conditional uses found at the end of each chapter of this ordinance for each category of zoning district or districts does not constitute an assurance or presumption that such conditional use will be approved. Rather, each proposed conditional use shall be evaluated on an individual basis, in relation to its compliance with the standards and conditions set forth in this chapter and with the standards for the district in which it is located, in order to determine if the conditional use is appropriate at the particular location.

7.3 Site Plan And Permit Required

(1) A conditional use permit shall be required for all uses listed as conditional uses in the zoning district regulations where they are, or will be located, and if the use is specified as conditional use elsewhere in this ordinance. Failure to comply with any of the conditions imposed in the permit will result in an order to show cause for revocation. The permit may be revoked by the planning commission upon evidence that any condition has not been met. (2) A conditional use permit has the potential for adverse impacts if located and laid out on zoning lots without careful planning. Such impacts may interfere with the use and enjoyment of adjacent property uses. Site plan review is a process designed to address such adverse impacts and minimize them where possible. Site plan review of development proposals is required for all conditional uses in all districts.

7.4 Fee

The application for any conditional use permit shall be accompanied by the appropriate fee as determined by the City Council.

7.5 Application

(1) The Planning Commission may authorize the Zoning Administrator to grant, attach conditions to, or deny conditional use permits, subject to such limitations or qualifications as are

deemed necessary. The Zoning Administrator ~~is also authorized to issue conditional use permits for family food production, the raising of animals and commercial uses in existing buildings, when appropriate, but~~ may also defer any such application to the Planning Commission for its determination, in the sole discretion of the Zoning Administrator.

(2) The Zoning Administrator shall send out the appropriate notification for all conditional use permits. If comments are received that indicate a concern about the proposed conditional use, the conditional use shall be sent to the Planning Commission for its consideration.

(3) The Zoning Administrator does not have authority to approve commercial conditional use permits requiring construction of new facilities or requiring exceptions or variances to the city ordinances and standards.

(4) All applications for a conditional use permit shall include:

(a) The applicant's name, address, telephone numbers and interest in the property;

(b) The owner's name, address, and telephone number, if different than the applicant, and the owner's signed consent to the filing of the application;

(c) The street address and legal description of the subject property;

(d) The zoning classification, zoning district boundaries and present use of the subject property;

(e) A vicinity map with North, scale and date, indicating the zoning classifications and current uses of properties within 500 feet of the boundaries of the subject property. When a conditional use permit will be considered by the Planning Commission, the application shall also include a current plat map showing the names and addresses of all property owners appearing on the tax rolls of the Tooele County Assessor within 500 feet of the boundaries of the subject property.

(f) A plat or a survey of the parcel of land, lots block, blocks, or parts or portions thereof, drawn to scale, showing the actual dimensions of the piece or parcel, lot, lots, block, blocks, or portions thereof, according to the registered or recorded plat of such land;

(g) The proposed title of the project and the names, addresses and telephone numbers of the architect, landscape architect, planner, or engineer on the project;

(h) A complete description of the proposed conditional use;

(i) A plan or drawing drawn to scale of twenty feet to the inch (20' = 1 inch) or larger which includes the following information of the proposed use:

i. actual dimensions of the subject property;

ii. exact sizes and location of all existing and proposed buildings or other structures;

iii. driveways;

iv. parking spaces;

v. safety curbs;

vi. landscaping;

vii. location of trash receptacles; and

viii. drainage features and environmental features.

(j) Traffic Impact Analysis;

(k) A statement indicating whether the applicant will require a variance in connection with the proposed conditional use permit;

(l) Envelopes, mailing labels and first-class postage for all property owners located within 500 feet of the subject property when a conditional use permit will be considered by the Planning Commission: and

(m) Such other further information or documentation as the Zoning Administrator may deem to be necessary for a full and proper consideration and disposition of the particular application.

Amended 01/03 by Ordinance 2003-02

HISTORY
Amended by Ord. 2021-12 on 4/28/2021
Amended by Ord. 2022-06 on 5/4/2022

7.6 Staff Report And Site Plan Report

Once the Zoning Administrator has determined that the application is complete, a Staff Report evaluating the conditional use application shall be prepared by the Zoning Administrator and forwarded to the Planning Commission along with a Site Plan Review Report prepared by the Zoning Administrator.

7.7 Public Hearing

A public hearing may be held if the Chairman of the Planning Commission shall deem a hearing to be necessary and in the public interest.

7.8 Determination

Level 1 Conditional Use Permit Approval (Approved by the Planning and Zoning Administrator)

The Level 1 Conditional Use Permit (CUP) applies to uses that are considered to have less impact on surrounding areas or infrastructure. These uses are typically straightforward, where the zoning code's criteria are easily met.

Example Uses for Level 1 include, but are not limited to, the following:

- Home-Based Occupations in Compliance with Zoning Regulations.
- Commercial operations that do not require new construction.
- Animal, Sportsman and Kennel Permit that meet City Ordinance requirements.

Level 2 Conditional Use Permit Approval (Approved by the Planning Commission)

The Level 2 Conditional Use Permit applies to uses with potentially greater impacts on the community, infrastructure, or neighboring properties. These uses are generally more complex or involve larger-scale developments or changes.

Example Uses for Level 2 include, but are not limited to, the following:

- Larger retail or commercial developments.
- Construction of a Dwelling.
- Group home type developments.
- Mining.
- Uses requiring significant infrastructure improvements (e.g., traffic signals, additional utilities).
- Encroaching on a Public Utility Easement.

(1) The Planning Commission, or upon authorization, the Zoning Administrator, may permit a use to be located within a zoning district in which a conditional use permit is required by the use regulations of that zoning district or elsewhere in these ordinances. The Zoning Administrator is also authorized to issue conditional use permits for family food production and the raising of animals, when appropriate, but may also defer any such application to the Planning Commission for its determination, in the sole discretion of the Zoning Administrator. In authorizing any conditional use, the Planning Commission or Zoning Administrator shall impose such requirements and conditions as are necessary for the protection of adjacent properties and the public welfare. The Planning Commission or Zoning Administrator shall only approve with conditions, or deny a conditional use based upon written findings of fact with regard to each of the standards set forth below and, where applicable, any special standards for conditional uses set forth in a specific zoning district. The Planning Commission or Zoning Administrator shall not authorize a conditional use permit unless the evidence presented is such as to establish:

(a) The proposed use is one of the conditional uses specifically listed in the zoning district in which it is to be located;

(b) That such use will not, under the circumstances of the particular case, be detrimental to the health, safety, comfort, order, or general welfare of persons residing or working in the vicinity;

(c) That the use will comply with the intent, spirit, and regulations of these ordinances and is compatible with and implements the planning goals and objectives of the City, including applicable City master plans;

(d) Make the use harmonious with the neighboring uses in the zoning district in which it is to be located;

(e) That nuisances which would not be in harmony with the neighboring uses, will be abated by the conditions imposed;

(f) That protection of property values, the environment, and the tax base for Grantsville City will be assured;

(g) That the conditions shall be in compliance with the current comprehensive General Plan of Grantsville City;

(h) That some form of a guarantee is made assuring compliance to all conditions that are imposed;

(i) That the conditions imposed are not capricious, arbitrary, or contrary to any precedence set by the Planning Commission on prior permits, which are similar in use and district, unless prior approvals were not in accordance with the provisions and standards of this ordinance;

(j) The internal circulation system of the proposed development is properly designed;

(k) Existing and proposed utility services are adequate for the proposed development;

(l) Appropriate buffering is provided to protect adjacent land uses from light, noise and visual impacts;

(m) Architecture and building materials are consistent with the development and compatible with the adjacent neighborhood;

(n) Landscaping is appropriate for the scale of the development;

(o) The proposed use preserves historical, architectural and environmental features of the property; and

(p) Operating and delivery hours are compatible with adjacent land uses.

HISTORY
Amended by Ord. 2022-06 on 5/4/2022

7.9 Planning Commission Action

The staff's written recommendation shall be considered at the meeting. At the conclusion of the meeting, the Planning Commission shall either

(1) approve the conditional use;

(2) approve the conditional use subject to specific modifications;

(3) postpone a decision pending consideration of additional information to be submitted by the applicant; or

(4) deny the conditional use.

7.10 Effect Of Approval Of Conditional Use

The approval of a proposed conditional use by the Planning Commission or the Zoning Administrator shall not authorize the establishment or extension of any use nor the development, construction, reconstruction, alteration or moving of any building or structure, but shall merely

authorize the preparation, filing and processing of applications for any permits or approvals that may be required by the regulations of the City, including but not limited to a Building Permit, Certificate of Occupancy and subdivision approval.

7.11 Appeals Of Decision

Any person aggrieved by a decision of the Planning Commission regarding the issuance, denial or revocation or amendment of a conditional use permit, may appeal such decision to the City Council, whose decision shall then be final. All appeals to the City Council must be in writing and filed with the Zoning Administrator within thirty (30) days of the date of the decision appealed from. The decision of the City Council may be appealed to the District Court provided such appeal is filed within thirty (30) days of the decision of the City Council. Said appeal shall be filed with the Zoning Administrator and with the Clerk of the District Court.

7.12 Inspection

(1) Following the issuance of a conditional use permit by the Planning Commission or the Zoning Administrator:

(a) The Zoning Administrator shall take in an application for approval of a building permit (if applicable), and shall insure that development is undertaken and completed in compliance with the conditional use permit, these ordinances, and the building codes.

(b) The Zoning Administrator shall make periodic inspections to insure that compliance with all conditions imposed are being complied with. An Investigation Report will be issued to those who are out of compliance and if the discrepancy is not corrected in an allotted time, an Order to Show Cause will be issued for action by the Planning Commission.

7.13 Time Limit

(1) A conditional use permit for temporary uses may be issued for a maximum period of six (6) months, with renewals at the discretion of the Planning Commission for no more than three (3) successive periods thereafter.

(2) Unless there is substantial action under a conditional use permit within a maximum period of one (1) year of its issuance, said permit shall expire. The Planning Commission may grant one extension up to six (6) months, when deemed in the public interest. The approval of a proposed conditional use permit by the Planning Commission shall authorize only the particular use for which it was issued.

7.14 Notification Required

When the Planning Commission considers an application for a conditional use permit at the work meeting, notification shall be sent by mail to all landowners appearing on the tax rolls of Tooele County Assessor that adjoin the property or within an area that the Planning Commission or the Zoning Administrator deems to be impacted. It is the intent to make notification to all landowners or residents in the area that may be directly impacted by the conditional use action.

Amended 01/03 by Ordinance 2003-02

7.15 Amendment Of A Conditional Use Permit

(1) Once granted, a conditional use permit shall not be enlarged, changed, extended, increased in intensity, or relocated unless an application is made to amend the existing permit, and approval is given by the Planning Commission, except as provided below:

(a) The Zoning Administrator may administratively consider, approve, or disapprove modifications or changes which are consistent with the purpose and intent of this ordinance. In addition, such administrative determinations may be made only where the following conditions exist:

i. All additions, modifications, or changes are determined not to have significant impact beyond the site.

ii. Any decision of the Zoning Administrator may be appealed within 30 days to the Planning Commission.

(b) The Planning Commission may consider, approve with modifications, or disapprove amendments to a conditional use permit where the Zoning Administrator determines not to make an administrative determination as provided in (a) above and where the following requirements are met:

i. The proposed modification or amendment complies with the intent and purpose of these ordinances.

ii. Reasonable conditions may be attached, where and to the extent that the Planning Commission finds, that the imposition of the conditions will directly mitigate or eliminate some aspect of the proposed amendment that violate the intent and requirements of this chapter. Impacts must be of the magnitude that without the mitigation or elimination thereof, the amendment to the conditional use permit could not be granted.

iii. All decisions of the Planning Commission regarding approval, denial, and the imposition of special conditions may be appealed to the City Council as provided in this Chapter.

7.16 Revocation

(1) The Planning Commission may revoke a conditional use permit if the conditions of a use permit are not fully complied with. Prior to the revocation of a use permit, the Chairman of the Planning Commission, after receiving information that there is reason to believe that the conditions of a use permit are not being complied with, shall issue an Order to Show Cause, to the owner or person(s) who are in control over the property or use in question. The order shall specify the alleged conditions that are not in compliance, inform the owner or other responsible party that the conditional use permit is in question and may be revoked, and any relevant evidence may be presented in support of the owner or responsible parties position. All persons wishing to present evidence shall be required to take an oath or affirmation to tell the truth, which shall be administered by or under the direction of the Chairman of the Planning Commission. The form of the oath or affirmation shall be as specified by Sections 78-24-17 or 78-24-18 of the Utah Code Annotated. The Chairman may be reversed on any procedural ruling,

by a majority vote of the other Planning Commission members present. A decision of the Planning Commission shall include a findings of fact and it's ruling.

(2) The Planning Commission may after a hearing, revoke a conditional use permit, allow the use to continue, or add new terms and conditions to an existing permit. Furthermore, the Planning Commission shall have the right of action to compel offending structures or uses to be removed at the cost of the violator or owner. Nothing in this section shall be construed to prevent the Planning Commission from otherwise reviewing use permits or be construed to prevent persons from being prosecuted under the criminal provision of this code for failure to comply with the terms of a conditional use permit.

(3) Any person or firm aggrieved by the decision of the Planning Commission regarding the revocation or amendment of a conditional use permit, may appeal such decision to the City Council whose decision shall then be final. The decision of the City Council shall be appealed to district court provided, that petition for such relief is presented to the court within 30 days after the filing of such decision in the office of the Grantsville City Council.

AGENDA ITEM #7

Consideration of the amendments to the GLUMDC for chapter 8.

Grantsville City Planning Commission

May 15, 2025
Public Hearing

Consideration of the proposed amendment to the Grantsville City Land Use and Management Code Chapter 4, 7, and 8.

Notice is hereby given that, in accordance with the provisions of Sections §10-9A-205 and §10-9A-502 of the Utah Code, the Grantsville Planning Commission will hold a discussion and public hearing on **May 15, 2025, at 7:00 p.m.** at Grantsville City Hall. The meeting will also be broadcast on Zoom. The discussion, public hearing, and meeting are to receive public input and consider action on the **consideration of the proposed amendment to the Grantsville City Land Use and Management Code Chapter 4, 7, and 8.**

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Or by emailing pzcommission@grantsvilleut.gov. All comments and concerns need to be sent in writing through email or mail and received no later than **12:00pm on May 14, 2025.**

Dated this 2nd day of May, 2025

BY ORDER OF THE GRANTSVILLE PLANNING COMMISSION

Shelby Moore
Zoning Administrator

Scan the QR code above or use the link below to join the Zoom meeting.
https://us02web.zoom.us/j/86290004540
Meeting ID: 862 9000 4540

STAFF REPORT
To: Planning Commission
From: Shelby Moore Planning and Zoning Administrator
Public Hearing: 5-15-2025
Meeting Date: 5-15-2025
Subject: Amendment to Section 8.7 – *Municipal Ordinances Governing Residential Facilities For Handicapped Persons*

I. SUMMARY

Staff recommends approval of a proposed amendment to Section 8.7 of the General Land Use and Municipal Development Code (GLUMDC), titled *"Municipal Ordinances Governing Residential Facilities For Handicapped Persons."* The proposed amendment adds a provision requiring that **All Handicap Facilities shall follow the permitting process and guide lines for group homes,** ensuring legal consistency, nondiscriminatory practices, and alignment with federal law.

II. BACKGROUND

Section 8.7 of the GLUMDC regulates the local land use treatment of residential facilities for handicapped persons, commonly referred to as "group homes." Historically, applications under this section have been reviewed with varying levels of scrutiny depending on location and other factors. The lack of a clear, centralized permitting requirement has raised concerns about compliance with the federal Fair Housing Act (FHA) and the Americans with Disabilities Act (ADA).

III. PROPOSED AMENDMENT

Amendment to Section 8.7 – Municipal Ordinances Governing Residential Facilities For Handicapped Persons:
Add the following language:

"All applications submitted under this section shall comply with the group home permitting process as established by this Code. No residential facility for handicapped persons shall be approved or operated without full adherence to the permitting procedures outlined in this process."

IV. ANALYSIS

Legal and Regulatory Alignment

- Ensures the City complies with FHA and ADA requirements by applying a uniform permitting procedure for all qualifying facilities.
- Reduces risk of discriminatory practices or unequal treatment based on facility type, location, or applicant.

Procedural Consistency

- Establishes a standard permitting framework for staff, applicants, and the public.
- Clarifies expectations and supports more efficient and predictable processing of applications.

Policy Considerations

- Reinforces the City's commitment to fair housing and the integration of people with disabilities into residential neighborhoods.
- Addresses public concerns regarding transparency and equitable enforcement.

Chapter 8 Regulation Of General Applicability

8.1 Home Occupations
8.2 Congregate Care Facilities
8.3 Nursing Care Facilities
8.4 Group Homes
8.5 Transitional Treatment Homes
8.6 Municipal Ordinances Governing Elderly Residential Facilities
8.7 Municipal Ordinances Governing Residential Facilities For Handicapped Persons
8.8 Municipal Ordinances Governing Residential Facilities For Congregate Care Facilities, Nursing Care Facilities, Group Homes, And Transitional Treatment Homes
8.9 City Council Review And Approval Of Certain Developments Required
8.10 Essential Utilities And Infrastructure To Be Completed Prior To Issuance Of Building Permits

8.1 Home Occupations

(1) All home occupations whether allowed as a permitted use, or as a conditional use, shall comply with the following standards:

(a) The home occupation must be clearly incidental and secondary to the primary use of the dwelling for residential purposes;

(b) Under appropriate circumstances up to fifty percent of the usable floor space of a residence may be used for a home occupation, provided said home occupation does not change the character or primary use of the dwelling for residential purposes;

(c) A home occupation is generally intended to involve persons residing at the location where a home occupation is conducted. Non-residents may be allowed to participate in a home occupation when deemed

appropriate by the Planning Commission as a part of a conditional use permit. The character of the home occupation and the neighborhood in which it is located shall be considered in granting any such conditional use permit. Appropriate conditions shall insure that any impacts upon the neighborhood are mitigated, which conditions may include adequate off-street parking. (Amended 1/99)

(d) The residence must be the principal residence of the applicant;

(e) Tools, items, equipment or occupations which are offensive or noxious by reason of the emission of odor, smoke, gas, vibration, magnetic interference or noise are prohibited;

(f) Stock in trade, inventory or other merchandise shall be allowed to be kept only in one room of the dwelling and limited to 100 square feet of floor space;

(g) Except for home occupation businesses authorized by a conditional use permit, no clients or customers shall come to the home nor shall any additional vehicular traffic or parking needs be generated.

(h) The home shall not require any internal alterations other than those necessary for a home occupation approved as a conditional use, nor any external alterations to the residence, nor provide any visible evidence from the exterior that the building is being used for any other purpose than that of a residence;

(i) Only one non-illuminated name plate, not exceeding two hundred square inches, and mounted flat against building; and

(j) Except for home occupations authorized by a conditional use permit, no advertising by any method shall identify the home address.

(2) The following activities shall be permitted as home occupations that only require the approval of the Zoning Administrator :

(a) Artists, illustrators, writers, photographers, editors, drafters, publishers;

(b) Consultants, private investigators, field representatives and other similar activities where the entire work of the business, except for record keeping and telephone, are conducted off of the premises; and

(c) Bookkeeping and other similar computer activities.

(d) Home occupations that require a client to come to the home for service including barbers, beauticians, tax accountants, home instruction of musical instruments, voice and educational subjects and similar or professional services. Physicians, therapists or other health care providers must obtain approval of a home occupation permit from the Planning Commission. (Amended 5/02)

(3) Repealed (Reserved for Future Use). (Amended 5/02)

(4) Applications for home occupation permits shall be filed with the Zoning Administrator. The applications shall include the following information:

(a) The names and addresses of all residents within an three hundred (300) foot radius of the property (exclusive of intervening streets and alleys) and their signatures, when possible, stating whether they support or oppose the home occupation proposed;

(b) The expected number of clients per day; (Amended 6/00)

(c) A description of the type of business proposed;

(d) A listing of the individuals at the home who will be working on the business;

(e) The expected hours of operation of the business; and

(f) If the business is conducted in an apartment, the application must also be approved by the apartment management.

(5) Upon receipt of an application for a home occupation, the Zoning Administrator shall make a determination of the completeness. If the application is determined to be complete, the Zoning Administrator shall approve or deny the application, or forward it to the Planning Commission for a conditional use permit.

(6) The Zoning Administrator shall issue a permit for the home occupation if they finds that the:

(a) provisions of this Ordinance are satisfied;

(b) proposed home occupation will be in keeping with the character of the neighborhood and will not adversely affect the desirability or stability of the neighborhood;

(c) proposed home occupation does not diminish the use and enjoyment of adjacent properties or create an adverse traffic or parking impact on adjacent streets or properties;

(d) proposed home occupation will not negatively impact the future use of the property as a residence;

(e) proposed home occupation will not adversely affect the public health, safety or welfare; and

(f) proposed home occupation conforms with all fire, building, plumbing, electrical and health codes.

(7) If the application is forwarded to the Planning Commission for special consideration before issuing a conditional use permit, the Planning Commission shall consider the application and approve with conditions or deny the application in accordance with the procedures and standards set forth in chapter 7, Conditional Use Permits.

(8) The Planning Commission, or the City Council, and Zoning Administrator, in the case of home occupations authorized by this chapter, may terminate any permit for a home occupation use upon making findings that support either or both of the following conclusions:

(a) any of the required licenses or permits necessary for the operation of the business have been revoked or suspended;

(b) violation or disregard of any condition issued in approval of the permit; or

(c) violation of any of the provisions of this Ordinance anywhere on the property.

(9) Any termination of a home occupation conditional use permit may be appealed to the Planning Commission if such appeal is made 30 days following the date of termination. Any person adversely affected by the denial or issuance of a home occupation conditional use permit may appeal that decision to the Planning Commission pursuant to chapter 3.23.

(10) Existing licenses for home occupations which were legal under the prior ordinance regulating home occupations but which are not permitted under this Ordinance may be kept and reissued for subsequent years.

(11) Home occupation conditional use permits issued under this Ordinance are personal to the applicant, non-transferable and do not run with the land.

Amended 05/02 by Ordinance 2002-06, 01/03 by Ordinance 2003-02

HISTORY
Amended by Ord. 2025-05 on 1/30/2025

8.2 Congregate Care Facilities

A congregate care facility shall be permitted as a conditional use in all residential zoning districts provided it complies with all of the requirements of the particular zoning district, all applicable requirements of this Ordinance and the Grantsville City Code, including business licensing requirements.

8.3 Nursing Care Facilities

A nursing care facility shall be permitted as a conditional use in all residential zoning districts provided that it complies with all of the requirements of that particular zoning district, all applicable requirements of this Ordinance and the Grantsville City Code, including business licensing requirements.

HISTORY
Amended by Ord. 2025-05 on 1/30/2025

8.4 Group Homes

(1) The purpose of this chapter is to permit the establishment of group homes for the disabled subject to licensing procedures and, where appropriate, conditional use standards. No group home for the disabled, shall be established, operated or maintained within the City without a valid license issued by the Board of Health.

(2) Small group homes (four to six residents) shall be permitted by conditional use permit upon the issuance of a license in all residential zoning districts, provided that no small group home shall be located within eight hundred feet of another group home or a transitional treatment home.

(3) Large group homes (seven or more residents) may be permitted by conditional use permit upon the issuance of a license in the RM-7 and RM-1 1 zoning districts provided that no large group home shall be located within eight hundred feet of another group home or a transitional treatment home.

(4) A residential facility for disabled persons shall be consistent with existing zoning of the desired location. A residential facility for disabled persons shall:

(a) be occupied on a 24-hour-per-day basis by eight or fewer disabled persons in a family-type arrangement under the supervision of a house family or manager;

(b) conform with applicable standards of the Department of Human Services;

(c) be operated by or operated under contract with that department;

(d) the facility meets all applicable building, safety, zoning, and health ordinances applicable to similar dwellings;

(e) the operator of the facility provides assurances that the residents of the facility will be properly supervised on a 24-hour basis;

(f) the operator of the facility establishes a municipal advisory committee through which all complaints and concerns of neighbors may be addressed;

(g) the operator of the facility provides adequate off-street parking space;

(h) the facility be capable of use as a residential facility for disabled persons without structural or landscaping alterations that would change the structure's residential character;

(i) no residential facility for disabled persons be established within three-quarters mile of another residential facility for disabled persons;

(j) no person being treated for alcoholism or drug abuse be placed in a residential facility for disabled persons;

(k) no person who is violent be placed in a residential facility for disabled persons; and

(l) placement in a residential facility for disabled persons be on a strictly voluntary basis and not a part of, or in lieu of, confinement, rehabilitation, or treatment in a correctional facility.

(2) Upon application for a permit to establish a residential facility for disabled persons in any area where residential dwellings are allowed, except an area zoned to permit exclusively single-family swellings, Grantsville City may decide only whether or not the residential facility for disabled persons conforms to ordinances adopted by Grantsville City under this part. If Grantsville City determines that the residential facility for disabled persons complies with those ordinances, it shall grant the requested permit to that facility.

(3) The use granted and permitted by this section is nontransferable and terminates if the structure is devoted to a use other than a residential facility for disabled persons or if the structure fails to comply with the ordinances adopted under this part.

HISTORY
Amended by Ord. 2025-05 on 1/30/2025

8.5 Transitional Treatment Homes

(1) The purpose of this chapter is to permit the establishment of transitional treatment homes for the disabled subject to licensing procedures and, where appropriate, conditional use standards. No transitional treatment home for the disabled, shall be established, operated, or maintained within the City without a valid license issued by the Board of Health.

(2) Small transitional treatment homes (four to six residents) may be allowed as a conditional use permit in all residential zoning districts, provided that no small group home shall be located within eight hundred feet of another transitional treatment home or a group home.

(3) Large group homes (seven or more residents) may be permitted by conditional use permit in all residential zoning districts provided that no large group home shall be located within eight hundred feet of another group home or a transitional treatment home.

HISTORY
Amended by Ord. 2025-05 on 1/30/2025

8.6 Municipal Ordinances Governing Elderly Residential Facilities

(1) The purpose of this chapter is to establish that a residential facility for elderly persons shall:

(a) not be operated as a business;

(b) be owned by one of the residents or by an immediate family member of one of the residents or be a facility for which the title has been placed in trust for a resident;

(c) be consistent with existing zoning of the desired location; and

(d) be occupied on a 24-hour-per-day basis by eight or fewer elderly persons in a family-type arrangement.

(2) A residential facility for elderly persons is a permitted use in any area where residential dwellings are allowed, except an area zoned exclusively single-family dwellings. Upon application for a permit to establish a residential facility for elderly persons in any area where residential dwellings are allowed, except an area zoned to permit exclusively single-family dwellings, Grantsville City may decide only whether or not the residential facility for elderly persons conform to ordinances adopted by Grantsville City under this part. The permit process requires that:

(a) the facility meet all applicable building, safety, zoning, and health ordinances applicable to similar dwellings;

(b) adequate off-street parking space be provided;

(c) the facility be capable of use as a residential facility for elderly persons without structural or landscaping alterations that would change the structure's residential character;

(d) no residential facility for elderly persons be established within three-quarters mile of another residential facility for elderly persons or residential facility for handicapped persons.

(e) no person being treated for alcoholism or drug abuse be placed in a residential facility for elderly persons; and

(f) placement in a residential facility for elderly persons be on a strictly voluntary basis and not a part of, or in lieu of, confinement, rehabilitation, or treatment in a correctional facility.

(3) Subject to granting of a conditional use permit, a residential facility for elderly persons shall be allowed in any municipal zoning district that is zoned to permit exclusively single-family use, if that facility:

(a) conforms to all applicable health, safety, zoning, and building codes;

(b) is capable of use as a residential facility for elderly persons without structural or landscaping alterations that would change the structure's residential character; and

(c) no residential facility for elderly persons be established or permitted within three-quarters mile of another existing residential facility for elderly persons or residential facility for handicapped persons.

(4) The use granted and permitted by this section is nontransferable and terminates if the structure is devoted to a use other than a residential facility for elderly persons or if the structure fails to comply with the ordinances adopted under this part.

(5) The requirements of this section that requires a residential facility for elderly persons obtains a conditional use permit or other permit does not apply if the facility meets the requirements of existing zoning ordinances that allow a specified number of unrelated persons to live together.

(6) The decision of a municipality regarding the application for a permit by a residential facility for elderly persons must be based on legitimate land use criteria and may not be based on:

(a) the age of the facility's residents; or

(b) discrimination against elderly persons and against residential facilities for elderly persons.

8.7 Municipal Ordinances Governing Residential Facilities For Handicapped Persons

(1) The purpose of this chapter is to establish that a residential facility for handicapped persons shall be:

(a) consistent with existing zoning of the desired location;

(b) be occupied on a 24-hour-per-day basis by eight or fewer handicapped persons in a family-type arrangement under the supervision of a house family or manager; and

(c) conform with applicable standards of the Department of Human Services and be operated by or operated under contract with that department.

(2) A residential facility for handicapped persons is a permitted use in any area where residential dwellings are allowed, except an area zoned exclusively single-family dwellings. Upon application for a building permit to establish a residential facility for handicapped persons in any area where residential dwellings are allowed, except an area zoned to permit exclusively single-family swellings, Grantsville City may decide only whether or not the residential facility for elderly persons conform to ordinances adopted by Grantsville City under this part. The building permit process shall require that:

(a) the facility meets all applicable building, safety, zoning, and health ordinances applicable to similar dwellings;

(b) the operator of the facility provides assurances that the residents of the facility will be properly supervised on a 24-hour basis;

(c) the operator of the facility establishes a municipal advisory committee through which all complaints and concerns of neighbors may be addressed;

(d) the operator of the facility provide adequate off-street parking space as is required in Chapter 6 of this code;

(e) the facility be capable of use as a residential facility for handicapped persons without structural or landscaping alterations that would change the structure's residential character;

(f) no residential facility for handicapped persons be established within three-quarters mile of another residential facility for handicapped persons;

(g) no person being treated for alcoholism or drug abuse be placed in a residential facility for handicapped persons;

(h) no person who is violent be placed in a residential facility for handicapped persons; and

(i) placement in a residential facility for handicapped persons be on a strictly voluntary basis and not a part of, or in lieu of, confinement, rehabilitation, or treatment in a correctional facility.

(3) Subject to granting of a conditional use permit, a residential facility for handicapped persons shall be allowed in any municipal zoning district that is zoned to permit exclusively single-family use. Subject to granting of a conditional use permit the Planning Commission shall be assured that:

(a) no person who is being treated for alcoholism or drug abuse may be placed in a residential facility for handicapped persons;

(b) no person who is violent may be placed in a residential facility for handicapped persons; and

(c) placement in a residential facility for handicapped persons shall be on a strictly voluntary basis and may not be a part of, or in lieu of, confinement, rehabilitation, or treatment in a correctional institution.

(d) conforms to all applicable health, safety, zoning, and building codes;

(e) is capable of use as a residential facility for handicapped persons without structural or landscaping alterations that would change the structure's residential character; and

(f) no residential facility for handicapped persons be established within three-quarters mile of another existing residential facility for handicapped persons.

(4) If Grantsville City determines that the residential facility for handicapped persons complies with those ordinances, it shall grant the requested permit to that facility.

(5) The decision of a municipality regarding the application for a permit by a residential facility for handicapped persons shall be based on legitimate land use criteria and may not be based on:

(a) handicapping condition of the facility's residents; and

(b) discrimination against handicapped persons and against residential facilities for handicapped persons.

(6) The use granted and permitted by this section is nontransferable and terminates if the structure is devoted to a use other than a residential facility for handicapped persons or if the structure fails to comply with the ordinances adopted under this part.

(7) All Handicap Facilities shall follow the permitting process and guide lines for group homes.

HISTORY
Amended by Ord. 2025-05 on 1/30/2025

8.8 Municipal Ordinances Governing Residential Facilities For Congregate Care Facilities, Nursing Care Facilities, Group Homes, And Transitional Treatment Homes

(1) The purpose of this chapter is to establish governing ordnances for Congregate Care Facilities, Nursing Care Facilities, Group Homes, and Transitional Treatment Homes. a. be owned by one of the residents or by an immediate family member of one of the residents or be a facility for which the title has been placed in trust for a resident; b. be consistent with existing zoning of the desired location; and c. be occupied on a 24-hour-per-day basis by one of the owners or by a facility manager.

(2) A residential facility for Congregate Care Facilities, Nursing Care Facilities, Group Homes, and Transitional Treatment Homes are a permitted use in any area where residential dwellings are allowed, except in areas developed under a PUD application or a Zoning Overlay District. Grantsville City may decide only whether or not the residential facility conform to ordinances adopted by Grantsville City under this part. The permit process requires that: a. the facility meets all applicable building, safety, zoning, and health ordinances applicable to similar dwellings;

b. adequate off-street parking space be provided; c. the facility be capable of use as a Congregate Care Facilities, Nursing Care Facilities, Group Homes, and Transitional Treatment Homes without structural or landscaping alterations that would change the structure's residential character; d. no Congregate Care Facilities, Nursing Care Facilities, Group Homes, and Transitional Treatment Homes be established within three-quarters mile of another residential facility.

(3) The use granted and permitted by this section is non-transferable and terminates if the structure is devoted to a use other than a Congregate Care Facilities, Nursing Care Facilities, Group Homes, and Transitional Treatment Homes or if the structure fails to comply with the ordinances adopted under this part.

(4) The requirements of this section that requires a Congregate Care Facilities, Nursing Care Facilities, Group Homes, and Transitional Treatment Homes obtains a conditional use permit or other permit does not apply if the facility meets the requirements of existing zoning ordinances that allow a specified number of unrelated persons to live together.

(5) The decision of a municipality regarding the application for a permit by a Congregate Care Facilities, Nursing Care Facilities, Group Homes, and Transitional Treatment Homes must be based on legitimate land use criteria and may not be based on: a. the age of the facility's residents; or b. discrimination against residential facilities and against residential facilities for Congregate Care Facilities, Nursing Care Facilities, Group Homes, And Transitional Treatment Homes.

HISTORY
Adopted by Ord. 2025-05 on 1/30/2025

8.9 City Council Review And Approval Of Certain Developments Required

(1) Notwithstanding any other provision to the contrary in this Code or under any other Grantsville city Ordinance, all new developments or construction projects having an estimated new construction value of over $250,000.00, all multiple occupancy non-residential structures with over four separate occupants or uses and all apartment or condominium structures or developments having more than two residential units, shall be first reviewed and approved by the City Council prior to the commencement or construction.

(2) The City Council review and approval required by this Section shall take place prior to the issuance of any building permits for the proposed project or development. The Building Official’s determination of valuation under Section 5- 2 of the Grantsville City Code shall be used to determine if the construction

value of a project is over $250,000.00 under this Section. This development also requires the review and approval of the Zoning Administrator or the Planning Commission, said review and approval shall be completed prior to the review and approval by the City Council under this Section.

(3) The review and approval by the City Council under this Section shall be conducted in an effort to ensure that all departments of the City are notified of the proposed project prior to construction, that all applicable building and zoning regulations have been complied with, that utilities are efficiently provided to the property and that any negative impacts to the neighborhood or community are mitigated. The City council may impose such reasonable conditions and requirements as it deems necessary in order to achieve the foregoing objectives and to ensure that city planning issues are raised and resolved prior to construction.

Amended 05/05 by Ordinance 2005-09

HISTORY
Amended by Ord. 2025-05 on 1/30/2025

8.10 Essential Utilities And Infrastructure To Be Completed Prior To Issuance Of Building Permits

All essential utilities and infrastructure as identified herein, shall be installed and completed in each phase of a subdivision, planned unit development that includes more than one lot, or multifamily dwelling development, prior to the issuance of any building permit in that development. Essential utilities shall include culinary water, sewer lines, paved streets, curb, gutter and drainage improvements (when required by the final design), permanent street signs and electricity service. Notwithstanding anything to the contrary herein, the City Public Works Director shall have authority to authorize the issuance of building permits in these developments, when the street and other required improvements have been completed, with the exception of the street surface course, when taking into account weather and temperature conditions and the feasibility of completing the surface course. If the Public Works Director authorizes building to be issued under these circumstances, no occupancy permits shall approved prior to the final completion of the street surface course.

Section added 03/09 with the adoption of Ordinance 2009-06

HISTORY
Amended by Ord. 2025-05 on 1/30/2025

AGENDA ITEM #8

Report from Zoning Administrator.

AGENDA ITEM #9

Open Forum for Planning Commissioners

AGENDA ITEM #10

Report from City Council.

AGENDA ITEM #11

Adjourn.