PROVO MUNICIPAL COUNCIL

Regular Meeting Agenda

5:30 PM, Tuesday, November 15, 2022
Council Chambers (Room 100)
Hybrid meeting: 445 W. Center Street, Provo, UT 84601 or
https://www.youtube.com/provocitycouncil

The in-person meeting will be held in the **Council Chambers**. The meeting will be available to the public for live broadcast and on-demand viewing on YouTube and Facebook at: youtube.com/provocitycouncil and facebook.com/provocouncil. If one platform is unavailable, please try the other. If you do not have access to the Internet, you can join via telephone following the instructions below.

TO MAKE A VIRTUAL PUBLIC COMMENT:
To participate in the public comment portion(s) of the meeting, call in as an audience member as the presentation is wrapping up. Be sure to mute/silence any external audio on your end to reduce feedback (if you are viewing the live proceedings on YouTube, mute the YouTube video; you will be able to hear the meeting audio through the phone while you are on the line).

Press *9 from your phone to indicate that you would like to speak. When you are invited to speak, the meeting host will grant you speaking permission, calling on you by the last four digits of your phone number. Please begin by stating your first and last name, and city of residence for the record. After you have shared your comment, hang up. If you wish to comment on a later item, simply re-dial to rejoin the meeting for any subsequent comment period(s).

November 15 Council Meeting: Dial 346 248 7799. Enter Meeting ID 815 0117 0362 and press #. When asked for a participant ID, press #. To join via computer, visit zoom.us and enter the meeting ID and passcode: 380837.

Decorum

The Council requests that citizens help maintain the decorum of the meeting by turning off electronic devices, being respectful to the Council and others, and refraining from applauding during the proceedings of the meeting.

Opening Ceremony

Roll Call
Prayer
Pledge of Allegiance

Public Comment

Fifteen minutes have been set aside for any person to express ideas, concerns, comments, or issues that are not on the agenda:

Please state your name and city of residence into the microphone.
Please limit your comments to two minutes.
State Law prohibits the Council from acting on items that do not appear on the agenda.

Action Agenda

1. A resolution consenting to the appointment of an individual to the Landmarks Commission. (22-009)

2. An ordinance amending the previously adopted ordinance 2022-33 regarding the Neighborhood Program. (22-055)

3. An ordinance amending Provo City Code regarding towing operations to clarify signage requirements and allowed fees. (22-076)

4. An ordinance amending Provo City Code to enact Chapter 3.15 "Percent-for-the-Arts" Public Art Program. (22-061)

5. An ordinance amending Provo City Code to update references to local development standards. Citywide application. (PLOTA20220333)

6. An ordinance amending the Zone Map classification of approx. 0.21 acres of real property generally located at 515 S 700 E, from Residential Conservation (RC) to Low Density Residential (LDR). Maeser Neighborhood. (PLRZ20220322)

7. An ordinance amending the General Plan to adopt the Southwest Neighborhoods Plan. Citywide Application. (PLGPA20220255)

8. An ordinance amending the zone map classification of approx. .22 acres of property located at 1220 E 960 S, from One Family Residential (R1.8) & Residential Conservation (RC) to Low Density Residential (LDR). Provost South Neighborhood (PLRZ20220244)

Adjournment

If you have a comment regarding items on the agenda, please contact Councilors at council@provo.org or using their contact information listed at: provo.org/government/city-council/meet-the-council

Materials and Agenda: agendas.provo.org
Council meetings are broadcast live and available later on demand at youtube.com/ProvoCityCouncil
To send comments to the Council or weigh in on current issues, visit OpenCityHall.provo.org.

The next Council Meeting will be held on Tuesday, November 29, 2022. The meeting will be held in the Council Chambers, 445 W. Center Street, Provo, UT 84601 with an online broadcast. Work Meetings generally begin between 12 and 4 PM. Council Meetings begin at 5:30 PM. The start time for additional meetings may vary. All meeting start times are noticed at least 24 hours prior to the meeting.

Notice of Compliance with the Americans with Disabilities Act (ADA)
In compliance with the ADA, individuals needing special accommodations (including auxiliary communicative aids and services) during this meeting are invited to notify the Provo Council Office at 445 W. Center, Provo, Utah

84601, phone: (801) 852-6120 or email evanderwerken@provo.org at least three working days prior to the meeting. Council meetings are broadcast live and available for on demand viewing at youtube.com/ProvoCityCouncil.

Notice of Telephonic Communications

One or more Council members may participate by telephone or Internet communication in this meeting. Telephone or Internet communications will be amplified as needed so all Council members and others attending the meeting will be able to hear the person(s) participating electronically as well as those participating in person. The meeting will be conducted using the same procedures applicable to regular Municipal Council meetings.

Notice of Compliance with Public Noticing Regulations

This meeting was noticed in compliance with Utah Code 52-4-207(4), which supersedes some requirements listed in Utah Code 52-4-202 and Provo City Code 14.02.010. Agendas and minutes are accessible through the Provo City website at agendas.provo.org. Council meeting agendas are available through the Utah Public Meeting Notice website at utah.gov/pmn, which also offers email subscriptions to notices.

PROVO MUNICIPAL COUNCIL STAFF REPORT

Submitter: EVANDERWERKEN
Department: Council
Requested Meeting Date: November 15, 2022

SUBJECT: A resolution consenting to the appointment of an individual to the Landmarks Commission. (22-009)

RECOMMENDATION: Approve the resolution.

BACKGROUND: Mayor Kaufusi has submitted the name of an individual who she recommends for appointment to the Landmarks Commission. The Council, after considering the Mayor's recommendations and this resolution is presented for the Council's advice and consent to formalize the appointment.

FISCAL IMPACT:

PRESENTER'S NAME: Mayor Kaufusi

REQUESTED DURATION OF PRESENTATION: 5 minutes

COMPATIBILITY WITH GENERAL PLAN POLICIES, GOALS, AND OBJECTIVES:

CITYVIEW OR ISSUE FILE NUMBER: 22-009

RESOLUTION 2022-

A RESOLUTION CONSENTING TO THE APPOINTMENT OF AN INDIVIDUAL TO THE LANDMARKS COMMISSION. (22-009)

WHEREAS, the Mayor, acting pursuant to her statutory authority, has recommended that individuals be appointed to serve on various boards and commissions as detailed below; and,

WHEREAS, on November 15, 2022, the Municipal Council met to ascertain the facts regarding this matter, which facts are found in the public record of the Council's consideration; and

WHEREAS, after considering the Mayor's recommendation and facts presented to the Municipal Council, the Council (i) consents to the board appointments set forth below and (ii) finds such appointments will reasonably further the health, safety and general welfare of the citizens of Provo City.

NOW, THEREFORE, be it resolved by the Municipal Council of Provo City, Utah, as follows:

PART I:

1. Pursuant to Provo City Code Section 16.02.010, the Municipal Council consents to the appointment of the individuals listed below to serve on the listed board or commission for the prescribed term:

Appointee's Name	Board	Term Expiration Date
Marci LeMonnier	Landmarks Commission - Alternate	June 30, 2026

2. Following said appointments, there are 7 members (including 1 alternate) and 2 vacancies (1 regular seat and 1 alternate) on the Landmarks Commission, as shown on the attached Exhibit A.

PART II:

This resolution and the board and commission appointments indicated herein shall take effect immediately.

END OF RESOLUTION.

EXHIBIT A[1]
LANDMARKS COMMISSION APPOINTMENTS

Name	Seat[2] Professional discipline, if applicable	Term Expiration Date[3]	Appointing Resolution
Matthew Christensen	1 - professional per code	6/30/2024	2020-22
Jessie Embry	2 - professional per code history	6/30/2022 6/30/2026	2018-27 2022-48
Jeff Ringer	3	6/30/2023	2019-38
Scott Bingham	4 - professional per code architecture	6/30/2023	2022-48
Susan Krueger-Barber	5	6/30/2025	2022-48
Eric Carter	6 - professional per code architecture & architectural history	6/30/2026	2022-42
Vacant	7		
Marci LeMonnier	Alternate	6/30/2026	attached
Vacant	Alternate		

[1] This Exhibit includes the Landmarks Commission appointees in the resolution to which it is attached. Anyone not so appointed should be removed from the Exhibit.
[2] At least three (3) members shall be professionals from the disciplines of history, archaeology, planning, law, architecture, or architectural history. Alternate seats are required by city code.
[3] Four-year (staggered) terms. For vacancies, appointment shall fill the unexpired term and shall represent the same membership category as the seat vacated.

PROVO MUNICIPAL COUNCIL STAFF REPORT

Submitter: EVANDERWERKEN
Department: Council
Requested Meeting Date:

SUBJECT: An ordinance amending the previously adopted ordinance 2022-33 regarding the Neighborhood Program. (22-055)

RECOMMENDATION: Presentation only. This item will be scheduled for tonight's Council Meeting.

BACKGROUND: Last year the Council established the Neighborhood Program Review Committee to evaluate Provo's Neighborhood Program and bring forth recommendations to address any issues within the program. The committee has presented its proposal, conducted several discussions among the whole Council, and invited public comment. The ordinance revising the program into the Neighborhood District Program was adopted on August 9, 2022. Subsequently, the Neighborhood Program Review Committee has recommended the following clean up language to the ordinance.

FISCAL IMPACT:

PRESENTER'S NAME: Justin Harrison, Council Executive Director

REQUESTED DURATION OF PRESENTATION: 15 minutes

COMPATIBILITY WITH GENERAL PLAN POLICIES, GOALS, AND OBJECTIVES:

CITYVIEW OR ISSUE FILE NUMBER: 22-055

ORDINANCE 2022-.

AN ORDINANCE AMENDING THE PREVIOUSLY ADOPTED ORDINANCE 2022-33 REGARDING THE NEIGHBORHOOD PROGRAM. (22-055)

WHEREAS, Provo City Code Chapter 2.29 was repealed in its entirety and reenacted on August 9, 2022 by ordinance 2022-33; and

WHEREAS, the Neighborhood Program Review Committee has recommended changes to the adopted Neighborhood District Program ordinance; and

WHEREAS, after considering the Neighborhood Program Review Committee's recommendation, and facts and comments presented to the Municipal Council, the Council finds (i) the previously adopted Ordinance 2022-33 should be amended as described herein and (ii) such action furthers the health, safety, and general welfare of the citizens of Provo City.

NOW, THEREFORE, be it ordained by the Municipal Council of Provo City, Utah, as follows:

PART I:

Ordinance 2022-33, which has an effective date of January 1, 2023 is hereby amended prior to its implementation. The text of Provo City Code Chapter 2.29 that was approved by Ordinance 2022-33 is hereby amended as shown in Exhibit A.

PART II:

A. If a provision of this ordinance conflicts with a provision of a previously adopted ordinance, this ordinance shall prevail.

B. This ordinance and its various sections, clauses and paragraphs are hereby declared to be severable. If any part, sentence, clause or phrase is adjudged to be unconstitutional or invalid, the remainder of the ordinance shall not be affected thereby.

C. The Municipal Council hereby directs that the official copy of the Provo City Code be updated to reflect the provisions enacted by this ordinance when Ordinance 2022-33 takes effect.

D. This ordinance shall take effect immediately after it has been posted or published in accordance with Utah Code 10-3-711, presented to the Mayor in accordance with Utah Code 10-3b-204, and recorded in accordance with Utah Code 10-3-713.

END OF ORDINANCE.

EXHIBIT A – NEIGHBORHOOD DISTRICT PROGRAM

Chapter 2.29
Neighborhood District Program

Sections:

2.29.010 Neighborhood District Program Created
2.29.020 Purpose
2.29.030 Voting Membership
2.29.040 Executive Board
2.29.050 Meetings
2.29.060 Matching Grant Review Process
2.29.070 Neighborhood District Fee Waivers

2.29.010 Neighborhood District Program Created

(1) *Neighborhoods and Neighborhood Districts*. There are hereby established geographic areas within the City which shall be known as Neighborhoods and Neighborhood District Zones as shown on an Official Neighborhood Map adopted by the Municipal Council, which by this reference is made a part of this Chapter. Each "Neighborhood" is a geographically distinct portion of the City. Each "Neighborhood District" shall consist of geographically adjacent Neighborhoods. The boundaries of Neighborhoods and Neighborhood Districts shall be determined by the Municipal Council and shall appear on the Official Neighborhood Map.

(2) *Neighborhood Districts.* There shall be no more than five (5) total Neighborhood Districts. Each Neighborhood District shall have an Executive Board comprised of residents from within the boundaries of the Neighborhood District. When possible, at least one (1) resident from each Neighborhood located within the boundaries of the Neighborhood District shall serve on the Executive Board.

(3) *Neighborhood District Program.* The Neighborhood Districts and their associated activities created by this Chapter shall be referred to as the Neighborhood District Program.

2.29.020 Purpose

(1) The purpose of the Neighborhood District Program is to provide for public participation and involvement in City affairs and provide a mechanism for communication between the Municipal Council and the public.

(2) Each Neighborhood District Executive Board may provide suggestions and feedback to the Municipal Council on governmental affairs and services affecting the area the Neighborhood District represents.

(3) The Neighborhood District Executive Board shall work to:

(a) Identify and build on the strengths and assets of each Neighborhood in order to solve local problems and meet local needs and desires;

(b) Bring Neighborhood residents and other local stakeholders (including Neighborhood businesses and residential landlords) together to achieve the shared goals of the Neighborhood District Program;

(c) Bring other non-governmental organizations and local nonprofit organizations to help deliver services that are needed by residents within their Neighborhood District;

(d) Create opportunities for community building among residents (i.e., service projects, beautification efforts, social activities, etc.); and

(e) Organize yearly social activities for the individual Neighborhoods within their boundaries.

(4) The Neighborhood District Executive Board is not a legislative body. The Board members are not elected officials and do not have any implied legislative or executive authority.

2.29.030 Voting Membership

Voting at a Neighborhood District meeting is limited to persons eighteen (18) years of age or older whose primary Provo domicile is within the identified boundaries of the corresponding Neighborhood District. For purposes of this Chapter, "primary Provo domicile" means the Provo domicile where the person physically resides more days in a calendar year than any other Provo domicile.

No person may be a member or resident, or vote at meetings, of more than one Neighborhood District. A person who physically resides at more than one domicile in Provo, for purposes of this Chapter, is a member and resident of the Neighborhood District where their primary Provo domicile is located. Before a person may vote at a Neighborhood District meeting, they must sign a Declaration of Residency declaring the address of their primary Provo domicile and that they are a resident of the corresponding Neighborhood District.

2.29.040 Executive Board

(1) Members: Appointment: Vacancies: Removal.

(a) A minimum of seven (7) members, with a maximum of eleven (11) members, shall be appointed by the Municipal Council to serve as the Executive Board for each Neighborhood District.
(b) Only residents of the corresponding Neighborhood District may be considered for appointment to the Executive Board, except as provided in Subsection (2).
(c) Neighborhood input will be considered in making appointments to the Executive Boards.
(d) Before an applicant can be appointed, they are required to attend a Neighborhood District Orientation session for that appointment cycle, provide evidence of attendance at an orientation session in the past three (3) years, or have served as an Executive Board member in the past two (2) years.
(e) Members of the Executive Board shall serve at the pleasure of the Municipal Council and may be removed from office by a majority of the members of the Municipal Council.

(2) Notwithstanding the requirements of Subsection (1):
(a) In the Neighborhood District containing the University Neighborhood, the Municipal Council shall appoint one (1) member of the Executive Board from persons nominated by the President of Brigham Young University;
(b) In the Neighborhood District containing the Downtown Neighborhood, the Municipal Council shall appoint one (1) member of the Executive Board from persons nominated by Downtown Provo, Inc.;
(c) In the Neighborhood District containing the Joaquin Neighborhood, the Municipal Council shall appoint at least one (1) member of the Executive Board who is a property owner of student housing located within the Joaquin Neighborhood so long as the following requirements are met:
(i) The property owner has a valid and current rental dwelling license from Provo City; and
(ii) The property owner is not a member of another Neighborhood District Executive Board.
(d) The Municipal Council may choose to appoint a maximum of one (1) business owner to an Executive Board so long as the following requirements are met:
(i) The business has a physical location within the boundaries of the Neighborhood District;
(ii) The business has a valid business license from Provo City and is in good standing; and
(iii) The owner is not a member of another Neighborhood District Executive Board.

(3) Officers of the Executive Board. The voting members of each Neighborhood District shall select a chair, two (2) vice-chairs, and a secretary from the members of the Executive Board.

(4) Terms of office.
(a) Executive Board Member

(i) All Executive Board member terms shall be for forty-eight (48) months upon appointment. At the launch of this program, one-half of the appointments will be for terms of twenty-four (24) months for the purposes of staggering.

(ii) No individual may be appointed to serve on an Executive Board who has served on any Executive Board within the last twelve (12) months unless appointed under Subsection (2) or as otherwise provided in this Subsection (4)(ii). If a position on the Executive Board has been vacant for more than three months, this prohibition may be waived by the Municipal Council at their discretion.

(b) Chair of the Executive Board

(i) No person may serve as Chair for more than twelve (12) consecutive months.

(ii) No person may be selected as Chair within ~~twenty-four (24)~~ **twelve (12)** months of having served as Chair.

(5) *Communications.* Members of the Neighborhood District Executive Boards shall coordinate and channel all official communications to the Municipal Council/Planning Commission through their respective Executive Board's Chair and the Neighborhood Coordinator.

(6) *Official representatives.* The Chair, or in their absence, a Vice-Chair or other duly appointed representative, shall be the official representative of their Neighborhood District to the Municipal Council or Planning Commission and shall represent positions taken by their Neighborhood District, provided that such representative has received the prior approval for such representation from a majority of the Neighborhood District Executive Board members present at the Neighborhood District meeting during which the item was discussed.

(7) *Meetings.*

(a) Absences. If a member of an Executive Board fails to attend three (3) or more consecutive meetings, or fifty (50%) percent or more of the meetings in any eight (8) month period, without the approval of the majority of the other Executive Board members, the seat of such member shall be deemed immediately vacated.

(b) At least a majority of the currently serving Executive Board members must be present at any meeting to conduct any business or take any official action.

(8) *Candidates for public offices.* If any member of an Executive Board files as a candidate for election to a public office, they shall take a leave of absence from the Executive Board immediately upon filing and until the election is over. If any member of an Executive Board is elected or appointed to any public office, their seat as a member of the Executive Board shall become vacant upon election or appointment to the public office.

2.29.050 Meetings

(1) *Presiding officer.* The Chair, or a Vice-Chair in the absence of the Chair, shall preside over Neighborhood District meetings.

(2) *Secretaries.* Each Executive Board shall have a secretary to keep an accurate record of the meetings and general actions and discussions of the Neighborhood District Executive Board, including an accurate record of the Executive Board members in attendance.

(3) *Time and place.* A meeting of the residents of each Neighborhood District shall be held at a regularly scheduled designated time and place. The Neighborhood Coordinator in the Municipal Council Office shall be responsible for the meeting schedule.

(4) *Open to the public.* All Neighborhood District meetings shall be open to the public and duly noticed, and agendas prepared and posted ~~therefore, pursuant to provisions of the Utah Open & Public Meetings Act (Utah Code Title 52 Chapter 4~~**)** **on the City website**.

(5) *Official business.* Official business of a Neighborhood District may only be conducted at duly noticed meetings operating under established procedures ~~set forth in this section and under the provisions of the Utah Open & Public Meeting Act (Utah Code Chapter 52-4)~~.

(6) *Recommendations.* Official recommendations to the Municipal Council and/or Planning Commission may be made by the residents of a Neighborhood District, by a Neighborhood District Executive Board, or both. Recommendations of a Neighborhood District Executive Board must be approved according to the rules governing its meetings set forth in this Chapter. Recommendations of the residents of a Neighborhood District must be made by means of motions adopted by a majority vote of the residents present at the meeting. Executive Board members may vote on such motions but vote simply as residents of the Neighborhood District. All official recommendations from the residents of a Neighborhood District to the Municipal Council and/or Planning Commission must show the number of residents that voted in favor of and in opposition to said recommendation, as well as the number of residents present that abstained from voting.

(7) *Communications.*

(a) No Neighborhood District Executive Board member may use the title of Neighborhood District Executive Board member on any form of communication except for (i) communications directed to the Planning Commission and/or Municipal Council or (ii) communications directed to the residents of the Neighborhood District. Communications of both types must be approved by a majority of the Executive Board and channeled through the Neighborhood Coordinator.

(b) No Neighborhood District Executive Board member may use the title of Neighborhood District Executive Board member for any communication involving political and/or commercial activities.

(8) *Agendas.* The Neighborhood Coordinator shall establish the agenda for Neighborhood District meetings. However, at any regular meeting of the residents of a Neighborhood District, any member may request the inclusion of any specific agenda item that falls within the subject matter and jurisdiction of the Neighborhood District for

a specific future meeting. Upon concurrence of a majority of the members of the Executive Board, such items will be placed on the agenda of the next meeting as requested.

(9) Supplemental rules. All meetings and activities of each Neighborhood District shall operate under such further rules, not inconsistent with the provisions of this Chapter, as may be established and adopted by the Municipal Council Executive Director. The Neighborhood Coordinator will create and maintain an official handbook for the program.

(10) Attendance by Municipal Council Members. Members of the Municipal Council may attend Neighborhood District meetings, as desired.

(11) Services provided by the City. The City may provide the following services to Neighborhood Districts:

(a) Neighborhood Coordinator and other reasonable staff support as necessary to render assistance to the Neighborhood Districts and respective Executive Boards. Requests for additional staff support shall be made to the Municipal Council Executive Director.

(b) The Municipal Council Office shall have a yearly budget of one thousand dollars ($1,000.00) for each Neighborhood District Executive Board to utilize for facilitating meetings of the Executive Board or District members or social functions for the Neighborhood District.

(c) The Neighborhood Coordinator will coordinate with the Development Services Department to arrange for staff representation on land use applications.

(d) The Neighborhood Coordinator will invite other City departments to participate in Neighborhood District meetings to share useful information and speak with residents on relevant issues.

2.29.060 Matching Grant Review Process.

(1) Five thousand dollars ($5,000.00) shall be set aside each year for use as a matching grant fund for use within each Neighborhood District.

(2) The Municipal Council Executive Director shall establish criteria for awarding matching grants and shall establish procedures for evaluating and approving grant applications.

(3) The Neighborhood District Executive Board will review applications for completeness, request additional information as needed, recommend approval or rejection of the application, and submit complete applications with recommendations to the Neighborhood Coordinator or their designee.

(4) The Municipal Council Executive Director may accept or reject the Neighborhood District Executive Board's recommendation regarding any matching grant application, subject to direction by the Municipal Council Chair.

(5) ~~It~~ If the grant is approved by the Municipal Council Executive Director, then the Secretary for the Neighborhood District Executive Board will work with the Neighborhood Coordinator or their designee to administer the grant.

(6) Any funds not spent will be returned to the Council Office.

2.29.070 Neighborhood District Fee Waivers.

(1) An Executive Board Chair may request a fee waiver before submitting an application on behalf of their Neighborhood District to the Development Services Department for:

  (a) A text amendment to the General Plan or Provo City Code Title 14 or 15; or

  (b) A map amendment to the General Plan Map or the Zone Map of Provo.

(2) An Executive Board Chair may only submit a fee waiver request if:

  (a) Authorized by Municipal Council;

  (b) Authorized by City Administration; or

  (c) A duly noticed meeting of the Neighborhood District residents is held at which a majority of the residents present vote in support of the proposed amendment.

(3) In all cases, the fee waiver request may not be granted if:

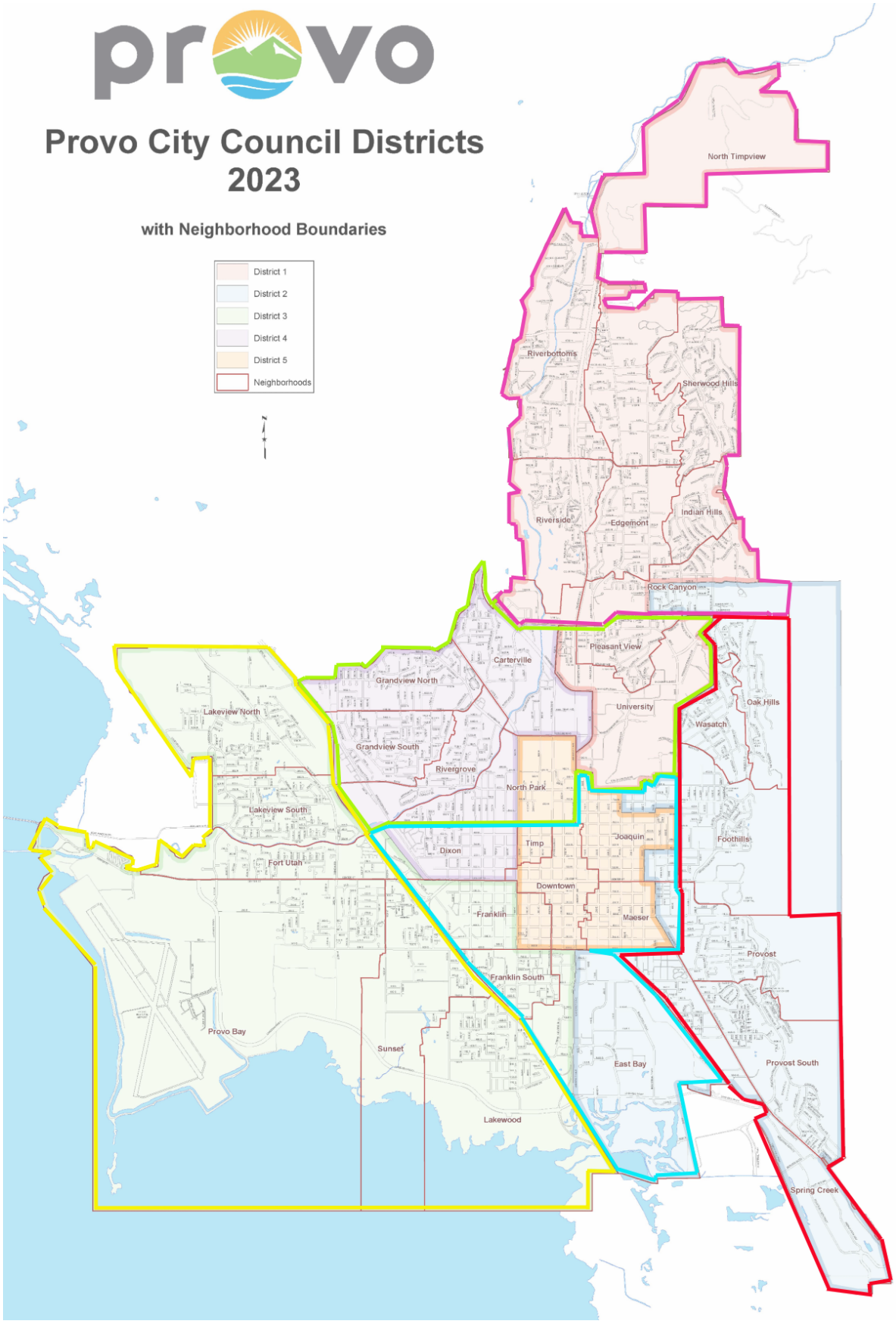
  (a) The Chair is a developer, or an agent of a developer, of a project related to the proposed amendment; or

  (b) The Chair will receive an economic benefit for advancing the proposed amendment or for any project related to the proposed amendment.

(4) The Development Services Director, or their designee, shall make the final determination on the fee waiver request at the Director's, or designee's, discretion.

Provo City Council Districts 2023

with Neighborhood Boundaries



District 1

North Timpview

Riverbottoms

Sherwood Hills

Riverside

Edgemont

Indian Hills

Rock Canyon

District 2

Oak Hills

Wasatch

Foothills

Provost

Provost South

Spring Creek

District 3

Lakeview North

Lakeview South

Fort Utah

Provo Bay

Sunset

Lakewood

District 4

Grandview North

Grandview South

Rivergrove

North Park

Carterville

Pleasant View

University

District 5

Dixon

Timp

Franklin

Franklin South

Downtown

Joaquin

Maeser

East Bay

PROVO MUNICIPAL COUNCIL STAFF REPORT

Submitter: EVANDERWERKEN
Department: Council
Requested Meeting Date:

SUBJECT: An ordinance amending Provo City Code regarding towing operations to clarify signage requirements and allowed fees. (22-076)

RECOMMENDATION: Presentation and discussion only.

BACKGROUND: This presentation is a follow up on questions Councilors had regarding code about towing signage, charges/costs, and delievery vehicle exemptions.

FISCAL IMPACT: None

PRESENTER'S NAME: Brian Jones, City Attorney

REQUESTED DURATION OF PRESENTATION: 15 minutes

COMPATIBILITY WITH GENERAL PLAN POLICIES, GOALS, AND OBJECTIVES:

CITYVIEW OR ISSUE FILE NUMBER: 22-076

ORDINANCE 2022- .

AN ORDINANCE AMENDING PROVO CITY CODE REGARDING TOWING OPERATIONS TO CLARIFY SIGNAGE REQUIREMENTS AND ALLOWED FEES. (22-076)

WHEREAS, after review by the Council it has been proposed that Provo City Code Section 9.31.110 (Towing and Parking Enforcement Operations) be amended to clarify signage requirements and allowed fees; and

WHEREAS, on October 18 and November 15, 2022, the Municipal Council met to ascertain the facts regarding this matter and receive public comment, which facts and comments are found in the public record of the Council's consideration; and

WHEREAS, after considering the facts presented to the Municipal Council, the Council finds that (i) Provo City Code should be amended as proposed and (ii) such action furthers the health, safety, and general welfare of the citizens of Provo City.

NOW, THEREFORE, be it ordained by the Municipal Council of Provo City, Utah, as follows:

PART I:

Provo City Code Section 9.31.110 (Towing and Parking Enforcement Operations) is hereby amended as shown in Exhibit A.

PART II:

A. If a provision of this ordinance conflicts with a provision of a previously adopted ordinance, this ordinance shall prevail.

B. This ordinance and its various sections, clauses and paragraphs are hereby declared to be severable. If any part, sentence, clause or phrase is adjudged to be unconstitutional or invalid, the remainder of the ordinance shall not be affected thereby.

C. The Municipal Council hereby directs that the official copy of the Provo City Code be updated to reflect the provisions enacted by this ordinance.

D. This ordinance shall take effect immediately after it has been posted or published in accordance with Utah Code 10-3-711, presented to the Mayor in accordance with Utah Code 10-3b-204, and recorded in accordance with Utah Code 10-3-713.

EXHIBIT A

9.31.110

Towing and Parking Enforcement Operations[1].

. . .

(5) No person may conduct a towing or parking enforcement operation without meeting any applicable notice and signage requirements contained in the Utah State Code. ~~at a parking lot having four (4) or more parking spaces other than on a vehicle which has been continuously parked in such a lot for more than seventy-two (72) hours, unless:~~

~~(a) "No parking" areas, restricted parking spaces, and visitor parking spaces, if any, are clearly marked with signage installed in such a manner as to provide adequate notice to those utilizing the parking area, including marking of the boundaries between the subject parking lot and any adjoining parking lot owned by another person; and~~

~~(b) A conspicuous sign posted at, or immediately adjacent to, each entrance to the property provides notice that unauthorized vehicles may be towed from the parking lot or booted. Each such sign shall:~~

~~(i) Be at least eighteen (18) inches by twenty-four (24) inches in size;~~

~~(ii) Give warning, in large reflective lettering, that unauthorized vehicles may be towed or booted;~~

~~(iii) Give the name and telephone number of business(es) authorized to conduct a towing or parking enforcement operation on the property;~~

~~(iv) State the fees charged for towing and parking enforcement operations; and~~

~~(v) Be posted within approximately five (5) feet of each entrance to a parking lot.~~

~~(A) For purposes of this Subsection, a parking lot entrance shall mean any access allowing the entrance or exit of a vehicle between a private parking lot and a City street unless such access is not the property of the parking lot owner. In such case, the parking lot entrance shall mean:~~

~~(I) The intersection of the parking lot property line and the property line of the access point; or~~

~~(II) Any privately owned road connected to a public right-of-way leading to the entrance of a parking lot located on private property.~~

~~(B) A sign posted directly over a driveway leading to an underground lot shall be deemed to meet the location requirements of this Subsection.~~

~~(C) If signs cannot be posted within five (5) feet from the entrance to a parking lot for reasons of practical difficulty (such as the necessity of drilling a hole through concrete, removing a tree or shrubs, or because of an immediately adjacent private driveway not owned by the owner of the parking lot), a sign may be placed as close as reasonably practicable to the parking lot entrance. However, no sign shall be further than thirty (30) feet from the edge of the curb that borders the private property.~~

(6) . . .

(7) The written or telephonic request required under Subsection (6)(b)(i) of this Section prior to initiating a towing or parking enforcement operation is not required if all of the following requirements are met:

(a) The towing or parking enforcement business conducting the towing or parking enforcement operation has been designated as a Provo City certified towing or parking enforcement business by the Mayor, or the Mayor's designee;

(i) A licensed towing or parking enforcement business may seek this designation by completing and signing a written application on a form provided by the City.

(ii) The licensed applicant business shall be granted this designation upon satisfying the Mayor, or the Mayor's designee, that the applicant's business operations comply with all of the contractual obligations required under Subsection (7)(c) of this Section.

(b) The owner of the property where the towing or parking enforcement operation takes place complies with all the contractual obligations required under Subsection (7)(c) of this Section; and

(c) The towing and parking enforcement business and the private property owner must have, and comply with, a contract that contains provisions documenting and requiring all of the following:

(i) A right of appeal to the property owner by the owner or operator of the vehicle booted or towed;

(ii) The right of the property owner to grant the appeal and waive part or all of the fees and charges incurred by the appellant;

(iii) A documented plan for providing adequate visitor parking;

(iv) Reasonable, as determined by the Mayor or the Mayor's designee, temporary permit parking on a 24/7 availability basis for any property where the owner requires permit parking;

(v) Signage that, in the Mayor or Mayor's designee's reasonable opinion, provides fair notice to all persons of all limitations on parking on the property; ~~and~~

(vi) That the towing or parking enforcement operator's total maximum fees and charges for ~~booting or otherwise~~ immobilizing a vehicle shall not exceed eighty percent (80%) of the maximum fee allowed under Utah State Code for removing a vehicle immobilization device;

(vii) That the relevant fee charged by the towing or parking enforcement operator for towing a vehicle~~, including~~ shall not exceed eighty percent (80%) of the maximum allowed fee for non-consent, non-police generated tows by Utah State Code and the Utah Administrative Code for the:

(A) Tow Truck Service fee;

(B) Vehicle Storage fee for the first day of storage (subsequent days of storage may be charged in accordance with the rules and rates set forth in Rule 909-19-13, Utah Administrative Code, as amended)~~, shall not exceed eighty percent (80%) of the maximum fees set through Rule 909-19-11, Utah Administrative Code.~~

(C) Fuel Surcharge fee;

(D) Administrative fee; and

(E) After Hours fee; and

(viii) That the towing or parking enforcement operator shall not charge any fee, rate, or charge not explicitly listed in Subsection (7)(c)(vi) or (vii).

(d) It is a violation of this Section to conduct a towing or parking enforcement operation without a written or telephonic request pursuant to this Subsection (7) if either party to a contract described in Subsection (7)(c) of this Section fails to comply with a contract provision required under Subsection (7)(c) of this Section.

(e) Appeals by towing or parking enforcement operators or property owners of decisions by the Mayor, or the Mayor's designee, made under this Subsection (7) may be appealed to a hearing examiner to be appointed by the Mayor in accordance with Section 3.06.010, Provo City Code.

(8) A booted vehicle may not be removed from the site sooner than two (2) hours after the time of booting.

(9) Except as otherwise provided in this Section, a towing or parking enforcement business conducting a towing or parking enforcement operation shall comply with the following requirements: ~~pursuant to this Section shall release the subject vehicle to its owner or agent immediately upon payment of applicable fees authorized by this Section or by Rule R909-19, Utah Administrative Code, as amended.~~

(a) The towing or parking enforcement business shall accept payment offered in cash or by major credit card, but shall not be obligated to accept checks or payment in coins and shall maintain sufficient cash on hand to make change of up to forty dollars ($40.00).

(b) Every towing or parking enforcement business providing services pursuant to this Subsection shall post in a conspicuous place upon its business premises a true copy of this Section.

(c) A parking enforcement business removing a vehicle immobilization device shall be limited to ~~a~~ the maximum ~~booting~~ fee, per vehicle, authorized by Utah State Code for removal of the device~~of fifty percent (50%) of the maximum towing rate for non-consent tows as provided in Rule R909-19-12, Utah Administrative Code~~, and may not charge any other fee for a parking enforcement operation. If an immobilized vehicle is towed, no fee ~~of any kind relating to booting~~ may be charged ~~in addition to~~ other than those fees explicitly listed in Subsection 7(c)(vii)~~towing, storage, or other applicable fees~~. If a vehicle is towed or booted unlawfully, no fee shall be payable.

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PROVO MUNICIPAL COUNCIL STAFF REPORT

Submitter: MDAYLEY
Department: Council
Requested Meeting Date: 07-26-2022

SUBJECT: A discussion regarding the proposed "Percent-for-the-Arts" program from the Public Art Committee. (22-061)

RECOMMENDATION: Presentation and discussion.

BACKGROUND: The Council's Public Art Committee was tasked with drafting an ordinance to enact a program with the goal to increase public art throughout the city.

FISCAL IMPACT: None

PRESENTER'S NAME: Melia Dayley, Policy Analyst

REQUESTED DURATION OF PRESENTATION: 35 minutes

COMPATIBILITY WITH GENERAL PLAN POLICIES, GOALS, AND OBJECTIVES:

CITYVIEW OR ISSUE FILE NUMBER: 22-061

ORDINANCE 2022-.

AN ORDINANCE AMENDING PROVO CITY CODE TO ENACT CHAPTER 3.15 "PERCENT-FOR-THE-ARTS" PUBLIC ART PROGRAM. (22-061)

WHEREAS, it is proposed to amend Provo City Code to enact provisions regarding a "Percent-for-the-Arts" program to promote and identify a funding mechanism to encourage cultural development and the production and placement of public art in the City of Provo; and

WHEREAS, the amendment to Provo City Code will create the "Percent-for-the-Arts" Public Art Program and establish the structure and guidelines for its management; and

WHEREAS, on November 1 and 15, 2022, the Municipal Council met to ascertain the facts regarding this matter and receive public comment, which facts and comments are found in the public record of the Council's consideration; and

WHEREAS, after considering the facts presented to the Municipal Council, the Council finds (i) Provo City Code Chapter 3.15 should be enacted as set forth below, and (ii) this action reasonably furthers the health, safety, and general welfare of the citizens of Provo City.

NOW, THEREFORE, be it ordained by the Municipal Council of Provo City, Utah, as follows:

PART I:

Provo City Code Chapter 3.15 is hereby enacted as set forth in Exhibit A.

PART II:

A. If a provision of this ordinance conflicts with a provision of a previously adopted ordinance, this ordinance shall prevail.

B. This ordinance and its various sections, clauses and paragraphs are hereby declared to be severable. If any part, sentence, clause or phrase is adjudged to be unconstitutional or invalid, the remainder of the ordinance shall not be affected thereby.

C. The Municipal Council hereby directs that the official copy of the Provo City Code be updated to reflect the provisions enacted by this ordinance.

D. This ordinance shall take effect immediately after it has been posted or published in accordance with Utah Code 10-3-711, presented to the Mayor in accordance with Utah Code 10-3b-204, and recorded in accordance with Utah Code 10-3-713.

END OF ORDINANCE.

Chapter 3.15 "Percent-for-the-Arts" Public Art Program

3.15.010 Purpose

This policy is designed:

(1) For the integration of art into public spaces, including in the design of public facilities, and the acquisition and preservation of public art;
(2) To establish a program which administers that portion of appropriations for capital expenditures that is set aside for the acquisition of works of art used for public buildings and facilities;
(3) To enhance the quality of life in the city by placing art of the highest quality in public spaces where it is seen by the general public;
(4) To promote and preserve appreciation for and exposure to the arts;
(5) To promote the development and support of arts in the community, and
(6) To foster cultural development in the city and encourage the creativity and talents of its artists and craftspeople.

3.15.020 Definitions

For the purposes of this Chapter, the following definitions shall apply:

"**Art**" includes all forms of original artistic creations, which are integrated into major public projects or funded by appropriations under this policy including, but not limited to, work by an artist in the following areas:

(1) Design work that is integrated into the construction or improvement of a public project, including, but not limited to:
    (a) Interior or exterior surfaces, fixtures, and functional elements; and
    (b) Outdoor space design elements in areas such as plazas, arcades, and pedestrian passageways.
(2) Artistic design of public spaces and public facilities, including roadways, parkways, pedestrian or bicycle paths, transit system improvements, water and wastewater facilities, and publicly owned sites with historic, archeological, and unique geological features.
(3) Forms of visual art, including, but not limited to:
    (a) Sculpture: in the round, bas-relief, high relief, mobile, fountain, environmental, kinetic, electronic, etc., in any material or combination of materials;
    (b) Painting: all media, including portable and permanently affixed works such as murals and frescoes;
    (c) Photography and film;
    (d) Graphic arts: printmaking, drawing, and calligraphy;
    (e) Art forms in clay, fiber and textiles, wood, metal, plastics, glass, mosaics, and other materials;
    (f) Mixed media: any combination of forms or media;
    (g) Other categories or new technologies that may develop through artistic pursuit such as computer/audio/video generated work, use of lasers, etc.; and
    (h) Temporary art installations and/or art-centered events.

"**Artist**" means a practitioner in the visual arts, generally recognized by critics and the artist's peers as a professional who is committed to producing high quality work on a regular basis, and who is not the project architect or a member of the project's architectural firm.

"**City building or facility**"

(1) means a city building, permanent structure, facility, park, or appurtenant structure thereof, wholly or partially enclosed, that includes, but is not restricted to a space or facility used, or to be used, for carrying out the functions of a department, board, commission, institution, or agency of the city, including offices, hearing or meeting rooms, auditoriums, libraries, courtrooms, classrooms, workshops, and utility and infrastructure accessory structures such as lamp posts, utility boxes, sidewalks, crosswalks, parking lots, and roads;

(2) does not include motor pools, sewers, repair and maintenance focused projects on existing buildings and facilities, underground utility infrastructure, or buildings used solely for storage or warehousing.

"**Principal user**" means the department, board, commission, institution, or agency of the city which will primarily be using a city building or facility.

"**Program**" means the Percent-for-Art Program created in this part.

"**Project**" means a project whereby one or more city buildings or facilities is acquired, constructed, renovated.

3.15.030 Creation of Program – Collections and Use of Appropriations

(1) A Percent-for-Art Program and the funds acquired through the program, shall be administered by the Provo Arts Council. Funds acquired through the program shall be held in the Parks and Recreation Department's budget under the Covey Center Division in a separate function.

(2) Any appropriation received through the Percent-for-Art Program shall be used to acquire existing works of art or to commission the creation of works of art placed in or at appropriate city buildings or facilities as recommended by the Arts Council and with the advice of the principal user of the city facility or building that will house the art. Any unexpended funds remaining at the end of the fiscal year shall be non-lapsing and not revert to the General Fund.

(3) Funding for the program shall follow the following structure:

(a) 1% of the original planned construction budget for a building or facility that the Art Council determines has sufficient public use or access, especially where the design and technical construction of the building or facility lend themselves to works of art, will be directed towards the Percent-For-Art program budget.

(i) "Original planned and/or anticipated construction budget" does not include those parts of the budget funded through grants or other specific funding sources, inasmuch as doing so would violate the agreement/terms of the grants and/or specific funding source.

(ii) All funds set aside and administered by the program from appropriations for any city building or facility of which any part is obtained from the issuance of bonds shall be used only to acquire works of art that will be placed in or at, and remain a part of, that building or facility, to the extent necessary to preserve the federal income tax exemption otherwise allowed for interest paid on the bonds.

(b) The 1% contribution is the assumed contribution from each project selected to the Percent-for-the-Arts fund.

(i) If public art is a part of a new project's design and/or construction, the project's 1% contribution to the public art fund can be off-set or exempted. The exemption from the contribution, or an appeal for specific contribution amounts, will need final approval from the Arts Council after their review.

(A) If exemptions or specific contribution off-sets are granted due to the project's planned artistic elements, such elements may not be removed from the project or changed (except for de minimis changes of minor details that do not change the substance of the project) without review by the Arts Council. During such review, the Arts Council may rescind the exemption or off-set or otherwise determine how the 1% contribution or its equivalent shall be met by the project.

(ii) The funds collected through the program will go into a central arts fund located within the Covey Center's budget under the Department of Parks and Recreation to be used for public art projects throughout the city; however, priority and primary use of funds may go towards art acquisition for the projects from which funds were collected.

3.15.040 Selection and Placement of Art

(1) Art selected pursuant to the provisions of this policy for a public project may:
   (a) Be placed in, on, or above any such project;
   (b) Be attached or detached within or about such property; and
   (c) Be either temporary or permanent.

(2) The process of selection and placement of art shall proceed as follows:
   (a) The Arts Council shall take applications and solicit submissions of art from artists. While priority will be placed on submissions for the newest or upcoming project from which funds were collected from, submissions can be ongoing and for anywhere in the city.
   (b) The Arts Council shall create procedures, rules, and guidelines as they see necessary and fit to ensure the screening process of the submitted art proposals are fair and transparent as well as all other administrative duties including, but not limited to, ensuring the proper installation, maintenance, accessibility, retirement, and/or disposal of an art piece.

(3) Location of Public Arts Projects:
   (a) All public arts projects shall be located on:
      (i) Property owned, leased, used, or otherwise occupied by the City or the Provo City Redevelopment Agency and within the corporate limits of the City; or
      (ii) Private property, subject to a license or easement approved by the City Attorney, allowing for maintenance and public access to the art project for the life of the project.

3.15.050 Program Guidelines

The Provo Arts Council shall follow these guidelines in administering the program:

(1) Works of art shall be acquired under the program for use only with respect to those buildings or facilities that the Provo Arts Council determines to have significant public use or access, especially where the design and technical construction of the building or facility lend themselves to works of art.

(2) Selection and placement shall consider the distribution of works of art throughout the various social, economic, and geographic communities of the city.

(3) The Provo Arts Council:

  (a) shall give first preference to Provo artists.

(4) The Provo Arts Council shall be the administrator of the program including the acquisition and review of potential art, selecting artwork, the placement of the art, and the collection and distribution of funds needed for the acquisition and potential maintenance of public art. Final appropriation for the art acquisition and placements shall be at the Municipal Council's discretion.

  (a) In selecting artwork, the Provo Arts Council shall consider the community values of Provo and may reject any submissions or proposals on the basis they do not meet or uphold those values.

(5) Any relocation of art placed under this program shall be done with participation from the Public Works Department and Facilities Division, as needed, and approval from the Director of the principal user and the Provo Arts Council.

3.15.060 Title to Work of Art Vests in the Name of the City — Title Subject to Restrictions and Interests.

(1) Title to a work of art acquired by or created for the program vests upon its completion, installation, and final acceptance in the name of the city.

(2) Title to a work of art acquired from appropriations for any city building or facility of which any part is obtained from the issuance of bonds, and placed in or at that building or facility, is subject to the same restrictions and interests as title to that building or facility, to the extent necessary to preserve the federal income tax exemption otherwise allowed for interest paid on those bonds.

3.15.070 Responsibility for Maintenance and Security of Public Art.

(1) The principal user of the building or facility in which the art is located is responsible, in cooperation with the Provo Arts Council, for the conservation, maintenance, and security of all works of art placed in or at each building or facility under the program.

(2) Up to 15% of the funds acquired through the program may be used for the maintenance of public art, but this does not have to be the only source of funds needed for maintenance.

3.15.080 Rights of artist commissioned by program.

An artist who is commissioned by the program to create a work of art has the following rights with respect to that work of art:

(1) all rights secured to the artist under federal copyright laws;

(2) the right to claim authorship of the work of art;
(3) the right to photographic reproduction of the work of art;
(4) the right of first refusal:
    (a) to conduct all repair and conservation work on the work of art in accordance with accepted principles of professional conservation; and
    (b) to purchase the work of art if the city decides to sell it; and
(5) the right to deny further association of the artist's name with or authorship of the work of art if conservation or repair work is done by a person other than the artist, which in the opinion of the artist damages its integrity.

Percent for the Arts:

Provo City Public Art Fund & Program

November 1, 2022 Council Work Meeting

Goal of Program

“For the integration of art into public spaces…to foster cultural development in the city and encourage the creativity and talents of its artists and craftspeople”



Ordinance Components

01. Purpose

02. Definitions

03. Creation of Program- Collection & Use of Appropriations

04. Selection & Placement of Art

05. Program Guidelines

06. Title of Art

07. Maintenance & Security

08. Rights of Artist

02. Definitions

A. “Art” includes all forms of original artistic creations, which are integrated into major public projects or funded by appropriations under this policy including, but not limited to, work by an artist in the following areas:

- ❑ Integrated, artistic design work on interior & exterior surfaces, fixtures, & functional elements
- ❑ Forms of visual art
- ❑ Other forms of technology-centric art
- ❑ Temporary or art-centered events

E. "Project" means a project whereby one or more city buildings or facilities is acquired, constructed, renovated.

1."City building or facility" means a city building, permanent structure, facility, park, or appurtenant structure thereof, wholly or partially enclosed, that includes, but is not restricted to a space or facility used, or to be used, for carrying out the functions of a department, board, commission, institution, or agency of the city, including offices, hearing or meeting rooms, auditoriums, libraries, courtrooms, classrooms, workshops, and utility and infrastructure accessory structures such as lamp posts, utility boxes, sidewalks, crosswalks, parking lots, and roads.

2."City building or facility" does not include motor pools, sewers, repair and maintenance focused projects on existing buildings and facilities, underground utility infrastructure, or buildings used solely for storage or warehousing.

03. Creation of Program- Collection & Use of Appropriations

Funds are:

- ❑ Administered by the Provo Arts Council
- ❑ Held in the Parks and Recreation Department's budget under the Covey Center Division

"1% of the original planned construction budget for a building or facility that the Art Council determines has sufficient public use or access, especially where the design and technical construction of the building or facility lend themselves to works of art, will be directed towards the Percent-For-Art program budget"

- ❑ "...does not include those parts of the budget funded through grants or other specific and/or restricted funding sources, inasmuch as doing so would violate the agreement/terms of the grants/funding source"

"The 1% contribution is the assumed contribution from each project selected to the Percent-for-the-Arts fund.

- ❑ If public art is a part of a new project's design and/or construction, the project's 1% contribution to the public art fund can be off-set or exempted. The exemption from the contribution, or an appeal for specific contribution amounts, will need final approval from the Arts Council.
- ❑ The funds collected through the program will go into a central arts fund...to be used for public art projects throughout the city; however, priority and primary use of funds may go towards art acquisition for the projects from which funds were collected."

Example 1:
New Infrastructure Project

*In this **fictional** scenario, a new road is being constructed with sidewalks, locations for bus stops, and street lighting.*

Total Capital Budget- $2.5 million

Original Construction Budget- $2 million

- **Restricted funding for project (federal) -** $650,000

→

Eligible budget subject to 1% collection- $1.35 million

1% to Percent for the Arts Fund- $13,500

Example 2: Additions to Existing Park

*In this **fictional** scenario, an existing city park is going to be adding in a new bathroom & additional seating/pavilion areas.*

Total Capital Budget- $550,000

Original Construction Budget- $425,000

- **Awarded grant for project-** $25,000

→

Eligible budget subject to 1% collection- $400,000

1% to Percent for the Arts Fund- $4,000

04. Selection & Placement of Art

“Art selected pursuant to the provisions of this policy for a public project may:

- ❑ Be placed in, on, or above any such project;
- ❑ Be attached or detached within or about such property; and
- ❑ Be either temporary or permanent.”

“The process of selection and placement of art shall proceed as follows:

- ❑ The Arts Council shall take applications and solicit submissions of art from artists. While priority will be placed on submissions for the newest or upcoming project from which funds were collected from, submissions can be ongoing and for anywhere in the city.
- ❑ The Arts Council shall create procedures, rules, and guidelines as they see necessary and fit to ensure the screening process of the submitted art proposals are fair and transparent as well as all other administrative duties including, but not limited to, ensuring the proper installation, maintenance, accessibility, retirement, and/or disposal of an art piece.

All public arts projects shall be located on:

- ❑ Property owned, leased, used, or otherwise occupied by the city or the Provo City Redevelopment Agency and within the corporate limits of the city; or
- ❑ Private property, subject to a license or easement approved by the city attorney allowing for maintenance and public access to the art project for the life of the project.

05. Program Guidelines

"The Provo Arts Council shall follow these guidelines in administering the program:

- Works of art shall be acquired under the program for use only with respect to those buildings or facilities that the Arts Council determines to have significant public use or access, especially where the design and technical construction of the building or facility lend themselves to works of art.
- Selection and placement shall consider the distribution of works of art throughout the various social, economic, and geographic communities of the city.
- Shall give first preference to Provo artists
- In selecting artwork…consider the community values of Provo and may reject any submissions or proposals on the basis they do not meet or uphold those values."

- "The Provo City Arts Council shall be the administrator of the program… Final appropriation for the art acquisition and placements shall be at the Municipal Council's discretion."

- "Any relocation of art placed under this program shall be done with participation from the Public Works Department and Facilities Division, as needed, and approval from the Director of the principal user and the Arts Council."

06. Title of Art

“Title to a work of art acquired by or created for the program vests upon its completion, installation, and final acceptance in the name of the city.”

07. Maintenance & Security

“The principal user of the building or facility in which the art is located is responsible, in cooperation with the Art Council, for the conservation, maintenance, and security of all works of art placed in or at each building or facility under the program.”

“Up to 15% of the funds acquired through the program may be used for the maintenance of public art, but this does not have to be the only source of funds needed for maintenance.”

08. Rights of Artist

An artist…has the following rights:

- ❑ all rights secured to the artist under federal copyright laws;
- ❑ the right to claim authorship of the work of art;
- ❑ the right to photographic reproduction of the work of art;
- ❑ the right of first refusal:
  - ❑ to conduct all repair and conservation work on the work of art in accordance with accepted principles of professional conservation; and
  - ❑ to purchase the work of art if the city decides to sell it; and
- ❑ the right to deny further association of the artist's name with or authorship of the work of art if conservation or repair work is done by a person other than the artist, which in the opinion of the artist damages its integrity.



Thank you

Memorandum

To:	Provo City Planning Commission
From:	Development Services Department
Print Date:	10/20/2022
RE:	Case Report on Public Works Standards Amendment - David Day (Applicant)

Public Notice:
Provo City Public Works Dept has requested Ordinance Text amendments to Section 15.03.020(3) of the Provo City Code to update the engineering design standards for 2023. Citywide application. Aaron Ardmore (801) 852-6404 aardmore@provo.org PLOTA20220333

Comments
Provo City Planning has reviewed the proposed changes from Provo City Public Works and supports the updates and amendments proposed within the referenced application above. The updates are as follows:

Proposals

- Proposed Ordinance Text Amendment text for PLOTA20220333.

- Changes to 2022 for 2023 Provo Public Works Standard Drawings
  15 pages of Provo Public Works Standard Drawing were edited to clarify questions that have been asked by contractors, engineers and developers.
  6 pages were removed.

- Changes to 2022 for 2023 Provo Public Works Development Design Standards
  5 pages of Provo Public Works Development Design Standards were edited to clarify questions that have been asked by contractors, engineers and developers.

- Proposed 2023 Provo Public Works Standard Drawings
  Clean copy containing all proposed changes.

- Proposed 2023 Provo Public Works Development Design Standards
  Clean copy containing all proposed changes.

Conclusion
Staff recommends that the Planning Commission forward a positive recommendation to the City Council of the proposed amendments to the Public Works design standards.

ORDINANCE 2022-.

AN ORDINANCE AMENDING PROVO CITY CODE TO UPDATE REFERENCES TO LOCAL DEVELOPMENT STANDARDS. CITYWIDE APPLICATION. (PLOTA20220333)

WHEREAS, it is proposed that Provo City Code Section 15.03.020 (General Development Standards) be amended to update the references to local development standards; and

WHEREAS, on November 9, 2022, the Planning Commission held a duly noticed public hearing to consider the proposed amendment, and after such meeting, the Planning Commission recommended approval to the Municipal Council by a vote of 6:0; and

WHEREAS, on November 15, 2022, the Municipal Council met to ascertain the facts regarding this matter and receive public comment, which facts and comments are found in the public record of the Council's consideration; and

WHEREAS, after considering the Planning Commission's recommendation and facts and comments presented to the Municipal Council, the Council finds (i) Provo City Code should be amended as described herein and (ii) the proposed amendment reasonably furthers the health, safety and general welfare of the citizens of Provo City.

NOW, THEREFORE, be it ordained by the Municipal Council of Provo City, Utah, as follows:

PART I:

Provo City Code Section 15.03.020 is hereby amended as set forth in Exhibit A.

PART II:

A. If a provision of this ordinance conflicts with a provision of a previously adopted ordinance, this ordinance shall prevail.

B. This ordinance and its various sections, clauses and paragraphs are hereby declared to be severable. If any part, sentence, clause or phrase is adjudged to be unconstitutional or invalid, the remainder of the ordinance shall not be affected thereby.

C. The Municipal Council hereby directs that the official copy of the Provo City Code be updated to reflect the provisions enacted by this ordinance.

D. This ordinance shall take effect immediately after it has been posted or published in accordance with Utah Code 10-3-711, presented to the Mayor in accordance with Utah Code 10-3b-204, and recorded in accordance with Utah Code 10-3-713.

END OF ORDINANCE.

Exhibit A

Section 15.03.020. General Development Standards.

. . .

(3) Provo City adopts and incorporates by reference into this section:

(a) The following nationally recognized, industry standards:

(i) Manual of Standard Specifications, 2017, American Public Works Association;

(ii) Manual of Standard Plans, 2017, American Public Works Association;

(iii) Manual on Uniform Traffic Control Devices for Streets and Highways (the "MUTCD"), 2009 Edition, Federal Highway Administration;

(iv) A Policy on Geometric Design of Highways and Streets, 6th Edition, American Association of State Highway and Transportation Officials;

(v) Trip Generation Manual, 10th Edition, Institute of Transportation Engineers; and

(b) The following local standards, which supersede those standards adopted by Subsection (3)(a) of this Section to the extent there is any conflict:

(i) ~~2022~~2023 Provo Standard Drawing Details;

(ii) ~~2022~~2023 Provo City Public Works Department Development Design Standards;

(iii) Utah Manual on Uniform Traffic Control Devices, For Streets and Highways, (FHWA's MUTCD 2009 Edition as amended for use in Utah), 2011, Utah Department of Transportation;

(iv) 2017 Standard Specifications for Road and Bridge Construction, 2017, Utah Department of Transportation;

(v) 2017 Standard Drawings for Road and Bridge Construction, 2017, Utah Department of Transportation; and

(vi) Utah Administrative Rules Titles R305-R317

Provo City Planning Commission

Report of Action

November 09, 2022

*ITEM #1 Provo City Public Works requests approval of an Ordinance Text Amendment to Section 15.03.020(3), Provo City Code, to update 2022 standards to 2023 standards. Citywide application. David Day (801) 852-6735 dday@provo.org PLOTA20220333

The following action was taken by the Planning Commission on the above described item at its regular meeting of November 09, 2022:

RECOMMENDED APPROVAL

On a vote of 6:0, the Planning Commission recommended that the Municipal Council approve the above noted application.

Motion By: Robert Knudsen
Second By: Jeff Whitlock
Votes in Favor of Motion: Robert Knudsen, Jeff Whitlock, Lisa Jensen, Melissa Kendall, Raleen Whalin, Andrew South
Lisa Jensen was present as Chair.

- Includes facts of the case, analysis, conclusions and recommendations outlined in the Staff Report, with any changes noted; Planning Commission determination is generally consistent with the Staff analysis and determination.

TEXT AMENDMENT
The text of the proposed amendment is attached as Exhibit A.

STAFF PRESENTATION
The Staff Report to the Planning Commission provides details of the facts of the case and the Staff's analysis, conclusions, and recommendations.

CITY DEPARTMENTAL ISSUES
- The Coordinator Review Committee (CRC) has reviewed the application and given their approval.

NEIGHBORHOOD MEETING DATE
- City-wide application; all Neighborhood Chairs received notification.

NEIGHBORHOOD AND PUBLIC COMMENT
- This item was City-wide or affected multiple neighborhoods.

CONCERNS RAISED BY PUBLIC
Any comments received prior to completion of the Staff Report are addressed in the Staff Report to the Planning Commission. Key issues raised in written comments received subsequent to the Staff Report or public comment during the public hearing included the following: None.

APPLICANT RESPONSE

Key points addressed in the applicant's presentation to the Planning Commission included the following:

- David Day explained the changes and showed some examples of what is being adopted as referenced in the City Code.

PLANNING COMMISSION DISCUSSION

Key points discussed by the Planning Commission included the following:

- The Planning Commission asked staff to go through several pages of the changes while staff explained some of the major changes being made.
- Lisa Jensen clarified that the ordinance change was just updating the references to the Public Work standards from 2022 to 2023.

Lisa Jensen

Planning Commission Chair

Bill Peperone

Director of Development Services

See Key Land Use Policies of the Provo City General Plan, applicable Titles of the Provo City Code, and the Staff Report to the Planning Commission for further detailed information. The Staff Report is a part of the record of the decision of this item. Where findings of the Planning Commission differ from findings of Staff, those will be noted in this Report of Action.

Legislative items are noted with an asterisk (*) and require legislative action by the Municipal Council following a public hearing; the Planning Commission provides an advisory recommendation to the Municipal Council following a public hearing.

Administrative decisions of the Planning Commission (items not marked with an asterisk) **may be appealed** by submitting an application/notice of appeal, with the required application and noticing fees to the Community and Neighborhood Services Department, 445 W Center Street, Provo, Utah, **within fourteen (14) calendar days of the Planning Commission's decision** (Provo City office hours are Monday through Thursday, 7:00 a.m. to 6:00 p.m.).

BUILDING PERMITS MUST BE OBTAINED BEFORE CONSTRUCTION BEGINS

EXHIBIT A

Section 15.03.020. General Development Standards.

. . .

(3) Provo City adopts and incorporates by reference into this section:

(a) The following nationally recognized, industry standards:

(i) Manual of Standard Specifications, 2017, American Public Works Association;

(ii) Manual of Standard Plans, 2017, American Public Works Association;

(iii) Manual on Uniform Traffic Control Devices for Streets and Highways (the "MUTCD"), 2009 Edition, Federal Highway Administration;

(iv) A Policy on Geometric Design of Highways and Streets, 6th Edition, American Association of State Highway and Transportation Officials;

(v) Trip Generation Manual, 10th Edition, Institute of Transportation Engineers; and

(b) The following local standards, which supersede those standards adopted by Subsection (3)(a) of this Section to the extent there is any conflict:

(i) 2023 Provo Standard Drawing Details;

(ii) 2023 Provo City Public Works Department Development Design Standards;

(iii) Utah Manual on Uniform Traffic Control Devices, For Streets and Highways, (FHWA's MUTCD 2009 Edition as amended for use in Utah), 2011, Utah Department of Transportation;

(iv) 2017 Standard Specifications for Road and Bridge Construction, 2017, Utah Department of Transportation;

(v) 2017 Standard Drawings for Road and Bridge Construction, 2017, Utah Department of Transportation; and

(vi) Utah Administrative Rules Titles R305-R317

2023 PROVO CITY
PUBLIC WORKS DEPARTMENT
DEVELOPMENT DESIGN STANDARDS



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INTRODUCTION

This document has been prepared and compiled by the Engineering Staff of the Public Works Department. This document is to assist developers in understanding the current procedures for the review and approval, by the Public Works Department, for developments within the City.

The review process may require multiple reviews and approvals. These include the Concept Plan Approval, Preliminary Plan Approval, and Final Plan Approval.

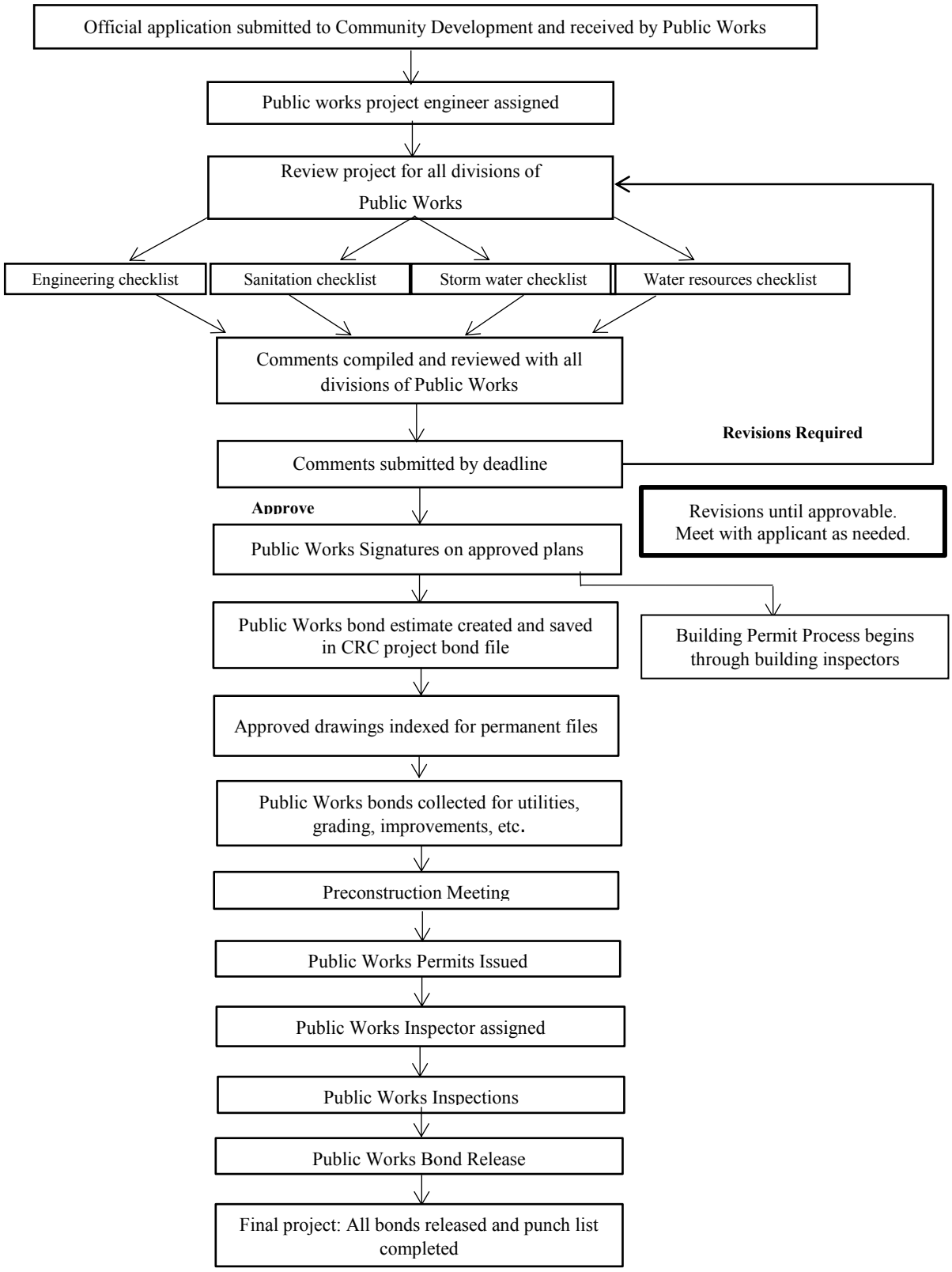
In addition to the previously mentioned reviews and approvals, developments may also require review and approvals for annexation and rezone requests.

This document includes a TABLE OF CONTENTS which directs the user to a specific topic and page; a process to guide the developer through the review and approval process; and information required to be included in the submittal process. All drawings shall be saved in the datum NAD 83, Utah State Plane, Central Zone, US Survey Foot, NAVD 88.

The items contained in the document have been prepared as a supplement to the adopted subdivision ordinances and standards, and are provided as an aid to the Developer. Through the use of this document, the Developer will be able to more closely comply with adopted standards.

This document is not intended to fully represent the current adopted subdivision ordinance, construction standards and drawings, master plans, or other City requirements. The Developer shall be responsible to comply with all of the adopted ordinances and standards of Provo City

PUBLIC WORKS DEVELOPMENT REVIEW PROCESS



CONCEPT PLAN CHECKLIST

This type of application must first be reviewed by the Coordinator's Review Committee (CRC) consisting of Provo City Staff. All submittals shall be submitted to Community Development. The City staff will make a recommendation to the Provo City Planning Commission for consideration. The Planning Commission has the authority to either approve or deny the request.

Below is a list of information that is required to be submitted with the application in order for City staff to process the request. If any of the required information is not submitted, the application will be considered incomplete and will not be accepted.

In compliance with the Provo City Code a concept plan application shall include:

1. Application form submitted it to the City
2. Receipt of all paid application fees
3. Plan submitted electronically showing the proposed development layout with the following information:
    a. Total acreage of the site and the percentages designated for various uses
    b. Proposed traffic circulation pattern
    c. Proposed recreation facilities and improvements
    d. General location of all dwellings and other structures
    e. Indication of proposed population and building densities (units per net acre).
    f. Preliminary elevations or perspectives of all building types including floor plans.
    g. A workable infrastructure plan for providing necessary streets, water, sewer, storm drainage, and electrical distribution for the entire tract.

Based on the size or complexity of the development proposal, staff may require any or all of the following additional information in order to obtain concept plan approval:

1. Complete and accurate legal description of the property
2. Preliminary title search showing legal ownership of the property.
3. Grading plan of the entire site
4. Preliminary subdivision layout
5. Phasing plan with a construction timetable for all phases

Staff will review the application and record that the information has been submitted. Upon receipt of a complete application with all necessary supporting drawings and documents, the plan shall be distributed to the various City departments for review, comments and approval. After each City department reviews the plan, they shall either request revisions to the submittal or approve the project as submitted. If the plan must be revised, then a revised concept plan shall be prepared which addresses the matters raised by City staff and then shall be resubmitted to the Community Development Department for review and approval.

PRELIMINARY PLAN CHECKLIST

This type of application must first be reviewed by the Coordinator's Review Committee (CRC) consisting of Provo City Staff. The City staff will make a recommendation to the Provo City Planning Commission for consideration. The Planning Commission has the authority to either approve or deny the request.

Applicant submits the preliminary project plan with a completed application, required fees and all supporting documents as required. Upon receipt of a complete application with all necessary supporting drawings and documents, the plan shall be distributed to the various City departments for review, comments and approval. After each City department review the plan, they shall either request revisions to the submittal or approve the project as submitted. If the plan must be revised, then a revised preliminary project plan shall be prepared which addresses the matters raised by City staff and then shall be resubmitted to the Community Development Department for review and approval. A preliminary project plan shall demonstrate compliance with application provisions of the Provo City Code. Concurrent with any request to rezone or annex property, a preliminary project development plan shall be submitted to the Community Development Department.

Any development plan that includes a preliminary subdivision greater than three (3) acres shall comply with Section 15.03.300 and Section 15.04.130, Provo City Code.

The preliminary project plan shall be submitted in a pdf electronic format.

Below is a list of information that is required to be submitted with the application in order for City staff to process the request. If any of the required information is not submitted, the application will be considered incomplete and will not be accepted.

Staff will review the application and check the boxes if the information has been submitted. As part of the application provide the following.

1. A complete and accurate legal description of the real property which is the subject of development.
2. A preliminary title search showing legal ownership of the property. If the applicant is not the property owner, the applicant shall also provide written proof that the applicant has sufficient legal claim on the property, and each parcel therein, to proceed with development plans. Such proof may be in the form of options, deeds, or contracts on which the developer shall be entitled to black out confidential information such as the amount of consideration paid or periodic payment amounts.
3. Topographic maps of the entire site, including contour intervals no greater than two (2) feet.
4. A tabulation of the total acreage of the site and the percentages thereof to be designated for various uses, i.e. parking, residential units, open space, public streets, private streets, landscaping, etc.
5. Proposed traffic circulation pattern including private driveways, public and private streets, pedestrian paths, location of parking spaces and ingress or egress.
6. Parks, common opens spaces, playgrounds, school sites, and other public or private recreation facilities and improvements proposed within the planned development.

7. General location of all dwellings and other structures in the planned development, and an indication of proposed population densities and building densities (units per net acre).
8. A general landscaping plan showing what areas are to be landscaped and what types of plants and materials are to be used together with their numbers and sizes.
9. Preliminary elevations or perspectives of all building types proposed within the development including floor plans.
10. Preliminary subdivision plat, if the site is being divided, showing a general layout of all proposed lots.
11. A workable infrastructure plan for providing necessary streets, water, sewer, storm drainage, and electrical distribution for the entire tract including the point from which said services are to be extended.
12. If applicable, a draft of the declaration of covenants, conditions, and restrictions.
13. If applicable, a phasing plan which including a construction timetable for all phases.
14. An existing features site analysis plan which shows the location of severely constraining elements such as steep slopes thirty percent (30%) or greater, wetlands, watercourses, drainage channels, one hundred (100) year flood plains, potential landslide areas, fault lines, rock fall areas, or any other sensitive land area. The site analyses plan shall also show the location of significant features such as but not limited to woodlands, tree lines, open fields or meadows, scenic views, rock outcrops, roads, tracks, underground utilities, power lines, trails, etc.
15. If applicable, a development agreement.
16. For all developments three (3) acres or greater or ten (10) housing units or greater, and as may be required for other developments as reasonably determined by the City Engineer, a traffic study addressing key traffic issues identified by the Provo City Traffic Engineer. In determining whether to require a traffic study the City Engineer shall consider existing and projected traffic patterns and volume, and whether a traffic study will yield information useful for undertaking review of a proposed project plan or other development plan. Items to be addressed in a traffic study shall include but not be limited to the following:
17. Trip generation rates for the development.
18. Threshold volumes and percent of threshold for the surrounding street system.
19. A local area street plan.

PLAT APPROVAL

1. INFORMATION TO BE INCLUDED
    A. The name of the subdivision in bold heading at the top of the drawing.
    B. Section, Township and Range
    C. City and County name
    D. Signature blocks for the Community Development Director, City Engineer, Mayor, and City Recorder.
    E. Signature blocks for owner dedication with proper attest blocks.
    F. Owners dedication narrative
    G. Boundary description narrative
        a. Must include the point of beginning tied to a found PLSS monument.
        b. Must have a tie to a second found PLSS monument for the establishment of the basis of bearing. Two found Provo City Centerline monuments may be used in the Provo City Block System. The exterior boundary must be described in full using bearings and distances.
    H. Boundary description as a drawing, matching the narrative.
    I. Dedication plat restrictions i.e. utility restrictions, setback restrictions, access restrictions, or other are required as part of development.
    J. Types and locations of all existing and proposed easements.
    K. Public utility and drainage easements are required in all subdivisions. The minimum width of easements shall be:
        a. On rear lot lines; eight feet on each side
        b. On front lot lines; eight feet
        c. On side lot lines; eight feet.
    L. In circumstances where a City utility traverses a lot or parcel to be developed the easement width shall be provided as required by the City Engineer.
    M. Slope easements shall be shown where required.
    N. Easements on street frontages shall be labeled as sidewalk and public utility easements.
    O. The placement/location of Public Utility Easements, Drainage Easements, and Sidewalk Easements may be adjusted with the approval from the City Engineer.

2. DESCRIPTION CLOSURE REQUIREMENTS
    A. The boundary must close to within 0.04 feet.
        a. The boundary description shall be traversed in a clockwise direction around the subdivision boundary. The exterior boundary must be described in full using bearings and distances
        b. The street centerline must close to the boundary within 0.04 feet. The centerline is placed using the boundary information.
        c. Individual lot boundaries must close to within 0.04 feet to the street boundary and to the subdivision boundary.
        d. The boundary to conform with adjacent parcels.

3. CENTERLINE INFORMATION
    A. Distances from monument to monument.
    B. Distance from PC to PT.
    C. Curve data to include
        a. Delta
        b. Radius
        c. Arc Length
        d. Chord bearing and distance
        i. Non-tangent curves to the approach and departure segments must also show the bearing to the center of the curve or the bearing for a tangent approach line.
        e. Prepare a table for numerous curves
4. PROPERTY AND LOT INFORMATION
    A. The square footage of the lot shall be shown.
    B. Addresses will be assigned by the Provo City Engineering Department

5. TITLE REPORT INFORMATION
    A. The title report is used to determine the proper owner's signature blocks; the location of existing easements; and to determine that the dedication plat and the property owned are the same parcel.
        a. The Title Report and the Dedication Plat must match exactly or include the entire subdivision and additional property. The report cannot be smaller than the subdivision.
        b. All easements shown on the Title Report must be shown on the Dedication Plat AND the easement owner must sign the Dedication Plat.
        c. The City Surveyor will review the Title Report and may direct the owner to remove specific easements or other encumbrances.
6. UTAH COUNTY RECORDER STANDARDS
    A. The plat shall have a border no larger than 24" X 36"
    B. The notary seal or lettering must be clear and legible.
    C. The subdivision title or heading must be consistent throughout all narratives.
    D. The owner(s)' signatures must be exactly as found on the Title Report.
    E. The scale must be clearly shown and must conform to the accepted standard, i.e. 1"=20', 30', 40', 50', 60' or 100'.
    F. All names shall be consistent on all narratives.

7. MONUMENT PLACEMENT
    A. Monuments shall be installed at all street intersections.
    B. Monuments shall be installed at the PI of all curves, or where the PI is outside
    C. All monuments installed to Provo City Standards

8. PLAT REVIEW CHECKLIST

All plats will be reviewed according to the current plat review checklist

FINAL PROJECT PLAN CHECKLIST

Final project plans must be submitted if the proposed project includes an industrial, commercial, institutional or multiple-family residential building, structure or use.

The following plans shall be submitted in an electronic pdf format. Upon approval CAD files shall be submitted which are applicable to Public Works, including fiber optic, water, sewer, stormwater assets, etc.

Site Plan

1. Legal description of property.
2. Dimensions of existing and proposed property lines.
3. Distances from buildings to property lines.
4. Square footage of existing and proposed structures.
5. Use of existing and proposed structures.
6. Location of all fire hydrants within 500' or fire suppression methods where applicable.
7. Trash storage container location, size and how enclosed.
8. Eight foot public utility easements along all property lines where applicable.
9. Location of existing and proposed easements and/or right-of-ways.
10. Location of power, telephone, and cable facilities, including poles, anchors, transformers, and connection pedestals.
11. Areas devoted to public or open space use.
12. A proposed density range of each phase/lot.
13. An existing features site analysis which shows the location of significant features and severely constraining elements.

Parking Plan

1. Parking space count.
2. Parking space dimensions, including back up area.
3. Ingress and egress.
4. Parking for people with disabilities.
5. Location of supporting columns in subgrade parking.

Landscaping Plan

1. Location and dimensions of landscaped area, showing existing and proposed landscaping.
2. Types and sizes of existing and proposed landscaping materials, plants, and trees.
3. Percent of landscaping.
4. Location and type of proposed and existing retaining walls, hedges or fences.
5. Proposed and existing sprinkler/irrigation system.

Building Design Plan

1. Exterior elevations of proposed buildings, indicating roofing materials, type of construction, exterior materials and colors.
2. Conceptual sign plans.
3. Total square footage for all floors, including rough floor plans.
4. Note all existing buildings proposed for use or for demolition.

Traffic Study

1. Any project with 3 acres or greater of area or 10 housing units or greater must complete a final traffic report addressing the following:
    a. Trip generation for the development using Provo Transportation Master Plan trip rates;
    b. Threshold volumes and percent of threshold for the surrounding street system;
    c. Local area street plan; and
    d. All other items as determined by the Provo City Engineer.
2. Direction of traffic flow through project.
3. Location and width of proposed and existing ingress and egress.
4. Evidence of Utah Department of Transportation access approval (if applicable.)
5. Proposed street layout and design.

Utility Plan

1. Location and size of existing and proposed water, sewer mains, laterals, power lines and utilities, gas lines and utilities, telephone utilities and connections.
2. A utility site plan for layout and design for new electrical facilities.

Drainage Plan

1. Location of existing and proposed storm drain structures.
2. Proposed drainage system.
3. Location of irrigation pipes, ditches, canals, waterways and detention basins.
4. Detailed drainage plans with calculations based on 10 year storm event, including total impervious surface area, drainage flows from roofs or parking structures.
5. Sump details, storm sewer profiles and construction drawings.

Grading Plan

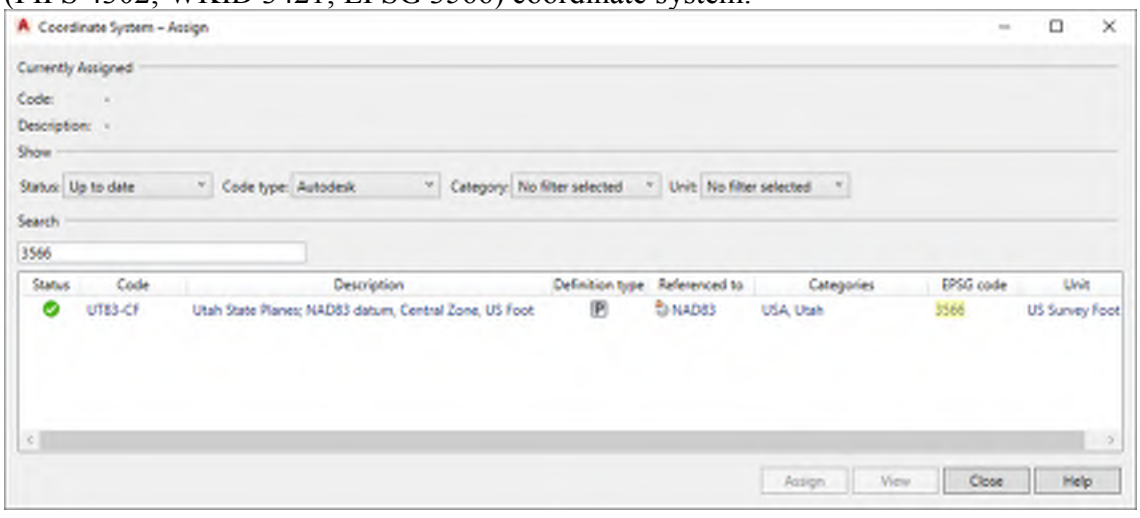
1. Grading shall be defined as any work including filling, cutting, excavation or relocation of material which affects the contour, slope, elevation or drainage features of a parcel of property, or which involves more than fifty (50) cubic yards of material.
2. No grading shall be accomplished without first having obtained a grading permit from the City Engineer. A grading permit may be obtained at the office of the Provo City Engineer after completion of an application for permit complying with any and all permit requirements.

Supporting Documents

1. Submitted plans should be accompanied with:
    a. A completed application,
    b. Required fees,
    c. Engineer or surveyor's computer generated information disc;
    d. Proof of single ownership or control of the subject property by title report, deeds, etc.;
    e. Market study or cost/benefit study if required by the Development Services Director;
    f. Phasing plan if the project is to be completed in phases;
    g. Final subdivision plat when determined applicable;
    h. Development agreement where applicable;
    i. Other information or studies to aid the Planning Commission in its deliberations;
    j. Other documents that require compliance with Provo City Code.

CAD Files

1. CAD files are required of approved plans and are submitted to Public Works adhering to the following standards:

    a. DWG file submitted must match the information represented on the mylars at the time of submittal for approval.
    b. DWG file must be defined in the NAD83 State Plane Utah Central Survey Feet (FIPS 4302; WKID 3421; EPSG 3566) coordinate system.
    c. 

    d. DWG file must contain data specific to utilities and reference data only and be named with an underscore "PW" (i.e. PROJECTNAME_PW).
    e. The CAD data must be stored using simple points, polylines and closed polylines representing asset centers, centerlines, and boundary extents.
    f. CAD data stored in the CAD layers must be contiguous and coincident where appropriate. For example, a sewer main pipe will be drawn using a polyline that extends to and whose endpoint is coincident with the end of the adjoining sewer

main pipe. The coincident endpoints will also be coincident with the point representing the center of the sewer manhole located between the two sewer main pipes.

g. Each drawing layer in the CAD file may only store a single data type. For example, if a layer is created to store proposed water valves, only simple points representing water valves may be stored in that layer. Extraneous information such as text blocks, annotation, leader lines, etc. may not be stored in the data layer. CAD layers must adhere to the following naming convention.
    i. A prefix of "EX_" or "PR_" or "_DM" will indicate whether the layer will store Existing, Proposed, or Demolish (remove) utility data.
    ii. A "W_" "S_" or "SW_" will indicate whether the layer will store data associated with the water system, sewer system, or stormwater system respectively.
    iii. The layer name will follow to indicate what type of data is stored in the layer, for example, MAIN for main pipes or LATERAL for lateral pipes. For example, PR_S_MAIN will be the layer storing polylines representing proposed sewer mains. The layer types are as follows:

Prefix	System	Name	Feature Type	Description
EX_, PR_, DM_	W_, S_, SW_	MAIN	Polyline	Represents main pipe centerline. Drawn with straight polyline consisting of two end points. End points will be coincident with points representing a system valve, hydrant, meter, CCCD, pump assembly, reservoir, lift station, network structure, or fitting of all types except wye and true wye.
EX_, PR_, DM_	W_, S_, SW_	LATERAL	Polyline	Represents lateral pipe centerline. Drawn with straight polyline consisting of two end points. End points will be coincident with points representing a system valve, hydrant, meter, CCCD, network structure, cleanout, or fitting of all types.
EX_, PR_, DM_	W_, S_, SW_	CASING	Polyline	Represents extents of pipe encasement, typically drawn as a rectangular, closed polyline overlapping with a MAIN or LATERAL pipe.
EX_, PR_, DM_	W_, S_, SW_	EASEMENT	Polyline	Represents extents of easement drawn as a closed polyline.
EX_, PR_, DM_	W_, S_, SW_	SYSTEM_VALVE	Point	Represents horizontal center of valve operating nut
EX_, PR_, DM_	W_	HYDRANT	Point	Represents horizontal center of hydrant assembly

EX_, PR_, DM_	W_, S_, SW_	VAULT	Closed Polyline	Represents vault horizontal extents
EX_, PR_, DM_	S_, SW_	MANHOLE	Point	Represents horizontal center of manhole (not lid)
EX_, PR_, DM_	W_, S_, SW_	FITTING	Point	Represents horizontal center of fitting (types below)
EX_, PR_, DM_	W_	METER	Point	Represents horizontal center of meter
EX_, PR_, DM_	W_	CCCD	Point	Represents horizontal center of cross connection control device (backflow assembly)
EX_, PR_, DM_	W_, S_, SW_	PUMP_ASSEMBLY	Point	Represents horizontal center of pump assembly
EX_, PR_, DM_	W_	RESERVOIR	Closed Polyline	Represents reservoir horizontal extents. Drawn with straight or curved lines closing to form an area.
EX_, PR_, DM_	S_, SW_	LIFTSTATION	Point	Represents horizontal center of sewer lift station
EX_, PR_, DM_	W_, S_, SW_	NETWORK_STRUCTURE	Point	Represents horizontal center of misc. (types below)
EX_, PR_, DM_	S_	CLEANOUT	Point	Represents horizontal center of sewer cleanout
EX_, PR_, DM_	W_, S_, SW_	SOGI	Point	Represents horizontal center of sand, oil and grease interceptor

FINAL SUBDIVISION CHECKLIST

The following is a brief outline of the submittal requirements that a developer should consider when submitting for an Annexation, Rezone, Concept Plan, Preliminary Plan or Final Plan Approval. This outline also lists the items that the Provo City Public Works Department will review at each approval level.

1. Annexation
    A. The Developer will provide a location map of the proposed annexation.
        a. The map will show the location of the parcel to be annexed, and will include the legal description of the parcel to be annexed.
            1. The legal description for the annexation will match the adjacent annexation parcels as recorded at the Utah County Recorder's Office or on file with the City recorder.
    B. The Public Works Department will provide a report concerning the actual annexation. The report will define the availability of water, sewer, storm drainage and street configuration for the proposed annexation area. This information will be of a general nature, and is not intended to be inclusive of all requirements for the proposed annexation area. The report will include development requirements that will be imposed as a condition of annexation.
    C. The developer shall provide an Annexation Plat to be reviewed and approved by the Provo City Surveyor, City Engineer and Community Development Director.

2. Rezone
    A. The Developer will provide the site plan location map. The map will show the location of the parcel for rezone and will include the legal description for the rezone.
    B. The Public Works Department will provide a statement concerning the ~~actual~~ rezone. This will include a statement which defines the availability of water, sewer, storm drainage and the street configuration for the proposed rezone area. This information will be of a general nature, and is not intended to be inclusive of all requirements for the proposed rezone area.

3. Concept Plan
    A. The purpose of the concept plan approval is to provide a layout and design which is general in nature. The configuration of the lots and streets shall be included.
    B. The Developer will submit:
        a. Lot Configuration
            1. Concept plan with boundary legal description.
                a. The site plan shall include adjacent parcels.
                b. The site plan shall be scaled no smaller than 1" = 100'
            2. Area of each lot
            3. Contour lines with actual elevations referenced to Utah County information.

a. 2 foot intervals shall be required. Additional contour information may be required.

4. Slopes exceeding 30% shown and are required to be avoided by development including grading and landscaping.
5. The site plan will show the location of any retainage structures that exceed a height of 10 feet that maybe will be required to be constructed prior to the construction of any home.

b. Street configuration
    1. Proposed street grades shall be included. Maximum street grade is 12% for local streets though 8% maximum is encouraged.
    2. Proposed street cross section.
    3. Locations of cuts/fills exceeding 2 feet.
c. Location of existing and proposed improvements
    1. Location of water, sewer, storm drainage, streets, and natural drainage path.
    2. Locations of existing easements, i.e. gas lines, irrigation lines, power lines, phone lines, private access easements.

C. The Public Works Department will provide the following information:
    a. A written memorandum addressing the acceptability of the street configuration, the street cross-section, the slope of the lots. The Community Development Department will address the lot size and their configuration.
    b. The memorandum will provide information concerning waterline size, possible off-site utility system improvements, sanitary sewer size and details, storm drain configuration, sub-surface drainage requirements, slope protection requirements (including easements and revegetation), and possibly other items specific to the development.
    c. The memorandum will specify if a geotechnical report will be required. If the report is required, it must be submitted with the Preliminary Plan.

4. Preliminary Plan
    A. The purpose of the Preliminary Plan is to show the feasibility of the proposed development and the conformance to the adopted standards. The Staff~~,~~ and Planning Commission may require alterations to the Preliminary Plan as necessary such that the development conforms to the standards and specifications of the City. The preliminary approval will give the developer the direction needed to complete the improvement plans. The preliminary approval shall terminate one year after the Planning Commission has given approval.
    B. The Developer shall submit a geotechnical study, if necessary, for the development area with the preliminary subdivision plan. The geotechnical report will contain the minimum information required, as shown in the geotechnical section of this booklet, and the improvement plans will reflect the recommendations of the geotechnical report.

C. The developer will submit an electronic pdf copy of the preliminary plan containing the following information.
    a. Lot configuration
        1. Preliminary subdivision plan with boundary legal description.
            a. The preliminary subdivision plan shall include adjacent parcels.
        2. Area of each lot
        3. Contour lines with actual elevations
            a. 2 foot intervals shall be required. Additional contour information may be required.
        4. Slopes exceeding 30% shown and are required to be avoided by development including grading and landscaping.
        5. The site plan will indicate that the maximum slope for a driveway shall be 15%.
    b. Street configuration
        1. Maximum street grade is 12% for local streets. 8% maximum shall be required unless approved by the City Engineer.
        2. Proposed street cross section conforming to City Street Standards.
        3. The preliminary plan shall include cross-section drawings at locations where the slopes will have cuts or fills exceeding two (2) feet on either site of the street. The cross-section drawings shall be spaced no greater than 50 feet.
    c. Location of existing improvements
        1. Location of water, sewer, storm drainage, streets, irrigation (open ditch or pressure lines) and natural drainage paths and/or creeks and streams.
        2. Locations of existing easements, i.e. gas lines, irrigation lines, power lines, communication lines~~,~~ and private access easements.
            a. All easements shall be shown on the preliminary subdivision plat.
        3. Location of all cuts/fills exceeding two (2) feet at the right-of-way line.
    d. Proposed configuration of public utilities, i.e., sanitary sewer, culinary water, storm drainage, sub-surface drainage, pressure irrigation, communication, natural gas, electrical power and cable T.V.
        1. The sizes of the system(s) must be shown but the City has the right to require changes to location and sizes prior to final submittal.
    e. Boundaries of areas subject to flooding or listed on the FEMA flood plan maps and drawings.
        1. Areas subject to flooding may include low areas created by street construction.
    f. Written approval from affected entities.
        1. Stream alteration – State Engineer

2. Irrigation system relocation – Irrigation users and company.
3. Acknowledgement to grant easements on adjacent private property from the property owner(s).

D. The Public Works Department will provide written comments through the CRC review process the following information:
   a. The acceptability of the street configuration, street cross-sections~~,~~ and the grading and slope of the lots. The Community Development Department will address the lot size and their configuration.
   b. Information concerning waterline size, sanitary sewer size and details, storm drain configuration, sub-surface drainage requirements, slope protection requirements (including easements and revegetation), possible off-site utility system improvements and other items specific to the development.
   c. If a geotechnical report will be required for the development, project review will not be completed until the geotechnical report has been submitted and reviewed.

CULINARY WATER SYSTEMS

1. WATER MAIN LINE UPSIZING OR EXTENSIONS
    A. The developer of a project which requires the extension or upsizing of water main lines shall pay the cost of such work.
    B. All subdivisions shall have a complete water distribution system installed before such subdivisions are accepted by the City.
        a. The design and construction of such a water distribution system shall meet all applicable standards and be approved prior to installation.
        b. The developer shall install the water distribution system at the developer's own expense for all water mains which are necessary to provide all required water per State and City design standards. Minimum static pressure at the point of use shall be 50 psi. Maximum shall be 120 psi.
        c. The system shall include a properly designed redundant feed from the nearest adequately supplied locations in the City water distribution system. Provo City will use a hydraulic model where required by State Code to verify that the capacity for fire flow and water demand as specified in the project plans are available. The proposed system shall be modified to comply with the model findings.
        d. If the Director requires increased capacity above that required for the project, the developer may be eligible for reimbursement for the difference in material cost between the main required for the development and the larger diameter main actually installed.
    C. When any street is to be paved from curb to curb with a permanent type of pavement, an eight (8) inch or larger water main shall be installed in that street prior to the paving of the street. The cost of installation of such water main shall be borne by the developer.
    D. If a person installs a water main line extension to serve a parcel, said main line extension shall extend completely across the parcel of property being developed.
    E. If a new water main line is installed, all new and existing service connections shall be connected to the new main line without splicing and all appurtenances shall meet current standards as shown in Standard Detail P-521.
    F. Multiple water main lines in street are only permitted in exceptional circumstances (e.g., varying pressure zones in the area).
    G. A developer who pays the cost of an off-site water main line extension may have the right of reimbursement described in Provo City Code Chapter 10.02.050.

2. CULINARY WATER MAIN STANDARDS
    A. All water system installation and design must conform to Provo City's Water System Master Plan and all applicable state administrative rules, particularly R309-550.
        a. Minimum allowable water main diameter shall be eight inches (8").

b. Main lines larger than the minimums shown above may be required if necessary for fire flow or pressure. Developer shall be responsible for an upsize based on providing sufficient capacity for the development.
c. If the Master Plan requires a larger pipe size than described in paragraphs (a) and (b), City may require the developer to install the larger size.

B. Waterline shall be Ductile Iron with polywrap, grease on bolts and #14 copper tracer wire per Provo Standard Drawing P-594 and installed per AWWA Standard C600-10. C900 PVC Pipe may be allowed with approval from director. HDPE, Steel, or other pipe material are not allowed unless expressly permitted by the Public Works Division of Water Resources. All construction and installation shall conform to standards referenced in R309-550-8 of the Utah Administrative Code.
    a.. Continuity of tracer wire shall be confirmed by an independent tester prior to requesting verification of continuity by Provo City and positive test results presented to City inspectors before City inspectors will check for continuity. Failure of a continuity test conducted by a City inspector will result in a re-inspection fee as set forth in the Consolidated Fee Schedule.

C. Waterline should typically be installed within the street section in the location shown on Provo Standard Drawing P-914.

D. Provide a minimum of ten (10) feet horizontal clearance between a water and sewer edge to edge per Utah Administrative Code R317-3-2 and R309-550-7 (laterals, services and main lines).
    a. Where a water main and a sewer line must cross, the water main shall be at least 18 inches above the sewer line. Separation distances shall be measured edge-to-edge (i.e. from the nearest edges of the facilities).
    b. Water mains and sewer lines shall not be installed in the same trench.
    c. Where local conditions make it impossible to install water or sewer lines at separation distances required by subsection (a), the sewer pipes are in good condition, and there is not high groundwater in the area, it may be acceptable if the design includes a minimum horizontal separation of 6 feet and a minimum vertical clearance of 18 inches with the waterline being above. In order to determine whether the design is acceptable, the following information shall be submitted as part of the plans for review.
        1. reason for not meeting the minimum separation standard;
        2. location where the water and sewer line separation is not being met;
        3. horizontal and vertical clearance that will be achieved;
        4. sewer line information including pipe material, condition, size, age, type of joints, thickness or pressure class, whether the pipe is pressurized or not, etc.;
        5. water line information including pipe material, condition, size, age, type of joints, thickness or pressure class, etc.;
        6. ground water and soil conditions; and,
        7. any mitigation efforts.

E. Minimum cover required shall be 52 inches (52”).

F. All new water infrastructure shall be pressure tested by maintaining 200 psi for two hours.
G. All materials that may come in contact with drinking water, including pipes, gaskets, lubricants and O-Rings, shall be ANSI-certified as meeting the requirements of ANSI/NSF Standard 61, Drinking Water System Components - Health Effects. To permit field-verification of this certification, all components shall be appropriately stamped with the NSF logo.
H. Pipe, joints, fittings, valves, and fire hydrants shall conform to ANSI/NSF Standard 61, and applicable sections of AWWA Standards C104-A21.4-08 through C550-05 and C900-07 through C950-07.

3. VALVES
   A. Valves shall be provided in all intersections and shall equal number of legs.
   B. Mainline valves on either side of tee shall be located a minimum of three feet (3') off a tee or cross and shall be MJ x MJ valves.
   C. Mainline Valves shall be located a minimum of three feet (3') from any fitting and shall be MJ x MJ valves.
      a. An exception would be a flanged connection on the stem of a tee.
   D. All valves larger than 12 inches (12") shall be butterfly design.
   E. All butterfly valves shall be of the double offset design and shall meet or exceed the requirements of AWWA C504-15.
   F. Provide concrete collars on valve boxes at ¼" below finished asphalt.
   G. Place valves at intersections per Provo Standard Drawing P-914.

4. WATER SERVICES
   A. No service line connections shall be made to Provo City's water distribution system or to main water lines on private property without authorization. The party making the connection shall be required to obtain a permit for the same and to pay the fees associated with that permit as shown on the Consolidated Fee Schedule.
   B. Water taps on public or private mains shall be installed by a qualified and licensed plumber or a pre-qualified utility contractor and inspected by the City.
   C. Minimum size shall be one-inch (1") diameter for service lines and meter yokes.
   D. Engineering calculations shall be required to show that meter size is adequate to meet demand for any uses other than detached single family residential or townhomes.
   E. The water service shall be in front of the property it services and shall not cross through other properties.
   F. No common use water services shall be allowed unless approved by the Water Resources Director.
      a. Service lines must be so arranged that the supply to each separate house or premises are controlled by a separate valve, placed within and near the line of the street curb.

b. Common use water services shall be eliminated as redevelopment of the site occurs, or if repair or replacement is needed. The construction or repair cost will be the responsibility of the Owner.
c. Master meter(s) or combined building meters may be allowed for private developments if approved by the Water Resources Director. All lines within the private development shall be private including those from the private mainline to the meter. The developer shall provide the City with an agreement defining who is responsible for maintenance and show the lines as private on the plat and utility plans. Individual shutoffs located near the curb are required for each unit.
d. Legal and physical access shall be provided to all meters.
e. All service lines shall be capped downstream of the meter box until connected for service.

5. ABANDONDED SERVICE LINES
   A. Whenever a water service line is abandoned in favor of a different service line, the old service line shall be disconnected from the main line and the old service tap shall be plugged at the main line. The cost of all such work shall be the responsibility of the owner of the property being serviced by the new water service line. Any work described in this Section shall be inspected by Provo City before backfilling. Prior to demolition permit approval, water services and fire lines shall be abandoned per Provo City standards.

6. FIRE HYDRANTS
   A. Provide minimum fire flow required by the Uniform Fire Code for proposed structures and fire flow calculations at all hydrant locations. Unless project specific information is provided, the following will be assumed:

Provo City Minimum Operational and Performance Criteria for Planning and Design

Component	Criteria
Fire Flow Requirements (flow [gpm] @ duration [hours]) [a]	
Single-Family Residential	1,500 gpm @ 2 hrs
Other	IFC or Fire Marshall
Water Distribution Line Sizing	
Max day plus Fire Flow or Average Peak Day Demand Condition	
Minimum Pressure, psi	50 psi (20 psi for fire flow)
Maximum Velocity, ft/sec	7 fps (excluding fire flow)

[a] Typical minimum flow will be verified by City on a case by case basis

   B. Install fire hydrants per Provo Standard Drawing P-511.
      a. Hydrants shall be connected to a minimum eight-inch (8") main using a minimum six-inch (6") diameter pipe.
      b. No bends are allowed on fire hydrant laterals.
      c. No services shall be allowed on fire hydrant laterals.
   C. Replace fire hydrant if the hydrant is to be moved.

D. Fire Hydrant spacing:
    a. Shall not exceed three hundred feet (300') in areas of multi-family dwellings, commercial and manufacturing uses.
    b. In single family dwelling use areas hydrant spacing shall not exceed five hundred feet (500 ft).
    c. Major roads shall have fire hydrants placed on both sides of the roadway to provide for Fire Department access to such hydrants.
E. Place fire hydrant within 100 feet (100') of the fire department connection (FDC).
F. Provide fire hydrants at the end of dead-end lines for flushing purposes.
G. Private fire service lines designed to provide fire protection to a building or buildings shall be constructed according to Provo City Standards at the expense of the owner of the building being serviced according to the following requirements:
    a. Maintenance associated with such fire service lines shall also be at the expense of said owner.
    b. Water service lines and meters may be connected to fire service lines when approved by the Director if the fire line has a redundant connection and said fire lines are intended to provide water to the building being serviced by the fire service line. In this case, the fire lines and service lines will be private and only appurtenances inside the meter box will be maintained by the City.
    c. Provide a valve on the mainline. Fire line after the valve shall be private.
    d. Fire suppression system and hydrants are not allowed on the same line unless the fire line has a redundant connection.
    e. Provide approved backflow prevention.

7. WATER VAULTS/METER BOXES
    A. Whenever a new service line is installed connecting any premises to an unmetered private line which is supplied water from the water mains of Provo City, or whenever a service pipe is connected directly to the water system of said City, a water meter must be installed.
    B. All water meters shall be installed in easily accessible locations.
    C. No meter box shall be allowed in any street, driveway, driveway flare, or sidewalk without express written permission of Provo City.
    D. At the time of a significant remodel or new construction, existing services and meter sets must be brought up to current standard with dual check valves in meter yoke and new can. If the service line is damaged, deteriorated, or galvanized pipe, the OWNER shall replace the water service from the mainline to the meter. Splices between the mainline and meter yoke are not allowed so if a meter location is changed to be farther from the mainline, a new service line from the main to meter yoke is required.
    E. Water meters shall be furnished and installed by Provo City.
    F. Water meters shall not be installed until:
        a. Proper demolition of old water lines and services has been completed or a bond for such demolition has been received.

b. Newly installed main lines have been pressure tested, disinfected, and approved and service lines, including meter boxes and appurtenances, have been inspected and approved.
c. No meters shall be installed until all applicable fees have been paid including water connection fees, impact fees and main line extension fees as appropriate.

8. THRUST RESTRAINTS
   A. Concrete thrust blocks:
      a. Provide concrete thrust blocks at all taps, temporary dead ends and at the base of all hydrants.
      b. Place thrust blocks directly against undisturbed earth.
      c. Provide bond breakers on all thrust blocks.
      d. All other locations shall rely on restrained joints to handle thrust unless directed otherwise by City
   B. Joint Restraints:
      a. The number of joints that need to be restrained back from thrust producing fittings shall be determined by the design engineer and approved by the City.

9. BACKFLOW PREVENTION DEVICE
   A. Install a backflow prevention assembly approved by the State of Utah downstream of all meters larger than 2-inch, residential services connected to a private water source and ahead of all outside irrigation systems. The backflow prevention device shall meet all requirements of Utah Administrative Rule R309-105 and the International Plumbing Code.
   B. Reduced Pressure Zone (RPZ) backflow prevention and a swing check connection is required between all private water sources and the City water system.
   C. Comply with City Standard Drawings.
   D. Contact cross connection coordinator at (801) 852-6788 for inspection of the backflow prevention devices other than dual check valves inside meter boxes.

10. WATER LINE LOOPING
   A. Looping of water lines creates a vulnerability in the system; therefore, looping is highly discouraged. All other alternatives should be investigated prior to proposing looping, which should be the option of last resort.
   B. If looping of water lines is approved by Provo, the Director may assess a fee for shutting down the existing line and to provide for future maintenance of the loop. The fee will vary based on the size of the line being looped.

11. EASEMENTS
   A. Provide a minimum twenty feet wide (20') public utility easement for all public water mains installed outside of the street right of way or other City owned property. Unless otherwise approved, the water line should be installed in the center of the easement.

12. OTHER APPURTENANCES

A. Provide pressure reducing stations if required by Water Resources Director.

B. Air relief valves and blow-offs at high points may be required if other means of air release are not provided. If used, air relief valves and blow-offs shall comply with the following:

   a. The open end of the air relief vent pipe from automatic valves shall be provided with a #14 mesh, non-corrodible screen and a downward elbow, and where possible, be extended to at least one foot above grade. Alternatively, the open end of the pipe may be extended to as little as one foot above the top of the pipe if the valve's chamber is not subject to flooding, or if it meets the requirements of Chamber Drainage.

   b. Blow-offs or air relief valves shall not be connected directly to a sewer.

   c. Adequate number of hydrants or blow-offs shall be provided to allow periodic flushing and cleaning of water lines.

   d. The air relief valve shall be installed in a manner to prevent it from freezing. A shut-off valve shall be provided to permit servicing of an air relief valve.

C. All booster proposed stations and storage tanks subject to Water Resources Director approval and shall meet all the following requirements:

   a. All booster stations and storage tanks shall be identified as part of the City's master plan and shall be designed to service large City areas and not individual developments. Private booster stations are not allowed.

   b. No booster stations shall be constructed without a storage tank of sufficient size to meet all sizing requirements of Utah Administrative Code R309-510. Said tank shall be located at an elevation sufficient to provide gravity flow to its service area and shall be designed to work cooperatively with all other components of the water source, storage and distribution system.

   c. The booster station shall be located on a main with sufficient size and pressure to provide the required flow without causing any part of the water system to fail to meet pressure requirements.

D. Chambers, pits, or manholes containing valves, blow-offs, meters, or other such appurtenances to a distribution system, shall not be connected directly to a storm drain or sanitary sewer. Chambers shall be provided with a drain to daylight, if possible. Where this is not possible, underground gravel-filled absorption pits may be used if the site is not subject to flooding and conditions will assure adequate drainage. Sump pumps may also be considered if a drain to daylight or absorption pit is not feasible.

13. SOURCE PROTECTION

A. Comply with 10.06.030 Provo City Code Annotated and R309-600 of Utah Administrative Code which require the protection of all sources of drinking water, including groundwater. Potential contamination sources such as gas stations, dry cleaners, and surface water infiltration are not allowed in areas where a spill, leak, or contamination may adversely impact drinking water wells, springs, or other drinking water sources.

SANITARY SEWER SYSTEMS

All Sanitary Sewer installation and design shall comply with Provo City's Wastewater Collection System Master Plan.

1. SEWER MAIN LINE UPSIZING OR EXTENSIONS
    A. The developer of a project which requires the extension or upsizing of sewer main lines shall pay the cost of such work.
    B. All subdivisions shall have a complete sewer distribution system installed before such subdivisions are accepted by the City.
        a. The design and construction of such a sewer distribution system shall meet all applicable standards and be approved prior to installation.
        b. The developer shall install the sewer distribution system at the developer's own expense for all sewer mains which are necessary to provide all required sewer per State and City design standards.
            1. Design 8"-15" pipes to flow no more than Half Full at Peak Flow.
            2. Design 18" and Larger Pipes to flow no more than 75% Full at Peak Flow.
            3. Include inflow and infiltration in sizing calculations.
            4. Provo City may use a sewer model to verify sewer capacity is available for the proposed project as specified in the project plans. The proposed system shall be modified to comply with the model findings and offsite improvements may be required prior to development.
            5. Ensure that transmission pipes sizes are sufficient for future growth in the area per the most recent Provo City's Wastewater Collection System Master Plan. If the Master Plan requires a larger pipe than the development, City may pay for the difference in material cost between the size required for the development and the larger size.
    C. When any street is to be paved from curb to curb with a permanent type of pavement, an eight (8) inch or larger sewer main shall be installed in that street prior to the paving of the street. The cost of installation of such sewer main shall be borne by the developer.
    D. If a person installs a sewer main line extension to serve a parcel of property, said main line extension shall extend completely across the parcel of property being developed.
    E. A developer who pays the cost of an off-site sewer main line extension may have the right of reimbursement described in Provo City Code Chapter 10.03.040.
2. SEWER PIPE MAIN STANDARDS
    A. Minimum mainline size shall be 8" in diameter. Actual size of mainlines shall provide adequate flow for current and future development.
    B. Provide green PVC (polyvinyl Chloride) SDR 35 or approved equal.
    C. Sewer mainlines and laterals shall be marked with a detectable green colored locator tape.

D. Minimum depth of the sewer mainlines shall be seven (7) feet below finish grade. In areas where basements are allowed, sewer mains shall be deep enough to service basements.

E. Sewer mainline grades are as follows:

Minimum Sewer Main Pipe Slope*	
8 inch sewer lines**	0.40%
10 inch sewer lines	0.28%
12 inch sewer lines	0.22%
15 inch sewer lines	0.15%
18 inch sewer line	0.12%
21 inch and larger sewer lines	0.10%
* Sewer mains may not be upsized only for the purpose of installing at a flatter slope unless information is provided by the engineer showing that there is adequate scour volume to keep the line clean without increased maintenance. ** The first segment(s) of 8 inch sewer mains may be required to be placed at 1% min slope if there is not sufficient flow to provide adequate scour volume.	

F. All sewers which are designed to flow at 10 feet per second or greater shall be reviewed by City for approval or alternate design consideration. Suitable thrust blocks, concrete anchors or equivalent restraints shall be provided per R317-3-2 of the Utah Code when pipe slopes are 10% or greater.

G. Horizontal clearance to any culinary water line shall be at least 10 feet (10') edge of pipe to edge of pipe per R309-550 and R317-3-2.
   a. Utilities crossing sewer mains shall cross as close to a right angle as possible.
   b. Provide a minimum vertical clearance of eighteen inches (18") between water and sewer with water main lines and service above the sewer measured from the outside of the pipes.
   c. When utilities are bored near sewer mains, laterals and all crossings, the sewer utilities shall be TV inspected.

3. MANHOLE DESIGN STANDARDS

A. Manholes shall conform to Provo Standard Drawing P-411.

B. Depth transitions shall occur between manholes. Drop manholes are discouraged and may only be used with explicit written approval and shall conform to Provo Standard Drawing P-433.

C. Sewer manholes shall be installed:
   a. At a maximum spacing of four hundred (400) feet.
   b. At all changes in grade, size or alignment, and at all intersections with other mainlines.
   c. At the end of main lines (no cleanouts allowed on mainlines).
   d. All six-inch (6") and larger laterals on commercial or multi-family laterals require a manhole at the connection to the public main.

D. Sewer manholes shall be sized based on the following:
   a. Five (5) foot Diameter manholes required at three-way manholes, 90° bends, over 15" and 18" pipes, manholes over 10' deep, and in manholes with over one foot of drop across manhole.

b. Six (6) foot Diameter manholes required over pipes 24” and greater, and at three-way manholes where the deflection exceeds 90° and height of manhole exceeds 16'.

4. ABANDONMENT OF SEWER LATERALS
   A. Whenever an existing sewer lateral(s) is abandoned in favor of a new lateral, the Owner shall disconnect the existing sewer lateral from the main and plug the lateral tap into the main. All costs associated with labor and material for such work shall be the responsibility of the property owner causing the lateral to be abandoned. All work shall be inspected by Provo City before backfilling. Prior to demolition permit approval, sewer laterals shall be abandoned per Provo City standards.

5. SEWER LATERAL DESIGN STANDARDS
   A. Sewer taps will be performed by the contractor and inspected by a City Inspector.
      a. Sewer taps into an existing eight (8) inch main shall not be greater than four (4) inches.
         1. Direct nose-on connections may only be used when connecting to an existing mainline. The installation must be inspected and a saddle used when warranted.
         2. Connections to new mains shall be with a wye and a forty-five degree (45º) bend.
      b. Minimum distance between connections shall be four feet.
      c. Sewer laterals shall connect to sewer main lines and not discharge into manholes.
   B. At the time of significant remodel or change of use, reuse of existing laterals may be allowed for use only if the following conditions are met:
      a. The existing lateral is of sufficient size and slopes for the proposed use.
      b. The existing lateral is in good condition, free from damage, bellies, leaks, or deviations in slope.
      c. If the above criteria cannot be met the Owner shall abandon the existing lateral at the main and provide a new lateral that meets all current Provo Standards and Specifications.
      d. The existing lateral is ABS (Acrylonitrile-Butadiene-Styrene) or PVC
   C. Allowable sanitary sewer lateral pipe material shall be as follows:
      a. ABS (Acrylonitrile-Butadiene-Styrene) schedule 40, black in color. For use in sewer laterals only.
      b. PVC (Polyvinyl Chloride) SDR 35 or other approved wall thickness for laterals (green in color).
      c. Lining is allowed only after review and approval of CCTV of lateral by Provo City personnel.
   D. Minimum lateral size shall be as follows:
      a. Single family residential: four (4) inches in diameter with 2% minimum slope.

b. Individual lateral serving five (5) or fewer residential equivalent units: four (4) inches in diameter with a minimum slope of 2%.
c. All other uses: minimum six inches (6") diameter with a slope of 2%. A 1% minimum slope may be used if approved as part of the City review.
    1. The sewer lateral size shall be based on actual project flows, but in no case shall the lateral be less than six inches (6") in diameter.
    2. The sewer lateral shall be in front of the property it services and shall not cross through other properties.

E. The policy of the City regarding the number of separate service laterals for residential and commercial structures is as follows:
    a. Each separate lot, parcel, dwelling unit, building, house, business or premises shall be served by an individual lateral except as allowed in paragraph (c).
    b. For one- and two-family dwelling structures, a separate service lateral for each dwelling unit is required.
    c. For multiple-family dwelling structures, stacked dwelling units, or commercial structures separate service laterals for each unit shall be the general rule. However, where design dictates otherwise, a common lateral for multiple units (or fewer laterals than the number otherwise specified) may be permitted where the applicant provides adequate documentation, including signed and stamped engineering calculations, and guarantees to assure adequacy of sewer/wastewater collection and responsibility for payment and maintenance. Easements may also be necessary where common laterals cross property lines. In any such case, the Water Resources Director has sole discretion to permit or reject a reduction in the required number of service laterals accordingly.
    d. Common sewer laterals approved under paragraph (c) shall be have a minimum diameter of six (6) inches for all laterals serving more than five residential equivalent units.
F. Sewer laterals shall not be allowed to connect into any private sewer system without permission from the owner of said system.
G. Cleanouts shall be required at a minimum of every 100 feet (100') and at bends forty-five degrees (45°) or greater. All laterals shall have at least one cleanout.

6. PRETREATMENT
    A. Pretreatment
        a. Pretreatment will generally be required for each use producing excessive grease, sand, oil or sewer load different from a standard residential unit.
        b. All covered parking lots, car washes, restaurants, auto shops and interior floor drains that are subject to receipt of sand, silts, chemicals, petroleum products, or other contaminants must have a grease trap, sand/oil separator, or other appropriately designed system to pretreat all process waste water before it enters the collections system.

c. Grease Interceptors shall be sized according to the current manual of the Uniform Plumbing Code (UPC) with a minimum size of 750 gallons and be installed per Provo Standard Drawing P-441.
    1. All drainage fixtures in any food and beverage preparation area or any process which produces fats, oils, or greases (FOG) shall be routed through a grease interceptor.
    2. Food grinders or disposals are heavily discouraged.
    3. Restroom waste shall not be routed through grease interceptor.
d. Include note on plans to contact the Pretreatment Coordinator at 801-852-6793 regarding required pretreatment and grease interceptors.
e. The Interceptor shall have manhole rings and covers rated for traffic loading.
f. A sampling manhole shall be installed no more than 10 feet (10') downstream from any interceptor.
    1. The required vault will be a four-foot (4') manhole unless otherwise approved by the pretreatment coordinator.
    2. Sampling vault should be at flowline with no hydraulic jumps.
    3. A six inch (6") minimum clearance is required from the end of the inlet pipe to the bottom of the sampling manhole flowline.
    4. The bottom of the sampling manhole shall be formed to slope the water towards the outlet pipe.
    5. If the inlet is greater than six inches (6") a plan will need to be submitted and approved by the City.

7. EASEMENTS
    A. Provide a minimum twenty feet wide (20') public utility easement for all public sewer mains installed outside of the street right of way or other City owned property. Unless otherwise approved, the sewer line should be installed in the center of the easement.
8. LIFT STATIONS
    A. No temporary or private lift stations shall be allowed.
    B. In extenuating circumstances, a single grinder pump servicing a single residential home may be allowed with prior approval.
9. SHALLOW SEWER
    A. Provide the following note on the plat for sewer main line depths less than 10 feet (10'):
        a. "Shallow Sewer Depths! Contractor shall verify sewer lateral depth and set foundation elevation to provide adequate fall into sewer lateral. Buildings with a basement may not have sewer service available for basement."
    B. Provide the following note on the plat for property on one side of the street is low enough to make providing sewer to the property from the street difficult:
        a. "Low Lots! Contractor shall verify sewer lateral depth and set foundation elevation to provide adequate fall into sewer lateral. Buildings with a basement may not have gravity sewer service available for basement."

STORM DRAIN SYSTEM

This section of the Development Design Standards is intended as a "quick guide" to storm drainage requirements. More complete guidance is contained in the Provo City Storm Drainage System Design and Management Manual (Drainage Manual), which can be found on the Provo City Public Works – Storm Water web page.

1. DRAINAGE SUBMITTAL REQUIREMENTS (Chapter 3 of the Drainage Manual)
    A. A geotechnical report identifying groundwater elevation is required for all developments that lie within the high Water Table Area, as defined in Section 15.03.010(2), Provo City Code, and for other areas determined by the Public Works Director or their designee as likely to have shallow ground water.
    B. Sites proposing retention and infiltration are required to submit a field infiltration analysis measuring the in-situ infiltration rate. The design infiltration rate must use a safety factor of at least 2 in order to account for plugging, silting, and the creation of biofilms over time.
    C. A Lot Grading Plan shall be submitted for single-family residential lots, meeting the requirements of Section 3.2 of the Drainage Manual.
    D. Concept Plan drawings submitted as part of a rezone request shall include the information required in Section 3.3 of the Design Manual.
    E. A Storm Drainage Report and Management Plan shall be submitted for all developments requiring Project Plan approval, following the requirements in Section 3.4 of the Drainage Manual
    F. Regular Maintenance and inspections of private drainage facilities is the responsibility of the owner(s) of said facility. See Section 18.03.040 for minimum maintenance and inspection requirements.
    G. All development located wholly or partially within the FEMA floodplain must obtain a Floodplain Development Permit from the City. Permit requirements are identified in Section 15.05.180, Provo City Code.
    H. Storm Water Pollution Prevention Plans (SWPPPs) are required for all projects disturbing more than 1 acre, and for residential lots meeting the criteria for Common Plans of Development.

2. HYDROLOGY (Chapter 4 of the Drainage Manual)
    A. Acceptable hydrologic methods are the Rational Method (up to 200-acre drainage area for peak flow calculations, or up to 20-acre drainage area for volume calculations) and the SCS Curve Number Method using the Farmer-Fletcher distribution.
    B. Base criteria is that storm drains, minor ditches, detention, and retention facilities control the 10-year design storm. Single-family residential development and public streets may discharge flows to downstream storm drain facilities un-detained. All other development types must detain 10-year flows onsite, with a maximum discharge of 0.2 cfs/acre.

C. If a project cannot show a positive overflow path for the 100-year design storm to downstream streets, major channels, or the Provo River without flooding homes, buildings, or other critical facilities, the 100-year design storm must be controlled onsite.
D. Values used for rainfall depths and intensities are provided for three weather stations around Provo, as contained in Tables 4-2A through 4-3C in the Drainage Manual. The exhibit in Appendix A of the Drainage Manual shows the location of the three weather stations, and the areas where the corresponding table should be used.
E. Rational Method Runoff Coefficients are contained in Table 4-4 of the Drainage Manual
F. Rainfall distribution patterns for the Farmer-Fletcher distribution are contained in Tables 4-5 and 4-6 of the Drainage Manual.
G. SCS Curve number models shall use a "base" curve number based on Table 4-7 of the Drainage Manual, with impervious cover accounted for separately.

3. STREET DRAINAGE (Chapter 5 of the Drainage Manual)
   A. Street inlets shall conform to Provo City Standard Details P-315a through P-315d.
   B. Inlets shall be placed on both sides of street at a distance of no more than four hundred (400) lineal feet of street curb and gutter, when gutter flows are =>3 cfs, and upstream of every intersection, ADA ramp, and reverse grade driveway. Additional inlets may be required to capture the 10-year design flow.
   C. A minimum of double inlets shall be required at low points of vertical curves and on steep slopes (5% or greater). Downhill-sloping cul-de-sacs and dead end are generally not allowed, but if they are specifically approved they shall require double inlets and a 100-year overflow path.
   D. The use of combination inlet type of structures is generally not allowed, and shall require special permission in rare cases where a separate inlet and manhole is not feasible.
4. STORM DRAIN (Chapter 6 of the Drainage Manual)
   A. The minimum allowable pipe diameter is 18 inches for mainline and 15 inches for laterals from inlet to manhole.
   B. Public storm drain shall be reinforced concrete pipe (RCP).
   C. Storm drain manholes shall conform to APWA Standard Detail 341. Manholes shall be located no further than 400-feet apart, and at all pipe transitions including changes in direction, elevation, slope and pipe size.
   D. Normal depth calculations can be used for sizing only when calculations show all pipes are no more than 75% full. Alternatively, full hydraulic modeling can show flow under full pipe capacity, with the HGL no high than 1-foot below grade.
5. OPEN CHANNELS (Chapter 7 of the Drainage Manual)
   A. Open channel design shall be dictated by the maximum permissible velocity of the channel material/lining. See Table 7-1 in the Drainage Manual.
   B. Unless otherwise approved, channel side slopes shall not be steeper than 3H:1V.

C. Open channels shall have a minimum of 1 foot of freeboard from design depth to top of bank.

6. CULVERTS AND BRIDGES (Chapter 8 of the Drainage Manual)
   A. Large bridges (more than just RCP or RCB) shall be design using UDOT bridge design criteria.
   B. A culvert blockage factor of 50 percent shall be used for culverts placed in drainages with upstream debris potential as determined by the City.
   C. A minimum of 2 feet of freeboard is required unless otherwise approved. Culverts within the FEMA floodplain may be subject to additional freeboard requirements.
7. DETENTION/RETENTION BASINS (Chapter 9 of the Drainage Manual)
   A. Sizing criteria is based on design storm and maximum discharge requirements shown in Chapter 4 of the Drainage Manual)
   B. The maximum ponding depth is 3 feet during the 10-year design storm for above ground basins. A minimum 1 foot of freeboard for the 10-year storm is required.
   C. Side slopes shall be 3H:1V or flatter for above ground basins.
   D. Minimum bottom slope for detention ponds is 2%, unless a flatter slope with a low flow channel or soil amendments to promote infiltration is approved by the Public Works Director or their designee.
   E. Retention/infiltration facilities are not allowed in well protection Zones 1 and 2.
8. SENSITIVE LANDS (Chapter 10 of the Drainage Manual)
   A. A geotechnical report identifying groundwater elevation is required for all developments that lie within the high Water Table Area, as defined in Section 15.03.010(2), Provo City Code, and for other areas determined by the Public Works Director or their designee as likely to have shallow ground water.
   B. All development located wholly or partially within the FEMA floodplain must obtain a Floodplain Development Permit from the City. Permit requirements are identified in Section 15.05.180, Provo City Code.
   C. Development must a minimum of 1-foot above the Utah Lake base flood (100-year) elevation, including roadways, residential lots, and residential finished floors (including basements). Commercial buildings must either be 1 foot above or be flood proofed to that elevation.
   D. Developments located within or adjacent to the Provo River floodplain and other floodplains identified on the FEMA FIRMs, must be 1-foot above the base flood (100-year) elevation, including roadways, parking lots, and residential finished floors (including basements).
   E. The American Society of Civil Engineers (ASCE) Standard 14, adopted by reference in the International Building Code (IBC), has additional freeboard requirements of critical structures.

9. WATER QUALITY (Chapter 11 of the Drainage Manual)
   A. Development project that disturb land greater than or equal to one acre, including project that are part of a larger common plan of development or sale which

collectively disturbs land greater or equal to one acre, are subject to the water quality requirements in Chapter 11 of the Drainage Manual.

B. New development must retain the 80th percentile storm (see Table 11-1 of the Drainage Manual). Redevelopment projects must either provide a net gain to onsite retention or net reduction to impervious surface. Redevelopment projects increasing the impervious surface by greater than 10% must retain the net increase in the volume associated with the 80th percentile storm.
C. A Storm Water Quality Report shall be submitted for all projects meeting the applicability standard, using the template in Appendix F of the Drainage Manual.
D. See Chapter 11 of the Drainage Manual for approved Best Management Practices (BMPs), and alternative methods if meeting the full retention standard is determined to be infeasible.
E. Standard Details for common BMPs are included in the Provo Standard Drawing Details (Supplement to the APWA Manual of Standard Plans).

10. MAINTENANCE ACCESS AND EASEMENTS (Chapter 12 of the Drainage Manual)

A. Storm water facilities located on private property shall generally be maintained at the expense of the property owner, unless it collects or conveys public storm water.
B. Private facilities that are owned or maintained by someone other than the property owner (such as irrigation lines owned and maintained by private irrigation companies, or drainage facilities maintained by the HOA) must be located in an easement in favor of the facility owner. Coordinate with the private facility owner for easement size requirements.
C. Easement and maintenance access requirements for facilities to be owned or maintained by the City are detailed in Chapter 12 of the Drainage Manual.
D. Regardless of ownership, open channels shall be a minimum of 20-feet from structures such as buildings, sheds, etc. Detention and retention basins shall be a minimum of 40-feet from structures, or provide engineered water proofing measures. Storm drain shall be located a minimum of 10-feet from structures.

SUB-SURFACE DRAIN – (AS REQUIRED)

1. SUB-SURFACE DRAIN SIZE DETERMINATION
    A. The minimum sub-surface drain size shall be eight (8)-inches.
    B. The sub-surface drain shall be sized to carry 0.8 cfs per 100 acres of developed area.
    C. The sub-surface drain shall have a minimum flow velocity of one (1) foot per second.
    D. The minimum slope on a sub-surface mainline drain shall be 0.4%.
    E. A sub-surface drain shall be a separate system from the storm drain system. A sub-surface lateral shall not connect to storm drain lines.

2. SUB-SURFACE DRAIN LINE PLACEMENT
    A. The sub-surface drainage system shall be installed as determined by the City.
    B. Sub-surface drain lines shall not be placed in side lot or rear lot property lines unless approved by the City.
        a. Sub-surface drain lines that are approved for side lot or rear lot installation shall have a 20-foot easement provided.
        b. Sub-surface drain lines that are approved for side lot or rear lot installation shall provide for vehicular access to all manholes.
    C. The lines shall be installed with a minimum cover of 4.5 feet from the top of the pipe to the finish ground elevation.
    D. The design should insure that there will be no conflict between the land drain line and the sanitary sewer line.
    E. The lateral line will be installed within 5 feet of a common property line. The contractor will install identifier tape one foot over the lateral, running the length of the lateral, with the wording ‘Drain Line’ on the tape.

3. MANHOLE SIZE AND PLACEMENT DETERMINATION
    A. Manholes shall be installed as follows:
        a. Maximum spacing is 400 feet.
        b. Change in alignment.
        c. Change in slope.
        d. Junction with other lines.
    B. Minimum size manhole is four-foot (4) inside diameter.
    C. Five-foot (5) inside diameter manholes shall be used for all locations as follows:
        a. Intersection of three land drain lines.
            1. A 6-inch multi-user/commercial line connecting to an 8 inch or larger requires a manhole.
        b. Change of grade with an algebraic difference of five percent (5.0%)
        c. Change in alignment where the interior angle is greater than 70 degrees but less than 90 degrees.
    D. Manholes shall be placed at the end of all lines, including temporary dead-ends.

4. SUB-SURFACE DRAIN SERVICE LATERAL SIZE AND PLACEMENT
    A. All residential connections shall have an individual service connection. Sharing or joint use of lines is not allowed.
    B. Residential service lines shall be 4 inch White PVC pipe.
        a. The service lateral shall be installed as per Provo City Standards.
        b. The service lateral shall extend to the property on a minimum slope of 2.0%.
        c. The contractor will install identifier tape one foot over the top of the lateral the entire length of the lateral and the tape will say “Land Drain.”
    C. All commercial connections shall have individual connections based on unit ownership.
        a. If one building is divided into units one connection per unit will be required.

5. PIPE LINE MATERIALS, CONSTRUCTION AND TESTING
    A. 4 inch and 6 inch service lines shall be PVC ASTM 3034 pipe.
    B. 8 inch and 10 inch sub-surface drain lines may be concrete or PVC ASTM 3034 pipe.
        a. PVC pipe shall have a minimum of 6 inches of 1-1/2” drain rock placed for bedding and covering the line.
        b. PVC lines shall be tested for deflection after the trench has been backfilled and compacted.
        c. Concrete pipe shall be bedded as per Provo City Standards.
        d. The backfill around and over the concrete pipe shall be compacted to a minimum of 95%.
    C. Manhole bases may be pre-cast using the design as a guide for stub orientation.
        a. Pre-cast manhole bases shall be placed on a minimum of 8 inches of gravel bedding.
    D. Poured-in-place manhole bases shall conform to the following standards:
        a. The concrete base shall be at least 10 inches thick.
        b. The sub-grade material shall be gravel bedding.
    E. Manhole sections shall be tongue & groove, pre-cast concrete sections with cast-in-place vinyl steps.
    F. The frame and cover shall be cast iron.

IRRIGATION SYSTEM IMPROVEMENTS

Submit a written approval for the relocation of the system.

1. FLOOD IRRIGATION SYSTEMS
    A. The developer shall provide adequate conveyance for flood irrigation wastewater to pass around or through a developed subdivision.
        a. The conveyance may be either a pipe system or open channel.
            1. A pipe shall be required if the system crosses any street or access way.
            2. The City Engineer and the owner shall approve the conveyance system.
    B. The developer will be required to install a pipe system to convey any supply ditch that passes through the proposed subdivision.
        a. The pipe size shall be determined by the owner and approved by the City Engineer and by the owner.
        b. The location of the pipe system shall approved by the City Engineer.

GRADING PLAN

1. Grading shall be defined as any work including filling, cutting, excavation or relocation of material which affects the contour, slope, elevation or drainage features of a parcel of property, or which involves more than fifty (50) cubic yards of material.
2. No grading shall be accomplished without first having obtained a grading permit from the City Engineer. A grading permit may be obtained at the office of the Provo City Engineer after completion of an application for permit complying with any and all permit requirements.

STREET IMPROVEMENTS

1. STREET WIDTHS
    A. Proposed street shall have the minimum width for the rights-of-way. The width is measured from lot line to lot line. Street widths shall comply with street classifications as defined by the Master Street Plan or as approved by the City Engineer.
    B. The minimum asphalt width shall be attained whenever curb and gutters are installed.
    C. The asphalt on all public streets shall be bordered on both sides by Type E curb & gutter or as approved by the City Engineer.

2. STREET INTERSECTIONS
    A. On collector and local streets, four (4) way intersections may be designed with a roundabout according to Provo City Standards and as approved by the City Engineer.
    B. Streets shall intersect each other as near as possible at right angles.
    C. Offsets between intersections from ten (10) feet to one hundred twenty (120) feet, measured from street center line to street center line, shall be prohibited.
    D. Residential streets and alleys shall not extend more than five hundred (500) feet in length without an off-setting intersection to another street.
    E. Curb at all intersections shall be rounded with curves having a minimum lip of curb radius as per city standards.

3. STREET LAYOUT
    A. The arrangement of streets in new developments shall make provision for the continuation of the existing streets in adjoining areas or their proper projection where adjoining land is not subdivided.
        a. New streets shall be made at the same or greater width as the existing road, but in no case less than the required minimum width.
    B. Street alignments shall be selected to relate to the natural topography and other natural conditions.

C. Direct driveway access from residential property to collector and arterial streets shall not be permitted without approval of the City Engineer. Access to new residential development shall be provided by local streets.

4. STREET CURVE DESIGNS
    A. Where the street lines within a block deflect from each other, there should be a connecting curve that meets the minimum curve radii as per city standards.
    B. Local streets shall be designed with horizontal and vertical curves. (Refer to AASHTO– A Policy on Geometric Design of Highways and Streets.)

5. STREET SLOPES
    A. Street slopes shall be kept within minimum and maximum allowable slopes.
    B. Cross slope shall be designed at 2%. A minimum cross slope of 1% and a maximum cross slope of 4% is allowed by the City Engineer.

6. CURB & GUTTER/ SIDEWALK / WATERWAY / DRIVEWAY
    A. Curb & Gutter shall be placed on each side of developed streets.
        a. 24" Type E curb & gutter shall be used on all streets.
        b. See APWA Plan 205 for design guidelines.
    B. Sidewalk shall be placed on each side of developed streets.
        a. Sidewalks shall be six (6) feet in width except where other widths are deemed appropriate by the City Engineer and comply with the latest Americans with Disabilities Act requirements. No boxes, lids or structures.
        b. Planter strips of a minimum seven (7) feet in width shall be used in all street cross sections except as determined by the City Engineer
        c. See Provo City Standards and Specifications for design guidelines.
    C. Waterways
        a. Design street drainage to eliminate waterways. Waterways will only be allowed as approved by the City Engineer.
        b. Refer to APWA Plan 211 for design guidelines.
    D. Driveway
        a. Driveways shall comply with standard drawings with one driveway for each property and a maximum width of 30 feet except as determined by the City Engineer.

7. CUL-DE-SAC REQUIREMENTS
    A. Each cul-de-sac shall have a minimum right-of-way of fifty (50) feet and a radius of fifty (50) feet of right-of-way for the cul-de-sac bulb.
    B. The maximum length of a cul-de-sac shall not exceed five hundred (500) feet, unless;
        a. Physical conditions necessitate providing a longer cul-de-sac.

b. A cul-de-sac street which exceeds five hundred (500) feet shall include an intermediate turnaround near the midpoint of the street as approved by the City Engineer.

C. In no case shall a cul-de-sac street length exceed one thousand (1,000) feet.

8. SECOND ACCESS REQUIREMENTS
   A. A second street access is required under the following conditions:
      a. A development that has fourteen (14) or more residential lots. (250 ADT)
      b. A development that extends more than one thousand (1,000) feet from a connecting street. (Comply with the Fire Code)
9. ALLEYS
   A. Where access is desired to the side or rear of abutting properties, an alley may be provided. Alleys shall have a minimum width of twenty-four (24) feet of asphalt or concrete pavement measured from face of curb to face of curb. The design grade and alignment design of an alley shall conform to local street standards, except that the centerline radius may be reduced where appropriate, as determined by the City Engineer.

10. PRIVATE STREETS
   A. Private streets shall be designed to meet Provo City Street Standards. Any modifications require the approval of the City Engineer.
   B. Provo City shall not open, grade, pave, or perform any maintenance work on any private or undedicated street, road or alley
   C. Provo City shall refrain from laying utility lines in any street which has not:
      a. Been accepted by the City as a public street or alley
      b. Received approval of the Mayor as part of a final subdivision plat or development, unless an easement is granted therefor.
   D. The City shall not accept or maintain streets unless such streets have been constructed in accordance with Provo City standards and specifications.

11. RIGHT-OF-WAY SLOPE REQUIREMENTS
   A. The developer shall provide cross-section drawings of the right-of-way when the cut or fill exceeds 2 feet at the right-of-way line.
   B. The developer shall provide slope easements on the dedication plat when the cut or fill exceeds two (2) feet.
   C. The developer shall provide engineering drawings for slope retaining when the cut or fill requires retaining walls or structures.

12. GRADING PLAN
   A. Grading shall be defined as any work including filling, cutting, excavation or relocation of material which affects the contour, slope, elevation or drainage features of a parcel of property, or which involves more than fifty (50) cubic yards of material.

B. No grading shall be accomplished without first having obtained a grading permit from the City Engineer. A grading permit may be obtained at the office of the Provo City Engineer after completion of an application for permit complying with any and all permit requirements.

13. TRAFFIC STUDY

A. A traffic study shall be required for all developments three (3) acres or greater or ten (10) units or greater, and may be required for other developments as reasonably determined by the City Engineer.

B. The Developer and or Engineer shall be required to meet with the City Engineer prior to initiating the traffic study.

C. Items considered in a traffic study shall include:

a. A study of existing area conditions

b. Traffic projections (determined by trip generation rates obtained from the Provo Transportation Master Plan trip rates or approved by the City Engineer)

c. Traffic analysis

d. On- and off-site improvement analysis, conclusions, and recommendations

Street Standard Values

	Arterial Street	Minor Arterial Street	Collector Street	Local Street
Minimum Street Width	128 ft	80 ft	80 ft	54 ft, 60 ft, 66 ft
Minimum Asphalt Width	78 ft	50 ft	50 ft	• 24 ft where: land use is residential and connects to local roads and projected AADT is less than 400 and on-street parking on one side only • 30 ft where: land use is residential or connects to collector road or projected AADT is greater than 400 and on-street parking is not prohibited • 36 ft where: land use is commercial or industrial or connects to arterial road or projected AADT is greater than 1400 and on-street parking is not prohibited
Minimum Lip of Curb Radius at Intersection	30 ft	30 ft	30 ft	15 ft
Minimum Curve Radius at Street Deflection	510 ft	335 ft	335 ft	200 ft
Minimum Street Slope	0.4%	0.4%	0.4%	0.4%
Maximum Street Slope	8.0%	8.0%	8.0%	12.0%
Street Cross Slope	2%	2%	2%	2%

GEOTECHNICAL INFORMATION

If the City Engineer determines that a geologic report is required as described in Section 15.05, Provo City Code, in relation to the subject property, the developer shall submit a geologic report which complies with the 2020, Guidelines for investigating geologic hazards and preparing engineering-geology reports, with a suggested approach to geologic-hazard ordinances in Utah, second edition: Utah Geological Survey Circular, 128 Bowman, S.D., and Lund, W.R., editors or current version of this document and shall include:

1. MINIMUM INFORMATION REQUIRED
    A. Project plan showing boring locations.
        a. Boring logs shall include the following:
            1. Elevation
            2. Drill or backhoe type
            3. Samples
            4. Field tests
            5. Ground water level fluctuations
    B. Laboratory Tests – Performed in general accordance with ASTM
        a. Sieve analysis
        b. Atterberg Limits
        c. CBR
        d. Direct Shear
        e. Consolidation
        f. Identify Soils according to USCS
        g. Moisture density curve(s)
    C. Engineer Analysis and recommendations
        a. Foundations and Retaining Walls
            1. Allowable bearing capacity
            2. Lateral loads friction coefficients
            3. Settlement
            4. Drainage – Backfill information
            5. Seismic loading
        b. Pavements
            1. Traffic loads
            2. Subgrade support value (CBR)
            3. Pavement thickness
        c. Special Considerations
            1. Site preparation – use of on-site materials
            2. Expansive soils
            3. Collapsible soil
            4. Slope stability
            5. Rock Fall
            6. Shallow ground water level – drainage, etc.

7. Surcharge / preloading (if used, developer needs to install settlement monitors and elevations benchmark.)
8. Identification of geological hazards.

The number and depth of borings/pits are to be determined for each specific project shall be determined by the geotechnical engineer. However, as a minimum, the depth should be deeper than any anticipated excavation (cuts, foundations, utilities, etc.). The number of borings shall be determined by the geotechnical engineer/geologist and shall be compatible with the complexity/simplicity of the geology, subsurface conditions and the type of project.

D. Following the construction of the utilities in the street(s) within the development and prior to the final paving of the street(s), the Developer must submit written documentation from the consulting Geotechnical Engineer, the Design Engineer and the Contractor, indicating that each have received and read the Geotechnical Report and have incorporated the recommendations into the design and construction of the development.

2. USE OF FILTER FABRIC FOR STREET CONSTRUCTION
   A. Normal woven or non-woven filter fabric is a viable material to use when a separation layer is needed over a soft subgrade and beneath granular fill. These materials provide some minor reinforcing for supporting loads, but primarily act to prevent the movement of many fines up into the overlying crushed base or other clean granular material.
   B. If reinforcement of soft subgrade is desired, a geo grid should be designed for the intended purpose.

3. FLOWABLE FILL
   A. Utility excavations and subsequent backfill are the source of many problems for paved streets. It is extremely difficult to nearly impossible to place the utility, and backfill the trench, so that some subsequent differential settlement does not occur at the pavement surface. Cost associated with supplying, placing in lifts and compaction conventional backfill materials is high and results are unsatisfactory to marginal. Therefore, “flowable fill” is a preferential backfill alternative for utility installations beneath paved streets where hydraulic equipment is difficult to use such as a trench narrower than 36 inches.

4. TRENCHLESS TECHNOLOGY
   A. Trenchless technology/directional drilling is encouraged to be used for many utilities placed beneath streets without making a pavement utility cut. This procedure should be used whenever feasible.

WARRANTY PERIOD

The warranty period for the culinary water system, sanitary sewer system, sub-surface drainage system, storm drainage system, and street improvements as defined in Provo City Code 15.03.260.

The developer will be responsible for the placement of all sidewalks within the development. The placement of the sidewalk may be delayed until the actual construction of a house, but the developer will be required a keep a bond in place until the installation of the sidewalk has been completed.

2023 Provo Standard Drawing Details
(Supplement to the APWA Manual of Standard Plans, 2017)

provo
PUBLIC WORKS

PREFACE

The primary purpose of this document is to clearly define the current engineering standards to be used in Provo City. Provo City has adopted the 2012 APWA Manual of Standard Plans, however, while the City recognizes the extensive effort that APWA has executed to create a document that can be widely used across many municipalities, there are specific differences between many APWA standards and Provo City Standards. This document serves to identify any modifications to or replacement of APWA Specifications and Manual of Standard Plans.

Provo City has modified some of the APWA Specifications to reflect local requirements. The following modified specifications have been included as a part of this document:

Section 01 55 26M – Traffic Control
Section 31 05 13M – Common Fill
Section 32 12 05M – Bituminous Concrete
Section 32 16 13M – Driveway, Sidewalk, Curb, Gutter
Section 33 05 05M – Ductile Iron Pipe
Section 33 11 00M – Water Distribution and Transmission

The structure of the remainder of this document follows the same basic structure of the APWA Manual of Standard Plans Table of Contents; however, there are some differences. Following is an explanation of the structure of this document:

1. Numbering – The plan numbers listed refer to the APWA plan number. A plan number having a prefix of "P-" means that the APWA plan has been modified or replaced by the Provo City Standard included as part of this document. The Provo City Standard drawing may replace more than one APWA drawing. In this case the P drawing number may not match the APWA number.
2. Description – The title of the plan with reference to the accepted plan, shown in parentheses.
    a. (APWA Plan ###) indicates that the APWA plan is accepted in its entirety.
    b. (Provo Standard Detail) indicates that the APWA drawing has been completely replaced by a Provo drawing.
    c. (Replaced by Provo City Standard Detail P- ###) indicates that the APWA plan has been replaced by a Provo City Standard that replaces multiple APWA plans and the P number does not match the APWA number.
    d. (Do Not Use) indicates that the APWA plan is not typically used in Provo City. The specified plan may be used in Provo City only after written consent is granted from the Public Works Director or his/her designee.

This document is intended to be altered periodically to ensure that the most current Provo City Standards are available for public use. This document will be revised and published on the City's web site annually, during the first week of January.

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Catch Basins, Inlets, Outlets and Hardware

302 30” Frame and Cover (APWA Plan 302)

Type A (APWA Plan 302)
Type B (APWA Plan 302)

303 44” Frame and Cover (APWA Plan 303)

304 48” Frame and Cover (Do Not Use)

305 51” Frame and Cover (Do Not Use)
Cover (Do Not Use)
Frame A (Do Not Use)
Frame B, C, D (Do Not Use)

308 35 ½ ” Grate and Frame (APWA Plan 308)

309 47 ¾ ” Grate and Frame
Vane Grate (APWA Plan 309)
Grid Grate (Do Not Use)

310 48” Grate and Frame (Do Not Use)

P-315a Pre-Cast Curb Face and Inlet Box (Provo Standard Detail)

P-315b Double Pre-Cast Curb Face and Inlet Box (Provo Standard Detail)

P-315c Double Catch Basin – Precast (Provo Standard Detail)

P-315d Double Catch Basin – Cast-in Place (Provo Standard Detail)

P-316 Combination Catch Basin and Clean Out Box (Provo Standard Detail)
(Do Not Use)

317 Curb Face Inlet Box (Do Not Use)

320 Debris Grate Inlet (APWA Plan 320)

321 Backflow Preventer
Flap Gate (Do Not Use)
Pinch Valve (AWPA Plan 321)

322 Curb Face Inlet Box /Bubble Up Box (Provo Standard Detail P-315)

323 Pipe Outfall (APWA Plan 323)
Round with flare (APWA Plan 323)
Elliptical with flare (APWA Plan 323)
Access control rack (APWA Plan 323)

Cleanout Box and Hardware

331 Cleanout Box
Type A (Do Not Use)
Type B (APWA Plan 331)
Type C (APWA Plan 331)

332 Precast Box (APWA Plan 332)

335 Adjust Reinforced Concrete Deck to Grade (APWA Plan 335)

Manhole and Hardware

341 Precast Manhole (APWA Plan 341)
Cast in place base (APWA Plan 341)
Pipe pass through base (APWA Plan 341)

345 Concrete Deck (APWA Plan 345)

360 Raise Frame to Grade (APWA Plan 360)

Grade ring (APWA Plan 360)
Plastic form (APWA Plan 360)

362 Cover Collar for Storm Drains (APWA Plan 362)

Piping

P-372 Area Drain (Provo Standard Detail) Do Not Use

373 Concrete Pier (APWA Plan 373)

P-375 Sump (Provo Standard Detail)

Trenching

381 Trench Backfill (Replaced by Provo City Standard Detail P-255)

382 Pipe Zone Backfill (Replaced by Provo City Standard Detail P-255)

Miscellaneous

P- 390 Lot Grading Plan (Provo Standard Detail)

P- 391 Lot Grading Plan Profiles (Provo Standard Detail)

P-392a Lot Drain Lateral with Drain Sump (Provo Standard Detail)

P-392b Lot Drain Lateral with Gravity Flow (Provo Standard Detail)

P-392c Lot Drain Lateral and Clean Out (Provo Standard Detail)

P-394 Site Drainage Profile (Provo Standard Detail)

PART 4 – SANITARY SEWER

Abbreviations and Symbols

401 Abbreviations and Symbols for Sewer (Do Not Use)

Manholes and Hardware

402 30” Frame and Cover (APWA Plan 402)

P-411 Sanitary Sewer Manhole (Provo City Standard Detail)

412 Invert Cover (APWA Plan 412)

413 Cover Collar for Sanitary Sewer Manhole (APWA Plan 413)

Piping

P-431a Sewer Lateral Connection (Provo City Standard Detail)

P-431b Sewer Cleanout (Provo Standard Detail)

432 Sewer Lateral Relocation (Do Not Use)

Liquid Separation Systems

P-441 Grease Trap (Provo City Standard Detail)

Trenching

See Provo City Standard Detail P-255 for Trenching Requirements

PART 5 – WATER SYSTEMS

Abbreviations and Symbols

501 Abbreviations and Symbols for Water (Do Not Use)

Concrete Boxes and Hardware

502 27” Frame and Cover (Do Not Use)
503 38” Frame and Double Cover (Do Not Use)
505 Concrete Meter Boxes (Do Not Use)

Fire Hydrants

P-511 Fire Hydrant with Valve (Provo City Standard Detail)

Meters

P-521 ¾” and 1” Meter (Provo City Standard Detail)
P-522 1 ½” and 2” Meter (Provo City Standard Detail)
523 3” and 4” Compound Meter with 2” Bypass (Replaced by Provo City Standard Detail P-525)
P-525 6” Compound Meter with 2” Bypass (Provo City Standard Detail)
527 8” Compound Meter with 2” Bypass (Do Not Use)
529 10” Turbo Meter with 6” Turbo Meter and 2” Bypass (Do Not Use)

Monitoring Systems

535 Electrolysis Monitoring Station Details (Do Not Use)

Piping

541 Water Service Line (Replaced by Provo City Standard Detail P-521)
542 Water Service Line Loop (Do Not Use)
543 Water Main Loop (Do Not Use)
Style A (Do Not Use)
Style B,C (Do Not Use)
546 Fire Hydrant Replacement or Relocation (Do Not Use)
551 ¾” and 1” Service Taps (Replaced by Provo City Standard Detail P-521)
552 1 ½” and 2” Service Taps (Replaced by Provo City Standard Detail P-522)

Thrust Blocks

561 Direct Bearing Thrust Block (APWA Plan 561)
562 Tie-down Thrust Restraints (APWA Plan 562)

Trenching

See Provo City Standard Detail P-255 for Trenching Requirements

Valves

571 4” Washout Valve (Do Not Use)
572 Detector Check Valve with ¾” Bypass Meter (Do Not Use)
573 6” Pressure Reducing Valve with 2” Bypass (Do Not Use)
574 Cover Collar for Water Valve Box (APWA Plan 574)
575 Air Release Assembly (Do Not Use)

General

593 Pressurized Irrigation Water and Potable Water Interface (Do Not Use)
Type A – Pump Interconnect (Do Not Use)
Type B – Backflow Preventer Interconnect (Do Not Use)
P-594 Water Mainline, Polywrap, &Tracer Wire Detail (Provo City Standard Detail)
P-595 Water Mainline Tee Detail (Provo City Standard Detail)

PART 6 – IRRIGATION AND LANDSCAPING

Abbreviations and Symbols

601 Abbreviations and Symbols for Irrigation and Landscaping (APWA Plan 601)

Gravity Flow System

611 Curb Face Inlet – Irrigation (Do Not Use)

613 Irrigation Diversion Box (Do Not Use)

614 Irrigation Diversion Box (Do Not Use)

Heads

621 Stationary Head (APWA Plan 621)

622 Pop-up Head (APWA Plan 622)

Valves

P-631 Backflow Preventer (Provo City Standard Detail)

P-631a Outdoor Reduced Pressure Principal Assembly (RP) (Provo City Standard Detail)

P-631b Indoor Reduced Pressure Principal Assembly (RP) (Provo City Standard Detail)

P-631c Pressure Vacuum Breaker (PVB) (Provo City Standard Detail)

P-631d Spill Resistant Pressure Vacuum Breaker (SVB) (Provo City Standard Detail)

P-631e Atmospheric Vacuum Breaker (AVB) (Provo City Standard Detail)

P-631f Atmospheric Vacuum Breaker (AVB) (Provo City Standard Detail)

632 Drain Valve (APWA Plan 632)

633 Control Valve (APWA Plan 633)

635 Isolation Valve (APWA Plan 635)

Electrical

651 Wire Runs for Landscape Irrigation (APWA Plan 651)

Trees and Plants

681 Tree (APWA Plan 681)

683 Shrubs and Bushes (APWA Plan 683)

PART 7 – LIGHTING, TRAFFIC CONTROL

Street Lighting

702 Abbreviations and Symbols for Traffic Signals (APWA Plan 702)

710 Riser (APWA Plan 710)

730 Collar for Street Light Pole (APWA Plan 730)

731 Junction Box (APWA Plan 731)

732 Trench for Buried Electrical Conduit (APWA Plan 732)

Park Strip (APWA Plan 732)

Roadway (APWA Plan 732)

733 Joint Use Trench (APWA Plan 733)

736 Street Light Pole Terminal (APWA Plan 736)

737 Street Light Meter Pedestal (APWA Plan 737)

741 Screw-in Base Street Light Pole (APWA Plan 741)
742 Direct Burial Street Light Pole (APWA Plan 742)
743 Concrete Base for Street Light Pole (APWA Plan 743)

TRAFFIC CONTROL

Signals

751 Signal Pole Foundation (APWA Plan 751)
752 Signal Pole Wiring (APWA Plan 752)
753 Signal Light Head (APWA Plan 753)
Types and Drawing Symbols (APWA Plan 753)
Placement (APWA Plan 753)
754 Single Cabinet Base (APWA Plan 754)
Type 5 (APWA Plan 754)
Type 6 (APWA Plan 754)
755 Pedestrian Push Button Pole (APWA Plan 755)

Speed Humps

761 Speed Bump (Do Not Use)
762 Speed Table (Do Not Use)

PART 8 – GENERAL FACILITIES

Design Standards

802 Defective Concrete (APWA Plan 802)
805 Design Vehicle (APWA Plan 805)
Type A (APWA Plan 805)
Type B (APWA Plan 805)

Security Fencing

831 Chain Link Fence (APWA Plan 831)

Miscellaneous

880 Bus Stop Pad (APWA Plan 880)

PART 9 – TYPICAL STREET STANDARDS

Design Standards

P-900 Typical Street Section (Provo City Standard)
P-901 Typical Street Section (Provo City Standard)
P-902 Clear Vision Requirements (Provo City Standard)
P-903 Typical Local Street T-Intersection (Provo City Standard)
P-904 Typical Collector Street T-Intersection (Provo City Standard)
P-905 Typical Local Street T-Intersection (Provo City Standard)
P-910 Cul-de-sac with Planter (Provo City Standard)
P-912 Local Street Roundabout (Provo City Standard)

P-913 Minimum Pavement Design (Provo City Standard)
P-914 Utility Location in R.O.W. (Provo City Standard)
P-915 Overhead Utility Location (Provo City Standard)

SPECIFICATIONS

SECTION 01 55 26M
TRAFFIC CONTROL

REVISDED 12-08-2015

Delete section 01 55 26 and replace with the following:

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Traffic control Requirements

1.2 RELATED SECTIONS

A. Section 01 11 00S: Scope of Work

1.3 REFERENCES

A. AASHTO Roadside Design Guide, Current Edition

B. ASTM D 4956: Retroreflective Sheeting for Traffic Control.

C. ATSSA: American Traffic Safety Services Association, Inc.

D. Instructions to Flaggers. Publication of UDOT.

E. MUTCD: Manual on Uniform Traffic Control Devices, Current Edition.

F. Work Zone Traffic Control Guide: Publication of the Utah LTAP Center.

G. ADA: Americans with Disabilities Act.

1.4 SUBMITTALS

A. Traffic Control Plan at least 10 days prior to commencement of any portion of the WORK.

B. Flagger or traffic control technician certificates when requested by ENGINEER.

1.5 SPECIAL TRAFFIC CONTROL PROVISIONS

A. IN GENERAL:

1. Unless otherwise approved by the ENGINEER, CONTRACTOR shall maintain at least one 12-foot wide travel lane for each direction of travel at all times.

2. Full road and/or intersection closures will only be approved under extreme circumstances as determined by the ENGINEER. Street and/or lane closure fees may be assessed for closures determined to be for CONTRACTOR convenience in completing the Work.

3. If a lane, intersection, or road closure is approved by the ENGINEER, the CONTRACTOR shall be required to provide advance public notification. This shall be done using electronic message boards (variable message signs) at the beginning and end of each reach to be closed, and in all four directions at intersections, as well as flyers to the residents in the vicinity. The CONTRACTOR shall post both types of messages at least 7 days prior to closure.
4. A copy of the approved Traffic Control Plan shall be maintained on the job site at all times.
5. Unless otherwise approved by the Engineer, CONTRACTOR shall remove all traffic control devices from roadway at the end of each day. All advance warning signs not being used should be turned around until the traffic control placement the following day.
6. CONTRACTOR shall implement traffic control measures to safely and properly secure the work area, equipment, residents, and personnel throughout the duration of the project. This requirement also applies to portions of the work being performed by subcontractors.

B. INTERSECTIONS:

1. Use uniformed police officer when construction activities are impacting an operating signalized intersection.
2. Use of flaggers at a signalized intersection is permitted only when signals have been turned to red flash mode or are inoperable.
    a. Control each approach by separate flaggers.
        1) Flaggers can control only two lanes of approach traffic.
            a) Third lane control permitted when left or right turn bays are present.
    b. Coordinate all modifications to signal operations with the Provo City Traffic Engineer.
3. For unsignalized intersections – provide a certified flagger for each approach.
4. Existing left turn lanes may be used for through traffic movement when the need to reduce the through traffic to one lane at the approach to signalized intersections. Install appropriate channelization and install “No Left Turn” signs stating “Bus Exception” message.

C. ACCESS:

1. CONTRACTOR shall provide access to all affected properties except for durations of less than 8 hours. In all cases:
    a. Provide alternate access whenever normal access is blocked and an alternate access method is possible.

b. Notify property owners 48 hours in advance of change or loss of access detailing duration and frequency of access closures.

D. PARKING RESTRICTIONS:

1. CONTRACTOR shall be responsible to notify residents and/or businesses of any necessary parking restrictions that may be required to complete the Work.

2. CONTRACTOR shall post "NO PARKING" signs every 50 feet 24 hours in advance of the anticipated need for parking restrictions.

E. PUBLIC TRANSIT:

1. CONTRACTOR shall contact the Utah Transit Authority (UTA) and coordinate necessary alternations in UTA's bus service. Details of alternate bus routes are to be submitted with the Traffic Control Plan.

2. CONTRACTOR shall keep bus stops open and clear of debris and minimize disruption to current bus services in and around bus stops.

F. MOMENTARY PARTIAL OR COMPLETE LANE CLOSURE AUTHORIZATION (WITHOUT PERMIT):

1. Provide flagger when work momentarily affects travel lanes. Example: A backhoe maneuvering in a travel lane outside of the construction work zone.

a. Activities requiring momentary partial or complete lane closures shall be kept to a minimum. Lane closure fees may be assessed as determined appropriate by the ENGINEER for excessive momentary closures.

1.6 TRAFFIC CONTROL PLAN

A. CONTRACTOR shall develop and submit a Traffic Control Plan which satisfies OWNER's requirements and shall conform to the requirements of this section and the requirements, limitations, and phasing identified in Construction Documents. Traffic Control Plan to be created using the recommendations and guidelines outlined in the following resources. Resolve discrepancies between resources in descending order as shown:

1. MUTCD.

2. Work Zone Traffic Control Guide

3. ATSSA

B. CONTRACTOR shall be responsible to provide a Traffic Control Plan for all phases, segments, and portions of the WORK including items of the WORK performed by Subcontractors.

C. The Traffic Control Plan shall be prepared using CAD software showing the appropriate scale and space relationship between traffic control devices and intersections, high volume driveways, and other pertinent roadway features.

D. OWNER may require that the Traffic Control Plan be produced, signed, and sealed by a professional engineer licensed in the State of Utah at no additional cost to the OWNER.

E. CONTRACTOR shall coordinate with the Provo City Traffic Engineer in the preparation and implementation of the Traffic Control Plan.

F. Include the following documentation as part of the traffic control plan:

1. Written description and phasing.
2. Drawing showing phasing (if required for clarity)
3. Drawing showing placement of traffic control devices.

G. Show how to move pedestrians through or around the Work site.

H. Show how traffic control at signalized intersections will be addressed.

I. Provide concrete barrier or other positive protection for workers and all hazards located within the AASHTO clear zone for approach traffic.

J. Meet grade, slope and protection requirements of the Americans with Disabilities Act (ADA).

1.7 TRAFFIC CONTROL TECHNICIAN

A. Certified by UDOT, ATSSA, or Associated General Contractors (AGC).

B. Authority

1. Obtains and uses all labor, equipment, and materials necessary to maintain traffic control.
2. Changes traffic control operations according to the approved traffic control plan.

C. Responsibilities and Duties

1. Oversees all traffic control operations.
2. Will be present and active participant during the installation, maintenance, and removal of Temporary Traffic Control Devices.
3. Implements the Traffic Control Plan.
4. Remains available 24 hours a day, seven days a week, and can be on-site within 30 minutes of notification.
5. Corrects deficiencies immediately upon verbal or written notification from Engineer or his representative.
6. Document the traffic control activities and inspections on a form acceptable to the Engineer. Inspect at least four times each day with at least one of the inspections conducted during nighttime hours:

a. Before beginning of shift

b. At mid-shift

c. Half-hour after shift ends

d. At midpoint of the off-shift period

7. Coordinate project traffic control with emergency services and local law enforcement agencies.
8. Inspect and document traffic control inspections twice each day when no construction work is being done.
    a. Once during daylight hours and once during nighttime hours.
    b. Conduct inspections a minimum of eight hours apart.
9. Submit traffic control activities and inspection forms each week on a day and time acceptable to the ENGINEER.
10. Monitor traffic queue lengths and adjust advanced warning signs to provide adequate warning to the actual back of queue resulting from construction activities.

1.8 FLAGGER

A. Certified by ATSSA, AGC, or UDOT.

B. Equipment:
    1. 24" X 24" "Stop/Slow" sign.
    2. 6" to 8" long red wand for night flagging.
    3. Light plant for night flagging.

C. Clothing:
    1. Clothed; full length pants and long or short sleeved shirt.
    2. Hard toed shoes.
    3. Lime green, orange, or red-orange hardhat and vest.
    4. Night clothing to be reflectorized.

PART 2 PRODUCTS

2.1 PAVEMENT MARKINGS, SIGNS, BARRICADES

A. MUTCD.

B. Channelizing Devices: Crash worthy plastic cones, drums and barricades.
    1. Only drums, barricades, and vertical panels will be allowed for nighttime use. No cones will be allowed for nighttime use.

C. Reflective Sheeting: ASTM D 4956.

D. Pavement Markings: Section 32 17 23.

1. Temporary striping: by CONTRATOR
2. Permanent striping: by CONTRACTOR
    a. ENGINEER will provide layout for new pavement striping where striping has been completely removed.
    b. CONTRACTOR shall be responsible to provide traffic control for ENGINEER during striping layout operations
3. Permanent rumble strips: by CONTRACTOR
    a. To follow installation of permanent striping and requires restriping following grinding of rumble strips.

PART 3 EXECUTION

3.1 FLAGGING

A. MUTCD

B. ATSSA

3.2 TRAFFIC CONTROL DEVICES

A. Install traffic control devices before work activities begin.

B. Maintain devices to ensure proper, continuous function.

C. Wash devices weekly unless conditions warrant more frequent cleaning.

D. Replace damaged devices missing any part of the message or background.

E. Remove when no longer needed.

F. Concrete barriers are not to be used as road closure devices.

END OF SECTION

SECTION 31 05 13M
COMMON FILL

REVISDED 12-08-2015

Delete Article 2.2 GRANULAR BORROW in its entirety and replace with the following:

2.1 **GRANULAR BORROW**

A. Classification: A-1-a

B. Non-Plastic, well graded, 3-inch maximum

Delete Article 2.5 NATIVE in its entirety and replace with the following:

2.5 **NATIVE**

A. Material obtained from Excavation may be used as fill, provided that the material meets the specifications for BORROW outlined in this Section and provided that all organic material, rubbish, debris, and other objectionable materials are removed.

B. CONTRACTOR shall provide material testing data, i.e. gradation analysis, Atterburg limits, appropriate proctor, etc. on a weekly basis as a minimum, or upon request by the ENGINEER, or if a noticeable change to the NATIVE material being excavated is observed.

C. It shall be the CONTRACTOR's responsibility to verify the suitability of NATIVE material prior to backfilling operations. Failure to comply with these specifications for trench backfill may result in rejections of portions of the WORK where backfill is not in compliance.

Delete Article 2.7 SAND in its entirety and replace with the following:

2.7 **SAND**

A. Use cyclone sand or equivalent.

B. Do not use pea gravel, recycled RAP, squeegee, or crushed fines.

C. Friable river or bank aggregate, free of loam and organic matter.

D. Meet the following gradation:

Sand Gradation	
Sieve Size	**Percent Passing**
3/8 inch	100
No. 100	1-10

Delete Article 2.8 GRAVEL in its entirety and replace with the following:

2.8 GRAVEL

A. Use 100 percent crushed mineral aggregate.

B. Meet the following gradation:

Gravel Gradation	
Sieve Size	**Percent Passing**
1.5 inch	100
1 inch	95 to 100
1/2 inch	25 to 60
No. 4	0 to 10
No. 200	0 to 5

Delete Article 2.10 SLAG, PUMICE, SCORIA in its entirety and replace with the following:

2.10 SLAG, PUMICE, SCORIA

A. Not Allowed.

END OF SECTION

SECTION 32 12 05M
BITUMINOUS CONCRETE

This Section modifies portions of Section 32 12 05 entitled "Bituminous Concrete" (APWA 2017 as outlined below.

Delete Article 1.4, paragraph D.7 and replace with the following:

7. Binder target percentage, dust to binder ratio, and the following as applicable.
   a. For Marshall mix design provide (1) tensile strength ratio (moisture sensitivity), (2) voids in the mineral aggregate (VMA), (3) stability, (4) flow, (5) voids in the bituminous mix, (6) voids filled with bituminous binder (VFA), (7) virgin binder replacement, (8) RAP asphalt content, and (9) effective asphalt content.
   b. For Superpave mix design provide (1) voids in the mineral aggregate (VMA), (2) voids filled with bituminous binder (VFA), and (3) Hamburg Wheel Tracker results.

Add to Article 2.1 the following:

2.5 Binder

A. Asphalt Cement (AC)

1. Performance graded asphalt binder (PGAB) may be substituted for asphalt cement as follows.

Asphalt Cement	Substitute
AC-10	PG 58-22 or PG 58-28
AC-20	PG 64-22

Delete Article 2.3, paragraph D and replace with the following:

D. RAP or ROSP: Free of detrimental quantities of deleterious materials.

1. Allowed up to 15 percent by weight of RAP or binder, whichever is lesser, with no change in specified binder grade.
2. Allowed from 15 to 25 percent by weight of RAP or binder, whichever is lesser, if the binder grade is adjusted according to AASHTO M323 to meet the specified binder grade.
3. Determine RAP binder content by chemical extraction.

Delete Table 4 from Article 2.4, paragraph C and replace with the following:

Table 5 - Master Grading Band limits - Marshall Mix Design							
Sieve	**Aggregate Grade**						
	DM-1	**DM-3/4**	**DM-1/2**	**DM-3/8**	**OM-1/2**	**FM-1**	**FM-1/2**
1 inch	100						
3/4 inch		100				100	
1/2 inch	75 - 91		100		100	90 - 100	100
3/8 inch		75-91		100	93 - 100	60 - 100	90 - 100
No. 4	47 - 61	46-62	60 - 80	60 - 80	36 - 44	15 - 40	30 - 50
No. 8					14 - 21	4 - 12	5 - 15
No. 16	23 - 33	22-34	28 - 42	28 - 42			
No. 50	12 - 22	11-23	11 - 23	11 - 23			2 - 5
No. 200	3 - 7	3-7	3 - 7	3 - 7	2 - 4	2 - 5	

NOTES

(a) Gradation is expressed in percent passing by weight. ASTM C136. Percentage of fines passing No. 200 sieve determined by washing, ASTM C117.

(b) Friction Mixture, ASTM D 3515.

(c) The alpha portion of the grade designator (DM, OM, FM) represents dense mix, open mix, and friction mix. The numerical portion (1, 3/4, 1/2) represents the ***maximum*** sieve size.

Delete Table 6 from Article 2.4, paragraph D and replace with the following:

D. **Design Parameters:** Table 6, determined by AI MS2.

Table 6 - Mix Design Parameters

Criteria	SuperPave			Marshall	
Mix Designator (a)	50Nd	75Nd	100Nd	50 blow	75 blow
Compaction (blows) (b)	-			50	75
Compaction (gyrations)	50	75	100	-	
Design Air Void Target, percent	3.5			3.5	
Stability, lbs., minimum (c)	-			1200	1800
Flow, in 0.01 inch units (d)	-			10-18	
Voids in Mineral Aggregate (VMA), percent, minimum, relative to maximum or nominal sieve size grading and calculated using Gsb (dry) for virgin aggregate and RAP aggregate	ASTM D 3203			ASTM D 6927	
	Maximum Grading			Nominal Grading	
	1		12.0	1	13.0
	3/4		13.0	3/4	14.0
	1/2		14.0	1/2	15.0
	3/8		15.0	3/8	16.5
RAP or ROSP specific gravity for calculations	Gsb (dry) by chemical extraction				
Dust to Binder Ratio, maximum	1.4			1.6	
Tensile Strength Ratio (moisture sensitivity), minimum (e)	-			0.80	
Rutting (Hamburg rut test) (f)	AASHTO T324				
Road Class I	-			-	-
Road Class II	15 mm/10,000 passes			-	-
Road Class III	10 mm/20,000 passes			-	-

NOTES

(a) Road Class is defined in Section 32 01 31

(b) 100Nd mix is for very high traffic applications only as defined by ENGINEER. 100Nd mix is intended for lower lift applications or surface applications with proactive seal coat program.

(c) Number of compaction blows each end of specimen.

(d) Design Density Target: ASTM D 2041. Percent of maximum theoretical specific gravity

(e) Stability, Flow, Voids: ASTM D 6927.

(f) Tensile Strength Ratio (moisture sensitivity): ASTM D 4867. Use freeze thaw conditioning. Compact test specimen to seven (7) percent plus or minus one (1) percent air voids.

(g) With testing performed at temperatures representing the specified binder grade in the Hamburg rut test, the average rut depth of two (2) mix design test samples is less than amount shown for the respective Road Classes.

END OF SECTION

SECTION 32 16 13M
DRIVEWAY, SIDEWALK, CURB, GUTTER

Delete Article 3.1 and replace with the following:

3.1 CONSTRUCTION EQUIPMENT

A. Slip Form Machines:

1. Placement must produce required cross-section, line, grade, finish, and jointing as specified for formed concrete.
2. If results are not acceptable, remove and replace work with formed concrete.
3. Slip Form must be used for curb and gutter lengths over 200 feet, unless written approved is given by ENGINEER.

END OF SECTION

SECTION 33 05 05M
DUCTILE IRON PIPE

REVISED 12-08-2015

Add the following to Article 1.1 (page 723)

1.1 SECTION INCLUDES

B. Polyethylene wrap and tracer wire

Add the following to Article 2.1, A (page 724)

2.1 PIPE AND FITTING

A. Buried Applications:

7. Polyethylene wrap for all pipe and fitting, ANSI/AWWA C105/A21.5-10
8. Tracer Wire: #14 UF-G direct bury blue or red tracer wire.

END OF SECTION

SECTION 33 11 00M
WATER DISTRIBUTION AND TRANSMISSION

REVISED 12-08-2015

Add the following to Article 1.2 (page 781)

1.2 REFERENCES

B. AWWA Standards:

ANSI/AWWA C105/A21.5-10 Installation of Polyethylene wrap

Add the following to Article to 2.8 (page 784)

2.8 ACCESSORIES

I. Tracer Wire: #14 UF-G direct bury blue tracer wire.

Add the following to Article to 3.4 (page 785)

3.4 INSTALLATION – PIPE AND FITTINGS

C. Ductile Iron Pipe: AWWA C600.

1. Apply eight (8) mil thick polyethylene wrap

I. Tracer Wire required on all water lines. Wire to surface at base of fire hydrants.

Add the following to Article to 3.10 (page 787)

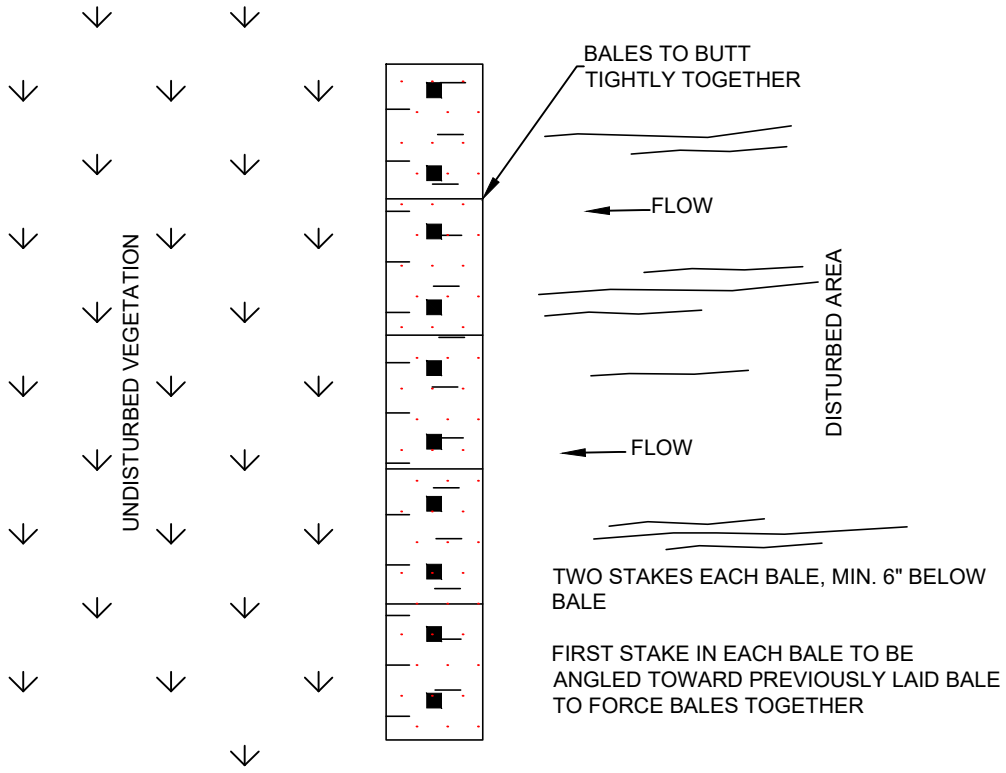
3.10 INSTALLATION – WATERMAIN LOOP (SYPHON)

G. Apply eight (8) mil thick polyethylene wrap to Ductile Iron Pipe and Fittings

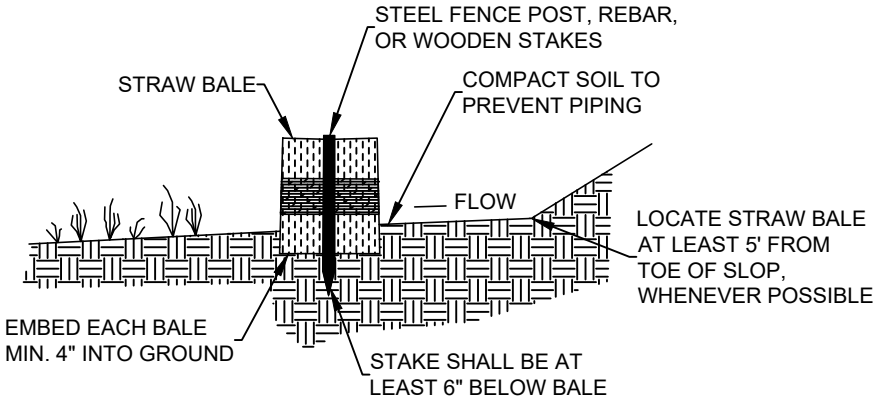
END OF SECTION

DRAWINGS

NARRATIVE: THIS PLAN MAY BE USED FOR THE CONSTRUCTION OF A STORM WATER BEST MANAGEMENT PRACTICE (BMP). IT IS NOT INCLUSIVE OF ALL PRACTICES AVAILABLE AND IS ONLY SPECIFIC TO THE CONSTRUCTION OF THIS TYPE. MAINTENANCE OF THIS TYPE OF INSTALLATION IS IMPORTANT AND SHOULD BE CONTINUOUSLY MONITORED BY THE CONTRACTOR AND ENGINEER. DETAILS SHOWN HERE HIGHLIGHT IMPORTANT PARTS OF CONSTRUCTION, AND MAY BE MODIFIED AS NEEDED IN CONSULTATION WITH CITY STORM WATER STAFF.



PLAN



SECTION

provo PUBLIC WORKS

STRAW BALE BARRIER

STANDARD DETAIL
P-121
NOT TO SCALE
REVISED DATE: 10/15/17

Straw Bale Barrier

1. GENERAL

A. Description. A temporary sediment barrier consisting of a row of entrenched and achored straw bales.

B. Application. To intercept and detain small amounts of sediment from small disturbed areas. To decrease the velocity of sheet flows and low- to moderate-level channel flows.

2. PRODUCT (not used)

3. EXECUTION

A. Place bales lengthwise in a single row, with ends of adjacent bales tightly abutting each other for the following conditions:

A.1. Perimeter Control: Place barrier at down gradient limits of disturbance.

A.2. Sediment Barrier: Place barrier at toe of slope or soil stockpile.

A.3. Protection of Existing Waterways: Place barrier at top of stream bank.

A.4. Area inlet protection: See Provo City Plan P-124.3.

B. Wire-bound or string-tie all bales. Install so straw bindings are oriented around the sides rather than along the top and bottom of the bale (to prevent deterioration of bindings).

C. Chink the gaps between bales (filled by wedging) with straw to prevent unfiltered water from flowing through the gaps. Loose straw scatter over the area immediately uphill from the straw bale barrier tends to increase barrier efficiency.

D. When bales are installed at the toe of slope, whenever possible place bales 5-feet or more away from slope for increased storage capacity.

E. Remove straw bale barriers when they have served their usefulness, but not before the up-slope areas have been permanently stabilized.

F. Maintenance:

F.1. Inspect straw bale barrier after every large storm event, at a minimum twice monthly, and with every SWPPP inspection required by the UPDES permit (if applicable).

F.2. Pay close attention to the repair of damaged bales, end runs, and undercutting beneath bales.

F.3. Bales must be promptly repaired or replaced when they have deteriorated.

F.4. Remove sediment deposits when the level of deposition reaches $\frac{1}{2}$ the height of the bale(s).

F.5. Realign bales when necessary to provide a continuous barrier and fill gaps.

F.6. Recompact soil around bales as necessary to prevent piping.

provo PUBLIC WORKS

STRAW BALE BARRIER

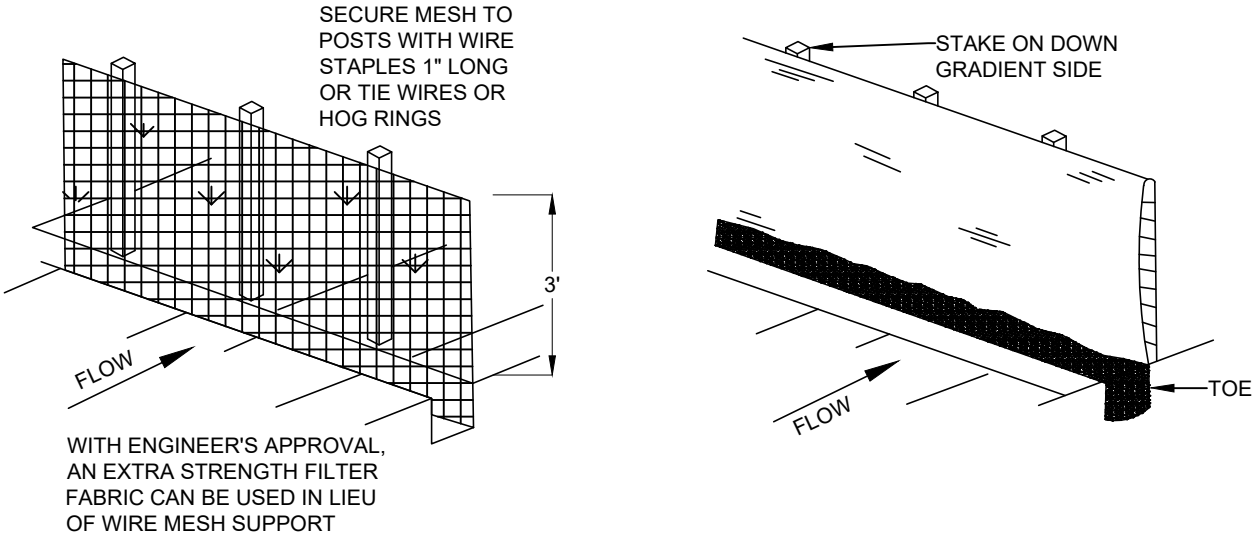
STANDARD DETAIL

P-121

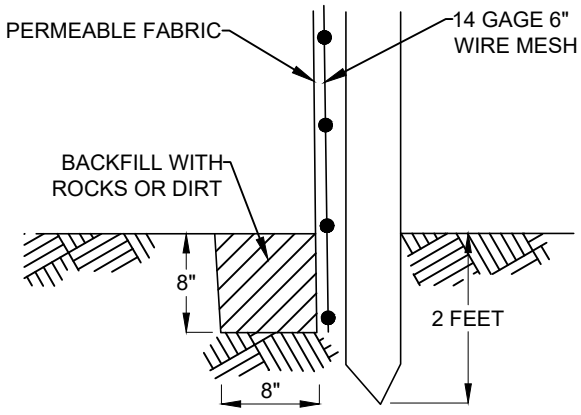
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REVISED DATE: 10/15/17

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INSTALLATION SWEQUENCE



TOE DETAIL

provo PUBLIC WORKS

SILT FENCE

STANDARD DETAIL
P-122
NOT TO SCALE
REVISED DATE: 10/15/17

Silt Fence Barrier

1. GENERAL

A. Description. A temporary sediment barrier consisting of an entrenched, permeable filter fabric stretched across and attached to supporting posts.

B. Application. To intercept sediment from disturbed areas of limited extent.

B.1. Perimeter Control: Place barrier at down gradient limits of disturbed area.

B.2. Sediment Barrier: Place barrier at toe of slope or soil stockpile.

B.3. Protection of Existing Waterways: Place barrier at top of stream bank. Do not place silt fence within stream banks.

B.4. Inlet Protection: see Provo City Plan P-124.3.

2. PRODUCT

A. Fabric. Synthetic filter fabric shall be a permeable sheet of propylene, nylon, polyester, or polyethylene yarn. Synthetic filter fabric shall contain ultraviolet ray inhibitors and stabilizers to provide a minimum of 6 months of expected usable construction life at a temperature range of 0 deg F to 120 deg F.

B. Burlap. 10 ounces per square yard of fabric.

C. Posts. At least 2"x2" wood, or 1.33 pounds per linear foot steel with a minimum length of 5 feet, or steel posts with projections for fastening wire to them.

3. EXECUTION

A. See attached plan for sequencing. Install wire mesh first.

B. Secure the fabric toe in a minimum 8"x8" trench.

C. When attaching two silt fences together, place the end of post of the second fence insider the end post of the first fence. Rotate both posts at least 180 degrees to create a tight seal with the filter fabric. Drive both posts into the ground and bury the flap in the trench.

D. When used to control sediments from a steep slope, place silt fences away from the toe of the slope for increased holding capacity. A minimum of 5 feet from the slope is required where feasible.

E. Maintenance:

E.1. Inspect silt fence barrier after every storm event, at a minimum twice monthly, and with every SWPPP inspection required by the UPDES permit (if applicable). During prolonged rainfall, inspect daily.

E.2. Should be fabric on a silt fence decompose or become ineffective while a barrier is still necessary, replace the fabric promptly.

E.3. Remove sediment deposits when the level of deposition reaches $\frac{1}{2}$ the height of the fence, or when deposition deforms the fence and hinders its ability to provide adequate protection.

E.4. Re-anchor fence as necessary to prevent shortcutting.

E.5. Inspect for runoff bypassing ends or undercutting barriers.

provo PUBLIC WORKS

SILT FENCE

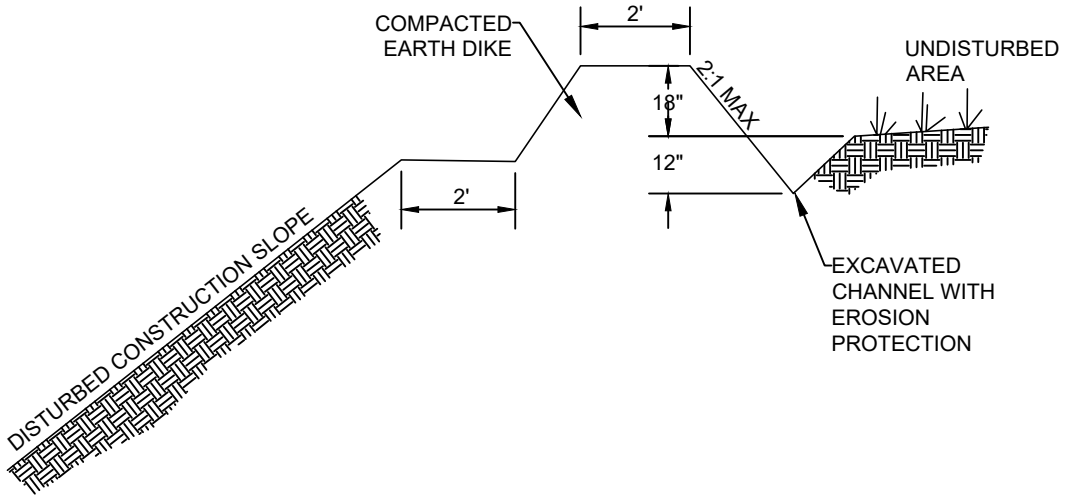
STANDARD DETAIL

P-122

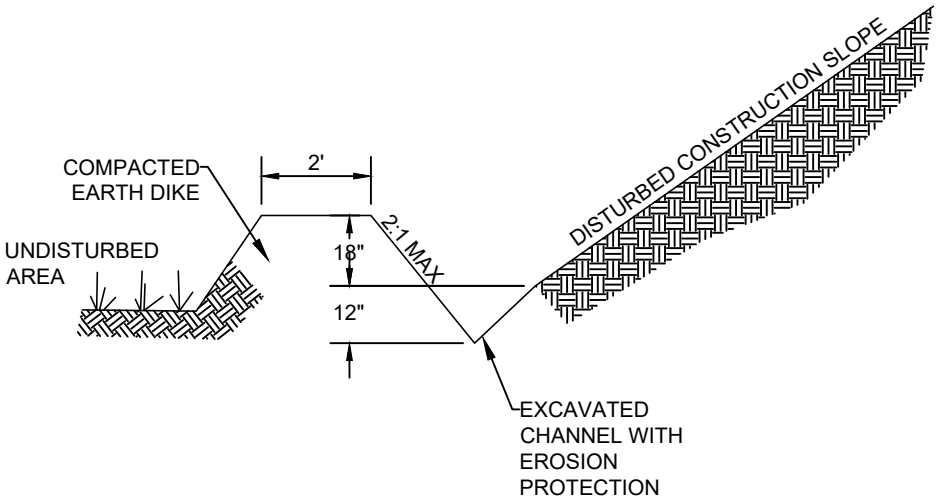
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TOP OF SLOPE (TYP)



BASE OF SLOPE (TYP)

PUBLIC WORKS

DIVERSION DIKE

STANDARD DETAIL
P-123
NOT TO SCALE
REVISED DATE: 10/15/17

Diversion Dike

1. GENERAL

A. Description. A temporary ridge of compacted soil located at the top or base of a sloped disturbed area.

B. Purpose. To intercept up gradient runoff and convey around construction site, and to divert sediment laden runoff.

2. PRODUCT (Not used)

3. EXECUTION

A. Potential construction locations.

A.1. Upstream of construction slope to intercept runoff and convey to controlled discharge point away from disturbed slope..

A.2. At base of soil stockpile or construction slope to capture sediment.

A.3. Around perimeter of disturbed areas to capture sediment.

B. Locate the dike where it will not be damaged by construction operations and traffic.

C. Clear and grub dike area, and construct dike before construction begins.

D. Excavate channel and place soil for dike on down gradient side.

E. Shape and machine compact excavated soil to form ridge.

F. Place erosion protections (such as rock rip rap) at outlet. Stabilize the channel and ridge with mulch, gravel, or vegetative cover. Temporary or permanent seeding and mulch shall be applied to the dike within 15 days of construction.

G. Calculations for sizing and armoring are required if area discharging to the diversion dike is over $\frac{1}{2}$ acre, or if the channel slope exceeds 2%.

H. Maintenance:

H.1. Inspect after every storm event, at a minimum twice monthly, and with every SWPPP inspection required by the UPDES permit (if applicable). During prolonged rainfall, inspect daily.

H.2. Look for runoff breaching the dike or eroding the channel or side slopes.

H.3. Check discharge point for erosion or bypassing of flows.

H.4. Repair and stabilize the dike, channel, and outlet immediately whenever erosion, breaching, or bypassing is occurring.

H.5. Check for and repair any traffic damage immediately.

provo PUBLIC WORKS

DIVERSION DIKE

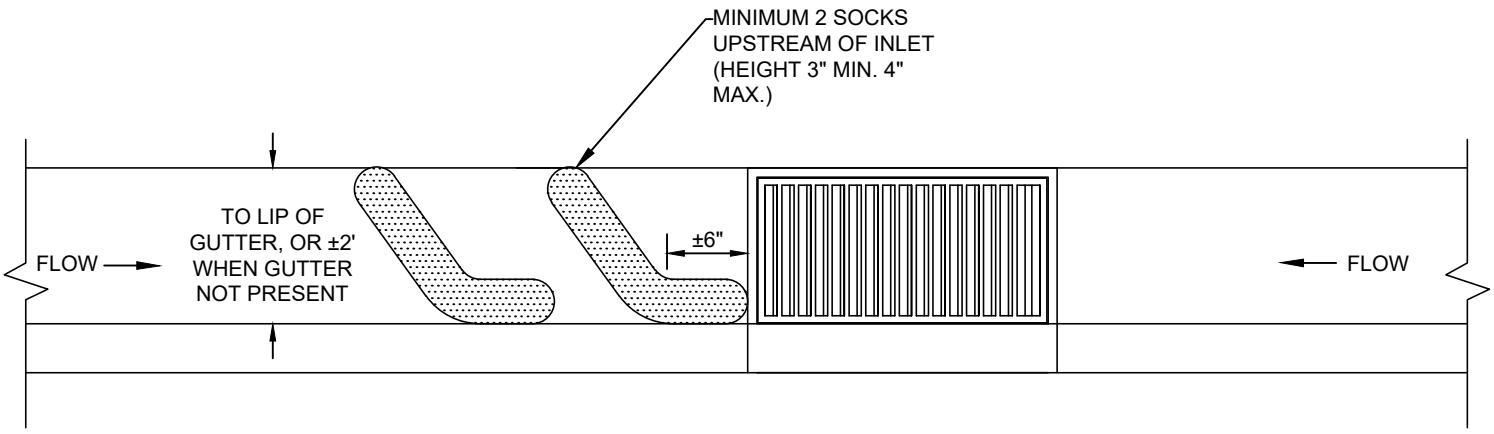
STANDARD DETAIL

P-123

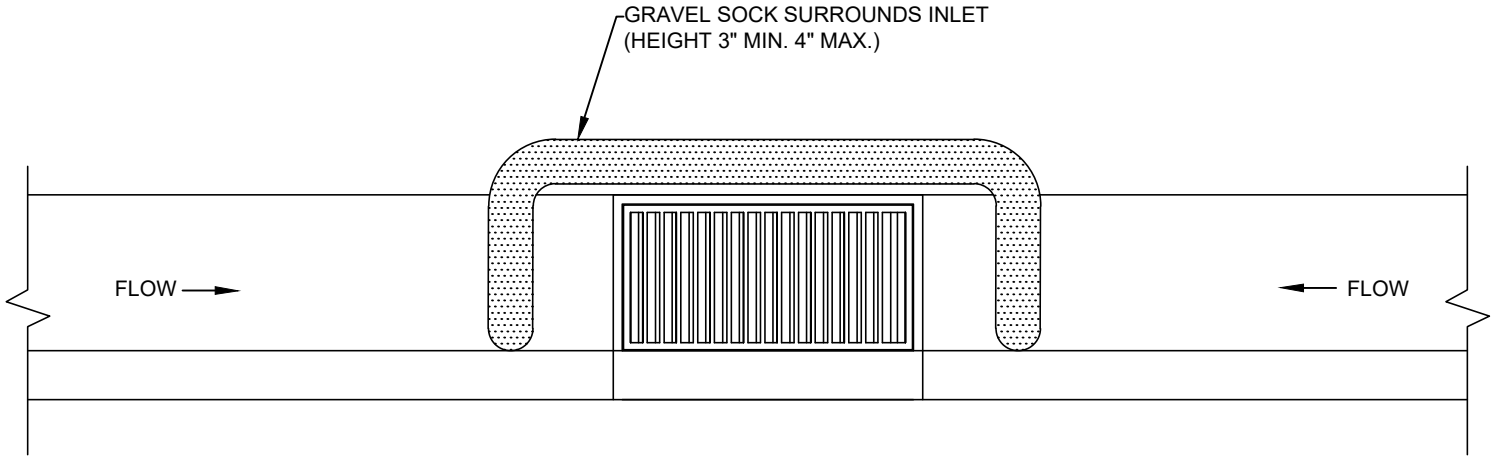
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ON-GRADE INLET PROTECTION



SUMP INLET PROTECTION

PUBLIC WORKS

INLET PROTECTION - GRAVEL SOCK

STANDARD DETAIL
P-124a
NOT TO SCALE
REVISED DATE: 9/28/17

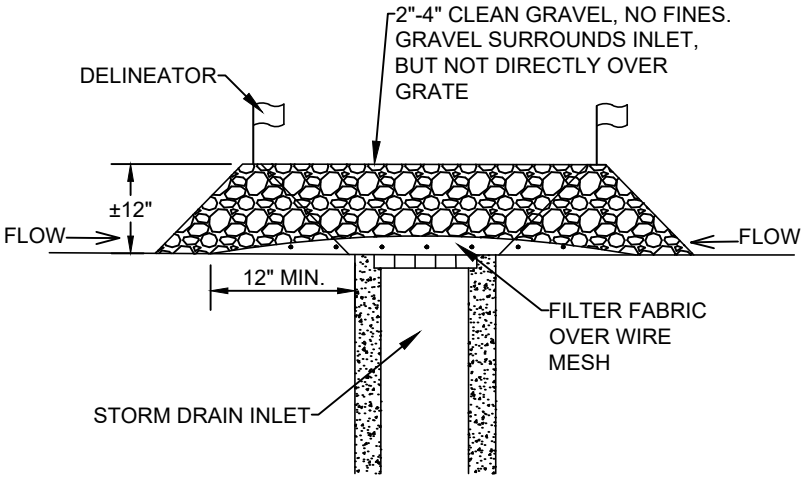
1. GENERAL
   A. Description. Placement of gravel sock upstream of curb inlets to filter water runoff.
   B. Application. Used at inlets in paved or unpaved areas where up gradient area is to be disturbed by construction activities.
2. PRODUCT (not used)
3. EXECUTION
   A. Provide inlet protection, except when blocking the inlet would cause excessive flooding or undesirable results. Notify Provo City storm water staff immediately for concurrence if inlet protection is to be removed.
   B. Prepare gravel sock (or other media approved by City storm water staff) in accordance with the manufacturers recommendation.
   C. On-grade inlet protection:
      C.1. Install at least two (2) gravel socks upstream of the inlet, as shown on the attached plan.
      C.2. Gravel sock shall butt tightly against the face of the curb, with ±6" of the sock against the curb to ensure a tight fit. The remainder of the sock is placed at an angle away from the curb to trap runoff between the sock and the curb.
      C.3. The sock should be 3-4" high, allowing excessive flows to flow either around or over the sock prior to overtopping the curb.
   D. Sump inlet protection:
      D.1. Install sock around around the entire perimeter of the inlet, leaving a min. 3" between the grate and sock.
      D.2. Gravel sock shall butt tightly against the face of the curb on both sides of the inlet.
      D.3. The sock should be 3-4" high, allowing excessive flows to flow over the sock prior to overtopping the curb.
   E. Maintenance:
      E.1. Inspect inlet protection after every large storm event, at a minimum twice monthly, and with every SWPPP inspection required by the UPDES permit (if applicable).
      E.2. Remove sediment accumulated when it reaches 2-inches in depth.
      E.3. Replace media and/or sock when damage has occured or when it has stopped functioning as intended.
      E.4. Expect minor ponding after rain between maintenance. If ponding is deeper than 2-inches, either sediment has accumulated and needs to be removed, or the media and/or sock is plugged and needs to be replaced.

provo PUBLIC WORKS

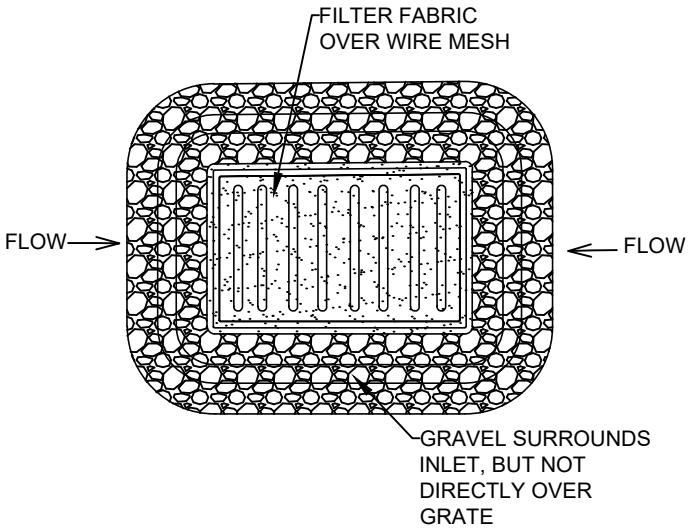
INLET PROTECTION - GRAVEL SOCK

STANDARD DETAIL
P-124a
NOT TO SCALE
REVISED DATE: 9/28/17

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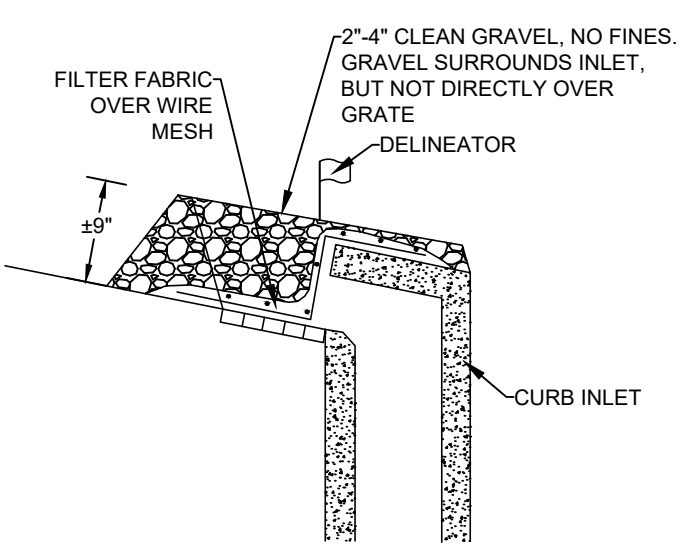


SECTION

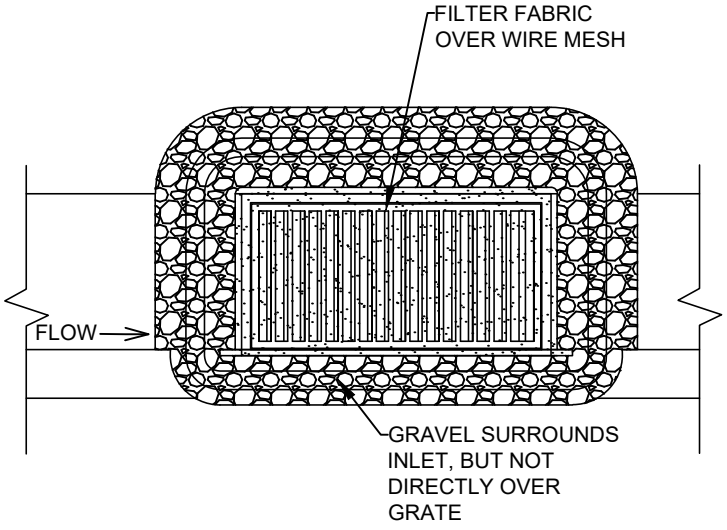


PLAN

AREA DRAIN PROTECTION



SECTION



PLAN

CURB INLET PROTECTION

PROVO PUBLIC WORKS

INLET PROTECTION - GRAVEL

STANDARD DETAIL
P-124b
NOT TO SCALE
REVISED DATE: 9/28/17

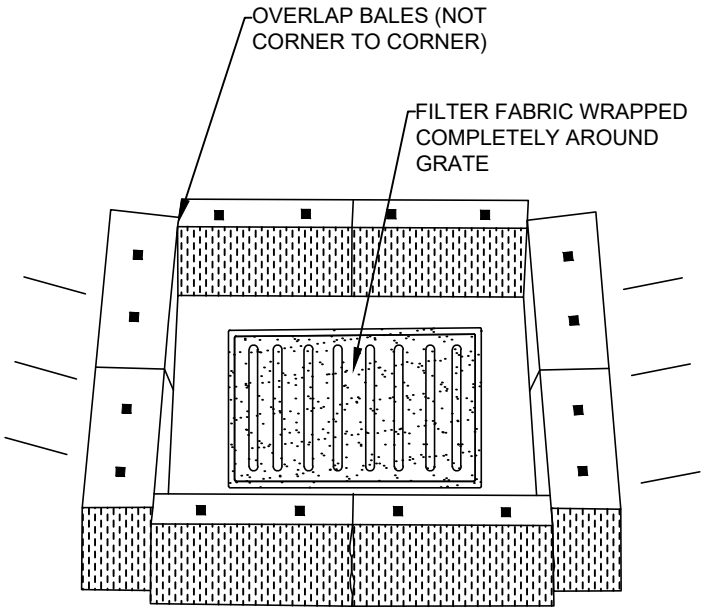
1. **GENERAL**
   A. Description. Placement of gravel filter around storm drain inlet for filter water runoff.
   B. Application. Used at inlets in paved or unpaved areas where up gradient area is to be disturbed by construction activities.
2. **PRODUCT** (not used)
3. **EXECUTION**
   A. Place $\frac{1}{4}$-inch to $\frac{1}{2}$-inch opening wire mesh over the inlet grate existing one foot past the grate in all directions. For curb inlets, also place wire mesh over curb opening.
   B. Place permeable filter fabric over the mesh
   C. Berm the gravel (2-inch to 4-inch in size, without fines) to the depths shown on the attached details, forming a wall around the grate on all sides. Slope sides so that area over the grate and curb opening are not covered by gravel.
   D. The filter fabric immediately over the grate needs to remain exposed so it can be visually inspected.
   E. Place at least two brightly colored delineators (such as painted staking laths or flags) on top of the gravel inlet protection to signify the gravel should not be graded or moved.
   F. Maintenance:
      F.1. Inspect inlet protection after every large storm event, at a minimum twice monthly, and with every SWPPP inspection required by the UPDES permit (if applicable).
      F.2. Remove sediment accumulated when it reaches 4-inches in depth.
      F.3. Replace filter fabric and clean or replace gravel when clogging is apparent.
      F.4. Gravel shall be bermed in a clean and orderly fashion per plan. Loose gravel over the grate or surrounding the inlet shall be promptly removed.

provo PUBLIC WORKS

INLET PROTECTION - GRAVEL

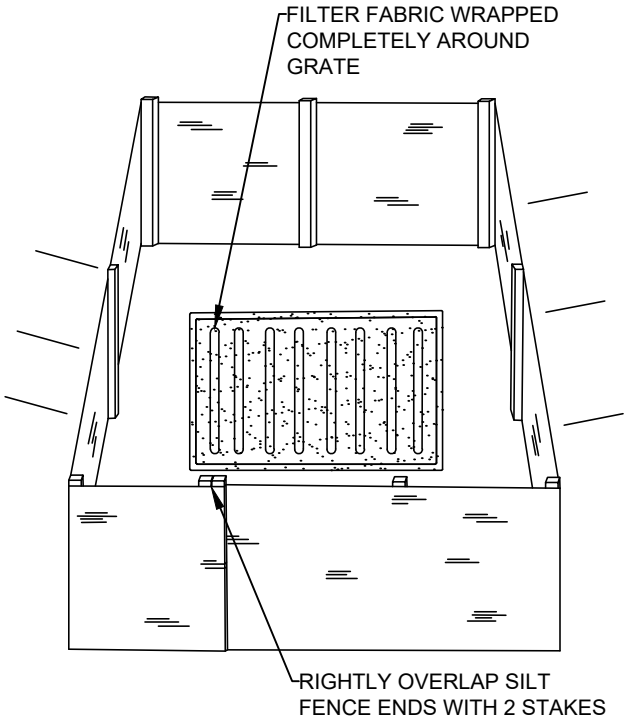
STANDARD DETAIL
P-124b
NOT TO SCALE
REVISED DATE: 9/28/17

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STRAW BALE BARRIER

(SEE PLAN NO. 121 FOR INSTALLATION)



SILT FENCE

(SEE PLAN NO. 122 FOR INSTALLATION)

PUBLIC WORKS

INLET PROTECTION - FENCE OR STRAW BALE

STANDARD DETAIL
P-124c
NOT TO SCALE
REVISED DATE: 10/15/17

Inlet Protection - Gravel

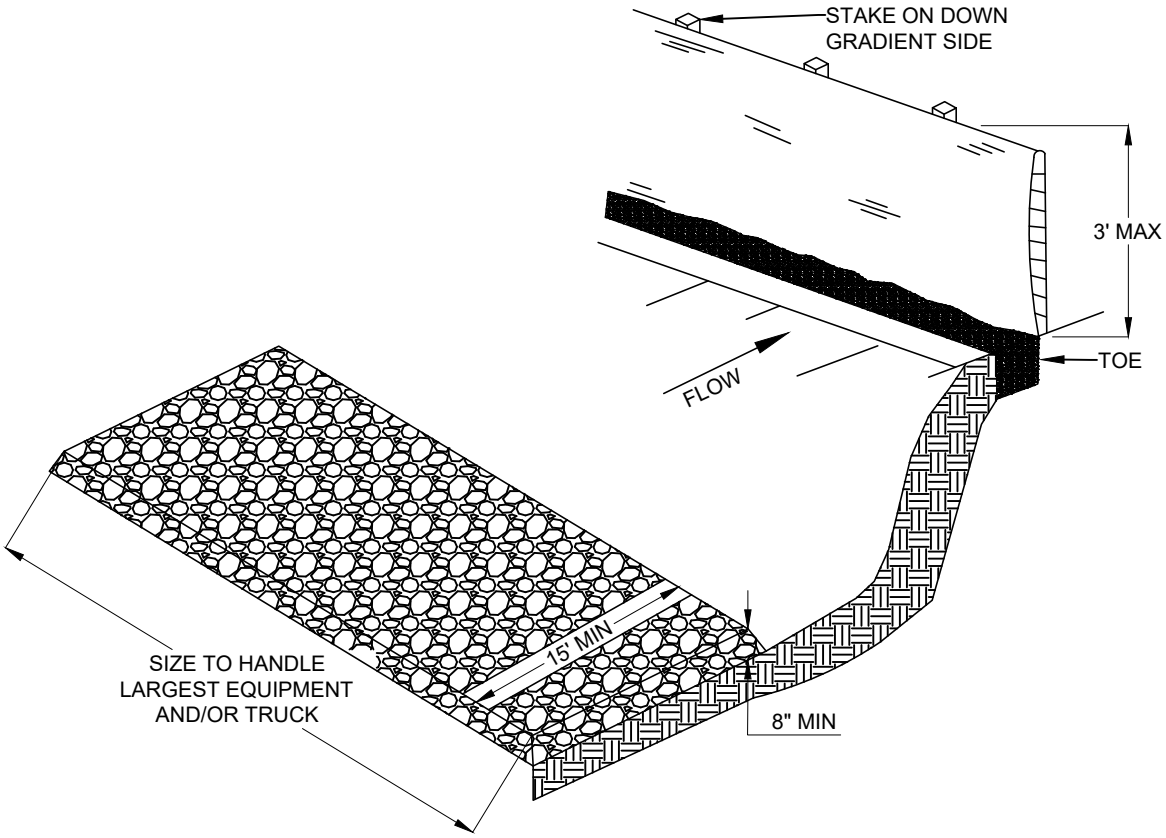
1. **GENERAL**
   A. Description. Placement of gravel filter around storm drain inlet for filter water runoff.
   B. Application. Used at inlets in paved or unpaved areas where up gradient area is to be disturbed by construction activities.
2. **PRODUCT** (not used)
3. **EXECUTION**
   A. Place $\frac{1}{4}$-inch to $\frac{1}{2}$-inch opening wire mesh over the inlet grate existing one foot past the grate in all directions. For curb inlets, also place wire mesh over curb opening.
   B. Place permeable filter fabric over the mesh
   C. Berm the gravel (2-inch to 4-inch in size, without fines) to the depths shown on the attached details, forming a wall around the grate on all sides. Slope sides so that area over the grate and curb opening are not covered by gravel.
   D. The filter fabric immediately over the grate needs to remain exposed so it can be visually inspected.
   E. Place at least two brightly colored delineators (such as painted staking laths or flags) on top of the gravel inlet protection to signify the gravel should not be graded or moved.
   F. Maintenance:
      F.1. Inspect inlet protection after every large storm event, at a minimum twice monthly, and with every SWPPP inspection required by the UPDES permit (if applicable).
      F.2. Remove sediment accumulated when it reaches 4-inches in depth.
      F.3. Replace filter fabric and clean or replace gravel when clogging is apparent.
      F.4. Gravel shall be bermed in a clean and orderly fashion per plan. Loose gravel over the grate or surrounding the inlet shall be promptly removed.

provo PUBLIC WORKS

INLET PROTECTION - FENCE OR STRAW BALE

STANDARD DETAIL
P-124c
NOT TO SCALE
REVISED DATE: 10/15/17

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PUBLIC WORKS

EQUIPMENT AND VEHICLE WASH DOWN AREA

STANDARD DETAIL
P-125
NOT TO SCALE
REVISED DATE: 10/15/17

Diversion Dike

1. GENERAL

A. Description. A temporary stabilized pad of gravel for general washing of equipment and construction vehicles. Intended solely for sediment control. Cannot be utilized for washing equipment or vehicles that may cause contamination of runoff (such as fertilizer equipment or concrete equipment).

B. Application. At any site where regular washing of vehicles and equipment will occur. May also be used as a filling point for water trucks, limiting erosion caused by overflow or spillage of water.

2. PRODUCT (Not used)

3. EXECUTION

A. Wash down areas for vehicles should be located as close as possible to the stabilized construction entrance, to minimize picking up dirt and mud after the vehicle has been washed down.

B. Clear and grub area, and grade down to provide maximum slope of 1 percent away from paved roadway.

C. Compact subgrade.

D. Place filter fabric under gravel pad consisting of 2-4" coarse aggregate (no fines). Gravel pad shall be a minimum of 8" thick.

E. Gravel pad should be sized for the largest equipment and/or truck used onsite to fit comfortably on the pad. Additional area is recommended to increase percolation and mitigate against excessive standing water.

F. Place silt fence on sides of wash down area (not entrance and exit).

G. Maintenance:

G.1. Inspect daily for loss of gravel or sediment build-up.

G.2. Top dressing additional stone or removing, cleaning, and replacing the stone will be required when accumulated mud or sediment impedes the effectiveness of the wash down area.

G.3. Keep the wash area in a condition which will prevent tracking or flowing of mud onto public rights-of-way.

G.4. Repair any structures used to trap sediments.

G.5. Inspect adjacent area for sediment deposit and install additional controls as necessary.

G.6. Maintain silt fence as outlined in Plan P-122.

provo PUBLIC WORKS

EQUIPMENT AND VEHICLE WASH DOWN AREA

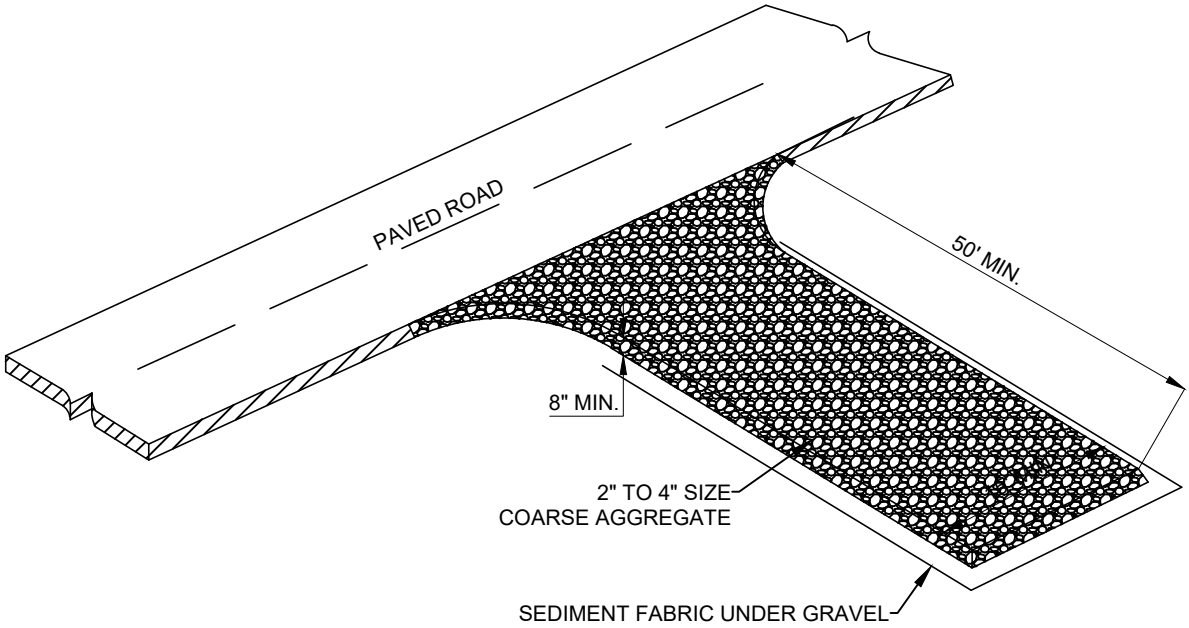
STANDARD DETAIL

P-125

NOT TO SCALE

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PUBLIC WORKS

STABILIZED ROADWAY ENTRANCE

STANDARD DETAIL
P-126

NOT TO SCALE

REVISED DATE: 10/15/17

Stabilized Roadway Entrance

1. GENERAL

A. Description. A temporary stabilized pad of gravel for controlling equipment and construction vehicle access to the site.

B. Application. At any site where vehicles and equipment enter the public right of way.

2. PRODUCT (Not used)

3. EXECUTION

A. Clear and grub area, and grade down to provide maximum slope of 1 percent away from paved roadway.

B. Compact subgrade.

C. Place filter fabric under gravel pad consisting of 2-4" coarse aggregate (no fines). Gravel pad shall be a minimum of 8" thick.

D. Maintenance:

D.1. Prevent tracking or flow of mud into the public right-of-way.

D.2. Inspect daily for loss of gravel or sediment build-up.

D.3. Top dressing additional stone or removing, cleaning, and replacing the stone will be required when accumulated mud or sediment impedes the effectiveness of the wash down area.

D.4. Inspect adjacent roadway for sediment deposit and implement additional controls as necessary (such as street sweeping), to keep the public roadway free of accumulated sediment and debris.

D.5. Expand stabilized area as required to accommodate activities.

provo PUBLIC WORKS

STABILIZED ROADWAY ENTRANCE

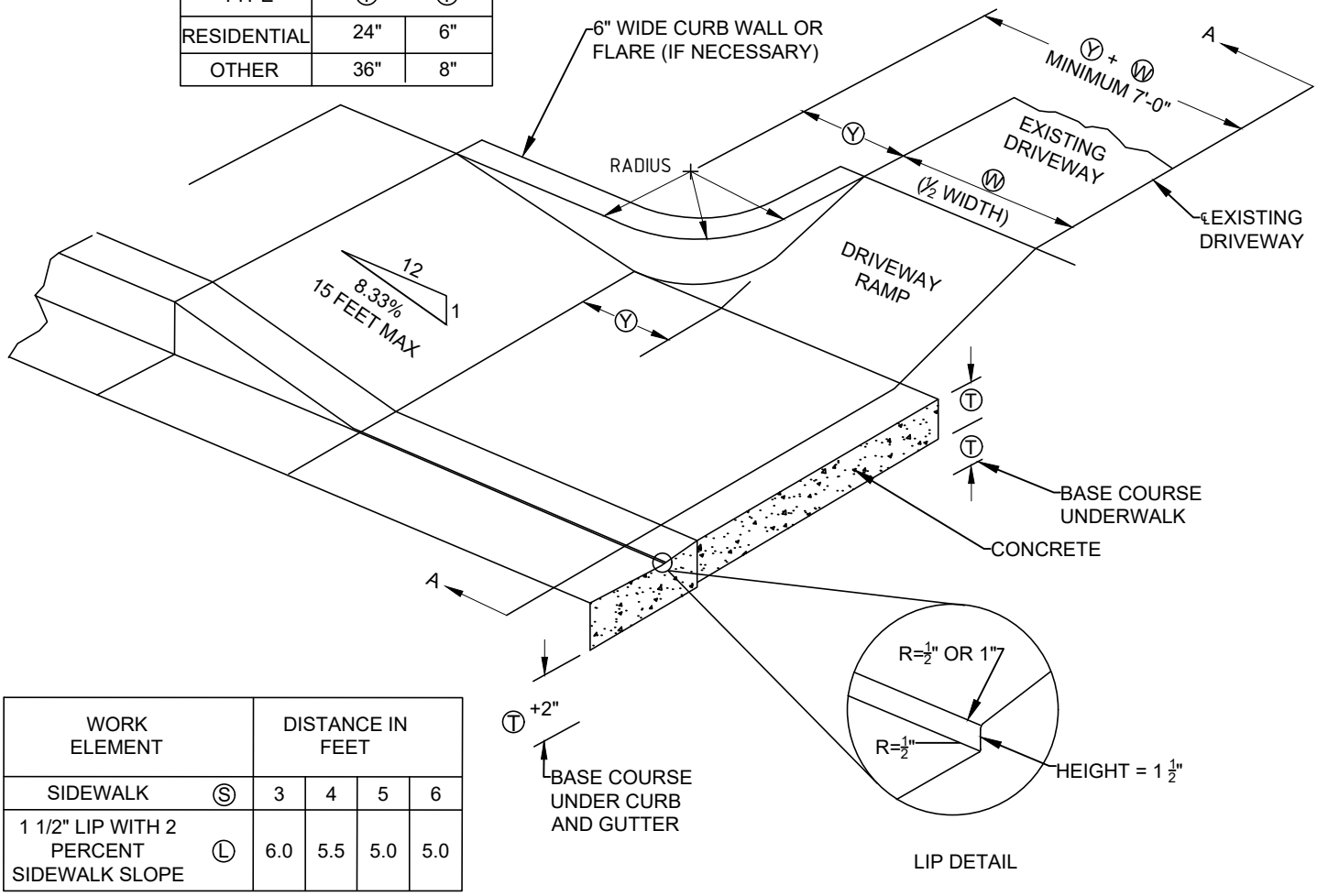
STANDARD DETAIL

P-126

NOT TO SCALE

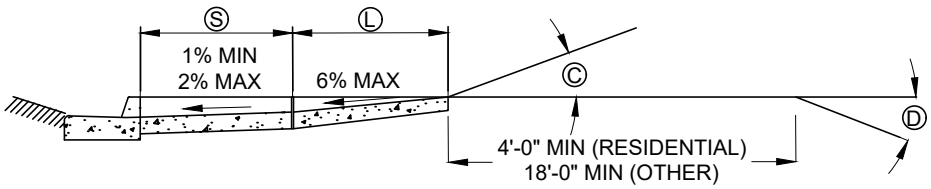
REVISED DATE: 10/15/17

STREET TYPE	LENGTH Ⓨ	LENGTH Ⓣ
RESIDENTIAL	24"	6"
OTHER	36"	8"



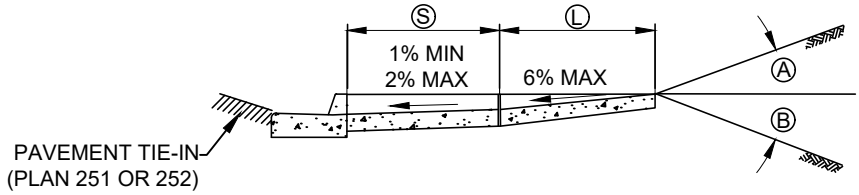
WORK ELEMENT	DISTANCE IN FEET			
SIDEWALK Ⓢ	3	4	5	6
1 1/2" LIP WITH 2 PERCENT SIDEWALK SLOPE Ⓛ	6.0	5.5	5.0	5.0

OBLIQUE



STREET TYPE	BREAK OVER ANGLE (MAX) Ⓒ	BREAK OVER ANGLE (MAX) Ⓓ
RESIDENTIAL	16%	6%
OTHER	6%	2%

SECTION A-A - APPROACH REQUIRING SERVICE TRUCK ACCESS



STREET TYPE	BREAK OVER ANGLE (MAX) Ⓐ	BREAK OVER ANGLE (MAX) Ⓑ
RESIDENTIAL	16%	12%
OTHER	6%	8%

SECTION A-A - TYPICAL DRIVEWAY APPROACH

provo PUBLIC WORKS

DIP DRIVEWAY APPROACH

STANDARD DETAIL
P-215
NOT TO SCALE
REVISED DATE: 11/25/15

1. GENERAL

A. Variance from specified dimensions and slopes must be acceptable to the engineer. System configuration may be changed at ENGINEER's discretion.

B. Additional requirements are specified in APWA Section 32 16 13.

2. PRODUCT

A. Base Course: Untreated base course. APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.

B. Expansion Joint Filler: 1/2-inch thick type F1 full depth. APWA Section 32 13 73.

C. Concrete: Class 4000. APWA Section 03 30 04. If necessary, provide concrete that achieves design strength in less than 7 days. Use caution; however as concrete crazing (spider cracks) may develop if air temperature exceeds 90 degrees F.

D. Reinforcement: Galvanized or epoxy coated, deformed, 60 ksi yield grade steel, ASTM A 615.

E. Concrete Curing Agent: Clear Membrane forming compound with fugitive dye (Type ID Class A), APWA Sectoin 03 39 00.

3. EXECUTION

A. Base Course Placement: APWA Section 32 05 10. Maximum lift thickness before compaction is 8-inches when using riding equipment or 6-inches when using hand held equipment. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 32 23 26.

B. Concrete Placement: APWA Section 03 30 10.

B.1. Install expansion joints vertical, full depth, with top of filler set flush with concrete surface.

B.2. Install contraction joints vertical, 1/8-inch wide or 1/4 slab thickness if the slap is greater than 8-inches thick. Maximum length to width ratio for non-square panels is 1.5 to 1. Maximum panel length (in feet) is 1.5 times the slab thickness (in inches).

B.3. Provide 1/2-inch radius edges. Apply a broom finish. Apply a curing agent.

C. Protection and Repair. Protect concrete from deicing chemicals during cure. Repair construction that does not drain. If necessary, fill flow-line with water to verify.

provo PUBLIC WORKS

DIP DRIVEWAY APPROACH

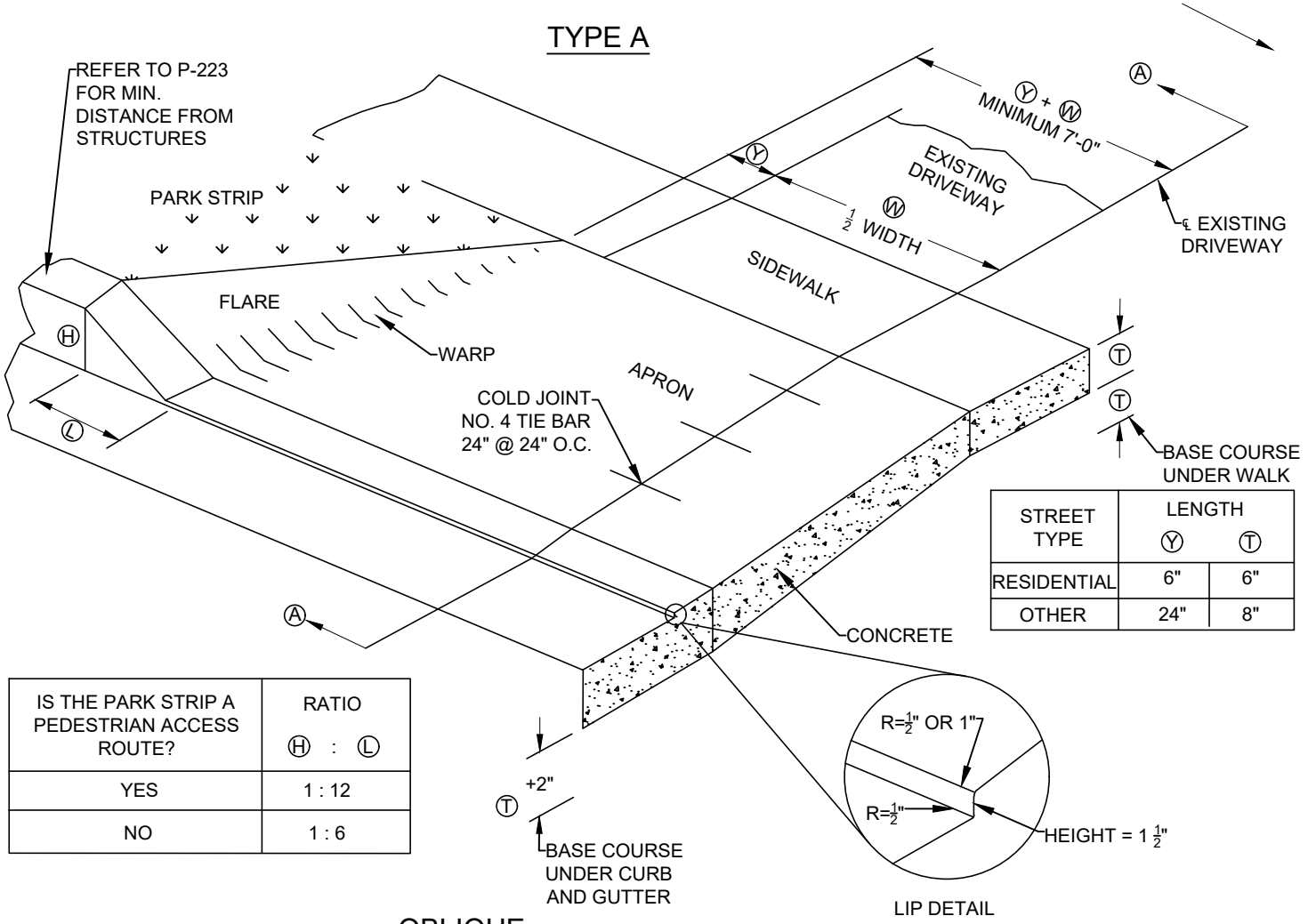
STANDARD DETAIL

P-215

NOT TO SCALE

REVISED DATE: 11/25/15

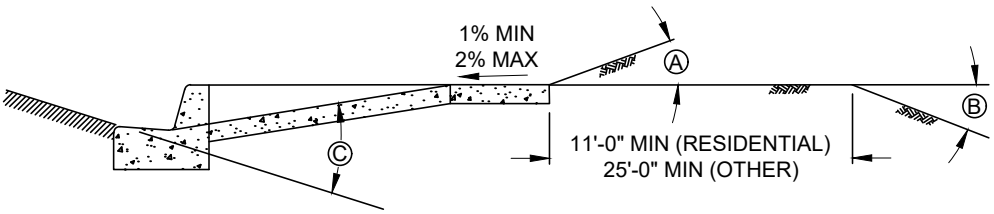
TYPE A



STREET TYPE	LENGTH Ⓨ	LENGTH Ⓣ
RESIDENTIAL	6"	6"
OTHER	24"	8"

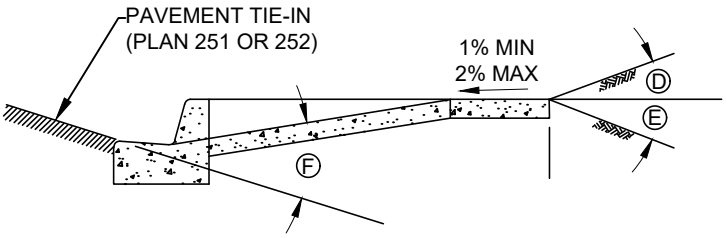
IS THE PARK STRIP A PEDESTRIAN ACCESS ROUTE?	RATIO Ⓗ : Ⓛ
YES	1 : 12
NO	1 : 6

OBLIQUE



STREET TYPE	BREAK OVER ANGLE (MAX) Ⓐ	Ⓑ	Ⓒ
RESIDENTIAL	16%	12%	16%
OTHER	6%	8%	10%

SECTION A-A - APPROACH REQUIRING SERVICE TRUCK ACCESS



STREET TYPE	BREAK OVER ANGLE (MAX) Ⓓ	Ⓔ	Ⓕ
RESIDENTIAL	16%	12%	16%
OTHER	6%	8%	10%

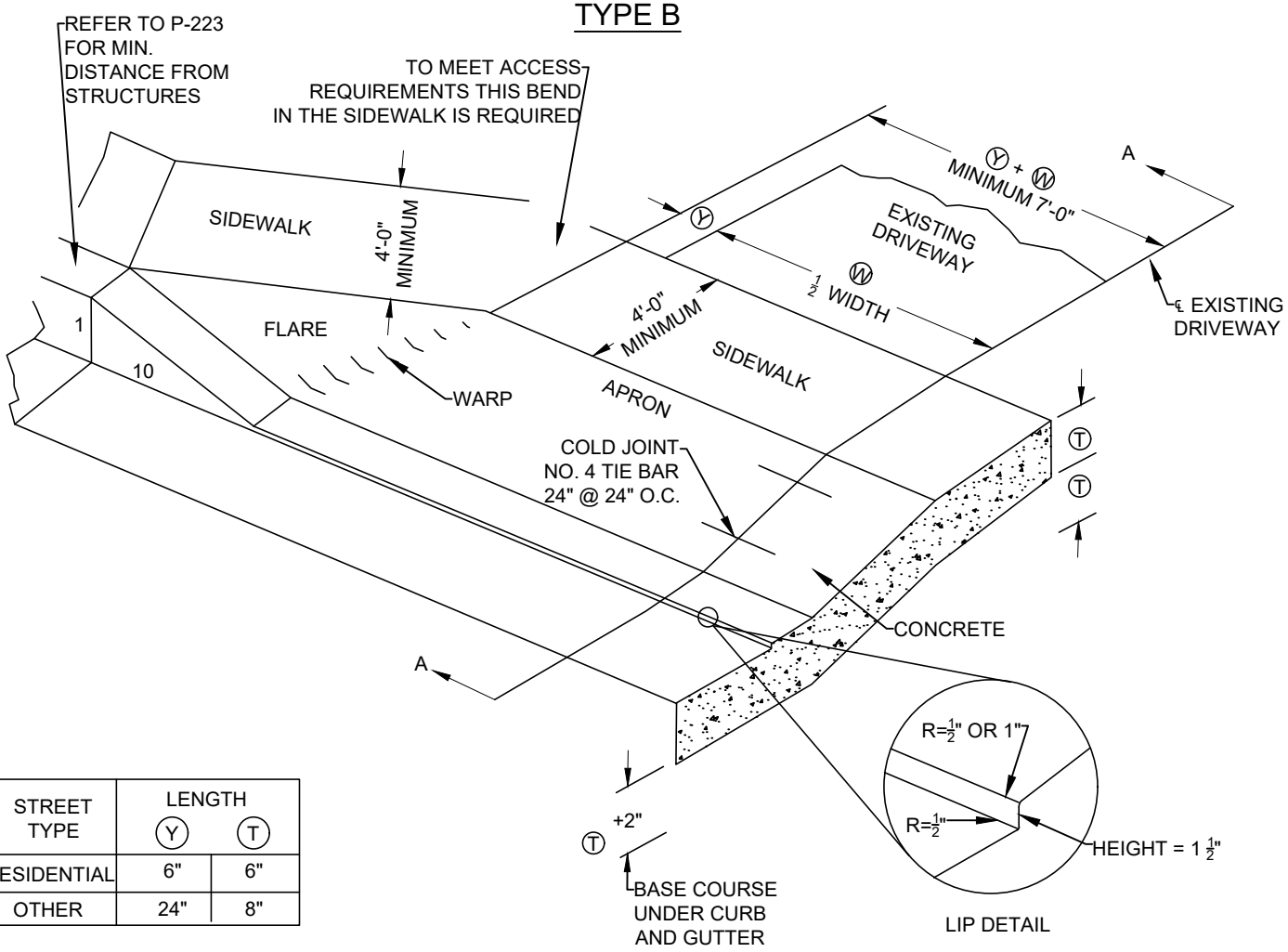
SECTION A-A - TYPICAL DRIVEWAY APPROACH

provo PUBLIC WORKS

FLARE DRIVEWAY APPROACH

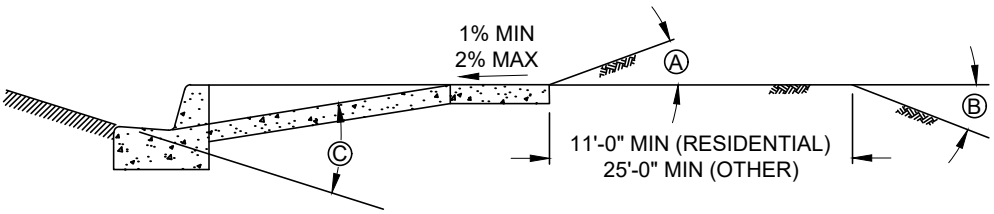
STANDARD DETAIL
P-221a
NOT TO SCALE
REVISED DATE: 11/25/15

TYPE B



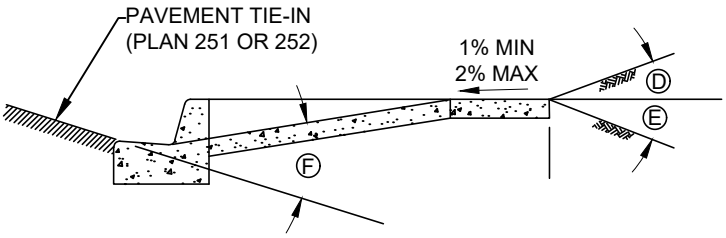
STREET TYPE	LENGTH Ⓨ	LENGTH Ⓣ
RESIDENTIAL	6"	6"
OTHER	24"	8"

OBLIQUE



STREET TYPE	BREAK OVER ANGLE (MAX) Ⓐ	Ⓑ	Ⓒ
RESIDENTIAL	16%	12%	16%
OTHER	6%	8%	10%

SECTION A-A - APPROACH REQUIRING SERVICE TRUCK ACCESS



STREET TYPE	BREAK OVER ANGLE (MAX) Ⓓ	Ⓔ	Ⓕ
RESIDENTIAL	16%	12%	16%
OTHER	6%	8%	10%

SECTION A-A - TYPICAL DRIVEWAY APPROACH

provo PUBLIC WORKS

FLARE DRIVEWAY APPROACH

STANDARD DETAIL
P-221b

NOT TO SCALE

REVISED DATE: 11/25/15

1. GENERAL

A. Variance from specified dimensions and slopes must be acceptable to the ENGINEER. System configuration may be changed at ENGINEER's discretion.

B. Field Changes to Slope Requirements:

B.1. Grades may have a 6 percent change in slope over a 11 feet wheel base run for both crest or sag vertical curves.

B.2. Where heavy truck use and fire truck access applies, or to improve design speed, design grades should be cut in half.

B.3. Specific uses or site conditions may require profile design submittal for review and acceptance.

C. Additional requirements are specified in APWA 32 16 13.

2. PRODUCT

A. Base Course: Untreated base course. APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.

B. Expansion Joint Filler: 1/2-inch thick type F1 full depth. APWA Section 32 13 73.

C. Concrete: Class 4000. APWA Section 03 30 04. If necessary, provide concrete that achieves design strength in less than 7 days. Use caution; however as concrete crazing (spider cracks) may develop if air temperature exceeds 90 degrees F.

D. Reinforcement: Galvanized or epoxy coated, deformed, 60 ksi yield grade steel, ASTM A 615.

E. Concrete Curing Agent: Clear Membrane forming compound with fugitive dye (Type ID Class A), APWA Sectoin 03 39 00.

3. EXECUTION

A. Base Course Placement: APWA Section 32 05 10. Maximum lift thickness before compaction is 8-inches when using riding equipment or 6-inches when using hand held equipment. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 32 23 26.

B. Reinforcement: No required if driveway apron is constructed without a cold joint.

C. Concrete Placement: APWA Section 03 30 10.

C.1. Install expansion joints vertical, full depth, with top of filler set flush with concrete surface.

C.2. Install contraction joints vertical, 1/8-inch wide or 1/4 slab thickness if the slap is greater than 8-inches thick. Maximum length to width ratio for non-square panels is 1.5 to 1. Maximum panel length (in feet) is 1.5 times the slab thickness (in inches).

C.3. Provide 1/2-inch radius edges. Apply a broom finish. Apply a curing agent.

D. Protection and Repair. Protect concrete from deicing chemicals during cure. Repair construction that does not drain. If necessary, fill flow-line with water to verify.

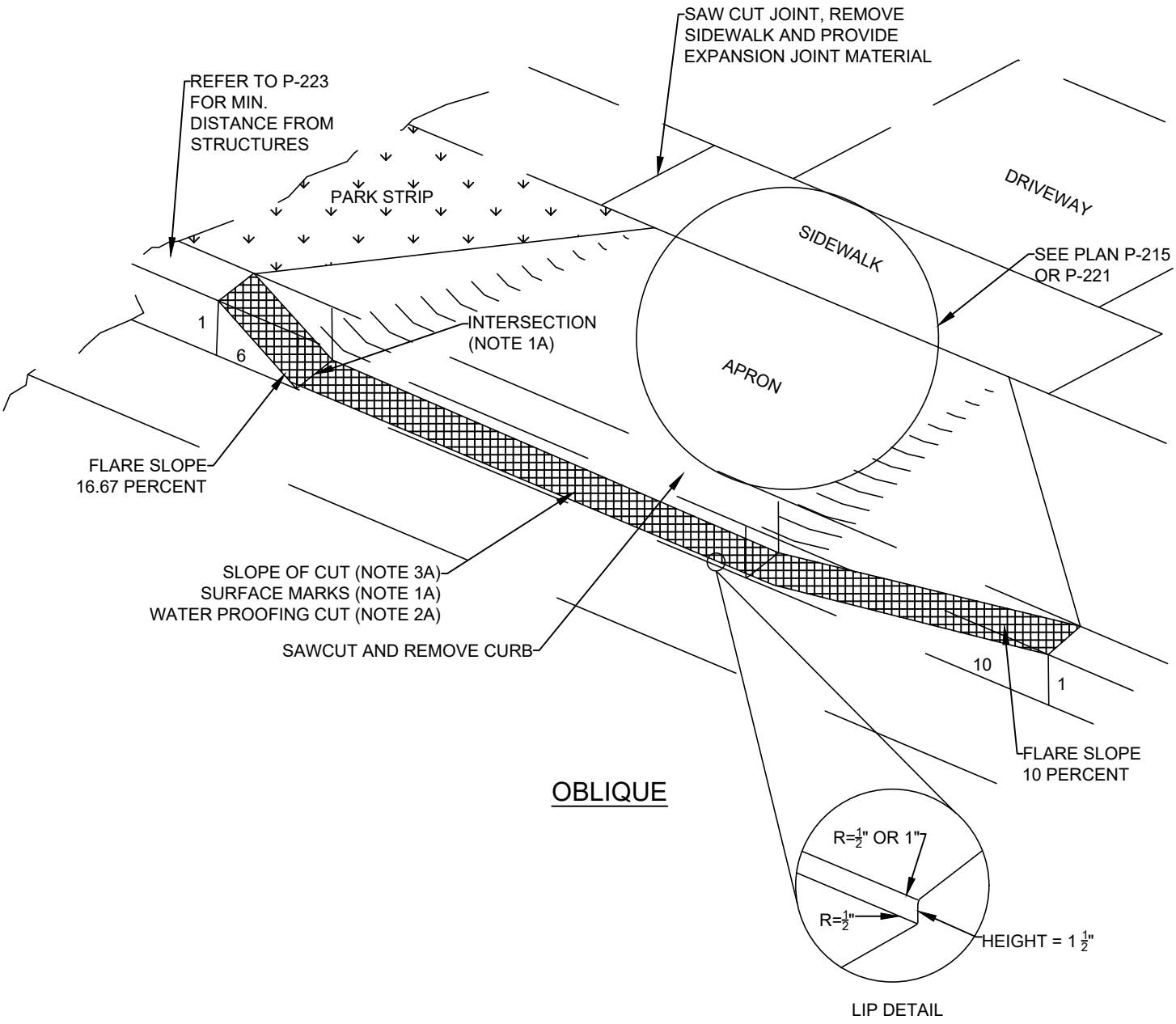
provo PUBLIC WORKS

FLARE DRIVEWAY APPROACH

STANDARD DETAIL
P-221

NOT TO SCALE

REVISED DATE: 11/25/15



SHEET 1 OF 2

PUBLIC WORKS

SAW-CUT DRIVEWAY APPROACH

STANDARD DETAIL

P-222

NOT TO SCALE

REVISED DATE: 11/25/15

1. GENERAL

A. The drawing shows sawing off and removing a curb for the construction of a new driveway approach. Additional requirements are specified in Plan 215 or Pan 221 for constructing driveway approach after curb is removed.

B. The slope of the right flare is required if a pedestrian access route abuts the curb. The slope of the left flare is required if a pedestrian acess route does not abut the curb.

C. Variance from specified slopes must be acceptable to the ENGINEER.

2. PRODUCT

A. Water Repellant: Penetrating compound, APWA Section 07 19 00.

B. Expansion Joint Filler: 1/2-inch thick type F1 full depth. APWA Section 32 13 73.

3. EXECUTION

A. At the apron, cut the curb off so the slope of the curb cut as measured perpendicular to the flow line is 16.67 percent (1:6). Unless specified otherwise, make the curb cut intersect the flow line.

B. At the flare, cur the curb off so the slope of curb cut as measured parallel to the flow line is as follows.

B.1. 8.33 percent (1:12) if curb borders a surface used by pedestrians.

B.2. 16.67 percent (1:6) if curb does not border a surface used by pedestrians.

C. No over-cutting where cuts merge. Grind sawed surface so no blade marks remain.

D. Water Proofing: Apply full coverage water repellant over cut concrete.

E. Expansion Joint: Vertical, full depth, with top of filler set flush with concrete surface.

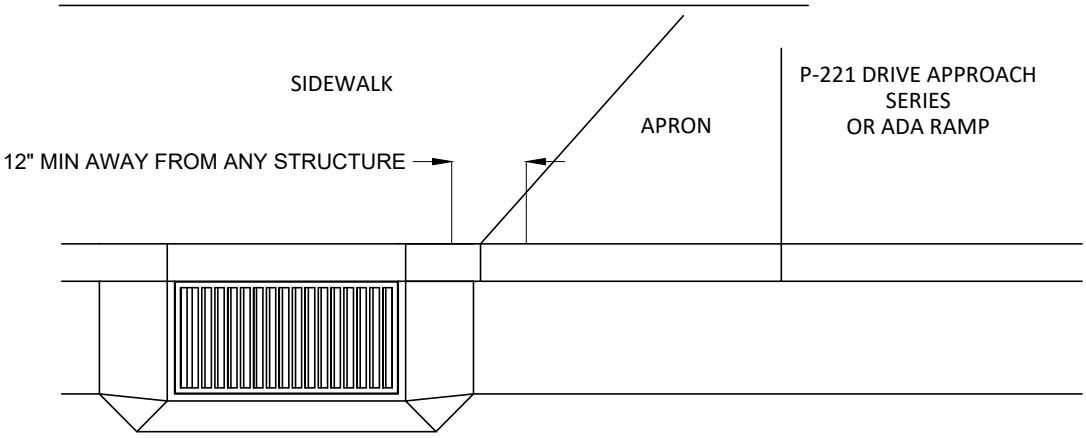
provo PUBLIC WORKS

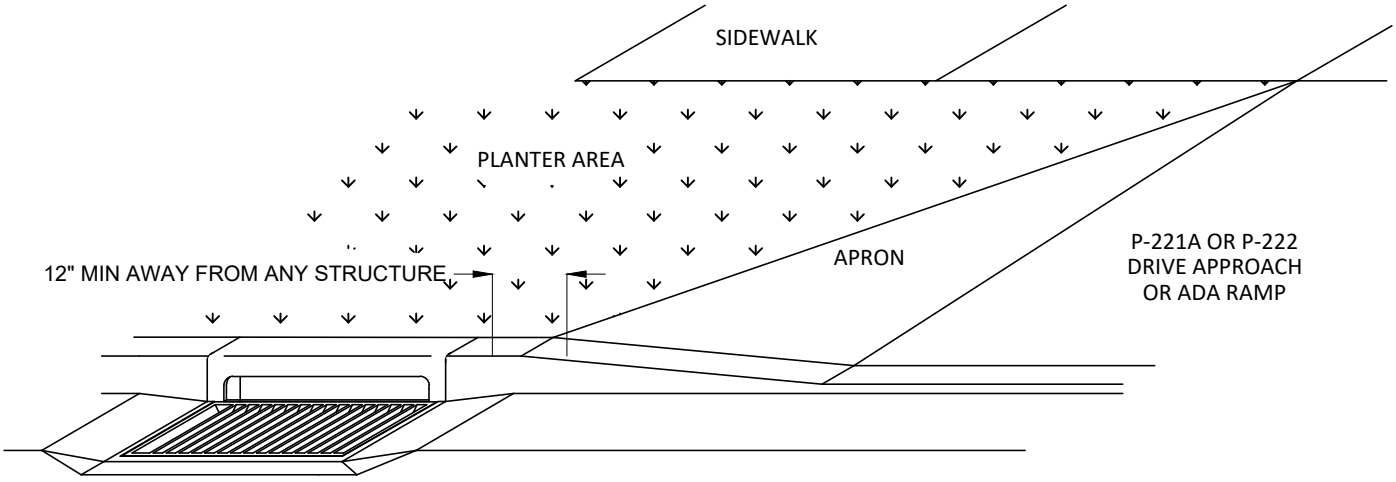
SAW-CUT DRIVEWAY APPROACH

STANDARD DETAIL
P-222

NOT TO SCALE

REVISED DATE: 11/25/15





SHEET 1 OF 1

PUBLIC WORKS

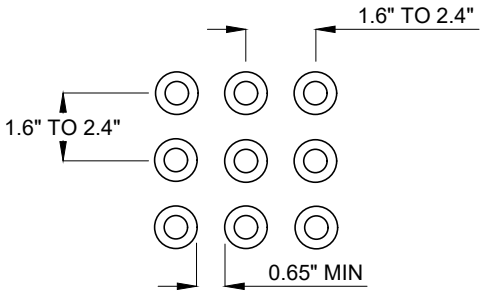
STORM DRAIN INLET FROM DRIVE APPROACH

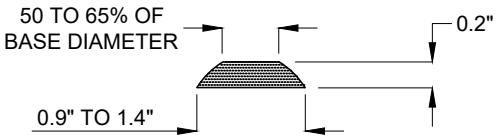
STANDARD DETAIL

P-223

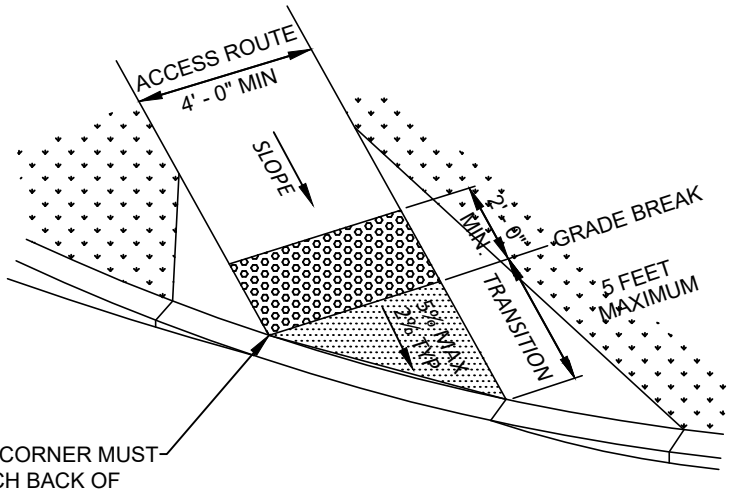
NOT TO SCALE

REVISED DATE: 11/11/16



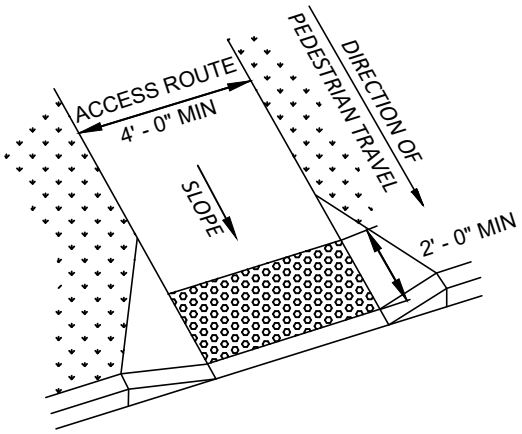


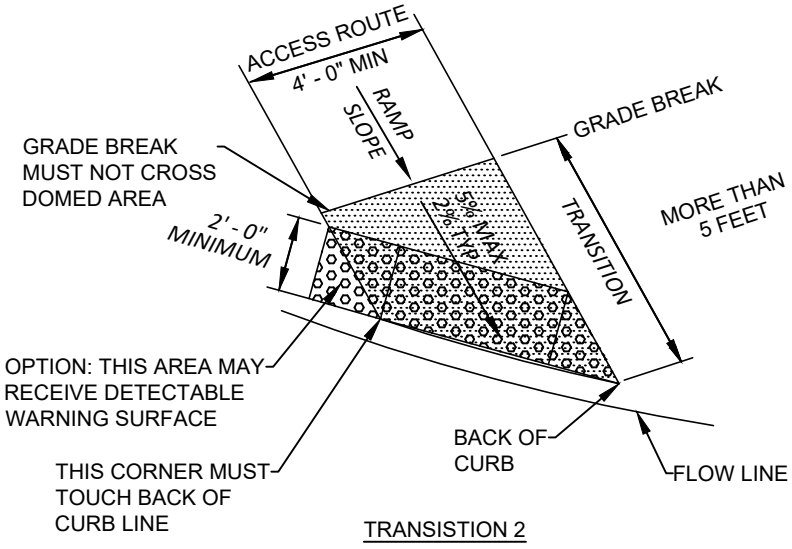
SECTION



TRANSISTION 1

TRUNCATED DOME DETAIL

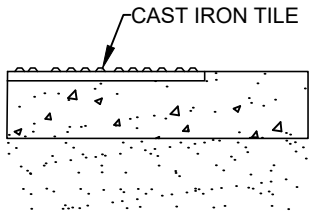




TRANSISTION 2

PERPENDICULAR ASSEMBLY

NON-PERPENDICULAR ASSEMBLY



STYLE T

PUBLIC WORKS

DETECTABLE WARNING SURFACE

STANDARD DETAIL
P-238

NOT TO SCALE

REVISED DATE: 11/25/15

1. GENERAL

A. Detectable warnings consist of a surface of truncated domes aligned in a square or radical grid pattern with dome size, dome spacing, contrast and panel size as indicated.

B. definitions and supplemental requirements are specified in APWA Section 32 16 14.

2. PRODUCT

A. Cast Iron Panels:

A.1. Must not be cut or manipulated. When resizing is needed, panel must be remanufactured.

A.2. Radius Panels are required on all radius curbs.

A.3. See Standard Plan P-235 for installation.

3. EXECUTION

A. Layout:

A.1. Joints Between Units: $\frac{3}{16}$ inch or manufacturer's recommendation.

A.2. Flares: Do not install detectable warning units on flared surfaces.

A.3. Alignment: Where a ramp, turning space, or blended transition provides access to the street continuously around a corner, align the vertical rows of truncated domes to be perpendicular or radial to the grade break between the ramp and the street for a 4 feet minimum width for each crosswalk served.

A.4. Transition 1 or 2: Selection is by ENGINEER unless indicated elsewhere.

A.5. At Rail Crossings: The edge of the detectable warning surface nearest the rail crossing is 6 feet minimum and 15 feet maximum from the center line of the nearest rail.

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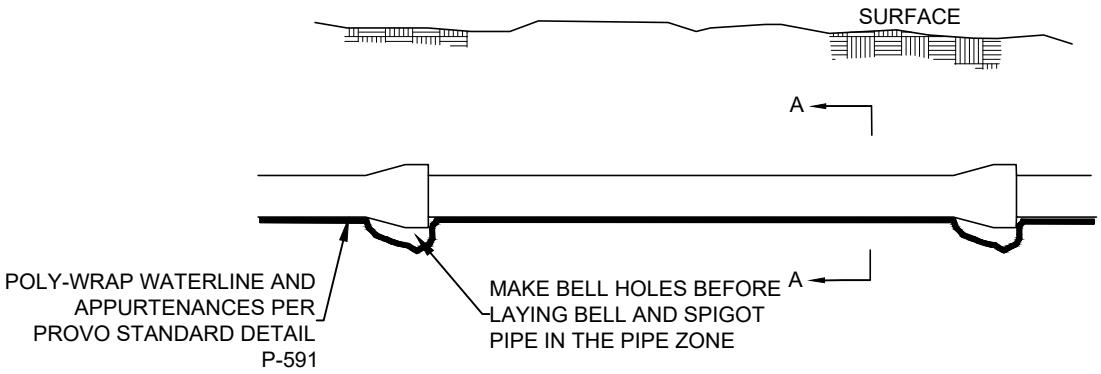
DETECTABLE WARNING SURFACE

STANDARD DETAIL

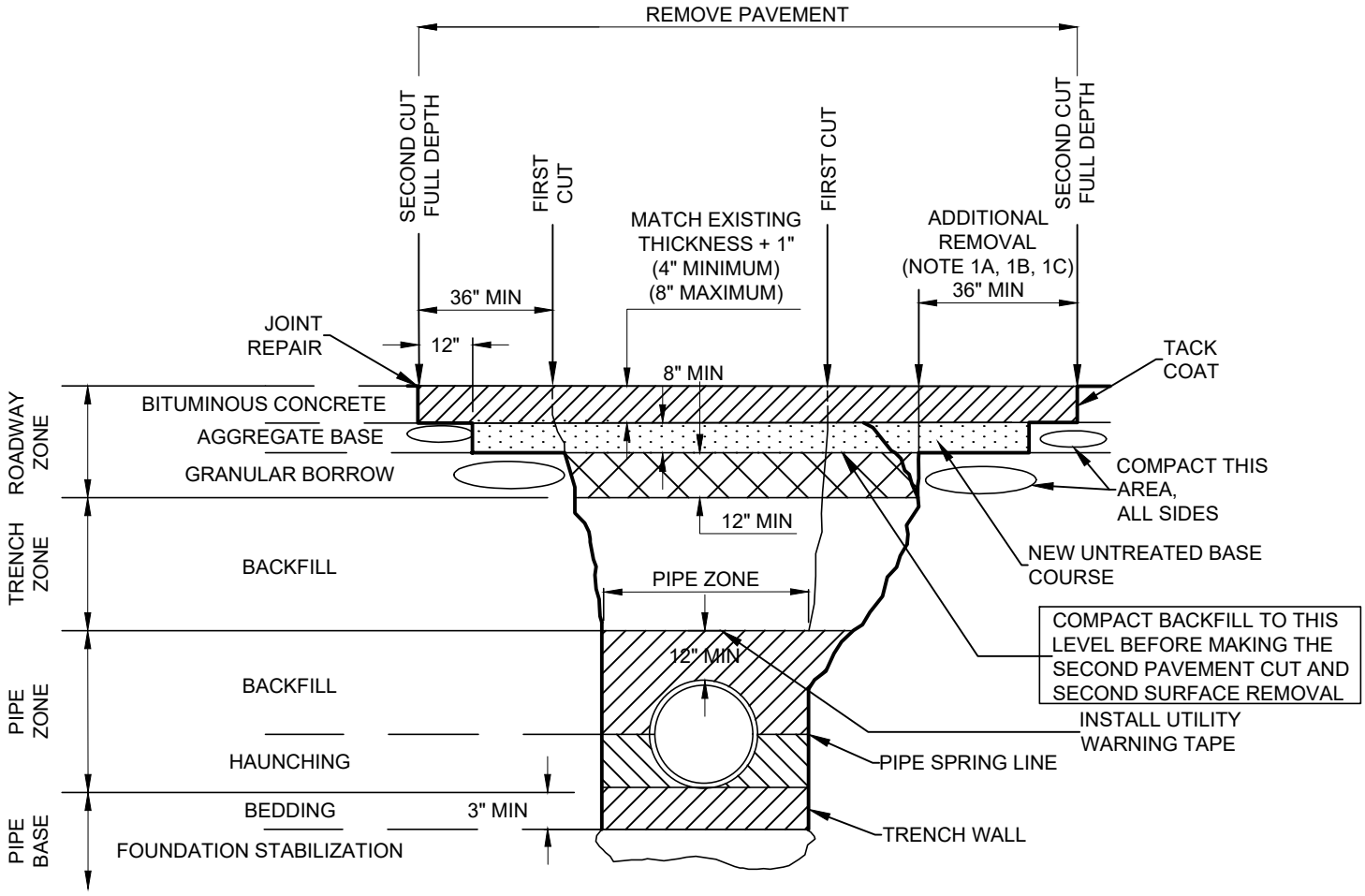
P-238

NOT TO SCALE

REVISED DATE: 11/25/15



ELEVATION VIEW



STORM DRAIN	
LOCATION IN TRENCH	REQUIRED MATERIAL
PIPE BASE	
FOUNDATION STABILIZATION	COMMON FILL
BEDDING	GRAVEL OR UNTREATED BASE COURSE
PIPE ZONE	
HAUNCHING	GRAVEL
BACKFILL	GRAVEL
TRENCH ZONE	
BACKFILL	BORROW OR FLOWABLE FILL*
ROADWAY ZONE	
GRANULAR BORROW	GRANULAR BORROW
AGGREGATE BASE	UNTREATED BASE COURSE
BITUMINOUS CONCRETE	BITUMINOUS CONCRETE

WATER LINE	
LOCATION IN TRENCH	REQUIRED MATERIAL
PIPE BASE	
FOUNDATION STABILIZATION	COMMON FILL
BEDDING	SAND
PIPE ZONE	
HAUNCHING	SAND
BACKFILL	SAND
TRENCH ZONE	
BACKFILL	BORROW OR FLOWABLE FILL*
ROADWAY ZONE	
GRANULAR BORROW	GRANULAR BORROW
AGGREGATE BASE	UNTREATED BASE COURSE
BITUMINOUS CONCRETE	BITUMINOUS CONCRETE

SANITARY SEWER	
LOCATION IN TRENCH	REQUIRED MATERIAL
PIPE BASE	
FOUNDATION STABILIZATION	COMMON FILL
BEDDING	GRAVEL OR UNTREATED BASE COURSE
PIPE ZONE	
HAUNCHING	GRAVEL
BACKFILL	GRAVEL
TRENCH ZONE	
BACKFILL	BORROW OR FLOWABLE FILL*
ROADWAY ZONE	
GRANULAR BORROW	GRANULAR BORROW
AGGREGATE BASE	UNTREATED BASE COURSE
BITUMINOUS CONCRETE	BITUMINOUS CONCRETE

PROVO PUBLIC WORKS

TRENCH BACKFILL AND SURFACE RESTORATION

STANDARD DETAIL
P-255

NOT TO SCALE

REVISED DATE: 11/25/15

1. GENERAL

A. The offset for the second asphalt cut shall be measured from the edge of the final trench wall which may result from undermining of the asphalt or sloughing of the trench wall during the construction process as shown in the detail.

B. If a saw cut in the direction of vehicular travel is within a wheel path, ENGINEER may order additional pavement removal so saw cut falls outside of a wheel path.

C. If the width of existing pavement left in place between trenches and/or curb and gutter, waterways, edge of pavement, etc. is less than 3 feet, CONTRACTOR shall remove the additional existing pavement and restore pavement according to the typical pavement restoration details.

D. Install pipe in the center of the trench or no closer than 6-inches from the wall of the pipe to the wall of the trench.

2. PRODUCT

A. Common Fill: Section 31 05 13M. Maximum particle size 2-inches.

B. Gravel: Section 31 05 13M. Do not use pea gravel or recycled RAP aggregate.

C. Untreated Base Course: Untreated base course, Grade $\frac{3}{4}$, APWA Section 32 11 23.

D. Sand: Section 31 05 13M. Do not use pea gravel or recycled RAP aggregate.

E. Flowable Fill: APWA Section 31 05 15. Target is 60 psi in 28-days and 90 psi maximum in 28 days. Material must flow easily requiring no vibration for consolidation.

F. Borrow: Section 31 05 13M. Maximum particle size 3-inches.

G. Granular Borrow: Section 31 05 13M. Maximum particle size 3-inches.

H. Tack Coat: APWA Section 32 12 13.

I. Bituminous Concrete: AC-10-DM-3/4. Section 32 12 05M.

J. Utility Warning Tape: Install between pipe zone and trench zone. Minimum tape width 3-inches.

3. EXECUTION

A. Excavate the Pipe Zone: Width is measured at the pipe spring line and includes an necessary sheathing. Provide width recommended by pipe manufacturer. Follow manufacturer's recommendations when using trench boxes.

B. Foundation Stabilization: Get ENGINEER's permission before installing common fill. Vibrate to stabilize. Installation of stabilization-separation geotextile will be required to separate backfill material and native subgrade materials if common fill cannot provide a working surface or prevent soils migration.

C. Pipe Base Placement: APWA Section 32 05 10. Maximum lift thickness before compaction is 8-inches when using riding equipent or 6-inches when using hand held equipment. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.

D. Flowable Fill: Where Required, place controlled low strength material in the trench, APWA Section 31 05 15. Cure to initial set before placing aggregate base or asphalt pavement. Prevent pipe floatation by installing in lifts and providing pipe restraints as required by pipe manufacturer. Reset pipe to line and grade if pipe "floats" out of position.

E. Trench Backfill: DO NOT USE sewer rock, pea gravel, or recycled RAP aggregate as trench backfill. Water jetting is NOT allowed. Submission of quality control compaction test result data developed for haunching areas may be requested by ENGINEER at any time. Provide results of tests immediately upon request. Native material obtained from excavation may be used as fill upon removal of organic material, rubbish, debris, and other objectionable materials are removed.

F. Task Coat: Clean all horizontal and vertical surface. Apply full coverage.

G. Asphalt Pavement: Match existing thickness plus 1 inch but not more than 6-inches on local streets or 8-inches on collector and arterial streets (as identified by Provo City). Install in lifts no greater than 3-inches after compaction. Compact to 94 percent of ASTM D 2041 (rice density) plus or minus 2 percent. If asphalt pavement is substituted for concrete substrate, omit rebar and provide 1.25-inches of pavement for each 1-inch of concrete substrate substituted.

H. Concrete Substrate: Cure to initial set before placing new asphalt concrete patch.

I. Reinforcement: Required if thickness of existing Portland-cement concrete substrate is 6-inches or greater. Not required if (1) less than 6-inches thick, (2) if existing concrete is deteriorating, (3) if excavation is less than 3 feet square, of (4) if asphalt pavement is substituted for Portland-cement concrete substrate.

J. Surface Restoration:

J.A. Landscaped Surface: Rake to match existing grade. Replace vegetation to match pre-construction conditions. Follow APWA Section 32 92 00 (turf or grass).

J.B. Paved Surface: Do not install asphalt of concrete surfacing until trench compaction is acceptable to ENGINEER. Follow APWA Section 33 05 25 (asphalt surfacing).

K. Joint Repair: If a Crack Occurs at a connection to the existing pavement or at any street fixture, flush and seal the crack per APWA Plan 265.

L. Patch Repair: Repair patch if any of the following conditions within the patch occur.

L.A. Pavement surface distortion exceeds $\frac{1}{4}$-inch deviation in 10-feet. Repair option: Plane off surface distortions. Coat planed surfaces with a cationic or anionic emulsion that complies with APWA Section 32 12 03.

L.B. Cracks at least 1-foot long and 1/4-inch wide occur more often than 1 in 10 square feet. Repair option: Crack seal, APWA Section 32 01 17.

L.C. Asphalt raveling is greater than 1 square foot per 100 square feet. Repair Option: Mill and inlay.

provo PUBLIC WORKS

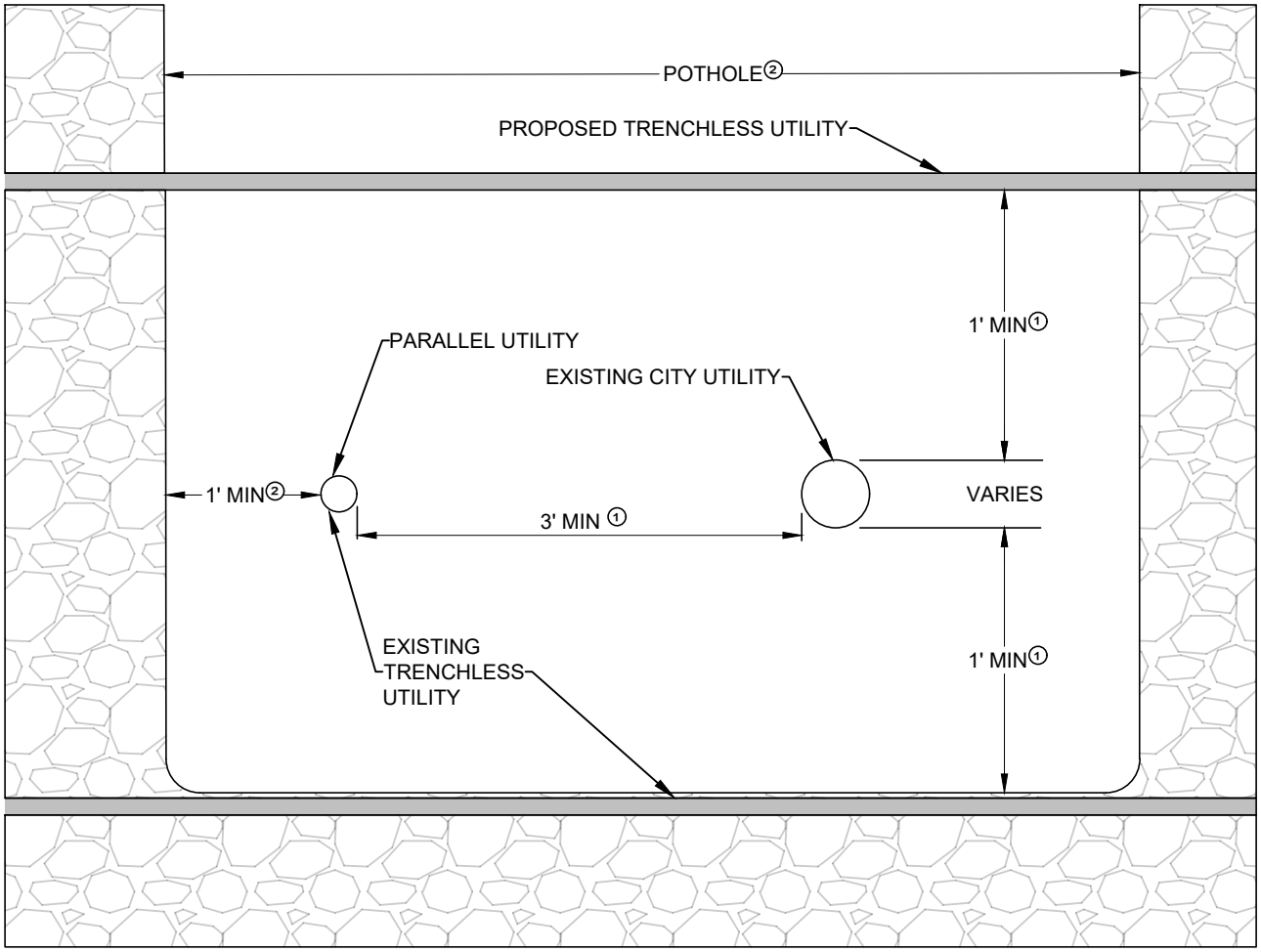
TRENCH BACKFILL AND SURFACE RESTORATION

STANDARD DETAIL

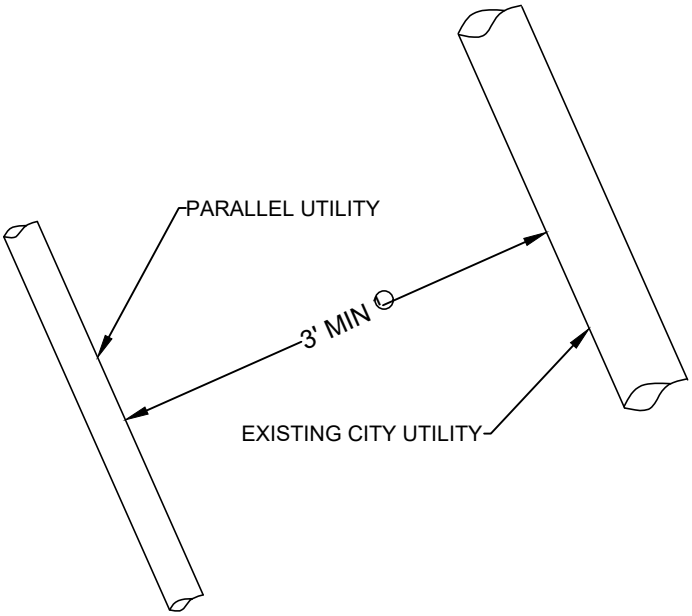
P-255

NOT TO SCALE

REVISED DATE: 11/25/15



CROSS SECTION



PLAN VIEW PARLLEL UTILITY INSTALLATION

1. Provide 1 foot minimum vertical clearance and 3 foot horizontal clearance edge to edge between city utility and trenchless utility.
2. Expose city utility at crossing location for a minimum of 1 foot on all sides prior to trenchless installation.

provo PUBLIC WORKS

TRENCHLESS UTILITY INSTALLATION

STANDARD DETAIL
P-257
NOT TO SCALE
REVISED DATE: 11/25/15

1. GENERAL
   A. All city utilities shall be potholed and exposed for one foot (1') on all sides.
   B. All parallel utilities shall be a minimum of three feet (3') from a city utility.
   C. If location of trenchless utility differs from what is represented on the permit, a new permit showing the revised location will be required.
2. PRODUCT
   A. If adequate compaction cannot be achieved around a city utility that has been potholed, flowable fill will be required.
3. EXECUTION
   A. Each utility shall be windowed and a person shall witness the of the trenchless utility crossing the existing utilities.
   B. Minimum 24 hour notice is required of any installation of a trenchless utility past a city utility.
   C. Pothole restoration shall conform to Provo City Standard P-255, "TRENCH BACKFILL AND SURFACE RESTORATION". If proper compaction cannot be obtained, flowable fill may be required.

provo PUBLIC WORKS

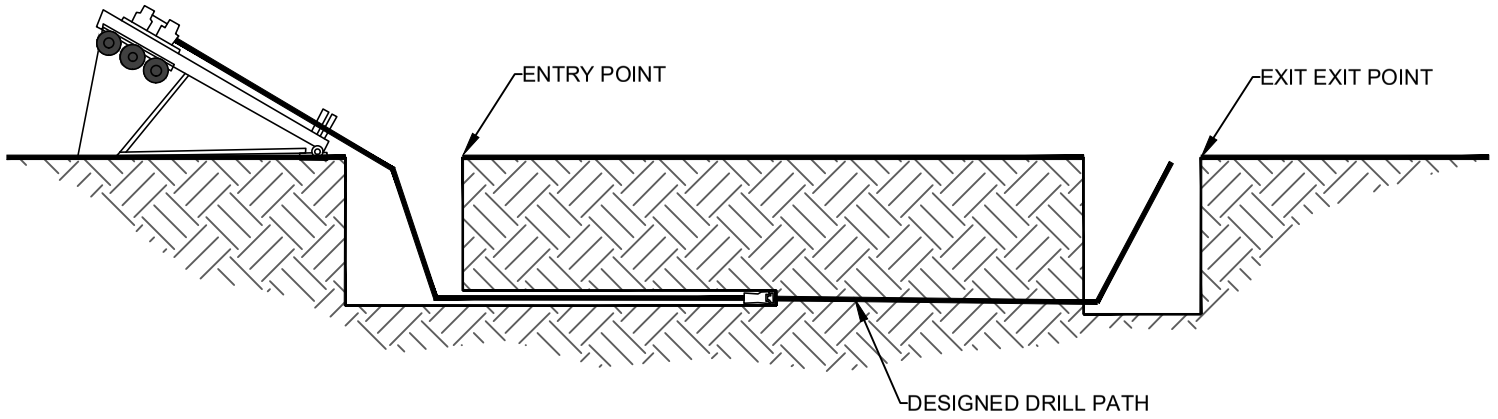
TRENCHLESS UTILITY INSTALLATION

STANDARD DETAIL
P-257
NOT TO SCALE
REVISED DATE: 11/25/15

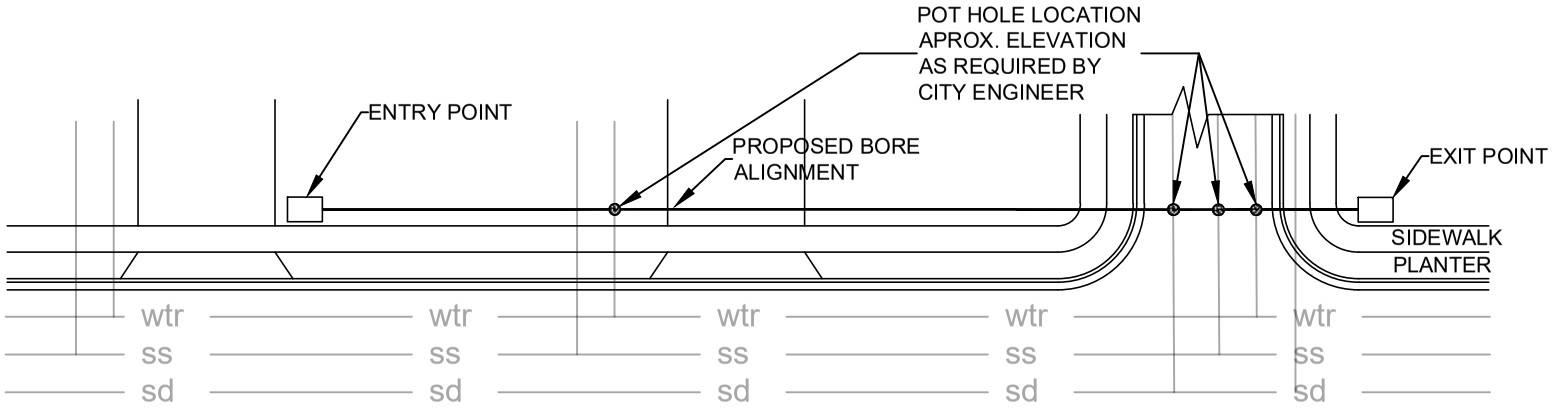
provo PUBLIC WORKS

DIRECTIONAL BORE

PLAN REQUIREMENTS



PLAN REQUIREMENTS



PLAN REQUIREMENTS

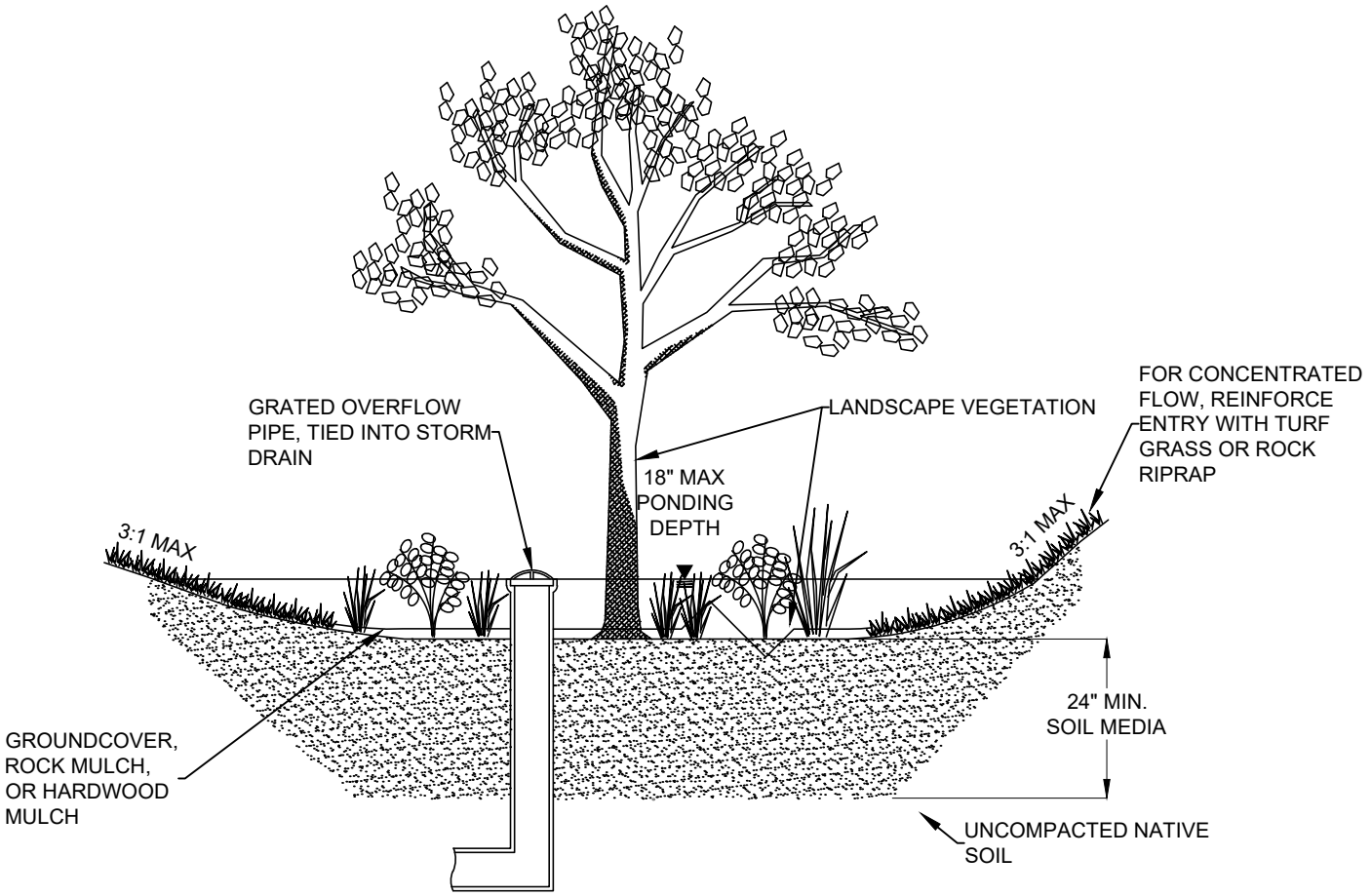
1. ENGINEERED DRAWINGS.
2. ENTRY AND EXIT POINTS MUST BE CLEARLY IDENTIFIED.
3. IDENTIFY CURB, GUTTER, AND SIDEWALK REMOVAL LOCATIONS, AND QUANTITIES.
4. IDENTIFY PROPOSED BORE DEPTH, LENGTH, AND ALIGNMENT. MINIMUM BORE DEPTH OF 36".
5. IDENTIFY LOCATION AND DEPTHS OF EXISTING CITY UTILITIES, INCLUDING, WATER, SEWER, STORM DRAIN, AND POWER.
6. TRAFFIC CONTROL PLAN
7. ADDITIONAL INFORMATION AS REQUIRED BY CITY ENGINEER.

NOTES

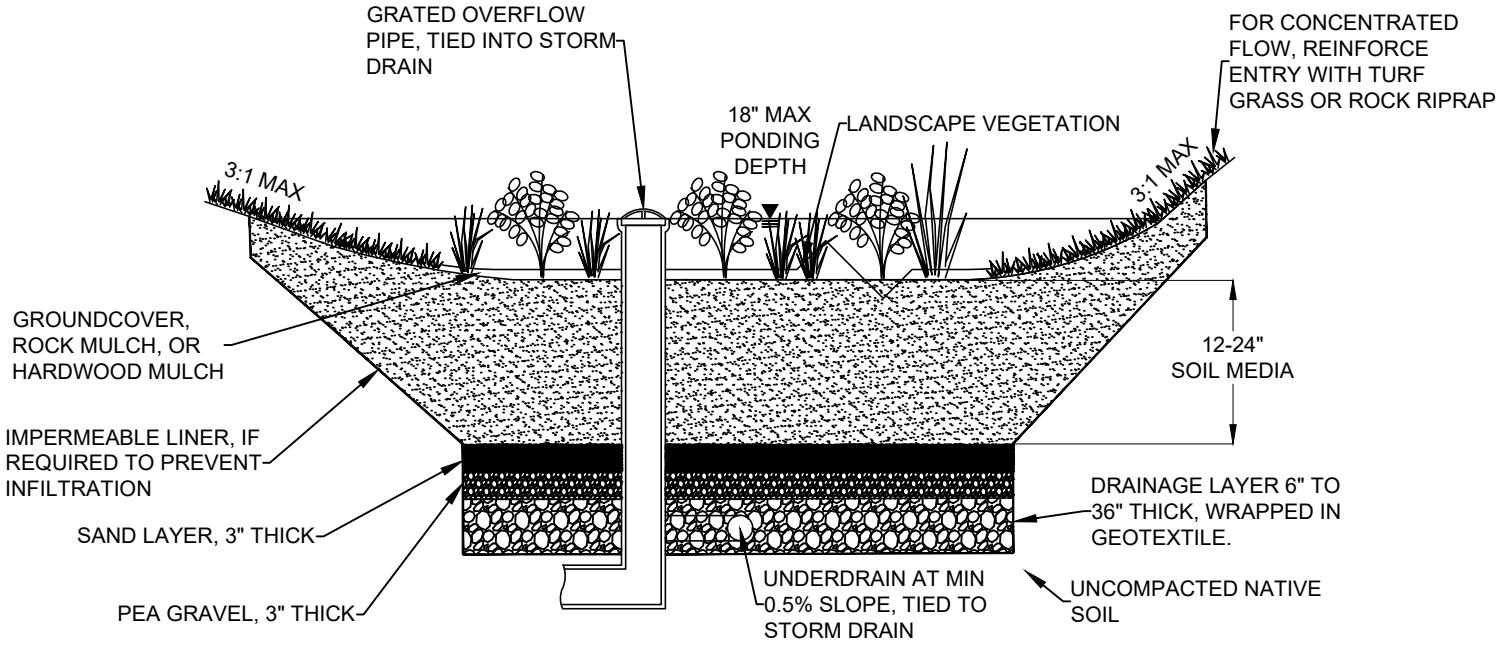
1. MAINTAIN MINIMUM SEPARATION OF 2 FOOT VERTICALLY AND HORIZONTALLY FROM EXISTING CITY UTILITIES.
2. CITY UTILITIES THAT ARE WITHIN 2 FEET OF BORE ARE TO BE WINDOWED AND OBSERVED AS BORE CROSSES UTILITY.
3. PERPENDICULAR CROSSINGS ARE REQUIRED FOR CITY UTILITIES.
4. PRIVATE UTILITY CROSSINGS ARE TO BE COORDINATED WITH THE CORRESPONDING OWNER.
5. APPROVED SET OF PLANS AND PUBLIC WORKS PERMIT ARE REQUIRED TO BE ON JOB SITE AT ALL TIMES.
6. COORDINATE ANY PLAN CHANGES THROUGH THE CITY ENGINEER PRIOR TO CONSTRUCTION.

STANDARD DETAIL
P-258
NOT TO SCALE
REVISED DATE: 03/21/17

SHEET 1 OF 1



RETENTION AND INFILTRATION



FILTRATION WITH UNDERDRAIN

provo PUBLIC WORKS

RAIN GARDEN

STANDARD DETAIL
P-301a

NOT TO SCALE

REVISED DATE: Sep-2020

1. GENERAL
   A. Submit before use:
      A.A. Soil Media: Certification from supplier or testing from native or amended soil, showing material meets requirements specified below.
      A.B. Sand, Pea Gravel, Sewer Rock, Rock Mulch, Rock Riprap: Name of supplier and source.
      A.C. Underdrain, Geotextile, Impermeable Liner, Hardwood Mulch: Sample and manufacturer's certification that material meets requirements specified below.

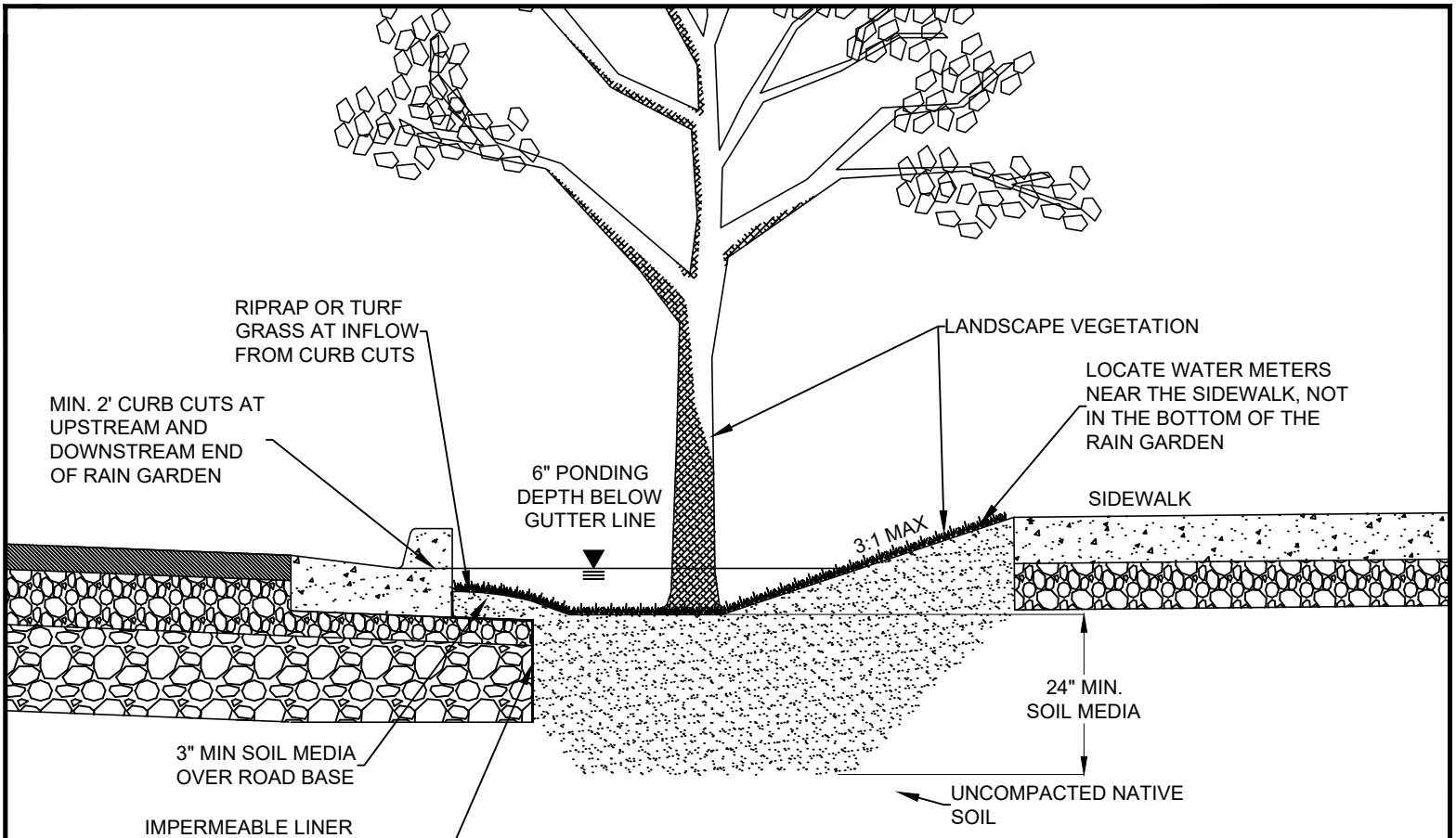
2. PRODUCT
   A. Landscape Vegetation: See Section 15.20, Provo City Code for landscape vegetation requirements. Refer to the Utah DEQ'S *A Guide to Low Impact Development within Utah* for additional guidance on plant selection in BMPs. Minimum 65% vegetative cover. Wood mulch only allowed where design floods are diverted around or ponded within rain garden (not conveyed through with velocity). Rain gardens requiring impermeable liner or underdrains shall be located at least 5' from trees or large, woody shrubs with roots that may compromise the liner or clog the underdrain.
   B. Soil Media: Native, amended, or engineered soil with organics to support plant growth, maximum 5% clay, minimum 60% gravelly sand or sand, with a long-term (safety factor applied) infiltration rate of at least 1 in/hr at 85% compaction.
   C. Sand Layer: Sand Per Utah Chapter APWA Specification 31 05 13.
   Pea Gravel: 3/8" to 1/2" pea gravel per Utah Chapter APWA Specification 31 05 13.
   E. Drainage Layer: ASTM Size 3-4 Sewer Rock per Utah Chapter APWA Specification 31 05 13.
   F. Underdrain: Min. 4" schedule 40 perforated PVC pipe, or equivalent with prior City approval.
   G. Geotextile: Drainage Geotextile per Utah Chapter APWA Specification 31 05 19. Class A if the drainage layer is very sharp and angular; otherwise, Class B.
   H. Impermeable Liner: Impermeable, nonbiodigradable, inert to soil chemicals, resistant to molds, mildew, acids and alkalis, and within a pH range of 3 to 12.
   I. Rock Riprap: Loose-placed riprap per Utah Chapter APWA Specification 31 37 00.
   J. Rock Mulch: Decorative rock at least 1" in diameter.
   K. Hardwood Mulch: Well-aged, hardwood mulch placed at least 3" thick.

3. EXECUTION
   A. Rain garden native subgrades shall not be compacted, and heavy construction equipment shall not be allowed within the rain garden footprint.
   B. Install all utilities prior to constructing the rain garden. Avoid BMP footprint when possible.
   C. Construction of rain garden shall commence after adjacent and tributary areas are stabilized.
   D. If no or only light compaction occurred on native soil during adjacent construction, loosen native subgrade (e.g. scarify top 6-9" of native soil with an excavator bucket). If significant compaction occurred, excavate 1' deep by 1' wide trenches every 6' and backfill with sand.
   I. If underdrain is required, inspect elevations prior to installation to ensure min. 0.5% slope. Follow manufacturer's recommendations for geotextile overlapping around drainage layer.
   J. If impermeable liner is required, inspect subgrade and remove items that may puncture.
   K. Install soil media in maximum 18" lifts, with only light compaction (85% maximum).
   L. Adhere to approved construction SWPPP, including any BMPs required to protect the rain garden during construction. If silt or other debris enters the rain garden during construction, remove before construction resumes.

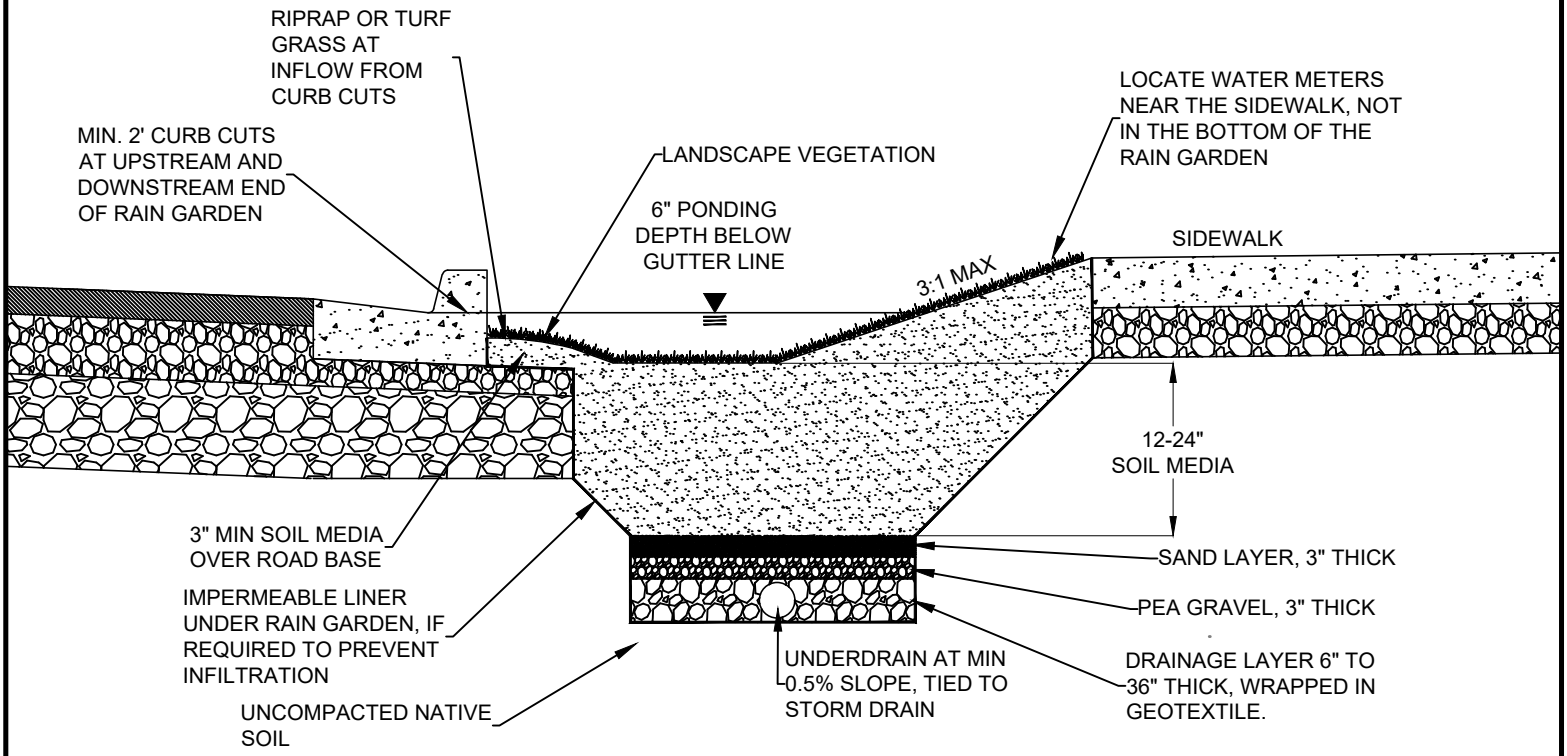
provo PUBLIC WORKS

RAIN GARDEN

STANDARD DETAIL
P-301a
NOT TO SCALE
REVISED DATE: Sep-2020



RETENTION AND INFILTRATION



FILTRATION WITH UNDERDRAIN

PROVO PUBLIC WORKS

RAIN GARDEN IN STREET PLANTER STRIP

STANDARD DETAIL
P-301b

NOT TO SCALE

REVISED DATE: Sep-2020

1. GENERAL

A. Submit before use:

A.1. Soil Media: Certification from supplier or testing from native or amended soil, showing material meets requirements specified below.

A.2. Sand, Pea Gravel, Sewer Rock, Rock Mulch, Riprap: Name of supplier and source.

A.3. Underdrain, Geotextile,Impermeable Liner: Sample and manufacturer's certification that material meets requirements specified below.

2. PRODUCTS

A. Landscape Vegetation: See Section 15.20.120 - Parkways, Provo City Code for vegetation requirements. Refer to the Utah DEQ's *A Guide to Low Impact Development within Utah* for additional guidance on plant selection within BMPs. Minimum 65% vegetative cover. Either (a) turf grass or (b) rock mulch and low maintenance plants that do not require regular pruning must be installed for new residential developments, for ease of maintenance by homeowner. No wood mulch allowed in rain gardens in street planter strips. Rain gardens requiring impermeable liner or underdrains shall be located at least 5' from trees or large, woody shrubs with roots that may compromise the liner or clog the underdrain.

B. Soil Media: Native, amended, or engineered soil with organics to support plant growth, maximum 5% clay, minimum 60% gravelly sand or sand, with a long-term (safety factor applied) infiltration rate of at least 1 in/hr at 85% compaction.

C. Sand Layer: Sand per Utah Chapter APWA Specification 31 05 13.

D. Pea Gravel: 3/8" to 1/2" pea gravel per Utah Chapter APWA Specification 31 05 13.

E. Drainage Layer: ASTM Size 3-4 Sewer Rock per Utah Chapter APWA Specification 31 05 13.

F. Underdrain: Min. 4" schedule 40 perforated PVC pipe, or equivalent with prior City approval.

G. Geotextile: Drainage Geotextile per Utah Chapter APWA Specification 31 05 19. Class A if the drainage layer is very sharp and angular; otherwise, Class B.

H. Impermeable Liner: Impermeable, nonbiodigradable, inert to soil chemicals, resistant to molds, mildew, acids and alkalis, and within a pH range of 3 to 12.

J. Rock Riprap: Loose-placed riprap per Utah Chapter APWA Specification 31 37 00.

K. Rock Mulch: Decorative rock at least 1" in diameter.

3. EXECUTION

A. Rain garden native subgrades shall not be compacted, and heavy construction equipment shall not be allowed within the rain garden footprint.

B. Install all utilities (including gas and communication/power conduits) prior to constructing the rain garden. Locate with consideration of the rain garden's drainage characteristics.

C. Construction of rain garden shall commence after adjacent and tributary areas are stabilized.

D. If no or only light compaction occurred on native soil during adjacent construction, loosen native subgrade (e.g. scarify top 6-9" of native soil with an excavator bucket). If significant compaction occurred, excavate 1' deep by 1' wide trenches every 6' and backfill with sand.

I. If underdrain is required, inspect elevations prior to installation to ensure min. 0.5% slope. Follow manufacturer's recommendations for geotextile overlapping around drainage layer.

J. If impermeable liner is required, inspect subgrade and remove items that may puncture.

K. Install soil media in maximum 18" lifts, with only light compaction (85% maximum).

L. Adhere to approved construction SWPPP, including any BMPs required to protect the rain garden during construction. If silt or other debris enters the rain garden during construction, remove before construction resumes.

provo PUBLIC WORKS

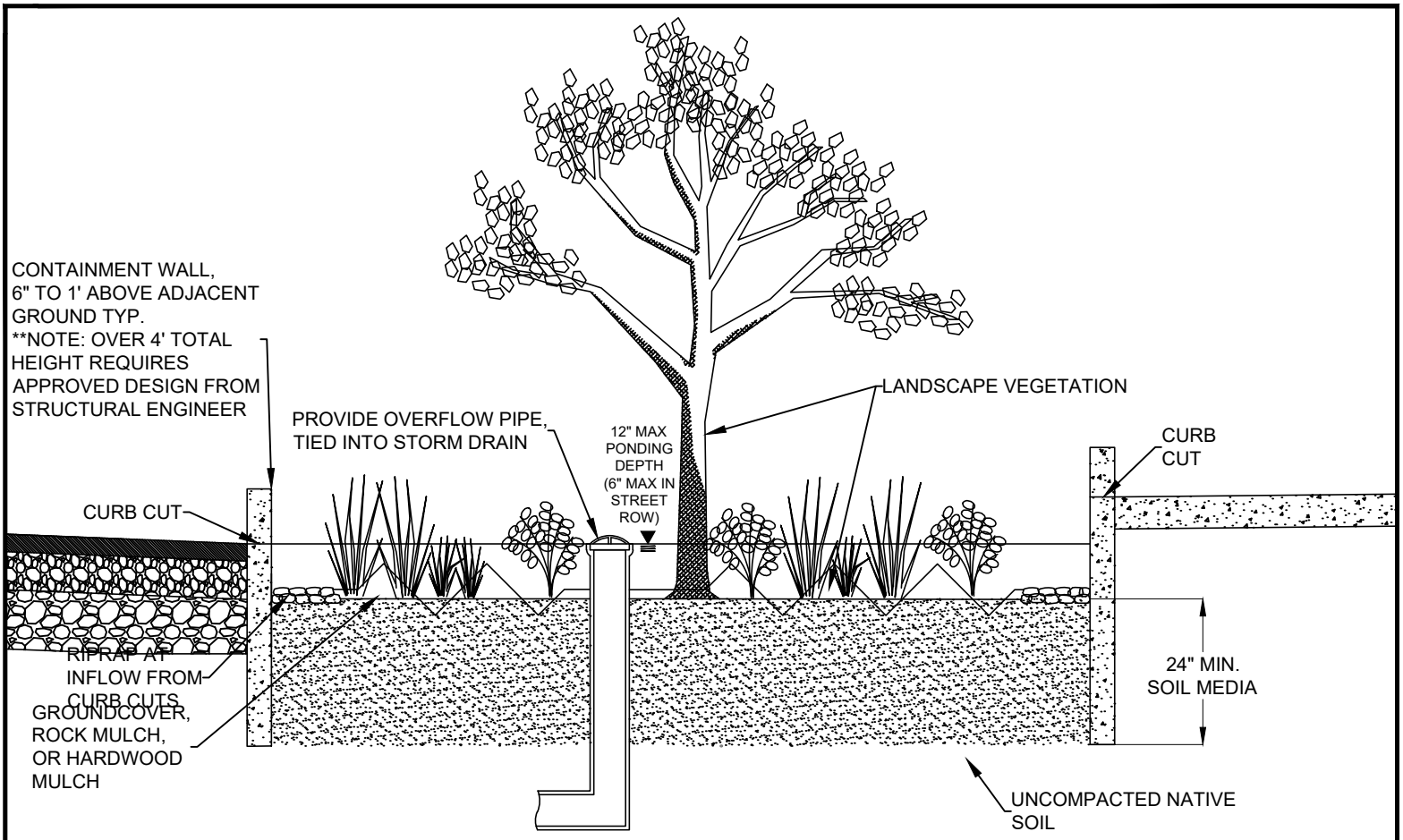
RAIN GARDEN IN STREET PLANTER STRIP

STANDARD DETAIL

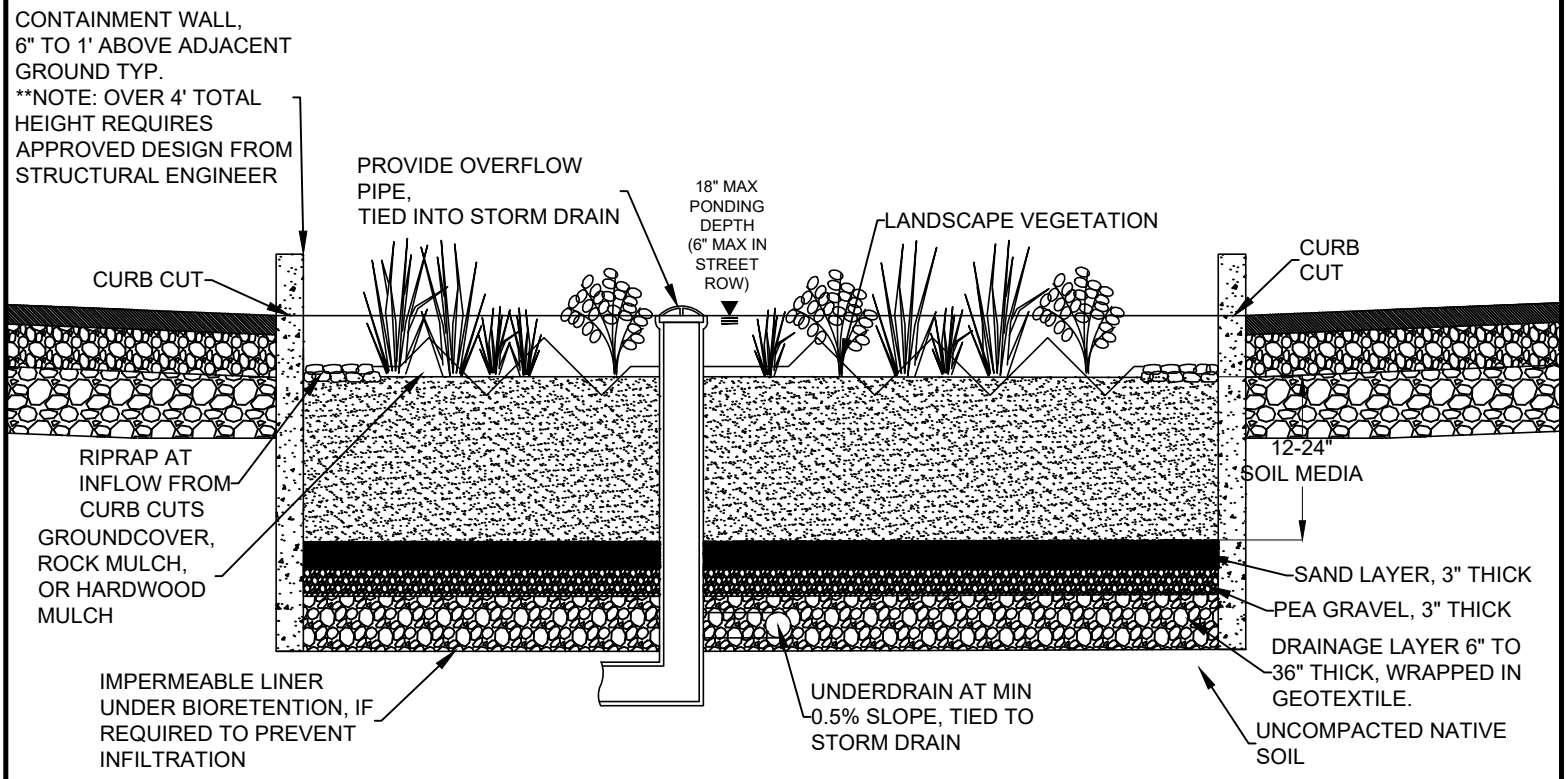
P-301b

NOT TO SCALE

REVISED DATE: Sep-2020



RETENTION AND INFILTRATION



FILTRATION WITH UNDERDRAIN

PROVO PUBLIC WORKS

BIORETENTION CELL

STANDARD DETAIL
P-302
NOT TO SCALE
REVISED DATE: Sep-2020

1. GENERAL

A. Submit before use:

A.1. Soil Media: Certification from supplier or testing from native or amended soil, showing material meets requirements specified below.

A.2. Sand, Pea Gravel, Sewer Rock, Rock Mulch, Rock Riprap: Name of supplier and source.

A.3. Underdrain, Geotextile,Impermeable Liner, Hardwood Mulch: Sample and manufacturer's certification that material meets requirements specified below.

2. PRODUCTS

A. Landscape Vegetation: See Section 15.20, Provo City Code for landscape vegetation requirements. Refer to the Utah DEQ's *A Guide to Low Impact Development within Utah* for additional guidance on plant selection within BMPs. Minimum 65% vegetative cover. Wood mulch only allowed where design floods are diverted around or ponded within bioretention cell (not conveyed through with velocity). No wood mulch in cells in street planter strips. Bioretention cells requiring impermeable liner or underdrains shall be located at least 5' from trees or large, woody shrubs with roots that may compromise the liner or clog the underdrain.

B. Soil Media: Native, amended, or engineered soil with organics to support plant growth, maximum 5% clay, minimum 60% gravelly sand or sand, with a long-term (safety factor applied) infiltration rate of at least 1 in/hr at 85% compaction.

C. Sand Layer: Sand per Utah Chapter APWA Specification 31 05 13.

D. Pea Gravel: 3/8" to 1/2" pea gravel per Utah Chapter APWA Specification 31 05 13.

E. Drainage Layer: ASTM Size 3-4 Sewer Rock per Utah Chapter APWA Specification 31 05 13.

F. Underdrain: Min. 4" schedule 40 perforated PVC pipe, or equivalent with prior City approval.

G. Geotextile: Drainage Geotextile per Utah Chapter APWA Specification 31 05 19. Class A if the drainage layer is very sharp and angular; otherwise, Class B.

H. Impermeable Liner: Impermeable, nonbiodigradable, inert to soil chemicals, resistant to molds, mildew, acids and alkalis, and within a pH range of 3 to 12.

I. Rock Riprap: Loose-placed riprap per Utah Chapter APWA Specification 31 37 00.

J. Rock Mulch: Decorative rock at least 1" in diameter.

K. Hardwood Mulch: Well-aged, hardwood mulch placed at least 3" thick.

3. EXECUTION

A. Native subgrades under bioretention shall not be compacted, and heavy construction equipment shall not be allowed within the bioretention cell footprint.

B. Install all utilities prior to constructing the bioretention. Avoid BMP footprint when possible.

C. Construction of bioretention cell shall commence after adjacent and tributary areas are stabilized.

D. If no or only light compaction occurred on native soil during adjacent construction, loosen native subgrade (e.g. scarify top 6-9" of native soil with an excavator bucket). If significant compaction occurred, excavate 1' deep by 1' wide trenches every 6' and backfill with sand.

I. If underdrain is required, inspect elevations prior to installation to ensure min. 0.5% slope. Follow manufacturer's recommendations for geotextile overlapping around drainage layer.

J. If impermeable liner is required, inspect subgrade and remove items that may puncture.

K. Install soil media in maximum 18" lifts, with only light compaction (85% maximum).

L. Adhere to approved construction SWPPP, including any BMPs required to protect the bioretention cell during construction. If silt or other debris enters the bioretention cell during construction, remove before construction resumes.

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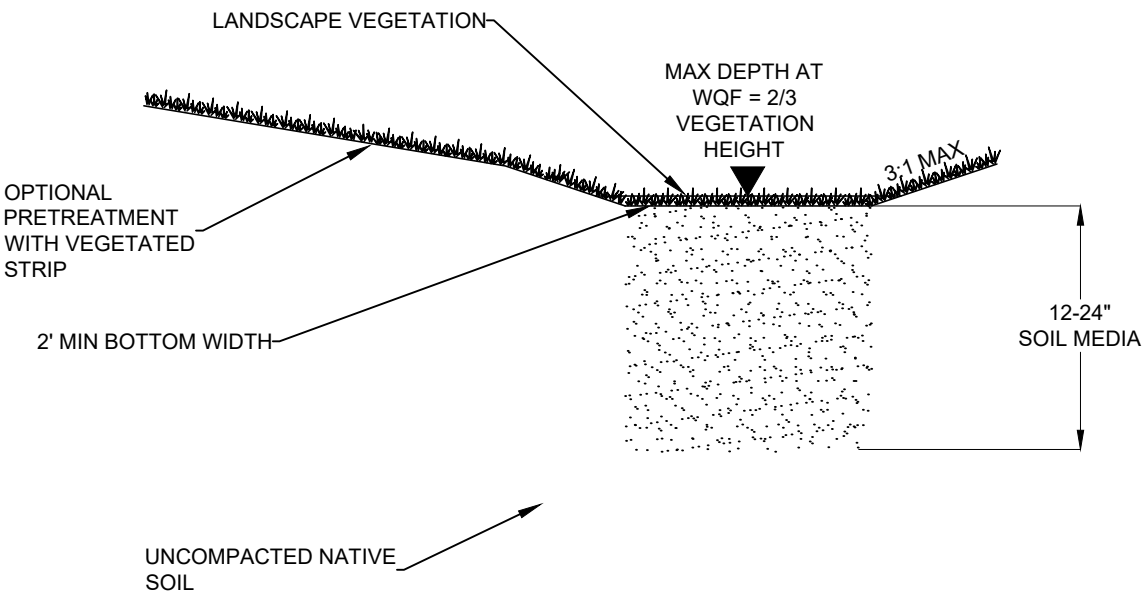
BIORETENTION CELL

STANDARD DETAIL

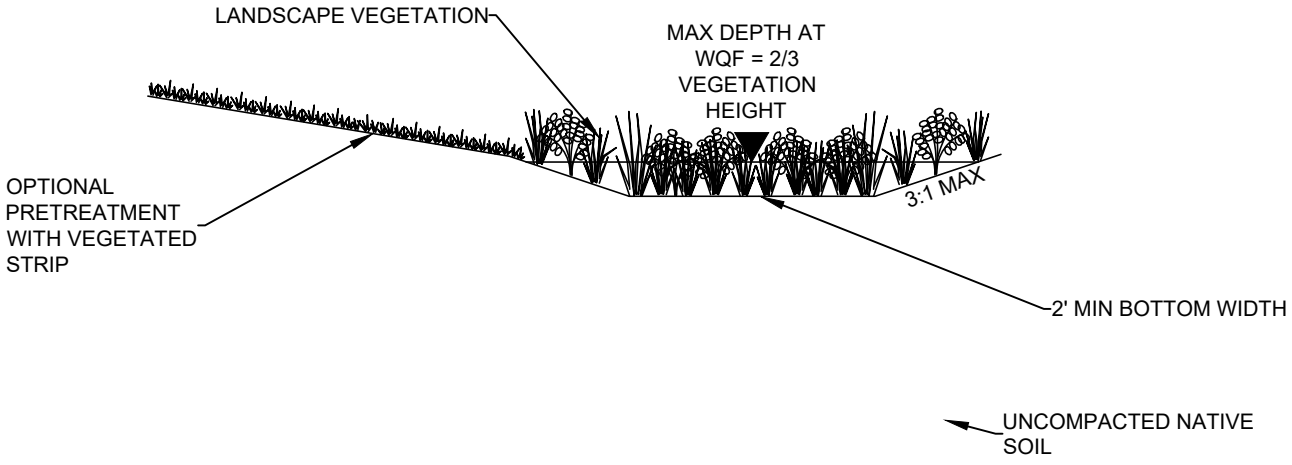
P-302

NOT TO SCALE

REVISED DATE: Sep-2020



BIOFILTRATION AND INFILTRATION



BIOFILTRATION ONLY

provo PUBLIC WORKS

BIOSWALE

STANDARD DETAIL
P-303
NOT TO SCALE
REVISED DATE: Sep-2020

Bioswales

1. GENERAL

A. Submit before use:

A.1. Soil Media: Certification from supplier or testing from native or amended soil, showing material meets requirements specified below.

2. PRODUCTS

A. Landscape Vegetation: See Section 15.20, Provo City Code for landscape vegetation requirements. Refer to the Utah DEQ's *A Guide to Low Impact Development within Utah* for additional guidance on plant selection within BMPs. Minimum 65% vegetative cover. Wood mulch not allowed in bioswales due to the swale being intended to convey flow with velocity.

B. Soil Media: Native, amended, or engineered soil with organics to support plant growth, maximum 5% clay, minimum 60% gravelly sand or sand, with a long-term (safety factor applied) infiltration rate of at least 1 in/hr at 85% compaction.

C. Rock Mulch: Decorative rock at least 1" in diameter. Size rock to withstand design velocities.

3. EXECUTION

A. Bioswales using the bottom section shall have a longitudinal slope of 1% or greater. See design plans for design slope.

B. Bioswale native subgrades shall not be compacted if infiltration is required, and heavy construction equipment shall not be allowed within the bioswale footprint.

C. Install all utilities (including gas and communication/power conduits) prior to constructing the bioswale. Locate with consideration of the bioswale's drainage characteristics.

D. Construction of bioswale shall commence after adjacent and tributary areas are stabilized.

E. For infiltration bioswales: If no or only light compaction occurred on native soil during adjacent construction, loosen native subgrade (e.g. scarify top 6-9" of native soil with an excavator bucket). If significant compaction occurred, excavate 1' deep by 1' wide trenches every 6' and backfill with sand.

I. Install soil media in maximum 18" lifts, with only light compaction (85% maximum).

J. Adhere to approved construction SWPPP, including any BMPs required to protect the rain garden during construction. If silt or other debris enters the rain garden during construction, remove before construction resumes.

provo PUBLIC WORKS

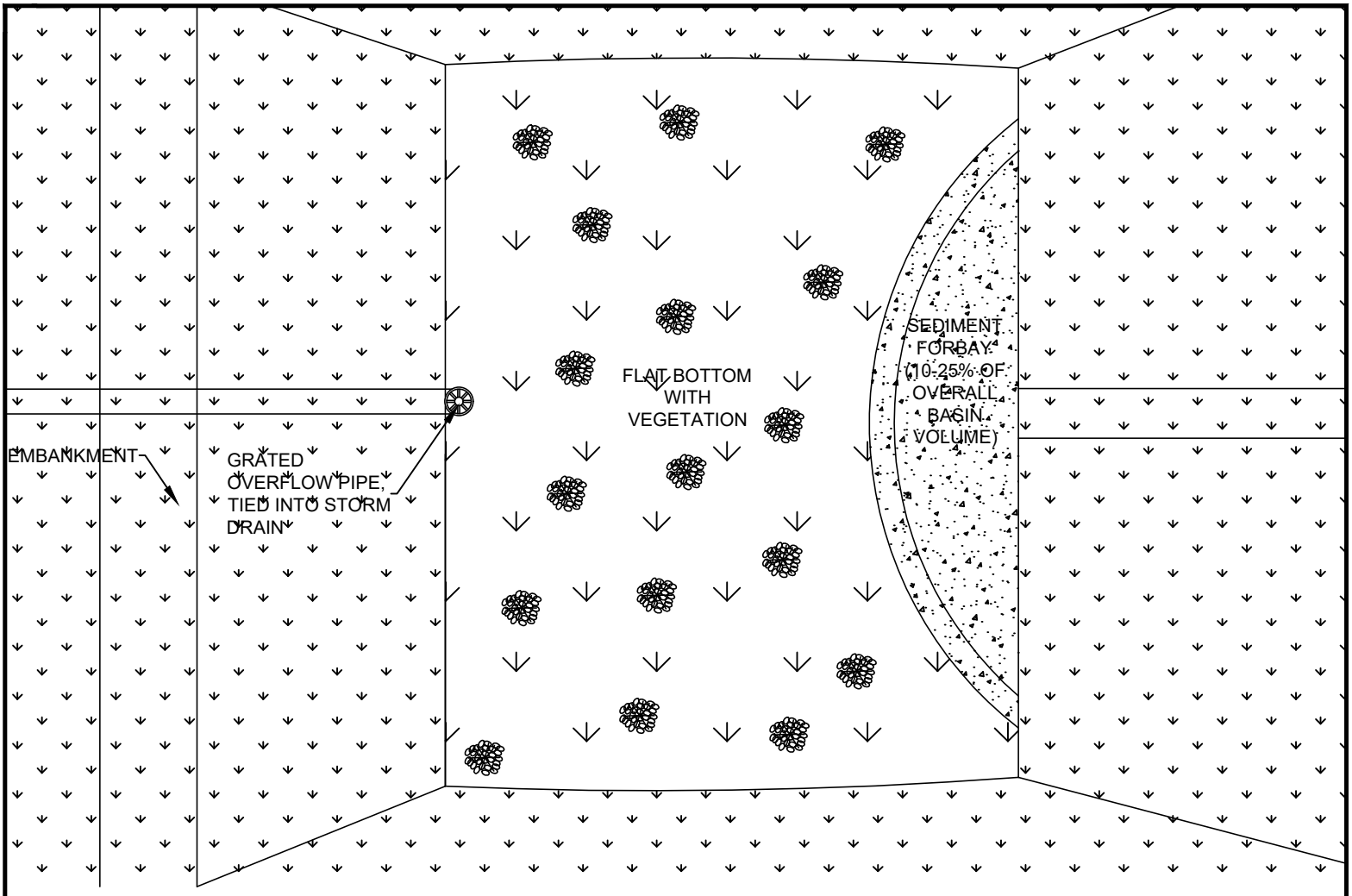
BIOSWALE

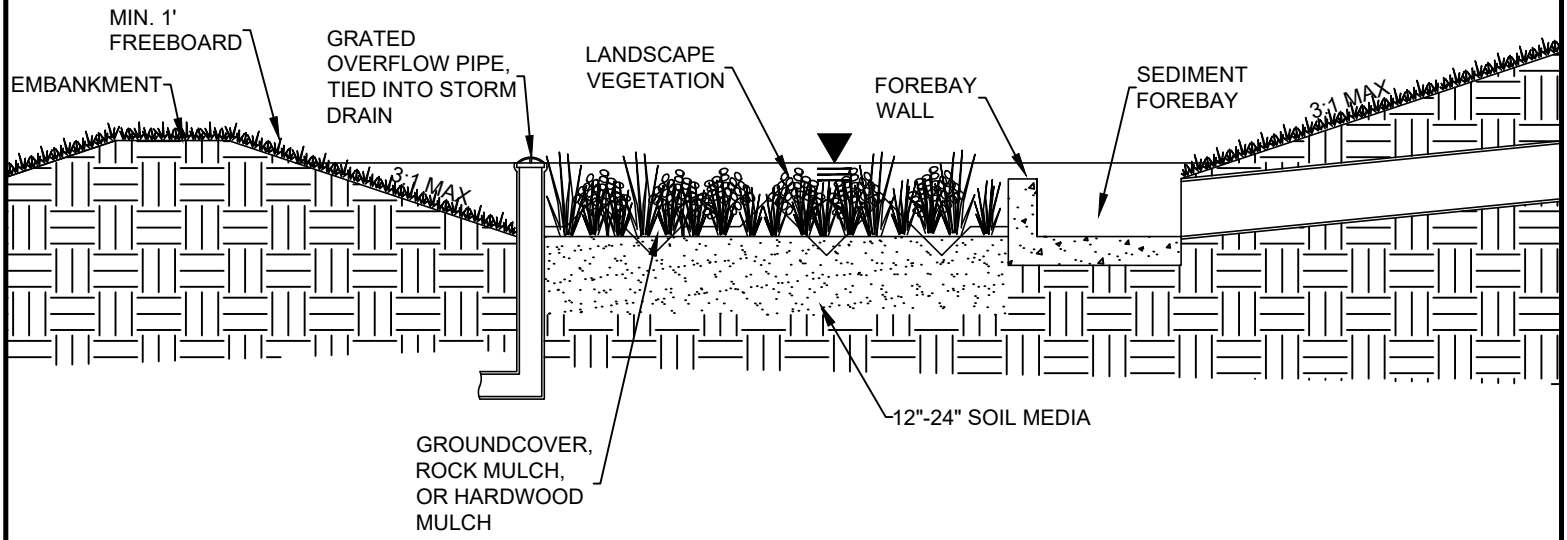
STANDARD DETAIL

P-303

NOT TO SCALE

REVISED DATE: Sep-2020





provo PUBLIC WORKS

INFILTRATION BASIN

STANDARD DETAIL
P-304
NOT TO SCALE
REVISED DATE: Sep-2020

1. GENERAL

A. Submit before use:

A.1. Soil Media: Certification from supplier or testing from native or amended soil, showing material meets requirements specified below.

A.2. Rock Mulch: Name of supplier and source.

A.3. Hardwood Mulch: Sample and manufacturer's certification that material meets requirements specified below.

2. PRODUCTS

A. Landscape Vegetation: See Section 15.20, Provo City Code for landscape vegetation requirements. Refer to the Utah DEQ's A *Guide to Low Impact Development within Utah* for additional guidance on plant selection in BMPs. Minimum 65% vegetative cover.

B. Soil Media: Native, amended, or engineered soil with organics to support plant growth, maximum 5% clay, minimum 60% gravelly sand or sand, with a long-term (safety factor applied) infiltration rate of at least 1 in/hr at 85% compaction.

C. Rock Mulch: Decorative rock at least 1" in diameter.

D. Hardwood Mulch: Well-aged, hardwood mulch placed at least 3" thick.

3. EXECUTION

A. Infiltration basin native subgrades shall not be compacted, and heavy construction equipment shall not be allowed within the rain garden footprint.

B. Install all utilities prior to constructing the basin. Avoid BMP footprint when possible.

C. Construction of infiltration basin shall commence after adjacent and tributary areas are stabilized.

D. If no or only light compaction occurred on native soil during adjacent construction, loosen native subgrade (e.g. scarify top 6-9" of native soil with an excavator bucket). If significant compaction occurred, excavate 1' deep by 1' wide trenches every 6' and backfill with sand.

I. Install soil media in maximum 18" lifts, with only light compaction (85% maximum).

J. Adhere to approved construction SWPPP, including any BMPs required to protect the rain garden during construction. If silt or other debris enters the rain garden during construction, remove before construction resumes.

provo PUBLIC WORKS

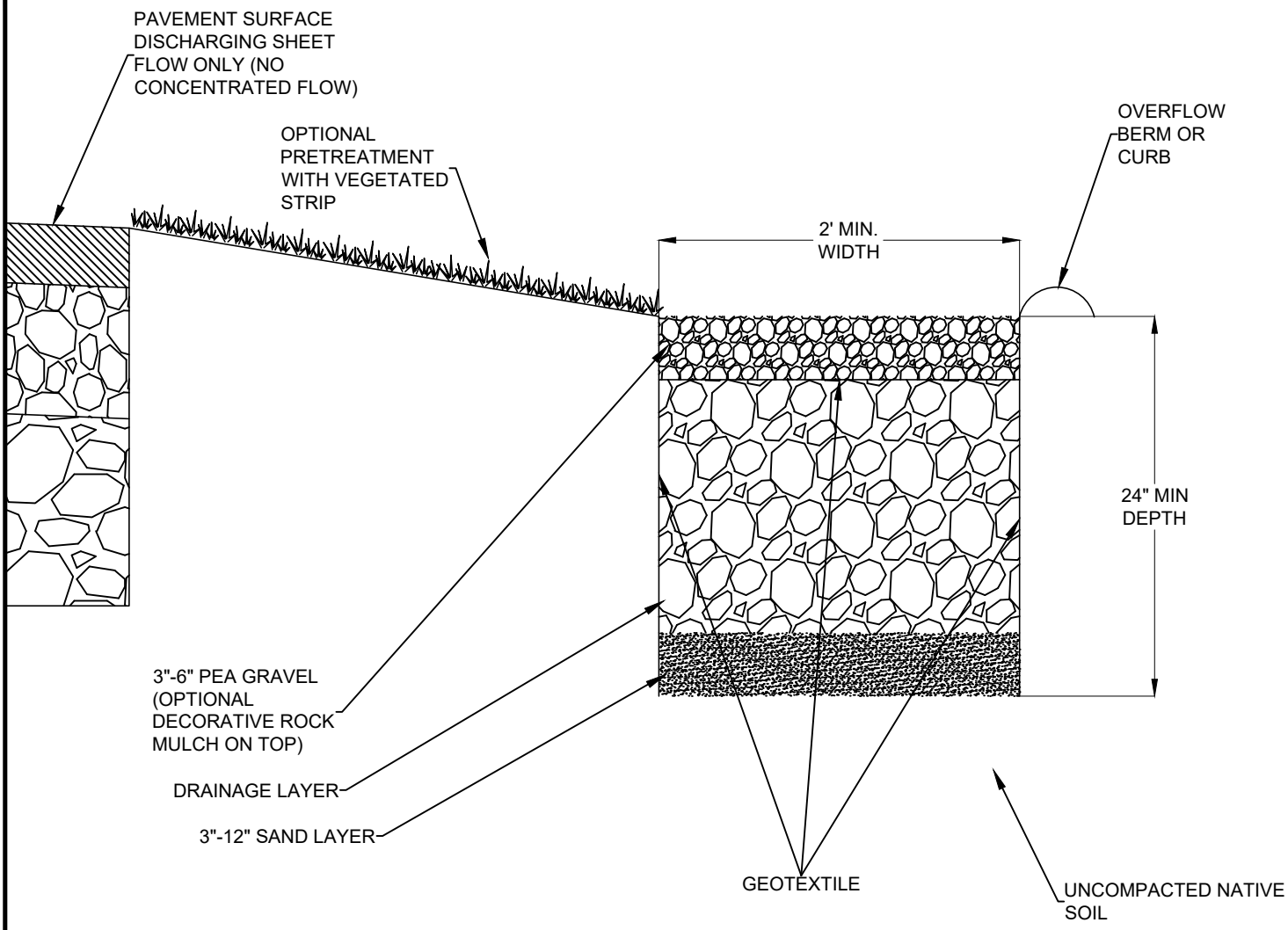
INFILTRATION BASIN

STANDARD DETAIL

P-304

NOT TO SCALE

REVISED DATE: Sep-2020



PUBLIC WORKS

INFILTRATION TRENCH

STANDARD DETAIL

P-305

NOT TO SCALE

REVISED DATE: Sep-2020

1. GENERAL

A. Submit before use:

A.1. Sand, Pea Gravel, Sewer Rock: Name of supplier and source.

A.2. Geotextile: Sample and manufacturer's certification that material meets requirements specified below.

2. PRODUCTS

A. Sand Layer: Sand per Utah Chapter APWA Specification 31 05 13.

B. Pea Gravel: 3/8" to 1/2" pea gravel per Utah Chapter APWA Specification 31 05 13.

C. Drainage Layer: ASTM Size 3-4 Sewer Rock per Utah Chapter APWA Specification 31 05 13.

D. Geotextile: Drainage Geotextile per Utah Chapter APWA Specification 31 05 19. Class A if the drainage layer is very sharp and angular; otherwise, Class B.

E. Rock Mulch (optional): Decorative rock at least 1" in diameter.

3. EXECUTION

A. Native subgrades under trench shall not be compacted, and heavy construction equipment shall not be allowed within the infiltration trench footprint.

B. Install all utilities prior to constructing the trench. Avoid BMP footprint when possible.

C. Construction of infiltration trench shall commence after adjacent and tributary areas are stabilized.

D. If no or only light compaction occurred on native soil during adjacent construction, loosen native subgrade (e.g. scarify top 6-9" of native soil with an excavator bucket). If significant compaction occurred, excavate 1' deep by 1' wide trenches every 6' and backfill with sand.

I. Follow manufacturer's recommendations for geotextile overlapping .

J. Infiltration trenches longitudinal slopes shall be 1% max. No longitudinal slope preferred.

K. Adhere to approved construction SWPPP, including any BMPs required to protect the infiltration trench during construction. If silt or other debris enters the trench during construction, remove before construction resumes.

provo PUBLIC WORKS

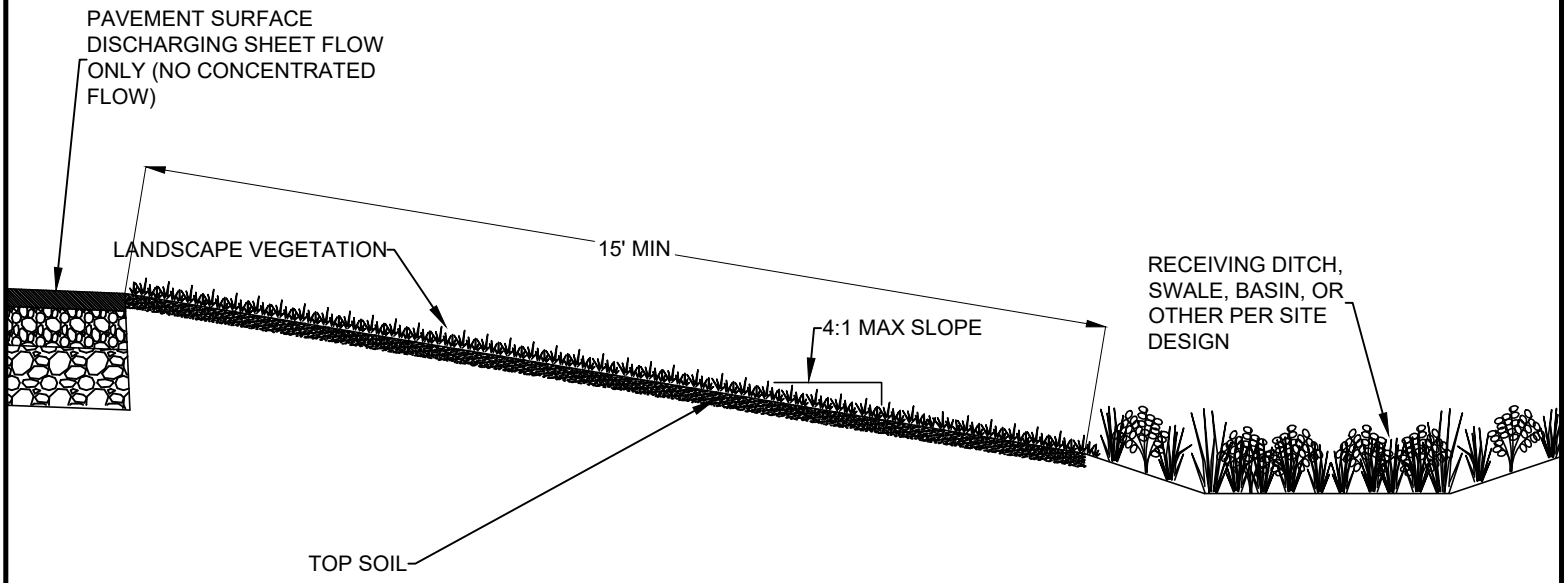
INFILTRATION TRENCH

STANDARD DETAIL

P-305

NOT TO SCALE

REVISED DATE: Sep-2020



provo PUBLIC WORKS

VEGETATED STRIP

STANDARD DETAIL

P-306

NOT TO SCALE

REVISED DATE: Sep-2020

1. GENERAL

A. Submit before use:

A.1. Top Soil: Certification from supplier or testing from native or amended soil, showing material meets requirements specified below.

2. PRODUCTS

A. Landscape Vegetation: See Section 15.20, Provo City Code for landscape vegetation requirements. Refer to the Utah DEQ's *A Guide to Low Impact Development within Utah* for additional guidance on plant selection within BMPs. Minimum 80% vegetated cover.

B. Top Soil: Per Utah Chapter APWA Specification 31 05 13.

3. EXECUTION

A. Vegetated strips shall have a maximum slope of 4:1, and minimum length of 15'. See design plans for design slope and length.

B. Install all utilities (including gas and communication/power conduits) prior to constructing the vegetated strip. Locate with consideration of the vegetated strip and receiving water body's drainage characteristics.

C. Construction of vegetated strip shall commence after adjacent and tributary areas are stabilized.

D. Adhere to approved construction SWPPP, including any BMPs required to protect the rain garden during construction. If silt or other debris enters the rain garden during construction, remove before construction resumes.

provo PUBLIC WORKS

VEGETATED STRIP

STANDARD DETAIL

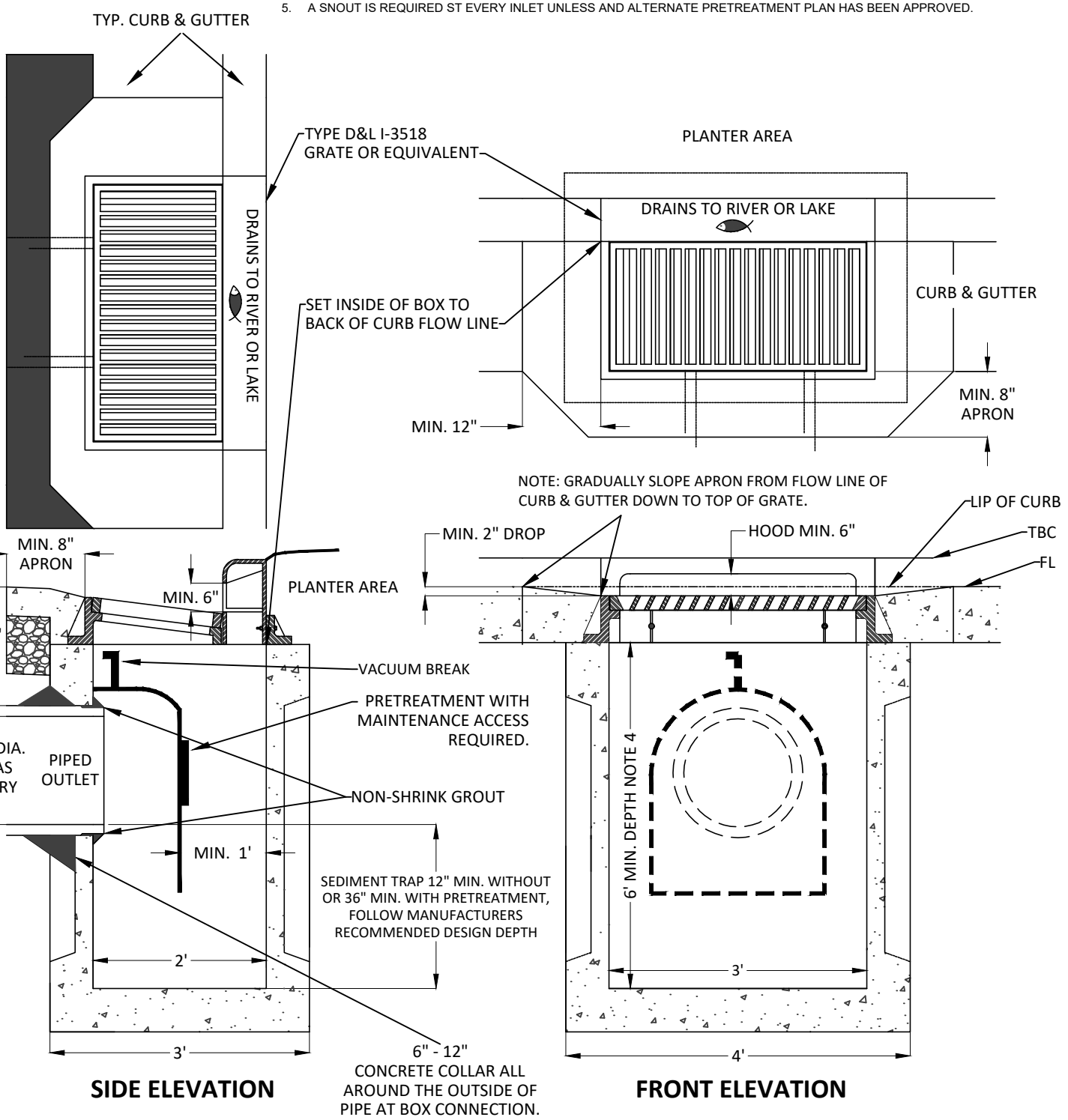
P-306

NOT TO SCALE

REVISED DATE: Sep-2020

NOTE:

1. FOR GRATE & FRAME DETAILS SEE D.&L. SUPPLY CATALOG #I-3518 OR EQUIVALENT.
2. REQUIRED STAMPED HOOD, "DRAINS TO RIVER OR LAKE" WITH FISH LOGO.
3. ALL BOXES AND FRAMES MUST SUPPORT A HS-20 LOADING.
4. REFER TO THE APPROVED PROJECT PLANS FOR PIPE SIZE, LOCATION, SEDIMENT DEPTH, PRETREATMENT AND OTHER STRUCTURE DESIGN REQUIREMENTS.
   - 4.1. 15" DIA. PIPE LATERAL MIN. BOX INSIDE DEPTH IS 6 FEET AND FOLLOWS PRETREATMENT MANUFACTURERS RECOMMENDATIONS.
   - 4.2. 18" DIA. PIPE AS NECESSARY. BOX INSIDE DEPTH IS 7 FEET AND FOLLOWS PRETREATMENT MANUFACTURERS RECOMMENDATIONS.
   - 4.3. *24" DIA. SPECIAL APPROVAL IS REQUIRED IN ADDITION TO INLET STRUCTURE DESIGN. THE MIN. DEPTH FROM OUT LET PIPE FLOW LINE TO FLOOR OF INLET BOX IS 6.0 FEET
5. A SNOUT IS REQUIRED ST EVERY INLET UNLESS AND ALTERNATE PRETREATMENT PLAN HAS BEEN APPROVED.



SHEET 1 OF 1

PUBLIC WORKS

PRE-CAST CURB FACE AND INLET BOX

STANDARD DETAIL

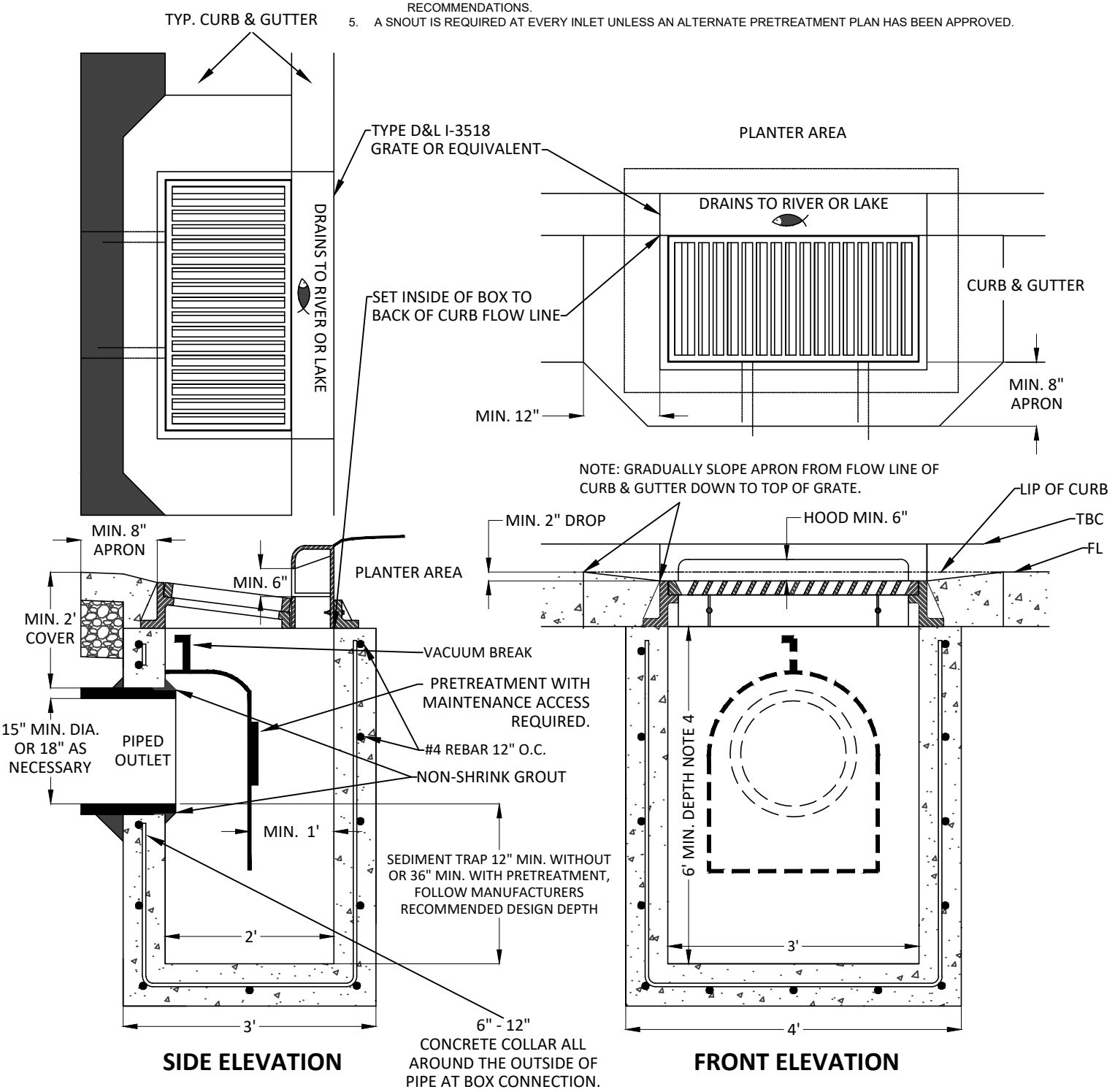
P-315a

NOT TO SCALE

REVISED DATE: 09/26/19

NOTE:

1. FOR GRATE & FRAME DETAILS SEE D.&L. SUPPLY CATALOG #I-3518 OR EQUIVALENT.
2. REQUIRED STAMPED HOOD, "DRAINS TO RIVER OR LAKE" WITH FISH LOGO.
3. ALL BOXES AND FRAMES MUST SUPPORT A HS-20 LOADING.
4. REFER TO THE APPROVED PROJECT PLANS FOR PIPE SIZE, LOCATION, SEDIMENT DEPTH, PRETREATMENT AND OTHER STRUCTURE DESIGN REQUIREMENTS.
   - 4.1. 15" DIA. PIPE LATERAL, MINIMUM DEPTH FROM OUTLET OF PIPE FLOW LINE TO FLOOR OF INLET BOX IS 3.75 FEET OR DEEPER. FOLLOW PRETREATMENT MANUFACTURERS RECOMMENDATIONS. MIN. BOX INSIDE DEPTH IS 6 FEET.
   - 4.2. 18" DIA. PIPE AS NECESSARY, MINIMUM DEPTH FROM OUTLET OF PIPE FLOW LINE TO FLOOR OF INLET BOX IS 4.5 FEET OR DEEPER. FOLLOW PRETREATMENT MANUFACTURERS RECOMMENDATIONS. MIN. BOX INSIDE DEPTH IS 7 FEET.
   - 4.3. *24" DIA. SPECIAL APPROVAL IS REQUIRED IN ADDITION TO INLET STRUCTURE DESIGN. THE MINIMUM DEPTH FROM OUT LET PIPE FLOW LINE TO FLOOR OF INLET BOX IS 6.0 FEET. FOLLOW PRETREATMENT MANUFACTURERS RECOMMENDATIONS.
5. A SNOUT IS REQUIRED AT EVERY INLET UNLESS AN ALTERNATE PRETREATMENT PLAN HAS BEEN APPROVED.



SHEET 1 OF 1

PUBLIC WORKS

CAST-IN-PLACE CURB FACE AND INLET BOX

STANDARD DETAIL

P-315b

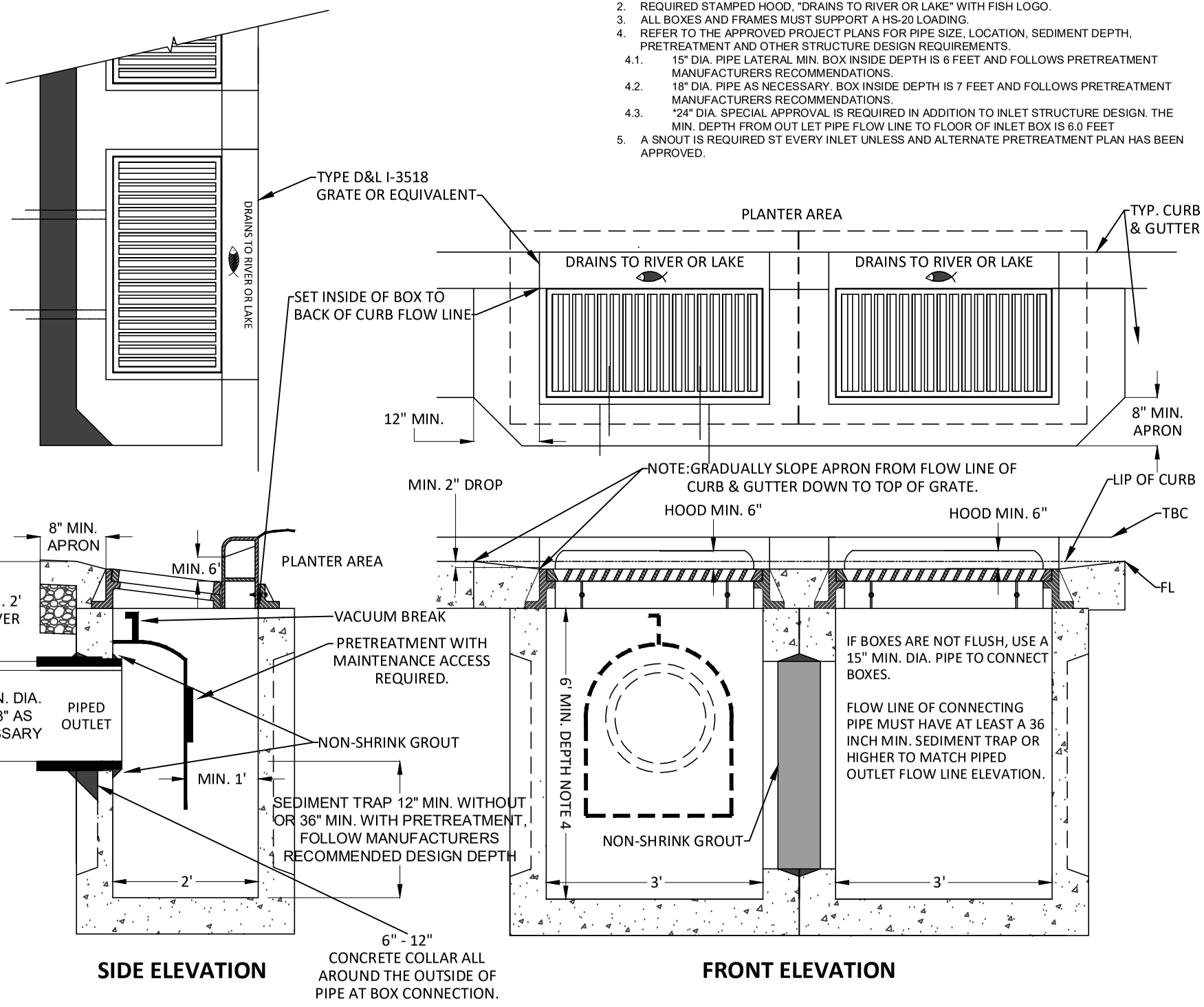
NOT TO SCALE

REVISED DATE: 09/26/19

provo PUBLIC WORKS

DOUBLE PRE-CAST CURB FACE AND INLET BOX

NOTE:
1. FOR GRATE & FRAME DETAILS SEE D.&L. SUPPLY CATALOG #I-3518 OR EQUIVALENT.
2. REQUIRED STAMPED HOOD, "DRAINS TO RIVER OR LAKE" WITH FISH LOGO.
3. ALL BOXES AND FRAMES MUST SUPPORT A HS-20 LOADING.
4. REFER TO THE APPROVED PROJECT PLANS FOR PIPE SIZE, LOCATION, SEDIMENT DEPTH, PRETREATMENT AND OTHER STRUCTURE DESIGN REQUIREMENTS.
   - 4.1. 15" DIA. PIPE LATERAL MIN. BOX INSIDE DEPTH IS 6 FEET AND FOLLOWS PRETREATMENT MANUFACTURERS RECOMMENDATIONS.
   - 4.2. 18" DIA. PIPE AS NECESSARY. BOX INSIDE DEPTH IS 7 FEET AND FOLLOWS PRETREATMENT MANUFACTURERS RECOMMENDATIONS.
   - 4.3. *24" DIA. SPECIAL APPROVAL IS REQUIRED IN ADDITION TO INLET STRUCTURE DESIGN. THE MIN. DEPTH FROM OUT LET PIPE FLOW LINE TO FLOOR OF INLET BOX IS 6.0 FEET
5. A SNOUT IS REQUIRED ST EVERY INLET UNLESS AND ALTERNATE PRETREATMENT PLAN HAS BEEN APPROVED.



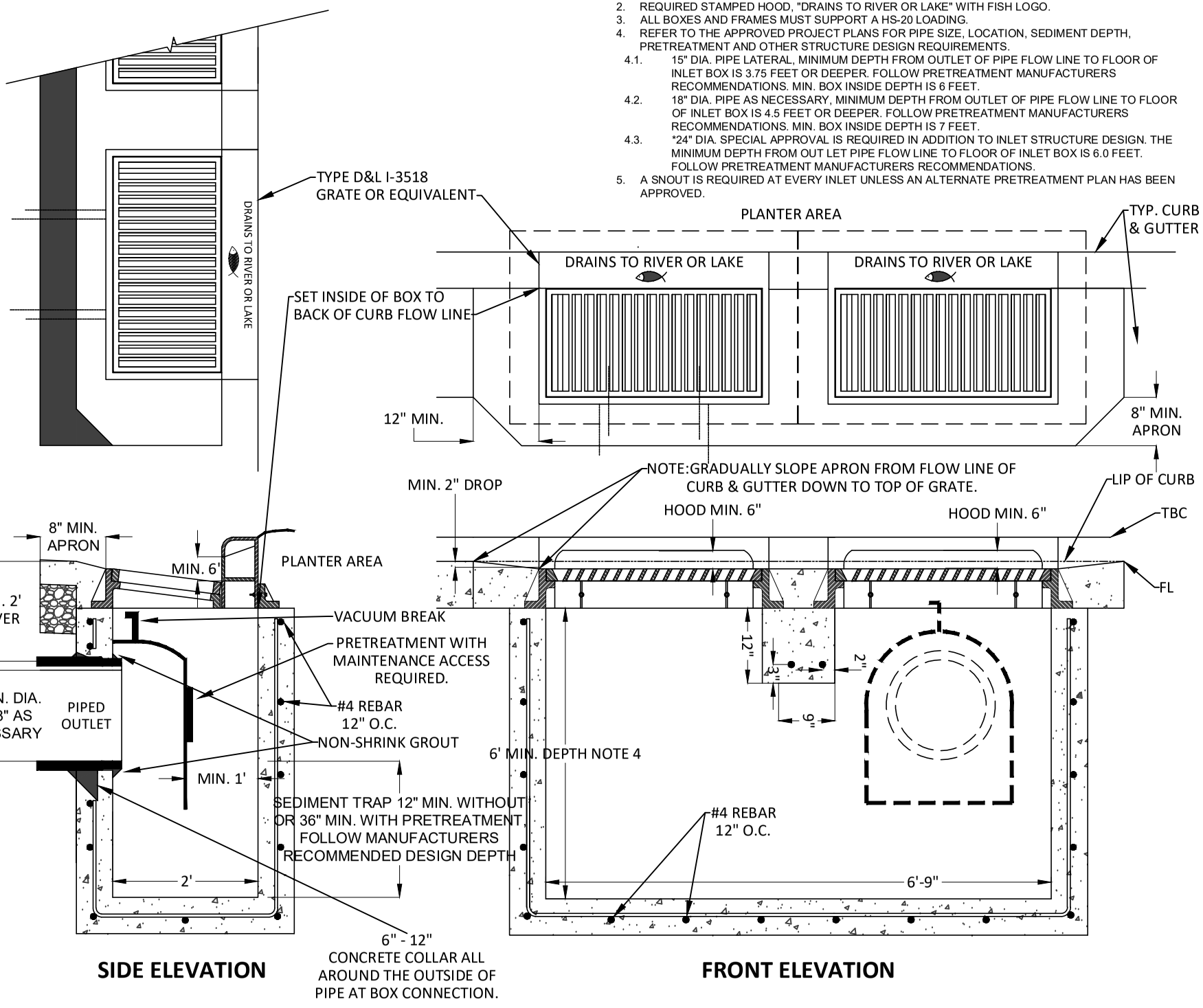
STANDARD DETAIL
P-315C
NOT TO SCALE
REVISED DATE: 09/26/19

SHEET 1 OF 1

provo PUBLIC WORKS

DOUBLE PRE-CAST CURB FACE AND INLET BOX

NOTE:
1. FOR GRATE & FRAME DETAILS SEE D.&L. SUPPLY CATALOG #I-3518 OR EQUIVALENT.
2. REQUIRED STAMPED HOOD, "DRAINS TO RIVER OR LAKE" WITH FISH LOGO.
3. ALL BOXES AND FRAMES MUST SUPPORT A HS-20 LOADING.
4. REFER TO THE APPROVED PROJECT PLANS FOR PIPE SIZE, LOCATION, SEDIMENT DEPTH, PRETREATMENT AND OTHER STRUCTURE DESIGN REQUIREMENTS.
   - 4.1. 15" DIA. PIPE LATERAL, MINIMUM DEPTH FROM OUTLET OF PIPE FLOW LINE TO FLOOR OF INLET BOX IS 3.75 FEET OR DEEPER. FOLLOW PRETREATMENT MANUFACTURERS RECOMMENDATIONS. MIN. BOX INSIDE DEPTH IS 6 FEET.
   - 4.2. 18" DIA. PIPE AS NECESSARY, MINIMUM DEPTH FROM OUTLET OF PIPE FLOW LINE TO FLOOR OF INLET BOX IS 4.5 FEET OR DEEPER. FOLLOW PRETREATMENT MANUFACTURERS RECOMMENDATIONS. MIN. BOX INSIDE DEPTH IS 7 FEET.
   - 4.3. *24" DIA. SPECIAL APPROVAL IS REQUIRED IN ADDITION TO INLET STRUCTURE DESIGN. THE MINIMUM DEPTH FROM OUT LET PIPE FLOW LINE TO FLOOR OF INLET BOX IS 6.0 FEET. FOLLOW PRETREATMENT MANUFACTURERS RECOMMENDATIONS.
5. A SNOUT IS REQUIRED AT EVERY INLET UNLESS AN ALTERNATE PRETREATMENT PLAN HAS BEEN APPROVED.

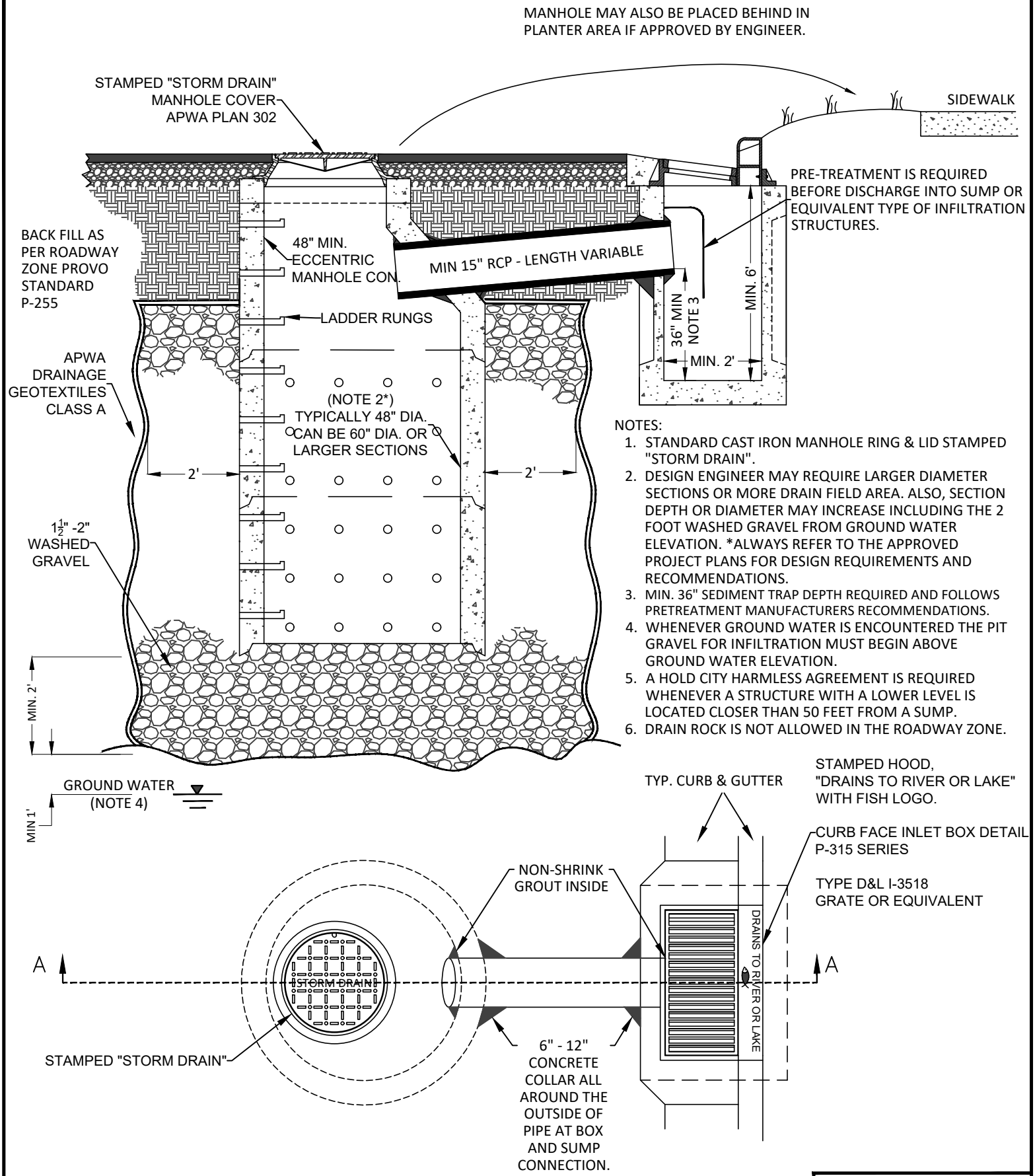


SIDE ELEVATION

FRONT ELEVATION

STANDARD DETAIL
P-315d
NOT TO SCALE
REVISED DATE: 09/26/19

SHEET 1 OF 1



SHEET 1 OF 1

PUBLIC WORKS

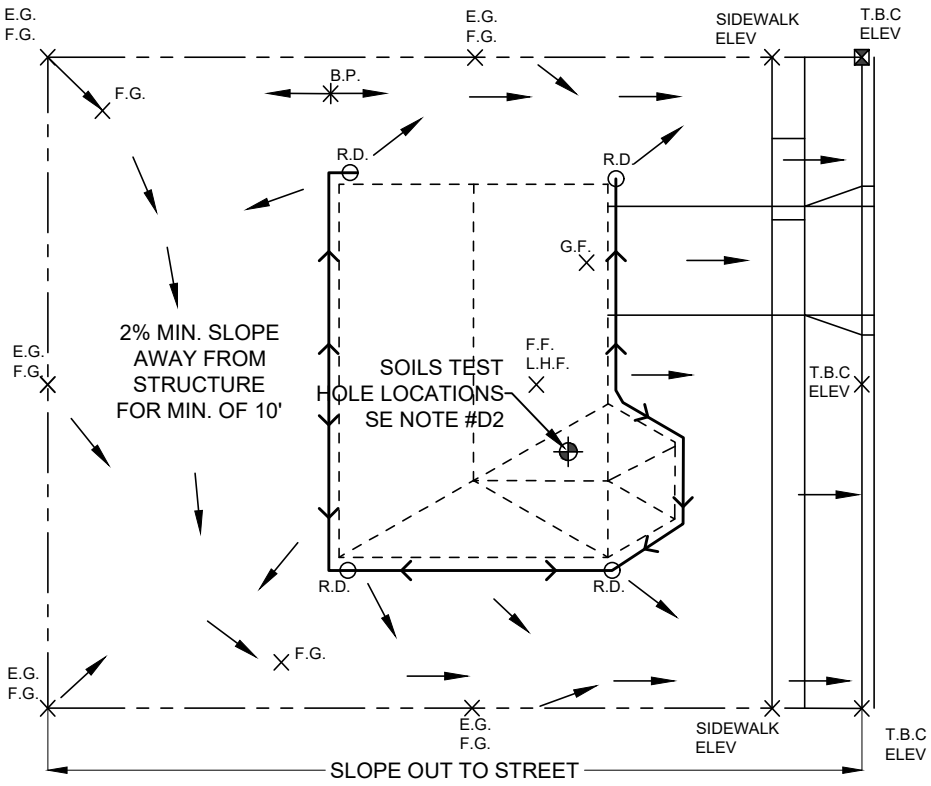
CURB AND GUTTER - DROP INLET AND SUMP

STANDARD DETAIL
P-375

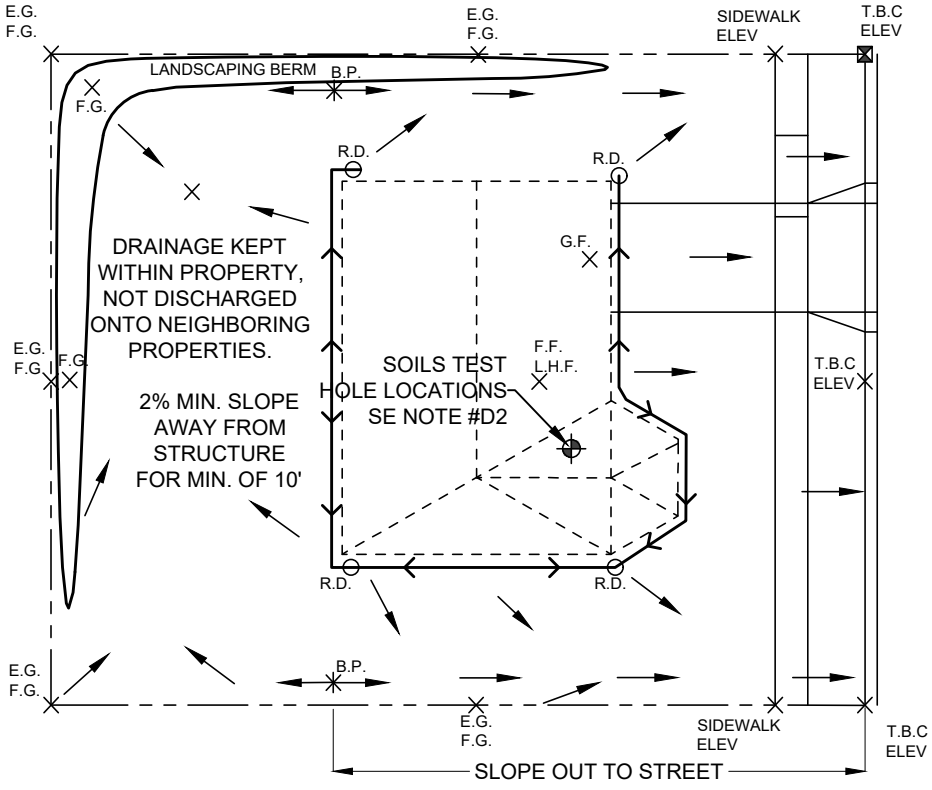
NOT TO SCALE

REVISED DATE: 10/08/18

TYPE 1 LOT



TYPE 2 LOT



LEGEND

- B.P. - BREAK POINT
- T.B.C. - TOP BACK OF CURB
- G.F. - GARAGE FLOOR
- L.H.F. - LOWEST HABITABLE FLOOR
- F.F. - FINISH FLOOR
- F.G. - FINISH GRADE
- E.G. - EXISTING OR PRE-CONSTRUCTION GRADE
- FLOW DIRECTION
- BENCH MARK (T.B.C. OR PERMANENT FEATURE)
- R.D. - ROOF DRAIN

REFER TO SHEET P-390 2 OF 2 FOR ADDITIONAL NOTES

REFERE TO SHEET P-319 FOR LOT GRADING PORFILES

PUBLIC WORKS

LOT GRADING PLAN

STANDARD DETAIL
P-390

NOT TO SCALE

REVISED DATE: 10/8/19

Lot Grading Plan Notes

1. **GENERAL**
   A. Per Section 18.03.080, Provo City Code, it shall be the responsibility of the property owner to ensure that the private drainage generated within the private property is adequately handled and does not create a nuisance on neighboring properties. Provide a site grading plan with existing and final elevation information.
2. **PRODUCT (not used)**
3. **EXECUTION**
   A. Drain as much surface flows, especially hard (impervious) surfaces, as possible out to the street fronting the lot. This includes the following; all front of building, as much roof as possible, driveway, walks, and so forth. Any areas unable to be sloped to the street shall be addressed within own lot boundaries and not discharged into any neighboring properties.
   B. Garage floor (G.F.) shall follow the requirements detailed in Provo standard drawing P-394.
   C. Identify existing spot elevations for at least 5-6 different locations, especially along the property boundary to ensure adequate tie0in to neighboring properties. Provide final grade elevations for same spots, significant grade changes, and other locations necessary to show intended grading design.
   D. Any time there is a lower level in a structure a soils engineer letter may be requested to determine the ground water elevations relative to the basement floor. Refer to the Storm Drainage Systems Design and Management Manual for requirements for lowest habitable floor elevations in relation to groundwater. Identify all test hole locations and depths relative to the benchmark (i.e. top of curb at property corner, or other permanent feature).

provo PUBLIC WORKS

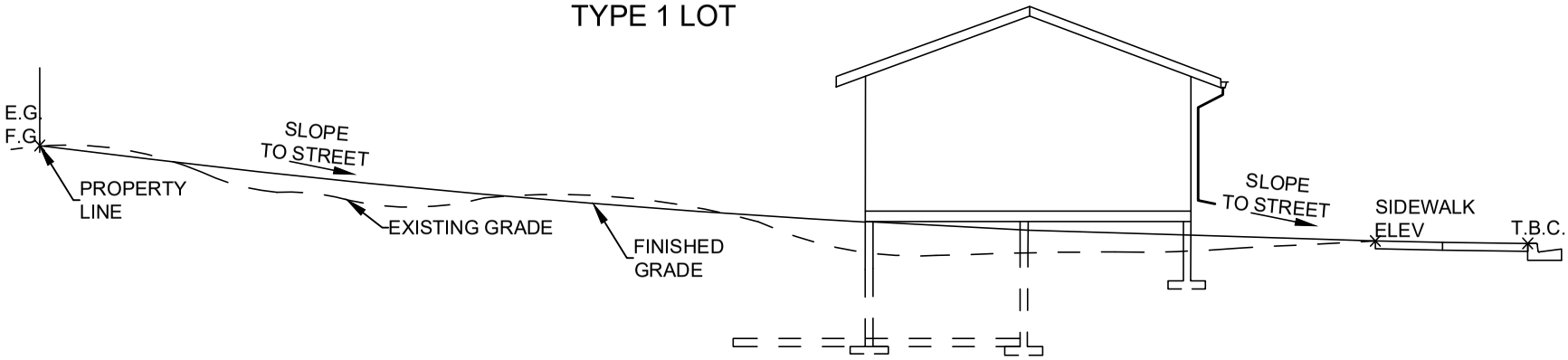
LOT GRADING PLAN

STANDARD DETAIL
P-390
NOT TO SCALE
REVISED DATE: 10/08/19

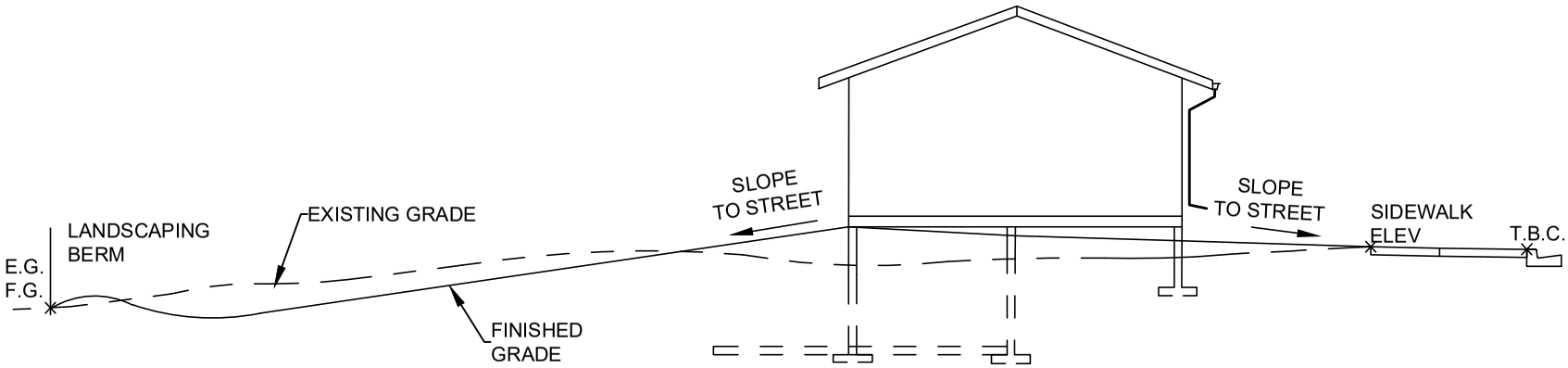
provo PUBLIC WORKS

LOT GRADING PROFILES

TYPE 1 LOT



TYPE 2 LOT

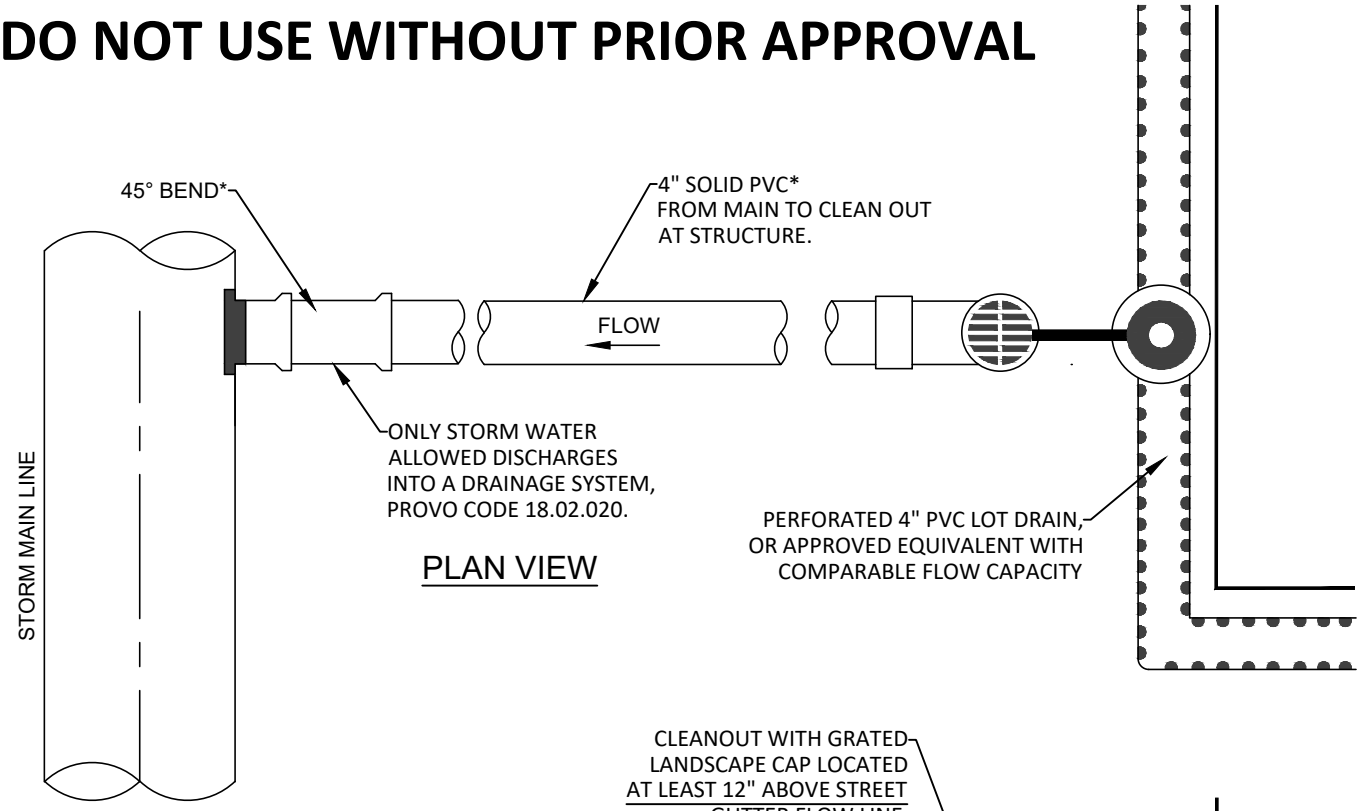


PLAN REQUIREMENTS

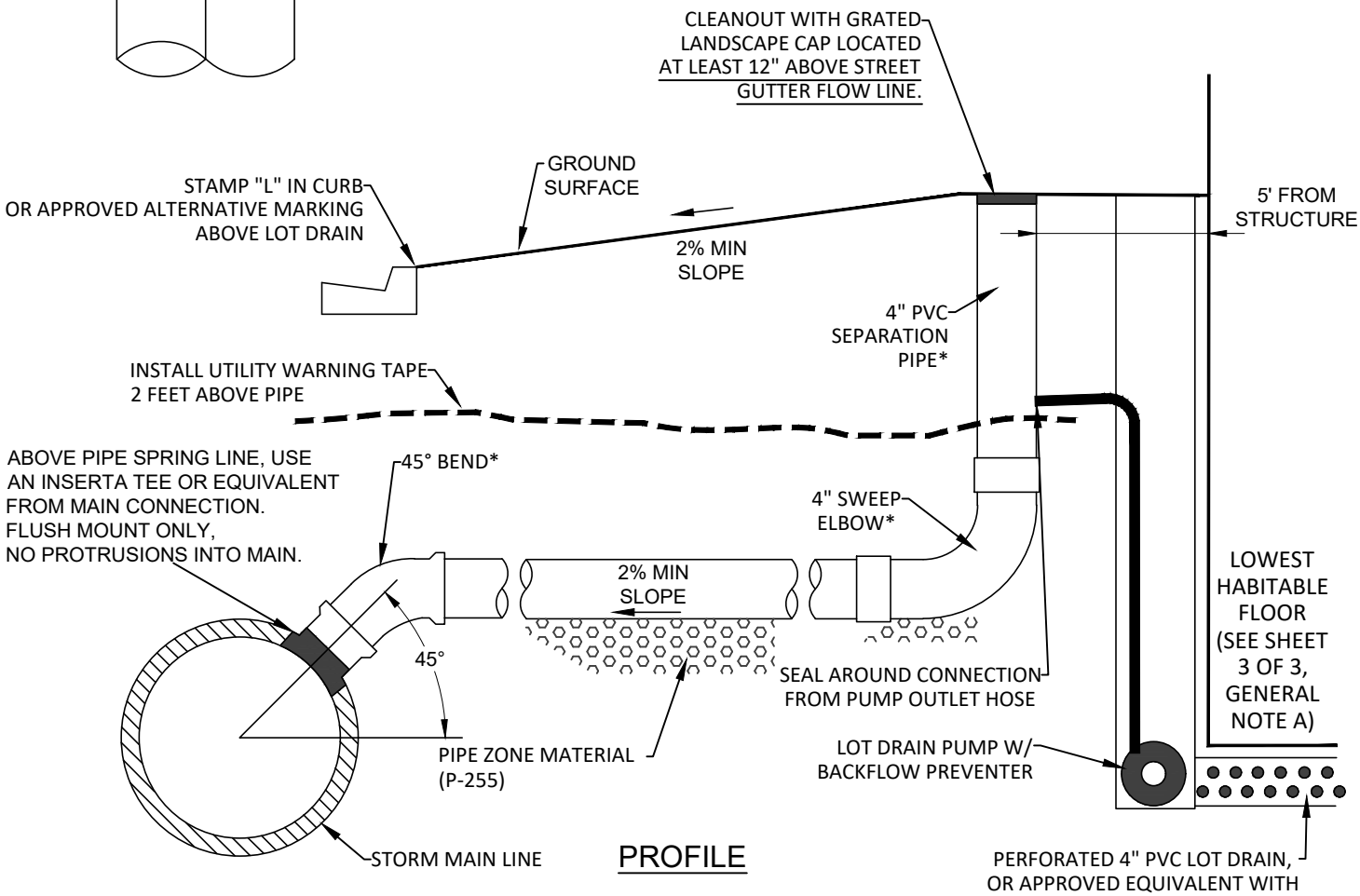
1. Existing and proposed grades (label and extend past property lines).
2. Elevations on key structural points, walls, slabs, driveways, garage, etc.
3. Retaining wall locations, and engineered design if required.
4. Other requirements as per geotechnical investigation reports if required.

STANDARD DETAIL
P-391
NOT TO SCALE
REVISED DATE: 10/8/19

- DO NOT USE WITHOUT PRIOR APPROVAL



PLAN VIEW



PROFILE

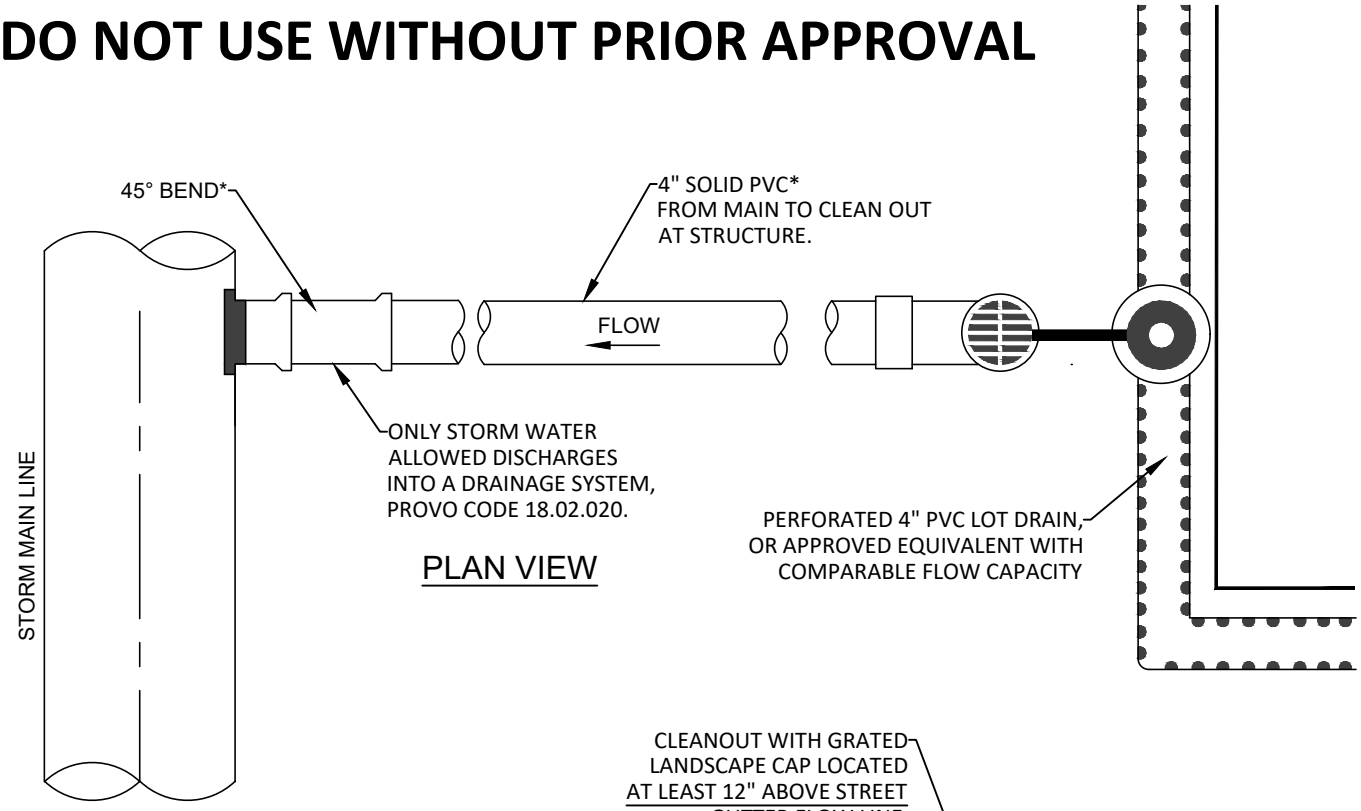
* USE TYPE SDR 35 PVC AND THE COLOR **WHITE** FOR ALL LOT DRAIN LATERAL PIPING

provo PUBLIC WORKS

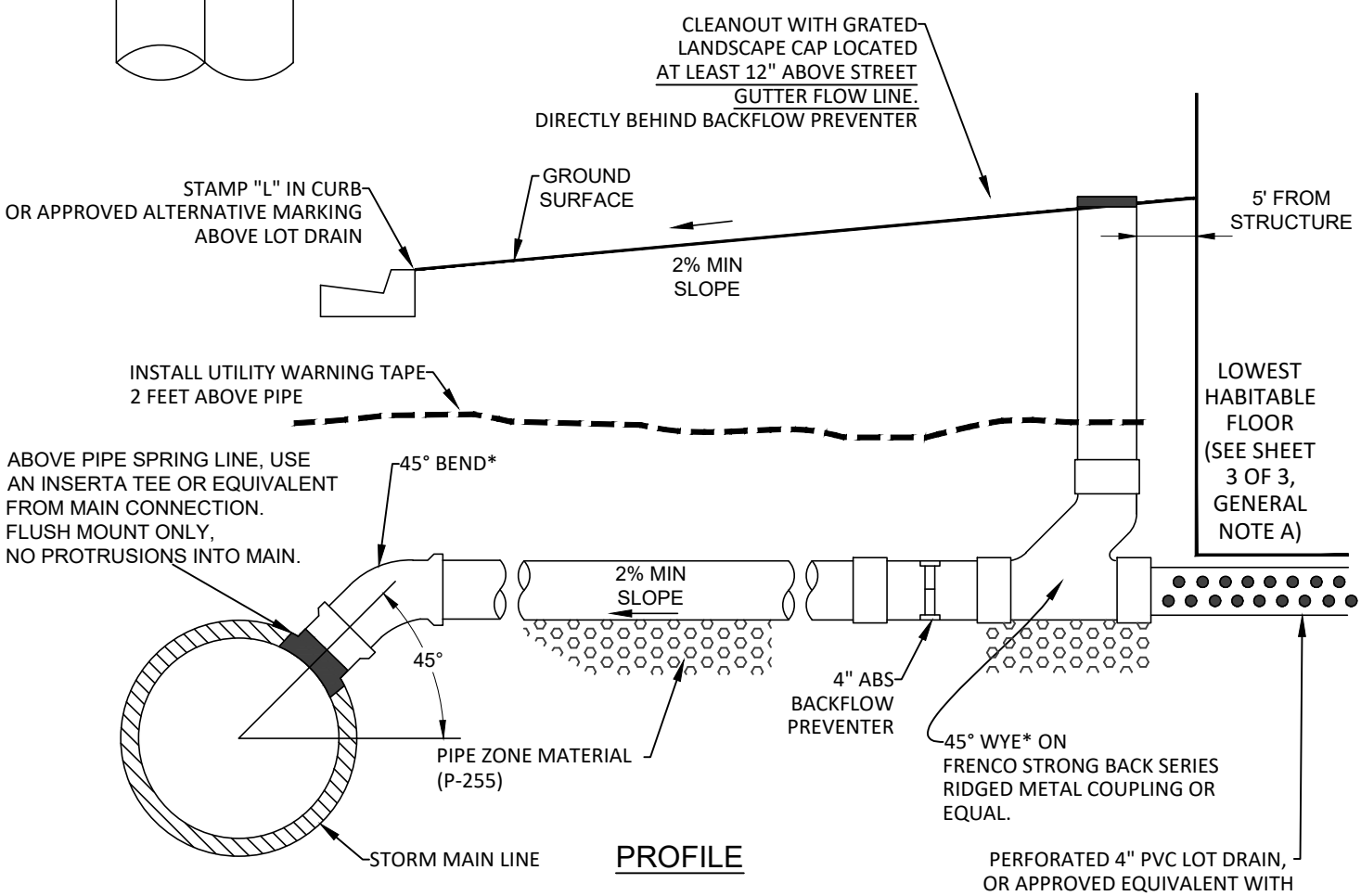
LOT DRAIN LATERAL WITH DRAIN PUMP

STANDARD DETAIL
P-392a
NOT TO SCALE
REVISED DATE: 10/07/2019

- DO NOT USE WITHOUT PRIOR APPROVAL



PLAN VIEW



PROFILE

* USE TYPE SDR 35 PVC AND THE COLOR **WHITE** FOR ALL LOT DRAIN LATERAL PIPING

provo PUBLIC WORKS

LOT DRAIN LATERAL WITH GRAVITY FLOW

STANDARD DETAIL
P-392b
NOT TO SCALE
REVISED DATE: 10/07/19

Lot Drain Lateral

1. GENERAL

A. Standard Drawings P-392a and P-392b may be used under the following conditions:

A.A. Lot drains are sometimes required by IBC to drain backfilled areas around buildings in areas with tight native soils. Lot drains are not intended to drain high groundwater. The lowest habitable floor is recommended to be a minimum of 4 feet above groundwater elevations. Provo City may require a site specific geotechnical report identifying groundwater elevations and minimum FF elevations, to be reviewed and approved by the City Engineer or their designee.

A.B. Standard Drawing P-392a - The top of the landscape grate on the separation pipe shall be a minimum of 12 inches above the gutter flow line.

A.C. Standard Drawings P-392b - This drawing can only be used if (a) the storm drain main is designed to convey the City design storm with the HGL below top of pipe, AND (b) the lowest habitable floor is a minimum of 2 feet above the top of storm drain main at the lot drain connection. Otherwise, P-392a must be used.

B. It is unlawful for any person to cause or allow the discharge into a water body or storm drainage system, either directly or indirectly, of any substance not comprised entirely of storm water, refer to Provo City code 18.02.020 for prohibited discharges.

C. Minimum distance between lot drain connections to the storm main shall be 4 feet.

D. Minimum required grade of lot drain is 2%.

E. Clean-outs shall be installed at a minimum every 100 feet and wherever there is a change in slope or direction of pipe lateral and within 5 feet from structure.

F. If building construction is not imminent, terminate at a clean-out a minimum of 12 feet inside the property line. Cap and mark white for future connection.

2. PRODUCT

A. Lot drains shall use type SDR 35 PVC. The color of the pipe and fittings shall be white.

B. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.

C. Backfill: Common fill, Provo Section 31 05 13M. Maximum particle size 2-inches.

D. Pipe Zone: Gravel, Provo Section 32 05 13M.

E. Lot Drain Mainline Connections: 45 degree bend and Inserta Tee or equivalent.

3. EXECUTION

A. Before installation, secure acceptance by ENGINEER for all pipe, fittings, and couplings to be used.

B. Core and remove plug from storm main. Do not break into storm main for connection.

C. Use an Inserta Tee or equivalent for a water tight connection at storm main. Protrusion into storm main pipe past inner wall is not allowed.

D. CONTRACTOR shall have ALL connections inspected and surveyed by Provo City before backfilling.

E. Provide backfill and surface restoration per Plan P-255.

provo PUBLIC WORKS

LOT DRAIN LATERAL AND CLEAN-OUT

STANDARD DETAIL

P-392c

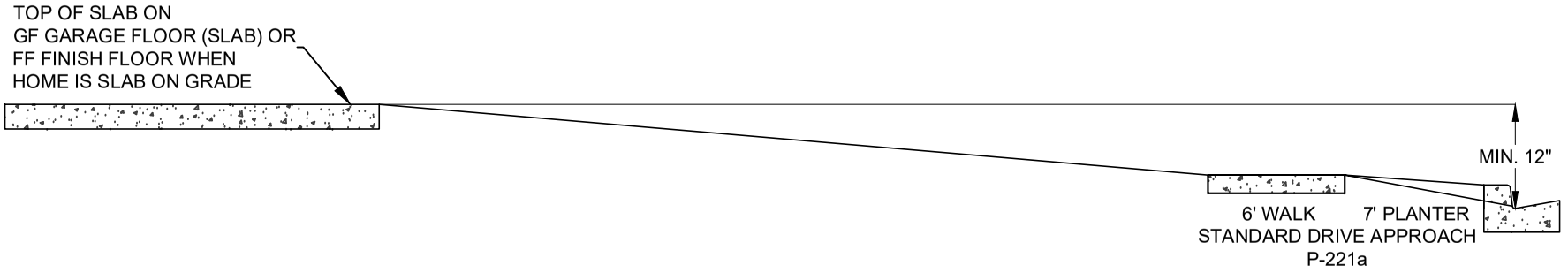
NOT TO SCALE

REVISED DATE: 10/07/19

PROVO PUBLIC WORKS

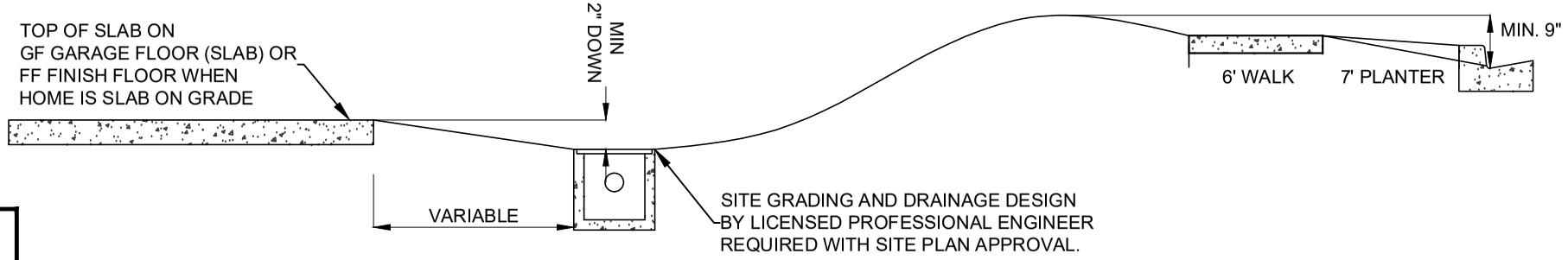
SITE DRAINAGE PROFILES

OPTION 1
(STANDARD)



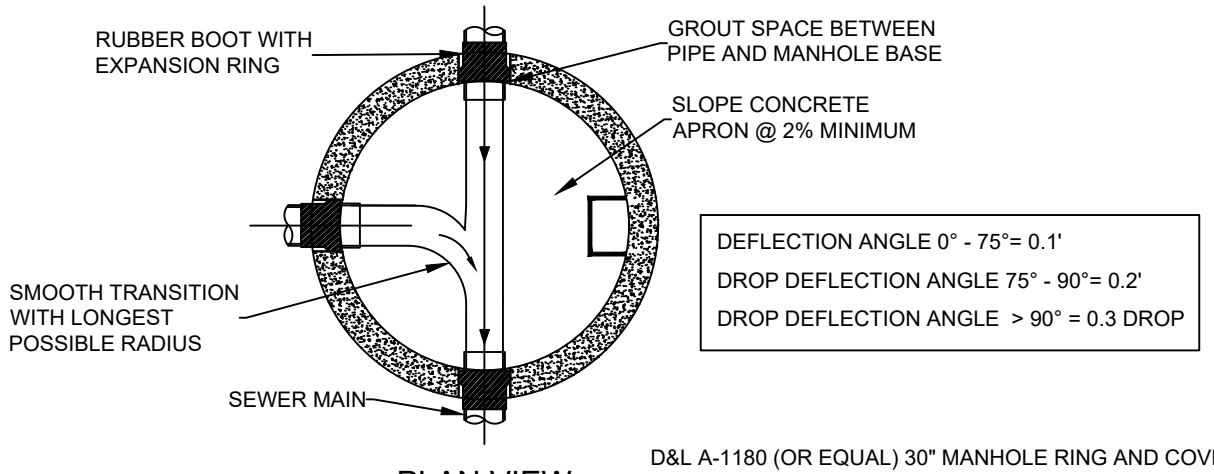
FOR EXISTING DRIVE APROACH TYPES,
REFER TO THE APPROPRIATE PROVO CITY
P-221 SERIES FOR DETAILS AND NOTES

OPTION 2
(ONLY FOR USE WHEN APPROVED BY CITY ENGINEER OR THEIR DESIGNEE WITH A SITE PLAN APPROVAL.)

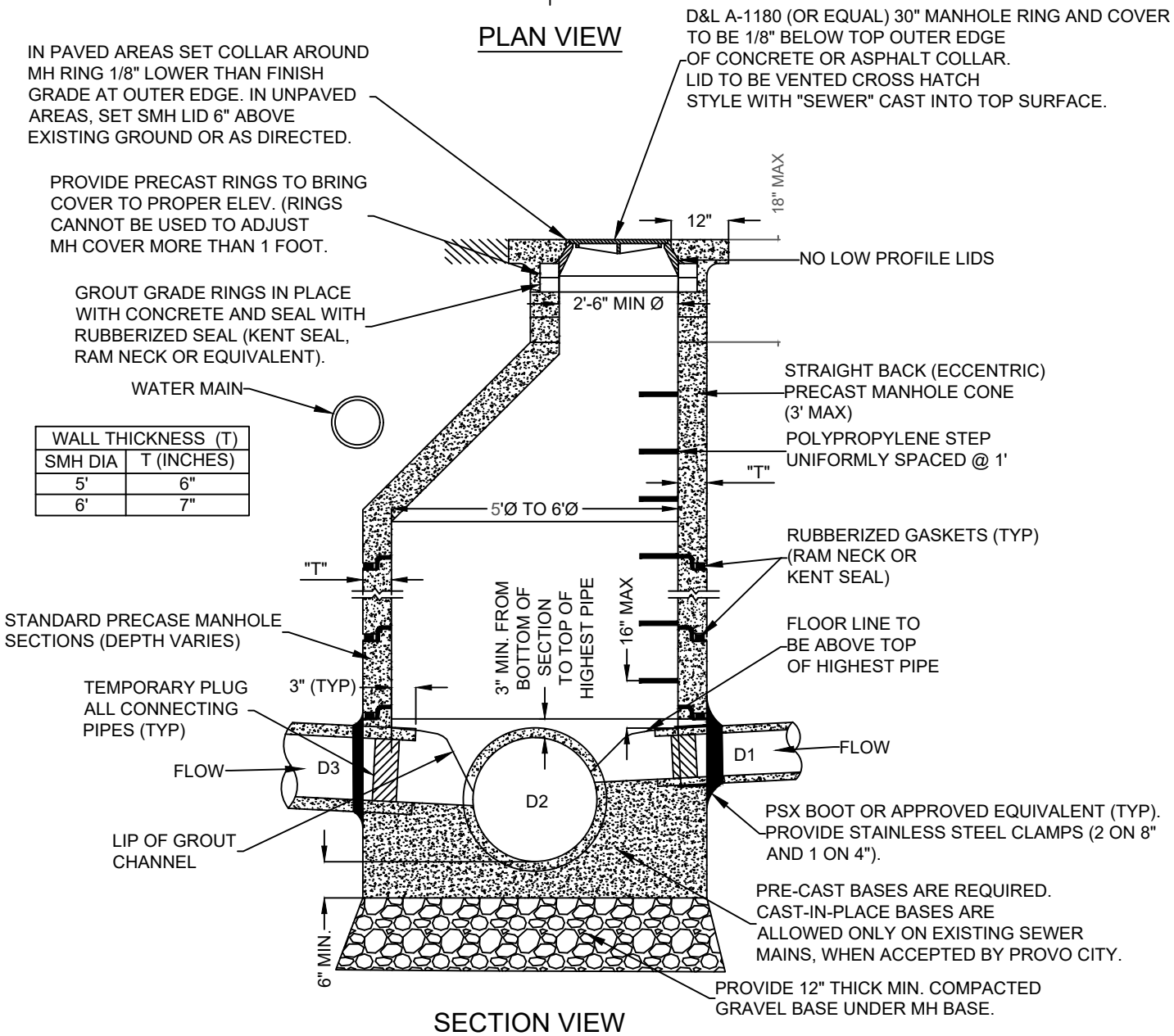


STANDARD DETAIL
P-394
NOT TO SCALE
REVISED DATE: 10/07/2019

SHEET 1 OF 1



PLAN VIEW



WALL THICKNESS (T)	
SMH DIA	T (INCHES)
5'	6"
6'	7"

SECTION VIEW

provo PUBLIC WORKS

STANDARD MANHOLE

STANDARD DETAIL
P-411
NOT TO SCALE
REVISED DATE: 09/26/19

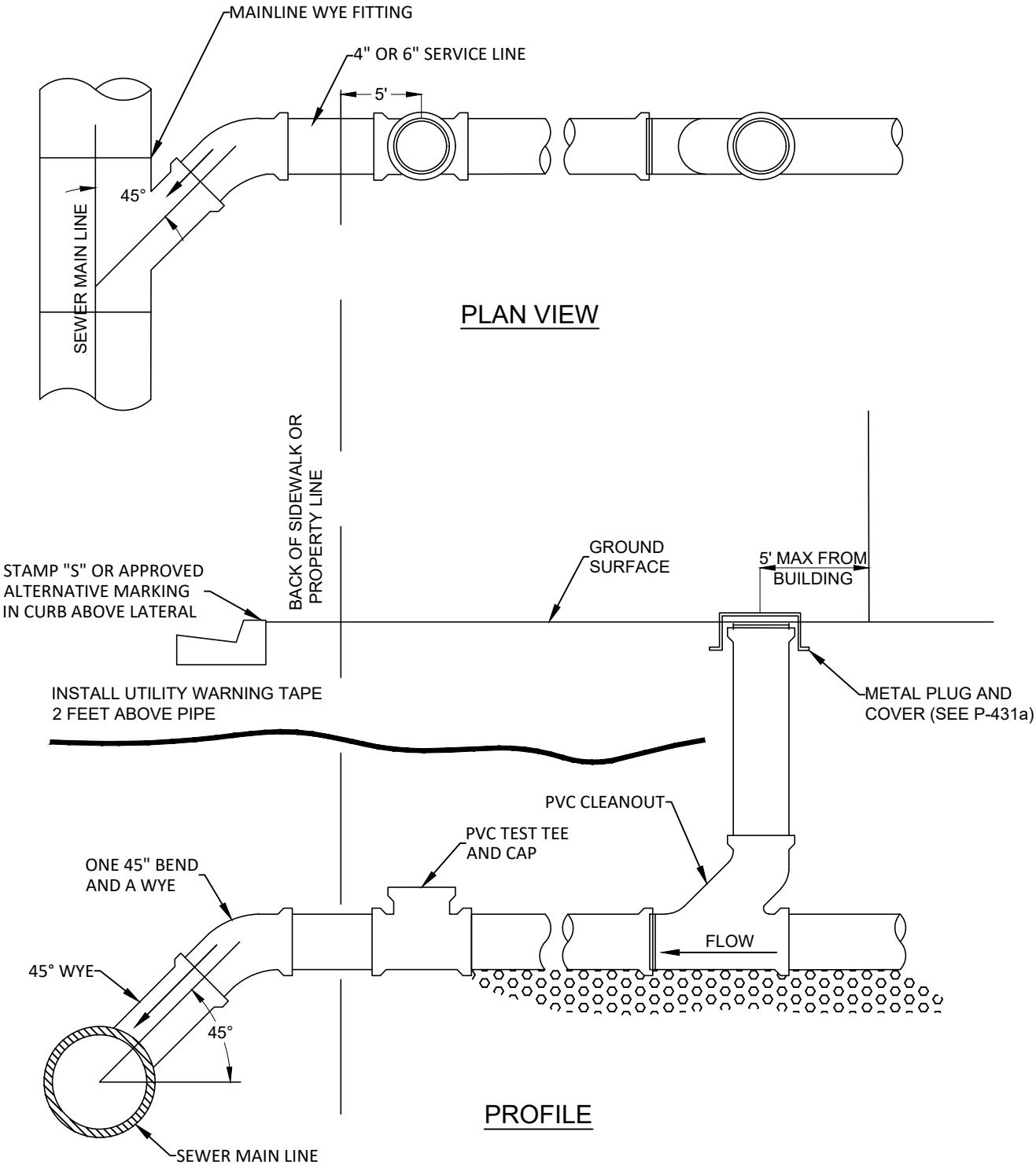
Trench Backfill & Surface Restoration

1. GENERAL
   A. The drawing shows typical pipe connections. Refer to construction drawings for connection locations or refer to field location of existing piping to construct connections.
   B. If grade allows, inverts of D1 and D3 shall match the 0.75 depth point of D2. Otherwise as approved by Provo City.
   C. Manhole Size
      C.A. Manhole diameter is determined by design and varies from 5 feet to 6 feet.
      C.B. Diameter is 6 feet minimum: For sewers over 24 inches, or when directed by Provo City.
   D. Standards apply to private and public systems.
2. PRODUCT
   A. Gravel: Use 1 inch minus gravel.
   B. Backfill: Common fill, Provo Section 31 05 13M. Maximum particle size 2-inches.
   C. Concrete: Class 4000, APWA Section 03 30 04.
   D. Cone and Wall Sections: Conform to ASTM C-478.
   E. Riser and Reducing Riser: ASTM C 478
   F. Grout: 2 parts sand to 1 part cement mortar, ASTM C 1329.
   G. Stabilization-Separation Geotextile: Moderate or high at CONTRACTOR's choice, APWA Section 31 05 19.
3. EXECUTION
   A. Sewer rock or a granular backfill borrow in a geotextile wrap.
   B. Base Course Placement: APWA Section 32 11 23. Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.
   C. Poured in Place: If manhole is to be poured in place, follow the same pattern as shown except use 10 inch minimum wall and base thickness.
   D. Invert Cover: During construction, place invert covers over the top of pipe in manholes that currently convey sewerage. See Plan P-412.
   E. Pipe Connections: Grout around all pipe openings.
   F. Pipe Seal: Install rubber-based pipe seals on all plastic pipes when connecting plastic pipes to manholes. Hold water-stop in place with stainless steel bands.
   G. Joints: Place flexible gasket-type sealant in all riser joints. Finish with grout and ensure manhole is watertight.
   H. Adjustment: If the required manhole adjustment is more than 1'-0", remove the cone and grade rings and adjust the manhole elevation with the appropriate manhole section, the cone section, and the grade rings or plastic form to make frame and lid match finish grade.
   I. Finish: Provide smooth and neat finishes on interior of cones, shafts, and rings. Imperfect moldings or honeycombs will not be accepted.
   J. Backfill: Provide backfill against the manhole shaft. Pea gravel and recycled RAP aggregate is NOT ALLOWED. Water jetting is NOT allowed. Adhere to all backfilling and surface restoration requirements included in Plan P-255.
   K. After all grading around manhole has been completed and final surfacing is in place, remove debris and temporary plugs.

provo PUBLIC WORKS

STANDARD MANHOLE

STANDARD DETAIL
P-411
NOT TO SCALE
REVISED DATE: 09/26/19



SHEET 1 OF 3

PUBLIC WORKS

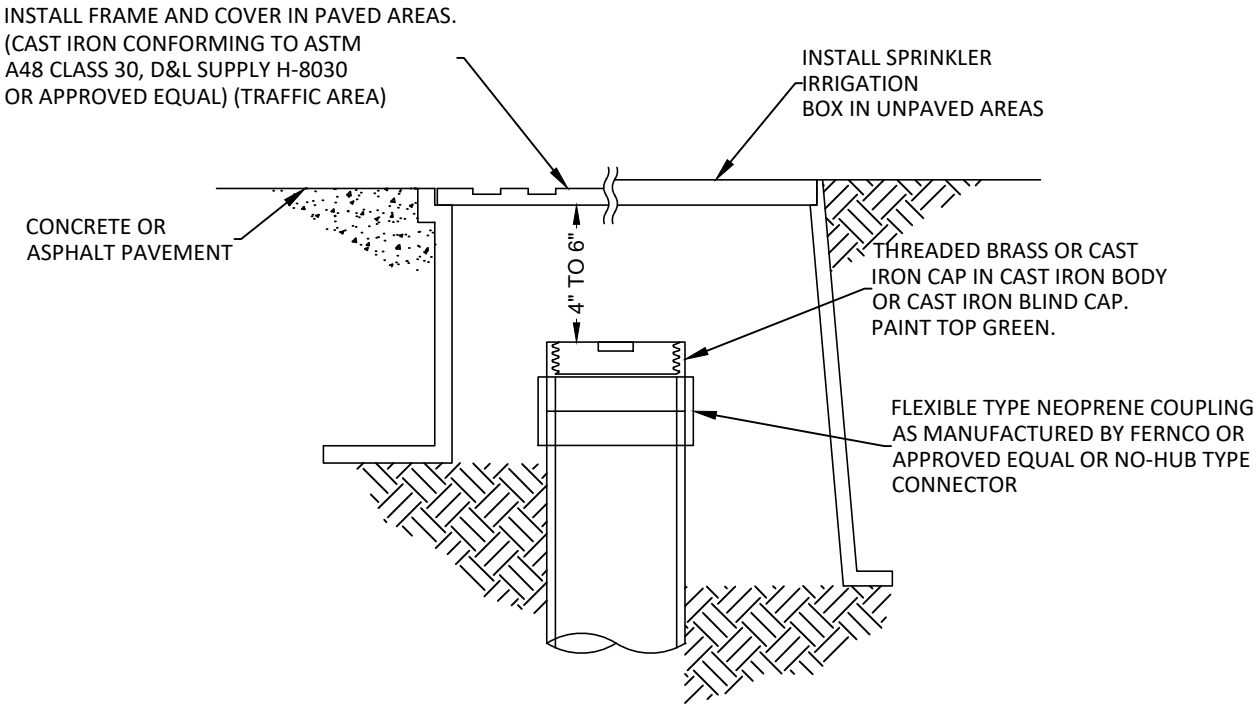
STANDARD SEWER SERVICE CONNECTIONS AND CLEAN-OUT

STANDARD DETAIL

P-431a

NOT TO SCALE

REVISED DATE: 09/26/19



PUBLIC WORKS

STANDARD SEWER SERVICE CONNECTIONS AND CLEAN-OUT

STANDARD DETAIL
P-431b

NOT TO SCALE

REVISED DATE: 11/10/16

1. GENERAL
   A. Laterals shall be 4-inch diameter minimum. A 6-inch or larger lateral is required for buildings with more than five equivalent residential units.
   B. Provide separate laterals for each unit. Provo Ciy approval required for all combined sewer laterals.
   C. Minimum distance between 4-inch lateral connection shall be 4 feet.
   D. Required grade of sewer laterals (ABS and PVC pipe) is 2%. Where it is impractical to run the sewer laterals at 2% due to the depth of the sewer main, a 6-inch or larger sewer lateral may be run a 1% grade when approved by Provo City.
   E. Clean-outs shall be installed every 100 feet, and where there is a change in slope or direction of the lateral and within 5' of the building.
   F. Distance between sewer laterals and water service lines shall be 10 feet.
   G. Individual grinder pump systems require Provo City approval. Gravity flow required from property to main with a cleanout at transition.
2. PRODUCT
   A. Sewer laterals shall be green or black in color. Do not use white.
   B. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
   C. Backfill: Common fill, Provo Section 31 05 13M. Maximum particle size 2-inches.
   D. Pipe Zone: Gravel, Provo Section 31 05 13M.
   E. Provide agency approved connection for all laterals connecting to lines 8" in diameter or less.
   F. Stainless steel and brass straps required for saddles.
   G. Strong back RC series by Fernco with four stainless steel clamps or equal required for all plain end pipe connections.
   H. Lateral Mainline Connections: All 4-inch connections to the main must be constructed with one 45 degree bend and wye. Direct nose-on connections to main are used when connecting to an existing main line. All nose-on work is to be inspected by city personnel.
   I. Manhole Mainline Connections: All 6-inch and larger laterals on commercial or multi-family laterals require a manhole at the connection to the public main.
3. EXECUTION
   A. Before installation, secure acceptance by ENGINEER for all pipe, fittings, and couplings to be used.
   B. Tape wrap pipe as required by soil conditions.
   C. Core and remove plug from sewer main. Do not break into sewer main to make connection.
   D. CONTRACTOR shall have all connections inspected and surveyed by Provo City before backfilling.
   E. CONTRACTOR shall perform water test for lateral as directed by Provo City Inspector.
   F. Provide backfill and surface restoration per Plan P-255.

provo PUBLIC WORKS

STANDARD SEWER SERVICE CONNECTIONS AND CLEAN-OUT

STANDARD DETAIL
P-431

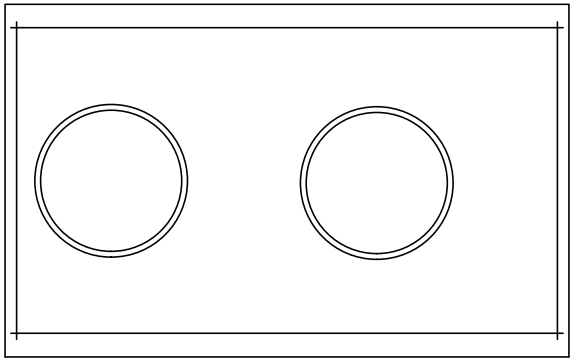
NOT TO SCALE

REVISED DATE: 09/26/19

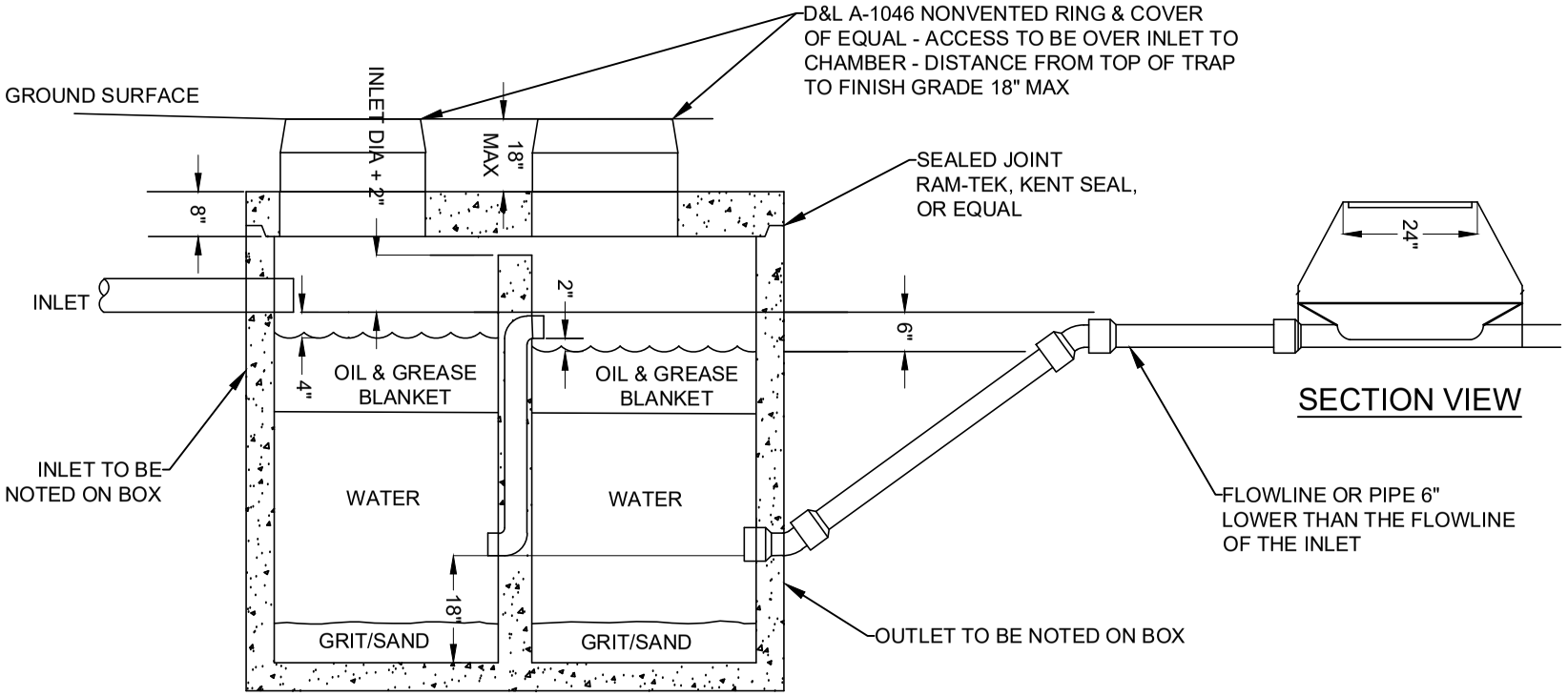
PROVO PUBLIC WORKS

GREASE TRAP AND SAMPLING MANHOLE

GREASE TRAP



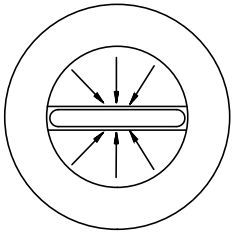
PLAN VIEW



SECTION VIEW

SAMPLING MANHOLE

POUR CONCRETE AROUND SEWER LATERAL IN BASE OF 48" OR LARGER MANHOLE CONE. CUT OUT A MINIMUM OF 24" FROM THE TOP OF LATERAL. SLOPE CONCRETE TO HOLE AT MIN 2%.



PLAN VIEW

SECTION VIEW

STANDARD DETAIL
P-441
NOT TO SCALE
REVISED DATE: 11/25/15

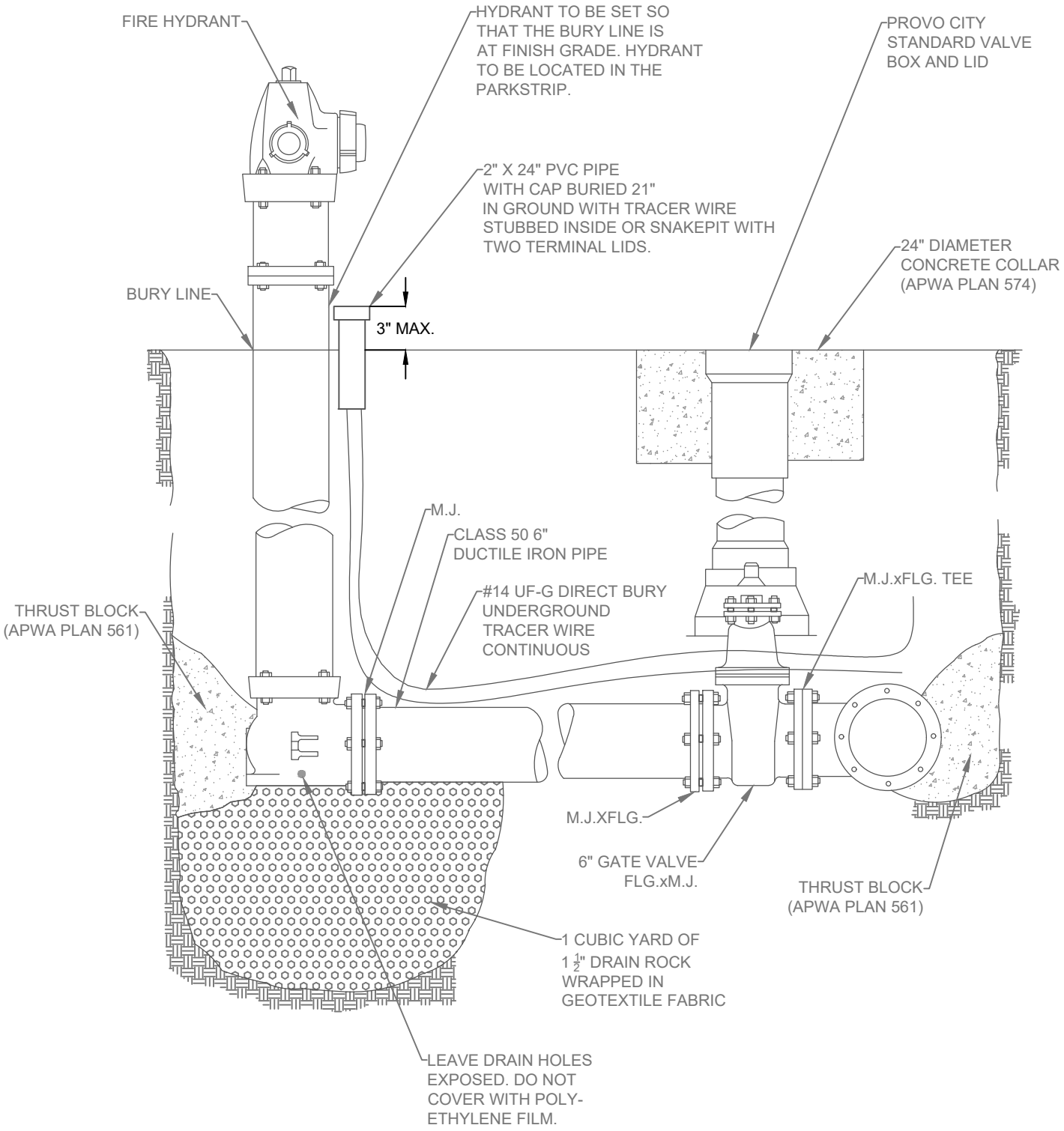
SHEET 1 OF 2

1. GENERAL
   A. Before backfilling around concrete box, secure inspection of installation by ENGINEER.
   B. Deep boxes are to be avoided whenever possible.
   C. Large traps will require three lids for access to clean.
   D. Sand-oil separator to be located outside parking garages in accessible location.
   E. Carwashes to have a minimum 300 gallon sediment volume sump with BMP SNOUT® pretreatment device of equal upstream of separator per bay.
   F. Automatic car washes will require a 600 gallon sediment volume sump with a BMP SNOUT® pretreatment device or equal upstream of separator per bay.
   G. Size to be determined by Plumbing Code unless otherwise by Pretreatment Coordinator. 750 gallon minimum.
   H. Alternate traps may be submitted for approval. Provide product information including removal rates.
2. PRODUCT
   A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
   B. Backfill: Common fill, Provo Section 31 05 13M. Maximum particle size 2-inches.
   C. Concrete: Class 4000, APWA Section 03 30 04.
   D. Reinforcement: Deformed, 60 ksi yield grade steel, ASTM A 615.
   E. PVC Pipe: APWA Section 33 05 07.
   F. Box extenders to be used to keep top of box within 18 inches of ground surface.
3. EXECUTION
   A. Base Course Placement: APWA Section 32 11 23. Maximum lift thickness is 6-inches before compaction. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 32 23 26.
   B. Reinforcement Placement: APWA Section 03 20 00.
   C. Concrete Placement: APWA Section 03 30 20. Provide 1/2-inch radius edges.
   D. Apply a broom finish. Apply a curing agent.
   E. Fill annular space around pipe wall penetrations with waterproof sealer.
   F. Backfill: Provide backfill against the box walls. Pea gravel and recycled RAP aggregate is NOT ALLOWED. Water jetting is NOT ALLOWED. Adhere to all backfilling and surface restoration requirements included in Plan P-255.

provo PUBLIC WORKS

GREASE TRAP AND SAMPLING MANHOLE

STANDARD DETAIL
P-441
NOT TO SCALE
REVISED DATE: 11/25/15



PUBLIC WORKS

FIRE HYDRANT DETAIL

STANDARD DETAIL
P-511

NOT TO SCALE

REVISED DATE: Aug. 2020

Fire Hydrant With Valve

1. GENERAL
   A. Before backfilling, secure inspection of installation by ENGINEER.
   B. Additional requirements are specified in APWA 33 11 00.
   C. On dead end line, locate shut off valve within 18 feet from the fire hydrant.
2. PRODUCT
   A. New materials only. Relocation of Hydrants not allowed.
   B. Hydrant: Dry barrel, AWWA C502; Waterous WB-67, Mueller A-423 or AVK 2780 Nostalgic.
   C. Polyethylene Wrap: All metal including pipe, couplings, joints, and valves shall be sleeved or wrapped with 8 mil. Polyethylene film.
   D. Thrust Blocks: Concrete Class 4000, APWA Section 03 30 04.
   E. Reinforcement: Deformed, 60 ksi yield grade steel, ASTM A 615.
   F. Backfill: Provo Section 31 05 13M. Maximum particle size 2-inches.
      F.A. Sand Bedding: All waterlines are to be bedded in sand for a distance of one foot on all sides.
      F.B. Drain Rock: ASTM Size No. 3 (2" to 1") or larger.
      F.C. Other Type of Common Fill: per sppecification.
   G. Geotextile: Stabilization-separation fabric, APWA Section 31 05 19.
   H. Color: Fire hydrant is to be factory coated red.
   I. Tracer Wire: #14 UF-G direct bury red or blue tracer wire required on all water lines. Wire to extend 24" above surface at base of fire hydrants.
3. EXECUTION
   A. Installation:
      A.A. Provide at least 1 cubic yard of drain rock around drain hole at base of hydrant spool. Wrap geotextile around drain rock and tape geotextile to hydrant spool to prevent sitting of sewer rock.
      A.B. Apply non-oxide grease to all buried metal surface. Wrap with polyethylene sheet and tape wrap.
      A.C. Provide 12 inch sand bedding around all piping.
      A.D. Notify fire department at (801) 852-6300 as soon as hydrant is placed in service.
   B. Thrust Blocks:
      B.A. Before pouring concrete, wrap pipe system with polyethylene sheet to prevent bonding of concrete to pipe system.
      B.B. Not required for flange or welded pipe systems.
   C. Provide backfill and surface restoration per Plan P-255.
   D. Operation of Valves: Provo City water valves to be operated only be Provo City Water Resources employees, even in emergencies. For assistance call (801) 852-6780

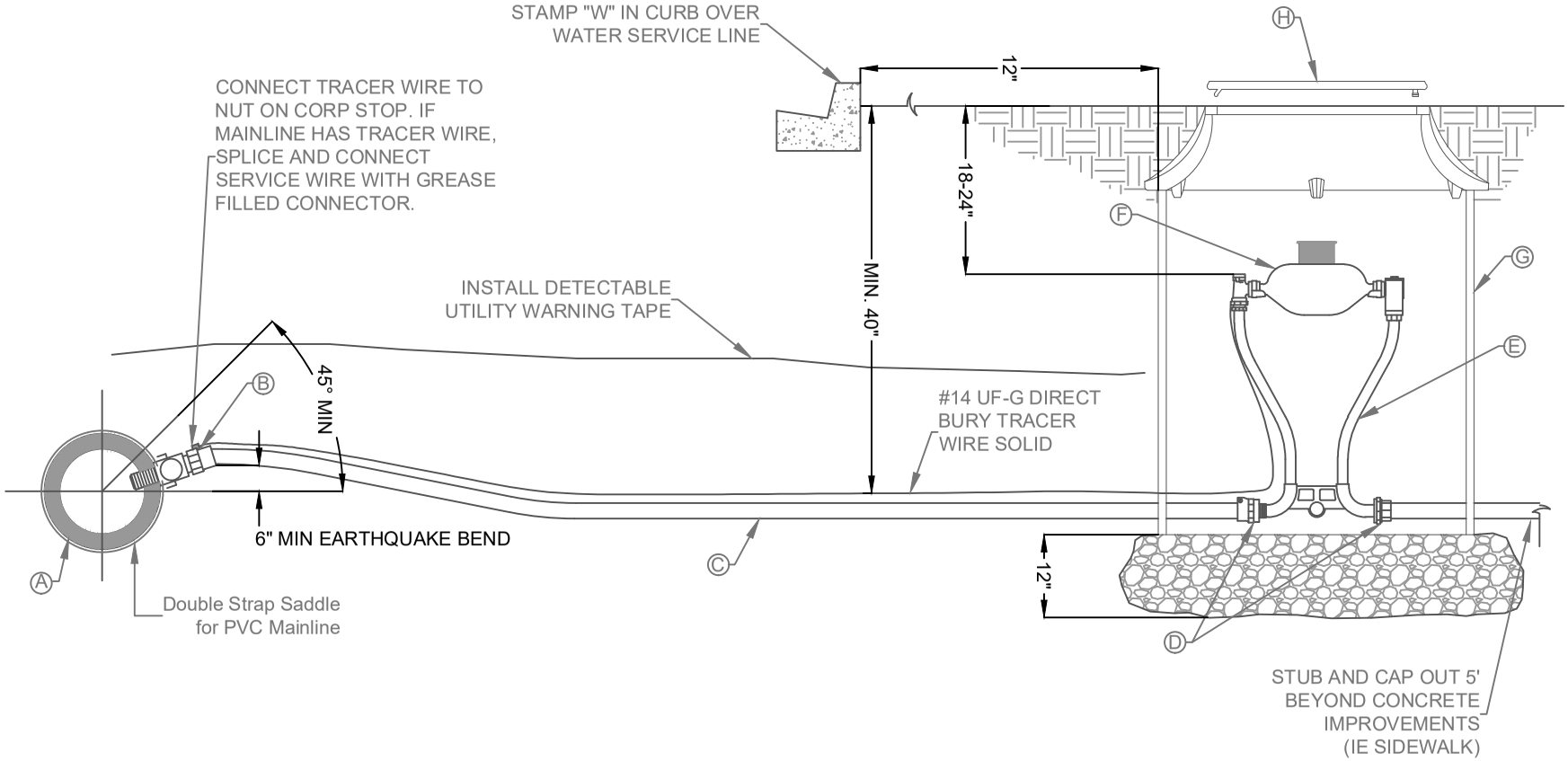
provo PUBLIC WORKS

FIRE HYDRANT DETAIL

STANDARD DETAIL
P-511
NOT TO SCALE
REVISED DATE: Aug. 2020

PROVO PUBLIC WORKS

1" METER SERVICE



LEGEND

No.	ITEM	DESCRIPTION
Ⓐ	CONNECTION TO MAIN	DIRECT TAP DUCTILE IRON / USE DOUBLE STRAP SADDLE ON PVC (PVC ALLOWED BY SPECIAL PERMISSION ONLY)
Ⓑ	CORPORATION STOP	BRASS WITH TRACER WIRE NUT (MUELLER OR FORD CC x COMPRESSION DIRECT TAP IN DUCTILE IRON) (IRON PIPE THREAD x COMPRESSION IN PVC SADDLE)
Ⓒ	PIPE	1-inch COPPER - TYPE "K" SOFT OR BLUE PC 200, DR9 POLYETHYLENE TUBING MEETING AWWA C901 & NSF 61 WITH #14 TRACER WIRE AND METAL INSERTS
Ⓓ	ADAPTER	BRASS - MALE x COMPRESSION
Ⓔ	METER YOKE	1-inch COPPER - EQUIP WITH INLET VALVE, VERTICAL DUAL CHECK VALVE, STABILIZER BARS PERPENDICULAR TO SETTER, & SOLID BAR BETWEEN INLET & OUTLET AT BASE AND HALFWAY UP METER YOKE
Ⓕ	METER	NEPTUNE AMI SMART METER WITH ANTENNA TO BE INSTALLED BY CITY. PROTECT FROM DAMAGE
Ⓖ	METER BOX	CMP, OR WHITE HDPE (21" DIA x 30" HEIGHT (MIN))
Ⓗ	RING AND LID	D&L FOUNDRY AND SUPPLY L-2244 RING WITH UNIVERSAL COVER FOR NEPTUNE R450 RADIO ANTENNA; D-6018-09 IN DRIVEWAYS AND CONCRETE

STANDARD DETAIL
P-521
NOT TO SCALE
REVISED DATE: 09\26\2019

1. GENERAL
   A. Do not install meter in driveways, sidewalks or curb and gutter without express written permission from Provo City.
   B. In new subdivisions, stake lot corners prior to installation of water meters.
   C. In street surfaces or other vehicular traffic areas, (like driveway approaches), install the same type of meter box as required for 1 $\frac{1}{2}$" and 2" serivce meters. See Plan P-522.
   D. Above ground reduced pressure backflow prevention valve (RP) may be required in some applications. For more information, contact Provo City Cross Connections Program Coordinator at (801) 852-6788.
   E. To get access to water, contact Provo City at 311 for water meter to be installed. Access to water will be downstream and outside of the meter box. No jumpers allowed.
   F. Maintain at least 2 feet between 1 inch service line taps. Maintain 4 feet between any connection that is larger than 1 inch and any other connection.

2. PRODUCT
   A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as base course without ENGINEER's permission.
   B. Backfill: Common fill, Provo Section 31 05 13M. Maximum particle size 2-inches.
   C. Castings: Grey iron class 35 minimum per ASTM A 48, coated with asphalt based paint or better.
   D. Fittings: Use compression fittings (no flare). Mueller or Ford only.
   E. Teflon tape and pipe dope to be used on all threaded pipe fittings.

3. EXECUTION
   A. Meter Placement:
      A.A. Install the meter box centered between curb and sidewalk (if there is no curb, install within 7' of the property line) and within the public right-of-way and in the center of the lot.
      A.B. Do not install meters under driveway approaches, sidewalks, or curb and gutter.
   B. Bed service line in one foot of sand all directions.
   C. Meter Box: Set box so grade of the frame and cover matches the finish grade of the surrounding surface.
   D. Lid must be to grade before meter will be installed.
   E. Pipe Outside of Right-of-Way: Coordinate with utility agency or adjacent property owner for type of pipe to be used outside of right-of-way.
   F. Inspection: Before backfilling around meter box, secure inspection of installation by ENGINEER.
   G. Provide backfill and surface restoration per Plan P-255.
   H. Operation of Valves: Provo City water valves to be operated only by Provo City Water Resources employees, even in emergencies. For assistance call (801) 852-6780

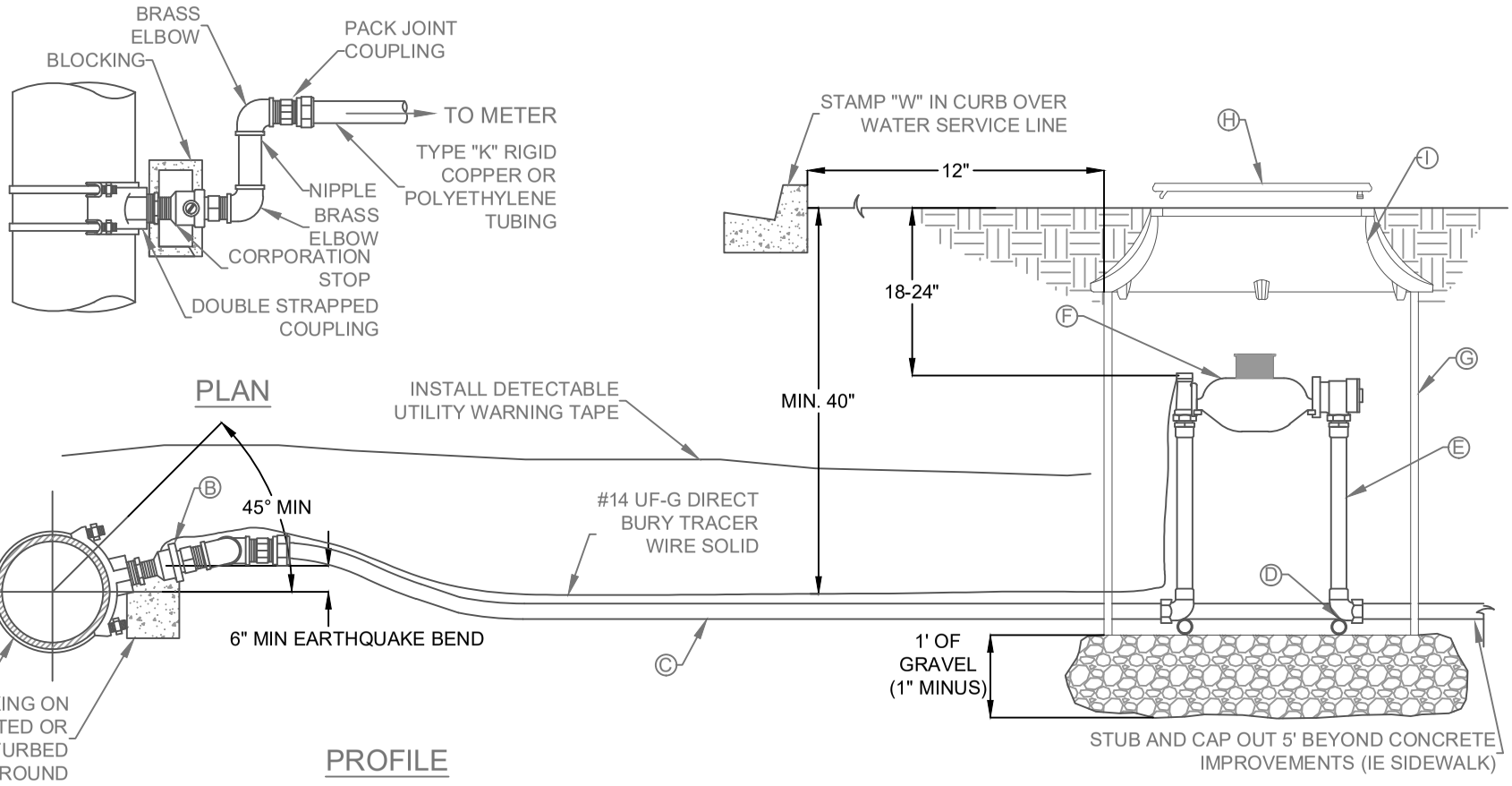
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1" METER SERVICE

STANDARD DETAIL
P-521
NOT TO SCALE
REVISED DATE: 09/26/19

PROVO PUBLIC WORKS

WATER SERVICE LATERAL
LAYOUT 1 ½" & 2"



LEGEND

No.	ITEM	DESCRIPTION
Ⓐ	CONNECTION TO MAIN	USE DOUBLE STRAP BRASS SADDLE
Ⓑ	CORPORATION STOP	BRASS WITH TRACER WIRE NUT (MUELLER OR FORD CC x COMPRESSION DIRECT TAP IN DUCTILE IRON) (IRON PIPE THREAD x COMPRESSION IN PVC SADDLE)
Ⓒ	PIPE	1 ½" OR 2" COPPER - TYPE "K" SOFT OR BLUE PC 200, DR9 POLYETHYLENE TUBING MEETING AWWA C901 & NSF 61 WITH #14 TRACER WIRE AND METAL INSERTS
Ⓓ	ADAPTER	BRASS - MALE x COMPRESSION
Ⓔ	METER YOKE	1 ½" OR 2" COPPER - EQUIP WITH INLET VALVE, VERTICAL DUAL CHECK VALVE, STABILIZER BARS PERPENDICULAR TO SETTER, & SOLID BAR BETWEEN INLET & OUTLET AT BASE AND HALFWAY UP METER YOKE
Ⓕ	METER	NEPTUNE AMI SMART METER WITH ANTENNA TO BE INSTALLED BY CITY. PROTECT FROM DAMAGE
Ⓖ	METER BOX	CMP, OR WHITE HDPE (21" DIA x 30" HEIGHT (MIN))
Ⓗ	RING AND LID	D&L FOUNDRY AND SUPPLY L-2244 RING WITH UNIVERSAL COVER FOR NEPTUNE R450 RADIO ANTENNA; D-6018-09 IN DRIVEWAYS AND CONCRETE

STANDARD DETAIL
P-522
NOT TO SCALE
REVISED DATE: 09/26/19

Water Service Lateral Layout 1 1/2" and 2"

1. GENERAL
   A. Do not install meter in driveways, sidewalks or curb and gutter without express written permission from Provo City.
   B. Turbine meters are required on all systems used exclusively for irrigation or fire protection.
   C. Where domestic use is applicable, use a standard City provided meter.
   D. Connections serving buildings of three (3) stories or more (not to include basements) may not utilize a dual check valve device installed at the meter yoke as protection. Above ground reduced pressure backflow prevention valve (RP) may be required in some applications. For more information, contact Provo City Cross Connection Program Coordinator at (801) 852-6788.
   E. To get access to water, contact Provo City at 311 for water meter to be installed. Access to water will be downstream and outside of the meter box. No jumpers allowed.
   F. Maintain at least 4 feet between any connection that is larger than 1 inch and any other connection.
2. PRODUCT
   A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as base course without ENGINEER's permission.
   B. Backfill: Common fill, Provo Section 31 05 13M. Maximum particle size 2-inches.
   C. Castings: Grey iron class 35 minimum per ASTM A 48, coated with asphalt based paint or better.
   D. Meter yoke to be same size as service line regardless of meter size.
   E. Teflon tape and pipe dope to be used on all threaded pipe fittings.
3. EXECUTION
   A. Meter Placement:
      A.A. Install the meter box centered between curb and sidewalk (if there is no curb, install within 7' of the property line) and within the public right-of-way and in the center of the lot.
      A.B. Do not install meters under driveway approaches, sidewalks, or curb and gutter.
   B. Bed service line in one foot of sand all directions.
   C. Meter Box: Set box so grade of the frame and cover matches the finish grade of the surrounding surface.
   D. Bypass Valve: Lock in off position.
   E. Blocking: Use clay brick or concrete block.
   F. Concrete Box:
      F.A. Center frame and cover over water meter.
      F.B. Allow 1-inch clearance around waterline where water line passes through concrete box wall. Seal opening with compressible seal.
   G. Pipe Outside of Right-of-Way: Coordinate with utility agency or adjacent property owner for type of pipe to be used outside of right-of-way.
   H. Inspection: Before backfilling around meter box, secure inspection of installation by ENGINEER.
   I. Provide backfill and surface restoration per Plan P-255.
   J. Operation of Valves: Provo City water valves to be operated only by Provo City Water Resources employees, even in emergencies. For assistance call (801) 852-6780

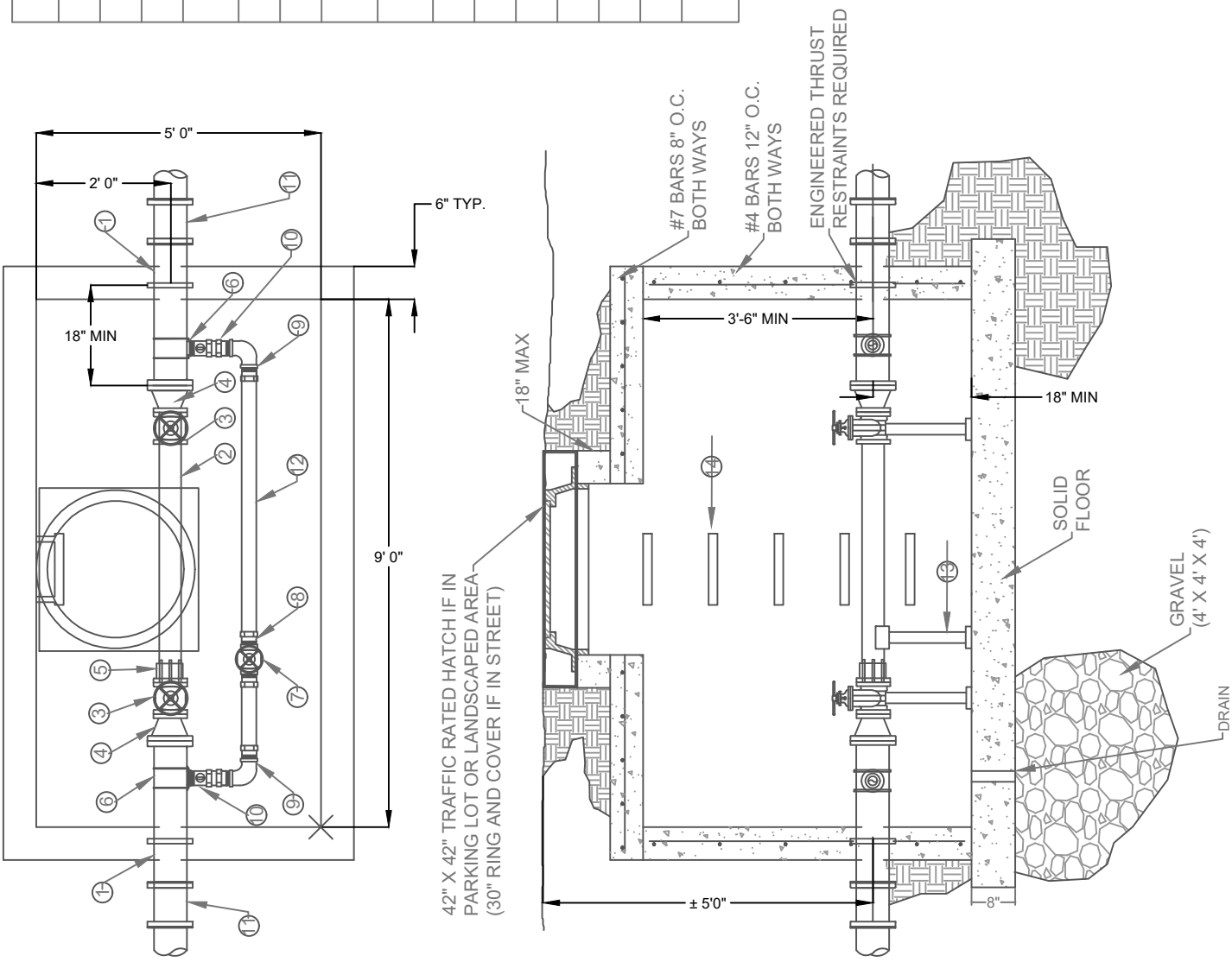
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WATER SERVICE LATERAL LAYOUT 1 $\frac{1}{2}$" & 2"

STANDARD DETAIL
P-522
NOT TO SCALE
REVISED DATE: 10/24/17

FITTING SCHEDULE

No.	DESCRIPTION
①	FL X PLAIN END W/THRUST RING
②	48" FL X PLAIN END SPOOL
③	EPOXY COATED GATE VALVE WITH HANDWHEEL
④	REDUCER WHEN REQUIRED
⑤	FLANGED COUPLING ADAPTER OR COUPLER
⑥	DOUBLE STRAP BRASS/STAINLESS STEEL SADDLE
⑦	EPOXY COATED GATE VALVE WITH HANDWHEEL
⑧	IP X COMPRESSIONS ADAPTOR (TYP)
⑨	BRASS ELBOW
⑩	IP X COMPRESSION CORP STOP
⑪	SLEEVE
⑫	RIGID COPPER
⑬	PIPE SUPPORT FOR METER AND VALVES
⑭	POLYPROPYLENE STEPS (PARSON ENVIRONMENTAL P-14938 OR EQUAL.



SHEET 1 OF 2

PUBLIC WORKS

3", 4" AND 6" METER VAULT AND PIPING

STANDARD DETAIL

P-525

NOT TO SCALE

REVISED DATE: 10/24/17

1. GENERAL

A. Additional requirements are specified in APWA Section 33 12 16.

B. Meter placement in street only with Provo City approval.

C. If use is such that water cannot be shut off, a bypass with a backflow prevention device is required.

D. Meter to be supplied and installed by Provo City.

E. Backflow prevention assembly required in separate vault downstream of meter connection or in a mechanical room before any other connection.

F. Other backflow requirements may apply. For more information, contact Provo City Cross Connection Program Coordinator at (801) 852-6788.

G. To get access to water, contact Provo City at 311 for a water meter to be installed. Access to water will be downstream and outside of the meter box. No jumpers allowed.

A. Maintain 4 feet between any connection that is larger than 1 inch and any other connection.

2. PRODUCTS

A. Small Fittings: Brass. Do not use galvanized materials.

B. Pipe Support: Adjustable pipe supports required.

C. Backfill: Common fill, PROVO Section 31 05 13M. Maximum particle size 2-inches.

D. Drain Gravel: Sewer rock, ASTM size no. 3 (2" to 1") or equal, PROVO Section 31 05 13M.

3. EXECUTION

A. Control Valve: Install valve with valve box adjacent to main.

B. Center frame and cover over water meter.

C. Bed service line in one foot of sand all directions.

D. Inspection: Before backfilling, secure inspection of installation by ENGINEER.

E. Provide backfill and surface restoration per Plan P-255.

F. Operation of Valves: Provo City water valves to be operated only by Provo City Water Resources employees, even in emergencies. For assistance call (801) 852-6780.

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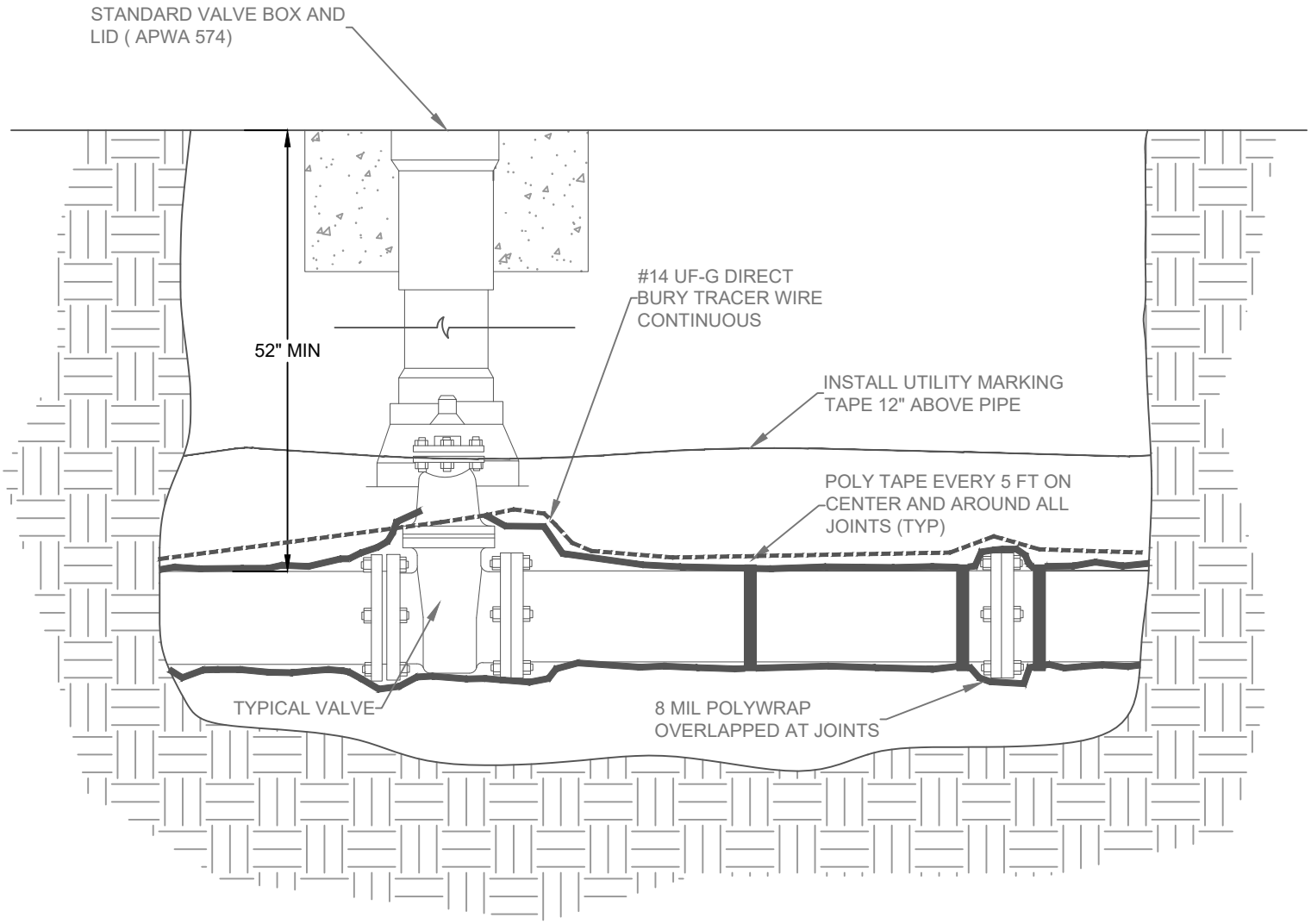
3", 4" AND 6" METER VAULT AND PIPING

STANDARD DETAIL

P-525

NOT TO SCALE

REVISED DATE: 10/24/17



PUBLIC WORKS

WATER MAINLINE, POLYWRAP, & TRACER WIRE

STANDARD DETAIL
P-594

NOT TO SCALE

REVISED DATE: Aug. 2020

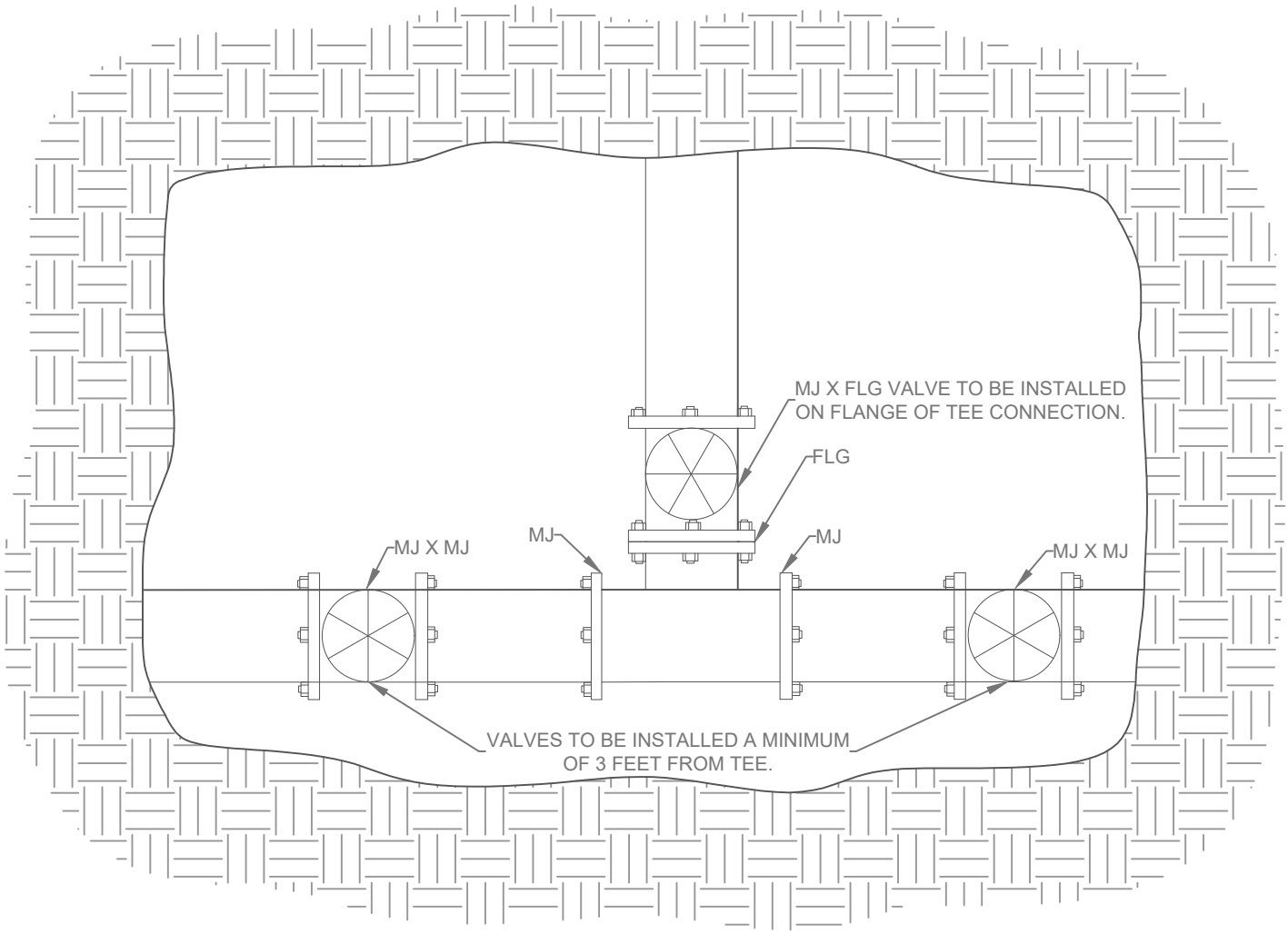
1. **GENERAL**
   A. Maintain at least 2 feet between 1 inch and ¾ inch service line taps. Maintain 4 feet between any connection that is larger than 1 inch and any other connection.
   B. Waterline installation to meet all requirements of Sections 33 05 05M and 33 11 00M.
2. **PRODUCTS**
   A. Pipe: All city maintained pipe in rights-of-ways or easements shall be ductile iron. C900 PVC Pipe may be allowed with approval from director.
   B. Polywrap: All metal including pipe, couplings, joints, and valves shall be sleeved or wrapped with 8 mil. Polyethylene.
   C. Tracer Wire: #14 UF-G direct bury red or blue tracer wire required on all water lines. Provide wire at base of fire hydrants. Provide excess wire to extend 24" above finished grade.
   D. Tape: Use poly tape around pipe and tracer wire at all joints and at ±5 foot intervals.
   E. Bolts: Use all stainless steel bolts.
   F. Backfill: Common fill, PROVO Section 31 05 13M. Maximum particle size 2-inches.
   G. Double offset butterfly valves required for valves 12" or greater.
3. **EXECUTION**
   A. Bed water mainline in one foot of sand all directions.
   B. Pull polywrap tight around pipe and tape with poly tape.
   C. Poly Tape:
      a. Tape around valves.
      b. Tape any cuts or tears.
      c. Tape wire on top center of pipe outside of the polywrap.
   C. Place valves at property lines. On existing construction valves may be placed 3 feet from tee when expressly allowed by Provo City.
   D. When splicing tracer wire, use a grease filled connector. Wire is to be continuous underground where practical. Underground splices must be inspected before backfill. All tracer wire shall be tested for continuity by an independent tester and written certification of continuity provided to Provo City inspectors prior to requesting continuity testing by Provo City. A re-inspection fee will be charged for any failed continuity test conducted by Provo City. Entire length of tracer wire shall be tested and approved by City prior to paving.
   E. Inspection: Before backfilling, secure inspection and GPS of installation by City.
   F. Provide backfill and surface restoration per Plan P-255.
   G. Operation of Valves: Provo City water valves to be operated only by Provo City Water Resources employees, even in emergencies. For assistance call (801) 852-6780.

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WATER MAINLINE, POLYWRAP, & TRACER WIRE

STANDARD DETAIL
P-594
NOT TO SCALE
REVISED DATE: Aug. 2020

PLAN VIEW



provo PUBLIC WORKS

WATER MAINLINE TEE

STANDARD DETAIL

P-595

NOT TO SCALE

REVISED DATE: Oct-2021

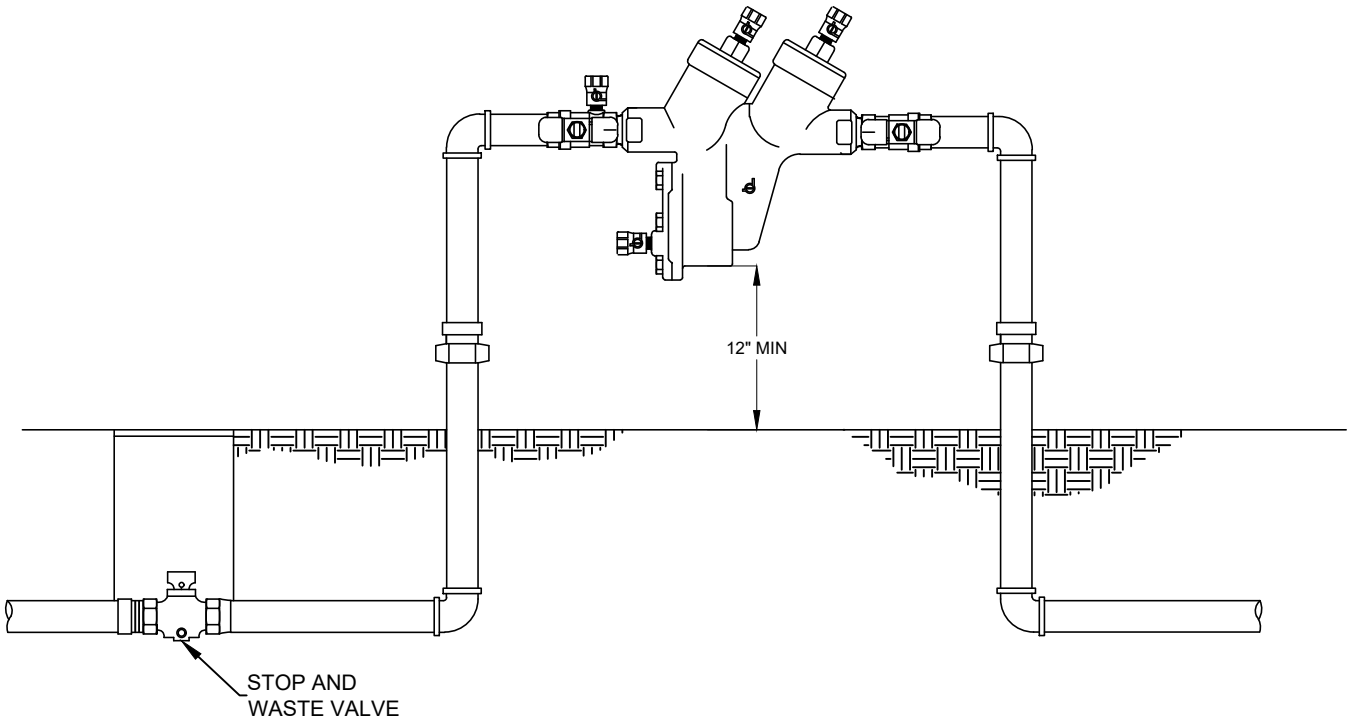
Water Mainline, Polywrap, & Tracer Wire

1. GENERAL
   A. Waterline installation to meet all requirements of Sections 33 05 05M and 33 11 00M.
2. PRODUCTS
   A. Pipe: All city maintained pipe in rights-of-ways or easements shall be ductile iron. Use ductile iron pipe for fire lines. All privately maintained pipe in public rights-of-ways shall be ductile iron.
   B. Polywrap: All metal including pipe, couplings, joints, and valves shall be sleeved or wrapped with 8 mil. Polyethylene.
   C. Tracer Wire: #14 UF-G direct bury red or blue tracer wire required on all water lines. Provide wire at base of fire hydrants and at all valves. Wire to be brought up outside of valve box and stubbed into valve box 3 inches below the lid through a hole cut in the valve box. Provide excess wire to extend 24" above finished grade.
   D. Tape: Use poly tape around pipe and tracer wire at all joints and at ±5 foot intervals.
   E. Bolts: All bolts need to be covered in FMH grease.
   F. Backfill: Common fill, PROVO Section 31 05 13M. Maximum particle size 2-inches.
   G. Double offset butterfly valves required for valves 12" or greater.
3. EXECUTION
   A. Bed water mainline in one foot of sand all directions.
   B. Pull polywrap tight around pipe and tape with poly tape.
   C. Poly Tape:
      a. Tape around valves.
      b. Tape any cuts or tears.
      c. Tape wire on top center of pipe outside of the polywrap.
   C. Place valves at property lines. On existing construction valves may be placed 3 feet from tee when expressly allowed by Provo City.
   D. When splicing tracer wire, use a grease filled connector. Wire is to be continuous underground where practical. Underground splices must be inspected before backfill.
   E. Inspection: Before backfilling, secure inspection of installation by ENGINEER.
   F. Provide backfill and surface restoration per Plan P-255.
   G. Operation of Valves: Provo City water valves to be operated only by Provo City Water Resources employees, even in emergencies. For assistance call (801) 852-6780.

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WATER MAINLINE TEE

STANDARD DETAIL
P-595
NOT TO SCALE
REVISED DATE: Oct-2021



DIRECTION OF FLOW

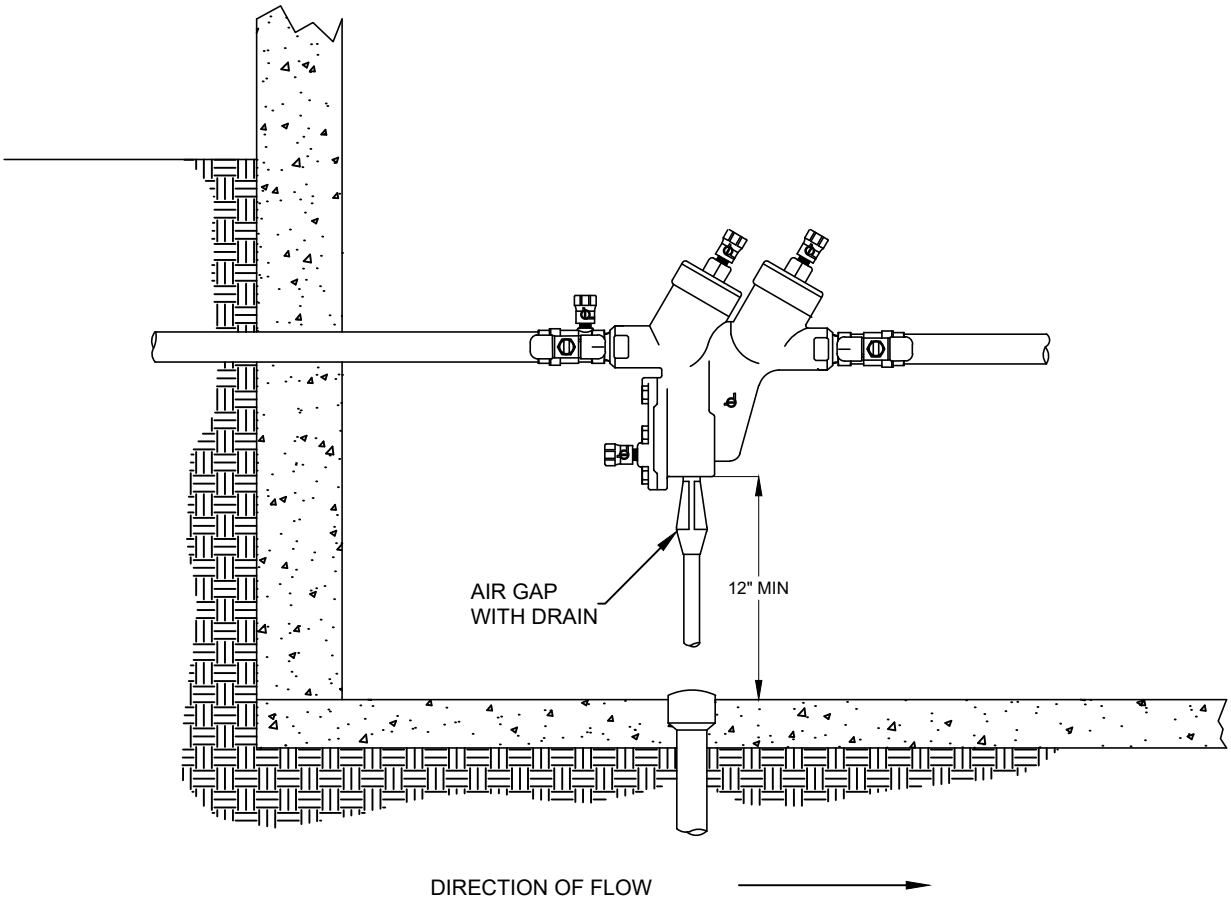
NOTES:

A. THE OUTDOOR REDUCED PRESSURE PRINCIPAL ASSEMBLY/REDUCED PRESSURE ZONE (RP) BACKFLOW ASSEMBLY SHALL BE PROTECTED FROM FREEZING AND VANDALISM.
B. THE BOTTOM OF THE ASSEMBLY SHALL BE A MINIMUM OF 12 INCHES ABOVE THE GROUND OR FLOOR. THE ASSEMBLY OWNER, WHEN NECESSARY SHALL PROVIDE DEVICES OR STRUCTURES TO FACILITATE TESTING, REPAIR AND MAINTENANCE.
C. THE BODY OF THE ASSEMBLY SHALL NOT BE CLOSER THAN 12 INCHES TO ANY WALL, CEILING OR ENCUMBRANCE AND SHALL BE ACCESSIBLE FOR TESTING, REPAIR AND MAINTENANCE.
D. RP BACKFLOW ASSEMBLIES SHALL NOT BE INSTALLED IN A PIT.
E. THE RELIEF VALVE OF THE ASSEMBLY SHALL NOT BE DIRECTLY CONNECTED TO ANY WASTE DISPOSAL LINE, INCLUDING SANITARY SEWER AND STORM DRAIN.
F. RP BACKFLOW ASSEMBLIES SHALL BE MAINTAINED AS AN ASSEMBLY. TWO (2) TURN OFF VALVES, FOUR (4) TEST CLOCKS.
G. THE ASSEMBLY SHALL BE INSTALLED IN A HORIZONTAL POSITION UNLESS SPECIFICALLY DESIGNED FOR VERTICAL USE.
H. FOR NOTES RELATING TO ALL BACKFLOW ASSEMBLIES, REFER TO TECHNICAL SPECIFICATIONS ON PLAN P-631.
I. IF YOU HAVE ANY QUESTIONS OR NEED MORE INFORMATION, PLEASE CONTACT PROVO CITY CROSS CONNECTION CONTROL COORDINATOR (801) 852-6788.

provo PUBLIC WORKS

OUTDOOR REDUCED PRESSURE PRINCIPAL ASSEMBLY (RP)

STANDARD DETAIL
P-631a
NOT TO SCALE
REVISED DATE: 11/25/15



NOTES:

A. THE INDOOR REDUCED PRESSURE PRINCIPAL ASSEMBLY/REDUCED PRESSURE ZONE (RP) BACKFLOW ASSEMBLY SHALL BE PROTECTED FROM FREEZING AND VANDALISM.

B. THE BOTTOM OF THE ASSEMBLY SHALL BE A MINIMUM OF 12 INCHES ABOVE THE GROUND OR FLOOR. THE ASSEMBLY OWNER, WHEN NECESSARY SHALL PROVIDE DEVICES OR STRUCTURES TO FACILITATE TESTING, REPAIR AND MAINTENANCE.

C. THE BODY OF THE ASSEMBLY SHALL NOT BE CLOSER THAN 12 INCHES TO ANY WALL, CEILING OR ENCUMBRANCE AND SHALL BE ACCESSIBLE FOR TESTING, REPAIR AND MAINTENANCE.

D. RP BACKFLOW ASSEMBLIES SHALL NOT BE INSTALLED IN A PIT.

E. THE RELIEF VALVE OF THE ASSEMBLY SHALL NOT BE DIRECTLY CONNECTED TO ANY WASTE DISPOSAL LINE, INCLUDING SANITARY SEWER AND STORM DRAIN.

F. RP BACKFLOW ASSEMBLIES SHALL BE MAINTAINED AS AN ASSEMBLY. TWO (2) TURN OFF VALVES, FOUR (4) TEST CLOCKS.

G. THE ASSEMBLY SHALL BE INSTALLED IN A HORIZONTAL POSITION UNLESS SPECIFICALLY DESIGNED FOR VERTICAL USE.

H. FOR NOTES RELATING TO ALL BACKFLOW ASSEMBLIES, REFER TO TECHNICAL SPECIFICATIONS ON PLAN P-631.

I. IF YOU HAVE ANY QUESTIONS OR NEED MORE INFORMATION, PLEASE CONTACT PROVO CITY CROSS CONNECTION CONTROL COORDINATOR (801) 852-6788.

J.

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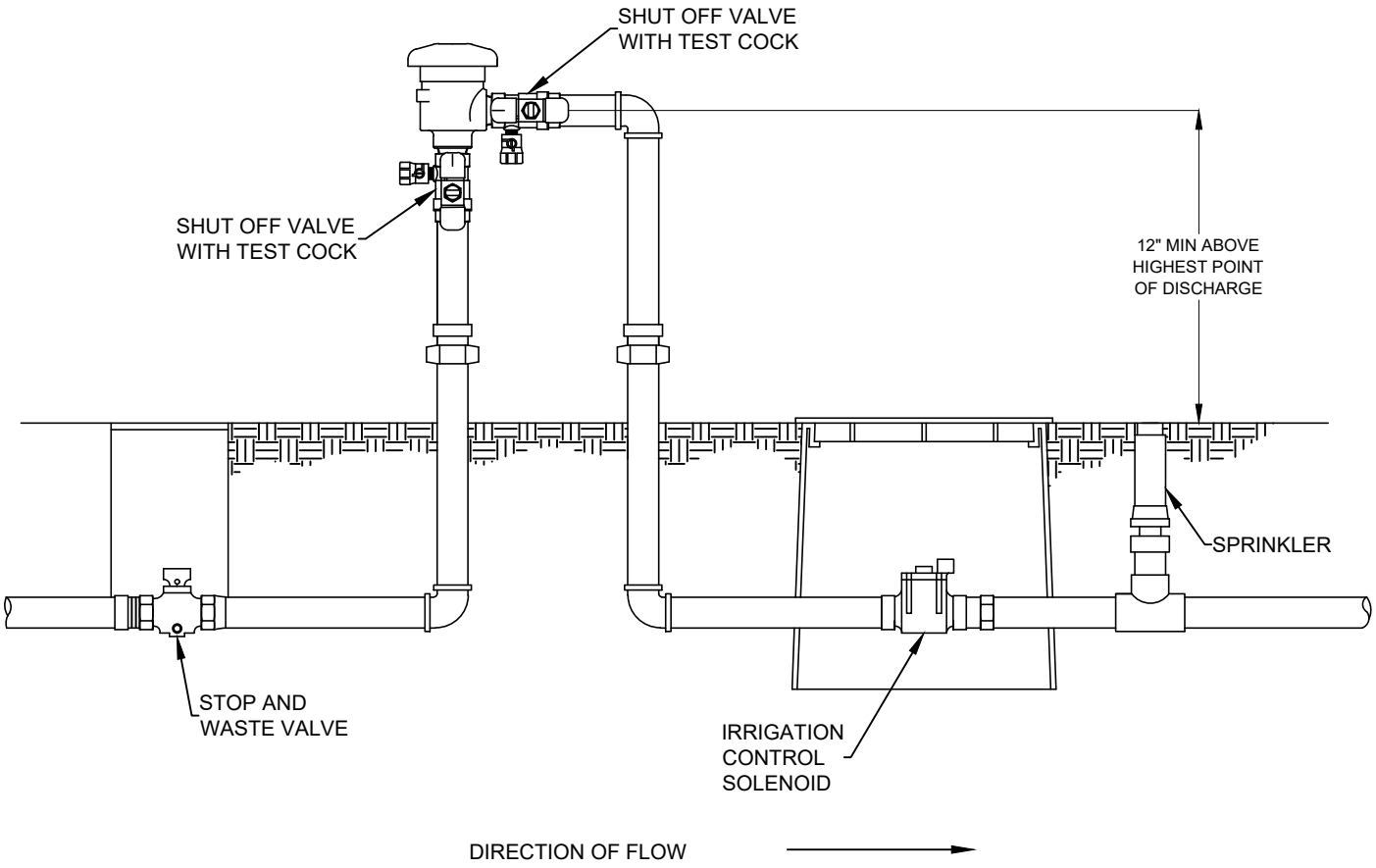
INDOOR REDUCED PRESSURE PRINCIPAL ASSEMBLY (RP)

STANDARD DETAIL

P-631b

NOT TO SCALE

REVISED DATE: 11/25/15



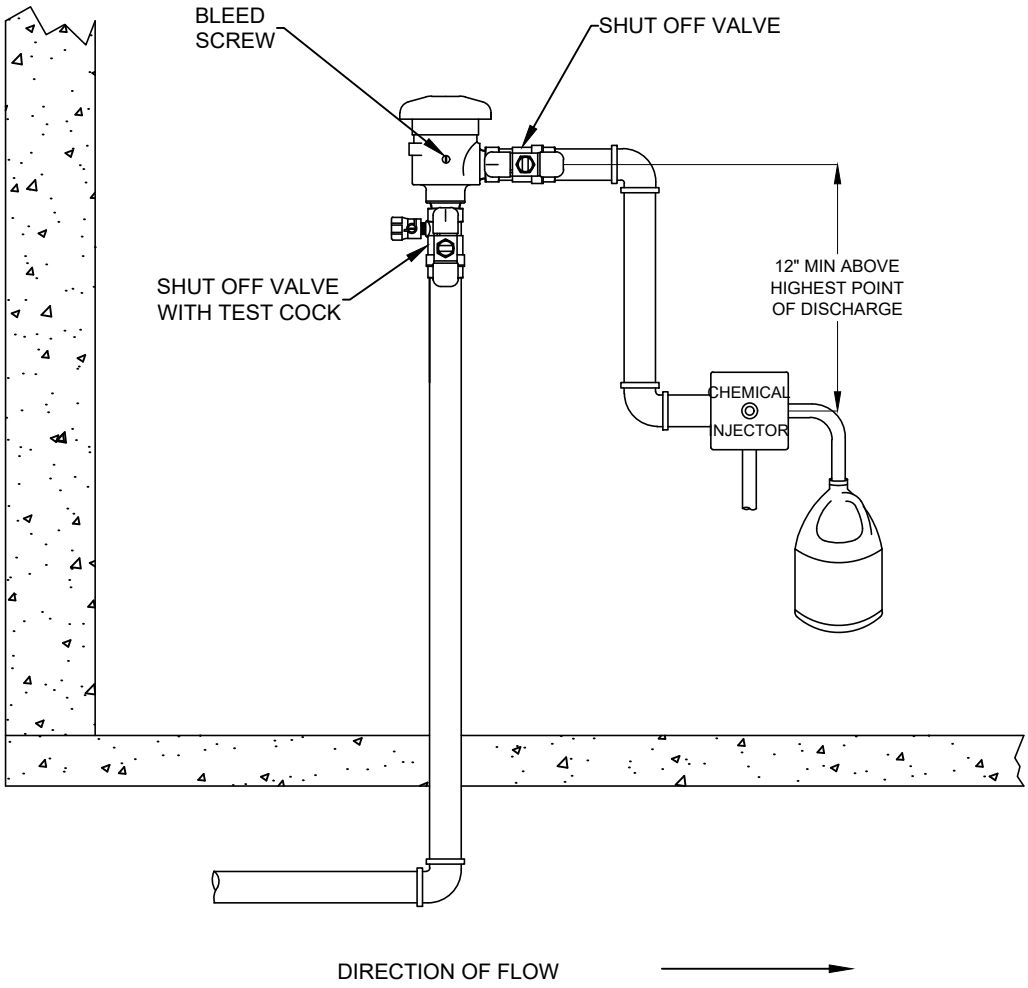
NOTES:

A. THE PRESSURE VACUUM BREAKER (PVB) SHALL NOT BE INSTALLED IN AN AREA THAT COULD BE SUBJECTED TO BACK PRESSURE.
B. THE ASSEMBLY SHALL BE INSTALLED A MINIMUM OF 12 INCHES ABOVE THE HIGHEST POINT OF USE.
C. THE ASSEMBLY SHALL BE READILY ACCESSIBLE FOR TESTING, REPAIR AND MAINTENANCE.
D. THE ASSEMBLY SHALL NOT BE INSTALLED BELOW GROUND (VAULT OR PIT).
E. THE PVB SHALL BE MAINTAINED AS AN ASSEMBLY.
F. THE PVB SHALL BE INSTALLED IN A VERTICAL POSITION.
G. THE PVB MAY BE INSTALLED WITH DOWNSTREAM VALUES.
H. FOR NOTES RELATING TO ALL BACKFLOW ASSEMBLIES, REFER TO TECHNICAL SPECIFICATIONS ON PLAN P-631.
I. IF YOU HAVE ANY QUESTIONS OR NEED MORE INFORMATION, PLEASE CONTACT PROVO CITY CROSS CONNECTION CONTROL COORDINATOR (801) 852-6788.

provo PUBLIC WORKS

PRESSURE VACUUM BREAKER (PVB)

STANDARD DETAIL
P-631c
NOT TO SCALE
REVISED DATE: 11/25/15



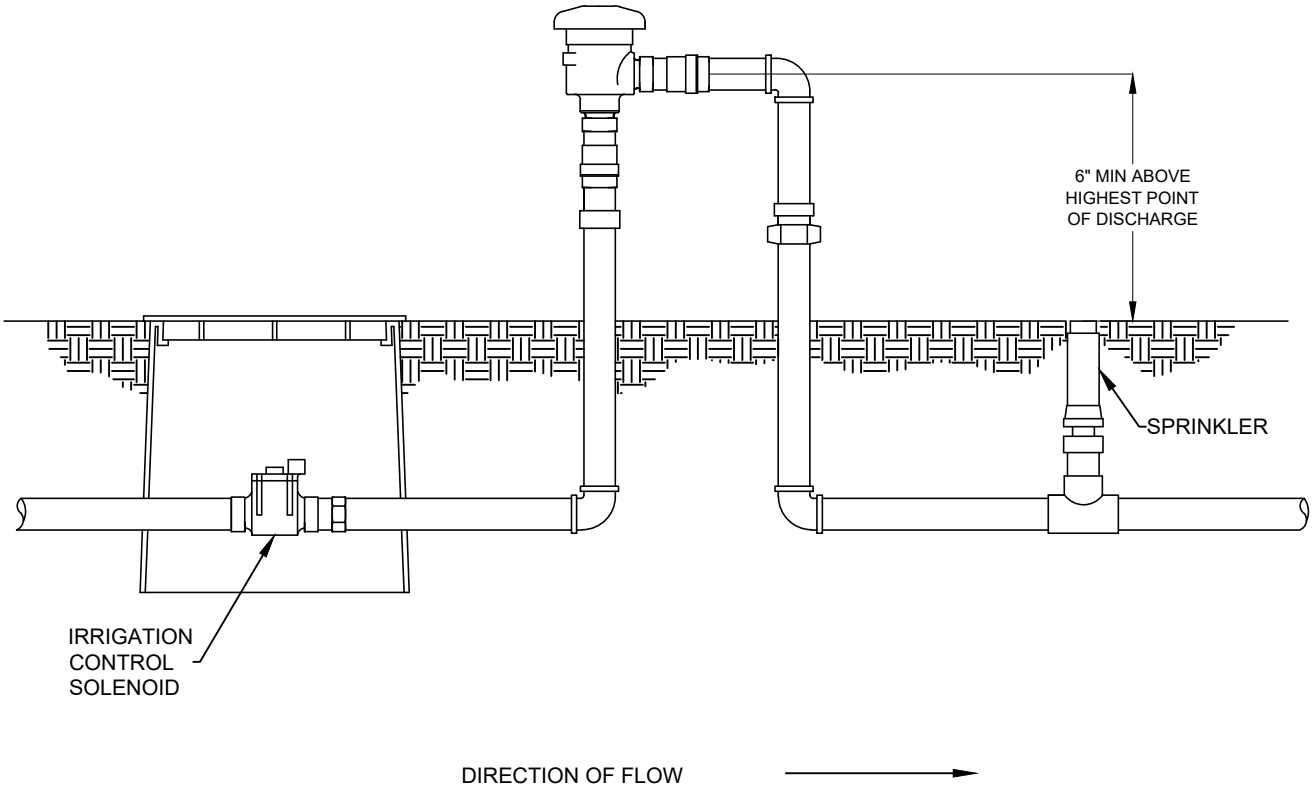
NOTES:

A. THE SPILL RESISTANT PRESSURE VACUUM BREAKER (SVB) SHALL NOT BE INSTALLED IN AN AREA THAT COULD BE SUBJECTED TO BACK PRESSURE.
B. THE ASSEMBLY SHALL BE INSTALLED A MINIMUM OF 12 INCHES ABOVE THE HIGHEST POINT OF USE.
C. THE ASSEMBLY SHALL BE READILY ACCESSIBLE FOR TESTING, REPAIR AND MAINTENANCE.
D. THE ASSEMBLY SHALL NOT BE INSTALLED BELOW GROUND (VAULT OR PIT).
E. THE SVB SHALL BE MAINTAINED AS AN ASSEMBLY.
F. THE SVB SHALL BE INSTALLED IN A VERTICAL POSITION.
G. THE SVB MAY BE INSTALLED WITH DOWNSTREAM VALUES.
H. FOR NOTES RELATING TO ALL BACKFLOW ASSEMBLIES, REFER TO TECHNICAL SPECIFICATIONS ON PLAN P-631.
I. IF YOU HAVE ANY QUESTIONS OR NEED MORE INFORMATION, PLEASE CONTACT PROVO CITY CROSS CONNECTION CONTROL COORDINATOR (801) 852-6788.

provo PUBLIC WORKS

SPILL RESISTANT PRESSURE VACUUM BREAKER (SVB)

STANDARD DETAIL
P-631d
NOT TO SCALE
REVISED DATE: 11/25/15



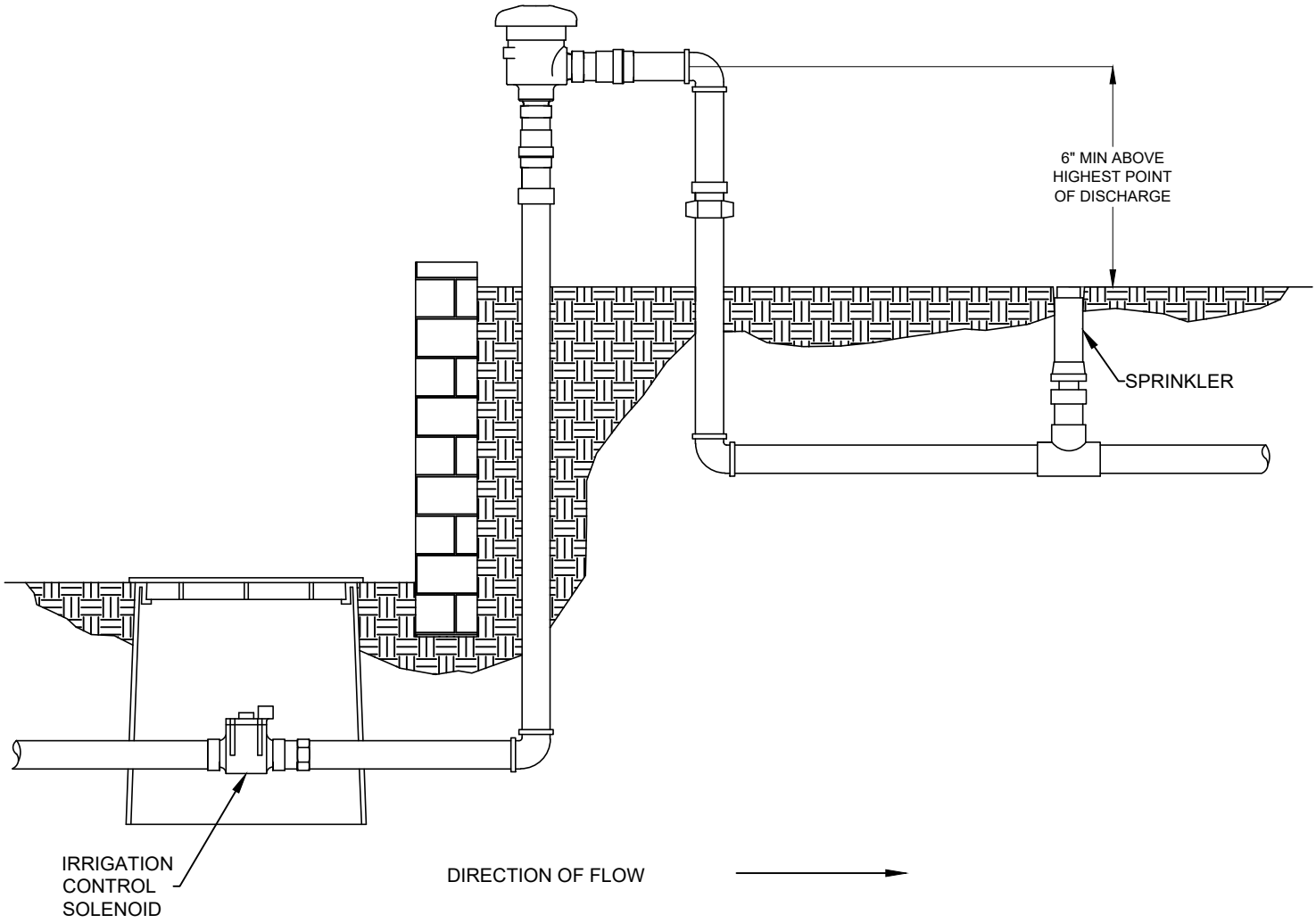
NOTES:

A. THE ATMOSPHERIC VACUUM BREAKER (AVB) SHALL NOT BE INSTALLED IN AN AREA THAT COULD BE SUBJECTED TO BACK PRESSURE OR BACK DRAINAGE.
B. THE AVB SHALL NOT BE INSTALLED WHERE IT MAY BE SUBJECTED TO CONTINUOUS PRESSURE FOR MORE THAN 12 CONSECUTIVE HOURS.
C. THE AVB SHALL BE INSTALLED A MINIMUM OF 6 INCHES ABOVE THE HIGHEST POINT OF USE.
D. THE AVB SHALL BE INSTALLED ON THE DISCHARGE SIDE OF THE LAST CONTROL VALVE.
E. THE AVB SHALL BE INSTALLED IN A VERTICAL POSITION.
F. INSPECT AT LEAST ONCE A YEAR, REMOVE POPPET HOOD AND VISUALLY INSPECT SEAL AND POPPET.
G. FOR NOTES RELATING TO ALL BACKFLOW ASSEMBLIES, REFER TO TECHNICAL SPECIFICATIONS ON PLAN P-631.
H. IF YOU HAVE ANY QUESTIONS OR NEED MORE INFORMATION, PLEASE CONTACT PROVO CITY CROSS CONNECTION CONTROL COORDINATOR (801) 852-6788.

provo PUBLIC WORKS

ATMOSPHERIC VACUUM BREAKER (AVB)

STANDARD DETAIL
P-631e
NOT TO SCALE
REVISED DATE: 11/25/15



NOTES:

A. THE ATMOSPHERIC VACUUM BREAKER (AVB) SHALL NOT BE INSTALLED IN AN AREA THAT COULD BE SUBJECTED TO BACK PRESSURE OR BACK DRAINAGE.
B. THE AVB SHALL NOT BE INSTALLED WHERE IT MAY BE SUBJECTED TO CONTINUOUS PRESSURE FOR MORE THAN 12 CONSECUTIVE HOURS.
C. THE AVB SHALL BE INSTALLED A MINIMUM OF 6 INCHES ABOVE THE HIGHEST POINT OF USE.
D. THE AVB SHALL BE INSTALLED ON THE DISCHARGE SIDE OF THE LAST CONTROL VALVE.
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F. INSPECT AT LEAST ONCE A YEAR, REMOVE POPPET HOOD AND VISUALLY INSPECT SEAL AND POPPET.
G. FOR NOTES RELATING TO ALL BACKFLOW ASSEMBLIES, REFER TO TECHNICAL SPECIFICATIONS ON PLAN P-631.
H. IF YOU HAVE ANY QUESTIONS OR NEED MORE INFORMATION, PLEASE CONTACT PROVO CITY CROSS CONNECTION CONTROL COORDINATOR (801) 852-6788.

provo PUBLIC WORKS

ATMOSPHERIC VACUUM BREAKER (AVB)

STANDARD DETAIL
P-631f
NOT TO SCALE
REVISED DATE: 11/25/15

1. GENERAL

A. Prior to the installation of any backflow prevention assembly, the Property Owner must be notified that the installation of a backflow prevention assembly may create a closed system, thereby creating a thermal expansion hazard. A thermal expansion device must be installed.

B. If any unapproved backflow prevention assembly is found within any water system, that assembly shall be removed and replaced with a state approved assembly.

C. All backflow assemblies shall be tested within 10 days of initial use.

D. All backflow assemblies shall be tested at least once a year.

E. All backflow assemblies shall be tested whenever relocated or repaired.

F. A copy of the test report must be sent to the Provo City.

G. Testers must have a current backflow assembly tester certificate.

2. PRODUCTS

A. Provide Outdoor or Indoor Reduced Pressure Principle Assembly (RP), Pressure Vacuum Breaker (PVB), Spill Resistant Pressure Vacuum Breaker (SVB), or Atmospheric Vacuum Breaker (AVB) per Provo City Standards.

B. Doublecheck assemblies are not allowed on landscape irrigation in Utah.

C. Above ground outdoor systems need to be galvanized steel, ductile iron or copper. No PVC allowed.

3. EXECUTION

A. Backflow Prevention Assembly type shall be approved by Provo City prior to installation.

B. Follow installation instructions on the backflow prevention assembly drawing.

C. Air Gap -

C.1. The Air gap shall be a minimum of one inch, or twice the diameter of the incoming pipe (within 10 pipe diameters of termination of the line).

C.2. Where the air gap is within two pipe diameters (horizontal measurement) of a wall, the air gap shall be increased to three times the incoming pipe diameter. High hazard air gaps shall be inspected on an annual basis.

provo PUBLIC WORKS

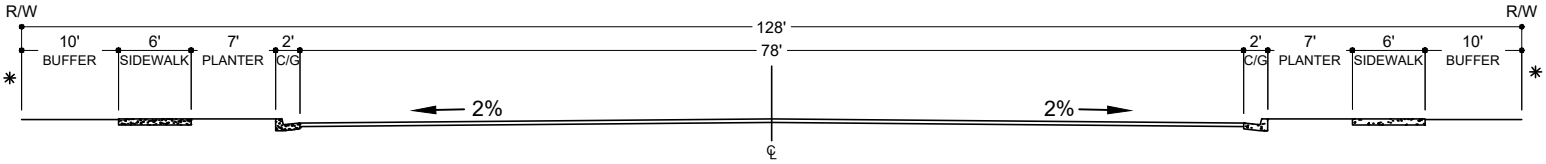
BACKFLOW PREVENTION ASSEMBLIES

STANDARD DETAIL

P-631

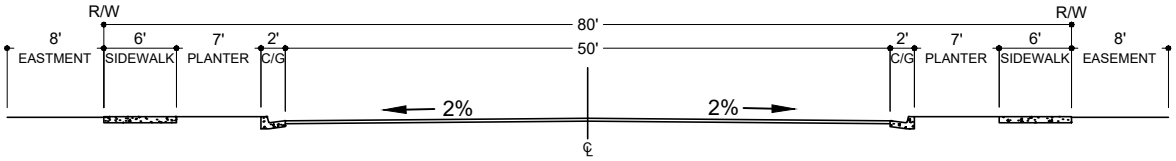
NOT TO SCALE

REVISED DATE: 11/10/16



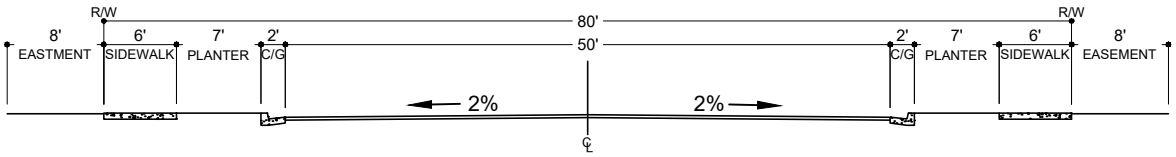
ARTERIAL STREET

(78' PAVEMENT)



MINOR ARTERIAL STREET

(50' PAVEMENT)



COLLECTOR STREET

(50' PAVEMENT)

NOTE:

* 8' PUBLIC UTILITY EASEMENT

SHEET 1 OF 1

PUBLIC WORKS

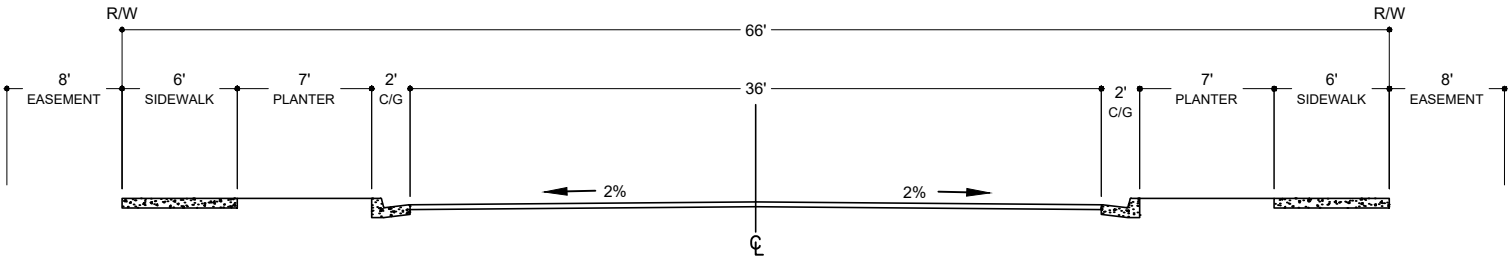
TYPICAL STREET SECTIONS

STANDARD DETAIL

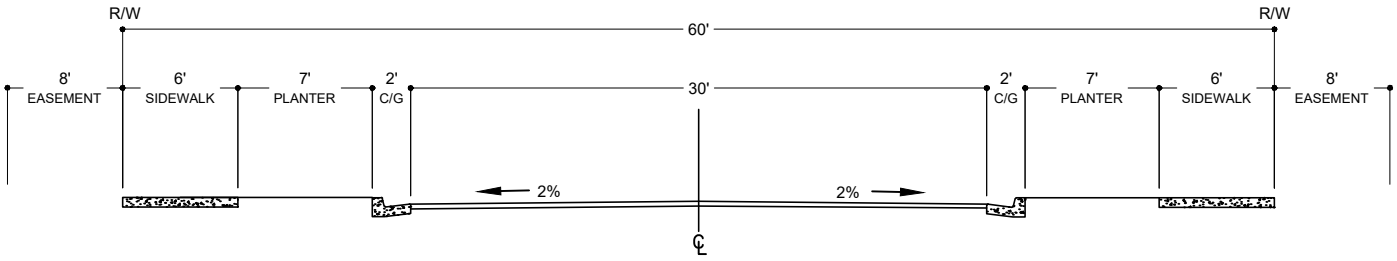
P-900

NOT TO SCALE

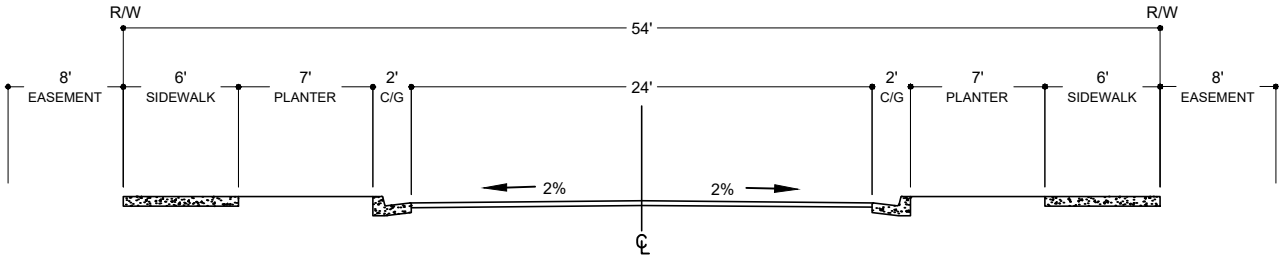
REVISED DATE: 4/20/19



LOCAL STREET
(36' PAVEMENT)



LOCAL STREET
(30' PAVEMENT)



LOCAL STREET (Parking on one side)
(24' PAVEMENT)

NOTE:
8' PUBLIC UTILITY EASEMENT

SHEET 1 OF 1

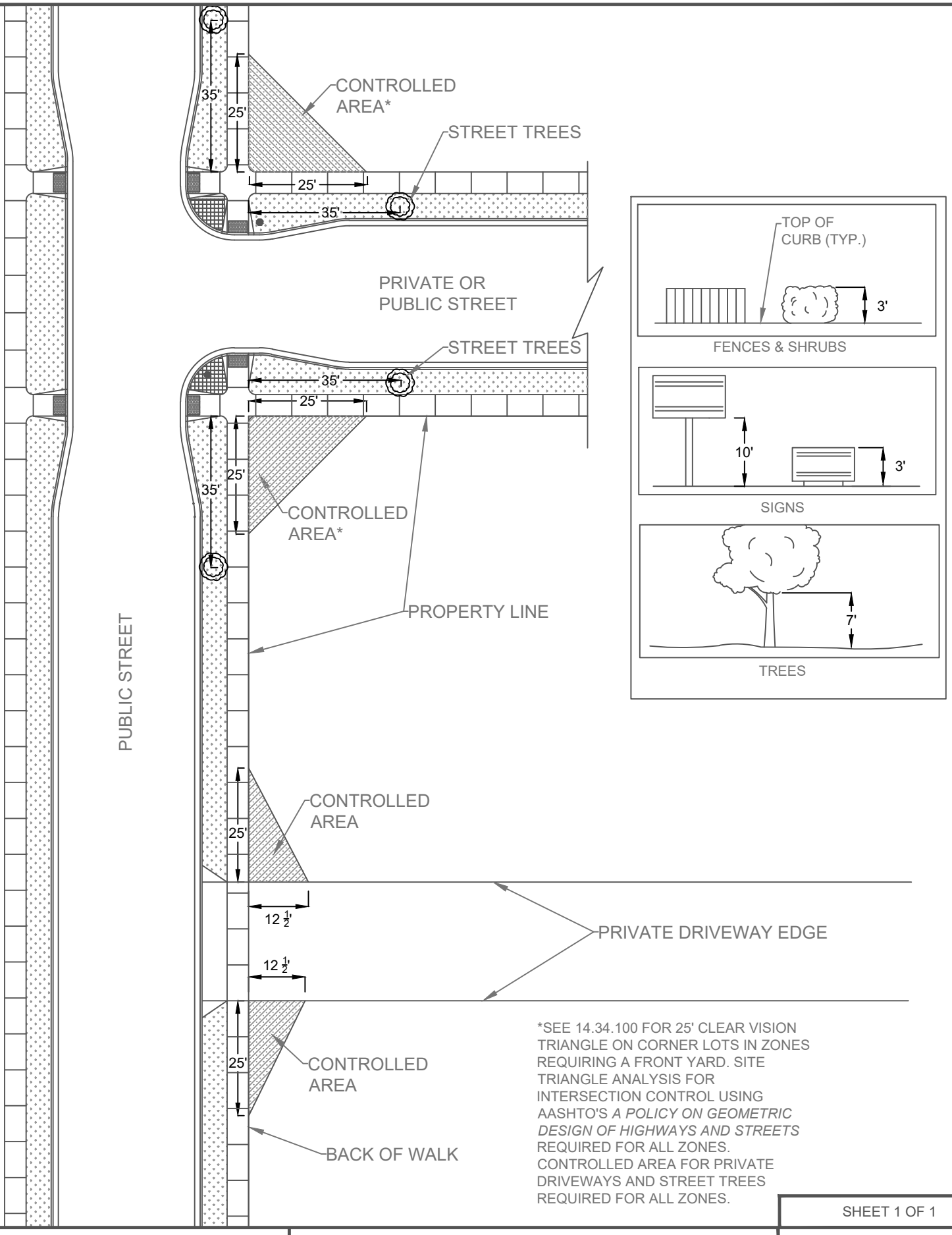
provo PUBLIC WORKS

TYPICAL STREET SECTIONS

STANDARD DETAIL
P-901

NOT TO SCALE

REVISED DATE: 4/20/19



*SEE 14.34.100 FOR 25' CLEAR VISION TRIANGLE ON CORNER LOTS IN ZONES REQUIRING A FRONT YARD. SITE TRIANGLE ANALYSIS FOR INTERSECTION CONTROL USING AASHTO'S *A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS* REQUIRED FOR ALL ZONES. CONTROLLED AREA FOR PRIVATE DRIVEWAYS AND STREET TREES REQUIRED FOR ALL ZONES.

SHEET 1 OF 1

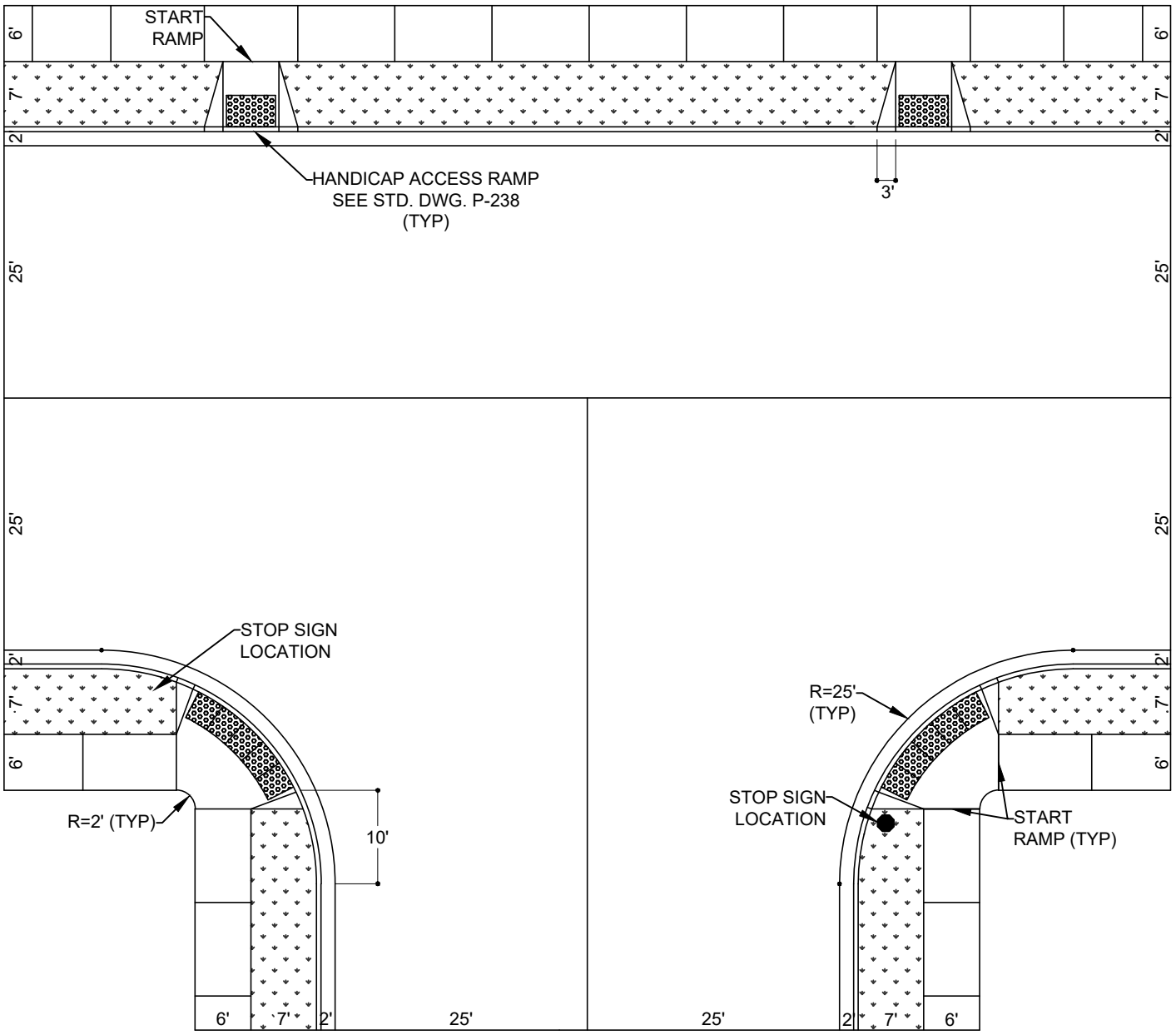
provo PUBLIC WORKS

CLEAR VISION REQUIREMENTS

STANDARD DETAIL
P-902

NOT TO SCALE

REVISED DATE: 10/04/2022



COLLECTOR STREET TO COLLECTOR STREET

NOTE: HANDICAP ACCESSIBLE RAMPS SHALL BE PROVIDED AT ALL CROSSING LOCATIONS.

SHEET 1 OF 1

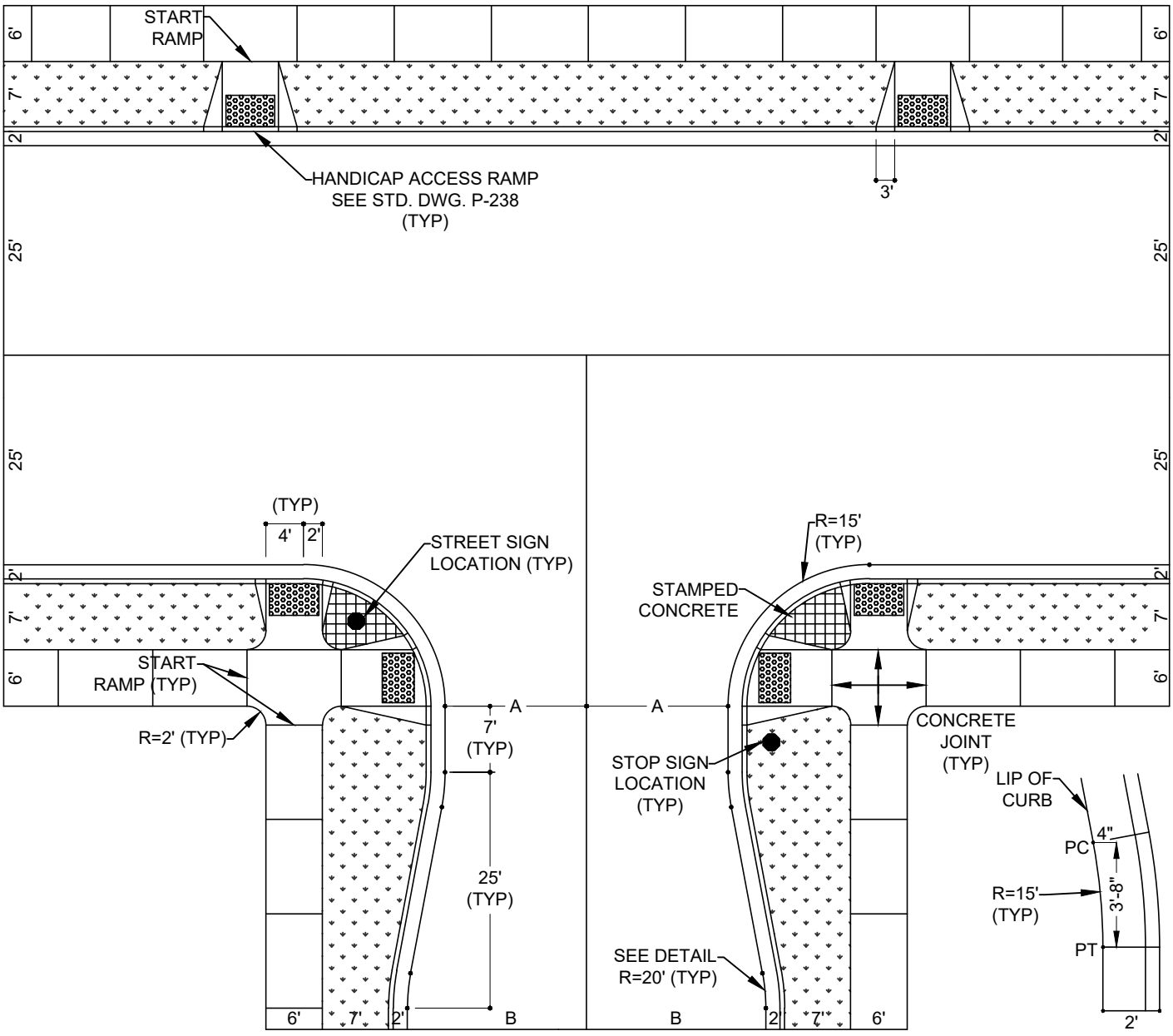
PUBLIC WORKS

TYPICAL COLLECTOR STREET T-INTERSECTION

STANDARD DETAIL
P-903

NOT TO SCALE

REVISED DATE: 10/14/19



ROAD WIDTH		
	A	B
30' PAVEMENT	12'	15'
36' PAVEMENT	14'	18'

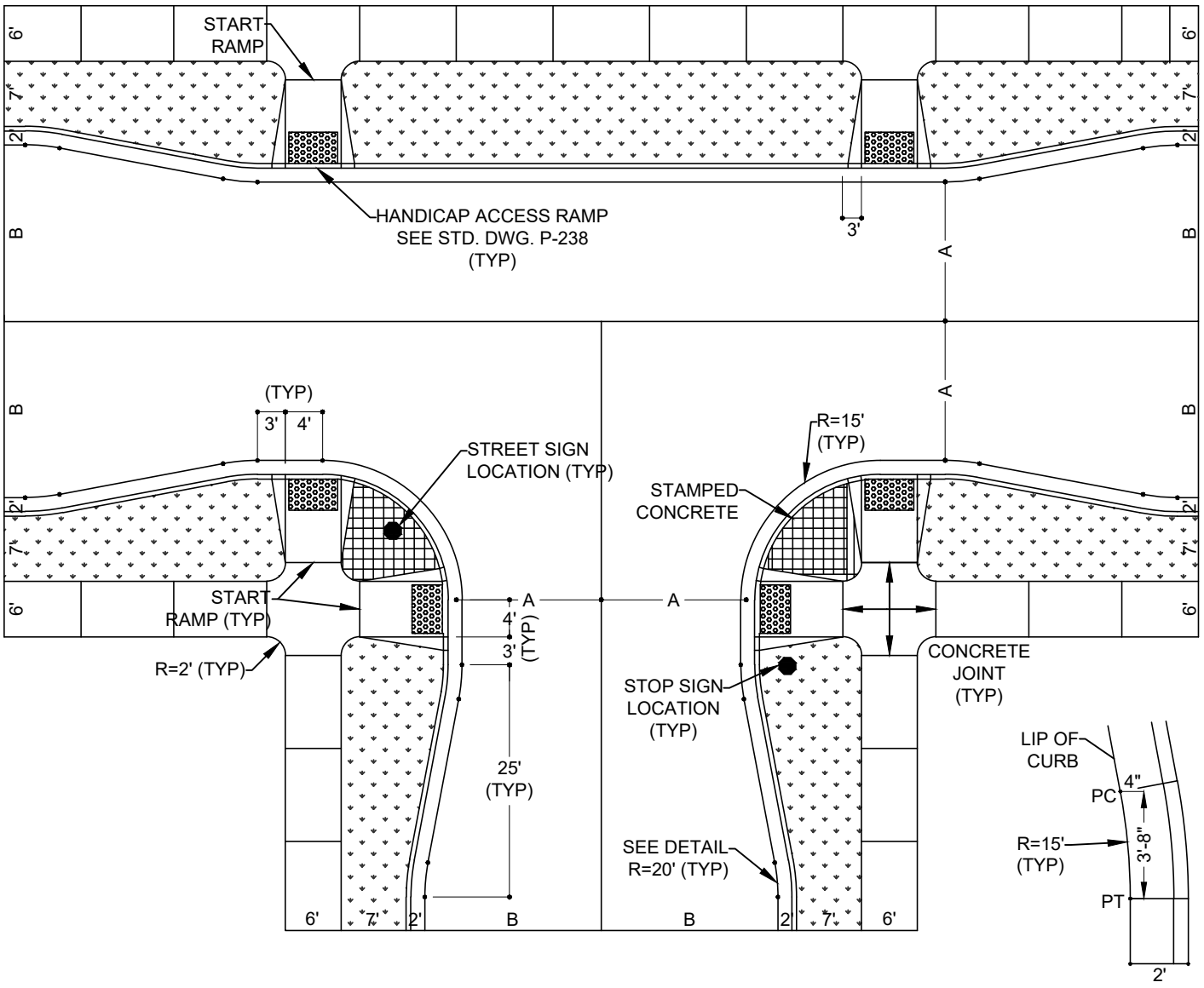
MODIFICATIONS TO THIS STANDARD MUST BE APPROVED BY THE CITY ENGINEER

NOTE: HANDICAP ACCESSIBLE RAMPS SHALL BE PROVIDED AT ALL CROSSING LOCATIONS.

PUBLIC WORKS

TYPICAL LOCAL TO COLLECTOR STREET T-INTERSECTION

STANDARD DETAIL
P-904
NOT TO SCALE
REVISED DATE: 10/14/19



ROAD WIDTH		
	A	B
30' PAVEMENT	12'	15'
36' PAVEMENT	14'	18'

MODIFICATIONS TO THIS STANDARD MUST BE APPROVED BY THE CITY ENGINEER

NOTE: HANDICAP ACCESSIBLE RAMPS SHALL BE PROVIDED AT ALL CROSSING LOCATIONS.

PROVO PUBLIC WORKS

TYPICAL LOCAL TO LOCAL STREET T-INTERSECTION

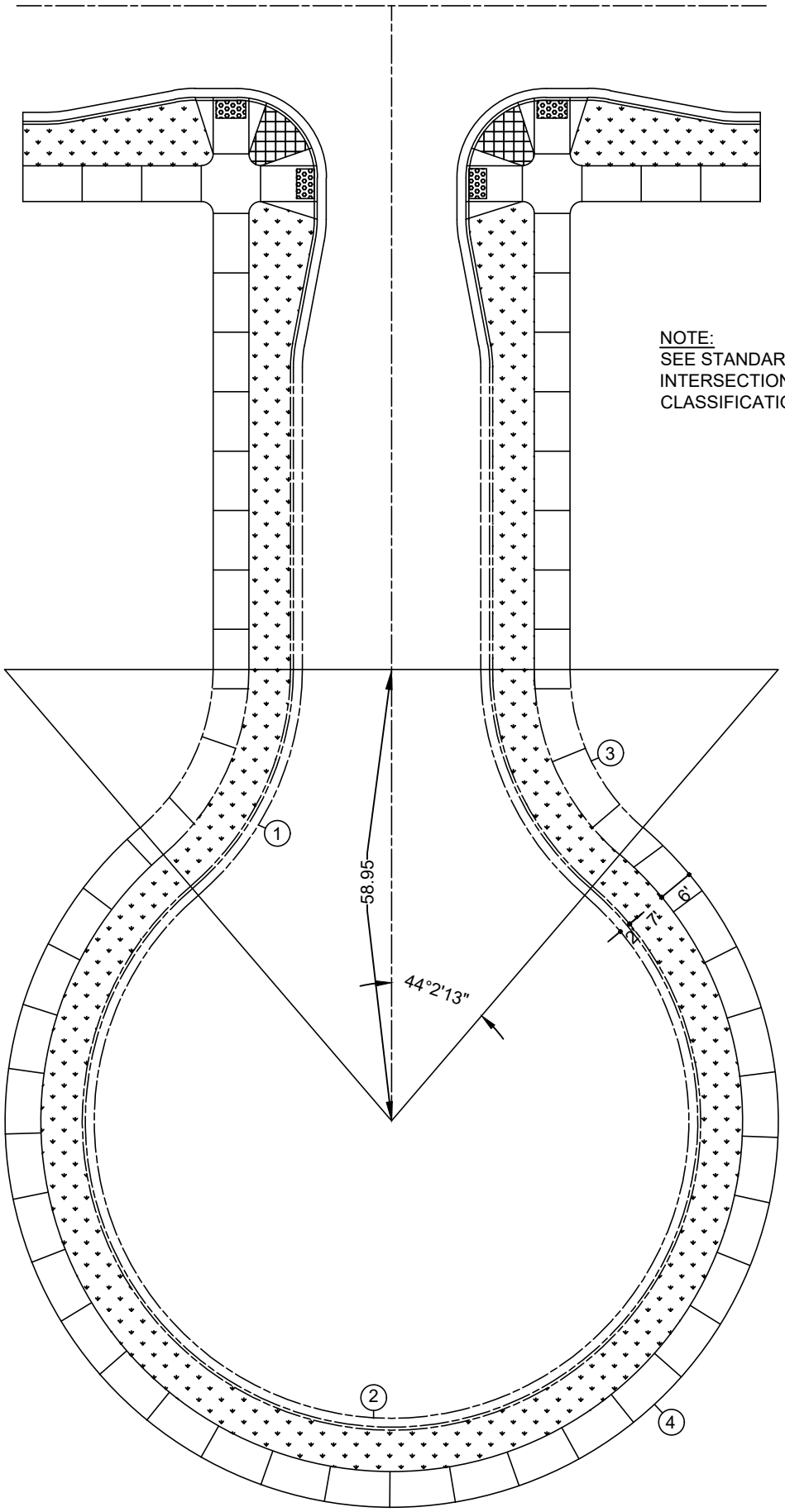
SHEET 1 OF 1

STANDARD DETAIL

P-905

NOT TO SCALE

REVISED DATE: 10/14/19



NOTE:
SEE STANDARD DRAWINGS 904 THROUGH 909 FOR INTERSECTION DETAILS DEPENDANT ON THE STREET CLASSIFICATION.

CURVE TABLE

CURVE	RADIUS
1	41.00°
2	41.00°
3	26.00°
4	56.00°

PUBLIC WORKS

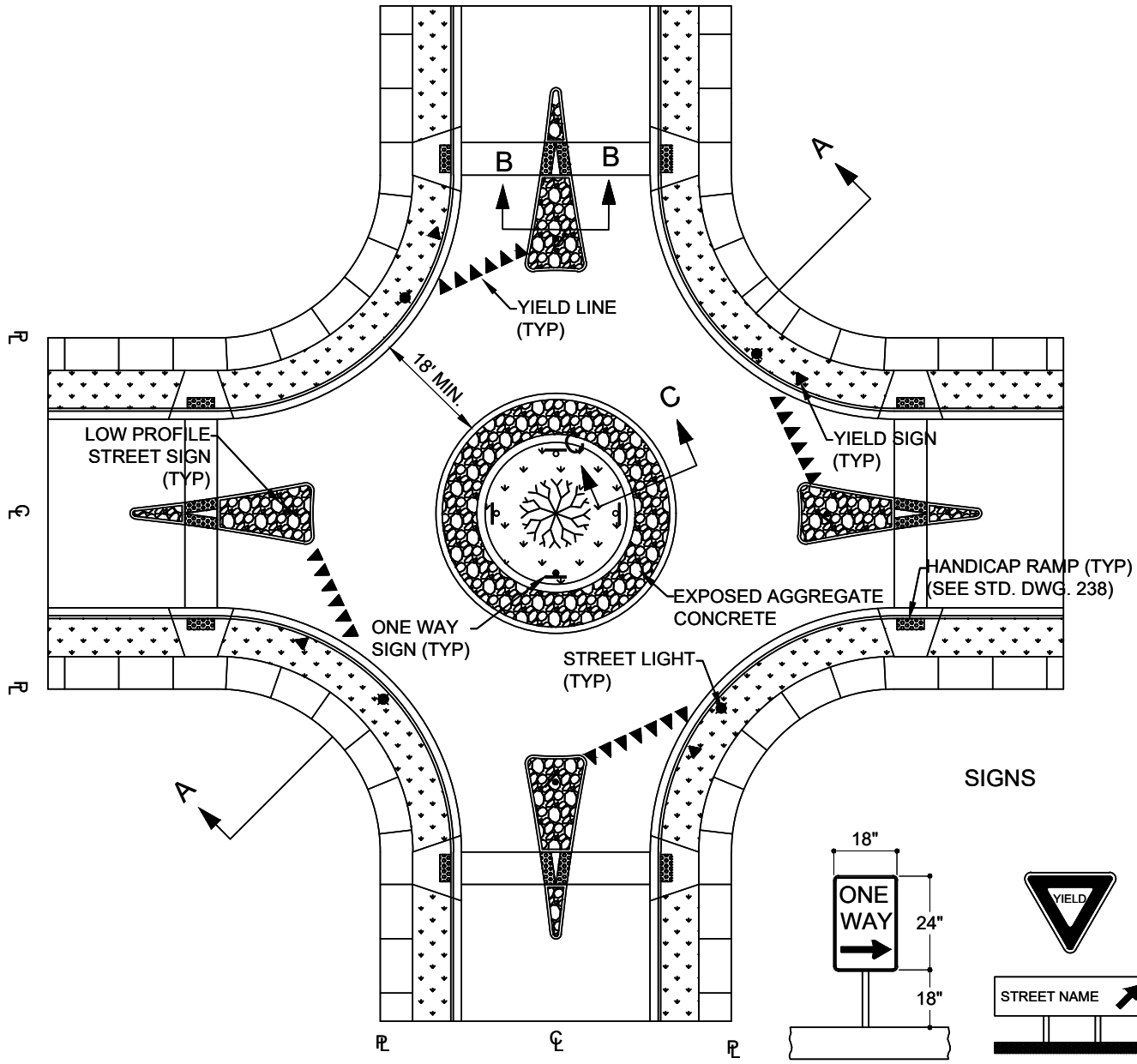
CUL-DE-SAC WITH PLANTER

SHEET 1 OF 1

STANDARD DETAIL
P-910

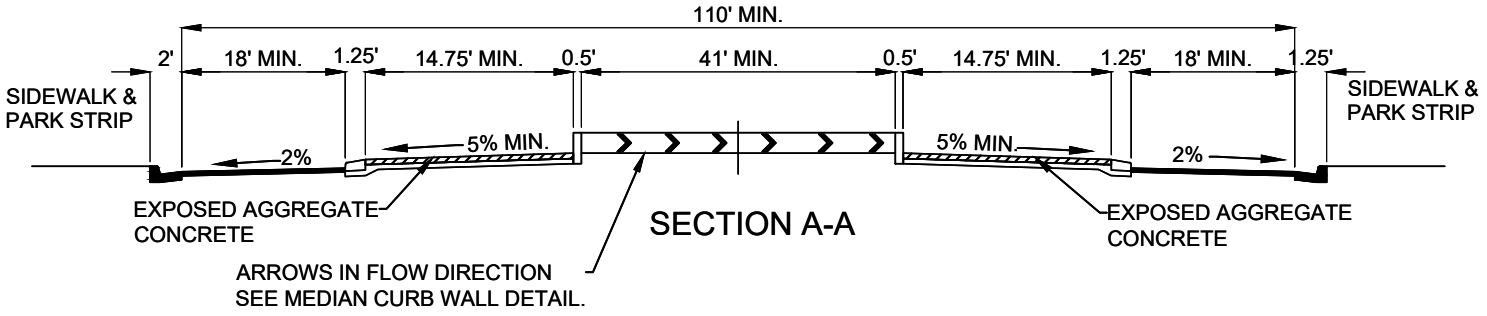
NOT TO SCALE

REVISED DATE: 09/28/2021



SIGNS

CHANGES CAN BE MADE
BASED ON DESIGN VEHICLE.



SECTION A-A

SHEET 1 OF 1

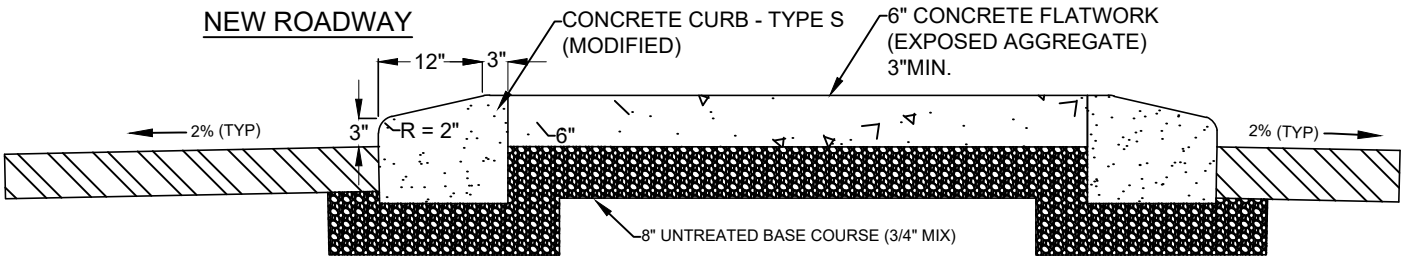
PUBLIC WORKS

TYPICAL ROUNDABOUT

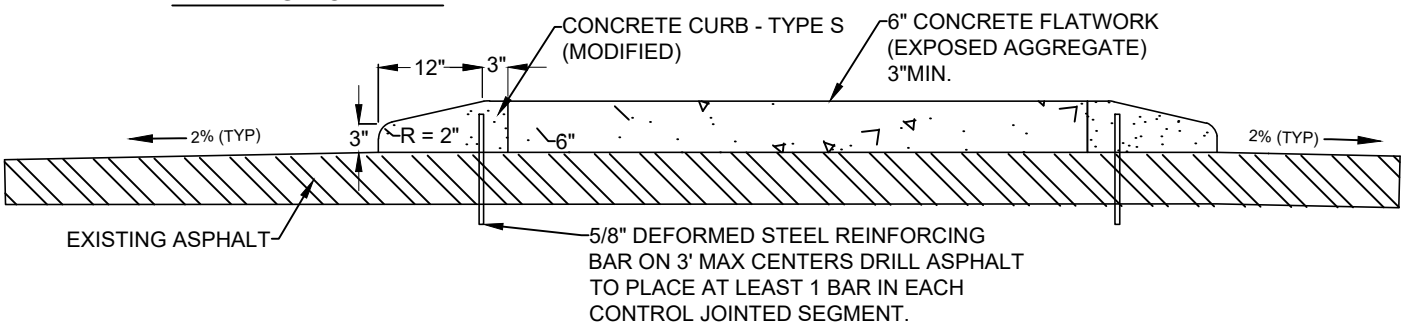
STANDARD DETAIL
P-912
NOT TO SCALE
REVISED DATE: 11/25/15

SECTION B-B

NEW ROADWAY

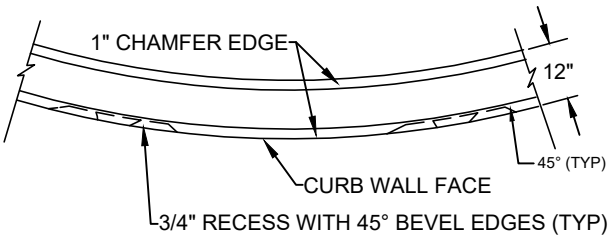


EXISTING ROADWAY

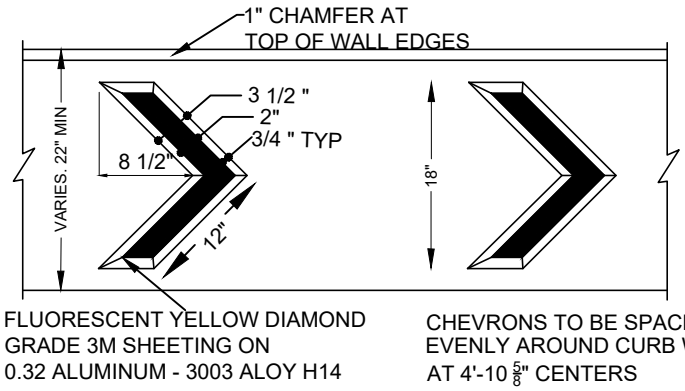


MEDIAN CURB WALL

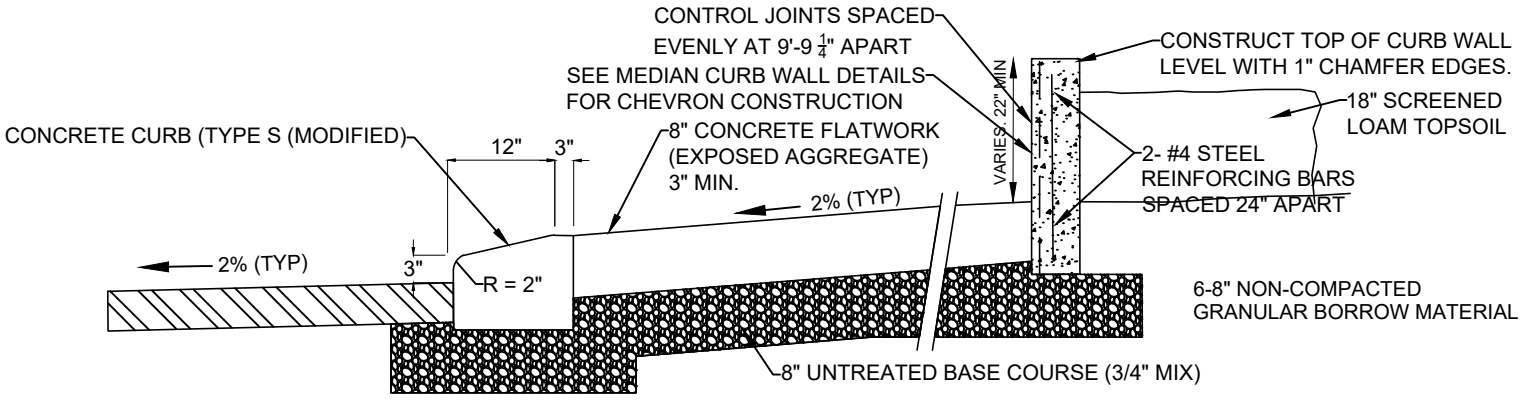
TOP VIEW



ELEVATION VIEW



SECTION C-C



SHEET 1 OF 1

PUBLIC WORKS

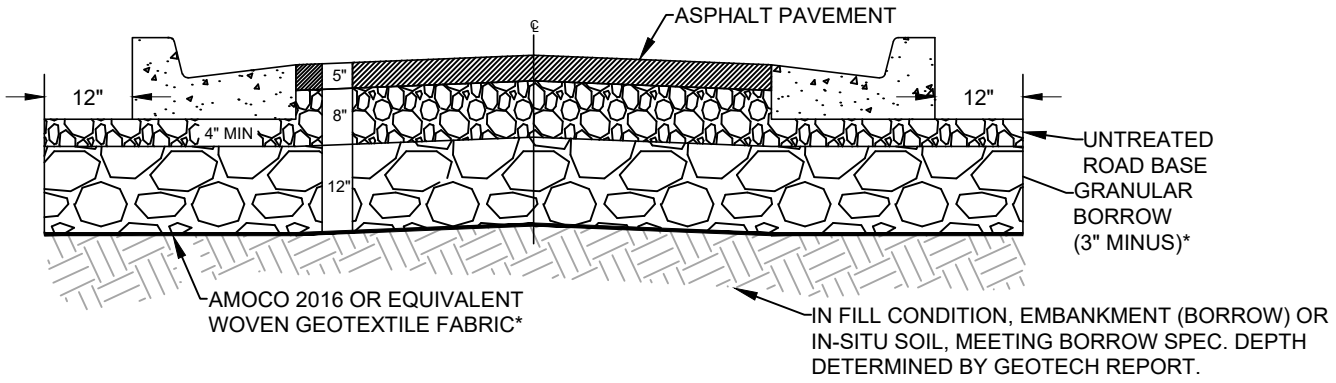
TYPICAL ROUNDABOUT

STANDARD DETAIL

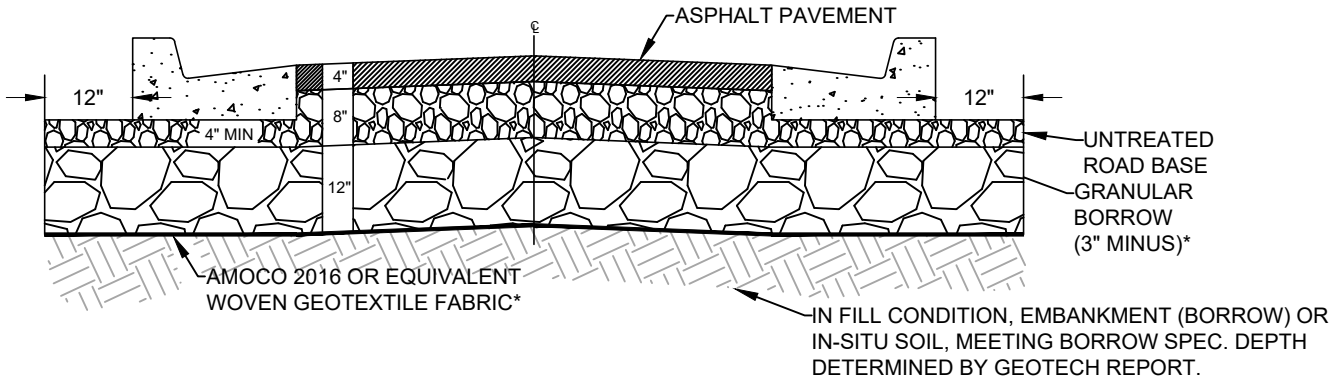
P-912

NOT TO SCALE

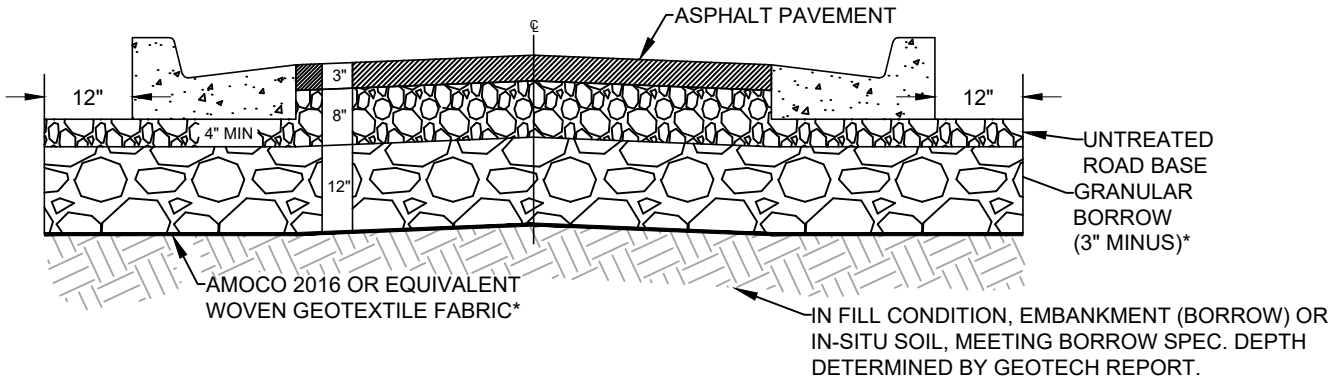
REVISED DATE: 11/25/15



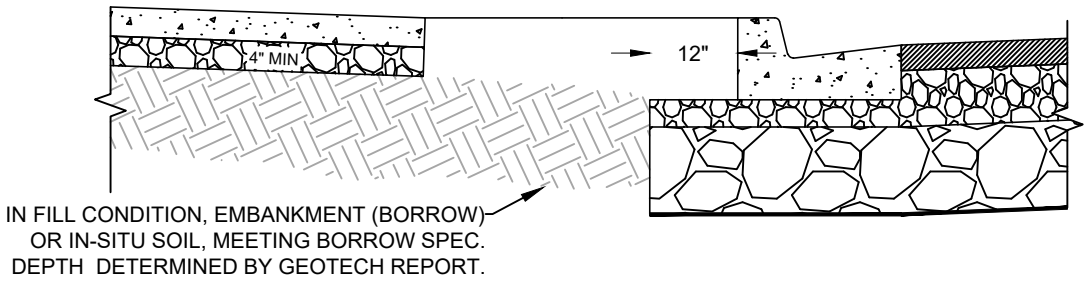
ARTERIAL STREETS



COLLECTOR STREETS



LOCAL\PRIVATE STREETS



TYPICAL SIDE DETAIL

*REQUIRED IN SENSITIVE LANDS, OR AS REQUIRED BY CITY ENGINEER

SHEET 1 OF 1

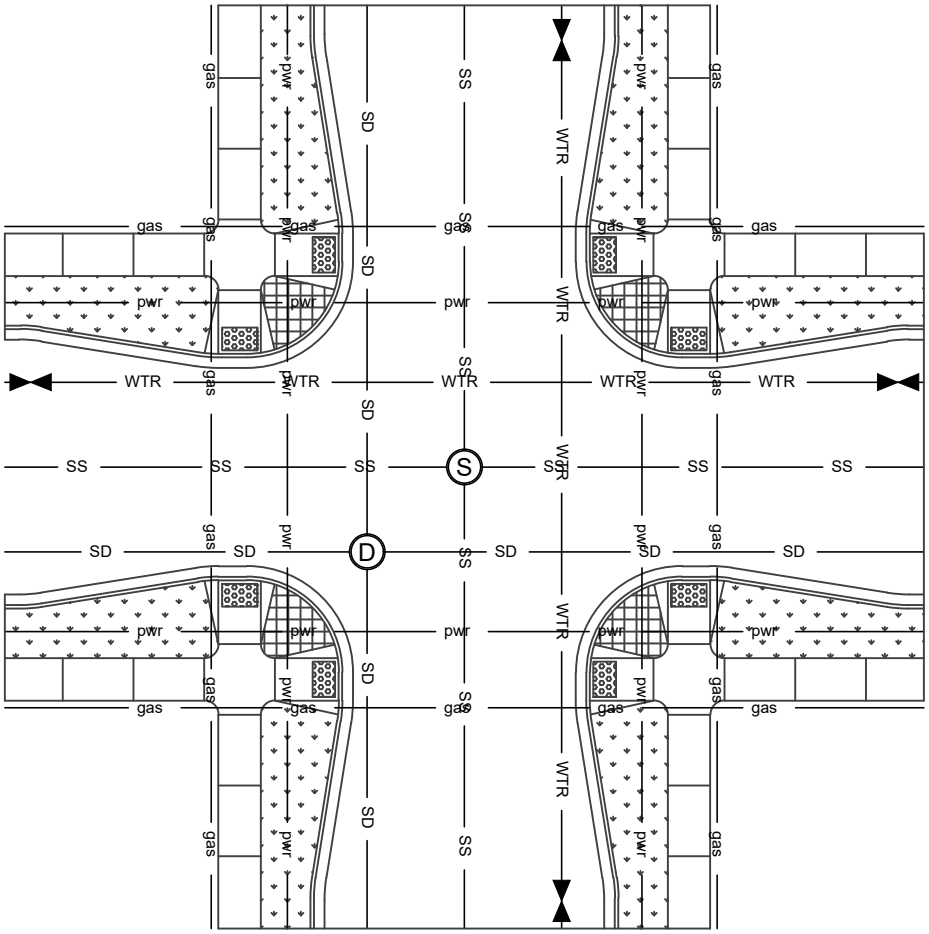
provo PUBLIC WORKS

MINIMUM PAVEMENT DESIGN

STANDARD DETAIL
P-913

NOT TO SCALE

REVISED DATE: 09/28/21



PLAN VIEW

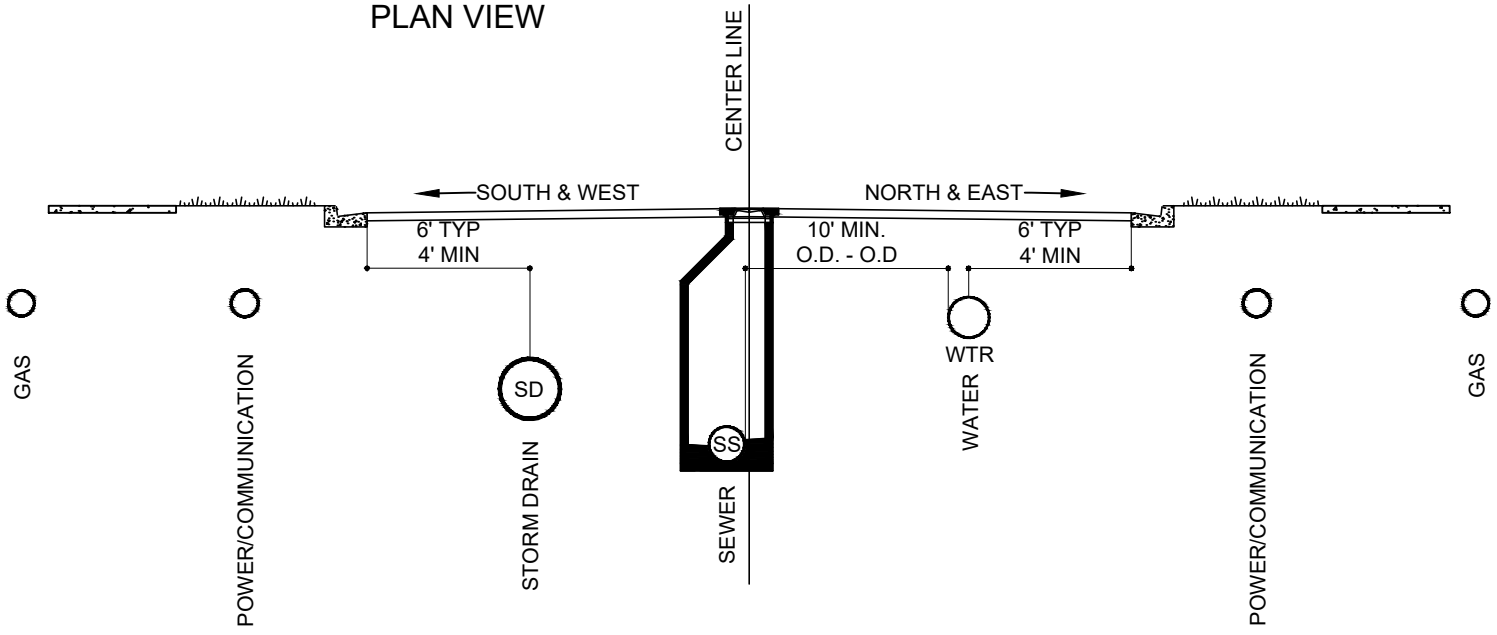
NOTES:

WATER LINES: TYPICALLY 6' FROM THE LIP OF CURB ON THE NORTH AND EAST SIDES OF THE ROAD.

SEWER LINES: TYPICALLY ON CENTER LINE OF ROAD.

STORM DRAIN: TYPICALLY 6' FROM THE LIP OF CURB ON THE SOUTH AND WEST SIDES OF THE ROAD.

DETAIL DOES NOT APPLY TO 24' ASPHALT WIDTH ROADS.



CROSS SECTION

SHEET 1 OF 1

PUBLIC WORKS

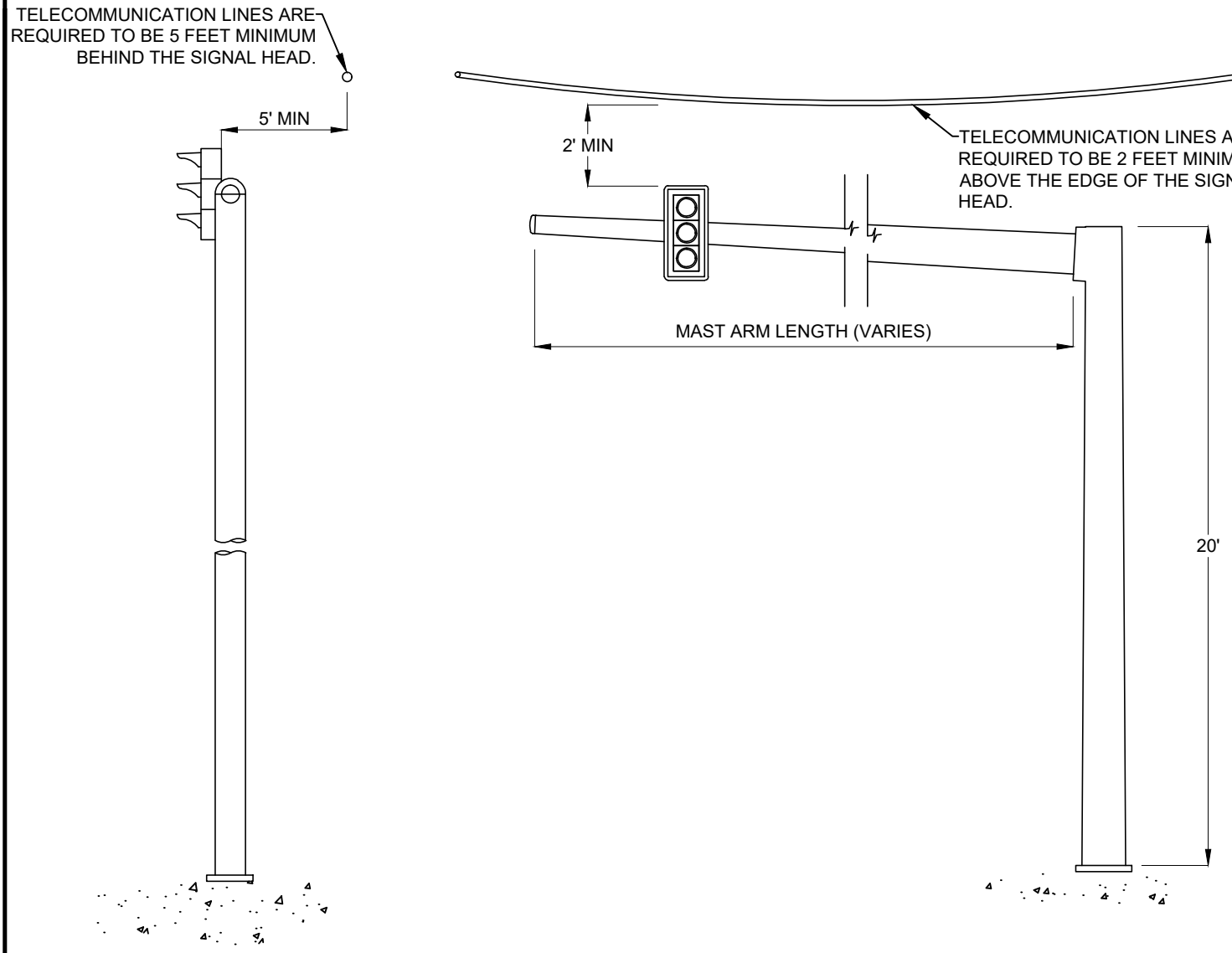
UTILITY LOCATION IN CITY R.O.W.

STANDARD DETAIL

P-914

NOT TO SCALE

REVISED DATE: 10/14/19



NOTES:
THIS STANDARD IS TO BE FOLLOWED AT ALL CURRENT AND FUTURE SIGNALIZED INTERSECTIONS

provo PUBLIC WORKS

OVERHEAD UTILITY LOCATION

STANDARD DETAIL
P-915
NOT TO SCALE
REVISED DATE: 10/14/19

ITEM 1*

Provo City Public Works requests approval of an Ordinance Text Amendment to Section 15.03.020(3), Provo City Code, to update 2022 standards to 2023 standards.

Citywide Application

PLOTA20220333

PROVO MUNICIPAL COUNCIL STAFF REPORT

Submitter: NLA
Department: Development Services
Requested Meeting Date: 11-15-2022

SUBJECT: An ordinance amending the Zone Map classification of approx. 0.21 acres of real property generally located at 515 S 700 E, from Residential Conservation (RC) to Low Density Residential (LDR). Maeser Neighborhood. (PLRZ20220322)

RECOMMENDATION: To be heard at the November 15, 2022 Work & Council Meeting. Please see supporting documents.

BACKGROUND: The subject property has been issued a building permit for a single-family home and a detached accessory dwelling unit (ADU). These uses are permitted in the Residential Conservation Zone. The subject property is bordered on the east and south by single-family homes in the Residential Conservation (RC) zone. Across 700 East, to the west, is a Medium Density Residential zone on which townhomes have been approved. Across 500 South, to the north, is a High Density Residential zone that includes a row of townhomes and stacked apartments.

FISCAL IMPACT:

PRESENTER'S NAME: Aaron Ardmore (801) 852-6404 aardmore@provo.org

REQUESTED DURATION OF PRESENTATION: 10 minutes

COMPATIBILITY WITH GENERAL PLAN POLICIES, GOALS, AND OBJECTIVES:

CITYVIEW OR ISSUE FILE NUMBER: PLRZ20220322

ORDINANCE 2022-.

AN ORDINANCE AMENDING THE ZONE MAP CLASSIFICATION OF APPROXIMATELY 0.21 ACRES OF REAL PROPERTY, GENERALLY LOCATED AT 515 SOUTH 700 EAST, FROM RESIDENTIAL CONSERVATION (RC) TO LOW DENSITY RESIDENTIAL (LDR). MAESER NEIGHBORHOOD. (PLRZ20220322)

WHEREAS, it is proposed that the classification on the Zone Map of Provo for approximately 0.21 acres of real property, generally located at 515 South 700 East (an approximation of which is shown or described in Exhibit A and a more precise description of which will be attached hereto as Exhibit B after the Zone Map has been updated), be amended from Residential Conservation (RC) to Low Density Residential (LDR); and

WHEREAS, on November 9, 2022, the Planning Commission held a duly noticed public hearing to consider the proposal, and after such hearing the Planning Commission recommended approval of the proposal to the Municipal Council by a 6:0 vote; and

WHEREAS, the Planning Commission's recommendation was based on the project design presented to the Commission; and

WHEREAS, on November 15, 2022, the Municipal Council met to ascertain the facts regarding this matter and receive public comment, which facts and comments are found in the public record of the Council's consideration; and

WHEREAS, after considering the Planning Commission's recommendation, and facts and comments presented to the Municipal Council, the Council finds (i) the Zone Map of Provo, Utah should be amended as described herein; and (ii) the proposed zone map classification amendment for the real property described herein reasonably furthers the health, safety and general welfare of the citizens of Provo City.

NOW, THEREFORE, be it ordained by the Municipal Council of Provo City, Utah, as follows:

PART I:

The classification on the Zone Map of Provo, Utah is hereby amended from the Residential Conservation (RC) Zone to the Low Density Residential (LDR) Zone for approximately 0.21 acres of real property generally located at 515 South 700 East, as described herein.

PART II:

A. If a provision of this ordinance conflicts with a provision of a previously adopted ordinance, this ordinance shall prevail.

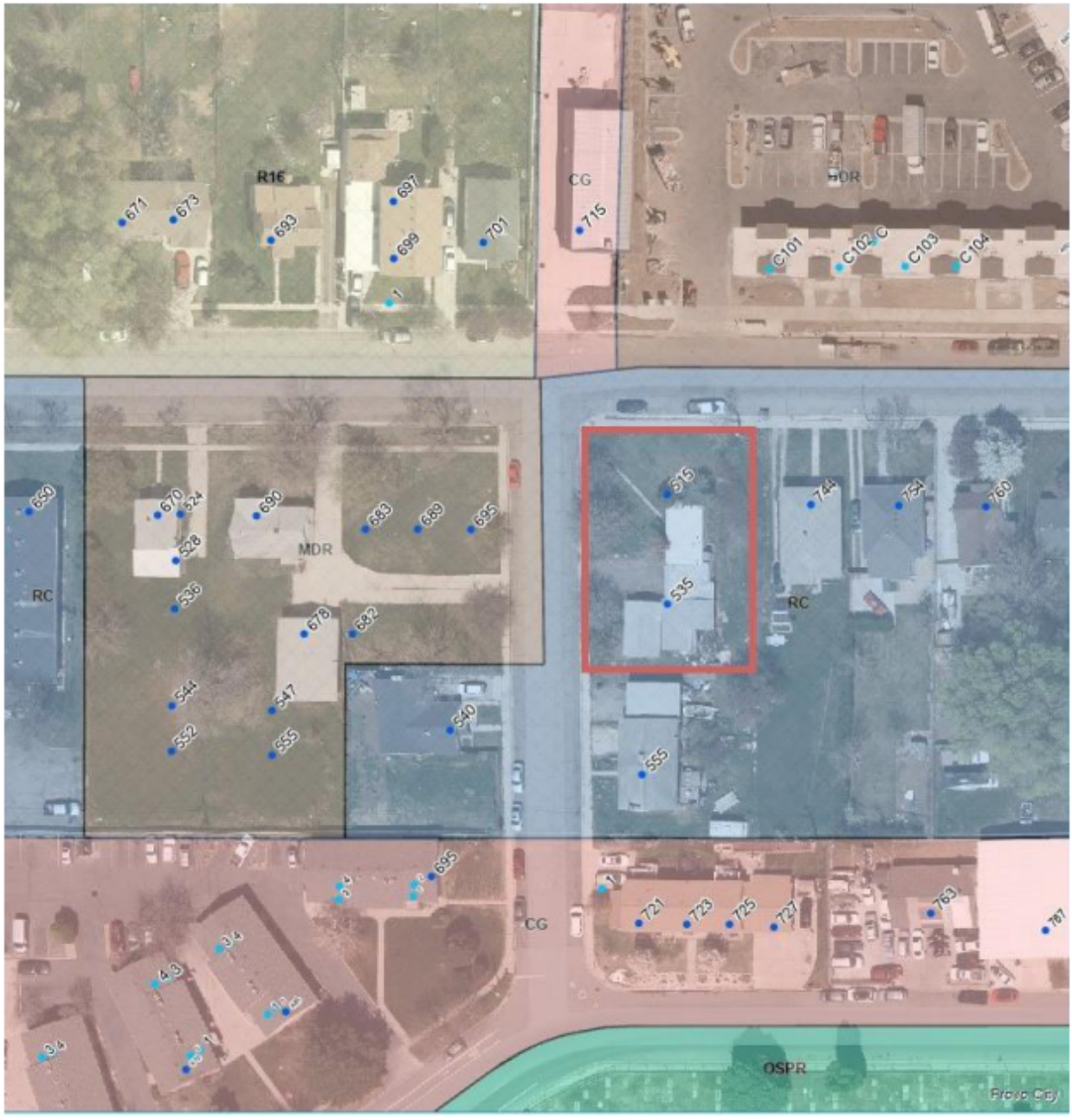
B. This ordinance and its various sections, clauses and paragraphs are hereby declared to be severable. If any part, sentence, clause or phrase is adjudged to be unconstitutional or invalid, the remainder of the ordinance shall not be affected thereby.

C. The Municipal Council hereby directs that the official copy of the Zone Map of Provo City, Utah be updated and codified to reflect the provisions enacted by this ordinance.

D. This ordinance shall take effect immediately after it has been posted or published in accordance with Utah Code 10-3-711, presented to the Mayor in accordance with Utah Code 10-3b-204, and recorded in accordance with Utah Code 10-3-713.

END OF ORDINANCE

EXHIBIT A – ZONE MAP



DEVELOPMENT SERVICES

Planning Commission Hearing Staff Report
Hearing Date: November 9, 2022

***ITEM #3** Kristen Lamb Reilly requests a Zone Map Amendment from the RC (Residential Conservation) zone to the LDR (Low Density Residential) zone in order to create a two-lot subdivision, located at 515 South 700 East. Maeser Neighborhood. Aaron Ardmore (801) 852-6404 aardmore@provo.org PLRZ20220322

Applicant: Kristen Lamb

Staff Coordinator: Bill Peperone

Property Owner: SOUL LINE DEVELOPMENT LLC

Parcel ID#: 22:029:0028; 22:029:0098

Acreage: 0.21

Number of Properties: 1

Number of Lots: 2 (proposed)

ALTERNATIVE ACTIONS

1. **Continue** to a future date to obtain additional information or to further consider information presented. *The next available meeting date is December 7, 2022, at 6:00 P.M.*

2. **Recommend Denial** of the requested Zone Map Amendment. *This action would not be consistent with the recommendations of the Staff Report. The Planning Commission should state new findings.*

Current Legal Use: A Single-family home with an accessory apartment is under construction.

Relevant History: See Relevant History, below

Neighborhood Issues: None. The neighborhood chair provided an email stating that a neighborhood meeting was not necessary.

Summary of Key Issues: The subject property currently has a building permit for a single-family home with a detached ADU. This application, if approved, would allow for each of the two homes to be on independent lots.

Staff Recommendation: Staff recommends approval of the zone change from Residential Conservation (RC) to Low Density Residential (LDR) for .21 acres located at 515 South 700 East.

OVERVIEW

The subject property has been issued a building permit for a single-family home and a detached accessory dwelling unit (ADU). These uses are permitted in the Residential Conservation Zone.

The subject property is bordered on the east and south by single-family homes in the Residential Conservation (RC) zone. Across 700 East, to the west, is a Medium Density Residential zone on which townhomes have been approved. Across 500 South, to the north, is a High Density Residential zone that includes a row of townhomes and stacked apartments.

The subject is within the Maeser Neighborhood Plan. The future land use map of the Neighborhood Plan calls for the block from 700 East to State Street, and from 500 South to 600 South to permit, or anticipate, multi-family development.

RELEVANT HISTORY

The applicant, Kristen Lamb, purchased the subject property in February or March 2020. Based on closing documents, she thought she was purchasing .29 acres of land, which would allow for two 6,000 sf lots, if a R1.6 zone change was granted. The R1.6 zone was considered because the single-family housing in the area is zoned R1.6. The original intent for the land purchase was to build two homes for the children of the applicant.

It was subsequently revealed that the land purchase only included .21 acres, so R1.6 zoning was no longer a possibility to achieve two homes.

Mrs. Lamb had many meetings with Staff and was informed of various options. The option that would not require any zone change was to build a single-family home with an attached, or a detached, ADU. Mrs. Lamb understood that under this option, the property owner would have to maintain residency.

The proposed changed to LDR would allow for subdividing the property into two 4,000 sf lots, each of which could be owner-occupied. Whether the property remains RC or is rezoned to LDR, two detached homes will be located on the property. The LDR zone change allows for Mrs. Lamb's original intent; to have homes for each of her children that they would have to option to sell in the future as single-family, detached homes.

FINDINGS OF FACT

1. The subject property contains .21 acres (9,147 sf).
2. The subject property is currently zoned Residential Conservation (RC).
3. The RC zones allows single-family with attached or detached ADUs.
4. The applicant has been issued a building permit for a single-family home with a detached ADU.
5. The Maeser Neighborhood Plan, which is an appendix to the General Plan, has a future land use designation of multi-family.

CONCLUSION

Staff is comfortable with a positive recommendation for rezoning the property from RC to LDR for the following reasons:

1. The land use will not change. The land will be developed with two single-family homes. The only significant difference is that in the RC zone, the second home will be an ADU while in the LDR zone, both homes can be owned separately;
2. The Maeser Neighborhood Plan anticipates higher density housing (multi-family) than what is being proposed; and
3. Considering the surrounding land uses, two single-family homes on 4,000 sf lots would not be inappropriate.

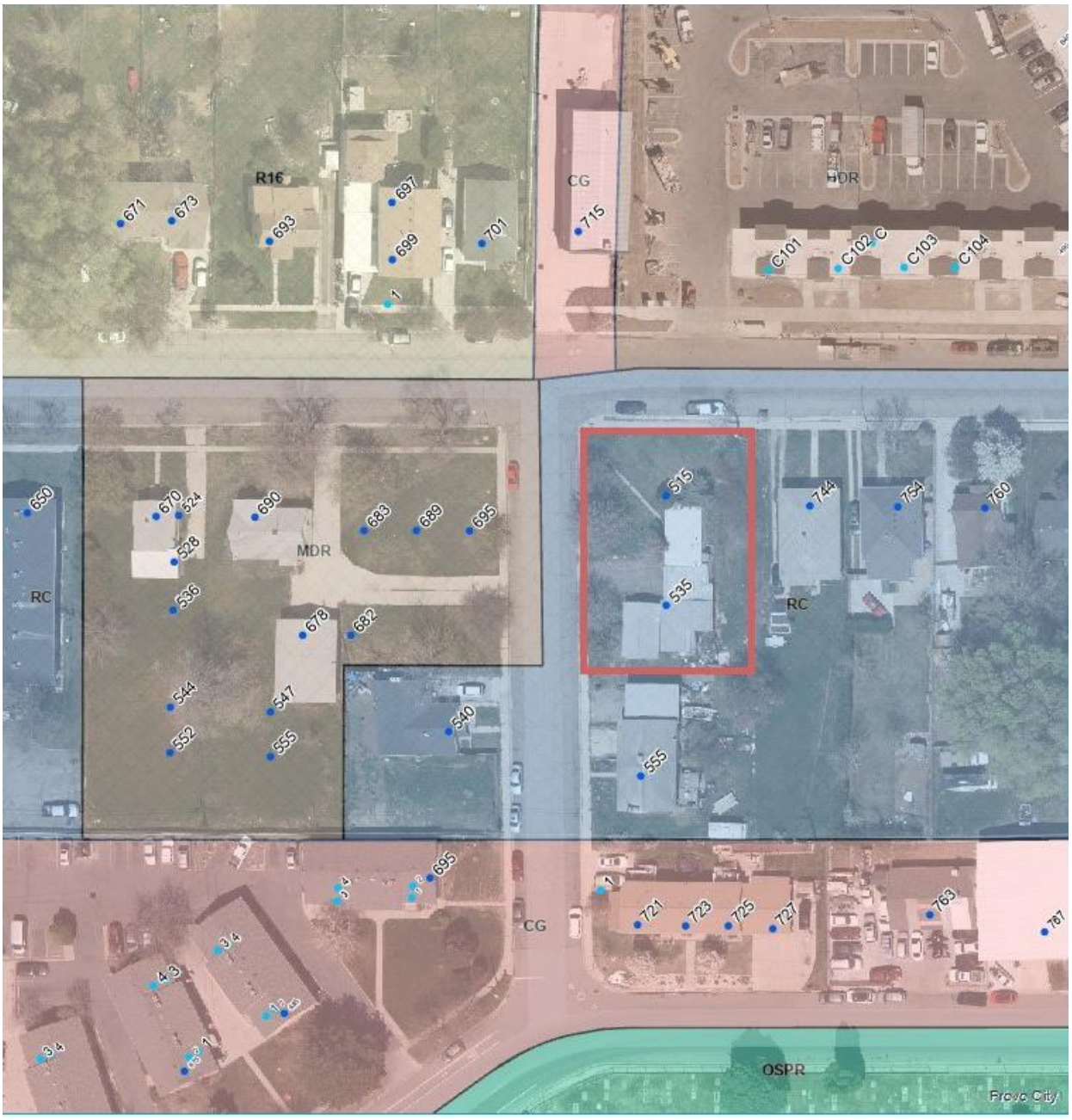
ATTACHMENTS

1. Aerial of Property
2. Current Zone Map
3. Maeser Neighborhood Plan Future Land Use Map
4. Proposed Site Plan
5. Proposed Elevations

ATTACHMENT 1 – AERIAL OF PROPERTY



ATTACHMENT 2 – CURRENT ZONE MAP



ATTACHMENT 3 – MAESER NEIGHBORHOOD PLAN FUTURE LAND USE MAP

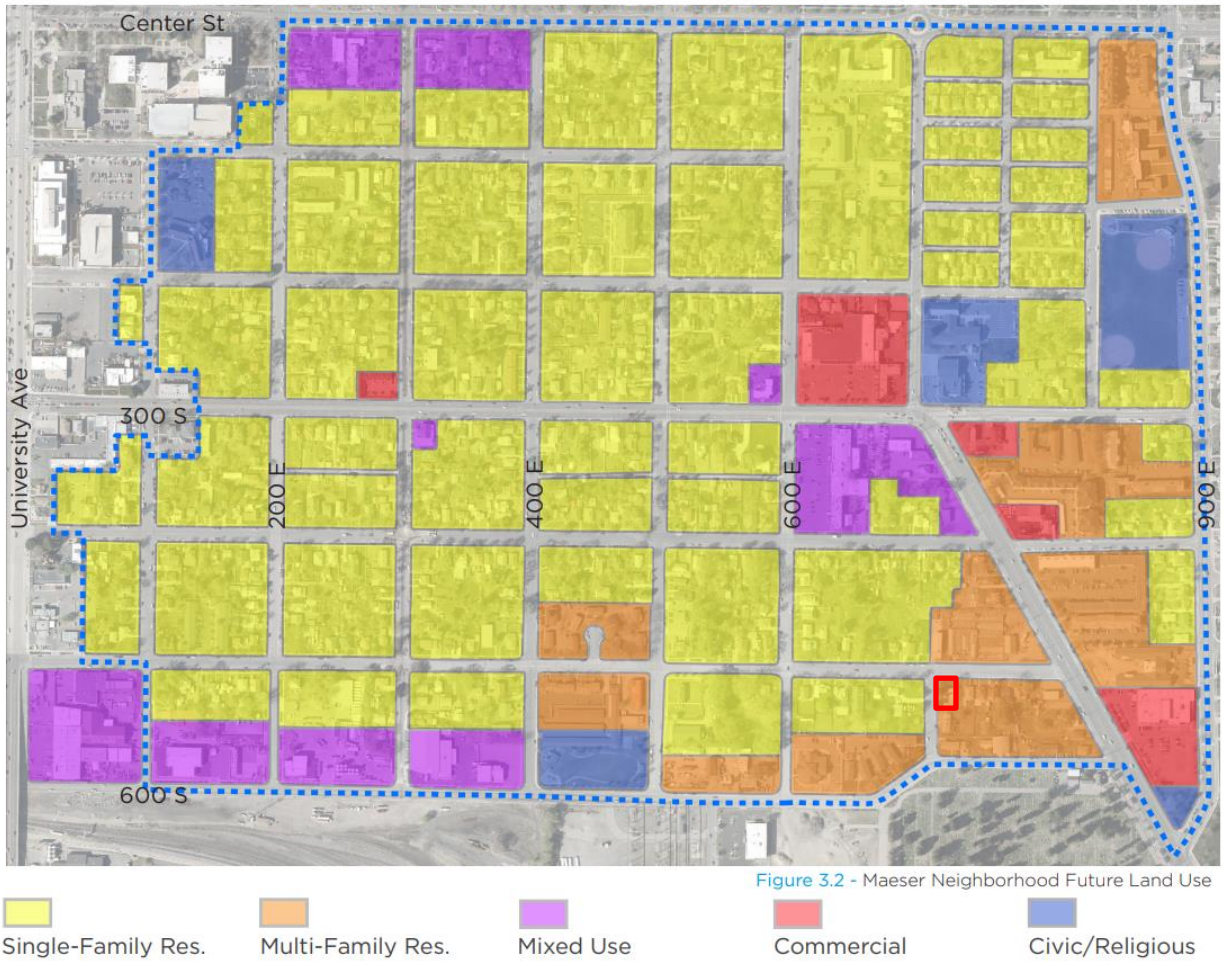
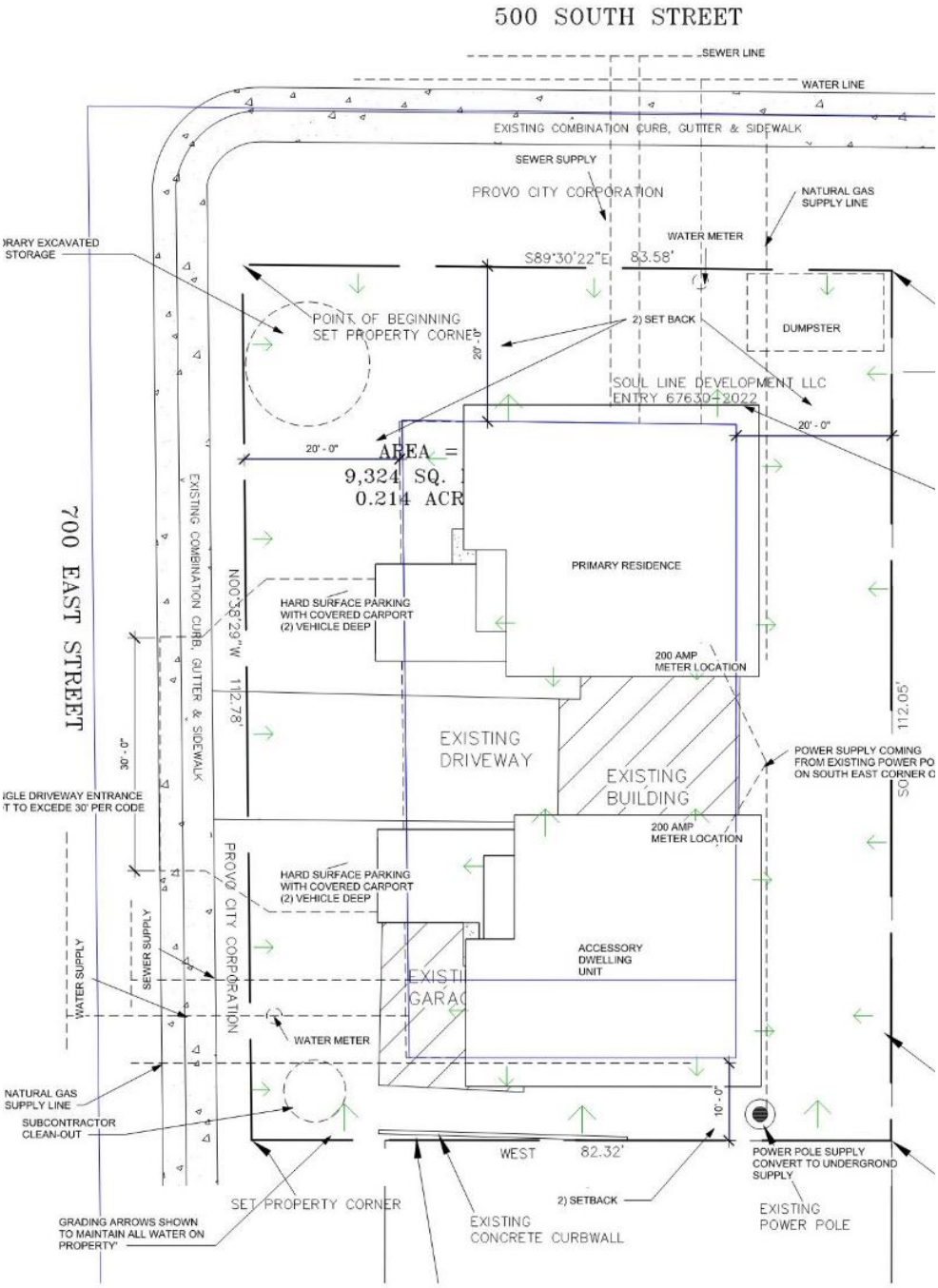
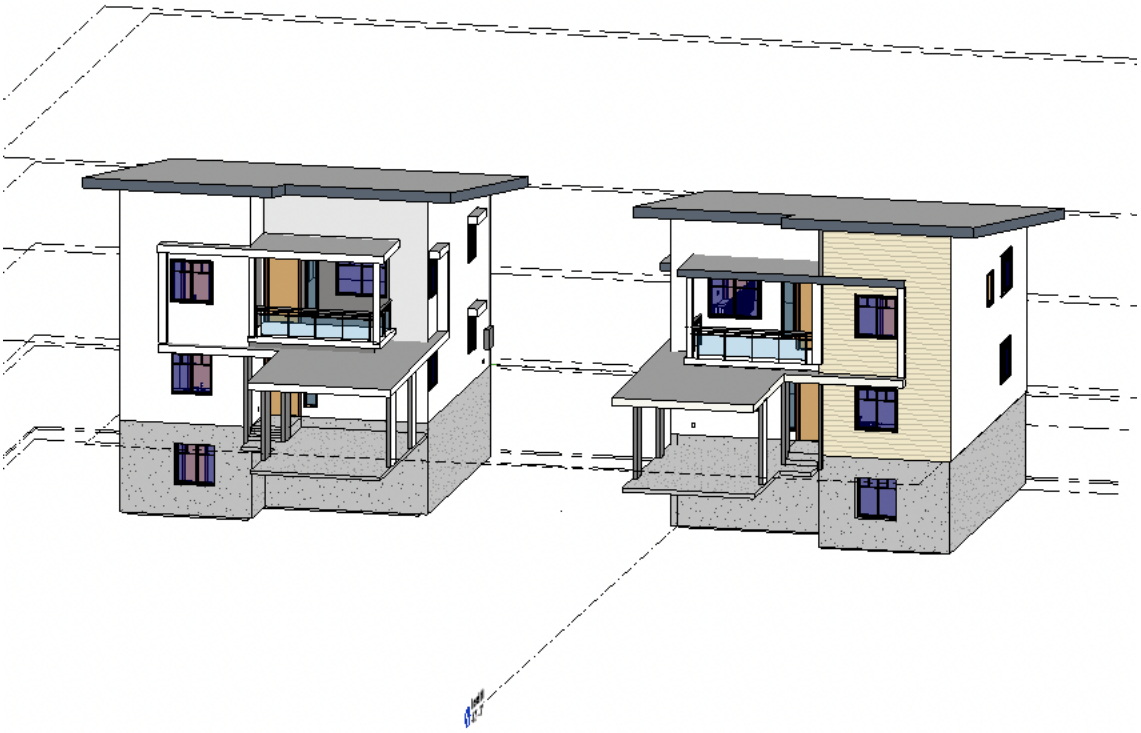


Figure 3.2 - Maeser Neighborhood Future Land Use

ATTACHMENT 4 – PROPOSED SITE PLAN



ATTACHMENT 5 – PROPOSED ELEVATIONS



Provo City Planning Commission

Report of Action

November 09, 2022

*ITEM #3 Kristen Lamb Reilly requests a Zone Map Amendment from the RC (Residential Conservation) zone to the LDR (Low Density Residential) zone in order to create a two-lot subdivision, located at 515 South 700 East. Maeser Neighborhood. Aaron Ardmore (801) 852-6404 aardmore@provo.org PLRZ20220322

The following action was taken by the Planning Commission on the above described item at its regular meeting of November 09, 2022:

RECOMMENDED APPROVAL

On a vote of 6:0, the Planning Commission recommended that the Municipal Council approve the above noted application.

Motion By: Raleen Whalin
Second By: Robert Knudsen
Votes in Favor of Motion: Raleen Whalin, Robert Knudsen, Melissa Kendall, Lisa Jensen, Jeff Whitlock, Andrew South
Lisa Jensen was present as Chair.

- Includes facts of the case, analysis, conclusions and recommendations outlined in the Staff Report, with any changes noted; Planning Commission determination is generally consistent with the Staff analysis and determination.

LEGAL DESCRIPTION FOR PROPERTY TO BE REZONED
The property to be rezoned to the LDR Zone is described in the attached Exhibit A.

APPROVED/RECOMMENDED OCCUPANCY
*2 Total Units
*Type of occupancy approved: Family
*Standard Land Use Code: 1111

STAFF PRESENTATION
The Staff Report to the Planning Commission provides details of the facts of the case and the Staff's analysis, conclusions, and recommendations.

- Bill Peperone gave an overview of the staff report, a history of the property, and detailed a current property line issue with the neighbor to the east that is ongoing. He indicated that staff will not finalize the zone change if it gets approved until the property line issue is resolved.

CITY DEPARTMENTAL ISSUES
- The Coordinator Review Committee (CRC) has reviewed the application and given their approval.

NEIGHBORHOOD MEETING DATE
- The Neighborhood Chair determined that a neighborhood meeting would not be required.

NEIGHBORHOOD AND PUBLIC COMMENT

- The Neighborhood Chair was not present or did not address the Planning Commission during the hearing.
- Neighbors or other interested parties were present or addressed the Planning Commission.

CONCERNS RAISED BY PUBLIC

Any comments received prior to completion of the Staff Report are addressed in the Staff Report to the Planning Commission. Key issues raised in written comments received subsequent to the Staff Report or public comment during the public hearing included the following:

- Chad Hales (neighbor to the east) described the process he has gone through with the applicant on the property line dispute and is fully supportive of the zone change.

APPLICANT RESPONSE

Key points addressed in the applicant's presentation to the Planning Commission included the following:

- Ms. Lamb Reilly gave a brief history on how she got into a property that she believed could easily be subdivided and given to her two children. She also detailed the property line dispute that is close to resolution with a seven-and-a-half-foot adjustment.

PLANNING COMMISSION DISCUSSION

Key points discussed by the Planning Commission included the following:

- Lisa Jensen confirmed that the old buildings are down and that with or without the zone change there will be two new buildings constructed on the property. She also confirmed with staff that the new boundary line will still maintain at least 8,000 square feet.
- The Planning Commission discussed that the real difference in the zone change will be one property owner instead of two property owners.
- The Commission noted that in this area the neighborhood plan already calls for increased density, and the request is for less density than what is on the Maeser Future Land Use Plan.
- Lisa Jensen described her support for the rezone and indicated that the neighborhood chairs response and the density around the property make her feel comfortable with this request, especially with the proposal for two single family lots.
- Robert Knudsen agreed with Mrs. Jensen's comments and noted that the architecture will fit in with the newer units in the area.
- Melissa Kendall stated her support for the rezone is due to the compliance with the neighborhood plan.

_____

Planning Commission Chair

_____

Director of Development Services

See Key Land Use Policies of the Provo City General Plan, applicable Titles of the Provo City Code, and the Staff Report to the Planning Commission for further detailed information. The Staff Report is a part of the record of the decision of this item. Where findings of the Planning Commission differ from findings of Staff, those will be noted in this Report of Action.

Legislative items are noted with an asterisk (*) and require legislative action by the Municipal Council following a public hearing; the Planning Commission provides an advisory recommendation to the Municipal Council following a public hearing.

Administrative decisions of the Planning Commission (items not marked with an asterisk) **may be appealed** by submitting an application/notice of appeal, with the required application and noticing fees to the Community and Neighborhood Services Department, 445 W Center Street, Provo, Utah, **within fourteen (14) calendar days of the Planning Commission's decision** (Provo City office hours are Monday through Thursday, 7:00 a.m. to 6:00 p.m.).

BUILDING PERMITS MUST BE OBTAINED BEFORE CONSTRUCTION BEGINS

EXHIBIT A

BEGINNING AT A POINT AT THE INTERSECTION OF THE EASTERLY RIGHT-OF-WAY OF 700 EAST STREET AND THE SOUTHERLY RIGHT-OF-WAY OF 500 SOUTH STREET, SAID POINT BEING LOCATED NORTH 89°05'28" EAST ALONG THE SECTION LINE 170.36 FEET AND SOUTH 1851.21 FEET FROM THE NORTH QUARTER CORNER OF SECTION 7, TOWNSHIP 7 SOUTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN; THENCE SOUTH 89°30'22" EAST ALONG SAID SOUTHERLY RIGHT-OF-WAY OF 500 SOUTH STREEET RIGHT-OF-WAY 83.58 FEET; THENCE SOUTH 112.05 FEET; THENCE WEST 82.32 FEET TO SAID EASTERLY RIGHT-OF-WAY OF 700 EAST STREET; THENCE NORTH 00°38'29" WEST ALONG SAID EASTERLY RIGHT-OF-WAY OF 700 EAST STREET 112.78 FEET TO THE POINT OF BEGINNING.

AREA = 9,324 SQ. FT. OR 0.214 ACRES

ITEM 3*

Kristen Lamb Reilly requests a Zone Map Amendment from the RC (Residential Conservation) zone to the LDR (Low Density Residential) zone in order to create a two-lot subdivision, located at 515 South 700 East.

Maeser Neighborhood

PLRZ20220322

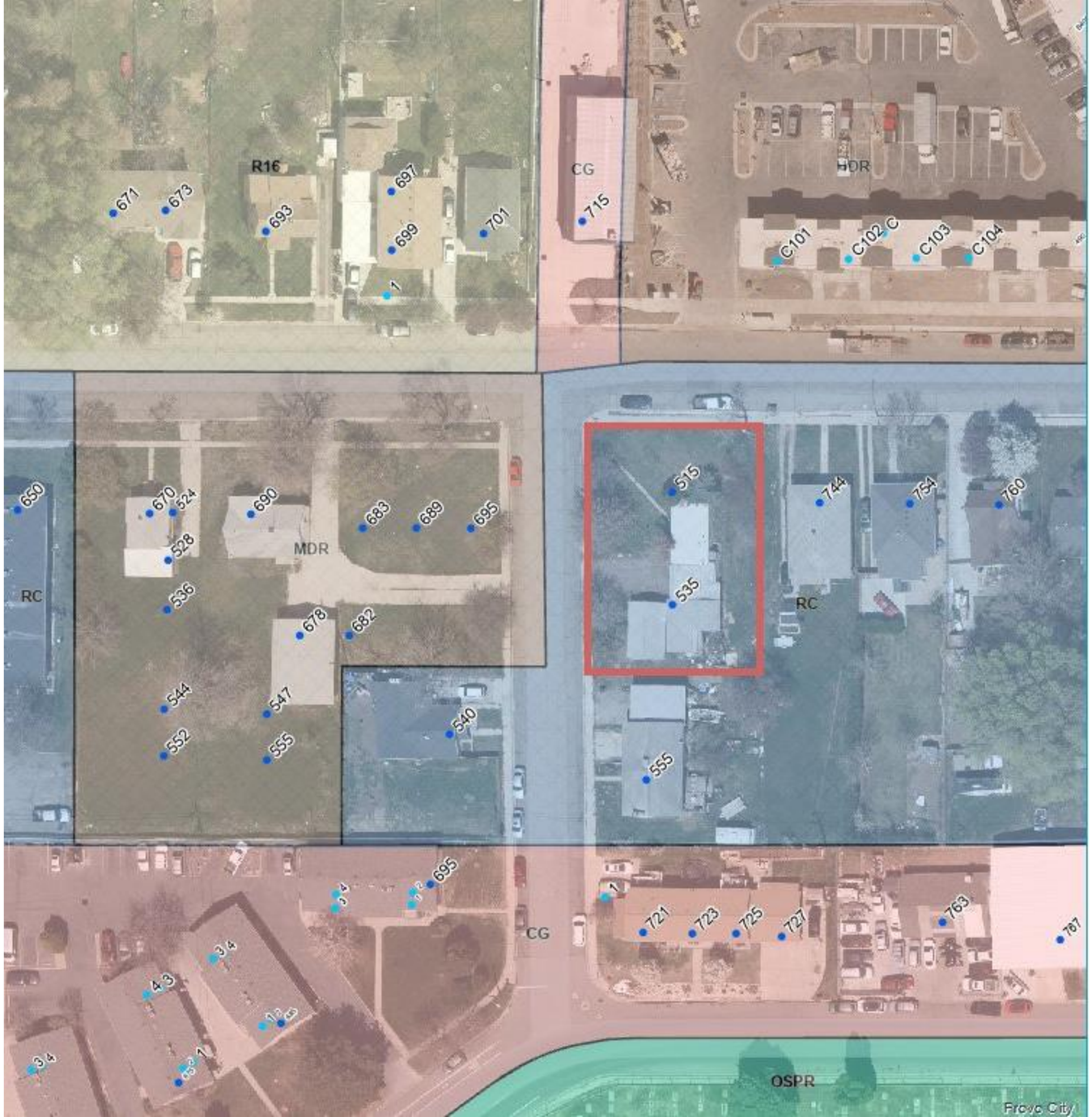
515 S 700 E

- Maeser Neighborhood



515 S 700 E

- Maeser Neighborhood
- Current Zone: RC
- Proposed Zone: LDR



515 S 700 E

- Maeser Neighborhood
- Current Zone: RC
- Proposed Zone: LDR
- Future Land Use Plan: Multi-Family Residential

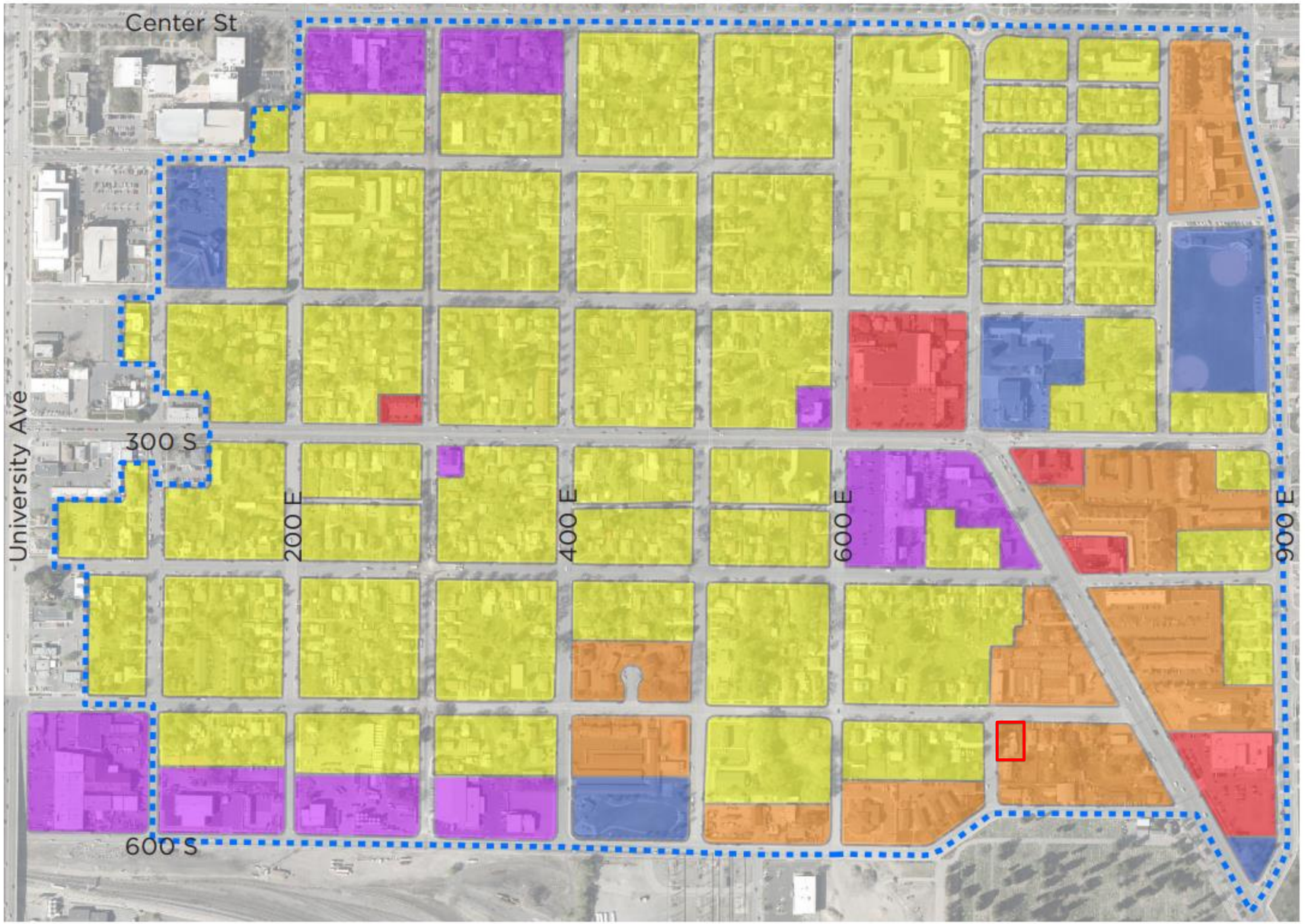
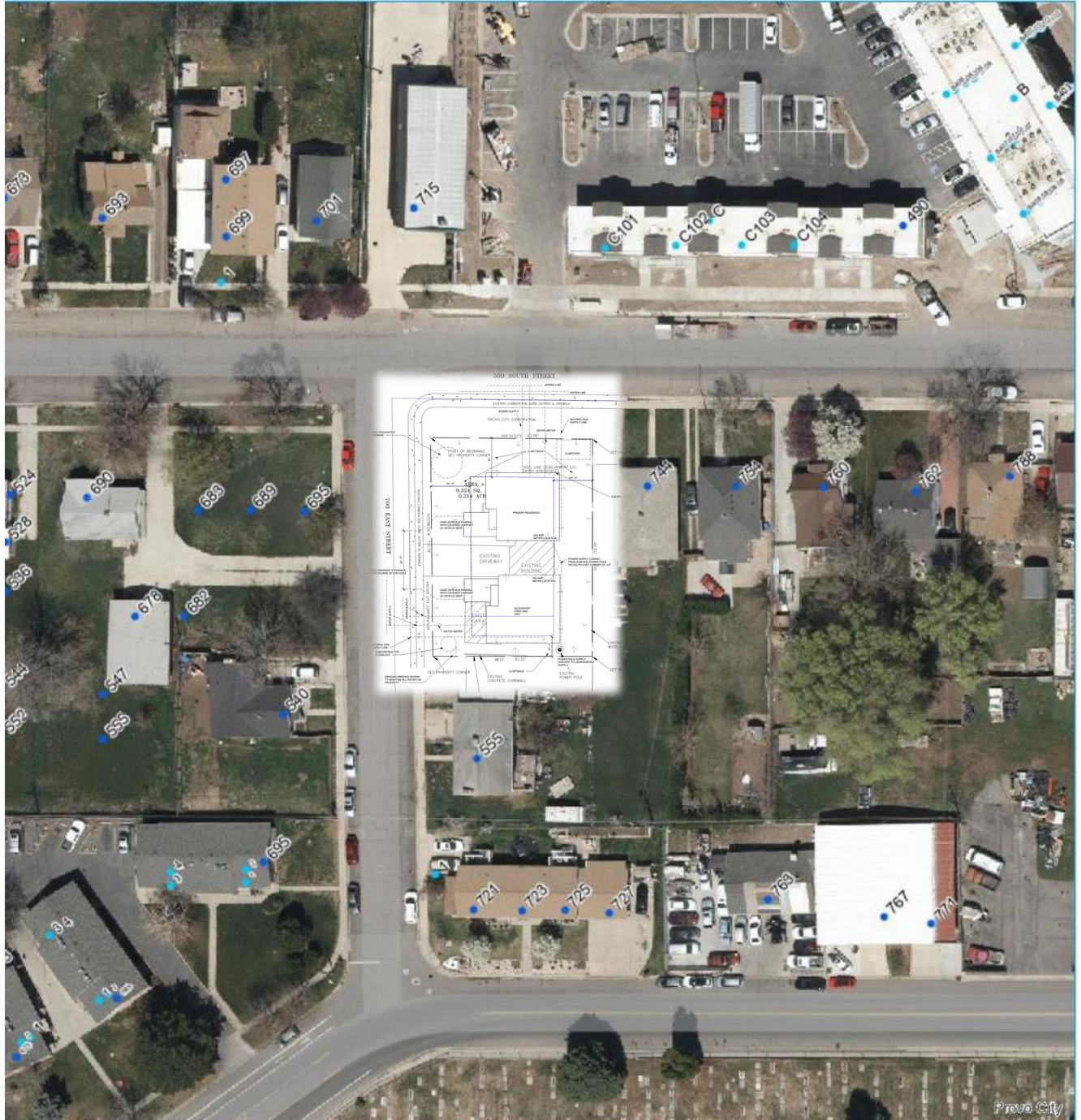


Figure 3.2 - Maeser Neighborhood Future Land Use

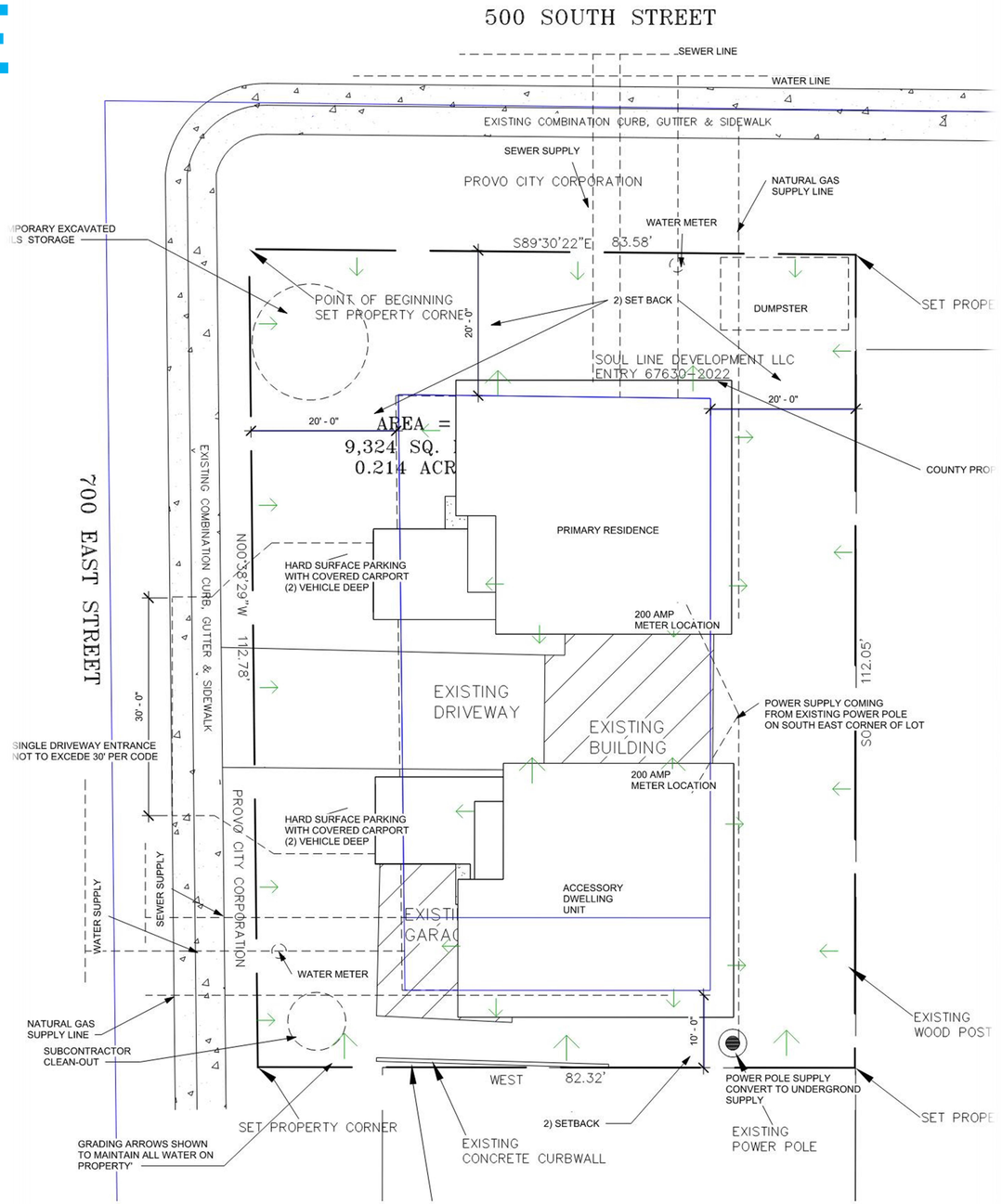
515 S 700 E

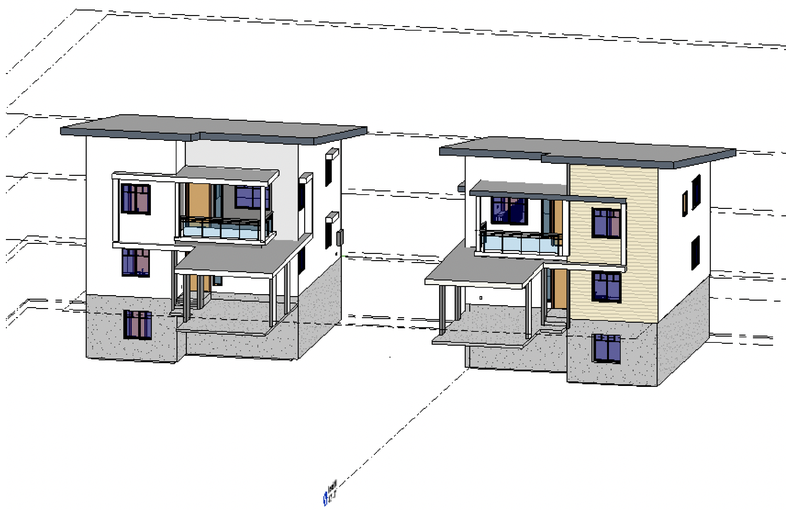
- Maeser Neighborhood
- Current Zone: RC
- Proposed Zone: LDR
- Future Land Use Plan: Multi-Family Residential
- Proposal: Two Single-Family Homes



515 S 700 E

- Maeser Neighborhood
- Current Zone: RC
- Proposed Zone: LDR
- Future Land Use Plan: Multi-Family Residential
- Proposal: Two Single-Family Homes
- Current Approval





PROVO MUNICIPAL COUNCIL STAFF REPORT

Submitter: NLA
Department: Development Services
Requested Meeting Date: 11-15-2022

SUBJECT: An ordinance amending the General Plan to adopt the Southwest Neighborhoods Plan. Citywide Application. (PLGPA20220255)

RECOMMENDATION: To be heard at the November 15, 2022 Work & Council Meeting. Please see supporting documents.

BACKGROUND: The Southwest Neighborhoods Plan (Plan) encompasses four of the City's neighborhoods: Fort Utah, Provo Bay, Sunset, and Lakewood. It is one of several combined neighborhood plans undertaken by the City in cases where several individual neighborhoods share similar characteristics, issues and challenges. As a mid-range planning tool, it is proposed to be adopted as a supplement to the Provo City General Plan. The Plan was originally begun in April of 2014 and has also involved an original committee and a second committee formed by the Municipal Council. Following input and direction from the Council at the end of 2017, Community Development (now Development Services) staff organized the current Committee at the beginning of 2018.

FISCAL IMPACT:

PRESENTER'S NAME: Javin Weaver, Planner

REQUESTED DURATION OF PRESENTATION: 10 minutes

COMPATIBILITY WITH GENERAL PLAN POLICIES, GOALS, AND OBJECTIVES:

CITYVIEW OR ISSUE FILE NUMBER: PLGPA20220255

ORDINANCE 2022-.

AN ORDINANCE AMENDING THE GENERAL PLAN TO ADOPT THE SOUTHWEST NEIGHBORHOODS PLAN. CITYWIDE APPLICATION. (PLGPA20220255)

WHEREAS, it is proposed that Provo City General Plan be amended to adopt a Southwest Area Neighborhood Plan; and

WHEREAS, on November 9. 2022, the Planning Commission held a duly noticed public hearing to consider the proposed amendment, and after such meeting, the Planning Commission recommended approval to the Municipal Council by a vote of 6:0; and

WHEREAS, on November 15, 2022, the Municipal Council met to ascertain the facts regarding this matter and receive public comment, which facts and comments are found in the public record of the Council's consideration; and

WHEREAS, after considering the Planning Commission's recommendation and facts and comments presented to the Municipal Council, the Council finds (i) the Provo City General Plan should be amended as described herein and (ii) the proposed amendment reasonably furthers the health, safety and general welfare of the citizens of Provo City.

NOW, THEREFORE, be it ordained by the Municipal Council of Provo City, Utah, as follows:

PART I:

Provo City General Plan is hereby amended as set forth in Exhibit A.

PART II:

A. If a provision of this ordinance conflicts with a provision of a previously adopted ordinance, this ordinance shall prevail.

B. This ordinance and its various sections, clauses and paragraphs are hereby declared to be severable. If any part, sentence, clause or phrase is adjudged to be unconstitutional or invalid, the remainder of the ordinance shall not be affected thereby.

C. The Municipal Council hereby directs that the official copy of the Provo City Code be updated to reflect the provisions enacted by this ordinance.

D. This ordinance shall take effect immediately after it has been posted or published in accordance with Utah Code 10-3-711, presented to the Mayor in accordance with Utah Code 10-3b-204, and recorded in accordance with Utah Code 10-3-713.

END OF ORDINANCE.

Exhibit A

The Southwest Area Neighborhood Plan can be found online at:
https://www.provo.org/home/showpublisheddocument/21178

Commented [MD1]: Full plan to be included as exhibit for final publication.

DEVELOPMENT SERVICES

Planning Commission Hearing Staff Report
Hearing Date: November 9, 2022

ITEM 4* The Development Services Department requests a General Plan Amendment to adopt the Southwest Neighborhood Plan (Lakewood, Sunset, Provo Bay and Fort Utah Neighborhoods). Citywide Application. Javin Weaver 801-852-6413 jweaver@provo.org PLGPA20220255

Applicant: Javin Weaver – Provo City Development Services Department

Staff Coordinator: Javin Weaver

Citywide Application

Council Action Required: Yes

ALTERNATIVE ACTIONS

1. **Approve** the requested General Plan Amendment. *This action would be consistent with the recommendations of the Staff Report.*

2. **Continue** to a future date to obtain additional information or to further consider information presented. *The next available meeting date is December 7, 2022, 6:00 P.M.*

3. **Deny** the requested General Plan Amendment. *This action would not be consistent with the recommendations of the Staff Report. The Planning Commission should state new findings.*

Relevant History:
- The West Side Citizen Advisory Committee met between 2014-2018.
- The Southwest Future Land Use Map was adopted in November 2018 (Ord. 2018-31) and was amended in May 2021 (Ord. 2021-18).
- The General Plan Southwest policies were amended in 2022 (Ord. 2022-12).

Neighborhood Issues:
Citizen input has been sought and received regarding a few issues that were brought to staff's attention. Most of these have been addressed in the Southwest Neighborhood Plan or will be during the hearing.

Summary of Key Issues:
Appropriateness of proposed Land Uses

Staff Recommendation: Staff recommends the Planning Commission recommend approval of the proposed General Plan Amendment to the Municipal Council.

OVERVIEW

The Southwest Neighborhood Plan (Plan) encompasses four of the City's neighborhoods: Fort Utah, Provo Bay, Sunset, and Lakewood. It is one of several combined neighborhood plans undertaken by the City in cases where several individual neighborhoods share similar characteristics, issues and challenges. As a mid-range planning tool, it is proposed to be adopted as a supplement to the Provo City General Plan. The Plan was originally begun in April of 2014 and has also involved an original committee and a second committee formed by the Municipal Council. Following input and direction from the Council at the end of 2017, Community Development (now Development Services) staff organized the current Committee at the beginning of 2018. Made up of residents, business owners, and representatives from the Planning Commission and the associated group of neighborhood chairs, the Committee began by examining the current plans and documents relating to the area. The Committee then worked to identify and assess past development activity, as well as current economic and social conditions. Once that was concluded, an extensive examination began regarding land suitability, opportunities, and potential for development. Overall, major considerations in the development of the Plan included:

- Anticipating the development needs of the relevant neighborhoods, the entire area, and the City as a whole;
- Identifying development issues;
- Identifying opportunities for and constraints to development;
- Identifying areas which are suitable/unsuitable for different types of development;
- Analyzing and proposing ways in which the area should develop over time; and
- Establishing appropriate policies and standards to guide development.

The Southwest Future Land Use Map was adopted in November of 2018 which was the result of the Committee efforts. The proposed Plan textualizes what the Southwest Future Land Use Map illustrates. This plan is not intended to conflict with the Southwest Future Land Use Map, but to facilitate land use development and act as a guiding policy document. The proposed Plan has been sent out to each of the four neighborhood chairs and to each planning commissioner. It was posted on Open City Hall, www.provo.org, and has been shared on all Development Services social media platforms. The Plan is the result of several revisions, some of which came following periods of public input. While not every issue could be addressed in a means favorable to everyone providing input, staff believes the plan provides the best alternatives and recommendations regarding the future development of this portion of the City.

FINDINGS OF FACT

1. The Westside Development Policies were adopted by Council on May 2, 2017.
2. The Southwest Future Land Use Map was adopted by Council on November 13, 2018 (Ord. 2018-31).
3. The Open Space Preservation and Recreation zone (Ord. 2020-54) was enacted by Council and all parks citywide were rezoned to this zone on December 1, 2020 (Ord. 2020-55). This included the Regional Sports Park.
4. 10 acres of the Southwest Future Land Use Map was amended by staff and adopted by Council on May 4, 2021 (Ord. 2021-18).
5. The Airport zones (Ord. 2021-39) were enacted by Council and the airport was rezoned to the Airport (A) zone on November 16, 2021 (Ord. 2021-40).
6. The Southwest Development Policies were amended by Council to include an intent statement on March 15, 2022 (Ord. 2022-12).
7. The Mixed-Use zones were enacted by Council on August 9, 2022 (Ord. 2022-28).
8. The Southwest Neighborhood Plan was discussed as a Study Session item at the Planning Commission meeting on October 12, 2022.

STAFF ANALYSIS

1. Provo City Code Section 14.02.020(2) sets forth the following guidelines for consideration of general plan amendments:

Before recommending an amendment to this Title, the Planning Commission shall determine whether such amendment is in the interest of the public and is consistent with the goals and policies of the Provo City General Plan. The following guidelines shall be used to determine consistency with the General Plan: (responses in bold)

a) Public purpose for the amendment in question.
The public purpose is to update the General Plan and provide a clear vision for this area of Provo, increase economic viability, and enhance the desirable qualities of the neighborhood. It is also a purpose of neighborhood-specific plans to provide a level of specificity that does not currently exist in any of the City's planning documents.

b) Confirmation that the public process is best served by the amendment in question.

This Plan is the culmination of a robust public input process. The proposed policies help strike a balance of the diverse input received to establish important, forward thinking land use policies for the Southwest Area.

c) Compatibility of the proposed amendment with General Plan policies, goal, and objectives.
The proposed amendment advances the goals, policies and objectives of the General Plan, Southwest Future Land Use Map and the Westside Development Policies for the Southwest area by providing a description for how each area should develop.

d) Consistency of the proposed amendment with the General Plan's "timing and sequencing" provisions on changes of use, insofar as they are articulated.
The proposed amendment is consistent with the timing and sequencing of the General Plan and the Westside Development Policies.

e) Potential of the proposed amendment to hinder of obstruct attainment of the General Plan's articulated policies
There is no potential of hinderance or obstruction to the General Plan policies with the proposed amendment.

f) Adverse impacts on adjacent landowners.
The document, as proposed, does not impact adjacent landowners, however the implementation measures that will follow as a result of the policy direction are anticipated to increase development interest in the area.

g) Verification of correctness in the original zoning or General Plan for the area in question.
The Southwest Future Land Use Map, which this document includes, contains the correct land use designations for the Plan area.

h) In cases where a conflict arises between the General Plan Map and General Plan Policies, precedence shall be given to the Plan Policies.
No conflicts have been identified.

CONCLUSION

Although complete consensus of all stakeholders is not anticipated, staff believes this plan is consistent with a reasonable balance of competing interests of the various stakeholders.

STAFF RECOMMENDED MOTION

Recommend that the Municipal Council approve the proposed Southwest Neighborhood Plan as appendix J of the General Plan, replacing and revoking appendix J, Southwest Area Future Land Use Map.

ATTACHMENTS

1. Southwest Neighborhood Plan is viewable at:
   Southwest Neighborhood Plan Document
   *Note – formatting changes to this will occur between the publication of this staff report and planning commission hearing date.

provo

WELCOME HOME

CITY COUNCIL

Item 7 - Southwest Neighborhoods Plan

November 15, 2022

Process of Southwest Neighborhoods Plan

1. Southwest Future Land Use Map November 2018
2. Planning Commission Study Session October 2022
3. Feedback (OCH, PC, Neighborhood Chairs)
4. Planning Commission November 2022


Southwest
Neighborhoods Plan
provo

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Southwest Neighborhoods Plan

Produced 2022
Provo Development Services Director - Bill Peperone
Planning Supervisor - Brandon Larsen

Staff
Javin Weaver



01 INTRODUCTION

The Southwest Neighborhoods Plan is a product of local citizens and Provo City staff working together to envision the best possibilities for the future growth and development of the four southwestern Provo neighborhoods: Fort Utah, Provo Bay, Sunset, and Lakewood. With their common growth and development issues, a combined plan will provide a unified direction for future housing, shopping, transportation, open space, and utility needs in this unique area of Provo.

A. BACKGROUND/HISTORY

Historically, the Southwest area of the city provided productive agricultural and grazing lands. During the construction of Geneva Steel in nearby Vinyard is when the Southwest area's first residential subvidision was established. West Park subdivision located in the Fort Utah neighborhood, was developed in 1943. The resulting population represented almost 30% of the entire Southwest area's population by the end of 1944.

Wetlands, high water table, floodplain zones, and associated challenges with these hazards, have also impacted development in the Southwest area. The flooding potential for parts of the southwest was illustrated during the floods of 1982-1984. A report of United States Senate briefly references the floods and describes steps taken to help protect the southwest area of the City from future flooding:

"From 1982 through 1984 Provo City was impacted by severe flooding which caused significant damage to the community.... The Army Corps spent approximately $ 2 million to upgrade an existing dike adjacent to the Provo airport, and a new dike was constructed along the south side of Provo River from the Utah Lake State Park linking it with the airport dike. An additional dike was built along the north shore of Provo Bay to protect residential areas in the southwest section of the City."

Over the ensuing years residential growth continued, but in most cases, not as rapidly as in other areas of Provo. Besides the desire of many area farmers to continue farming, a major contributor to a more limited growth was the Southwest Area's relative lack of City infrastructure, principally roads, sewer and storm drainage. Still, the Southwest Area has grown to a 2022 population of over 14,500 people, and over 3,664 housing units.



B. NEED AND PURPOSE

For some time, the Provo City General Plan has identified the need to develop an area-specific master plan (neighborhood plan) for the Southwest area. Over the last few years, the need has become critical as the entire Provo-Orem Metropolitan Area has experienced a strong housing demand from regional employment growth as well as the area's natural population increase. The appeal of the Southwest area for meeting some of that demand has drastically risen. Some of the reasons for this appeal includes: the large amount of buildable land, increased access provided by Lakeview Parkway, expanded service at the Provo

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Municipal Airport, and a declining desire by farmers to continue their operations. The major purpose of this plan is to address these land use and transportation challenges in additon to addressing the area's ongoing needs, desires, opportunities, while balancing the need to preserve areas within the neighborhood.

C. SCOPE AND METHODOLOGY

The Southwest Neighborhoods Plan was created with input from a steering committee comprised of residents, business owners, representatives from the Planning Commission, and representatives from the associated neighborhoods. The committee reviewed existing documents and plans identifying a number of objectives including:

- Understand and identify land use needs and desires, especially relating to residential, commercial, and open space uses;
- Identify development restrictions including the Utah Lake floodplain, wetlands, and airport constraints;
- Identify the availability and means of providing the necessary utility services for desired land uses;
- Examine the means to create attractive and successful business parks in the two areas designated for airport-related uses;
- Understand marketing needs in identifying existing and potential commercial sites; and
- Examine the need for a coordinated "branding" of the area and ways in which it can be used to create a true sense of place.



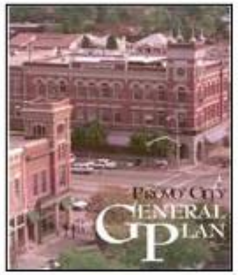




D. SUMMARY OF EXISTING GOALS AND POLICIES

The goals and policies of the following plans were reviewed and considered in the creation of the Southwest Neighborhoods Plan:

1 - PROVO CITY GENERAL PLAN - 2022



SOUTHWEST AREA GUIDING PRINCIPLES , POLICIES AND GOALS:

The General Plan establishes goals for the Southwest area as well as specific goals for the Fort Utah, Provo Bay, Lakewood, and Sunset neighborhoods. The purpose of these policies is to guide development in southwest Provo in order to promote a smart, sustainable, vibrant community that offers a high quality of life for current and future residents while respecting Provo's agricultural heritage.

Policy 1 - Preserve Provo's Agricultural Heritage and Support Agriculture for as long as Farmers Choose to Farm:

a. Approve the creation of a Provo Agricultural Commission to support local commercial and noncommercial agriculture.
b. Request that the Provo Agricultural Commission identify obstacles to the success of current and prospective farmers, including nontraditional farmers, and recommend ways to remove these obstacles.
c. Request that the Provo Agricultural Commission explore tools for agricultural preservation. These tools may include: conservation easements, transfers of development rights, community land trusts, a privately funded farmland trust fund, and Utah's "Agricultural Protection" Program.
d. Encourage the Provo Agricultural Commission to improve the productive use of agricultural land.
e. Encourage Development-Supported Agriculture and Agritourism to help preserve Provo's agricultural heritage.
f. Encourage our state lawmakers to increase funding for the LeRay McAllister Fund.
g. Protect agricultural operations from the impact of residential encroachment.
h. Identify agricultural landowners, have their properties listed on developmental maps to better avoid encroachment onto agricultural lands.

Policy 2 - Preserve and Create Quality Usable Open Space:

a. Update and utilize the Parks and Recreation Master Plan to provide developed parks and open space that satisfy a range of leisure and recreational needs.
b. Preserve and develop natural amenities for sustained enjoyment by the community. Examples include the Provo River and banks, the Provo River Delta, Utah Lake shoreline, and wetlands.
c. Provide parks and trails of different uses and sizes.
d. Encourage agritourism as a means to provide agriculturally themed open space.
e. Useable neighborhood open space should be an integral part of neighborhood design or combined to serve larger areas than the immediate development.

Policy 3 - Encourage Sustainable Residential Development Patterns:

a. Establish ordinances to require a mix of housing types, lot sizes, and designs to accommodate various stages of life.







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b. Detached single-family homes should be the predominant housing type and the use of other types should augment and not detract from the single-family feel of the area.
c. Housing types should be mixed without barriers separating types or densities.
d. The scale and style of residences should enhance the surrounding area, regardless of housing type.
e. Create design standards for important road corridors in southwest Provo.
f. The overall density of the area should average four units to the acre.

Policy 4 - Promote Development of Commercial Amenities and Employment Opportunities in Appropriate Locations:
a. Regional commercial uses may be located adjacent to I-15 or within the Airport Related Activities district.
b. Neighborhood and Community Shopping zones may be located at or adjacent to arterial or collector streets.
c. Design, scale and intensity of commercial zones or properties should transition to adjacent residential uses to minimize impact on the residential use.

Policy 5 - Create a Robust Transportation Network:
a. Update the Transportation Master Plan to accommodate the changing needs of southwest Provo.
b. The planned collector road network should be built as development occurs. No development should interrupt the collector road network.
c. Update the Provo City Major and Local Street Plan to include a network of proposed local streets to ensure connectivity in the land between collector and arterial roads.
d. Utilize Complete Streets Policies to ensure all modes of transportation are considered.
e. Utilize the Transportation Master Plan to identify corridors that should have sufficient right-of-way to accommodate public transit.
f. Lakeview Parkway is to be maintained as an arterial roadway with limited access.

Policy 6 - Require Proper Integration and Sequencing of Development:
a. The full block should be considered when rezoning away from agricultural uses.
b. Conceptual Integrated Development Plan for the entire block should be required for zone change applications.
c. Discourage rezoning of land that is surrounded by agricultural zoning.
d. Development may be limited or deferred depending on the availability of adequate municipal infrastructure (such as sewer, storm drainage, water, etc.).

Policy 7 - Restrict Development in Wetlands and Other Environmentally Sensitive Areas:
a. Land south and west of the Lakeview Parkway up to Center Street (excepting the airport protection area) should be preserved for open space and agricultural uses.
b. No development should occur in flood-prone areas unless the risks can be mitigated. Plans for mitigation should be reviewed for adequacy by the Provo City Engineer and any State or Federal regulatory agency with jurisdiction to ensure that sensitive lands are appropriately developed to protect people, property or significant natural features. Mitigation plans should not adversely affect adjacent properties.

Policy 8 - Future Land Uses Intent Statement:
a. The Municipal Council of Provo City reaffirms our commitment to the Southwest Area Guiding Principles, Policies and Goals within this plan and adopts this statement to provide additional clarity regarding density and mixed lot sizes. This statement is intended to clarify the existing policies, set common expectations for landowners, the development community, staff, and City officials, and maximize the development potential of west Provo. A significant factor in the Council's consideration of a rezone proposal in this area will be how the proposal meets the policies below.
b. Sewer capacity limits the west side to three units per acre gross in Residential areas (previously written as four units per acre and interpreted as a net calculation, see the Southwest Area Future Land Use Map). Given this constraint and the need for diverse housing options, Provo City encourages developers to submit ambitious, creative plans that provide a variety of lot and housing sizes to meet the varied needs of Provo residents, present and future.
c. Varied Lot Sizes Policies

i. Recommendations for varied lot sizes
a. Definitions of lot sizes

Small Lot	Medium Lot	Large Lot
< 8,000 sq ft	8,000-12,000 sq ft	> 12,000 sq ft

*Lot sizes are subject to the minimum requirements for the zone.

b. Table of ratios of lot sizes scaled for different developments

Acres in the development	Max Units (3 units/acre gross)	Small Lots	Medium Lots	Large Lots
≤10	30	N/A	N/A	N/A
11-19	33-57	25-75%	25-75%	25-75%
20+	60-147	25-40%	25-40%	remainder

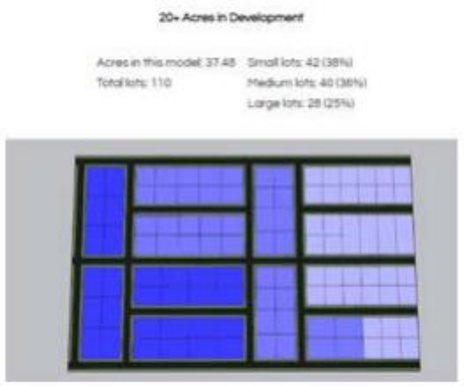
* Choose EITHER small and medium lots OR medium and large lots (choosing small and large is not desired)

d. Green space
i. Green space is encouraged, especially for developments of 50 acres or more, and the Council may be inclined to approve projects with reduced average lot size based on green space inclusion.
ii. Developers are responsible for maintaining green space. The use of graywater/non-potable water and waterwise landscaping is strongly encouraged.
e. Developers may decide how to integrate the different lot sizes within their plans.
f. When discussing units per acre on the west side of Provo, acreages should be understood to be gross, rather than net.



Models
These models show examples of the ratios of small, medium, and large lot sizes as described in the tables above and should not be interpreted as conveying any other recommendations.

Pages
6-7



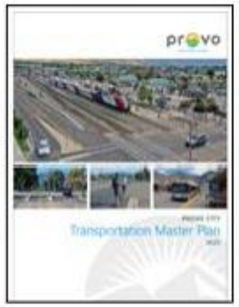


2 - TRANSPORTATION MASTER PLAN - 2020

Specific recommendations for the Southwest area of Provo include:
Lakeview Parkway. Lakeview Parkway is a an arterial built to serve the growing western neighborhoods of Provo and connect them to Interstate 15, the Provo Municipal Airport and the rest of the City. The roadway has a multi-use trail adjacent which serves active travelers. Lakeview Parkway presents opportunities for scenic rides along the shore of Utah Lake and include a shared use path along the corridor.

Geneva Road. Geneva Road provides a link from the western part of Provo to Orem and Vineyard. It could benefit from a shared use or side path providing a facility for foot traffic, as well as bicycling.

Active Transportation. A system of active transportation corridors to enhance existing systems and create connections.

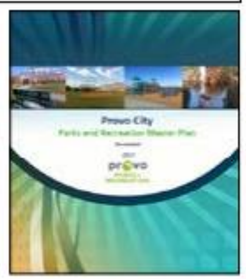


3 - BICYCYCLE MASTER PLAN - 2014

A In early 2014, the Provo City Municipal Council approved the Bicycle Plan as an appendage to the Transportation Master Plan. It is included as Section 10 of the current Transportation Master Plan.

4 - AIRPORT MASTER PLAN - 2000

The Provo Municipal Airport has an Airport Master Plan that was adopted in 2000. Since then, there has been an updated airport master plan that will soon be adopted. This master plan discusses the current needs at the airport and the future direction of the airport.



5 - PARKS AND RECREATION MASTER PLAN - 2021

TheThe Parks and Recreation Master Plan was adopted in December 2021. Key elements of this plan include findings from a stastically valid survey of residents indicating community priorities and needs. These community priorities are listed in the Community Needs Assessment, Facility Assessment and Service Level Analysis, and Site and Facilities Recommendations, all of which could pertain to the Southwest area of the city. Some of the priorities are:

- Improving the distribution of parks to accommodate areas of residential growth and increased density;
- Tails that improve connectivity to and around the City;
- Improving the distribution of parks to accommodate areas of residential growth and increased density;
- Developing an additional regional and/or sports complex with borad age and activity appeal;
- Developing access to the Provo River and improved recreational features wtihin the river corridor;
- Developing new types of parks that serve unique needs (i.e., universal playground, special use areas, etc.); and
- Developing more non-traditional sports and recreational opportunities Monitor and promote responsible economic development.

6 - UTAH LAKE MASTER PLAN - 2009

The Utah Lake Master Plan was adopted in June 2009 by the Utah Lake Commission, now redesignated as the Utah Lake Authority, an organization made up of representatives from neighboring municipalities, Utah County, the Department of Natural Resources, and other agencies of the State of Utah. The objectives and purposes of the Utah Lake Commission are summarized as:

- Encourage and promote multiple uses of the lake;
- Foster communication and coordination between Authority members;
- Promote resource utilization and protection;
- Maintain and develop recreation access; and
- Monitor and promote responsible economic development.





Pages
8-9

This section of the Southwest Neighborhoods Plan provides background on the area's existing land uses, transportation network, demographics, and overall character and environment.

A. LAND USE

RESIDENTIAL

Today the Southwest area contains over 14,500 residents in 3,664 housing units. These numbers are projected to more than double upon buildout of the area). Over 90% of the housing units are single-family detached units. The remaining housing units include a 144-unit mobile home park, a small number of duplexes, triplexes and fourplexes, and a number of townhomes, all located toward the eastern side of the Southwest area or along Lakeview Parkway.



HOMES IN THE WEST PARK SUBDIVISION



NEWER HOMES IN THE PELICAN CREEK SUBDIVISION

COMMERCIAL

The relatively small amount of commercial development in the Southwest area is located almost entirely within two general nodes along Center Street: the intersection of Center Street and 1600 West, and, the intersection of Center Street and Geneva Road (2050 West). The only exceptions include a retail garden store associated with the large greenhouse nursery at 400 South Lakeview Parkway and some limited retail uses associated with the airport. Currently, there are no medical offices and no traditional business or professional office buildings located within the entire Southwest area. The following paragraphs provide further details of the two Center Street commercial nodes:



CLUSTERED HOMES ON 2050 WEST

Center Street / 1600 West. This is a 13-acre commercially zoned area. However, due to the Center Street freeway interchange, only 4 acres in this area are actually used or available for commercial development.

Center Street / Geneva Road. This is a commercially zoned area of approximately 15.5 acres. Of those 10.5 acres are used, and an additional 1.5 acres are only lightly utilized. With a couple of minor exceptions, zoning on these properties follows the General Plan's "Commercial" designation.



CENTER STREET / 1600 WEST COMMERCIAL AREA



CENTER STREET / GENEVA ROAD COMMERCIAL AREA

INDUSTRIAL / MANUFACTURING

All existing industrial and manufacturing uses in the Southwest area are located either next to or within the boundaries of the Provo Municipal Airport. All areas denoted as "Airport Related Activities" on the current General Plan Map, are intended locations for industrial and commercial uses that would benefit from close proximity to the airport, but would not create a conflict or hindrance to airport operations.



DUNCAN AVIATION FACILITY

AGRICULTURAL LANDS

For the most part, agricultural lands in the Southwest Area are used for growing feed crops or grazing. Although agriculture still remains a major land use within the Southwest area, only those lands south of the Lakeview Parkway are designated as "Agricultural" by the current General Plan, making up 43% of the total land in the Southwest area.



AGRICULTURAL FIELD

AGRICULTURAL LANDS

The Southwest area enjoys an abundance of open space, especially with the large agricultural area south of the Lakeview Parkway. Significant open space areas also include the various City parks and school playgrounds, as well as large portions of the airport property.

The City is developing a Regional Sports Park near 2300 West Lakeview Parkway, which fulfills a visionary goal in the Parks and Recreation Master Plan. Besides sporting activities the regional park will include some of the basic elements of a neighborhood park and amenities similar to those found in a community park. This regional park is designed to meet the growing community need for athletic fields, as well as to provide major economic and social assets to the community as it will be the epicenter of many local and regional sports tournaments, recreation programs, and community events.



SOUTHWEST FUTURE LAND USE MAP - OPEN SPACE AND AIRPORT INDUSTRIAL (AI)



PROVO MUNICIAPL AIRPORT ENTRANCE SIGN

PUBLIC BUILDINGS, FACILITIES AND UTILITIES

Provo Municipal Airport. Located on the shore of Utah Lake, is the Southwest area's largest and most significant public facility. Besides general aviation and commercial, the airport also accommodates air carrier/air taxi, air cargo, military, corporate, emergency, medical, and agricultural users.

Public Safety. The Southwest area's only public safety

buildings are Fire Station #4 (located at 95 South 2050 West) and an auxiliary fire station at the Provo Municipal Airport. Fire Station #4 responds to the needs of the four Southwest area neighborhoods and the two Lakeview neighborhoods to the north. The Airport Station houses two specialty vehicles for Aircraft Rescue and Fire Fighting (ARFF) response. That station is staffed by firefighters from Station #4 during the landing and takeoff of commercial flights.



FIRE STATION #4

Utah Lake State Park. In 1967, the State of Utah created Utah Lake State Park, at the Provo Boat Harbor that was developed by Provo City. Principal features of the park include boating, picnicking, and camping facilities.

Schools. Currently, there are only two public schools in the Southwest area. Sunset View Elementary, which has existed since the 1950s, was completely reconstructed on-site in 2016. Amelia Earhart Elementary first opened in August 1998.



SUNSETVIEW ELEMENTARY SCHOOL

City Utilities. Provo City's utility services include the provision of culinary water and electrical power, as well as the removal of wastewater (sewer), solid waste (garbage), and storm water. There are no anticipated issues with the availability of culinary water or electricity to the Southwest area. Culinary water principally comes from springs in the canyons east of the city and a number of deep wells. The City has sufficient water available for both its current and anticipated needs, but is working on improving water storage and distribution throughout the City. There are no anticipated issues with the availability or distribution of culinary water to the Southwest Area.



AMELIA EARHART ELEMENTARY SCHOOL

In order to handle the full development of the Southwest area as proposed in the City's General Land Use Plan, an additional 36- inch sewer trunk line needs to pass under the freeway at 1450 South. This new trunk line is planned to extend to the treatment plant around the year 2026. Afterwards development may advance in the Southwest area while being restricted with the capacity limits of the new line restricted to the remaining capacity in the existing line.

B. TRANSPORTATION

The Provo City Transportation Master Plan (TMP) was developed to create a unified street and transportation system and serves as the guide for the transportation network for the Southwest Area. The plan includes street and vehicular elements, transit system elements, and active transportation components such as bike paths and pedestrian walkways.



PROVO WATER RECLAMATION FACILITY



MAJOR AND LOCAL STREET PLAN - TRANSPORTATION MASTER PLAN (TMP) FIGURE 4.1

Arterial Streets. Arterial Streets are the highest capacity roadways and are indicated by the red or yellow lines on the plan map on the page above.

Center Street has historically been the Southwest area's main connection to the rest of Provo City and is the principal roadway connection used to access Utah Lake State Park.

Geneva Road runs between Center Street and Pleasant Grove City and forms the largest portion of State Route 114.

Lakeview Parkway rovides a direct connection between Interstate 15 and the Provo Municipal Airport. An additional phases will extend the Parkway northward from 1530 North into Orem where it will connect to Geneva Road (SR 114).

500 West between Lakeview Parkway and Interstate 15 and 2050 West between Lakeview Parkway and Center Street are both considered minor arterials.

Collector Streets. Collector Streets are mid-sized capacity roadways and are indicated by the blue on the map above. These roads are meant to move traffic from local streets to arterial roads and are mean to limit access.

North-South collectors include: 1100 West, 1600 West, and Lakeshore Drive as it extends northward from Lakeview Parkway. Currently only 500 West and 1100 West connect to Lakeview Parkway. Street 2470 West has not been completed between 560 South and Lakeview Parkway nor 1600 West between 1150 South and Lakeview Parkway nor 2050 West between 600 South and Laekview Parkway.

East-West collectors include Center Street as it extends west from Lakeview Parkway to Utah Lake State Park, 600 South, and 1150 South. At present, neither 600 South nor 1150 South are fully extended to the west with 600 South now ending at 2470 West and 1150 South at 1600 West.

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ACTIVE TRANSPORTATION PLAN PHASES 1 & 2 - TMP FIGURE 5.10

ACTIVE TRANSPORTATION

Bikeways and Pedestrian Ways: Provo has been growing its bikeway and pedestrian network for many years. An area where significant progress has recently been made is the initial development of Lakeview Parkway Trail. The Parkway connects western Provo with the rest of the City and includes a multi-use pathway running parallel to the road for both bicycle and pedestrian use

The Provo River Parkway Trail provides an active transportation connection from Utah Lake State Park to the Provo Canyon recreational areas. The paved surface trail provides connectivity and outdoor recreational opportunities along the entire route.

As of October 2022, Provo City is contracted wtih BIRD micromobility to provide the City with e-bikes and e-scooters. These modes of transportation can be riden through out the City and provde a needed source for individuals first-mile and last-mile.

PUBLIC TRANSPORTATION.

Provo City is served by the Utah Transit Authority. Currently, one bus route, the 833, serves the entire Southwest area. The route runs between the airport and the Provo Central Station which connects you to Front Runner, along Center Street and 1150 West. buildout of the Southwest Area, this area of the City is projected to grow to be an additional 14,600 residents.

C. DEMOGRAPHICS

According to the 2020 American Community Survey 5-year estimate and subdivisions approved between 2020 and 2022, the number of housing units for the Southwest Area totals 3,664. This represents 9.13% of Provo's total housing units.

Housing Types. Single-family, detached housing units are the most common type of housing comprising 75% of the housing units in the Southwest area. Currently, there are only eight housing units that have active rental dwelling licenses. The remainder of the homes are owner occupied, which is significantly higher than other areas within the city.

TENURE

Comparing the tenure of the Southwest area to the rest of Provo, there is a higher rate of owner occupancy. In the Southwest area, only 0.002% of the homes are rented in comparison to the city-wide rental occupancy rate of 62.5%.

POPULATION

Currently there are 14,500 residents who live in the southwest area. Over the next few decades, the Mountainland Association of Governments projects Provo's population to be over 170,600 by 2050. Based on the projected buildout of the Southwest Area, this area of the City is projected to grow to be an additional 14,600 residents.

D. CHARACTER / ENVIRONMENT

PHYSICAL FEATURES

The Southwest area includes some outstanding physical characteristics including portions of the Provo River, Utah Lake, wetlands and a large amount of open space.

Utah Lake:

Covering about 96,000 acres, Utah Lake is one of the largest freshwater lakes in the Western United States and is popular for water sports and fishing. Besides acting as a reservoir for agricultural lands in the Salt Lake Valley, Utah Lake also provides a valuable environmental resource, and its surrounding shoreline provides for a variety of biological activities. It is also a critical piece of our ecosystem.

The Provo River:

The Provo River is the largest of the rivers and creeks feeding Utah Lake. The Federal government is nearing completion of the restoration of the Provo River Delta. The project will divert the Provo River northward, near Lake Shore Drive, where the river will meander and split into multiple streams, recreating its former delta area before entering the lake. River water will continue to flow in the existing channel, but at a very reduced volume.

Dry Creek:

Dry Creek is valuable both for irrigation and as a storm water drainage and runoff water filtration system. The creek begins to become discernible as it runs southward from roughly about 1330 West and 900 South. After entering Footprinter Park, it then flows under 1050 South to several larger ponds on the south side of the roadway. The creek then crosses under the Lakeview Parkway at approximately 1550 West before flowing onward into the lake.

SENSITIVE LANDS

The Southwest area has an abundance of sensitive lands. Without proper protection, new growth could have a serious impact on these lands and their related environment.

Wetlands:

Wetlands are those areas where the water table is at, near, or above the land surface for a significant part of most years. They are found throughout the Southwest area and the vast majority are on the south side of Lakeview Parkway in the Provo Bay area of Utah Lake.

Disturbance of wetlands for development is not permitted without completion of an extensive federal permitting process. Requirements through that process may involve establishing new wetlands in an alternative location. Sometimes these mitigation processes can actually result in creating more wetland areas than existed at the original location.

Floodplains:

There are of two different types of floodplains in the Southwest area. The first is associated with flooding from the Provo River. The second involves flooding caused by Utah Lake rising above its compromise or "full" level.

Provo River Floodplain. This floodplain includes lands adjacent to the river where water will likely flow if the river channel receives more water than it can carry. Due to careful management of the river's flow, there has not been extensive flooding from the river since 1983. City ordinances restrict buildings and other structures from being constructed within 100 feet of the top of the nearest riverbank to allow better river flood control access and lessen the chance of the water flow being dammed by structures and debris during flooding.

Utah Lake Floodplain. The floodplain includes the area where lake water could extend into shoreline areas. The water level of Utah Lake can fluctuate greatly depending on the water flow into and out of the lake and the amount of evaporation that takes place during the year.

Watertable. A high-water table exists for the entire Southwest area. This can cause standing water to occur when the water table receives more water than can percolate into the ground or else be drained. Properly engineered drainage systems and raised building foundations can lessen impacts from a high-water table.



PROVO RIVER

Character is important as it often leads to how a neighborhood or area is perceived and can even affect how people within the area socially interact. Several area residents have expressed concern that the existing character of the Southwest area will be adversely affected by new development. However, the counter belief has been expressed by many others that it will be this new development that will accentuate the Southwest area's many outstanding features and work to establish the long desired positive identity for the area.

Creating a future land use map for the Southwest area neighborhoods began with identifying and assessing past development activity (see General Plan policy on Pg. 3) as well as current economic and social conditions. Following an initial assessment and input period, an extensive examination of the area was made using the following considerations 1) Anticipating the development needs and desires of the area and its relevant neighborhoods; 2) Identifying development issues, including opportunities and constraints to development; 3) Identifying areas suitable or unsuitable for different types of development; 4) Identifying areas suitable for addressing broader City needs and opportunities; 5) Analyzing and proposing ways in which the area should develop over time; 6) Examining and proposing appropriate policies and standards to guide development; and, 7)Surveying property owners to determine their desires for future us of their properties.

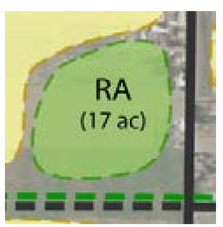
The resulting Southwest area Future Land Use map presents the land uses determined to best address both the areas, and where appropriate, the City's needs for housing, shopping, jobs, transportation, and recreation. The boundaries of the illustrated land uses should be viewed as flexible and not hard boundaries to allow creativity in the layout and development of a site. For properties not clearly depicted on the land use plan or specifically described within the text of this section, their intended development is to be in harmony with that of adjoining or nearby properties.

A. RESIDENTIAL

Over one-half of the area represented on the Future Land Use Map is planned for residential development. In addition to the four principally residential designations listed in this section, the mixed-use designations listed in the next subsection also allow residential uses.

The objective and intention of the various residential designations is to provide for a variety of housing types that are spread through the area, rather than just congregated into a single site or neighborhood. The plan also attempts to add enough residential units to the area to effectively support the successful development of neighborhood and community commercial centers without overloading available or planned public infrastructure.

RESIDENTIAL AGRICULTURAL (RA)



EXAMPLE OF RESIDENTIAL AGRICULTURAL (RA)

The RA designation is intended to allow for the development of single-family residential lots while also allowing limited agricultural type uses – mainly the keeping of farm animals.

RESIDENTIAL - SINGLE-FAMILY DETACHED (RES)

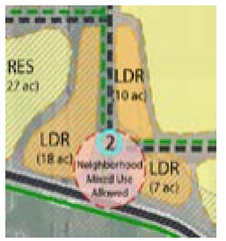
The "The "RES" or residential designation is the most prevalent residential designation. It generally includes all areas suitable for residential development that are not otherwise reserved for Residential/Agricultural uses, or else areas suited for higher density development. Areas with this designation would generally allow up to three (3) units per gross acre.



EXAMPLE OF SINGLE FAMILY RESIDENTIAL (RES)

LOW DENSITY RESIDENTIAL (LDR)

For the most part, LDR areas are located at or near the Lakeview Parkway intersections. Development within these LDR areas is intended to follow allowances in the City's LDR zone, which allows for attached single-family dwellings at a density of up to 12 units per acre, as well as detached single-family lots as small as 4,000 square feet. LDR type development is also a possible component for areas designated as "Neighborhood Mixed-Use."



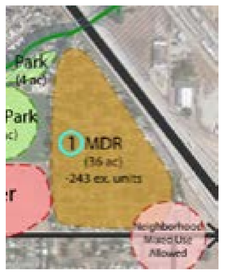
EXAMPLE OF LOW DENSITY RESIDENTIAL (LDR)

MEDIUM DENSITY RESIDENTIAL (MDR)

The Southwest area's highest density residential development should occur on land with an MDR designation. MDR occurs only in the area north of Center Street, next to Interstate 15 and is to have a mix of housing types with an overall density of up to 30 units per acre. Allowed housing types in an MDR Zone include both attached single-family units and apartment units. Unlike other residential areas, there is no restriction on stacking units one above another. MDR-scale development could also be a component in the adjacent "Village Center" designation.

B. COMMERCIAL

During the creation of this plan, one of the most common desires expressed by residents of the Southwest area was for a grocery store and other commercial uses, including professional and medical offices. With the reconstruction of the University Avenue Interstate 15 interchange and the opening of the Lakeview Parkway, consideration of additional locations for commercial development have been designated:



EXAMPLE OF MEDIUM DENSITY RESIDENTIAL (MDR)

VILLAGE CENTER / COMMERCIAL MIXED-USE (MU)

This designation is intended to allow for the development of a mix of retail, office, and residential uses, with attractive site amenities and distinctive design features with a density limit of 30 dwelling units per acre. The intent is not only to provide for a grocery center and associated retail users, but to also facilitate the creation of a major activity core for all six of the neighborhoods on the western side of the City. Residential development within this designation should match the density and scope of the City's MDR zone. To that end, the Village Center's layout should be unified in design with that of the adjacent MDR area.



EXAMPLE OF MIXED USE (MU)

NEIGHBORHOOD CENTER / MIXED-USE (NMU)

These areas are generally to be three to eight acres in size and intended for the development of smaller-scale retail and office commercial uses with a density limit of 12 dwelling units per acre. Gas stations and convenience stores would be anticipated at the sites adjoining the parkway, with more localized retail and office uses in the interior areas. Townhomes, bungalow courts, or similar scale residential uses are also appropriate to create a transition between the commercial areas and adjacent, lower density residential developments and vertical mixed use with a limitation of three stories and no taller than 38 feet.



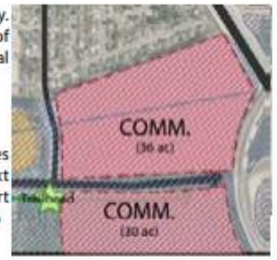
EXAMPLE OF NEIGHBORHOOD MIXED USE (NMU)

REGIONAL COMMERCIAL (FC3)

This is a generalized designation for two areas located on the western side of the University Avenue Interstate 15 interchange. The intent is to allow for larger scale retail users whose marketing area likely extends beyond Provo's boundaries. These regional commercial areas should not extend west of 500 West.

To make the area successful, proper consideration should be given to providing

both sufficient and efficient access to the area from the Lakeview Parkway. Intended more as a transition area than providing for a truly integrated mix of uses, an enhanced landscape buffer is required between the regional commercial area and the existing Lakewood single-family subdivision to its north.



EXAMPLE OF REGIONAL COMMERCIAL (FC3)

C. INDUSTRIAL/COMMERCIAL

The Future Land Use Map on page 20 of this document includes over 286 acres designated for industrial/commercial uses. The included areas are located next to or in close proximity to the airport. The intended purpose is that the airport will attract light industrial and business type uses that desire close proximity to the airport, as well as the direct access provided by Lakeview Parkway.

AIRPORT (A)

This designation applies to approximately 940 acres within the fence of the Provo Municipal Airport. The anticipated development would include expanded airport uses, corporate office and manufacturing parks, as well as some retail uses supporting the surrounding uses.

AIRPORT INDUSTRIAL (AI)

This designation applies to approximately 286 acres in the areas directly north and east of the airport property. The anticipated development includes corporate offices, hotels, warehouses, and eating establishments that would help in supporting the area around the airport.

D. AGRICULTURAL

During the preparation of the Southwest Future Land Use Map, extensive discussions took place concerning the community value and need to protect agricultural lands and ongoing farming operations. However, during public meetings and individual conversations, farmers shared their experience that farming has become more difficult and less profitable in recent years. For example, the ground water level has deepened so irrigating crops has become a challenge. To better understand their position, a survey was taken of area farmers that simply asked how long they intended to continue farming. The map on the following page categorizes their responses.



EXAMPLE OF AGRICULTURE (A1) AND AIRPORT INDUSTRIAL (AI)

Of those who responded, fifty-three percent (53%) indicated, they plan to continue farming for less than five years. Ten percent (10%) of respondents indicated they plan to continue to farm between five and ten years, and the remaining thirty-seven percent (37%) of respondents plan to continue farming for longer than ten years.

AGRICULTURAL (A1)

The majority of land located south of Lakeview Parkway is intended to retain agricultural allowances and to further protect and preserve ongoing agricultural operations. There are several mechanisms the City could utilize to preserve productive agricultural areas. The most common include funding their purchase, creating a conservation easement, or transferring development rights from farmland that could then be transferred to designated receiving areas.

Nearly 140 additional acres have been designated as agricultural on the Land Use Map which has divided the Agriculture zone with 68 acres on the east side, and 70 acres on the west side.

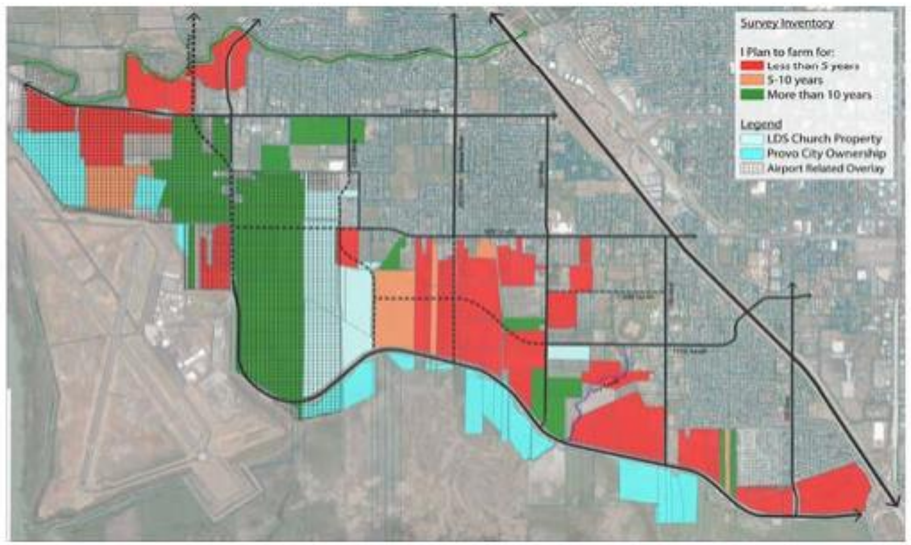
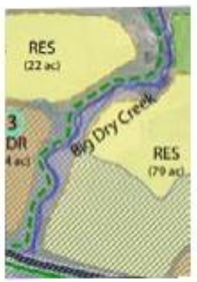


FIGURE ILLUSTRATES ESTIMATED CONTINUATION OF AGRULTURAL USES

E. PARKS, TRAILS & OPEN SPACE

Almost all areas on the Future Land Use Map designated as parks already exist. The exceptions include: the Big Dry Creek area, land the City owns south of Lakewood Park, land the City owns east of the Sunset View Neighborhood Park, two additional areas along the Provo River and a new connection south to Springville from Lakeview Parkway. Additional Park improvement details can be found in Chapter 7 – Site and Facility Recommendations of the 2021 Parks and Recreation Master Plan.



ILLUSTRATING BIG DRY CREEK

BIG DRY CREEK

The creek is located between 1150 South and Lakeview Parkway between 1100 West and 1600 West. Big Dry Creek provides an opportunity for connecting and unifying feature for future development in the area. As the area develops, street crossings of Big Dry Creek should be limited, and where possible the street system should front along the creek area. This would also allow dwellings to face the creek area, making it a safe, visible amenity rather than becoming an isolated passageway bound by back yard fences. Big Dry Creek also has a functional purpose as a part of the City's stormwater management system.

LAKEWOOD PARK

This park is located approximently at 400 West 1400 South. Formerly known as "Powerline Park 4" this area would be an expansion of the existing park southward on approximately three acres of City-owned property. This park expansion would give the residential areas to the south a more direct access to the park at 1500 South. The Parks and Recreation Department uses an inclusive park design process that involves local residents and City staff to evaluate opportuntities, persepective and consider alternatives for the development of the final plans.



ILLUSTRATING LAKEWOOD PARK LOCATION

SUNSET VIEW PARK

This park is located at 380 South1600 West, Sunset View Neighborhood Park will have improved park facilities and expanded parking east into the current City-owned property. The parking expansion would increase connectivity to the surrounding neighborhood through an inclusive park design process that involves local residents and City staff to evaluate opportuntities, persepective and consider alternatives for the development of the final plans.



ILLUSTRATING PROVO PARKWAY RIVER AREA LOCATION

PROVO RIVER PARKWAY AREAS

The Provo River Trail in the Southwest area has been widened and resurfaced, with enhanced pathway lighting added to areas along the route to enhance safety for trail users.

PROVO RIVER DELTA GATEWAY PARK



ILLUSTRATING DELTA GATEWAY LOCATION

This park is located approximently on the south side of the Provo River adjacent to Lakeshore Drive. The Parks & Recreation Department has partnered with federal agencies in the planning and development of a new City park at the entrance to the restored Provo River delta. The new Delta Gateway Park will integrate the existing Lakeshore bridge trailhead and include parking, playgrounds, pavilion and picnic areas as well as ecosystem and wildlife interpretation. This park will be a junction for the Provo River Trail into the new delta and to Utah County owned and managed lands along the existing channel that will feature trails, parks and linear ponds.

PROVO BAY MULTI-USE PATH

A new multi-use pathway connection from the Lakeview Parkway Trail to Springville City on the west side of Interstate 15 would add an important active transportation path to Provo's extensive trail system This path would offer access to the Provo Bay area to a greater number of recreational and other users and contribute to greater regional trail connectivity.

F. TRANSPORTATION

The following paragraphs lay out various aspects of a transportation system to be considered in the further development of the Southwest Area. These aspects include: the street network, street design, street connectivity and active transportation systems.

STREET NETWORK

The current and proposed network of arterial and collector streets in the Southwest Area employs a grid type layout. The obvious exception is the Lakeview Parkway where the lake's shoreline, floodplain, and wetlands affect its location. Modifications to the existing street network that should be considered are illustrated on the Southwest area's Land Use Maps. These modifications include the addition of local street designations to the map were deemed important and necessary to address better connectivity in certain areas.

STREET DESIGN AND CONNECTIVITY

The design for the street system should be unique in response to the neighborhood or community context. It may include: wider sidewalks or pathways, bike lanes, special bus lanes, public transportation stops, frequent and safe crossing opportunities, median islands, accessible pedestrian signals, curb extensions, narrower travel lanes, roundabouts and more. The goals and objectives listed in the General Plan, the Transportation Master Plan and the Bicycle Master Plan all speak to the necessity for integrated connections in Provo's street system. Because of its relatively undeveloped nature, the Southwest area of Provo presents a great opportunity to significantly improve connectivity. Standards for new developments should incorporate: 1) alleyways and mid-block pedestrian connections (or thru-ways or shortcuts), 2) shorter streets and smaller blocks, 3) traffic calming methods on local streets; and, 4) prohibiting dead-ends (cul-de-sacs) or closing streets as methods to control excessive vehicular traffic.

ACTIVE TRANSPORTATION OPTIONS

The following gives a general background and recommendations for active modes of transportation in the Southwest area:

Bikeways and Pedestrian Ways: For the Southwest area, the Bicycle Master Plan proposes bikeways along each of the area's arterial and collector streets, both as they exist and as they are proposed. Completion of the Lakeview Parkway Trail and the Airport Dike Trail are near but should continue to remain a high priority. Additional considerations for bikeways and pedestrian ways should include new off-street multi-use trails along the Dry Creek area, as well as trail extensions from arterial and collector streets into new developments.

Public Transportation: An increase in bus routes in the Southwest area will depend on future development, including increased airport use and planned employment centers near the airport. Considerations for future routes might include utilizing 600 South as an east-west route, adding a north-south route along Geneva Road, and extending the Utah Valley Express (UVX) rapid transit system to the airport. The Provo Municipal Airport has a station that was built to accommodate a UVX-like bus. The City will continue to work with the Utah Transit Authority to determine when and where additional routes are feasible.

G. PUBLIC FACILITIES

With the future growth in the area, new public facilities will be necessary as well as updating and enlarging existing infrastructure. The following briefly discusses the various public facilities that will be required with anticipated growth in the Southwest area.

CITY UTILITIES

Adopted master plans relating to the various City utilities have all considered the full build-out of the Southwest area. For dispersing utilities such as power and water that distribute from a source, most of the necessary improvements for further development will occur in conjunction with each new development project. However, for the two collecting systems (i.e., wastewater and stormwater), larger system improvements are necessary in certain areas before development can proceed. This is especially applicable to wastewater collection. A new sewer lift station near the airport is under construction and is expected to be completed by the end of 2022 or early 2023. This new station will add sewer capacity for expected growth in the Southwest area.

PUBLIC SAFETY

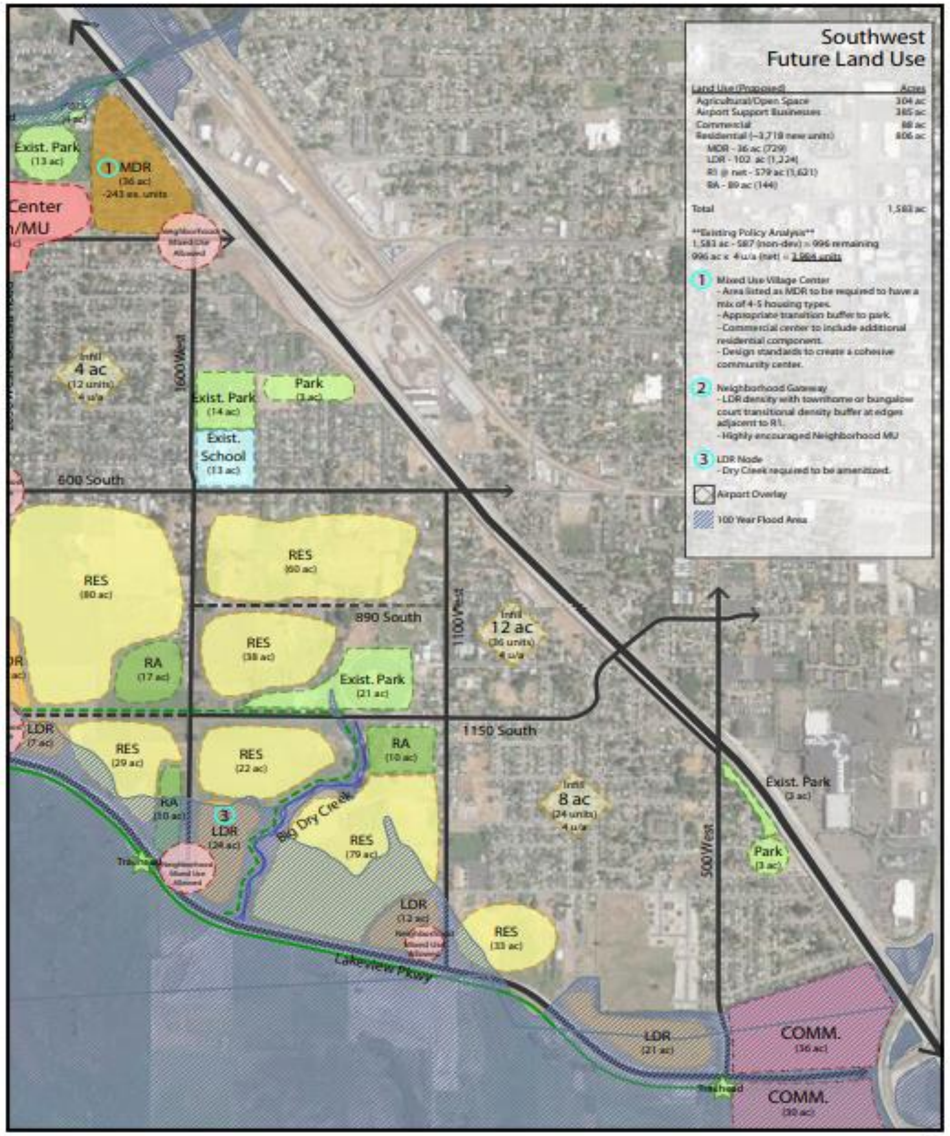
With the population growth occurring in the area west of Interstate 15, as well as increased air traffic at the airport, the Provo City Fire Department is exploring several options to continue providing necessary and adequate emergency response within the area. It is likely there will need to be an additional fire station west of the freeway. It is also likely the airport fire station will need to be enlarged and fully staffed at some point in the future as emergency coverage is required with landings and departures of commercial airline flights.

PROVO MUNICIPAL AIRPORT

Including an expansion of the airport boundaries another change that will affect the surrounding area will be parrallel aligning of the secondary runway to the west of the main runway (Runway 13-31). If the second runway were constructed, the need for the current crosswind runway (Runway 18-36) would be eliminated, as well as the need to maintain the airport area toward the northeast corner of the airport.

Pages
20-21


Airport Compatible Industrial/Comm.
A1.10
AR
RA
Exist. School
Exist. RA
RES
Village Center Comm/MU
Airport Ind./Comm.
Regional Park
LDR
2
Center Street
5340 West
2070 West / Geneva Road


Southwest Future Land Use
Land Use (Proposed) Acres
Agricultural/Open Space 304 ac
Airport Support Businesses 365 ac
Commercial 88 ac
Residential (~3,718 new units) 806 ac
MDR - 36 ac (729)
LDR - 102 ac (1,224)
RI @ net - 579 ac (3,621)
BA - 89 ac (144)
Total 1,583 ac
Existing Policy Analysis
1,583 ac - 587 (non-dev) = 996 remaining
996 ac x 4 u/a (net) = 3,984 units
1 Mixed Use Village Center
- Area listed as MDR to be required to have a mix of 4-5 housing types.
- Appropriate transition buffer to park.
- Commercial center to include additional residential component.
- Design standards to create a cohesive community center.
2 Neighborhood Gateway
- LDR density with townhome or bungalow court transitional density buffer at edges adjacent to RI.
- Highly encouraged Neighborhood MU
3 LDR Node
- Dry Creek required to be ameniitized.
Airport Overlay
100 Year Flood Area
1 MDR (36 ac) -243 ea. units
Exist. Park (13 ac)
Center /MU
Infill 4 ac (12 units) 4 u/a
Park (3 ac)
Exist. Park (14 ac)
Exist. School (13 ac)
600 South
890 South
1150 South
1100 West
1600 West
500 West
Infill 12 ac (36 units) 4 u/a
Infill 8 ac (24 units) 4 u/a
Exist. Park (21 ac)
Exist. Park (3 ac)
Park (3 ac)
RES (80 ac)
RES (60 ac)
RES (38 ac)
RES (29 ac)
RES (22 ac)
RES (79 ac)
RES (33 ac)
RA (17 ac)
RA (10 ac)
LDR (7 ac)
LDR (24 ac)
LDR (12 ac)
LDR (21 ac)
Big Dry Creek
Lakeview Pkwy
COMM. (36 ac)
COMM. (30 ac)

Currently, planning staff is working on drafting the Lakeview Parkway Design Corridor standards that could incorporate many of the design elements listed below. Coordination between various departments will need to occur in order for this section to be implemented.

A. PUBLIC REALM

STANDARD STREET LIGHTING AND ART

Street lighting was installed along the south and west side of Lakeview Parkway as part of the recent construction of the roadway. To create a uniqueness to the area, the fixtures could have a detailing attached to each light post such as a bird or airplane depending on where they are along the corridor. This enhancement would give a uniqueness to the corridor and pay homage to where the corridor is located. These fixtures should be used on one side, if not both sides, of Lakeview Parkway and continue northward across the Provo River.

LANDSCAPING

Certain improvements along Lakeview Parkway should create a "parkway" feel. There is a center median that could be filled with trees and shrubs but currently is filled with rocks. Landscaping along the corridor should be of similar species and design. As of October 2022 Provo City Staff is working on adding Lakeview Parkway as a design corridor to the Municipal Code. A common desire expressed by stakeholders in the area was to improve the street tree network. Many areas have been developed with insufficient parkstrip width to plant a tree, or the trees were simply never put in. As streets are improved, or new development occurs, the incorporation of new street trees should be included as part of the project. Irrigation would need to be installed in the center median and parkway sections prior to installation of vegetation.

UTILITY INFRASTRUCTURE

The placement of necessary utility infrastructure can play a large role in the aesthetic character of an area. Where feasible, any utility boxes should be located outside of highly visible areas. Specific priority should be given to the visual impact power transmission lines and other utility fixtures have on the Lakeview Parkway and Center Street corridors. Efforts should be given to camouflage this infrastructure or to allow to become a canvas that local artists may illustrate their work, pending any approval required.

B. STREET CORRIDORS

The following lists the major street corridors within the Southwest area where specific street design standards should be developed, adopted and implemented, provide unifying design elements for the community and to incorporate Complete Street design that can be carried on to connecting streets.

LAKEVIEW PARKWAY

Lakeview Parkway fulfills several previous goals of the City's General Plan for the Southwest area. Besides its connection to the airport, the Parkway also provides a long-sought access into the southern portions of the Southwest area. Future intersections will occur at 1600 West, 2050 West, and 2470 West. Determinations still need to be made regarding other possible connections to the parkway. The initial intent of the design for the parkway included creating an attractive gateway to the Southwest area and especially between the Airport and the city. Currently, only the southern/western lanes of the first phase of the Parkway have been fully improved, and the northern/eastern lanes will likely not be completed in full until significantly more development in the area occurs.

Therefore, it is important that before its full completion, the parkway design be re-examined to see what deficiencies or other improvements might be considered for the corridor to realize its gateway potential. Considerations should be given to detailing the parkway's northern and eastern edges in terms of landscaping, building setbacks, walls, and other transitions to the adjoining land uses. Details should also include entryway signage for business park areas, and the adjoining residential neighborhoods



EXAMPLE OF LAKEVIEW PARKWAY WITH LANDSCAPING

CENTER STREET CORRIDOR

The entire length of Center Street as it runs through the Southwest Area, is already included within the Zoning Ordinance's adopted West Center Street Design Corridor. Current design corridor requirements refer to such items as: minimum building setbacks, landscape buffers, pedestrian amenities and streetscape standards, and standards for site and building design and building materials. Although the adopted corridor plan provides an initial design standard, a more detailed plan should be developed and illustrated with adopted street cross-sections and design details based on, and more fully coordinated with the adjacent land uses.

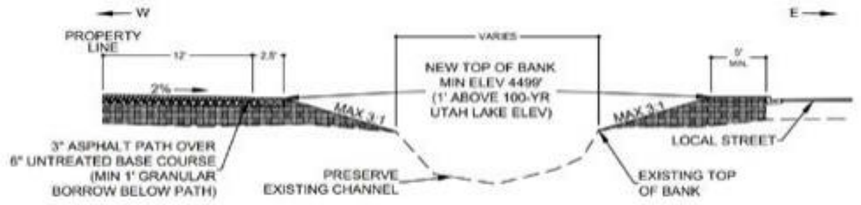
GENEVA ROAD CORRIDOR

The widening and further improvement of Geneva Road has been planned for a number of years. The planned cross section indicates two travel lanes in each direction, plus a center turn land. As that widening will have a major impact on the development of the proposed Village Center area, the specific design standards adopted for Geneva Road need to enhance rather than act as a barrier to the Village Center area. The City needs to work closely with the State and Mountainland Association of Governments in the development of the road standards for this particular section of State Highway 114.

C. TRAILS

BIG DRY CREEK

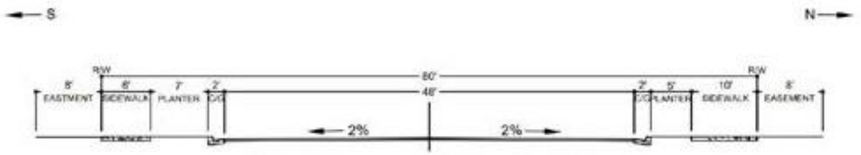
This area has the unique opportunity to have a trail adjacent to the creek connecting between Lakeview Parkway and 1150 South. A trail would be constructed on the wast side of Big Dry Creek adjacent to a local street. No sidewalk would be required on the west side of this local street due to the trail system. Final design details will be assessed during the construction of this trail. On the next page illustrates a cross section of how this area should be developed.



BIG DRY CREEK SECTION

1150 South

This will include a larger sidewalk that will function as a multi-use path on the north side of the street between Big Dry Creek and 2470 West where it terminates at the Regional Sports Park. Part of this trail will be on 1150 South, 2050 West (west side of the street between 600 South and Lakeview Parkway) and 900 South (north side of this future street). Future alignment of the trail will be determined at the time of development. Below illustrates a cross section of how this area should be developed.



1150 S - 2470 W TO BIG DRY CREEK

D. FENCING

For properties that are adjacent to a trail, the portion of the fence or hedge adjacent to the trail must be transparent for safety reasons. If a fence or hedge is greater than four feet in height, then the remainder of it must be at least 50% transparent.

E. GOALS AND OBJECTIVES

1. Provide a high-quality entrance to the City through a well-designed and landscaped gateway are, including a sign.
2. Draft a Lakeview Parkway design corridor standards.
   a. Identify current standards to guide future development.
   b. Develop a street tree planting program for already-developed areas where street trees are not in place.
3. Identify areas where additional street lighting can improve safety.
4. Develop and implement trails.

The original layout of the Southwest area remains unchanged throughout most of the neighborhood. Many wonderful buildings that were constructed in the early years of the area remain. These are some of the defining characteristics of the neighborhood and are worthy of historic preservation efforts to help ensure that Southwest area continues to be such a coveted neighborhood in Provo.

A. IDENTIFICATION SURVEY

This area of the city has not been surveyed in many years. The last surveys were done in 2002 and 2007. An updated Reconnaissance Level Survey (RLS) would indicate eligible properties and whether the creation of the "West Center Street Historic District" would be justified. There are 34 properties in the Southwest area primarily along Center Street that could be eligible for historic preservation based on 2002 and 2007 data; however, further research would be needed to verify the historic nature of each of these properties.

B. REGOGNITION

Many people may be unaware that there are eligible historic homes in their neighborhood or that their home contribute to a potential historic district. Efforts like a coordinated signage program would help people recognize them and gain an appreciate and greater connection to the history of the neighborhood. The signs could be as simple as small markers adjacent to the front sidewalks of historic houses that contain basic information about the house as well as a narrative of the design and history of the house. Preserving and educating about history should be encouraged. A program of historic markers should be implemented and coordinated with the city.sidential neighborhoods



PHOTO OF AN OLDER HOME ON CENTER STREET

06 IMPLEMENTATION STRATEGIES

This section is to describe how this plan may be fulfilled and describe what City departments will be responsible for overseeing its fulfillment.

A. PROCESS

This document is a guide to be utilized by City and Neighborhood leaders, the development community, and the residents working together to achieve the Plan's ideas and visions in the development of the Southwest area. The goals and objectives of the plan should be considered:

- As often as development projects are proposed;
- Annually to evaluate and report on the progress being made to achieve the stated goals and objectives; and,
- Periodically to ensure the goals and objectives remain up-to-date and viable.

It is only through this ongoing review and evaluation that the goals and objectives that this document can be fully realized.

B. IMPLEMENTATION RESOURCES

Though not all-inclusive, the following means and resources could be available and utilized to achieve the recommendations set forth in this document:

CAPITAL IMPROVEMENTS PLAN

Any projects needing City funding related to the Southwest plan should be included in the City's CIP, so budget allocations can be evaluated and prioritized.

FUNDING PROGRAMS AND AGENCIES

Funding programs and grants are available from federal, regional, and state agencies, as well as from philanthropic and non-governmental agencies to assist cities in the implementation of approved projects, especially when the projects involve connections or improvements to regional systems. The City should utilize these funding sources whenever possible.

IMPROVEMENT DISTRICTS

Consideration should be given to create improvement districts where a consolidated effort and broad improve would be advantageous.

C. AVAILABILITY

To ensure the Southwest Neighborhoods Plan continues to be a guiding document in City planning, it is important to make it widely available and visible to City Administrators and the public. This will be an addendum to the General Plan and will be available on the City website and City staff will be readily available to help explain its contents to City and Neighborhood officials, the development community, and the general public.

D. IMPLEMENTATION SCHEDULE

Southwest Neighborhoods Plan Goals	Phase 1		Phase 2		Phase 3	
	Priority 1	Priority 2	Priority 1	Priority 2	Priority 1	Priority 2
General						
Adopt the Southwest Neighborhoods Plan (City Council)	■					
Revise Southwest Area Future Land Use Map from Appendicies (City Council)	■					
Revise Capital Improvements Plan (D.S., P.W., Admin.)			■			
Fund on-going maintenance costs of additional parks (Parks, Admin.)				■	■	■
Land Use						
Update General Plan for future land uses (D.S.)	■					
Amend zoning map to be consistent with the plan (D.S.)		■				
Develop and implement the expansion of existing parks (Parks)			■	■	■	
Urban Design						
Install street lighting with detailing (Energy, D.S.)		■	■	■	■	
Implement street trees (Energy, D.S.)		■	■	■		
Adopt the Lakeview Parkway design corridor standards (D.S., P.W.)	■					
Develop and implement trails (P.W., Parks)		■	■	■		
Historic Preservation						
Conduct an updated Reconnanissance Level Survey (RLS) of the area (D.S.)	■					
Publish a list of eligible historic structures (D.S.)		■				
Develop an inventory of historic features and design elements (D.S.)			■			
Determine next steps based on RLS findings (D.S. and Landmarks Commission)				■		

Key = Development Services (D.S.), Public Works (P.W.), Administration (Admin), and Parks and Recreation (Parks)



Questions?

PROVO MUNICIPAL COUNCIL STAFF REPORT

Submitter: NLA
Department: Development Services
Requested Meeting Date: 11-01-2022

SUBJECT: An ordinance amending the zone map classification of approx. .22 acres of property located at 1220 E 960 S, from One Family Residential (R1.8) & Residential Conservation (RC) to Low Density Residential (LDR). Provost South Neighborhood (PLRZ20220244)

RECOMMENDATION: To be heard at the November 1, 2022 Work & Council Meeting. Please see supporting documents.

BACKGROUND: The applicant is requesting approval for a parcel of vacant land that is in the R1.8 zone along with a small portion of land that is in the RC zone to be rezoned to the LDR zone. The purpose of the rezone would be to allow for a new twin home to be built on the land that is being rezoned. The proposed rezone area will consist of approximately 0.22 acres of land. The smaller parcel A (seen in Attachment 2) is approximately 0.004 acres would be purchased by the applicant and added into the 0.217 acres of parcel B. The property is currently zoned R18 like the properties to the north and to the east. The other surrounding property that is on the south and west of the property is zoned RC.

FISCAL IMPACT:

PRESENTER'S NAME: Aaron Ardmore, Planner

REQUESTED DURATION OF PRESENTATION: 10 minutes

COMPATIBILITY WITH GENERAL PLAN POLICIES, GOALS, AND OBJECTIVES:

CITYVIEW OR ISSUE FILE NUMBER: PLRZ20220244

ORDINANCE 2022-.

AN ORDINANCE AMENDING THE ZONE MAP CLASSIFICATION OF APPROXIMATELY 0.22 ACRES OF REAL PROPERTY, GENERALLY LOCATED AT 1220 EAST 960 SOUTH, FROM ONE FAMILY RESIDENTIAL (R1.8) AND RESIDENTIAL CONSERVATION (RC) TO LOW DENSITY RESIDENTIAL (LDR). PROVOST SOUTH NEIGHBORHOOD. (PLRZ20220244)

WHEREAS, it is proposed that the classification on the Zone Map of Provo for approximately 0.22 acres of real property, generally located at 1220 East 960 South (an approximation of which is shown or described in Exhibit A and a more precise description of which will be attached hereto as Exhibit B after the Zone Map has been updated), be amended from One Family Residential (R1.8) and Residential Conservation (RC) to Low Density Residential (LDR); and

WHEREAS, on October 26, 2022, the Planning Commission held a duly noticed public hearing to consider the proposal, and after such hearing the Planning Commission recommended approval of the proposal to the Municipal Council by a 4:2 vote; and

WHEREAS, the Planning Commission's recommendation was based on the project design presented to the Commission; and

WHEREAS, on November 1 and 15, 2022, the Municipal Council met to ascertain the facts regarding this matter and receive public comment, which facts and comments are found in the public record of the Council's consideration; and

WHEREAS, after considering the Planning Commission's recommendation, and facts and comments presented to the Municipal Council, the Council finds (i) the Zone Map of Provo, Utah should be amended as described herein; and (ii) the proposed zone map classification amendment for the real property described herein reasonably furthers the health, safety and general welfare of the citizens of Provo City.

NOW, THEREFORE, be it ordained by the Municipal Council of Provo City, Utah, as follows:

PART I:

The classification on the Zone Map of Provo, Utah is hereby amended from the One Family Residential (R1.8) and Residential Conservation (RC) Zones to the Low Density Residential

(LDR) Zone for approximately 0.22 acres of real property generally located at 1220 E 960 S, as described herein.

PART II:

A. If a provision of this ordinance conflicts with a provision of a previously adopted ordinance, this ordinance shall prevail.

B. This ordinance and its various sections, clauses and paragraphs are hereby declared to be severable. If any part, sentence, clause or phrase is adjudged to be unconstitutional or invalid, the remainder of the ordinance shall not be affected thereby.

C. The Municipal Council hereby directs that the official copy of the Zone Map of Provo City, Utah be updated and codified to reflect the provisions enacted by this ordinance.

D. This ordinance shall take effect immediately after it has been posted or published in accordance with Utah Code 10-3-711, presented to the Mayor in accordance with Utah Code 10-3b-204, and recorded in accordance with Utah Code 10-3-713.

END OF ORDINANCE

EXHIBIT A – ZONE MAP



DEVELOPMENT SERVICES

Planning Commission Hearing Staff Report
Hearing Date: October 26, 2022

***ITEM # 1** Stephen Sowby requests a Zone Map Amendment from the R1.8 (One Family Residential) zone and the RC (Residential Conservation) zone to the LDR (Low Density Residential) zone in order to build a twin home, located at 1220 East 960 South. Provost South Neighborhood. Dustin Wright dwright@provo.org PLRZ20220244

Applicant: Stephen Sowby

Staff Coordinator: Dustin Wright

Property Owner: SILVER FOX CONSTRUCTION LLC

Parcel ID#: 22:036:0060 and 35:349:0003

Acreage: Approximately 0.22

Number of Properties: 2

Current Zone: R18 and RC

Proposed Zone: LDR

Council Action Required: Yes

Development Agreement: No

ALTERNATIVE ACTIONS

1. **Continue** to a future date to obtain additional information or to further consider the information presented. The next available meeting date is November 9, 2022, at 6:00 p.m.

2. **Recommend denial** of the requested Rezone Application. This action would not be consistent with the recommendations of the Staff Report. The Planning Commission should state new findings.

Current Legal Use:
Vacant land in a single-family residential zone.

Relevant History:
The neighboring property to the west is working with the applicant to sell a parcel of land that is 0.004 acres to increase the frontage of the property for these new lots.

Neighborhood Issues:
The applicant and the Council Office staff were not able to get a response from the neighborhood chair or vice chair to hold a neighborhood meeting. No issues have been presented to staff regarding this item.

Summary of Key Issues:

- The proposed rezone is supported by the Southeast Neighborhoods Plan for residential infill development.
- The neighboring property to the west has indicated that they have negotiated for a small part of their property to be sold to the applicant for this project.

Staff Recommendation:
Recommend approval of the requested Rezone Application to the Municipal Council with the following conditions:

1. Parcel A in Attachment 2 becomes part of a new lot through an approved subdivision plat.

BACKGROUND

The applicant is requesting approval for a parcel of vacant land that is in the R1.8 zone along with a small portion of land that is in the RC zone to be rezoned to the LDR zone. The purpose of the rezone would be to allow for a new twin home to be built on the land that is being rezoned.

The proposed rezone area will consist of approximately 0.22 acres of land. The smaller parcel A (seen in Attachment 2) is approximately 0.004 acres would be purchased by the applicant and added into the 0.217 acres of parcel B.

The property is currently zoned R18 like the properties to the north and to the east. The other surrounding property that is on the south and west of the property is zoned RC.

ANALYSIS

Sec. 14.020.020(2) establishes criteria for the amendments to the zoning title as follows: **(Staff response in bold type)**

> Before recommending an amendment to this Title, the Planning Commission shall determine whether such amendment is in the interest of the public, and is consistent with the goals and policies of the Provo City General Plan. The following guidelines shall be used to determine consistency with the General Plan:
>
> (a) Public purpose for the amendment in question.

Staff response: The proposed LDR zone will provide a compatible residential use for the area as infill on a vacant property.

> (b) Confirmation that the public purpose is best served by the amendment in question.

Staff response: The proposed use of the property will provide a harmonious transition between the existing residential uses on adjacent parcels.

> (c) Compatibility of the proposed amendment with General Plan policies, goals, and objectives.

Staff response: Rezoning the property will align with the future land use map for this area as shown in the Southeast Neighborhoods plan in attachment 4 of this report. While this specific parcel is not shown as LDR on the map it is immediately adjacent to it and the proposed use for the property as a twin home is one of the least intense uses in the zone. This would be consistent with the goals and objectives in chapter 3 of the Southeast Plan.

The General Plan states that the primary housing goal is to "provide adequate housing that meets population demands and supports the health, safety, and welfare of the public." Twin homes are a great option for helping with this goal.

(d) Consistency of the proposed amendment with the General Plan's "timing and sequencing" provisions on changes of use, insofar as they are articulated.

Staff response: There are no timing and sequencing that would be affected with this rezone request.

(e) Potential of the proposed amendment to hinder or obstruct attainment of the General Plan's articulated policies.

Staff response: The Southeast Plan encourages implementation of the preferred future land uses and amending the zoning map to be more consistent with the land use map. This will help implement the Plan rather than hinder any of the articulated policies.

(f) Adverse impacts on adjacent land owners.

Staff response: The land has been vacant and so any development on the property will create more impact than undeveloped land. Under the current zoning a single-family can be built. The types of impact from a twin home would be comparable to a permitted single-family use.

(g) Verification of correctness in the original zoning or General Plan for the area in question.

Staff response: The land use map from the General Plan has been reviewed and found to be correct for this area.

(h) In cases where a conflict arises between the General Plan Map and General Plan Policies, precedence shall be given to the Plan Policies.

Staff response: There are no conflicts noted by staff.

CONCLUSION

Staff has reviewed the proposed concept plan showing how the property would be divided to accommodate a new twin home with the proposed rezoning to LDR. A small parcel from the adjacent parcel is needed to meet the minimum lot standards for a twin home. For the rezone to function, the small parcel from the adjacent lot needs to be included. This property is zone RC. Only the portion of that lot that is proposed to be divided off needs to be rezoned and the remaining parcel will be stay zoned as RC.

ATTACHMENTS

1. **Aerial of Site**
2. **Sketch of area to be rezoned**
3. **Current Zone Map**
4. **General Plan Map**

Attachment 1 – Aerial of Site



Attachment 2 – Sketch of area to be rezoned

THIS RE-ZONE REQUEST INVOLVES TWO PARCELS. THE SMALL PARCEL A IS CURRENTLY PART OF THE RC ZONE. PARCEL B IS CURRENTLY A LEGAL SINGLE FAMILY LOT IN THE R-18 ZONE. THE TWO PARCELS WILL BE RE-ZONED AND COMBINED AS ONE PARCEL IN THE LDR ZONE. THE PARCEL WILL THEN BE DIVIDED INTO TWO LOTS FOR A TWIN HOME.

PARCEL A

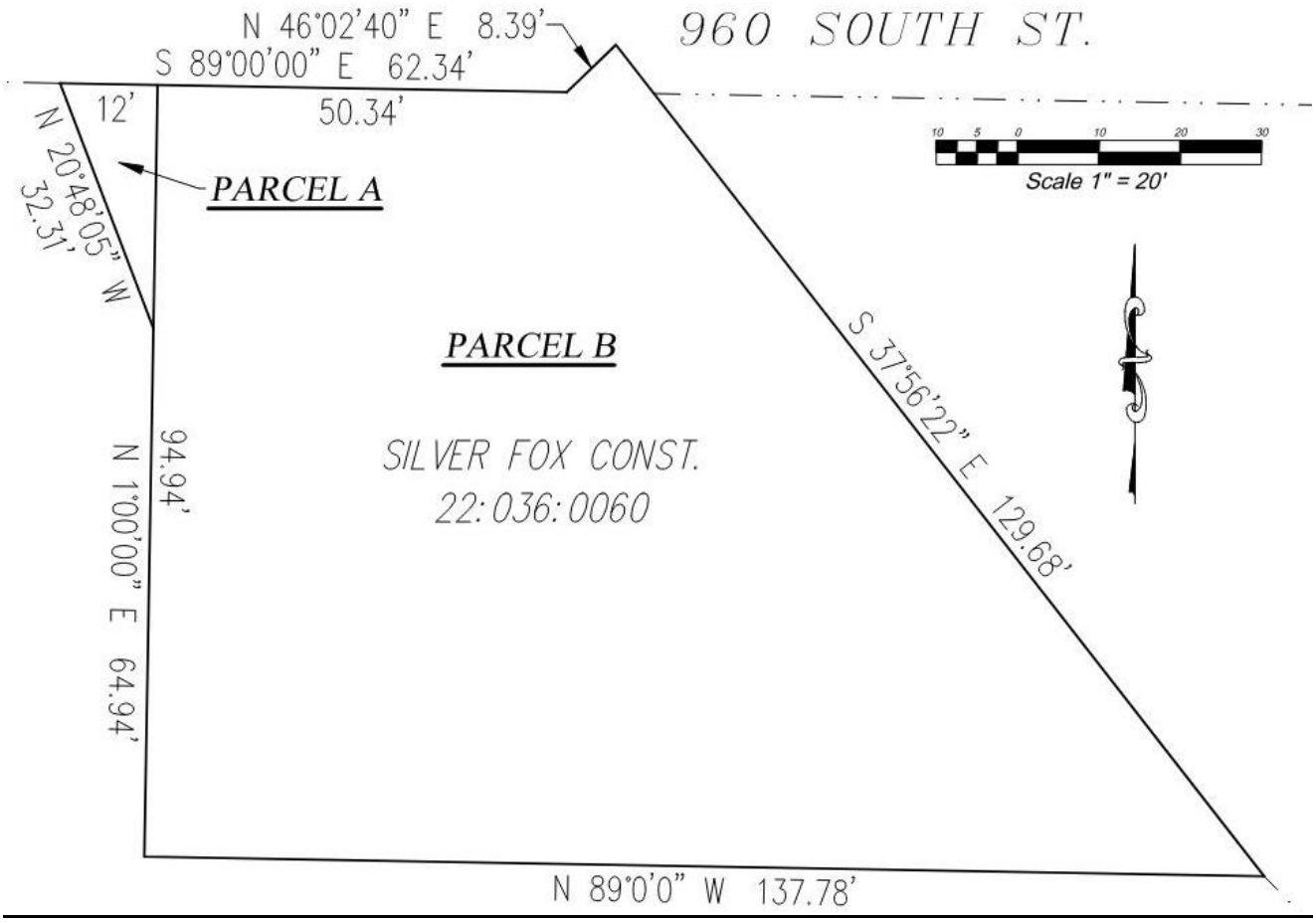
BEGINNING AT A POINT LOCATED NORTH 0°47'6" WEST ALONG SECTION LINE 1104.62 FEET AND WEST 157.51 FEET FROM THE SOUTHEAST CORNER OF SECTION 7, TOWNSHIP 7 SOUTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN; THENCE NORTH 20°48'5" WEST 32.31 FEET; THENCE SOUTH 89°0'0" EAST 12.00 FEET; THENCE SOUTH 1°0'0" WEST 30.00 FEET TO THE POINT OF BEGINNING.

AREA = 180 SQ FT OR 0.004 ACRES

PARCEL B

BEGINNING AT A POINT LOCATED NORTH 0°47'6" WEST ALONG SECTION LINE 1037.28 FEET AND WEST 21.81 FEET FROM THE SOUTHEAST CORNER OF SECTION 7, TOWNSHIP 7 SOUTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN; THENCE NORTH 89°0'0" WEST 137.78 FEET; THENCE NORTH 1°0'0" EAST 94.94 FEET; THENCE SOUTH 89°0'0" EAST 50.34 FEET; THENCE NORTH 46°2'40" EAST 8.39 FEET; THENCE SOUTH 37°56'22" EAST 129.68 FEET TO THE POINT OF BEGINNING.

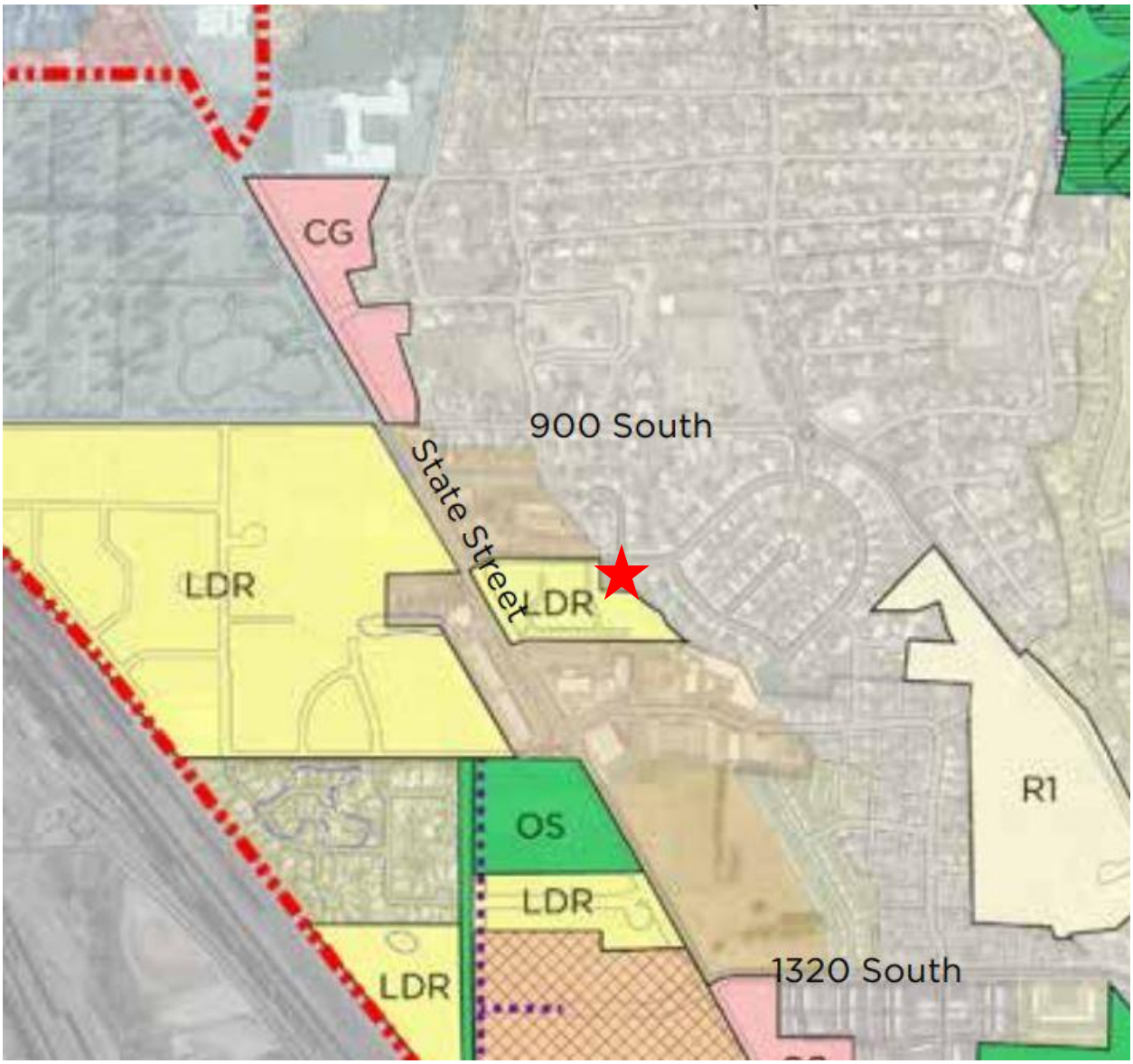
AREA = 9471 SQ FT OR 0.217 ACRES



Attachment 3 – Current Zone Map



Attachment 4 – General Plan Map



provo

WELCOME HOME

PLANNING COMMISSION

OCTOBER 26, 2022

ITEM 1*

Stephen Sowby requests a Zone Map Amendment from the R1.8 (One Family Residential) zone and the RC (Residential Conservation) zone to the LDR (Low Density Residential) zone in order to build a twin home, located at 1220 East 960 South.

Provost South Neighborhood

PLRZ20220244

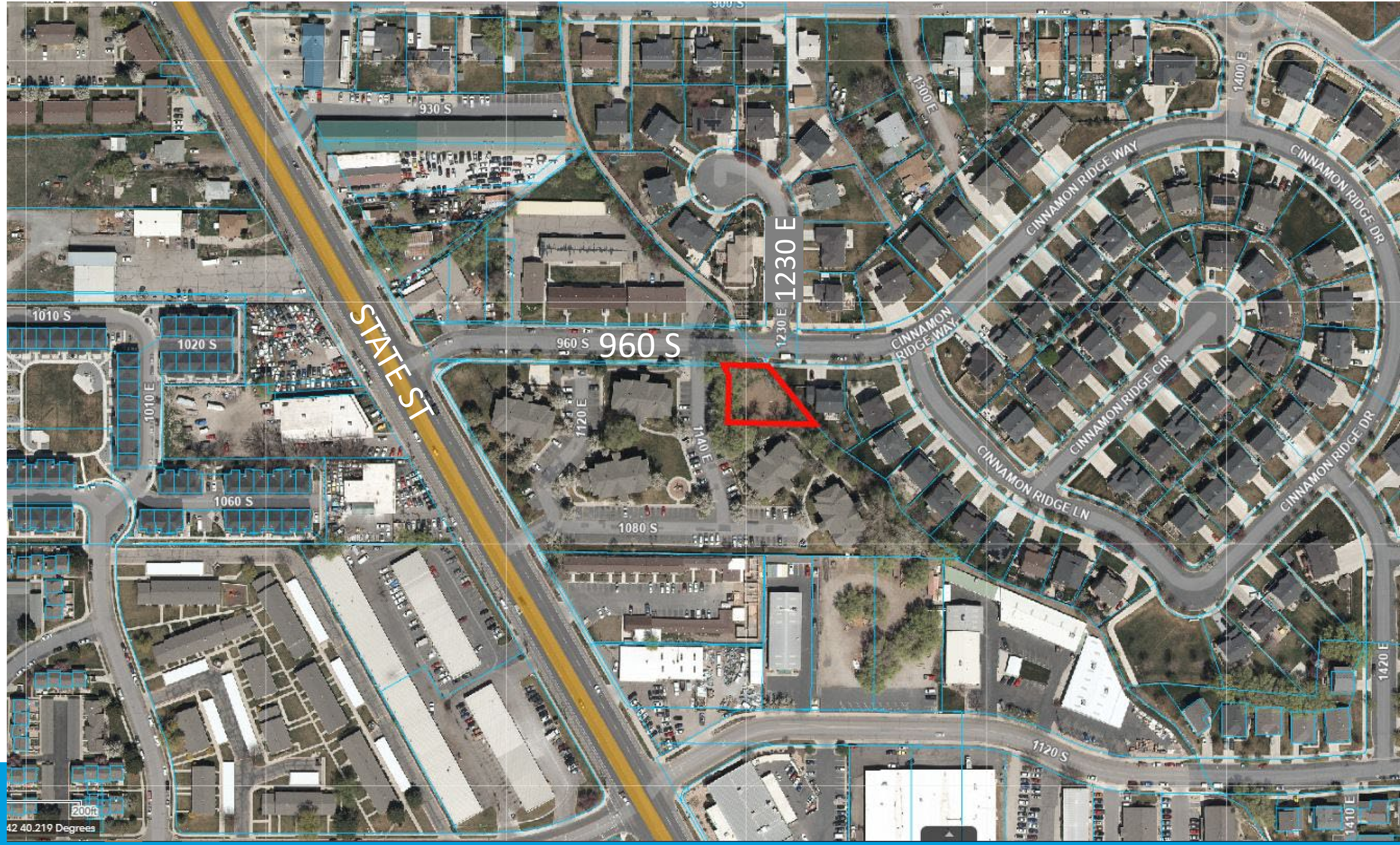
ITEM 2

Stephen Sowby requests approval of a Concept Plan for a new twin home in a proposed LDR (Low Density Residential) zone, located at 1220 East 960 South.

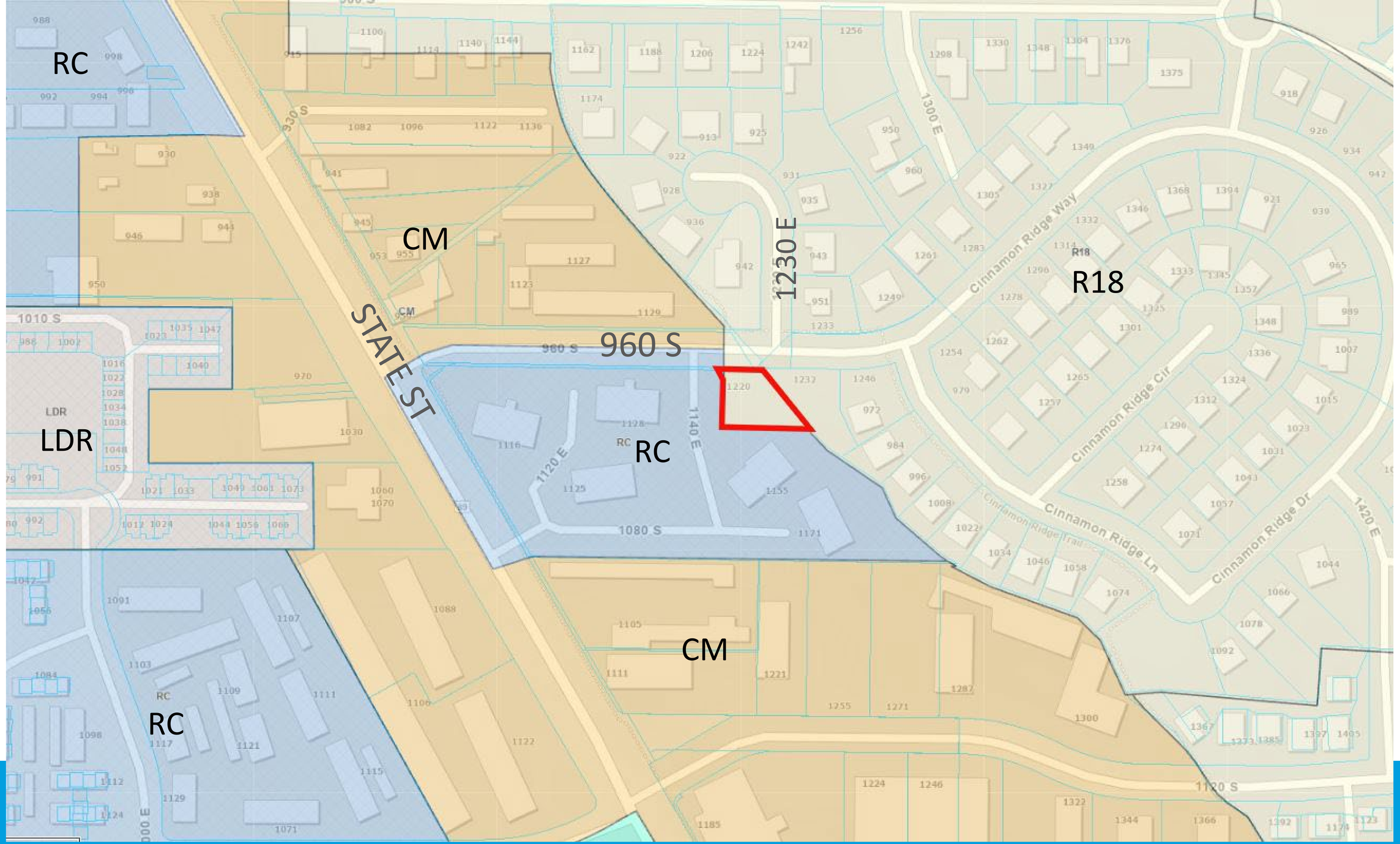
Provost South Neighborhood

PLCP20220245

1220 E
960 S

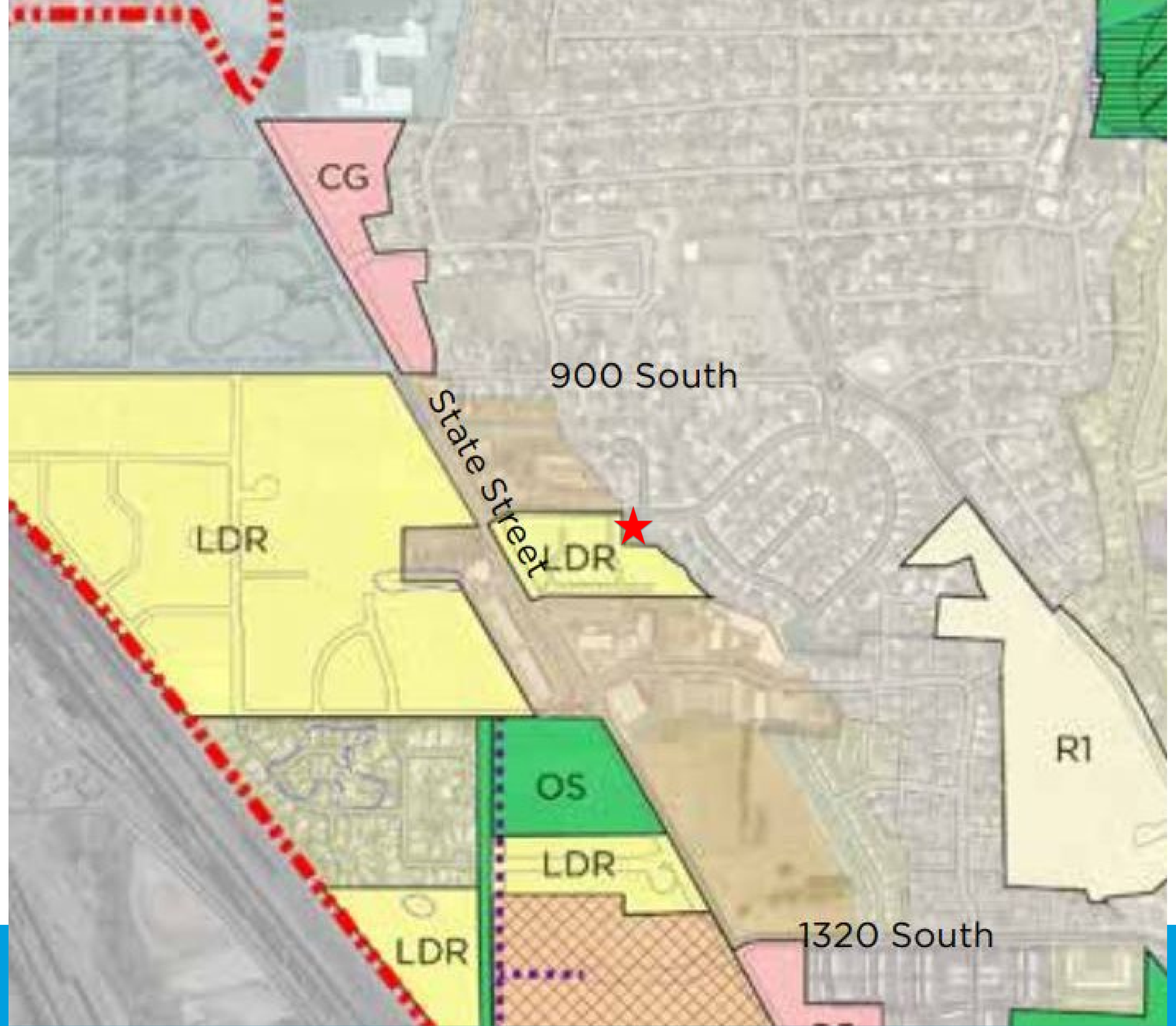

930 S
1300 E
1400 E
CINNAMON RIDGE WAY
CINNAMON RIDGE DR
1230 E
1010 S
1020 S
960 S
960 S
1230 E
STATE ST
CINNAMON RIDGE WAY
CINNAMON RIDGE CIR
CINNAMON RIDGE LN
CINNAMON RIDGE DR
1010 E
1120 E
1140 E
1060 S
1080 S
1120 S
1420 E
1410 E
200ft
42 40.219 Degrees

Zone Map

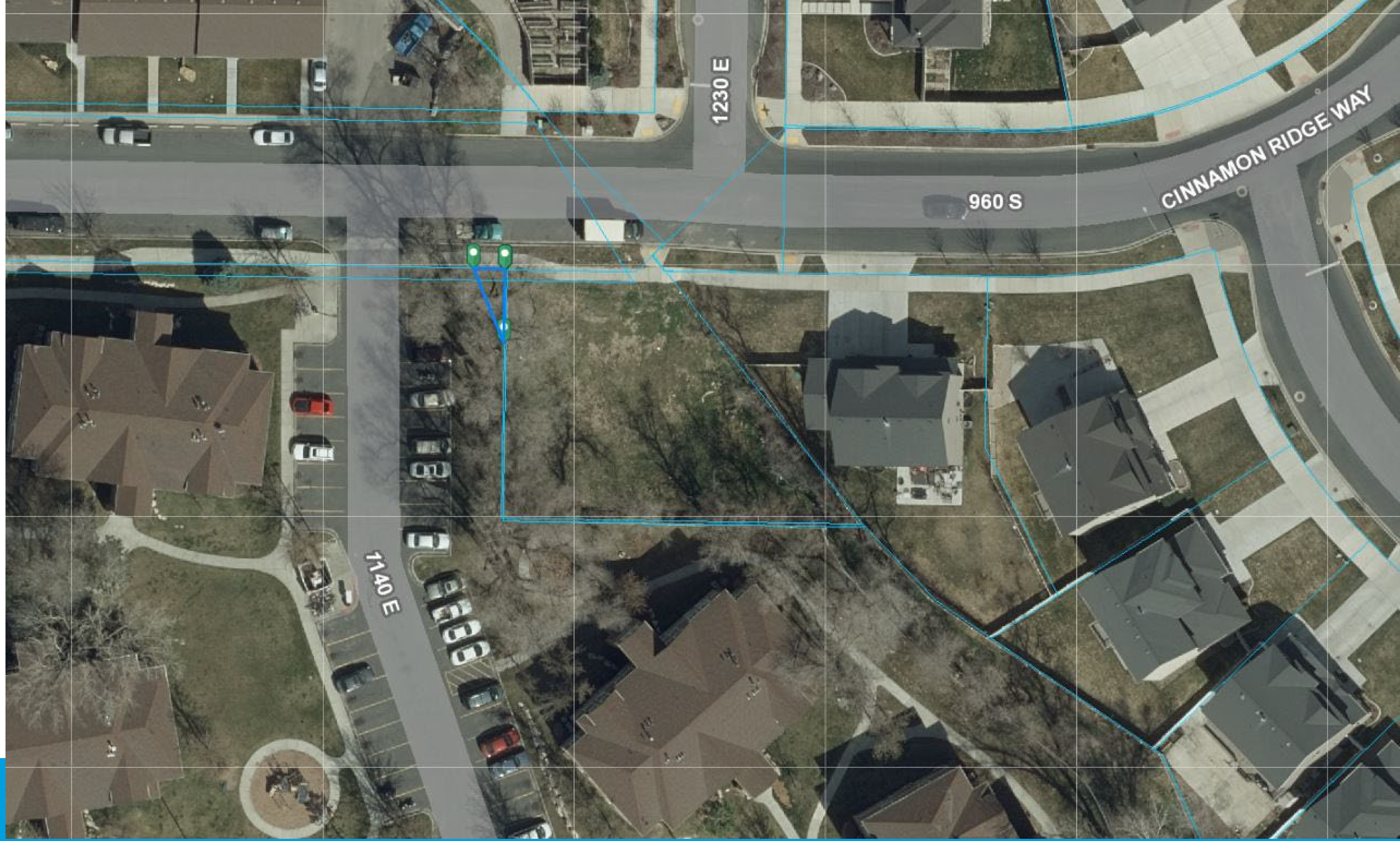

RC
CM
LDR
960 S
STATE ST
1230 E
1300 E
1140 E
1120 E
1080 S
1010 S
930 S
R18
Cinnamon Ridge Way
Cinnamon Ridge Cir
Cinnamon Ridge Ln
Cinnamon Ridge Dr
1420 E
1120 S

Future Land Use Map

★ Site Location



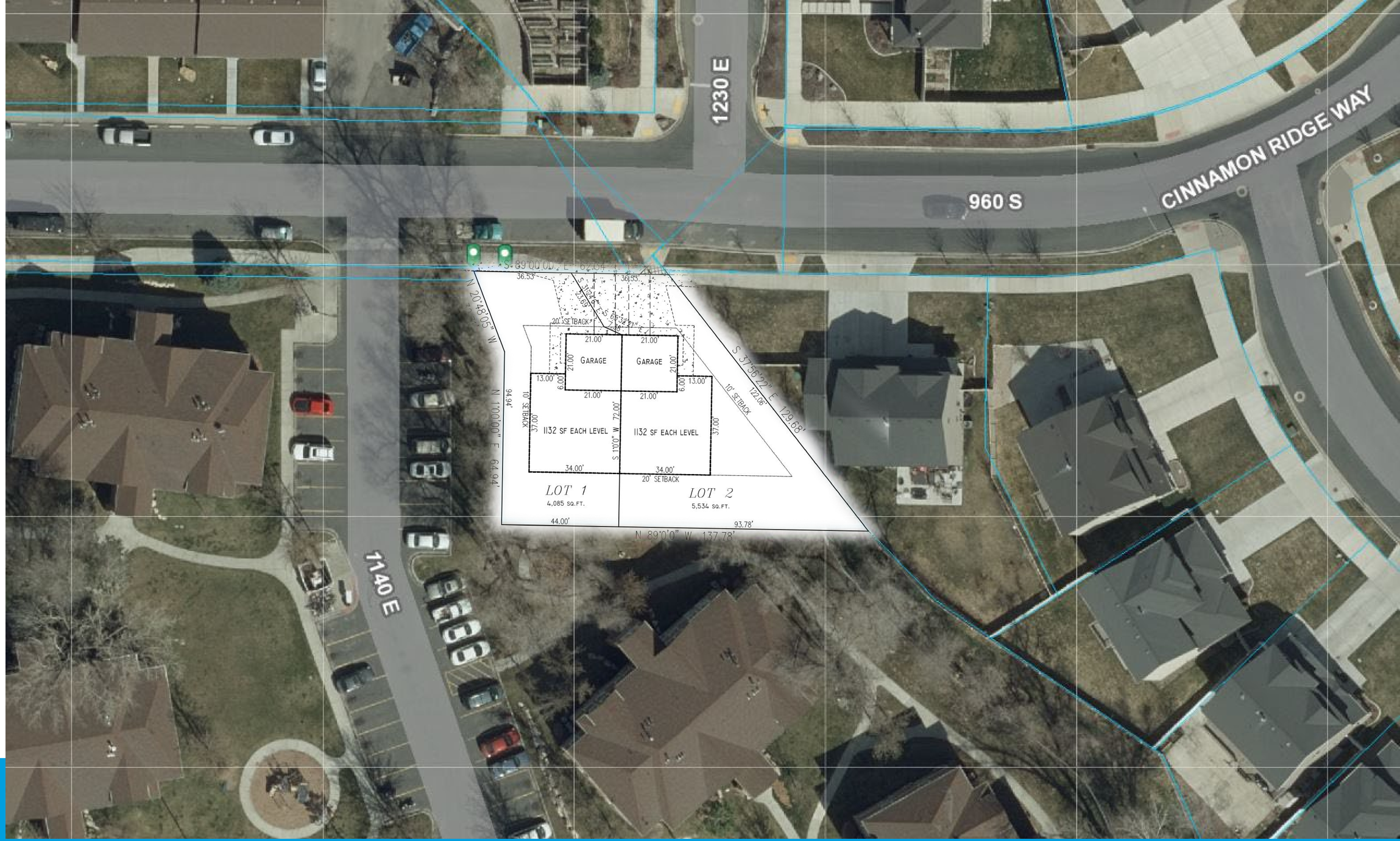
1220 E
960 S



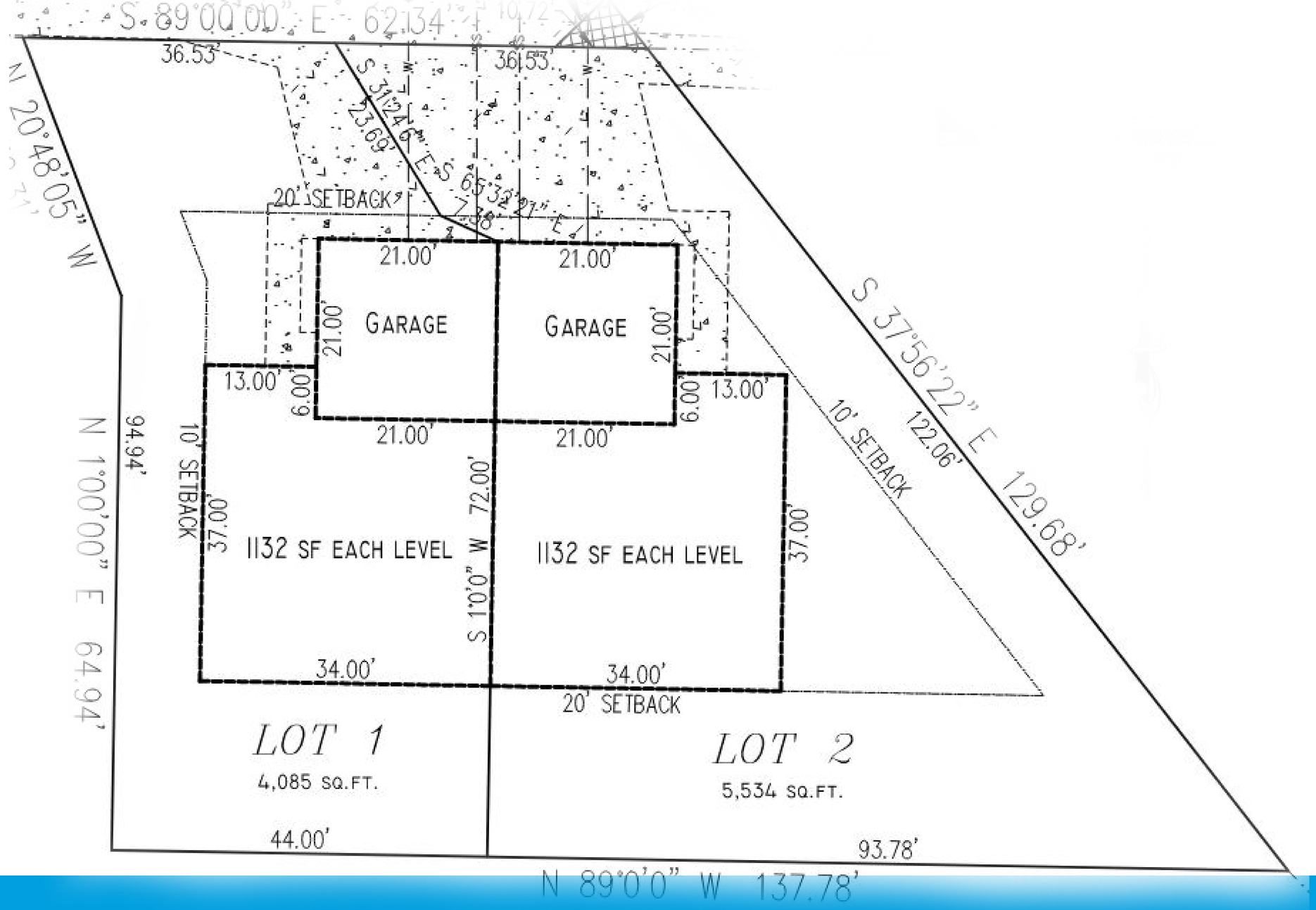
1220 E
960 S


1230 E
960 S
CINNAMON RIDGE WAY
1140 E
S 89°00'00" E 62.34'
12'
50.34'
N 20°48'05" W
PARCEL A
PARCEL B
SILVER FOX CONST.
22:036:0060
94.94'
N 1°00'00" E 64.94'
S 37°56'27" E 73.66'
N 89°0'0" W 137.78'

Concept Plan



Concept Plan

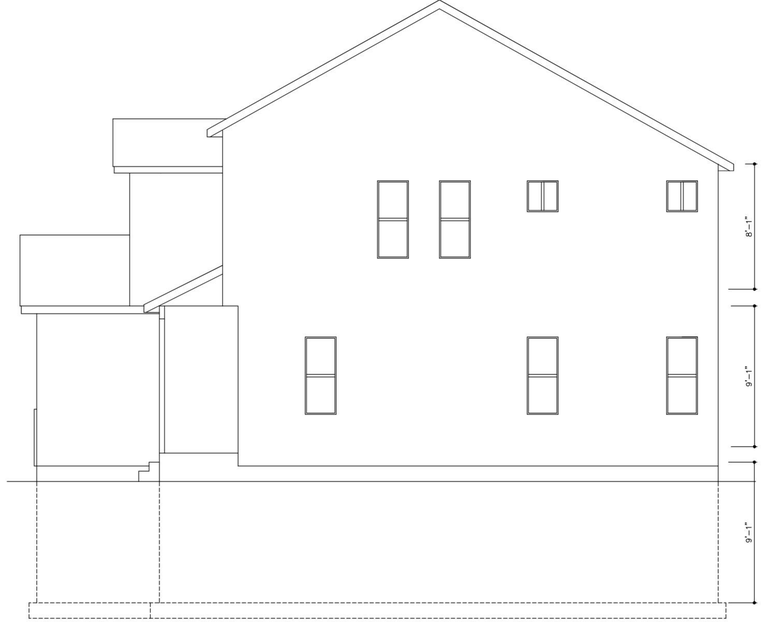


Elevations



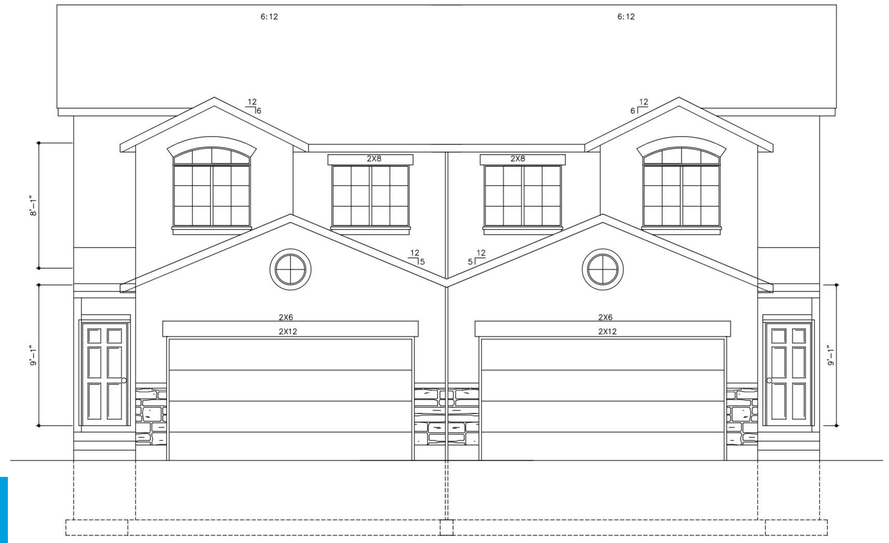
LEFT SIDE ELEVATION

SCALE 1/4" =1'-0"



RIGHT SIDE ELEVATION

SCALE 1/4" =1'-0"



FRONT ELEVATION

SCALE 1/4" =1'-0"



REAR ELEVATION

SCALE 1/4" =1'-0"

ITEM 1*

Stephen Sowby requests a Zone Map Amendment from the R1.8 (One Family Residential) zone and the RC (Residential Conservation) zone to the LDR (Low Density Residential) zone in order to build a twin home, located at 1220 East 960 South.

Provost South Neighborhood

PLRZ20220244

ITEM 2

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Provost South Neighborhood

PLCP20220245

Email sent Tuesday, October 25, 2022 12:26 AM (emailed to Planning Commission members)

Good Evening,
I would like to submit this letter to the Provo City Planning Commission as public comment in regards to Item 1 and Item 2 of the Planning Commission's Public hearing on Wednesday, October 26, 2022.

Dear Provo City Planning Commission,

My name is Kyle Stapley and I am a neighbor to an empty lot located at 1220 E 960 S in the South Provost neighborhood. It has come to our attention that a developer is petitioning the city to rezone this plot of land from R1.8 (One Family Residential and RC (Residential Conservation) to a LDR (Low-Density Residential) with the plans of building a twin home on the lot. Although we are very supportive of Provo adding more options for housing to our fast-growing city, we are very concerned with this proposal for the following reasons:

- The Southeast Provo Neighborhood Plan states, "Consistent with the General Plan policies to protect the single-family character of established neighborhoods, no properties currently zoned as R1 are recommended for changes in this plan… Current zoning regulations should be **strictly enforced** in the R1 zones to encourage clean, well-kept communities and regulate over-occupancy and parking issues facing the area" We feel changing the zoning of this lot does not align with these goals.
- The Southeast Provo neighborhood master plan also states one of its goals is to, "Protect established single-family residential neighborhoods and encourage well-kept neighborhoods while still providing housing opportunities for other demographics." The lot at 1220 E 960 S is clearly tied into the Cinnamon Ridge residential neighborhood and is clearly meant to be zoned for only a single family residence. The developer reached out to me in early 2022 requesting to purchase a very small portion of our land in hopes to meet the frontage code requirements to place a twin home on the land. We declined their proposal. According to the submitted concept plan, it appears they are now working to purchase enough land from the apartment complex to the west to meet that requirement. To me, the purchasing of very small slivers of land to meet minimum requirements shows this plot was not originally intended for anything more than a single-family home.
- Most of the neighborhood (including all single-family homes on 960 South) is managed by the Cinnamon Ridge HOA with clear CC&Rs and expectations to maintain that established neighborhood. Although this lot is not part of the HOA, nor do we expect it to be or follow its regulations, we do feel a multi-family residence would not be consistent with the character of the established neighborhood. We feel allowing a zone change for this lot does not align with the goals of maintaining single-family neighborhoods outlined in the Southeast Provo Plan. We feel strongly that Provo should maintain the stability of an established neighborhood and encourage more single-family homes, especially as there has been a strong focus on increasing the number of High-density residential housing in the southeast Provo Neighborhood as of late, especially west of State Street.
- Due to the Slate Canyon Apartments as well as the Jodel apartments on State Street and 960 South, the current parking situation on 960 South is already an issue as cars line the street up into the Cinnamon Ridge Neighborhood. This has caused concern with safety as well as degrading the character of the Cinnamon Ridge neighborhood. Attached is a photo taken Saturday, October 22, 2022 which shows the lines of parked cars already stretching well up 960 South passing 1220 E (the lot requesting a zone change) and 1232 E. to the corner of 960 S and

Cinnamon Ridge Lane. We believe adding another multi-family residence will further add to these parking and safety issues. These safety issues include increased traffic, limited visibility, and protecting children walking to Provost elementary through the popular Cinnamon Ridge trail, which children cross directly in front of the 1220 E property to access.

We hope the Planning Commission will be mindful of the Southeast Provo Neighborhood plan to fortify and strengthen the character of single-family residential neighborhoods and not allow the change of the zoning of 1220 E 960 S.

Thank you for your consideration,

Kyle Stapley
[redacted]
Provo, UT



Email sent Monday, October 24, 2022 12:11 PM (emailed to Planning Commission members)

I am writing to oppose the change to high density housing/twin home at the above address. I have lived in this neighborhood for more than 25 years and I've lived in Provo for nearly 30. This neighborhood is extremely crowded.

1) Righy across from this address is a pathway that dozens and dozens of children take on theirway home from provost elementary. Children cross the street right there. We cannot add high density housing to this area and introduce more cars that will endanger children crossing the street.

2) Right next to this address there are hundreds of people living in an apartment complex on both sides of the street. A neighbor recently was in an accident there because it's already so densely crowded.

3) Additionally, right at this address there is a curve in the road which makes it harder to see and would make it harder for residents to pull out.

4) On the opposite side of the street there is a mailbox that serves a dozen houses in the cul-de-sac. Cars stop frequently from both directions and make it harder for cars to pull out.

This is simply not a safe proposal.

I strongly oppose changing the zoning from low density to twin home at this site. Our neighborhood is already extremely crowded at this bottleneck and it would **especially endanger little children walking home from school.**
Sincerely, Becky Meng
--
Becky M.

Email sent Wednesday, October 26, 2022 5:42 PM (arrived too late to be emailed to PC members)

I would like to make a public comment asking you to vote against the proposed zoning changes for 1220 E 960 S Provo to build a twin home. I am the neighborhood co-chair of the Cottonwood Meadows development which is directly across the street from the property in question. A proposal to change the zoning to allow for a twin home has come up before and been rejected by the neighborhood and zoning commission. I would like to reiterate that I believe the majority of the people in the Cottonwood Meadows and Cinnamon Ridge neighborhoods are against a zoning change and would only like a single family home to go into that lot as intended by the original zoning.

That particular lot is on a busy street and is directly across from the entrance to our cul-de-sac. There is already a big problem with parking in front of that lot and on that street. Furthermore, everyone in our cul-de-sac needs to try to make a turn onto 960 at that spot. We cannot afford more people parking on that street. If a twin home is built, it will most likely add many more cars to 960 S at a particularly dangerous place. A single family home would be much more safe in terms of parking and driving. It is also directly across the street from a walking path where children walk to and from school every day as well as many neighbors. Many children cross the street right in front of 1220 S 960 E. It would create a bigger hazard for them to have more cars parking and driving in that spot.

Besides for safety reasons, I believe it is also unfair to the homeowners in the Cottonwood Meadows and Cinnamon Ridge neighborhoods to change the zoning. A twin home will attract mostly renters while a single family home (like the many single family homes in our neighborhoods) are almost entirely occupied by home owners. We believe it would depreciate our neighborhood to allow a twin home and it would decrease the appeal of our family neighborhood that we've worked very hard to create. The housing market is still going strong, and I believe a single family home will be much sought after and could still make the developers money. It seems to me that by trying to build a twin home, the developers are prioritizing their own bottom line over the safety and stability of our neighborhood.

I will be attending the Oct. 24 meeting remotely, but please consider my comment in your decision making and **vote against the zoning changes for 1220 E 960 S Provo.**

Sincerely,
Cristie Cowles Charles

Cristie Cowles Charles (she/her)
Adjunct Faculty, English Department
[redacted]
Brigham Young University
Provo, UT 84602
[redacted]