PAYSON CITY

DEVELOPMENT SERVICES DEPARTMENT

DEVELOPMENT GUIDELINES

As Adopted September 6, 2023

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INTRODUCTION

This document has been prepared and compiled by the Payson City Development Services Department. This document is to assist developers in understanding the current procedures for the review and approval of development/ construction projects 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 that 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.

The use of this document will allow the Developer 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 the adopted ordinances and standards of Payson City.

SECTION 1: GENERAL IMPROVEMENT REQUIREMENTS

1. GENERAL
    a. This section defines the general requirements for public improvements within Payson City.
    b. The improvements shall include all the improvements of a public need, but not limited to streets, striping and signage, culinary water, sanitary sewer, pressurized irrigation, drainage, street lighting, and storm drainage.
2. DEFINITIONS:
    a. CONTRACTOR shall refer to the person or persons actually performing the construction work.
    b. CUSTOMER shall refer to any individual requiring utility services (power, water, sewer, pressurized irrigation, etc.)
    c. DEVELOPER shall refer to the contractor, property owner or agent as applicable.
    d. CITY ENGINEER shall refer to the Payson City Engineer or an authorized representative.
    e. OWNER shall refer to subdividers, developers, contractors, or others responsible for the project within Payson City.
3. CONSTRUCTION DRAWINGS
    a. Complete and detailed construction plans and drawings of improvements shall be submitted to the Development Services Department.
    b. No construction shall start until plans have been reviewed and approved by the City Engineer, and other appropriate City officials.
    c. The following instructions are for the purpose of standardizing the preparation of drawings to obtain uniformity in appearance, clarity, size, and style.
        i. An electronic copy of the full-size plan set generated from the computer aided drafting program used for design shall be submitted to the Development Services Department for review.
        ii. Comments will be returned electronically to the Owner/Contractor for corrections.
    d. The plans and designs shall meet the Payson City Design Guidelines, and standard technical specifications and drawings hereinafter outlined.
    e. The Public Works Plan Review Checklist found in Section 16 of this document MUST be included in each submittal. Mark each item completed and provide reasons for any items not completed. Submittals without the checklist or with insufficient information will be returned as an incomplete submittal and will not be reviewed.
    f. At the completion of the Project, the Developer shall also provide a set of As-Built drawings in AutoCAD format by electronic disk or flash drive. Required As-Built drawings must be delivered before Final Acceptance is awarded and Bond returned.
4. UTILITY DISCLAIMER

    The locations, materials, slopes, flow line, rim elevations, and sizes of the existing underground or overhead utilities are shown as accurately as possible, but due to the age of the infrastructure and reporting

errors the sizes and locations of the utilities shown on the Payson City GIS map are approximate and should not be used for design purposes. The owner and contractor of a development project are responsible for contacting Blue Stakes to locate all the existing utilities and performing potholes to field verify the sizes, materials, and depths of the existing utilities prior to construction and ordering the correct materials to prevent errors in design sizes, materials, slopes, flow lines, and rim elevation shown on the GIS map. Failure to verify the sizes and ordering the building the wrong sized pipe or structure is the responsibility of the owner or contractor.

The engineering design of an open channel, pipe system, storm drainage detention/retention system, etc. should include hydraulics and hydrology calculations. Failure to comply with these requirements constitute Unprofessional Conduct under the Utah State Division of Professional Licensing rules and regulations.

5. PLAN SUBMITTAL - GENERAL
    a. North arrow.
    b. Scale bar.
    c. Consistent letter, stationing and numbering that reads left to right on the page and does not overlap with other text or leaders.
    d. Title block, located along the right side of each sheet to include:
        i. Project title.
        ii. Project location or address.
        iii. Date drawn.
        iv. Engineer, surveying, architect name, address, and phone number.
        v. Professional Engineer stamp box with signature and date.
        vi. Sheet number box.
        vii. Stamp plans "PRELIMINARY – NOT FOR CONSTRUCTION" until plans are approved.
    e. Existing property lines and easements.
    f. Construction notes with a reference to a Payson City or APWA Standard Detail.
    g. Plans must be stamped, signed, and dated by a Utah Licensed Professional.
    h. Call 811 Before You Dig or Blue Stake of Utah symbol.
6. TITLE SHEET
    a. Project name.
    b. Vicinity map.
    c. Drawing index table.
    d. Type of building information.
    e. Type of construction information.
    f. Type of occupancy information.
    g. Number of stories.

h. If the proposed building will include automatic fire sprinklers or not.
i. Required and provided parking stalls calculation table.
j. Required and provided ADA stalls calculation table.
k. Required and provided VAN ACCESSIBLE ADA stalls calculation table.
l. Site characteristic table with areas listed in square feet and acres.
m. Dumpster calculations.
n. Contact list:
    i. Developer.
    ii. Architect.
    iii. Civil Engineer.
    iv. Geotechnical Engineer.

7. GENERAL NOTES
    a. Payson City Standard Construction Notes.
    b. Project specific notes.
    c. Legend.
    d. Abbreviations.
8. ALTA SURVEY
    a. Existing property boundary.
    b. Existing property legal description.
    c. Benchmark.
    d. Basis of bearing.
    e. Section ties.
    f. All easements and encumbrances from title report with coordinating callouts.
9. TOPOGRAPHIC SURVEY
    a. Existing property boundary.
    b. Benchmark.
    c. Basis of bearing.
    d. Existing site features.
    e. Existing contours with labels.
    f. Ground shots on 50’ x 50’ grid.
    g. Existing utilities including rim and invert elevations.
    h. Floodplain information
    i. Wetland information with approved Army Corp Wetland Delineation
    j. Sensitive land information (hillside, steep slopes, earthquake zones, liquefaction, etc.)

10. HORIZONTAL CONTROL
    a. Proposed site improvements using dark lines.
    b. Existing conditions shown gray and/or dashed.
    c. Property boundary with bearings and distances.
    d. Existing and proposed street names/numbers and addresses.
    e. Existing and proposed public utility easements.
    f. Existing and proposed survey monuments.
    g. Parking lot dimensions including width and length.
    h. Parking lot driving aisle dimension.
    i. Location of proposed building(s) tied to two property corners.
    j. Building width and length dimension.
    k. Driveway width.
    l. Driveway location based on street stations.
    m. Location of proposed street lights.
    n. Location of proposed fire hydrants.
    o. Location of proposed garbage enclosure or dumpster/s.
    p. Parking lot pavement cross sections based on the soil report recommendations.
    q. Location and dimension of proposed commercial signs.
    r. Traffic signing and striping.
    s. Parking stalls striped using a four inch (4") solid white line.
    t. ADA parking stall striped using a four inch (4") solid blue line.
    u. ADA sign location.
    v. Existing and proposed curb and gutter.
    w. Existing and proposed sidewalks.
    x. Existing and proposed striping and signing.
    y. Location of mailbox or CBU.
    z. Construction notes with a reference to the APWA or Payson City standards.
11. GRADING AND DRAINAGE
    a. Layout of the subdivision or site plan.
    b. Table including the following information:
        i. Landscaping area in square feet and acres.
        ii. Roof area in square feet and acres.
        iii. Gravel area in square feet and acres.
        iv. Road area in square feet and acres.
    c. Proposed contours with labels using dark lines.

d. Existing contours with labels shown gray and/or dashed.
e. Show daylight line (proposed contour line matches existing contour line).
f. Size, material, slope, and length of proposed storm sewer lateral/s.
g. Size, material, slope, and length of the existing and proposed storm sewer main lines.
h. Size, material, and type of construction of the proposed and existing storm sewer manholes.
i. Size and location of the existing and proposed storm sewer inlets.
j. Size, material, and type of pretreatment device.
k. Manhole type and diameter.
l. Manhole flow line and rim elevation.
m. Plan view showing drainage sub-basins and the piping system.
n. Plan and profile sheets: 5x or 10x vertical exaggeration.
o. Benchmark information as measured on the field (not assumed).
p. Location of existing and proposed utilities including pipe crossings.
q. Drainage calculations showing the following:
    i. Pre- and Post-construction discharge rates
    ii. Cumulative peak flow calculations for each drainage sub-basin.
    iii. Capacity calculations for each segment of the pipe system.
    iv. Detention storage volume calculations.
    v. HGL elevations.
    vi. Orifice plate size calculations.
        - Size orifice plate to restrict outlet flow to pre-construction discharge rate or 0.2 CFS/ac, whichever is lower.
r. Construction notes with a reference to the APWA or Payson City standards.

12. CULINARY WATER AND PRESSURIZED IRRIGATION

a. Layout of the subdivision or site plan.
b. Size, material, and location of proposed individual or master water meters.
c. Size, material, and location of proposed water laterals.
d. Size, location, material, and type of joint of the proposed and existing water mains.
e. Size, location, material, and type of joint of the proposed and existing water isolation valves and major valves including pressure reducing valves.
f. Location of existing and proposed fire hydrants.
g. Location of existing and proposed blow offs and air vacs.
h. Location, type of joint, material, and size of proposed bends with thrust blocks.
i. Plan and profile sheets: 5x or 10x vertical exaggeration.
j. Benchmark information as measured on the field (not assumed).
k. Location of existing and proposed utilities including pipe crossings.

l. Construction notes with a reference to the APWA or Payson City standards.

13. SANITARY SEWER
    a. Layout of the subdivision or site plan.
    b. Location of nearest public drinking well if within a wellhead protection zone.
    c. Size, material, slope, and length of proposed sanitary sewer lateral.
    d. Size, material, slope, and length of the existing and proposed sanitary sewer main lines.
    e. Size, material, and type of construction of the proposed and existing sanitary sewer manholes.
    f. Size and location of the existing and proposed sanitary sewer cleanouts.
    g. Size, material, and type of grease traps, sand traps, monitoring box, etc.
    h. Manhole flow line and rim elevation.
    i. Plan and profile sheets: 5x or 10x vertical exaggeration.
    j. Benchmark information as measured on the field (not assumed).
    k. Location of existing and proposed utilities including pipe crossings.
    l. Construction notes with a reference to the APWA or Payson City standards.
14. POWER AND LIGHT
    a. Site plan view showing proposed improvement using a solid line.
    b. Site plan view showing existing features using a dashed line.
    c. Site plan view showing phased or future improvements using a solid faded line.
    d. Street names and/ or numbers.
    e. Location of power line trench one foot (1') behind the sidewalk.
    f. Minimum two feet (2') separation between communication and power line conduits.
    g. Location of existing and proposed street lights.
    h. Location of existing and proposed transformer boxes.
    i. Location of splice boxes.
    j. Location of sectionalizers.
    k. Location of switches.
    l. Location of recorded and proposed utility easements.
    m. Location of power poles and guy wires.
    n. Construction notes with a reference to the Payson City standards and the NESC.
    o. Add a note: "Trenching one foot (1') behind the sidewalk and four feet (4') to the top of conduit for primary from final grade."
15. FIRE AND RESCUE
    a. Site plan view showing proposed improvement using a solid line.
    b. Site plan view showing existing features using a dashed line.
    c. Site plan view showing phased or future improvements using a solid faded line.

d. Street names and/or numbers.
e. Type of building information.
f. Type of construction information.
g. Type of occupancy information.
h. Number of stories above grade plane.
i. Building height above grade plane.
j. If the proposed building will include automatic fire sprinklers or not.
k. Location of existing and proposed fire lines.
l. Location of the Fire Control Room (required for fire sprinklers).
m. Location of existing and proposed fire hydrants.
n. Fire lane.
o. Fire truck turning envelope.
p. Fire flow demand calculations.
q. Snow removal storage areas.
r. Traffic calming devices (speed bumps, chicanes, etc.)
s. Emergency vehicle turn around area according to IFC Appendix D.

16. STORMWATER POLLUTION PREVENTION PLAN
    a. Existing and proposed contour lines.
    b. Existing and proposed storm drain features.
    c. Delineated Jurisdictional Wetlands.
    d. Initial SWPPP showing structural and non-structural BMPs to be installed prior to and maintained during construction.
    e. Final SWPPP showing the removal of temporary BMPs and the long-term BMPs to be maintained until stabilization is complete.
    f. Certification statement stamped, signed, and dated by a Licensed Professional.
17. PLAN AND PROFILE
    a. Horizontal and vertical scale.
    b. Typical road cross sections.
    c. Road centerline stations (major every one hundred feet (100') and minor every fifty feet (50')).
    d. Horizontal curve information based on a twenty-five (25) mph design speed.
    e. Horizontal curve design according to AASHTO guidelines.
    f. Profile major grid every five (5) or ten (10) feet.
    g. Profile minor grid every one (1) or two (2) feet.
    h. Profile elevation labels.
    i. Plan view showing street and underground utilities layout.

j. Existing ground profile shown using a dashed line.
k. Proposed road profile shown using a solid line.
l. Proposed road slopes in percentage.
m. Sheet match-line information including station and following page numbers.
n. Proposed vertical curve lengths and K values according to AASHTO guidelines.
o. Proposed water line and pressurized irrigation including main sizes, type of joint, materials, size; location, type, material, and type of joint of isolation valves; fire hydrants assembly with location of water valve and pipe size; blow-offs location and size; PRV stations; water laterals location and dimension; and meter sizes.
p. Proposed sanitary sewer lines sizes, materials, slopes; elevation of rim, invert in and invert out; sewer lateral location, size, and material; pressure sewer lines and lift stations.
q. Proposed storm drain system including culverts, open channels size, slope, material; manhole location, size, and material; elevation on rim, flow line in and flow line out; curb inlets; end sections with riprap; detention basins and irrigation ditches.
r. Solved underground utility crossings (check water and storm drainage crossings).

18. DETAIL SHEET
    a. Each set of plans shall be accompanied by separate detail sheets.
    b. Detail sheet shall include all current Payson City Standard Details plus any special or specific construction details required for the project.

19. ADDITIONAL REPORTS AND FORMS
    a. Based on the type of applications, the following reports may be required:
        i. Title report.
        ii. ALTA Survey
        iii. Geotechnical report including percolation test taken from the proposed retention pond location.
        iv. Drainage report.
        v. Traffic Impact Study.
        vi. Approved Jurisdictional Delineation by the USACE.
        vii. Sensitive Land Overlay report.
        viii. Project Notification Form.
        ix. Land Disturbance Permit.
        x. Notice of Intent for Construction Activities.
        xi. Notice of Intent for Industrial Activities.
        xii. Dewatering Permit from the Utah State Division of Water Quality.
        xiii. Engineering Cost Estimation.
        xiv. Conveyance of Water Rights to Payson City.
        xv. Payment of inspection and material testing fees.

xvi. Utilities Notification form.

20. INSPECTION, TESTING AND QUALITY CONTROL

a. All construction work involving the installation of improvements in Payson City shall be subject to City inspections and testing as outlined in the quality control section of each specification.

b. Request for inspection:

i. Request for inspections shall be made to the Public Works Secretary by the person responsible for the construction.

ii. Notice shall be given forty-eight (48) hours in advance of the work starting.

iii. Any work shall be inspected prior to being backfilled or covered.

iv. The contractor shall be present for all inspections.

c. Construction completion inspection:

i. A final inspection shall be made by the Public Works Director, or a designee upon receipt of a request by the owner after all the construction work is completed.

ii. Any faulty or defective work shall be corrected by the persons responsible for the work within a period of thirty (30) days from the date of the City Engineer's Inspection Report defining the faulty or defective work.

d. Quality Control Testing:

i. Material testing shall be conducted by an independent laboratory, approved by the Public Works Director, at the owner's expense. Material testing and inspection fees must be paid in full before requesting a pre-construction meeting.

ii. All testing shall comply with the current ASTM, AASHTO, AWWA or Public Drinking Water Regulation standards and shall meet the minimum testing requirements as outlined in the specifications.

iii. Personnel performing test shall have the appropriate certifications to perform such tests.

iv. The cost of any and all re-testing required to bring materials into specification shall be borne by the owner.

v. The time and location of all tests shall be approved by the Public Works Director's office.

vi. If determined necessary by the Public Works Director or a designee, additional material testing can be required.

e. Test report:

i. Written test results will be required for review by the Public Works Director after each portion of the work (i.e., pipeline construction, earthwork, curb, gutter, sidewalk, roadway construction, etc.)

21. AS-BUILT DRAWINGS

a. Before final inspection, the Contractor shall provide a complete set of as-built drawings that includes all items specified on the construction drawings.

b. The as-built drawings shall show all improvement dimensions as constructed in the field.

c. A Pond Certification must be completed by the design engineer for all detention and retention basins. A plan showing the design and as-built contours of the basins must be included along with a Stage-Storage Table.

d. The as-built drawings shall be submitted on a flash drive saved in AutoCAD and Adobe Acrobat format.

e. No bond retainer shall be released until as-built drawings are received by the Public Works Director.

22. GUARANTEE OF WORK

a. The Owner shall warrant and guarantee that the improvements provided for hereunder, and every part thereof, will remain in good condition for a period of **one (1) year** after the date of the acceptance of the project by the City.

b. The Owner shall make all the necessary repairs and maintain the improvements and every part thereof in good condition during the specified time at no cost to the City.

c. The guarantee hereby stipulated shall extend to and include, but shall not be limited to:

i. Road base.

ii. Asphalt or concrete pavement.

iii. All pipes.

iv. Pipe joints.

v. Valves.

vi. Manholes.

vii. Backfill

viii. Curb

ix. Gutters

x. Sidewalks

xi. Striping and signage.

d. Whenever, in the judgment of the Public Works Director, said work shall be in need of repair, maintenance, or reconstruction, written notice shall be served upon the Owner and thereupon the Owner shall undertake and complete such repairs in a timely manner.

e. If the Owner fails to do so within thirty (30) days from the date of the service of such notice, the Public Works Director shall have such repairs made and the cost of such repairs shall be paid by the Owner including any additional expenses incurred by the City.

23. TRAFFIC CONTROL AND ROAD CLOSURES

a. The Contractor shall provide and maintain all necessary signs and barricades needed for traffic control according to the MUTCD guidelines, latest edition.

b. All necessary precautions shall be taken to protect the work and to safeguard the public.

c. Street road closures shall be approved by the City Engineer or his designee.

d. Sidewalk closures shall include a walkable path for people with disabilities.

24. SURVEY MONUMENTS
    a. Standard survey control monuments shall be installed in all streets to be dedicated for public use.
25. PRE-CONSTRUCTION MEETING
    a. All work completed in the right of way shall use a qualified contractor.
        i. Contractor shall be licensed in accordance with state laws.
        ii. The City may refuse a contractor from public works construction for any of the following reasons from the past 5 years:
            - Failure to pay suppliers or subcontractors on previous work.
            - Poor communication.
            - Threatening or intimidating communications.
            - Willful and deceptive efforts to perform defective or substandard work.
            - Defective or substandard work on previous projects.
            - Unethical acts.
        iii. Contractor shall have proper insurance.
            - Liability: One million dollars ($1,000,000) per person, two million dollars ($2,000,000) per event.
            - Workers Compensation Insurance.
    b. A preconstruction meeting is required on all development or public works construction projects.
    c. Verify the following:
        i. Land Disturbance Permit has been issued.
        ii. Stormwater Pollution Prevention Plan is approved, and UPDES NOI has been issued.
        iii. SWPPP BMPs are installed and approved.
        iv. Other necessary permits have been obtained.
        v. Conveyance of water rights to Payson City has been completed.
        vi. Payment of inspection and material testing fees has been completed.
        vii. Payson Fire Department Review approval letter signed.
        viii. When applicable, developer agreements are signed and executed.
        ix. When applicable, final plat application is approved.
        x. When applicable, performance guarantee bond has been posted.
    d. Attendance is required by contractor project manager, site supervisor(s), design engineer, consultants, significant subcontractors, significant suppliers, Public Works Director, Development Engineer, and City Inspectors.
    e. Discuss the following topics:
        i. Site supervisors and 24-hour contacts.
        ii. Compliance with OSHA guidelines.
        iii. Coordination.

iv. Schedule.
v. Required material testing submittals.
vi. Geotechnical issues.
vii. Survey issues.
viii. Coordination of inspections.
ix. Specifications & standards.
x. Request for partial and final bond releases.

26. IMPROVEMENTS SEQUENCE

a. City improvements shall be installed in the following sequence, unless otherwise directed by the Public Works Director:
   i. Rough grading
   ii. Sanitary Sewer
   iii. Culinary Water
   iv. Pressurized Irrigation
   v. Storm Sewer
   vi. Dry Utilities (In Public Right-of-Way)
   vii. Subbase
   viii. Curb and Gutter
   ix. Road Base
   x. Asphalt
   xi. Dry Utilities (In Easements)
   xii. Sidewalks and Trails
   xiii. Manholes and Valve Collars
   xiv. Survey Monument
   xv. Street Signs
   xvi. Street Lights
   xvii. Clean Up
b. Contractors and Developers shall ensure that all the improvement items previous to paving the road are installed, inspected, surveyed, and approved by the City Inspector.
c. No road cut permits will be issued on new City streets for **five (5) years** from the date the street was accepted by the City.

27. UPDES STORMWATER PERMIT

a. A UPDES (Utah Pollutant Discharge Elimination System) Permit from the State of Utah is required for all projects that disturb greater than 1 acre or are less than one (1) acre and part of common plan of development or sale that is greater than 1 acre.
b. A Notice of Intent (NOI) is required prior to construction.

c. A Notice of Termination (NOT) is required once stabilization has been achieved and before final approval is awarded.

28. BUILDING PERMITS

a. No building permit shall be issued for a subdivision until:

i. Road base is placed, graded, compacted, and approved on the entire road surface.

ii. Curb and gutter is in place.

iii. Street signs are installed.

iv. All underground utilities are in place, accepted, and functional.

v. Fire hydrants are installed and in full operation.

vi. It is reasonable to expect the subdivision improvements to be completed prior to the occupancy of the buildings.

29. CERTIFICATE OF OCCUPANCY

a. A developer shall not sell any portion of an approved development without informing the prospective buyer or builder that occupancy may not be obtained until all permanent improvements are installed and approved by the City.

SECTION 2: SURVEYING

1. SURVEYING STANDARDS
    a. All surveying of property lines and construction surveying for the locating of construction improvements shall be conducted under the direct supervision of a Utah Professional Licensed Surveyor (PLS).
2. HORIZONTAL CONTROL
    a. Payson City maintains all its data in the North American Datum of 1983 (NAD83) Utah Central Zone State Plane (U.S. Feet) coordinate system, also known as the Grid System.
    b. All construction data shall be provided to Payson City in this coordinate system.
    c. If data submitted to Payson City is not in this coordinate system and City staff must perform a transformation on the data received, the Owner will be billed for the time of the staff.
    d. Surveyors shall not develop a local coordinate system.
    e. There should be at least two principal corners in a subdivision plat and possibly more for uniquely shaped subdivisions with the intent of providing state plane data to define the major extents of the subdivision.
3. VERTICAL CONTROL
    a. All vertical data shall be in accordance with the North American Vertical Datum of 1988 (NAVD 88).
    b. Surveyors shall not develop a local vertical datum.
4. SURVEY MONUMENTS
    a. Monument classifications shall be as follows:
        i. Class I –When within pavements use ring and lid per APWA Std. Plan No. 274. Outside of paved roadways may use monument cap and base per APWA Std. Plan No. 272.
        ii. Class II – 18” #5 Rebar and aluminum or plastic cap stamped with PLS number driven flush to pavement surface or within 2” of ground surface.
        iii. Class - III a metal plug drilled and set into the back of curb at the projected property line.
5. SURVEY MONUMENT INSTALLATION
    a. Subdivision or Property Corner Monuments shall be set at:
        i. All angle points in survey boundary (Class II).
        ii. All points of tangency and points of curvature on and along survey boundary (Class II).
        iii. All Lot corners.
        iv. Three hundred foot (300’) intervals, unless otherwise approved. If line of sight is not obtainable within a three hundred foot (300’) interval, then monuments will be required to be closer together unless otherwise approved by the City Engineer.
        v. When it is not possible to set a property corner fronting the street a Class III monument will be set.

b. Section Corner replacements shall be Class I monuments. Any Section Corner replacement will be done under the supervision of the City or County Surveyor. Monuments must be set prior to the final acceptance of the improvements.

c. Where hard rock or other physical obstructions are encountered, monument length sufficient to resist removal may vary within reasonable limits.

6. EASEMENTS

a. An American Land Title Association (ALTA) Survey is required for all developments. All existing parcel boundaries, easements, monuments, etc., shall be plotted on the ALTA Survey and labeled in accordance with the Title Report.

b. All plats shall show the existing and proposed easements. When easements are to be provided for a lot of record, a Word document containing the easement legal description and exhibit map shall be provided to the City. The legal description must be tied to a Section Corner and include a basis of bearing. City Staff will review the legal description and (upon acceptance) will insert it into a formatted City Easement and provide the applicant with a signature copy of the Easement. After the Easement is signed and notarized the applicant will return the Easement to the City for recording at the Utah County Recorder's Office.

7. PLATS

a. Subdivisions: All subdivision plats shall be in accordance with the Payson City Subdivision Ordinance.

b. Right-of-Way Dedication: All roadways to be dedicated shall have a plat prepared in accordance with the standards for subdivision plats as defined in the City's subdivision ordinance.

8. CONSTRUCTION SURVEYING

a. All public improvements shall be installed based on construction survey stakes placed under the direction of a Utah Professional Licensed Surveyor.

b. Survey stakes for the construction of streets shall be installed at an interval no greater than one hundred feet (100').

c. Fire hydrants shall not be installed without survey stakes to establish the finished grade and the exact location of the hydrant to prevent improperly depressed or elevated hydrants.

d. All curb returns shall be installed based on a radius point provided by the surveyor.

SECTION 3: CULINARY WATER

1. WATER DESIGN STANDARDS
    a. All water system installation and design must conform to Payson City Water System Master Plan and the Utah State Administrative Code, Rule R309-510.
2. HYDRAULIC DESIGN CRITERIA
    a. Payson City may use a hydraulic model to verify that the required fire flow and water demand for the development are available in accordance with Payson City level of service requirements and Utah State Division of Drinking Water requirements. The proposed water system may need modifications to comply with the requirements per the hydraulic model analysis.
    b. The minimum fire flow shall be two thousand (2,000) gallons per minute (gpm).
    c. The fire flow may be increased as determined by the Fire Chief and based on the size of the proposed building(s), type of building, type of occupancy, and type of construction.
    d. The normal minimum operating pressure in all parts of the system shall be forty (40) psi.
    e. The anticipated maximum operating pressure of the system shall be one hundred to one hundred twenty (100 – 120) psi.
    f. The proposed water system shall be designed to conform to the pressure zones shown on the Payson City Water Master Plan. The developer is responsible for installing pressure reducing valves at pressure zone boundaries within or adjacent to the development.
3. CULINARY WATER PIPE SIZE AND TYPE
    a. Minimum allowable main line size is eight inches (8”) in diameter.
    b. Pipe type for water lines less than or equal to twelve inches (12”) shall be PVC pipe (C-900) or High-Density Polyethylene (HDPE).
    c. Horizontal clearance between a water main and sewer lines shall be a minimum of ten feet (10’) edge to edge per Utah Administrative Code R317-3-2 and R309-550.
    d. Minimum cover required shall be forty-eight inches (48”) to top of pipe.
    e. The culinary water main lines shall be installed on the North and West side of the street.
    f. The culinary water main lines shall be installed ten feet from the sewer main in the north or west side of the street.
    g. All unused water service line shall be abandoned at water main line.
4. CULINARY WATER VALVES
    a. Water valves shall be located at all intersections and shall equal number of legs.
    b. Water valves shall be placed at intervals not to exceed eight hundred feet (800’).
    c. Water valves shall be placed within ten feet (10’) of the upstream and downstream ends of casing pipes.
    d. Blow-offs shall be placed at the ends of water lines and at low points in the system.

e. All valves larger than twelve inches (12") shall be butterfly design. Valves twelve inches (12") and smaller shall be gate valves.
f. Direct bearing thrust blocks shall be comply with APWA Standard Plan 561.
g. Cover collar for water valve box shall comply with Payson City Standard Plan SD-3.
h. Water valve frame and cover shall comply with APWA Standard Plan 502 or 503 respectively.
i. Install an approved backflow prevention device as per Payson City Standard Drawings or APWA Standard Drawings (latest edition).
j. Air-vacuum valve stations shall be placed at high points on transmission lines and at other locations as required for proper system operations.
k. Pressure reducing valve stations shall be placed at pressure zone boundaries as shown in the Payson City Water Master Plan.

5. CULINARY WATER LATERALS AND METERS
   a. Minimum size water service line and meter is one inch (1") diameter.
   b. Install one inch (1") service connections, meters, and meter vaults according to Payson City Standard Plan W-5.
   c. Install one and a half inch (1-1/2") and two inch (2") service connections, meters, and meter vaults according to Payson City Standard Plan W-6.
   d. Services larger than two inches (2") shall follow APWA Standards and Specifications.
   e. All unused water service lines shall be abandoned at water main line.
   f. The water service line and meter for commercial, industrial, and manufacturing should be calculated based on the water demand and number of automatic sprinkler heads.
6. FIRE HYDRANTS
   a. Fire hydrant maximum spacing shall be five hundred feet (500') in residential areas and at the end of all dead-end lines.
   b. Fire hydrant maximum spacing shall be three hundred feet (300') in commercial, industrial, and manufacturing areas.
   c. Fire hydrant installation shall comply with Payson City Standard Plan W-1.
   d. Valves are required at main lines for all fire lines and fire hydrants.
   e. The location and the number of fire hydrants must be approved by the Payson City Fire Chief.
7. EASEMENTS
   a. Minimum twenty foot (20') public utility easements (PUE) shall be provided for all public water mains installed outside of the public right-of-way.

SECTION 4: PRESSURIZED IRRIGATION

1. GENERAL
    a. Designed in accordance with all culinary water system requirements with the following exceptions:
        i. Design pressures should be ten (10) psi lower than the culinary water system in the same pressure zone unless otherwise approved. The typical minimum operating pressure in all parts of the system shall be forty (40) psi.
        ii. The pipe material shall be colored purple, or a discrete color different from the culinary water main.
        iii. There shall be no cross connection between secondary and culinary water systems.
        iv. Culinary water is not to be used for irrigation purposes.
    b. Shall be installed at a minimum depth of thirty inches (30”).
    c. Shall be installed on the South and East side of the street.

SECTION 5: SANITARY SEWER

1. SEWER DESIGN STANDARDS
   a. All sanitary sewer installation and design shall comply with the Payson City's Wastewater Collection System Master Plan, and Utah State Administrative Code, Rule R317-3-2.
2. HYDRAULIC DESIGN CRITERIA
   a. Sewer lines shall be designed to maintain a flow velocity of two feet per second (2 fps) during peak flows.
   b. Where design velocities are projected to be greater than fifteen feet per second (15 fps), the sewers and manholes shall be protected against displacement by erosion and impact.
   c. Sanitary sewers shall be designed to carry the peak discharge as specified below:
      i. Laterals and collector mains: 400 gallons/capita/day
      ii. Interceptor and outfall mains: 250 gallons/capita/day
   d. Minimum Manning's "n" value is 0.012.
   e. Buoyancy of sewers shall be considered, and flotation of the pipe shall be prevented with appropriate construction where high groundwater conditions are anticipated.
   f. Velocity Calculations for gravity sewers:

      Manning's Equation (Gravity):

      $$V = \frac{1.486}{n} \times (R_H)^{\frac{2}{3}} \times S^{\frac{1}{2}}$$

      Where: V = velocity in feet/second

      n = coefficient of roughness (Manning), n = 0.013

      S = slope of energy grade line, ft/ft

      R_H = hydraulic radius, ft

      $$= \frac{\text{cross-sectional area of flow } (\text{ft}^2)}{\text{wetted perimeter}} \text{ or } \frac{\text{diameter (in.)}}{48}$$

   g. The evaluation criteria for sanitary sewer pipelines vary by pipe size:
      i. Pipeline capacity twelve inch (12") diameter and smaller: Peak flow in the pipe must be less than fifty (50) percent of the full flow pipe capacity.
      ii. Pipeline capacity fifteen inch (15") diameter and larger: Peak flow in the pipe must be less than seventy-five (75) percent of the flow pipe capacity.
   h. Design Peak Hourly Flow is the largest volume of flow to be received during a one-hour period expressed as a volume per unit time.

i. Peak Hour Factor must be calculated using the following equation:

$$\text{Peak Hour Flow} = \frac{18 + \sqrt{P}}{4 + \sqrt{P}}$$

In which P equals population in thousands

3. SANITARY SEWER PIPE SIZE AND TYPE
   a. Minimum main line size is eight inches (8") in diameter.
   b. Minimum depth of a sewer main, to top of pipe, will be not less than forty-eight (48") below subgrade of roadway.
   c. Sanitary sewers shall be designed of sufficient depth to permit sewer laterals from basements to be connected. Exceptions may be granted in subdivisions or areas in which no basements are to be constructed. A note shall be made on the plat to prohibit basements in these areas.
   d. Allowable sanitary sewer main pipe material for all projects shall be green PVC SDR 35, or High-Density Polyethylene (HDPE).
   e. Horizontal clearance to any culinary water line shall be at least 10 feet (10') edge to edge per R309-550 and R317-3-2.
      i. Any other utility crossing the sewer main shall do so as close to a right angle as possible.
      ii. For waterline crossings, the water shall be a minimum of eighteen inches (18") above the sewer.
   f. Unless otherwise accepted and approved by the City Engineer, the minimum slopes shall be the following:
      i. Eight inch (8") sewer lines: 0.40%
      ii. Ten inch (10") sewer lines: 0.28%
      iii. Twelve inch (12") sewer lines: 0.22%
      iv. Fifteen inch (15") sewer lines: 0.15%
      v. Eighteen inch (18") sewer lines: 0.12%
      vi. Twenty-one inch (21") and larger sewer lines: 0.10%
   g. Sewer main lines shall be located along the centerline of the road.
4. SANITARY SEWER MANHOLES
   a. Sewer manholes shall be installed:
      i. At a maximum spacing of four hundred feet (400').
      ii. At all changes in grade, size or alignment, and at all intersections with other main lines.
      iii. At the end of main lines (no cleanouts allowed).
      iv. Manholes are required on laterals six inches (6") or larger at the intersection with a sewer main line.
   b. Sewer manholes shall be sized based on the following:
      i. Manholes shall conform to Payson City Standard Plan SS-1.

ii. Minimum five foot (5') diameter manholes are required for all sanitary sewer systems owned and/or maintained by Payson City.

iii. Six foot (6') diameter manholes are required for all configurations with any inlet or outlet pipe of diameter greater than fifteen inches (15") and less than or equal to twenty-four inches (24"), manholes over fifteen feet (15') deep, and in manholes with over one foot (1') drop in manhole.

iv. Seven foot (7') diameter manholes are required for all configurations with any inlet or outlet pipe of diameter greater than twenty-four inches (24") and at three-way configurations with two or more pipes greater than or equal to twenty-four inch (24") diameter.

c. Sanitary sewer thirty inch (30") frame and cover shall conform to APWA Standard Plan 402.

d. Sanitary sewer cover collar for sanitary sewer manhole shall comply with Payson City Standard Plan SD-3.

e. Place manholes within ten feet (10') of the upstream and downstream ends of casing pipes.

5. SANITARY SEWER LATERALS

a. Minimum sanitary sewer lateral size for residential land use shall be four inches (4") in diameter.

b. Minimum sanitary sewer lateral size for commercial, industrial, and manufacturing land uses shall be six inches (6") in diameter.

c. Lateral size shall be based on the number of fixture units in the residence and slope of lateral. Up to ninety (90) fixture units shall be allowed per each four inch (4") lateral set at a two percent (2%) slope.

d. No roof drains, storm drains, foundation drains, or sub-drains shall be connected to the sanitary sewer system.

e. The minimum slope for a four inch (4") lateral shall be 2.00%.

f. The minimum slope for a six inch (6") lateral shall be 1.00%

g. Connection of sanitary sewer laterals shall be at 2:00 and 10:00 o'clock.

h. Cleanouts shall be required every 100 feet (100') and at angle points.

i. Pretreatment will generally be required for each use producing a sewer load different from a standard residential unit. Grease traps shall conform to APWA Standard Plan 441.

j. All unused sewer laterals shall be abandoned at the main line.

k. Sanitary sewer lateral connections for residential land use shall comply with Payson City Standard Plan SS-4.

l. All sanitary sewer design must comply with the Payson City Standards or as approved by the City Engineer.

6. EASEMENTS

a. Minimum twenty foot (20') wide public utility easements (PUE) are required for all publicly owned and maintained sewer main lines located on private property.

b. Sewer easements shall extend ten feet (10') beyond dead end manholes.

7. SEWAGE LIFT STATIONS

a. Sewage lift stations, where required, shall be designed to conform to all requirements of the State Administrative Rules, and shall be approved by the City Engineer.

b. Velocity of force main shall never be less than three feet per second (3 fps).

c. Air relief valves may be required to prevent air lock. Air vent shall be filtered to prevent odor with an approved device.

d. No segment of force main shall have zero slope.

e. Force main shall be installed with tracer wire.

f. Lift stations shall be built where required to pump sewage from low elevation areas into an existing or proposed gravity system.

g. Lift stations shall be enclosed in a permanent structure as approved by the City Engineer.

h. Lift station enclosures shall be sized adequately to accommodate all the required pumps, wet wells, all required plumbing items, electrical equipment, and all the appurtenant items, as approved by the City Engineer.

i. Equipment for a SCADA system shall be provided inside the lift station. The SCADA system shall be compatible to the City's system and shall be approved by the City Engineer or his designee.

j. Property for lift stations shall be deeded to the City, if it will be owned and maintained by the City, or the Homeowner's Association, or Business Owner's Association, if maintained by a private entity.

k. Lift stations shall be provided with standby power systems as required by State Code.

SECTION 6: STORM DRAIN

1. DRAINAGE PLAN:
   a. All system installation and design must conform to Payson City's Stormwater Master Plan.
   b. Surface drainage shall be designed as such that all drainage is addressed within own project boundaries and not adversely affect other properties.
   c. Provide protection to the project from natural drainage ways such as existing drainage irrigation.
   d. Identify all existing storm drain and irrigation features within and adjacent to the project boundaries.
   e. Projects within a delineated wetlands or high groundwater table zone, must meet and address those conditions as part of the project including, but not limited to the following:
      i. Provide minimum building finished floor elevations based on groundwater table depth elevation.
      ii. Provide the high groundwater table elevation measured during spring season.
      iii. Projects with a groundwater table elevation within five feet (5') of existing ground surface elevation must monitor groundwater for a twelve (12) month period. The results of the monitoring must be included in the geotechnical report.
   f. Identify public and private drainage systems.
   g. Provide overall pre-development and post-development pervious and impervious surface area measurements.
2. HYDRAULIC DESIGN CRITERIA:
   a. The design of a storm drainage system should have as its objective the design of a balance between the maximum allowable discharge rate and downstream receiving system's capacity.
   b. All drainage studies shall use rainfall data published by the National Oceanic and Atmospheric Administration (NOAA).
   c. The NOAA Precipitation Frequency Data Server is located at the following link: http://hdsc.nws.noaa.gov/hdsc/pfds/sa/ut_pfds.html

Duration	Frequency (inches/hour)					
	2 Year	5 Year	10 Year	25 Year	50 Year	100 Year
5 min	1.97	2.72	3.38	4.42	5.35	6.42
10 min	1.50	2.08	2.58	3.36	4.07	4.89
15 min	1.24	1.71	2.13	2.78	3.36	4.04
30 min	0.83	1.15	1.43	1.87	2.27	2.72
60 min	0.52	0.71	0.89	1.16	1.40	1.68
120 min	0.32	0.42	0.51	0.66	0.79	0.94
3 hours	0.24	0.31	0.37	0.47	0.55	0.65
6 hours	0.16	0.19	0.22	0.27	0.31	0.35
12 hours	0.10	0.12	0.14	0.16	0.18	0.20
24 hours	0.06	0.08	0.09	0.10	0.11	0.12

Duration	Frequency (inches)					
	2 Year	5 Year	10 Year	25 Year	50 Year	100 Year
5 min	0.16	0.23	0.28	0.37	0.45	0.54
10 min	0.25	0.35	0.43	0.56	0.68	0.82
15 min	0.31	0.43	0.53	0.70	0.84	1.01
30 min	0.42	0.58	0.72	0.94	1.14	1.36
60 min	0.52	0.71	0.89	1.16	1.40	1.68
120 min	0.64	0.84	1.02	1.31	1.57	1.87
3 hours	0.73	0.93	1.11	1.40	1.64	1.94
6 hours	0.94	1.15	1.34	1.60	1.84	2.11
12 hours	1.20	1.44	1.66	1.96	2.18	2.44
24 hours	1.51	1.80	2.04	2.38	2.64	2.88

d. Piped systems are to be designed using a ten (10) year, twenty-four (24) hour storm event.

e. Retention or detention basins are to be designed using a one hundred (100) year, twenty-four (24) hour storm event.

f. The stormwater drainage system shall be separated and independent of the sanitary sewer system.

g. Storm drainage system shall be designed using the Rational Method, SCS, or other methods approved by the City Engineer. Hillside developments must also use the TR-55 method to analyze the drainage channels from above the development.

h. A copy of the storm drainage calculations shall be submitted along with the construction plans.

i. The drainage calculations should include the Hydraulic Grade Line (HGL) elevation.

j. Inlets shall be provided so that surface water is not carried across or around any street intersections.

k. When calculations indicate that curb capacities are exceeded, catch basins shall be used to intercept flow.

3. RETENTION OR DETENTION PONDS:

a. Retention or detention basins are to be designed using a one hundred (100) year, twenty-four (24) hour storm event.

b. As part of the design consideration, a geotechnical study with a percolation rate is required to determine infiltration rates and the highest ground water table elevation.

c. Percolation test must show the capability of draining the pond within seventy-two (72) hours. Percolation test must be performed at the lowest anticipated pond elevation.

d. A sump may be required to facilitate infiltration and get through clay or other slow infiltrating soil layers. A geotechnical boring is required to determine the depth of soils that will allow percolation.

e. Over excavation of native clays and installation of free draining material may be required.

f. The floor of a detention basin must be at least of one foot (1') above the highest elevation of the groundwater table.

g. In order to control erosion and sedimentation, the detention pond shall be landscaped with water-wise

landscaping as shown in Payson City Standard Plan SD-4.

h. The maximum design depth for a storm drain detention basin shall be three feet (3') with an additional one foot (1') for free board to the top of the spillway.

i. The storm drain basin shall be designed with a minimum 5:1 (horizontal to vertical) slope.

j. Provide a minimum fifteen foot (15') wide maintenance access area to the hydraulic related features. Include a vehicle maintenance turnaround area.

4. STORM DRAIN PIPE SIZE AND TYPE:

a. The storm drain pipe shall be located on the South and East side of the street.

b. The storm drain pipe shall be located four-and-one-half feet (4.5') from the Top Back of Curb (TBC).

c. The minimum depth shall be eighteen inches (18") measured from the bottom of the road base to the top of the pipe.

d. The minimum vertical separation between a storm drain pipe and other utilities shall be twelve inches (12").

e. The minimum public storm drain main pipeline diameter is fifteen inches (15") and twelve inches (12") for laterals collecting runoff from one storm drain inlet.

f. All public storm drain lines within public rights-of-way shall be reinforced concrete pipe (RCP), unless approved by the City Engineer. High density polyethylene (HDPE) pipe is not permitted for storm drain usage in the public right-of-way.

g. A storm drain manhole is required for accesses at all pipe transitions including changes in direction, elevation, slope, and pipe size.

h. The minimum slope for a storm drain pipe is 0.40 percent.

i. All storm drain pipe must have a video from a camera truck performed by a third party and the lines and structures cleaned, before City acceptance.

5. STORM DRAIN MANHOLES:

a. Storm drain manhole spacing shall not exceed four hundred feet (400').

b. The construction of the storm drain manholes shall comply with the APWA Standard Plan 411.

c. Storm sewer thirty inch (30") frame and cover shall conform to APWA Standard Plan 402.

d. Storm sewer cover collar for storm sewer manhole shall comply with Payson City Standard Plan SD-3.

6. STORM DRAIN INLETS:

a. A minimum of twelve inches (12") of separation from flow line of outlet pipe to the floor of the inlet box is required.

b. Inlet boxes shall be the drop back hood type of inlet box and comply with APWA Standard Plan 315.1 or 315.2.

c. Inlet boxes should be placed at a distance of no more than four hundred feet (400') of street curb and gutter.

d. A double inlet box shall be installed at low points of vertical curves, downgrade cul-de-sacs or dead-end streets and in areas with steep slopes.

7. CULVERTS
   a. The minimum culvert size is eighteen inches (18") inches in diameter.
   b. Trash racks shall be used where the City determines that there is a high risk of severe blockages.
8. OPEN CHANNELS
   a. Located within a dedicated right-of-way, drainage easement, or equivalent.
   b. Convey a twenty-five (25) year twenty-four (24) hour storm event with a minimum freeboard of one foot (1').
   c. Line with rock or other similar erosion control if velocities are expected to exceed two feet per second (2 fps).
   d. No side slopes steeper than 2H:1V.
9. HEADWALLS
   a. For any culvert entrance or exit a headwall and concrete apron shall be required to control erosion.
   b. Staked rock with a concrete apron may be used for concrete pipe culverts.
10. EASEMENTS
   a. Minimum twenty-foot (20') wide public utility easements (PUE) are required for all publicly owned and maintained storm sewer main lines located on private property.
   b. Storm drainage easements shall extend ten feet (10') beyond dead end manholes.
11. PRIVATE LOT DRAIN CONNECTION:
   a. Lot drains shall use type SDR35 and the color white PVC for all piping.
   b. Lot drains shall be 4 inch diameter minimum.
   c. A back flow prevention device may be required on lot drain lines as determined by the City.
12. WATER QUALITY:
   a. A pretreatment device is required prior to all connections onto a City system, into an underground detention or retention basin system, which include Class V Injection wells or sumps.
      i. Pretreatment device must meet manufacturer design requirements and the following criteria:
         - Remove floatable contaminants.
         - Filter sediments.
         - Filter hydrocarbons.
   b. Pretreatment structure shall comply with Payson City Standard Plan SD-1.
   c. Submit a Stormwater Pollution Prevention Plan (SWPPP) for construction activity.
   d. Provide a Long-Term Stormwater Management Plan.
   e. Provide a Storm Drainage System Maintenance Agreement for all components of the proposed private drainage system.

i. The party responsible for executing the maintenance agreement, i.e., homeowners or business association, property owner, etc.

ii. Extent of the maintenance activities to be performed.

iii. Frequency of the proposed recordkeeping and reporting of performed maintenance and inspection activities.

iv. Provide easements to Payson City to access and inspect temporary and permanent stormwater controls.

SECTION 7: GRADING

1. GRADING
    a. All site grading shall comply with the grading requirements of this section, current zoning and subdivision ordinances, and Appendix J of the International Building Code (IBC), latest edition.
2. STREETS
    a. Streets should be designed to match natural grade as much as practical within design requirements.
    b. When the design centerline of new streets exceeds two percent (2%) grade, the streets shall be tabled across intersections at a grade that does not exceed two percent (2%) for the consideration of ADA compliant crosswalks.
3. CUTS & FILLS
    a. Imported fill material shall meet the requirements of the geotechnical report.
    b. Fill material shall not include organic, frozen, or other deleterious materials. No rock or similar irreducible material greater than twelve inches (12”) in any dimension shall be included in fills.
    c. Cut or fill slopes shall be located within the boundaries of the lots and shall not cross into an adjacent parcel.
    d. Elevation changes between two adjacent parcels exceeding four feet (4’) in height shall use a 3H:1V slope or a retaining wall.
    e. Retaining Walls greater than four feet (4’) in height require design by a structural engineer. Retaining wall plans and details shall be stamped and signed by the structural engineer responsible for the design.
4. SUBDIVISION LOTS
    a. Drainage across property lines shall not exceed that which existed prior to grading.
    b. Excess or concentrated drainage shall be contained on site or directed to an approved drainage facility. Erosion of the ground in the discharge area shall be prevented by installation of non-erosive down drains or other devices.

SECTION 8: EROSION CONTROL

1. GENERAL
    a. Necessary measures shall be taken to prevent erosion due to drainage at all points in new projects.
    b. During grading and construction, the developer shall control all potential storm runoff so that eroded soil and debris cannot enter any downstream water course or adjoining property.
    c. All drainage that leaves a new project shall be adequately addressed to mitigate all erosion on adjacent properties.
    d. Erosion mitigation shall be permanent unless otherwise approved.
2. UPDES PERMIT
    a. All new construction that disturbs one acre of land or more or is part of a larger development or sale that disturbs more than one acre shall obtain a UPDES Stormwater General Permit for Construction Activities (Permit #UTR090000) before construction begins.
    b. The permit requires the operator, typically the contractor, to control and eliminate stormwater pollution sources through the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP).
    c. The permit also requires inspection of the BMP controls either:
        i. At least once every seven (7) calendar days, or
        ii. At least once every fourteen (14) days and within twenty-four (24) hours of the end of a storm event of one half inch (0.5") or greater.
3. Stormwater Pollution Prevention Plan
    a. The Stormwater Pollution Prevention Plan (SWPPP) shall be prepared and submitted to the Development Services Department for review before the contractor can obtain the UPDES permit.
    b. The plan shall include, among other things:
        i. Possible sources of stormwater pollutants
        ii. Selection of Best Management Practices (BMPs) to reduce or eliminate pollutant impacts.
        iii. A SWPPP template that addresses all of the information required in the SWPPP can be obtained from the State of Utah Division of Water Quality web site: http://www.waterquality.utah.gov/UPDES/stormwatercon.htm
4. PERMITTING PROCESS
    a. The Operator prepares a SWPPP in accordance with the UPDES Permit.
    b. The Operator Submits SWPPP to City for review.
    c. Once the City has reviewed the SWPPP, the operator applies for the UPDES Permit by completing the Notice of Intent (NOI) form. The form can be completed online at: https://secure.utah.gov/stormwater/main.html

d. Construction may commence only after:
    i. The SWPPP has been reviewed by the City
    ii. The NOI has been submitted
    iii. The Operator has attended a pre-construction meeting with designated City personnel to review and discuss the SWPPP, and
    iv. All other applicable permits have been obtained from the City.
e. Once construction has been completed and the site stabilized, the contractor shall complete the Notice of Termination (NOT) form and submit to the Division of Water Quality.
f. Any bond retention will not be released until the NOT has been provided.

SECTION 9: STREET IMPROVEMENTS

1. STREET
   a. All streets within Payson City shall be designed structurally to conform to the Payson City Transportation Master Plan, AASHTO and MUTCD guidelines.
2. DEFINITIONS
   a. For the purposed of this chapter, the following definitions shall apply:

   “AASHTO guidelines” means the engineering and development standards published by AASHTO in the current edition titled "A Policy on Geometric Design of Highways and Streets."

   "ADA Accessibility Guidelines (ADAAG)" means the minimum standards set forth in the Federal Register, Volume 56, Number 144, July 26, 1991, regarding the accessibility to places of public accommodation and commercial facilities by persons with disabilities.

   “Alley” means a private right-of-way that is primarily designed to serve as an access to a garage from the rear or side of those properties whose principal frontage is on a public street.

   "Arterial" means generally a five-lane road with signalized streets that serve primarily through-traffic and provide access to abutting properties as a secondary function.

   "Clearview" means that portion of the corners at intersections where obstructions are limited to two feet in height in order to preserve a safe sight distance for motorists entering intersections.

   "Collector street" means streets providing land access and traffic circulation service within residential, commercial, and industrial areas. They enable moderate quantities of traffic to move efficiently between local streets and the arterial major street network.

   "Corner lot" means a lot abutting on two intersecting or intercepting streets, where the interior angle of intersection or interception does not exceed one hundred thirty-five degrees.

   "Curb ramps" means a short ramp cutting through a curb or built up to a curb.

   "Decision sight distance" means the distance required for a driver to detect an unexpected or otherwise difficult-to-perceive information source or hazard in a roadway environment that may be visually cluttered, recognize the hazard or its threat potential, select appropriate speed and path, and initiate and complete the required safety maneuver safely and efficiently.

   "Developed parcel" means those land uses other than agricultural.

   "Driveway" means an access constructed within and adjoining a roadway, private or public street, connecting the roadway with adjacent property and intended to be used in such a way that the access into the adjacent property will be complete and will not cause the blocking of any sidewalk border area or roadway.

   “In-Fill development” means the development of vacant or partially developed parcels which are surrounded by or in close proximity to areas that are substantially or fully developed and are no larger

than an acre and a half. Any in-fill development shall have pedestrian access to a public sidewalk.

"Local streets" means streets primarily providing access to immediately adjacent properties. Through movement may be possible but is not encouraged.

"Private roadway" means a roadway in private ownership which is controlled and maintained by the owners and not the city.

"Public roadway" means a roadway which has been dedicated, deeded, or otherwise conveyed to public use. Public roadways are owned and maintained by the city.

"Roadway" means the entire width between the boundaries of any highway, street or road which is used for vehicular traffic. The terms "roadway," "highway," "street" and "road" are used interchangeably in this chapter.

"Ramp" means a walking surface which has a running slope greater than 1:20.

"Sight distance" means the same as stopping sight distance.

"Stopping sight distance" means the minimum sight distance required that will allow motorists traveling at or near the design speed to stop before reaching a stationary object in its path.

"Sidewalk" means a facility provided for pedestrian movement, usually segregated from vehicular traffic by a curb or provided on a separate right-of-way.

3. 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.

   b. Street widths shall comply with the street classifications as defined by the Payson City Transportation Master Plan.

4. ROAD CLASSIFICATIONS

Type	ROW Width	Minimum CL Radius	Curb Radius	Pavement Width	Park-strip Width	Sidewalk Width
A-5-H	Varies	100’	25’	20’	6’	5’
MH ZONES	Varies	100’	25’	24’	6’	5’
INFILL LOTS / PRIVATE ROADS	Varies	100’	25’	26’	6’	5’
LOCAL	58’	100’	25’	32’	6’	5’
COLLECTOR	76’	200’	30’	50’	6’	5’
ARTERIAL	98’	500’	35’	72’	6’	5’
ARROWHEAD TRAIL	110’	500’	35’	84’	6’	5’
MAIN ST (NORTH OF SR-198)	113’	500’	35’	86’	6’	5’
900 NORTH (9600 SOUTH)	106’	500’	35’	70’	6’/11’	10’/5’

Type	Maximum Grade	Minimum Grade	Curb & Gutter	Pavement Thickness	Road Base Thickness	P.U.E. Width
A-5-H	10%	0.5%	2’	Gravel	8.0”	10’
MH ZONES	10%	0.5%	2’	3.5”	8.0”	10’
INFILL LOTS / PRIVATE ROADS	10%	0.5%	2’	3.5”	8.0”	10’
RESIDENTIAL	10%	0.5%	2’	3.5”	8.0”	10’
COLLECTOR	10%	0.5%	2’	5.0”	8.0”	10’
ARTERIAL	10%	0.5%	2’	5.0”	10.0”	10’
ARROWHEAD TRAIL	10%	0.5%	2’	5.0” MIN	10.0”	10’
MAIN ST (NORTH OF SR-198)	10%	0.5%	2.5’	5.0” MIN	10.0”	10’
900 NORTH (9600 SOUTH)	10%	0.5%	2’	5.0” MIN	8.0”	10’

a. The City Engineer may authorize a new perimeter street. The Developer is required to improve half the street width plus ten feet (10’) of a new perimeter street and dedicate the entire required street right-of-way width.

b. The pavement cross section for a public right of way should be based on a CBR value obtained from lab results and recommended by a Geotechnical Engineer. The CBR value shall be calculated from soil samples taken from the project location, not assumed, or estimated.

5. ROAD DESIGN

a. Sidewalks in areas of high pedestrian traffic shall require greater width as determined by the City Engineer.

b. Minimum curb return turning radius may increase based on the type of traffic and design vehicles and should be designed according to the AASHTO Design Guidelines, latest edition.

c. See WCG Figure #2 at the end of this section for Arrowhead Trail right-of-way transition at Salem City Boundary.

6. GEOMETRIC DESIGN

a. Streets shall be designed to provide adequate stopping sight distance in accordance with the AASHTO guidelines.

b. A vertical curve shall be provided in all changes in grade where the algebraic difference is one percent (1%) or greater.

c. The minimum K values for vertical curve design are:

Street Designation	Design Speed (mph)	K-Value (min)
Local/Residential	25	12
Collector	30	19
Arterial	35	29

7. INTERSECTIONS
    a. Street intersection and/or driveway centerline offsets shall be no less than one hundred fifty feet (150').
    b. Street intersection horizontal alignment shall be as near to ninety degrees (90°) as possible +/- ten degrees (10°) maximum.
    c. The grade of an intersecting street shall not exceed two percent (2%) and have a fifty foot (50') long tangent minimum.
    d. Intersections should be sloped at an angle no greater than two percent (2%) to accommodate pedestrian crossing. It may be necessary to "table" an intersection in new construction areas.
    e. Intersections should not be located on the interior of, or near, sharp curves. Intersections should be located a sufficient distance from all curves to provide proper sight distance for vehicles on the intersecting road or driveway and on the through road.
    f. New intersections with more than four (4) "legs" are generally not permitted.
    g. When designing local road networks, block lengths without an intervening connector street shall not exceed eight hundred feet (800') in length unless previous approval has been obtained from the City Engineer. Cul-de-sacs are not considered an intervening connecting street.
8. CUL-DE-SACS
    a. Cul-de-sac shall not exceed **five hundred feet (500')** in length measured from edge of cross street to center of cul-de-sac.
    b. The turnaround radius (at property line) shall not be less than ninety-six feet (96') for residential areas and one hundred twenty feet (120') for commercial and industrial areas.
    c. Paved cul-de-sacs with curb and gutter and sidewalk will be required on the permanent end of any city street.
    d. A fire hydrant and street light will be required at the end of the cul-de-sac.
9. SIGNS AND PAVEMENT MARKINGS
    a. All street name and traffic control signs and pavement markings required on the street system within a project or as a result of the project, shall be installed at the developer's expense in accordance with the standard drawings and MUTCD standards.
    b. A signing plan should be submitted with the engineering drawings; however, additional signing and traffic control may be added to the project as determined by the City's Representative.
    c. Street sign installation shall comply with the APWA Standard Plan 292 and Payson City Standard Plan ST-5.
    d. Public road signs shall use green background with white letters.
    e. Private road signs shall use blue background with white letters.
10. PAVEMENT
    a. All streets and parking lots, public or private, shall be surfaced to grade, with asphalt concrete

pavement, to the required minimum width and thickness in accordance with these specifications.

b. All streets require a slurry seal coat to be installed no sooner than six (6) months after completion yet prior to release of the warranty bond.

11. CURB & GUTTER/ SIDEWALK/ WATERWAY

a. Curb & gutter shall be placed on each side of developed streets.

b. A twenty-four inch (24") curb & gutter shall be used on all streets. See Payson City Standard Plan ST-7 for design guidelines.

c. Sidewalk shall be placed on each side of developed streets.

d. Sidewalks shall be five feet (5') in width except where other widths are deemed appropriate by the City Engineer and comply with the latest Americans with Disabilities Act requirements (ADA).

e. A maximum grade of five percent (5%), or two percent (2%) greater than the existing/proposed street grade, whichever is less, shall be required as measured along the running length of a meandering sidewalk.

f. Whenever any sidewalk connects with any trails, paths and/or other sidewalks that are larger or smaller in width, a transitional area will be required for design and safety standards.

g. Sidewalks shall be six inches (6") in thickness at all locations. See ADA Ramp details in this specification for thickness of different portions of the ramp.

12. PLANTER STRIPS

a. Planter strips of a minimum six feet (6') in width shall be used in all street cross sections except as determined by the City Engineer. See Payson City Standards and Specifications for design guidelines.

b. Must be landscaped with at least thirty percent (30%), by area of matured plant, of live vegetation.

c. Shall not be filled with any impervious material unless approved by the Public Works Director.

d. Shall be sloped at a minimum of two percent (2%) and a maximum of ten (10%).

e. Drought tolerant, water-wise landscaping is recommended. Utilize vegetation that may be maintained with drip irrigation. Spray type sprinkler heads are not permitted in any planter strip less than eight feet (8') wide.

13. TRAILS

a. Shared use trails shall be installed in accordance with the Transportation Master Plan and the Payson City Trail Plan.

b. Provide a ten foot (10') wide trail with two and a half inches (2.5") of asphalt over four inches (4") of road base.

c. Meandering trails and sidewalks shall be carefully laid out on the construction plans as follows:

i. Distance between inflection points of meander shall be typically spaced two hundred (200') to three hundred feet (300').

ii. In no case shall the distance be less than one hundred feet (100') unless necessary to avoid an obstacle as approved by the City.

iii. Meander should not curve at a radius less than two hundred feet (200') unless necessary to avoid an obstacle as approved by the Public Works Director.

iv. Additional easements may be required for the placement of meandering sidewalk or trail along the rights-of-way.

v. All pedestrian trails and sidewalks shall conform to ADA standards.

14. CURB SIDE MAILBOXES

a. All roadside mailboxes should be installed in accordance with applicable postal standards in the following locations:

i. In areas where the sidewalk is next to the curb, install boxes eighteen inches (18") behind the sidewalk so as to not encroach into the sidewalk.

ii. In areas where a planter strip is provided, install mailboxes within the strip, provided no part extends into the sidewalk or beyond the back of the curb.

iii. In rural areas where no barrier curb is installed, a minimum clear zone of ten feet (10') from the traveled way should be provided.

b. All mailboxes shall be handicap accessible.

c. Location of Cluster Box Unit (CBU) style mailboxes must be approved by the US Postal Service. Approval letter from the local Postmaster is required before project approval.

15. TRANSITIONS & TAPERS

a. All streets shall transition with tapers set at a ratio of no less than 15:1.

b. The transition taper area may be installed as a temporary asphalt section with no less than three inches (3") of asphalt over eight inches (8") of road base.

16. CROSS-GUTTERS

a. No cross gutters shall be allowed across major collector or major and minor arterial streets.

b. On commercial and industrial streets, cross gutters are generally not allowed and require approval by the City Engineer for their use.

c. The City Engineer may prohibit construction of cross gutters on any street deemed necessary.

17. CONCRETE COLOR

a. If the Developer chooses to color required curb, gutter, sidewalk, crosswalks, or trails, the color shall be either Davis – Sunset Rose, or Davis 641 – Yosemite Brown.

Sunset Rose

Yosemite Brown

18. SECOND ACCESS REQUIREMENTS
    a. Second access spacing must comply with the International Fire Code, Appendix D.
    b. City Engineer approval is required for a second access point onto a road owned and maintained by Payson City.
19. ACCESS MANAGEMENT
    a. Access to corner lots should be from the lesser-classified road at the greatest distance possible from the intersection.
    b. Accesses should be aligned directly with existing access on opposite side of parcel.
    c. Where it is not feasible to align driveways, major driveways on opposite side of the street should not be offset less than one hundred fifty feet (150').
    d. Where commercial lots are not large enough to allow access on opposite sides of the street to be aligned, the center of driveways not in alignment should be offset a minimum of two hundred fifty feet (250') on all collector streets, and three hundred feet (300') on arterial streets.
    e. Greater distances may be required if needed for left-turn storage lanes.
    f. Clear sight distance shall be provided for drivers entering or leaving all accesses onto local streets according to AASHTO Guidelines.
    g. For corner residential lots, one (1) access on each frontage may be permitted if it is determined by the City Engineer that two (2) driveways are needed to provide safe access for traffic entering and leaving the lot because of site distance and geometric design considerations.
    h. For corner residential lots, the approved driveway must be located as far from the intersection as possible.
    i. Double frontage residential lots will only have one (1) access onto the lesser classified roadway unless approved by the City Engineer.
    j. Circular driveways are considered one (1) access.
    k. Single-family residential driveways shall have a maximum curb cut of forty feet (40').
    l. Circular driveways should have a maximum curb cut of twenty feet (20') per side.
    m. Right-turn deceleration lanes:
        i. A right-turn deceleration lane is required on a collector or arterial road of speed limit thirty-five (35) mph or less with a traffic volume of fifty (50) vehicles per hour (vph).
        ii. A right-turn deceleration lane is required for all roads with a speed limit greater than thirty-five (35) mph and a right-turn traffic volume of twenty-five (25) vehicles per hour (vph) or more.
        iii. Taper lengths and storage lengths of these lanes shall comply with AASHTO's Policy on Geometric Design of Highways and Streets.
        iv. Based upon safety and operational studies, median treatments such as Two-Way-Left-Turn Lanes (TWLTL) and Raised Non-Transferable medians may be required on arterial streets, as determined by the City Engineer and the Transportation Master Plan.
        v. New access locations created by development shall be unified whenever possible to create the

fewest number of access points onto arterials or major collectors.

vi. Joint use or shared access agreements shall be required where necessary.

20. TRAFFIC STUDY

a. A Traffic Impact Study may be required based on the size, location, and type of proposed project.

b. Items considered in a Traffic Impact Study shall include:

c. A study of existing traffic conditions.

d. A traffic analysis of the existing traffic conditions plus the number of trips, according to the ITE Trip Generation Manual, generated by the proposed development.

i. Traffic analysis on adjacent signalized intersections.

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

21. PRIVATE ROADS AND ALLEYS

a. DESIGN: A roadway within a residential development may be designated as a private road or private alley, provided the street meets the following:

i. Private roads are only allowed for infill development or parcels with physical barriers and are not allowed for all other green field development. A physical barrier is Interstate 15, railroad tracks, the Highline Canal and/or natural streams. A subdivision of 5 acres or more in size will not qualify for private roads no matter what barrier exists on the property.

ii. Private roads may be permitted to access single family attached and multi-family land uses.

iii. Private roads must not create a conflict with a public road grid system.

iv. Each private road shall have a minimum of thirty-two-foot (32') wide drivable surface.

v. Infill lots shall follow the table above.

vi. All private roads shall be finished with asphalt or concrete pavement. Gravel roads are only permitted in the A-5-H zone.

vii. A Geotechnical Study must determine the asphalt or concrete pavement thickness.

viii. All private roads shall include a five-foot (5') wide and six-inch (6") thick concrete sidewalk adjacent to the private street excluding private alleys.

ix. All private roads shall include a two-foot (2') wide concrete curb and gutter or reinforced concrete waterway, excluding private alleys.

b. Parking shall be permitted adjacent to and accessing both sides of the private street, including 90-degree parking.

c. Turnaround, such as cul-de-sacs or hammerheads, are required for private roads exceeding one hundred and fifty feet (150') measured from the right of way line of the public street.

i. Turnarounds, such as cul-de-sacs or hammerheads, shall meet the Payson City Fire Department requirements.

ii. No parking at any time shall be permitted at turnarounds, cul-de-sacs, or hammerheads.

iii. The maximum length of a private road is two hundred fifty feet (250').

iv. Additional fire hydrants along the private road shall meet the Payson City Fire Department requirements.

d. MAINTENANCE: The maintenance of the private road in the development shall be the responsibility of the Homeowner's Association (HOA), Business Owner's Association (BOA), Property Management Company (PMC), or home owner of the private road. A functioning organization that pays fees to maintain the roadway and private utilities must be set up to have private roads and utilities. The management organization is responsible for:

i. Street lights located within a private road.

ii. Snowplowing of private roads.

iii. Asphalt pavement maintenance.

iv. Landscaping maintenance.

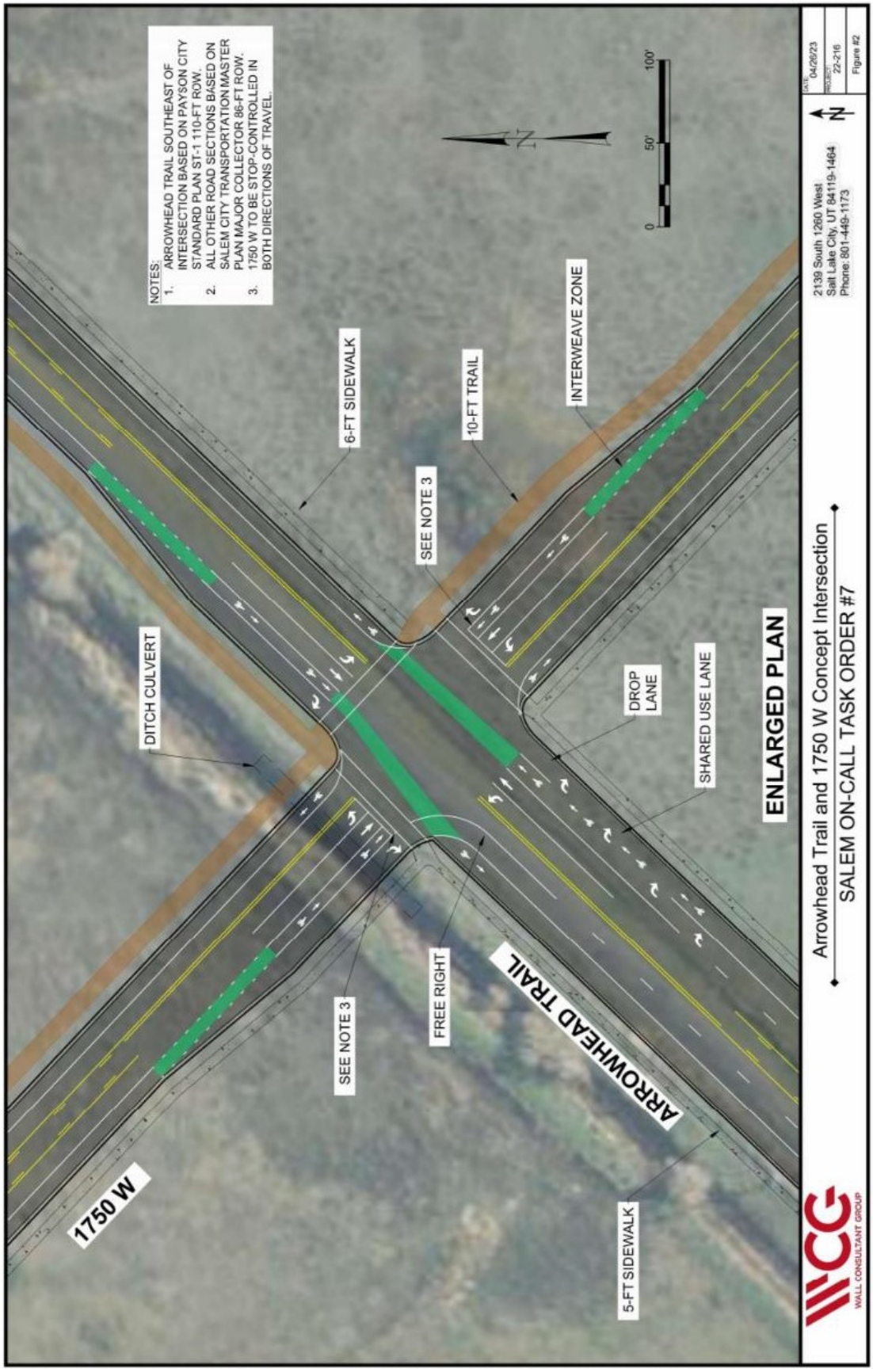
v. Garbage collection: If the HOA chooses City collection of garbage, the garbage collection trash enclosure or individual garbage cans shall be located at the entrance of the proposed private road and as approved by the City Engineer. The HOA may contract with a private collection company as per Payson City Code.

e. EASEMENTS: All private roads shall include a public utility easement (PUE) for streets, including a public sanitary sewer, culinary water, and pressurized irrigation pipe system.

i. The construction of the underground public utilities located within a private road shall meet Payson City Standards and Design Guidelines.

ii. The construction of the underground public utilities located within a private road requires posting a performance guarantee bond and payment of inspection and material testing fees.

iii. Private roads require the recordation of a shared access easement and road maintenance agreement recorded at the Utah County Recorder's Office.


NOTES:
1. ARROWHEAD TRAIL SOUTHEAST OF INTERSECTION BASED ON PAYSON CITY STANDARD PLAN ST-1 110-FT ROW.
2. ALL OTHER ROAD SECTIONS BASED ON SALEM CITY TRANSPORTATION MASTER PLAN MAJOR COLLECTOR 86-FT ROW.
3. 1750 W TO BE STOP-CONTROLLED IN BOTH DIRECTIONS OF TRAVEL.
6-FT SIDEWALK
10-FT TRAIL
INTERWEAVE ZONE
SEE NOTE 3
DITCH CULVERT
DROP LANE
SHARED USE LANE
ENLARGED PLAN
FREE RIGHT
SEE NOTE 3
ARROWHEAD TRAIL
1750 W
5-FT SIDEWALK
0
50'
100'
Arrowhead Trail and 1750 W Concept Intersection
SALEM ON-CALL TASK ORDER #7
WCG
WALL CONSULTANT GROUP
2139 South 1260 West
Salt Lake City, UT 84119-1464
Phone: 801-449-1173
DATE: 04/28/23
PROJECT: 22-216
Figure #2

SECTION 10: POWER AND LIGHT

1. REQUIREMENTS FOR NEW PROJECTS
    a. Conduit, wiring, and streetlights shall be installed at the Developer's expense in all new and proposed project areas.
    b. Those project areas will be lighted in accordance with a written plan that addresses intersections, public facilities, trails, and crosswalks.
    c. Developer may purchase their own materials for the project. A copy of the material bids must be submitted to the Development Services Department before they are purchased to be sure they meet Payson City Standard Technical Specifications.
    d. Developer has the option of purchasing all the materials from the Payson City Power Department.
2. TRENCHING
    a. The Developer is required to do all the trenching, installation of conduits, set transformers sleeves, hand holes, etc.
    b. The Developer is required to supply and install all secondary wires, connections.
    c. Payson City will set the transformers, pull primary wires, terminate high voltage equipment, and energize the system.
3. STREET LIGHTS
    a. Street lights that are in the right-of-way are set by the contractor and wired to power sources.
    b. Light fixtures and poles will be purchased from the Payson City Power Department.
4. TRENCH AND CONDUITS
    a. Trench located one foot (1') behind the sidewalk and within a Public Utility Easement.
    b. Trench located four feet (4') deep minimum measured from the top of the conduit to the final grade.
    c. Warning tape placed two feet (2') above power conduit.
    d. All 90° bends are to be fiberglass thirty-six inch (36") sweeps. No heating of conduit is allowed without prior approval from Payson Power.
    e. Road crossing sleeves for power are seventy feet (70') minimum and need to be in line two feet (2') back of sidewalk.
    f. Communication equipment is located on a different property corner other than power.
    g. Electrical conduit is gray schedule forty (40) PVC.
    h. Communication conduit use a color other than gray.
    i. One inch (1") minus aggregate must be installed under all electrical sleeves and equipment with at least six inches (6") around them.
    j. The Developer is responsible for all secondary wires, conduits, and connections.
    k. The Developer is required to set transformer box four inches (4") to six inches (6") above grade. Hand holes to be places one inch (1") to two inches (2") above final grade.

l. The Developer is required to supply all secondary wires and connections. Payson City will set transformers, pull primary wire, terminate high voltage equipment, and energize the system.
m. Conduit inside all equipment and sleeves need to be two inches (2") above the inside gravel base with Bell end couplings.
n. One 5/8" x 8' ground rod installed in transformers and sectionalizers.
o. Two 5/8" x 8' ground rods installed in switches in opposite corners four inches (4") above inside base grade.

SECTION 11: GEOTECHNICAL INFORMATION

1. MINIMUM INFORMATION REQUIRED
    a. Project plan showing boring locations
        i. Boring logs shall include the following:
            - Elevation
            - Drill or backhoe type
            - Samples
            - Field tests
            - Groundwater level fluctuations
            - Depth to gravel layer
        ii. Laboratory Test – Performance in general accordance with ASTM
            - Sieve analysis
            - Atterberg Limits
            - CBR values (not assumed but calculated via lab test)
            - Direct Shear
            - Consolidation
            - Identify soils according to USCS
            - Moisture density curve (s)
        iii. Engineer Analysis and recommendations
            - Foundations and retaining walls:
                - Allowable bearing capacity
                - Lateral loads friction coefficients
                - Settlement
                - Drainage – backfill of trenches information
                - Seismic loading
            - Pavements
                - Traffic load analysis including construction heavy traffic
                - Subgrade support value (CBR value calculated in the lab)
                - Concrete and/ or asphalt pavement thickness
            - Special considerations
                - Site preparation
                - Expansive soils
                - Collapsible soils
                - Slope stability
                - Rock fall

- Shallow ground water level
- Foundation drainage
- Construction of basements
- Surcharge/ preloading
- Identification of geologic hazards

b. The number and depth of borings/pits 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 boring should be deep enough to encounter a gravel layer suitable to allow infiltration.

c. 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 project 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 project.

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 geogrid 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. Costs associated with supplying, placing in lifts and compacting 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 thirty-six inches (36”).

4. TRENCHLESS TECHNOLOGY

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

b. It is required to pothole all utilities that cross the proposed bore path.

c. A bore plan and profile is required showing the measured depth of all existing utility crossings.

d. Boring across the public right-of-way requires prior approval from the Public Works Director.

SECTION 12: GARBAGE CONTAINERS

1. SPECIFIC WEIGHT OF THE WASTE USED FOR THE CONTAINER
    a. The specific weight tells how much weight there is in a given volume.
        i. For regular trash, an average specific weight number is about one hundred fifty (150) pounds per cubic yard.
        ii. For specific commercial uses dealing with metals, an average specific weight number is about two hundred twenty-five (225) pounds per cubic yard.
    b. An average trash generation of three (3) pounds per person per day.
    c. An average number of people per residential unit is three (3) people per unit.
    d. The estimated weekly trash generation is based on seven (7) days per week.
2. CALCULATE THE TOTAL WASTE PER WEEK
    a. Multiply the average trash generation times seven (7) days per week and divide by the specific weight. For example:

$$(3\frac{lbs}{person}/day \times 7\ days)/150\frac{lbs}{CY} = 0.14\frac{CY}{person}/week$$

3. VOLUME OF WASTE
    a. Multiply the number of units per three (3) people per unit.
    b. Multiply the total number of people by total waste per week. For example:
    A fifty (50) unit residential development:

$$\left(50\ units \times 3\frac{people}{unit}\right) \times 0.14\ CY = 21\frac{CY}{week}$$

4. NUMBER OF DUMPSTERS
    a. Dumpsters vary in sizes. The most common sizes are four (4), six (6) and eight (8) cubic yards.
    b. Divide the volume of waste by the size of the dumpster. Examples:
    $21\frac{\text{CY}}{\text{week}}$ / 6 CY = 3.5 dumpsters → Use 4
    $21\frac{\text{CY}}{\text{week}}$ / 8 CY = 2.6 dumpsters → Use 3
5. DUMPSTER SIZES
    a. Dimensions for a four (4), six (6) and eight (8) front loading dumpster:

Four (4) cubic yard dumpster dimension

Six (6) cubic yard dumpster dimension

Eight (8) cubic yard dumpster dimension

SECTION 13: PARKING FACILITIES

1. MINIMUM STANDARDS:
    a. Parking facilities shall be designed to conform to the following minimum standards:
        i. Parking Space Dimensions. The minimum size of a standard parking space shall be nine (9) feet wide and eighteen (18) feet long.
        ii. Enclosed garages shall have an interior dimension of at least twenty (20) feet wide and twenty (20) feet long.
    b. Driveways/Drive Aisles. Driveways providing access to parking facilities shall have the following dimensions:
        i. Nonresidential Uses. When fire apparatus access is required, the minimum driveway width shall be twenty (20) feet for one-way traffic and twenty-six (26) feet for two-way traffic. Otherwise the minimum driveway width for a one-way driveway shall be fourteen (14) feet. Where one-way drives exist, directional signs and arrows shall be provided.
        ii. Residential Uses (Two Units or Less). The minimum width shall be eighteen (18) feet.
        iii. Residential Use (Three to Five Units). When fire apparatus access is required, the minimum driveway width shall be twenty (20) feet for one-way traffic and twenty-six (26) feet for two-way traffic. Otherwise, the minimum width for a driveway shall be twenty (20) feet.
        iv. Residential Uses (More than Five Units). The minimum width shall be twenty (20) feet for one-way traffic and twenty-six (26) feet for two-way traffic. Where one-way drives exist, directional signs and arrows shall be provided.
        v. Residential Uses (All). In a residential zone, no portion of the required front yard area shall be developed or used for vehicular off-street parking other than that portion occupied by the driveway. The standard curb cut for a driveway is twenty-four (24) feet in width. The driveway curb cut may be widened to accommodate a recreational vehicle parking pad. The maximum curb cut allowed is forty (40) feet.
2. LIMIT ON RESIDENTIAL DRIVEWAYS. For all residential uses, the driveway must lead directly to a garage, carport or other approved parking facility. The length of driveway between the sidewalk (or curb if there is no sidewalk) and the garage foundation wall or carport supports must be a minimum of twenty five (25) feet to accommodate a parked vehicle. The number of permitted driveways shall be one per one hundred and fifty feet (150) of lot frontage, or fraction thereof, not to exceed a total of two driveways. For circular driveways, one hundred (100) feet of frontage is required. A maximum of one driveway will be allowed on Collector and Arterial roadways.
3. PAVING. All required parking spaces, recreational vehicle storage areas, material storage areas and associated driveways shall be paved in accordance with the design and construction specifications established by the City Engineer.
4. STRIPING. All required vehicle parking spaces shall be clearly marked with white paint or other easily distinguishable material.

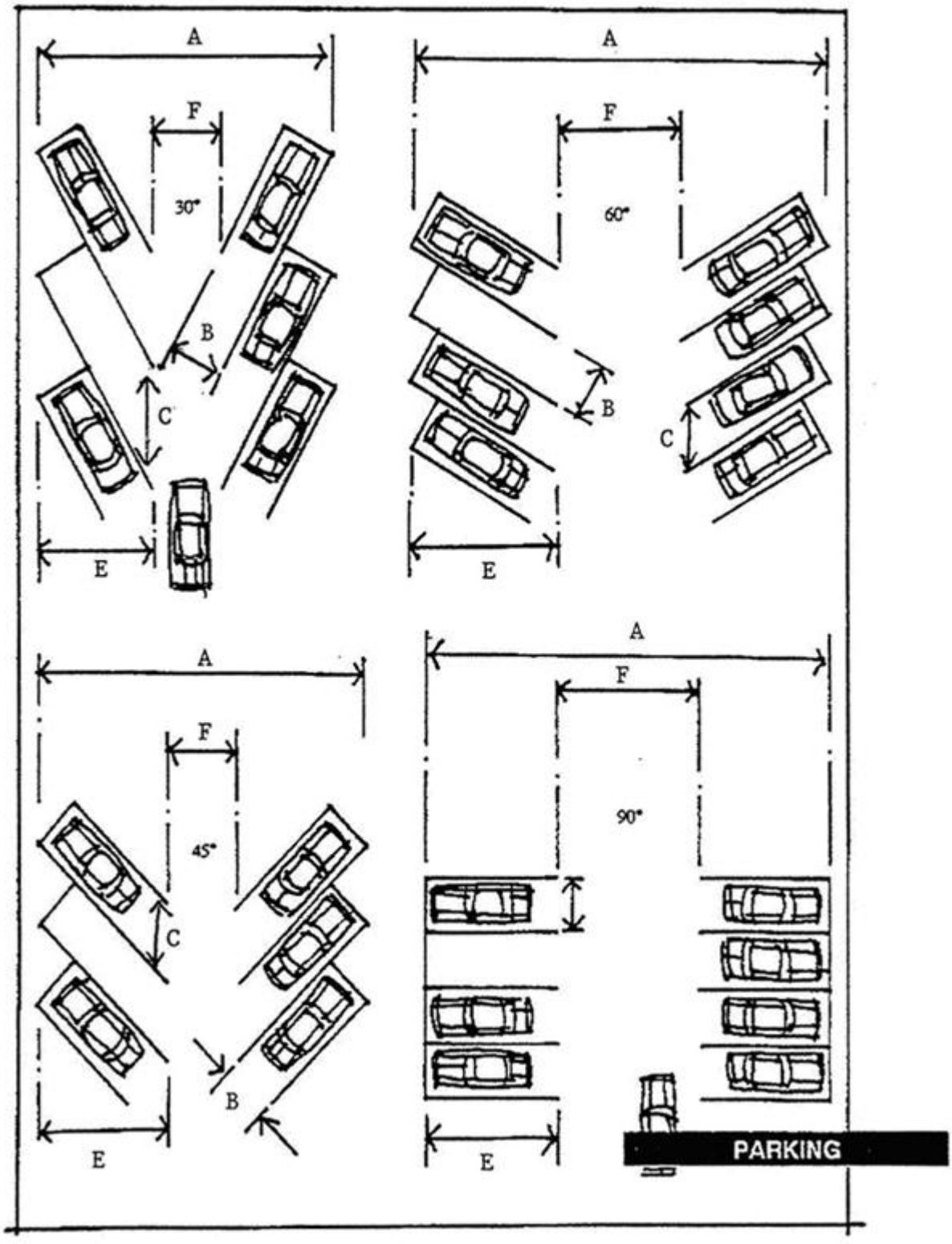
5. ACCESS AND MANEUVERING. Safe and adequate ingress and egress shall be provided to and from a street. Egress on to a public street shall be in a forward direction with maneuvering permitted in the public right-of-way.
6. TURNAROUND. Any required garage, carport or parking space located more than one hundred fifty (150) feet from the street or highway from which access is taken, and served by a driveway or aisle less than twenty feet wide, shall be provided with width and turnaround provisions in accordance with the International Fire Code.
7. LIGHTING. Lighting of outdoor parking areas shall be designed and maintained in a manner to prevent glare or direct illumination from intruding into any adjacent properties.
8. DRAINAGE. All areas used for the movement, parking, loading of vehicles shall be graded to convey surface water consistent with the water quality management plan requirements (if applicable). Drainage shall not be permitted across the surface of walkways or driveways.
9. PARKING LOT LANDSCAPING. All landscape areas shall include tree, shrub, and groundcover plantings. All landscape areas shall be consistent with the city's water conservation program. The following landscape provisions shall apply to all unenclosed parking facilities:
    a. The planting plans shall incorporate the use of drought tolerant plants to reduce water demand. A variety of plantings and hardscape should be selected and provided appropriately for their intended use. A minimum of five (5) feet of landscaped area shall be maintained along the perimeter of a parking area.
    b. Wherever a screen wall is provided and is set back from the lot line, the open area between the wall and the lot line shall be landscaped with an appropriate material which shall be continuously maintained.
    c. A minimum of one (1) tree per four (4) parking spaces shall be provided. Each tree shall be at least 1½ inch caliper and shall be of a species that provides a broad canopy. Shade trees must be dispersed as to provide a 50% tree canopy coverage of the parking lot within twenty (20) years of planting.
    d. The interior of all parking lots shall include landscaped planters. These planters shall have an inside dimension width of five (5) feet and shall have a length equal to the length of the adjoining parking spaces. These planters shall be placed at both ends of each row of parking spaces. Planter areas shall contain at least one (1) tree and a combination of appropriate shrubs and groundcover or mulch or both. There shall be an additional landscaped planter area adjoining each tenth parking space, except that when there are more than fourteen (14) and less than twenty spaces, one (1) additional planter shall be centered in the row.
    e. In parking areas where more than four (4) parking stalls exist without a circulation aisle, one stall shall include a continuous planting strip measuring five (5) feet in width, minimum inside dimension.
    f. All landscaping shall be maintained and shall be irrigated by an automatic sprinkling system connected to the pressurized irrigation system.

10. WHEEL STOPS. Securely fixed wheel stops, at least six (6) inches in height shall be placed to prevent vehicles from overhanging a public right-of-way, a pedestrian walkway which would not meet disabled accessibility requirements, and adjacent to walls, fences, and buildings.

11. MAINTENANCE: All parking lots and structures shall be maintained and kept free of garbage and debris. Striping of parking stalls shall be kept in a manner that allows each stall to be identified. Potholes, cracks, and other damage to the surface shall be repaired in a timely manner.

Table 13.1
Parking Space Dimensions

Regular Size Parking Spaces						
Dimension Indicator	**Description**	**Angle**				
		0°	**30°**	**45°**	**60°**	**90°**
	Overall module width					
A1	One-way	35.0	49.0	56.0	59.0	60.0
A2	Two-way	40.0	55.0	60.0	63.0	60.0
B	Stall width	10.0	9.0	9.0	9.0	9.0
C	Stall width parallel to aisle or curb	22.0	18.0	12.5	10.4	9.0
D	Length of parking stall	22.0	18.0	18.0	18.0	18.0
E	Stall depth to wall or curb	10.0	17.5	20.0	20.5	18.0
	Aisle width					
F1	One-way	15.0	14.0	16.0	18.0	24.0
F2	Two-way	20.0	20.0	20.0	22.0	24.0
F3	Fire Apparatus Accessible	26.0	-	-	-	26.0
Parking Spaces for the Disabled						
	Overall module width					
A1	One-way	43.0	57.0	62.0	64.0	60.0
A2	Two-way	48.0	63.0	67.0	68.0	60.0
B	Stall width	14.0	14.0	14.0	14.0	14.0
C	Stall width parallel to aisle or curb	23.0	28.0	19.8	16.2	14.0
D	Length of parking stall	23.0	19.0	19.0	19.0	18.0
E	Stall depth to wall or curb	14.0	21.5	23.0	23.0	18.0
	Aisle width					
F1	One-way	15.0	14.0	16.0	18.0	24.0
F2	Two-way	20.0	-	-	-	24.0
F3	Fire Apparatus Accessible	26.0	-	-	-	26.0


A
F
30°
B
C
E
A
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60°
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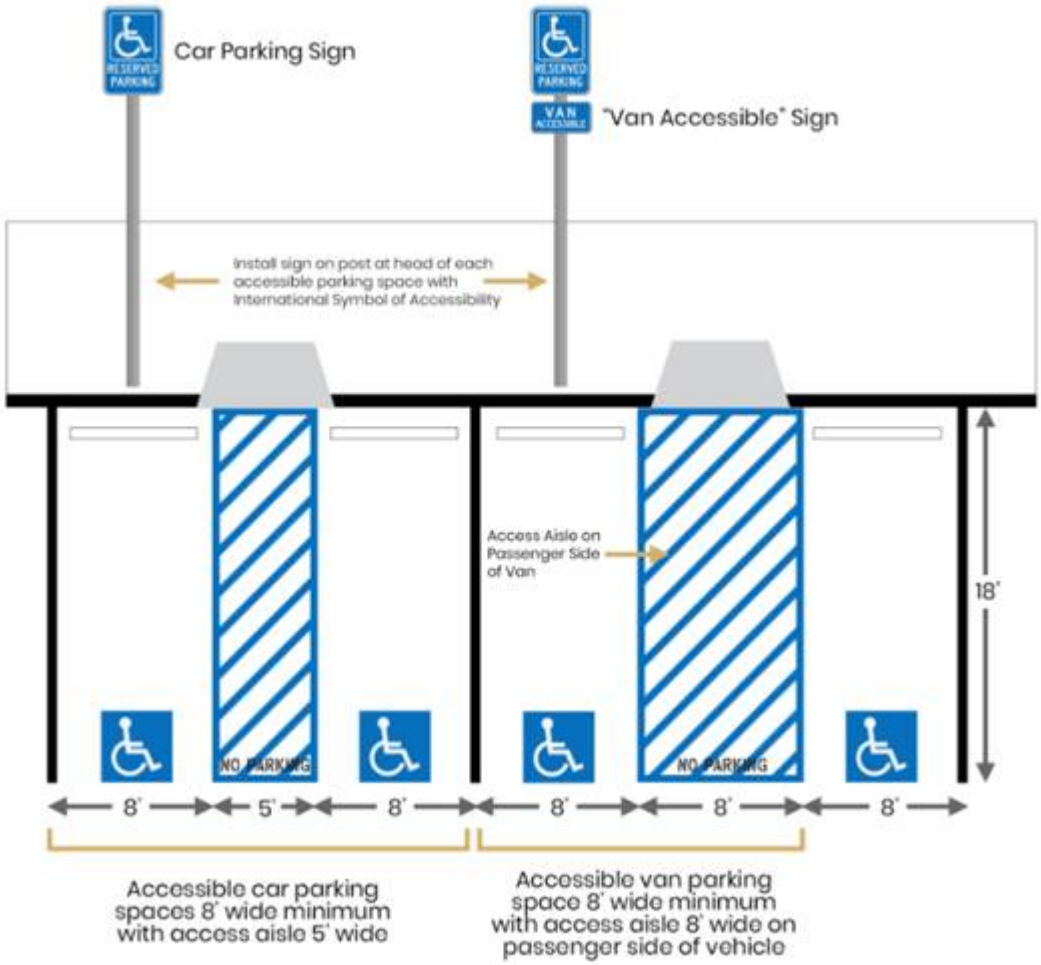
F
90°
E
PARKING

12. ADA ACCESSIBLE PARKING SPACES: The minimum number of accessible parking spaces required depends on the total number of parking spaces in the lot, as seen in the table below. Furthermore, one of every six accessible parking spaces, or fraction of six, must be "van-accessible." For example: A parking lot with 400 total spaces needs eight accessible spaces, and two of those eight spaces must be van-accessible.

Total Number of Parking Spaces in Parking Facility (Lot or Garage)	Minimum Total Number of Accessible Parking Spaces Required	Minimum Number of Van Accessible Sparking Spaces
1 - 25	1	1
26 - 50	2	1
51 - 75	3	1
76 - 100	4	1
101 - 150	5	1
151 - 200	6	1
201 - 300	7	2
301 - 400	8	2
401 - 500	9	2
501 - 1000	2% of total	1/6 of total ADA stalls required
1001 and over	20, plus 1 for each 100, or fraction thereof, over 1000	1/6 of total ADA stalls required

13. ADA PARKING STALL DIMENSIONS: ADA standard car parking stalls and van-accessible parking stalls shall be designed using the following minimum dimensions:



14. ADA PARKING STALL LOCATION: ADA parking stalls must be located on the shortest accessible route of travel to an accessible facility entrance. Where buildings have multiple accessible entrances with adjacent parking, the accessible parking spaces must be dispersed and located closest to the accessible entrances.

SECTION 14: OUTDOOR LIGHTING

1. SCOPE:
   a. The purpose of this Chapter is to regulate the placement, orientation, distribution patterns and fixture types of outdoor lighting installed in the City. It is the intent of the City to encourage lighting that provides safety, utility and security while preventing glare on public ways, protecting the enjoyment of private property rights, conserving energy resources and reducing atmospheric light pollution.

2. OUTDOOR LIGHTING PLANS

   If a proposed development, except developments limited to one- and two-family dwellings, involves the installation or alteration of outdoor lighting fixtures, an outdoor lighting plan shall be submitted and shall include the following information:

   a. A site plan, drawn to a scale of one (1) inch equaling no more than forty (40) feet, showing the location, height, manufacturer, model, lamp type, lumen output and wattage of each outdoor lighting fixture in relationship to buildings, streets and parking areas.

   b. An iso-lux plan showing the levels of illumination, in foot-candles, that would result at ground level from the lighting installation.

   c. A certification that the lighting fixtures to be installed are fully shielded, cut off type fixtures that will not allow light dispersion or direct glare to shine above a ninety (90) degree horizontal plane from the base of the fixture.

   d. A certification that the exterior lighting will comply with the maintained horizontal illuminance recommendations of the Illuminating Engineering Society of North America.

3. GENERAL PROVISIONS
   a. All outdoor lighting shall be turned off after business hours, except for essential security lighting.

   b. Lighting of signs, buildings and displays shall be directed downward. Uplighting shall be prohibited; provided that in landscaped areas uplighting may be allowed if approved by the Design Review Committee (DRC).

   c. Electrical service to outdoor lighting fixtures shall be underground unless fixtures are mounted directly on utility poles.

4. EXEMPTIONS

   The following types of outdoor lighting shall be exempt from the provisions of this Chapter:

   a. Holiday lighting during the months of November, December and January. Such lighting shall not create dangerous glare on adjacent streets or properties.

b. Temporary lighting, including but not limited to circuses, fairs, carnivals and civic uses, for a period not to exceed thirty (30) days unless otherwise approved by the Development Services Department.

c. Lighting associated with agricultural operations.

d. Construction or emergency lighting, provided that such lighting is temporary and is discontinued immediately upon completion of the construction work or abatement of the emergency circumstances necessitating such lighting.

e. Roadway lighting.

5. PARKING LOT LIGHTING

Parking lots should be illuminated adequately for security and safety, but such illumination shall be controlled to prevent glare and avoid decreasing the visibility of neighboring properties. Parking lot lighting shall not be used to draw attention to a business.

a. The maximum height of parking lot lighting shall be as follows:

   i. Twenty (20) feet in a residential zone,

   ii. Twenty-five (25) feet for a commercial, industrial or public facility use abutting a residential use or zone, and

   iii. Fifty (50) feet for a commercial, industrial, or public facility use not abutting a residential use or zone.

   iv. Height shall be measured from the ground surface being illuminated to the bottom of the lighting fixture.

b. Parking lot lighting fixtures designed to portray an historic period or architectural style are encouraged. If such fixtures are not "cut off" or shielded fixtures, the maximum initial lumens generated by each fixture shall not exceed two thousand (2000) (equivalent to a one hundred fifty (150) watt incandescent bulb). The height of such lighting fixtures shall not exceed fifteen (15) feet.

c. Parking lot lighting shall be designed so the minimum illumination at grade level is between two-tenths (.2) and three-tenths (.3) foot-candles in residential zones and between three-tenths (.3) and five-tenths (.5) foot-candles in commercial, industrial and public facility zones. The ratio of average parking lot illumination to minimum parking lot illumination shall not exceed four to one (4:1).

d. Except as modified elsewhere in this Subsection, lighting fixtures shall be shielded where necessary to prevent direct illumination of adjoining properties, with the exception of light needed to illuminate an adjoining public right-of-way.

6. LIGHTING OF GASOLINE STATION/ CONVENIENCE STORE CANOPIES

   Gasoline station and convenience store canopies shall provide adequate lighting for customers but lighting shall not be so intense as to be as an attention device for the business, as provided in this Section.

   a. Lighting fixtures in the ceiling of canopies shall be fully recessed in the canopy.
   b. Light fixtures shall not be mounted on the top or fascia of such canopies.
   c. The fascia of such canopies shall not be illuminated, except for approved signage.
   d. Areas around gasoline pump islands and under canopies shall have a minimum illumination at grade level between one (1) and five and one-half (5 1/2) foot-candles. The ratio of average illumination to the minimum illumination at grade in the areas around the gasoline pumps shall not exceed four to one (4:1).

7. LIGHTING OF EXTERIOR SALES/ DISPLAY AREAS

   The following provisions apply to businesses such as automobile, heavy equipment and recreational vehicle dealerships and other businesses, such as building material stores, which rely on outdoor display of merchandise.

   a. Areas designed for parking or passive display of merchandise shall be lighted in accordance with the standards for parking lots in Section 14.5 Payson City Design Guidelines, above.
   b. Light fixtures shall be shielded, cut off type fixtures located, mounted and aimed so that direct light is not cast onto adjoining streets or properties.
   c. Light fixtures shall be installed at a height not to exceed twenty-five (25) feet.
   d. Exterior sales/display areas shall be designed so that the minimum illumination at grade level is between one (1) and five (5) foot-candles. The ratio of average sales/display area lighting to minimum sales/display area lighting shall not exceed four to one (4:1).

8. LIGHTING OF OUTDOOR SPORTS OR PERFORMANCE FACILITIES

   a. The lighting plans to be submitted with the development plan shall be prepared by a qualified lighting designer, experienced in lighting such facilities. The plan shall demonstrate that the location, selection, and aiming of the lighting fixtures will focus light on the playing or performing areas, minimize glare and visibility from neighboring areas, minimize sky glow and promote energy efficiency.
   b. A dual lighting system shall be provided. The primary system shall be adequate for the sports or performing event. The primary system shall be shut off within forty-five (45) minutes of the conclusion of the event. The secondary system shall be designed to facilitate the exiting of patrons, clean up and maintenance.

9. SECURITY LIGHTING

Adequate lighting shall be provided to protect persons and property and to allow for the proper functioning of surveillance equipment as provided in this Section.

a. Security lighting plan shall utilize shielded fixtures. Floodlights shall not be permitted.

b. Vertical features, such as walls of a building, may be illuminated for security to a height of eight (8) feet above grade.

c. Security lighting poles shall not exceed twenty (20) feet in height in residential zones and twenty-five (25) feet in height in commercial, industrial or public facility zones.

d. Security lights intended to illuminate a perimeter, such as a fence line, shall be allowed only if regulated by a motion detection system that triggers the lighting when an intruder moves to within five feet of the perimeter.

e. The average horizontal grade level or vertical surface illumination of security lighting in residential zones shall not exceed one-half (1/2) foot-candle. The average horizontal grade level illumination of security lighting in commercial, industrial or public facility zones shall not exceed one and one-half (1 1/2) foot-candles.

10. LIGHTING FACADES

Lighting of building facades is discouraged, except for approved security lighting. Government buildings, church buildings, historic buildings and significant or contributing buildings within historic districts shall be exempt from this requirement.

a. Lighted facades shall not exceed an illumination of five (5) foot-candles on a vertical surface.

b. Light fixtures shall be shielded and directed downward.

11. ILLUMINATION OF SIGNAGE

a. Externally illuminated signs shall be served by light fixtures that are shielded and directed downward. The average level of illumination on the sign face shall not exceed three (3) foot-candles and the ratio of average to minimum illumination shall not exceed two to one (2:1).

b. Internally illuminated signs should be designed with light lettering or symbols on a darker background. If fluorescent lighting tubes are utilized, they shall be spaced on at least twelve (12) inch centers and be mounted at least three and one-half (3 1/2) inches from the sign face.

SECTION 15: TRAILS

1. SCOPE:
   a. This article establishes the minimum requirements for the design of Multi-Use Paths within the City of Payson. Multi-use paths shall be placed where so indicated on the City of Payson Future and Existing Trails and Parks plan, the Payson Transportation Master Plan, as well as all other Payson area-specific plans.

2. DEFINITIONS:
   a. Trails and Separated Shared-use Paths: The terms shared use paths, multiple-use paths, and trails are interchangeable within Payson City. A trail or shared use path shall refer to a City owned right-of-way (or permanent easement) that allows non-motorized travel with, or without access to the adjacent properties.
   b. Bicycle Lanes: Shall refer to on-street lanes, a minimum of four feet (4') wide, designated by paint or barriers, dedicated for the use of people on bicycles.
   c. Sidewalks – Shall refer to a hard-surfaced path adjacent to a street, a minimum of five feet (5') wide, dedicated for the use of people walking.
   d. Neighborhood Pathways: Shall refer to short links between neighborhoods, adjacent businesses, parks, and other points of interest. In cul-de-sacs, strategically placed paths (between two lots) can link bicyclists and pedestrians to local destinations without requiring long, indirect routes that tend to inhibit walking or bike riding.
   e. Non-standard or Temporary Pathways – Shall refer to the use of existing improvements such as sidewalks or roadway shoulders for trail routes and may be used only after all other options have been exhausted. Such solutions are temporary expedients.

3. DESIGN AND CONSTRUCTION STANDARDS
   a. These standards are based on recommendations of the American Association of State Highway and Transportation Officials (AASHTO), as set forth in the AASHTO Guide for the Development of Bicycle Facilities, 1999; and the Manual on Uniform Traffic Control Devices, 2009 Edition (MUTCD 2009), and other sources. Should any of these design standards come into conflict with published national standards, follow those in the current AASHTO Guide and MUTCD.
   b. Separation of Facilities
      i. When two-way shared-use paths are located adjacent to a roadway, wide separation between the two facilities demonstrates to both the bicyclist and the motorist that the path functions as an independent facility. Safety and comfort of the trail user are both critical considerations – a trail located next to high speed traffic diminishes safety and creates discomfort for the patron that reduces trail use.
      ii. A minimum horizontal separation of six feet (6') between the trail edge of pavement and roadway edge of pavement is required. Ideally, this buffer area will be lined with

shade trees or other vertical and native and/or drought-tolerant landscaping that acts as a barrier. Where the trail runs parallel to a high-speed facility (greater than or equal to 40 mph), wider separation is recommended.

iii. When this is not possible, a suitable physical barrier is required. Such barriers serve both to prevent path users from making unwanted movements between the path and the highway shoulder and to reinforce the concept that the path is an independent facility. Where used, the barrier should be a minimum of forty-two inches (42") high, to prevent bicyclists from toppling over it. A barrier between a shared-use path and adjacent roadway should not impair sight distances at intersections, and not be a hazard to trail users or errant motorists.

iv. Trails should not be located along roadsides where sidewalks are typically provided. Typically, sidewalks are not good candidates for use as trails since they tend to be too narrow to accommodate multiple services and are also frequently interrupted. Where good trail design is not possible due to frequent interruptions or lack of suitable separation from roadways, a combination of bicycle lanes and sidewalks may be more appropriate.

c. Trail Widths

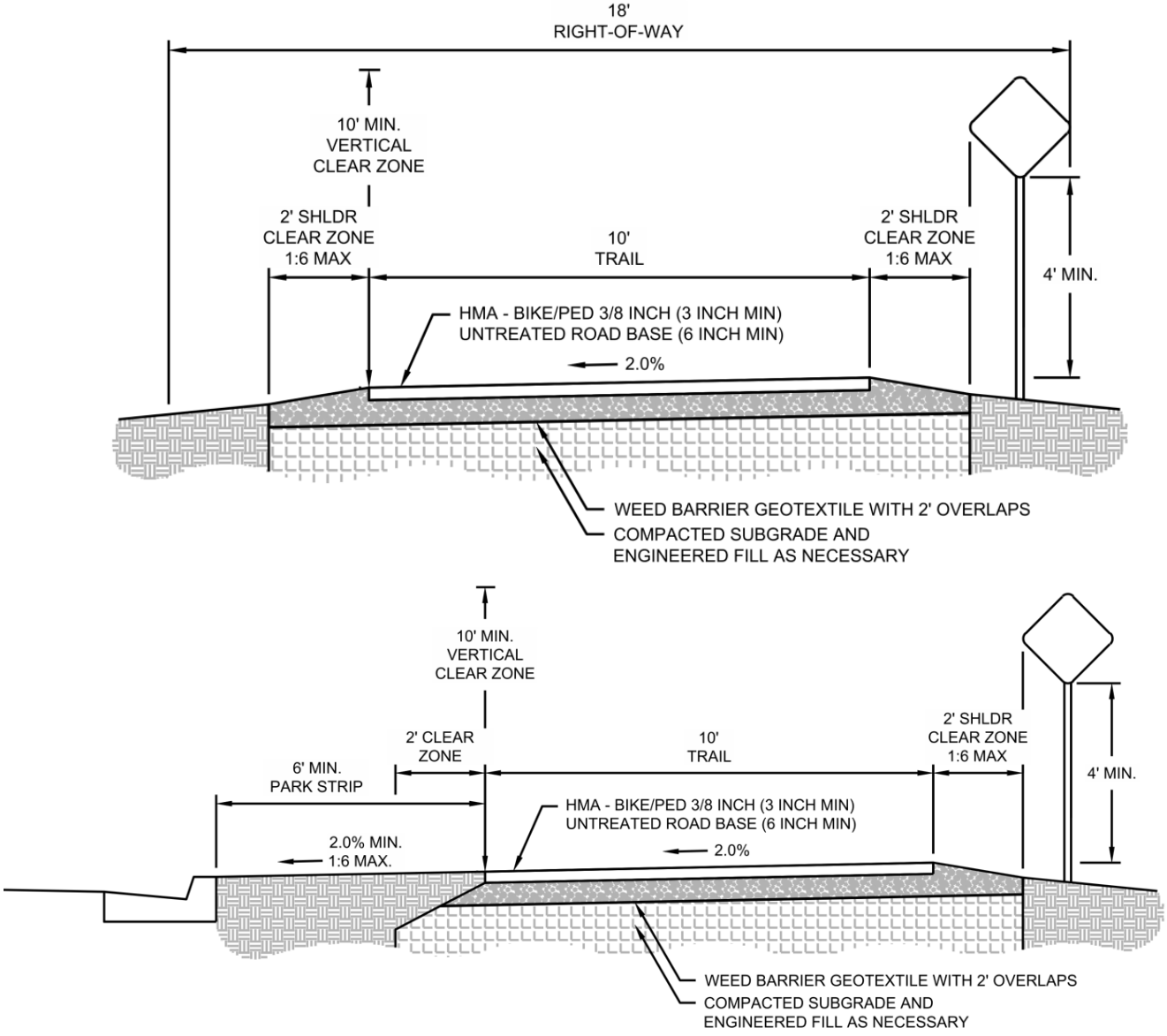
i. *Right of Way* - A minimum right of way width of eighteen feet (18') wide shall to be deeded to the City to accommodate the trail, shoulders, and signage. The trail right-of-way is meant to always provide public access along the trail. If the right-of-way cannot be deeded to the City based on extenuating circumstances, then a permanent easement needs to be granted that runs with the property to maintain public access in perpetuity. Neighborhood trail connectors should also follow the same cross section, widths, and standards outlined in this document even if part of a private development connection to the trail system.

ii. *Paved Shared-Use Trails* - Minimum useable surface width shall be ten feet (10') for two-way, shared-use trails in most instances. Constrictions to eight feet (8') may be designed in certain situations, such as restricted physical space between a roadway and building or vertical drop-off. All such constrictions should be less than one hundred feet (100') in length, and have smooth rather than abrupt transitions. Appropriate signage shall be installed to warn users of changes in trail width.

iii. *Natural surface paths* - Such paths in backcountry or rural settings shall be a minimum of two feet (2') wide where only pedestrian use is anticipated. A minimum width of four feet (4') is recommended where multiple uses are anticipated, or where the path is adjacent to a paved urban trail. Where path usage levels are anticipated to be similar to paved trails, natural surface paths shall be a minimum of ten feet (10') wide.

iv. *Neighborhood Pathways* – Short connecting paths of five hundred feet (500') or less, minimum six feet (6') in width.

v. *Shoulders and clear zones* – At a minimum, a two-foot (2') wide horizontal clear zone, from which all lateral obstructions such as trees, signs, fences, etc, are to be removed shall be provided on either side of the path. Within this clear zone, a two-foot (2') wide graded area on either side of the trail with a cross-slope no greater than a 1V:6H shall be provided. A vertical clear zone of ten feet (10') is also required, free of obstructions such as tree limbs, overhangs, etc. The horizontal and vertical clear zones together create a trail envelope free of obstructions and other hazards.



4. TRAIL SURFACES:

a. Asphalt surfacing shall be preferred for trails in the City. If circumstances dictate that a concrete trail would be preferable, then it must be approved by the City Engineer or their appointee.

b. Design Loads – While loads will be substantially less than highway loads, trails shall be designed to sustain, without damage, occasional wheel loads from emergency and maintenance vehicles.

c. Subgrade Identification – Trail projects shall be required to identify the existing subgrades along the proposed trail route prior to construction. A geotechnical report completed by a licensed, professional geotechnical engineer must be completed for all trail projects to analyze soil conditions and recommend a pavement design unless waived by the City Engineer or designee. Naturally occurring clay soils, peat, and high silt content sandy soils have been identified as having typically insufficient strength for proper pavement construction at minimum thickness.

d. Asphalt Surface Trail - Asphalt surface trails shall be built with a minimum three (3) inches bituminous surface course of PG 64-34, DM-1/2, 50 blow (APWA 32.12.05) on top of six inches (6") of untreated road base--minus ¾-inch aggregate size. Subgrade soil should be compacted to a minimum of ninety-five percent (95%) maximum density at optimum moisture (AASHTO T 99 standard) and base course must be compacted to ninety-five percent (95%) of maximum density at optimum moisture as determined by the AASHTO T180 or ASTM D 1557 or as determined by a licensed, professional geotechnical engineer and approved by the City Engineer or designee.

    i. General Specifications for Asphalt Work

        1. Ensure that asphalt paving machines and handwork must be able to form the smooth curves, width changes, surface pitch, and superelevation required.
        2. Ensure that both the subgrade and the base must be dry and free of frost and ice when asphalt work is done.
        3. Scarify the surface of the subgrade to a minimum depth of six inches (6"), adjust the moisture condition as needed, then compact the soil.
        4. Apply a root inhibitor or lay geotextile beneath the asphalt to prevent roots from heaving the surface.
        5. Extend base course a minimum of two feet (2') beyond the minimum paved surface width. Compact the shoulder and slope it away from the asphalt at a maximum 1V:6H slope.
        6. Ensure that the finished asphalt surface is smooth and free of obvious imperfections. Where asphalt meets concrete or other hard surfaces, the joint must be smooth and even across both surfaces. Asphalt joints are to be butt rather than taper.
        7. Feather the edge of pavement with base course or native soil to avoid any sharp drops from the trail edge.

e. Concrete Surface Trail - Concrete Surface Trails shall be constructed with a minimum four-inch (4") slab thickness on four-inch (4") base course, with transverse saw-cut joints every ten feet (10') and a medium transverse broom finish. Finished slabs shall be flush with ground surface.

i. General Specifications for Concrete Work

1. Cross-slope, superelevation, grade and weed barrier geotextile fabric requirements for concrete trails are the same as for asphalt trails.

ii. Materials

1. Concrete – 4000 psi at twenty-eight (28) days, 6±1% entrained air. Aggregate shall be both coarse and fine with maximum coarse aggregate size of one and one-half (1-1/2) inch, conforming to the Standard Specification for Concrete Aggregate, ASTM C33. Air entraining agents shall conform to ASTM C260.
2. Cement – Cement shall conform to standard specification for Portland Cement, ASTM C150, Type I or II, or ASTM 175 for Air-Entraining Portland Cement, Type IA or IIA.
3. *Water* – Water used for mixing shall be clean and free from injurious amounts of oil, acids, alkali, salt, or organic substances harmful to concrete.
4. *Curing Compounds* – Liquid membrane curing compounds shall conform to ASTM C309.
5. *Preformed Filler* – Expansion joint material shall be non-extruding preformed joint filler conforming to ASTM D1751.
6. *Joint Sealer* – Joint sealer shall conform to ASTM D3405.

f. Natural Surface Trail – Trails using natural surfacing materials should be designed to provide facilities for as many users as possible. Surface type shall be provided as indicated in the Payson City *Non-Motorized Trails System Plan*. Compacted dirt, crushed stone and crusher fines are acceptable in appropriate aggregates and size.

i. Large rocks, roots or stumps, and other obstacles to users shall be removed and all organic material scarified within the path envelope unless the trail is planned specifically for single-track mountain bike use.

ii. Crushed stone paths shall have a minimum compacted depth of four inches (4") of crushed stone–limestone, sandstone, or crushed rock--with an aggregate mix and passing a screen of no more than three-fourths inch (3/4"). No rounded aggregate shall be used. Path surfaces of untreated base course are discouraged, due to the typical inclusion of soils in base course materials that render them prone to rutting and displacement in wet conditions.

5. STRUCTURES:

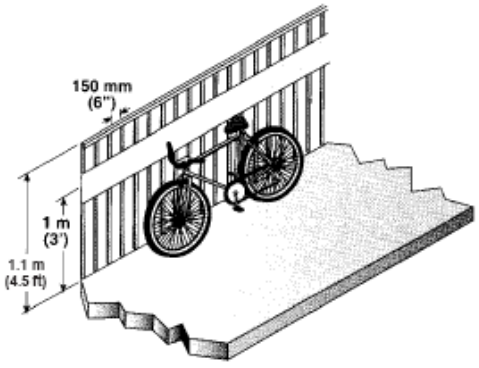
a. All overpasses, underpasses, and bridges shall have a minimum clear width the same as that of the approach trail, plus the minimum two-foot (2') wide horizontal clear zone.

Bridge or underpass approaches shall be aligned along the path to allow clear sight lines across or through the entire structure, and to avoid forcing trail users to make abrupt turns, climbs, or descents to access the structure.

b. Widths and clearances—The minimum clear width of the bridge surface shall be no narrower than the approach path. A preferred width of fourteen feet (14') provides an additional clear width of two feet (2') on each side of a ten-foot (10') traveled portion of a bridge that is to be used by both cyclists and pedestrians. A vertical clearance of ten feet (10') shall be maintained.

c. Design loads—When a bridge is wide enough to permit access by emergency vehicles, the design live load of the bridge shall accommodate such vehicles.

d. Railings—Railings on both sides of a multi-use path structure shall be a minimum of forty-two inches (42") high. Additional height tends to obstruct the view of path users and should be avoided if appropriate. Smooth ten-inch (10") wide horizontal rub rails shall be attached to the inside of the railings at a handlebar height of three feet (3') above the bridge deck surface. Openings in the handrail shall be no wider than six inches (6") to prevent young children from falling through the handrail.

i. 

Railing with "rub-rail"

Adapted from Oregon Bicycle and Pedestrian Plan (1995)

e. Bridge entrances—At each entrance to the bridge, the handrails as described above shall extend a minimum of eight feet (8') beyond the end of the bridge and splayed outward at fifteen-degree (15) angles to the pathway.

f. Decking—If decking that does not provide a smooth and continuous surface is to be used (such as wood decking) it shall be laid at no less than forty-five degrees (45) to the direction of travel along the bridge to prevent gaps that may develop in the decking from trapping bicycle wheels. Where possible, decking shall be laid ninety degrees (90) to the direction of travel. On all bridge decks, bicycle-safe expansion joints shall be used. Decking materials that become slippery when wet shall be avoided. All screws or bolts shall be countersunk flush with the deck surface.

g. All structures, including underpasses, shall maintain the minimum clear zone or envelope throughout.

6. DRAINAGE:
    a. Trails shall have continuous cross slopes of two percent (2%) to provide for proper drainage, and be accessible to wheelchairs where wheelchair use is possible. Crowned surfaces are not usually wheelchair-friendly.
    b. Ditches, swales, interceptor swales, and/or closed drain systems shall properly drain water away from the trail surface and clear zones. Open drainage features shall be located outside the trail envelope.
    c. Drainage grates shall be located outside of the trail envelope. However, if placement inside the envelope is necessary, the grate shall be of bicycle safe design and emplaced flush with the trail pavement surface.
7. DESIGN SPEED:
    a. Paved trail design speed shall be to twenty-five (25) miles per hour to safely accommodate bicycle use; higher design speeds for multi-use paths are discouraged. Unpaved trails may be designed to a fifteen (15) miles per hour speed.
8. MINIMUM CURVE RADII FOR PAVED TRAILS:

Design Speed	Minimum Radius
12mph	36 feet
20mph	100 feet
25mph	156 feet
30mph	225 feet

    a. Where reduced curve radii must be used because of limited right-of-way, topographical, or other considerations, standard curve warning signs and supplemental pavement markings shall be installed as per the *MUTCD 2009 or the most current edition.* Wider pavement can also be used to offset the effects of reduced curve radii.
    b. Superelevation – Superelevation or pavement banking on curves may be required. Refer to *AASHTO Guide for the Development of Bicycle Facilities*, 1999, pp 37-46 for design recommendations.
9. GRADES:

Grade	Maximum Length
6%	800 feet
7%	400 feet
8%	300 feet
9%	200 feet
10%	100 feet

    a. Grades on trails shall be kept to a minimum, under five percent (5%), in order to best serve all non-motorized users. Steeper grades may be used only over short distances.

b. Grades shall not exceed ten percent (10%) on straight sections, or five percent (5%) on curves. Where a path must curve on a grade, provide longer than normal sight lines and a transition zone at both top and bottom of the grade.

c. Grades shall not exceed three percent (3%) with crushed stone or other unpaved surfaces for bicycle handling, drainage, and erosion reasons. If this is not feasible, appropriate drainage and erosion mitigation measures should be utilized. Refer to International Mountain Bicycling Association's publication *Building Better Trails* for design guidelines.

d. Signs warning of steep grades must be provided at the top of sections with grades higher than five percent (5%), or where users cannot see the bottom of the grade.

W7-5
18"X18"

10. SIGHT DISTANCE:
    a. Adequate sight distances shall be maintained for the higher speed users, usually considered to be bicyclists. Use the guidelines provided in the *AASHTO Guide for the Development of Bicycle Facilities, 1999, pp 40-46.*

11. TRAIL-ROADWAY INTERSECTIONS:
    a. Long sections of trail without road crossings or driveways are most desirable. At a bare minimum, 1320 feet (1/4 mile) between such interruptions should be planned and maintained throughout.

    b. Intersections between trails and roadways shall be carefully designed to maintain the safety of users and motorists. Refer to *AASHTO Guide for the Development of Bicycle Facilities, 1999* for design recommendations.

    c. Controlling motorized vehicle access may be required at trail/roadway intersections. All such intersections shall be signed with the MUTCD standard sign R5-3**.**

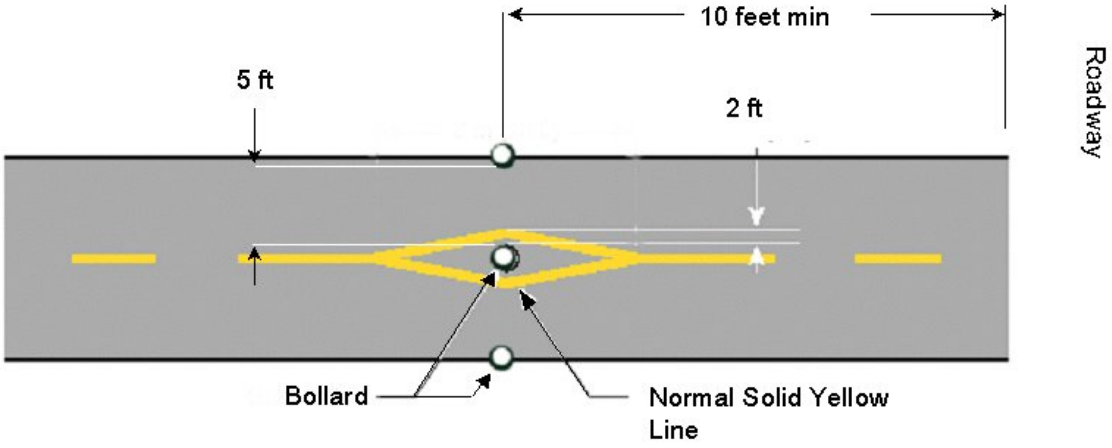
R5-3

i.

    d. Lockable, removable bollards shall be used if more aggressive measures are needed. Posts or bollards shall be set back beyond the clear zone on the crossing roadway or be of a

breakaway design. The post shall be permanently retro-reflectorized for nighttime visibility and painted a bright color for improved daytime visibility. Striping an envelope around any post within the travel way of a paved trail is recommended. See M*UTCD 2009, Part 9, Traffic Controls for Bicycle Facilities,* page 9C-3.

i.  Bollard Design—Three and one-half-inch (3½") diameter galvanized steel, rounded top, painted traffic yellow with retro-retro-reflectorized obstruction marking. Top of bollard should be between three feet (3') and four feet (4') above paved surface

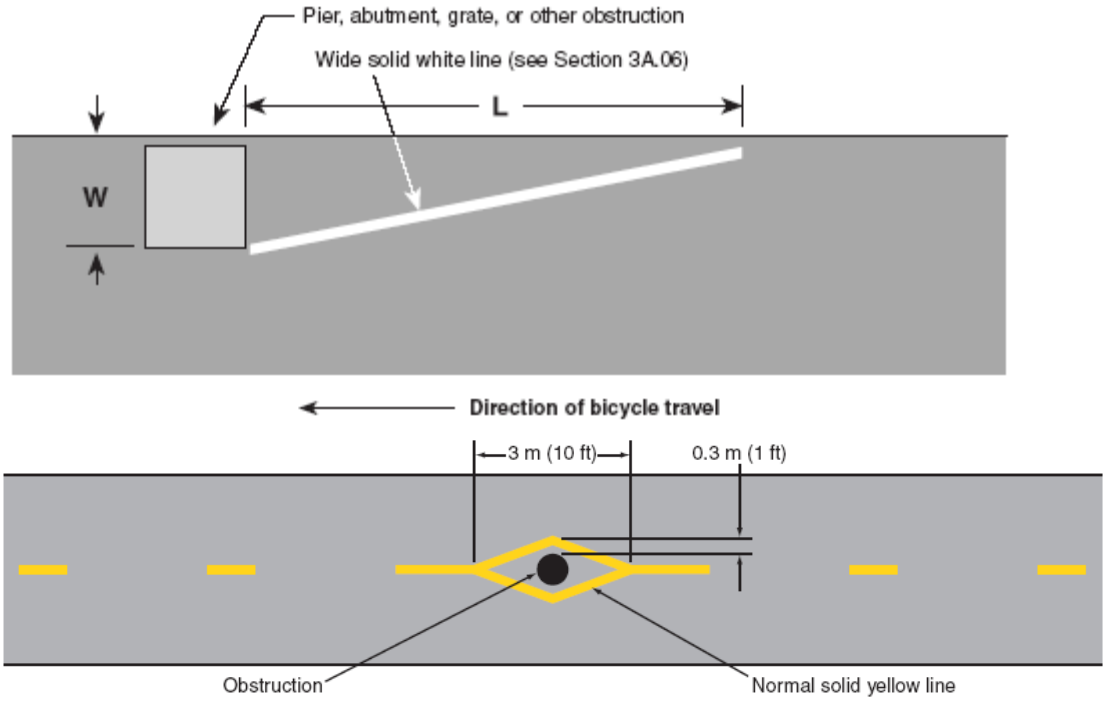


ii. Bollard Placement and Pavement Markings

iii. An appropriate number of bollards shall be placed across the trail to inhibit motorized access. Placement should be such that "travel lanes" on the trail are unobstructed and do not force users to detour out of the normal line of travel. Separation between bollards shall be five feet (5') to allow trail user access while not allowing automobiles.

iv. Where the desire for ATV use of the trail can be reasonably anticipated, the separation between bollards may be reduced to a maximum of forty-eight inches (48") to discourage such vehicular access. Appropriate obstruction marking and signing should be placed as needed when bollards intrude into the pathway surface.

Figure 9C-8. Example of Obstruction Pavement Marking



12. SIGNAGE AND PAVEMENT MARKINGS:
    a. All appropriate and necessary signage and pavement markings are to be provided according to the *MUTCD 2009 or the most current edition.* See *Part 9, Traffic Controls for Bicycle Facilities.*
    b. Sign placements shall follow MUTCD regulations. Signs should be placed no closer than two feet (2') from the trail edge of pavement, and no farther than six feet (6'). The bottom edges of signs shall be between four feet (4') and five feet (5') vertically from the trail surface. These requirements facilitate access by users while maintaining the envelope. Signs for a trail shall be scaled down to recommended sizes.
    c. Striping of bicycle lanes on the roadway in tandem with sidewalks for pedestrians can be provided to link two sections of separated pathway or to extend a route where needed. Proper signage should also be provided. Multiple or frequent transitions from trail to bike lanes/sidewalks are not recommended due to safety and usability problems. Refer to the *AASHTO Guide for Developing Bicycle Facilities, 1999.*

 R1-1 18"x18"	 R1-2 24"x24"x24"	 R9-7 12"X18"
 W1-5 18"X18"	 W5-4 18"X18"	 W7-5 18"X18"

d. Sample Signage

13. ACCESSIBILITY:

a. Title II and Title III of The Americans with Disabilities Act (ADA) of 1990 require all new construction and alterations to be accessible to all Americans, including those with disabilities. The US Access Board publishes *ADA Accessibility Guidelines (ADAAG)* that must lawfully be applied to new construction in both the private and public sectors. While these guidelines do not yet specifically address trails, the following provisions can and should be applied:

i. Accessible Routes (ADAAG 4.3)

ii. Parking (ADAAG 4.6) - will usually apply to trailheads

iii. Curb Ramps (ADAAG 4.7)

iv. Ramps (ADAAG 4.8)

SECTION 16: PUBLIC WORKS PLAN REVIEW CHECKLIST

Cover Sheet

- ☐ Project Name
- ☐ Vicinity Map
- ☐ Drawing Index Table
- ☐ Type of building information
- ☐ Type of construction information
- ☐ Type of occupancy information
- ☐ Number of stories
- ☐ Fire suppression required?
- ☐ Required and provided parking stalls based on each use type
    - Required and provided ADA stalls
    - Required and provided Van Accessible ADA stalls
- ☐ Site characteristic table with areas (hardscape, landscape, and building) listed in square feet and acres
- ☐ Dumpster calculations
- ☐ Contact list
    - Developer
    - Architect
    - Civil Engineer
    - Geotechnical Engineer

General Notes Sheet

- ☐ Payson City Standard Construction Notes
- ☐ Project specific notes
- ☐ Legend
- ☐ Abbreviations

ALTA Survey

- ☐ Existing property boundary
- ☐ Existing property legal description
- ☐ Benchmark
- ☐ Basis of bearing
- ☐ Section ties
- ☐ All easements and encumbrances from title report

Topographic Survey

- ☐ Existing property boundary
- ☐ Benchmark
- ☐ Basis of bearing
- ☐ Existing site features

- ☐ Existing contours with labels
  - Major contours @ 5’ intervals
  - Minor contours @ 1’ intervals
- ☐ Ground shots on 50’ x 50’ grid
- ☐ Existing utilities
  - Rim and invert elevations
- ☐ Floodplain information
- ☐ Wetland information with approved Army Corp Wetland Delineation
- ☐ Sensitive Land Information (Hillside, steep slopes, earthquake zones, liquefaction, etc.)

Horizontal Control Plan

- ☐ Proposed site improvements using dark lines
  - Curb and gutter
  - Sidewalk
  - Striping and signage
  - Building
  - Street lights
  - Fire hydrants
  - Dumpster enclosure
- ☐ Existing conditions shown dashed and/or gray
  - Curb and gutter
  - Sidewalk
  - Striping and signage
  - Structures to remain
  - Street lights
  - Fire hydrants
- ☐ Property boundary
- ☐ Existing and proposed street names/numbers
- ☐ Existing and proposed addresses
- ☐ Does the site require road improvements shown on TMP?
- ☐ Wetland delineation required?
- ☐ BFE shown if required
  - Is lowest floor 1’ above BFE?
- ☐ Existing and proposed easements
- ☐ Parking lot dimensions including length and width
- ☐ Drive aisle dimension
- ☐ Location of proposed buildings each tied to two property corners
- ☐ Building dimensions
- ☐ Driveway location and dimensions
- ☐ Parking lot pavement section with reference to soils report recommendations
- ☐ Location and dimensions of commercial signs
- ☐ Location of mailbox or CBU
  - Letter of approval from USPS

- ☐ Relevant notes with reference to Payson City or APWA standards

Grading and Drainage Plan

- ☐ Site layout
  - Proposed improvements shown dark
  - Existing conditions shown gray and/or dashed
- ☐ Site characteristics table with areas in square feet and acres
  - Hardscape
  - Landscape
  - Building
- ☐ Proposed contours with labels using dark lines
  - Major contours @ 5' intervals
  - Minor contours @ 1' intervals
- ☐ Existing contours with labels shown gray and/or dashed
  - Major contours @ 5' intervals
  - Minor contours @ 1' intervals
- ☐ Daylight location
  - Locations where proposed contours tie into existing contours
  - Does it make sense?
- ☐ Proposed storm drain pipes and structures using dark or blue stake colored lines
  - Size
  - Material
  - Slope
  - Length
  - Rim/Top of grate elevation
  - Invert elevations
  - Pre-treatment in final structure?
  - Separate pre-treatment device?
- ☐ Existing storm drain pipes and structures shown gray and/or dashed
  - Size
  - Material
  - Slope
  - Length
  - Rim/Top of grate elevation
  - Invert elevations
- ☐ Proposed drainage sub-basins
- ☐ Retention basin or sub-surface retention system
- ☐ Drainage calculations showing:
  - Pre- and Post-construction discharge rates using measured perc rate.
  - Cumulative peak flow calculations for each sub-basin
  - Pipe capacity calculations
  - HGL elevations
  - Orifice plate size calculations
    - Does discharge match the lesser of pre-construction rate or 0.2 CFS/ac?

- ☐ Relevant notes with reference to Payson City or APWA standards
- ☐ Plan and profile views of storm drain system with 5x or 10x vertical exaggeration
  - Show all utility crossings in profile view
  - Label all pipes and structures

Utility Plan

- ☐ Site layout
  - Proposed improvements shown dark
  - Existing conditions shown gray and/or dashed
- ☐ Proposed water usage calculations
- ☐ Proposed drinking water pipes and structures using dark or blue stake colored lines
  - Size
  - Material
  - Length
  - Meter location
  - Valves
  - Fittings
  - Fire hydrants
- ☐ Proposed pressurized irrigation pipes and structures using dark or blue stake colored lines
  - Size
  - Material
  - Length
  - Meter location
  - Valves
  - Fittings
- ☐ Proposed sanitary sewer pipes and structures using dark or blue stake colored lines
  - Size
  - Material
  - Slope
  - Length
  - Rim elevations
  - Invert elevations
  - All manholes 60” or greater
    - Manholes at 400’ max spacing
  - Lateral location
    - Commercial 6” / Residential 4”
    - Commercial tie into main at manhole?
    - Cleanouts at bends
    - Cleanouts at 100’ max spacing
- ☐ Existing drinking water pipes and structures shown gray and/or dashed
  - Size
  - Material
  - Meter location
  - Valves

- Fire hydrants
- Existing pressurized irrigation pipes and structures shown gray and/or dashed
  - Size
  - Material
  - Meter location
  - Valves
- Existing sanitary sewer pipes and structures shown gray and/or dashed
  - Size
  - Material
  - Slope
  - Rim elevations
  - Invert elevations
  - Service laterals
- All other existing utilities shown gray and/or dashed with appropriate callouts
- Relevant notes with reference to Payson City or APWA standards
- Plan and profile views of sewer, water, and PI with 5x or 10x vertical exaggeration
  - Show all utility crossings in profile view
  - Label all pipes and structures

Power and Lighting Plan

- Site layout
  - Proposed improvements shown dark
  - Existing conditions shown gray and/or dashed
- Existing and proposed street names/numbers
- Proposed power lines and structures using dark or blue stake colored lines
  - Power line shown 1’ behind sidewalk
  - 2’ min separation between power and communications
  - Street lights
  - Transformers
  - Splice boxes
  - Sectionalizers
  - Switches
  - Poles and guy wires
- Existing power lines and structures shown gray and/or dashed
  - Power lines
  - Street lights
  - Transformers
  - Splice boxes
  - Sectionalizers
  - Switches
  - Poles and guy wires
- Relevant notes with reference to Payson City or NESC standards

- ☐ Note added
  - "Trenching one foot (1') behind the sidewalk and four feet (4') to the top of conduit for primary from final grade."

Public Safety Plan

- ☐ Site layout
  - Proposed improvements shown dark
  - Existing conditions shown gray and/or dashed
- ☐ Existing and proposed street names/numbers
- ☐ Existing and proposed addresses
- ☐ Type of building information
- ☐ Type of construction information
- ☐ Type of occupancy information
- ☐ Number of stories above grade plane
- ☐ Building height above grade plane
- ☐ Fire suppression if required
- ☐ Existing and proposed fire lines
- ☐ Location of the Fire Control Room
- ☐ Location of all existing and proposed fire hydrants within 1000' of the project location
- ☐ Fire lane
- ☐ Fire truck turning envelope
- ☐ Fire flow demand calculations
- ☐ Snow removal storage areas
- ☐ Traffic calming devices
- ☐ Emergency vehicle turnaround area according to IFC Appendix D

Stormwater Pollution Prevention Plan

- ☐ Existing and proposed contours
- ☐ Existing and proposed storm drain features
- ☐ Delineated Jurisdictional Wetlands
- ☐ Structural Best Management Practices
- ☐ Non-Structural Best Management Practices
- ☐ Certification statement stamped, signed and dated by a Licensed Professional

Detail Sheets

- ☐ Relevant Payson City Standard Details
- ☐ Relevant APWA Standard Details
- ☐ Project specific construction details

SECTION 17: PAYSON CITY STANDARD DETAILS

See attached

PAYSON CITY STANDARD PLAN SHEET INDEX

PLAN #	TITLE	SHEETS	REVISED
	GENERAL		
G-0	PAYSON CITY STANDARD PLAN SHEET INDEX	2	SEP 2023
G-1	PAYSON CITY STANDARD CONSTRUCTION NOTES	2	SEP 2023
G-2	PROJECT CONTACT LIST	1	SEP 2023
	STORMWATER POLLUTION PREVENTION		
SWP-1	STORMWATER MANAGEMENT PLAN NOTES	2	SEP 2023
SWP-2	CONSTRUCTION FENCE DETAIL	1	SEP 2023
SWP-3	SILT FENCE DETAIL	1	SEP 2023
SWP-4	INLET PROTECTION DETAIL	2	SEP 2023
SWP-5	SEDIMENT CONTROL LOG DETAIL	1	SEP 2023
SWP-6	CONCRETE WASHOUT DETAIL	2	SEP 2023
SWP-7	STABILIZED CONSTRUCTION ENTRANCE DETAIL	1	SEP 2023
SWP-8	STABILIZED STAGING AREA DETAIL	1	SEP 2023
SWP-9	EROSION CONTROL BLANKET DETAIL	1	SEP 2023
SWP-10	PORTABLE TOILET	1	SEP 2023
	STREET		
ST-1	STANDARD STREET CROSS SECTIONS	4	SEP 2023
ST-2	STANDARD PLOT PLAN	1	SEP 2023
ST-3	CORNER PEDESTRIAN RAMP	4	SEP 2023
ST-4	PAVEMENT RESTORATION	2	SEP 2023
ST-5	STREET NAME SIGN AND POST DETAIL	1	SEP 2023
ST-6	MASONRY DUMPSTER ENCLOSURE DETAIL	3	SEP 2023
ST-7	CURB, GUTTER, AND SIDEWALK DETAIL	2	SEP 2023
ST-8	DRIVEWAY APPROACH	3	SEP 2023
ST-9	PARKING LAYOUT REQUIREMENTS	2	SEP 2023
ST-10	ADA ACCESSIBLE PARKING	1	SEP 2023
ST-11	TYPICAL PARK STRIP LANDSCAPING	2	SEP 2023
	STORM DRAIN		
SD-1	PRE-TREATMENT STRUCTURE AND SUMP DETAIL	1	SEP 2023
SD-2	STORM AND SANITARY SEWER PIPE TRENCH	1	SEP 2023
SD-3	CONCRETE COLLAR DETAIL	1	SEP 2023
SD-4	DETENTION / RETENTION BASIN DETAIL	1	SEP 2023
	SANITARY SEWER		
SS-1	PRECAST SANITARY SEWER MANHOLE	2	SEP 2023
SS-2	RECONSTRUCT BRICK MANHOLE	1	SEP 2023
SS-3	DROP MANHOLE SECTION	1	SEP 2023
SS-4	RESIDENTIAL SEWER LATERAL CONNECTION	2	SEP 2023
SS-5	NON-RESIDENTIAL SEWER LATERAL CONNECTION	1	SEP 2023
SS-6	SEWER LATERAL WITH GREASE TRAP	1	SEP 2023
SS-7	PROCESS WATER PRE-TREATMENT DETAIL	1	SEP 2023

PAYSON CITY STANDARD PLAN SHEET INDEX (CONTINUED)			
PLAN #	TITLE	SHEETS	REVISED
	WATER		
W-1	FIRE HYDRANT LOCATION AND 6' x 6' CONCRETE APRON	1	SEP 2023
W-2	WATER MAIN PIPE TRENCH	1	SEP 2023
W-3	1" PRESSURIZED IRRIGATION METER AND SERVICE	2	SEP 2023
W-4	1-1/2" AND 2" PRESSURIZED IRRIGATION METER AND SERVICE	1	SEP 2023
W-5	1" DRINKING WATER METER AND SERVICE	1	SEP 2023
W-6	1-1/2" AND 2" DRINKING WATER METER AND SERVICE	1	SEP 2023
W-7	DFW METER BOX AND LID FOR 1" WATER METER IN HARDSCAPE APPLICATIONS	1	SEP 2023
W-8	BACKFLOW PREVENTION ASSEMBLY - 1" THRU 3" PIPE SIZES	1	SEP 2023
	POWER		
P-1	OVERHEAD SERVICES - 200 AMP MAX - SINGLE PHASE AND THREE PHASE	1	SEP 2023
P-2	UNDERGROUND SERVICES - 200 AMP MAX - SINGLE PHASE AND THREE PHASE	3	SEP 2023
P-3	UNDERGROUND SERVICES - ABOVE 200 AMP - MULTIPLE METERED UNITS	2	SEP 2023
P-4	UNDERGROUND SERVICES - ABOVE 200 AMP - DEDICATED TRANSFORMER	1	SEP 2023
P-5	UNDERGROUND SERVICES - ABOVE 200 AMP - SINGLE METER SECONDARY SERVICE	1	SEP 2023
P-6	CONCRETE TRANSFORMER PAD - THREE PHASE TRANSFORMER	4	SEP 2023
P-7	PAD SWITCH SLEEVE	1	SEP 2023
P-8	STREET LIGHT POLE AND BASE DETAIL	1	SEP 2023

GENERAL NOTES

1. ALL CONSTRUCTION TO CONFORM TO PROJECT'S CURRENT SPECIFICATIONS AND DETAILS. THE SPECIFICATIONS ORDER OF PRIORITY IS: CONSTRUCTION DRAWINGS, SPECIAL PROVISIONS, PAYSON CITY STANDARD PLANS, APWA STANDARDS, AND SUMMARY.

2. PRIVATE DEVELOPMENTS MUST COMPLY WITH PAYSON CITY STANDARDS AND SPECIFICATIONS UNTIL THE START OF THE 1-YEAR FINAL INSPECTION.

3. EXISTING UTILITIES ARE SHOWN BASED ON BEST INFORMATION AVAILABLE AT THE TIME OF DESIGN. PAYSON CITY IS NOT RESPONSIBLE FOR INACCURACIES IN THE LOCATIONS OR SIZE OF UTILITY SHOWN. NOTIFY BLUE STAKES (811) PRIOR TO ANY EXCAVATION.

4. PROTECT ALL EXISTING UTILITIES (WATER, FIBER OPTIC, AND DRAINAGE SERVICES AND ACCESS ROADS, ETC.) DURING CONSTRUCTION AND ENSURE THEY REMAIN IN PLACE AND OPERATIONAL (UNLESS OTHERWISE NOTIFIED BY PROPERTY OWNER). DEPTHS OF DRY UTILITIES ARE APPROXIMATE. POTHOLE TO ASSESS LOCATION OF UTILITIES.

5. IDENTIFY DAMAGED ITEMS WITHIN THE CONSTRUCTION BOUNDARIES PRIOR TO BEGINNING CONSTRUCTION. REPLACE ANY ITEM DAMAGED, NOT IDENTIFIED PRIOR TO BEGINNING CONSTRUCTION, AT NO COST TO THE CITY. PROVIDE VIDEO OF THE SITE BEFORE CONSTRUCTION.

6. MAINTAIN SAFE CONSTRUCTION PROCEDURES AND WORKING CLEARANCES AT ALL TIMES WHILE WORKING NEAR POWER LINES. FOLLOW ALL APPLICABLE OSHA STANDARDS. PROPER SIGNAGE IS REQUIRED AT CONTRACTOR'S EXPENSE.

7. VERIFY ALL DIMENSIONS BEFORE STARTING WORK. IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES.

8. UNLESS DETAILED, SPECIFIED, OR OTHERWISE INDICATED ON THE DRAWINGS, CONSTRUCTION REQUIREMENTS ARE IN THE APPLICABLE TYPICAL DETAILS AND GENERAL NOTES. TYPICAL DETAILS APPLY EVEN WHEN NOT REFERENCED AT SPECIFIC LOCATIONS ON THE DRAWINGS.

9. CONSULT WITH THE ENGINEER WHERE NO CONSTRUCTION DETAILS ARE SHOWN OR NOTED FOR ANY PART OF WORK.

10. PRESERVE AND PROTECT ALL SURVEY MONUMENTS. CONTACT COUNTY SURVEYORS OFFICE TO RESET SURVEY MONUMENTS TO FINISH GRADE.

11. PRESERVE, RESTORE, OR REPLACE ALL EXISTING FENCES, ROADS, DRIVE APPROACHES, CULVERTS, MAIL BOXES, LANDSCAPING, EROSION CONTROL BLANKETS, DITCHES, SIGNS, K-RAIL, ETC. TO PRE-CONSTRUCTION CONDITION.

12. NOTIFY AT LEAST 48 HOURS IN ADVANCE THE CITY CONSTRUCTION INSPECTOR, THE FIRE CHIEF AND THE POLICE CHIEF OF ANY ROAD CLOSURES THAT HAVE BEEN APPROVED BY THE CITY ENGINEER RELATING TO THE PROJECT. A SIGNED AND APPROVED ROAD CLOSURE PERMIT IS REQUIRED.

13. REQUEST ANY CHANGES TO THE PLANS IN WRITING TO THE CITY ENGINEER FOR APPROVAL PRIOR TO MAKING THE CHANGES. DESIGN CHANGE REQUESTS MUST BE STAMPED BY THE PROJECT ENGINEER.

14. DO NOT PERFORM ANY WORK NEAR UTILITY LINES WITHOUT FIRST CONTACTING THE RELATED UTILITY COMPANY AND ALLOWING A REPRESENTATIVE OF THE RELATED UTILITY COMPANY TO OBSERVE THE WORK IF REQUESTED.

RIGHT-OF-WAY NOTES

1. SUBMIT FOR ACCEPTANCE TO CITY ENGINEER A TRAFFIC CONTROL PLAN FOR THE PROJECT'S TRAFFIC MAINTENANCE THAT MEETS MUTCD STANDARDS.

2. PROTECT EXISTING ASPHALT FROM CONSTRUCTION EQUIPMENT DAMAGE. REPLACE DAMAGED PAVEMENT AT THE DIRECTION OF THE PUBLIC WORKS DIRECTOR OR DESIGNEE.

3. DO NOT TRESPASS PRIVATE PROPERTY ALONG THE PROJECT. SECURE ACCESS IN WRITING FROM OWNERS TO PROPERTIES, RESIDENCES AND BUSINESSES DURING CONSTRUCTION. MAINTAIN TRAFFIC TO LOCAL RESIDENTS AT ALL TIMES.

STORMWATER NOTES

1. LENGTHS SHOWN ON PLAN SHEETS ARE HORIZONTAL.
2. ALL PIPE IN THE PAYSON CITY RIGHT-OF-WAY TO BE REINFORCED CONCRETE OR POLYVINYL CHLORIDE PIPE. HIGH DENSITY POLYETHYLENE PIPE IS NOT PERMITTED.
3. PROVIDE UPDES SWPP PERMIT AND NOI PRIOR TO PRE-CONSTRUCTION MEETING. KEEP THE PERMIT ON THE PROJECT FOR REVIEW.
4. ALL SWPP BMPS TO BE IN PLACE AND APPROVED PRIOR TO START OF CONSTRUCTION.
5. SWPP BMPS TO BE REMOVED AND STORM DRAIN TO BE CLEANED AND CCTV INSPECTION PERFORMED BY A THIRD PARTY PRIOR TO FINAL ACCEPTANCE.
6. STORM PIPE TO BE INSPECTED AND SURVEYED PRIOR TO BACKFILL. NOTIFY CITY 48 HOURS IN ADVANCE OF ANY REQUIRED INSPECTION.

SANITARY SEWER NOTES

1. SEWER PIPE TO BE INSPECTED AND SURVEYED PRIOR TO BACKFILL. NOTIFY CITY 48 HOURS IN ADVANCE OF ANY REQUIRED INSPECTION.
2. DROP MANHOLES ARE NOT PERMITTED WITHOUT PRIOR APPROVAL FROM THE CITY ENGINEER.
3. ALL SEWER PIPE TO BE GREEN SDR35 PVC PIPE. CORROSION RESISTANT PIPES AND MANHOLES ARE REQUIRED ON ALL LINES WITH HIGH HYDROGEN SULFIDE CONTENT OR AT THE DISCRETION OF THE PUBLIC WORKS DIRECTOR OR DESIGNEE.
4. COUPLINGS TO BE DOUBLE BAND, SHIELDED ADJUSTABLE REPAIR COUPLINGS IN COMPLIANCE WITH ASTM C 1173. NO CAST IRON FITTINGS PERMITTED.
5. INSTALL CONCRETE COLLAR FLUSH WITH MANHOLE RIM. CONCRETE COLLAR TO BE 1/4" BELOW PAVEMENT. SLOPE COLLAR FROM OUTSIDE EDGE TOWARDS THE MIDDLE TO THE RING AND COVER.
6. ALL SEWER TO BE CLEANED, AIR TESTED, AND CCTV INSPECTION PERFORMED BY A THIRD PARTY PRIOR TO FINAL ACCEPTANCE.
7. DURING CLEANING, BLOCK CONNECTION TO EXISTING CITY SEWER SYSTEM TO PREVENT DEBRIS FROM ENTERING THE SYSTEM.

WATER AND PRESSURIZED IRRIGATION NOTES

1. ALL PIPE TO BE DR18 PVC PIPE MEETING AWWA C900 SPECIFICATIONS. DRINKING WATER LINES TO BE BLUE, PRESSURIZED IRRIGATION LINES TO BE PURPLE.
2. SERVICE LATERALS TO BE 1" MINIMUM CTS POLY PIPE. DRINKING WATER SERVICES TO BE BLUE, PRESSURIZED IRRIGATION SERVICES TO BE PURPLE.
3. ALL WATER LINES TO BE INSPECTED AND SURVEYED PRIOR TO BACKFILL. NOTIFY CITY 48 HOURS IN ADVANCE OF ANY REQUIRED INSPECTION.
4. TRACER WIRE REQUIRED ALONG ALL PIPES AND LATERALS 2" DIAMETER OR GREATER. TAPE TRACER WIRE TO PIPE BELLS. CONTINUITY TO BE TESTED AND APPROVED PRIOR TO FINAL ACCEPTANCE. ANY ISSUES WITH TRACER WIRE CONTINUITY WILL BE REPAIRED AT CONTRACTOR'S EXPENSE.
5. TRACER WIRE AT VALVES SHALL BE BROUGHT NEAR SURFACE ON THE OUTSIDE OF VALVE BOX. NOTCH A HOLE ON THE UPPER SLEEVE AND FEED TRACER WIRE INTO VALVE BOX.
6. ALL METAL FIXTURES AND APPURTENANCES MUST BE WRAPPED IN 20 MIL BLACK POLYWRAP.
7. ALL DRINKING WATER AND PRESSURIZED IRRIGATION MAIN LINES MUST BE TESTED AT 200 PSI FOR 2 HOURS.
8. PRESSURIZED IRRIGATION MAIN LINES MAY BE AIR TESTED DURING THE OFF SEASON.
9. ALL FIRE HYDRANTS 10 YEARS OR OLDER WITHIN THE PROJECT LIMITS MUST BE REPLACED.

ELECTRICAL NOTES

1. ALL WORK AND MATERIALS TO CONFORM TO NATIONAL ELECTRIC CODE AND PAYSON CITY STANDARDS.
2. ALL POWER CONDUITS TO BE GRAY SCH 40 PVC OR APPROVED EQUAL.
3. NO OTHER UTILITY IS PERMITTED IN GRAY CONDUIT.
4. COORDINATE ALL ELECTRICAL WORK WITH PAYSON CITY POWER.

PAYSON CITY CONTACTS			
COMPANY / DEPARTMENT	NAME	TITLE	PHONE
DEVELOPMENT SERVICES	JILL SPENCER	CITY PLANNER	801-465-5233
DEVELOPMENT SERVICES	JON SNELGROVE	BUILDING INSPECTOR	801-465-5129
DEVELOPMENT SERVICES	MARTY DARGEL	PLANNING TECHNICIAN	801-465-5204
DEVELOPMENT SERVICES	MICHAEL BRYANT	PLANNER	801-465-5267
DEVELOPMENT SERVICES	ROBERT MILLS	DEVELOPMENT SERVICES DIRECTOR	801-465-5268
ENGINEERING	JOE JAMISON	GIS ADMINISTRATOR	801-465-5266
ENGINEERING	JONATHAN KNIGHT	DEVELOPMENT ENGINEER	385-895-8410
ENGINEERING	TRAVIS JOCKUMSEN	PW DIRECTOR / CITY ENGINEER	801-465-5235
FIRE	SCOTT SPENCER	FIRE CHIEF	801-465-5251
FIRE	TAYLOR SUTHERLAND	FIRE MARSHAL	385-895-7890
POLICE	BRAD BISHOP	POLICE CHIEF	801-465-5240
POWER	BRAD KEARL	ELECTRICAL DISTRIBUTION SUPERINTENDENT	801-404-6506
POWER	TYLER ROYLANCE	POWER PLANT SUPERINTENDENT	801-318-4355
PUBLIC WORKS	DEBBIE BUSHNELL	PUBLIC WORKS EXECUTIVE ASSISTANT	801-465-5217
PUBLIC WORKS	KYLE ANDERSON	PUBLIC WORKS INSPECTOR	801-465-5217
SEWER	JEFF HIATT	SEWER SYSTEM SUPERINTENDENT	801-465-5277
SEWER	TYLER LOWE	TREATMENT PLANT OPERATOR	801-465-5277
STORM DRAIN	JESSE SMITH	SWPP INSPECTOR	801-465-5230
STREETS	KENT FOWDEN	STREETS/STORMWATER SUPERINTENDENT	801-465-5230
WATER	CAMERON PHILLIPS	WATER SYSTEM SUPERINTENDENT	801-465-5278
PRIVATE UTILITY CONTACTS			
CENTURY LINK	BILL WESTFALL	ENGINEER	435-660-0923
COMCAST	ELYSIA VALDEZ	COORDINATOR	801-201-0177
DOMINION ENERGY	DAVE CHRISTENSEN	PRE-CONSTRUCTION REP	801-853-6586
SALEM CANAL IRRIGATION CO	CODY HORTON	WATER MASTER	801-362-5548
STRAWBERRY HIGH LINE CANAL	MARTY LARSON	GENERAL MANAGER	801-465-4824
UTOPIA	KEITH PERKINS	CONSTRUCTION MANAGER	801-613-3863
MISCELLANEOUS CONTACTS			
NEBO SCHOOL DISTRICT	MATT GLEDHILL	DIRECTOR OF OPERATIONS	801-354-7433
PAYSON POST OFFICE	RON MENDELL	POSTMASTER	801-465-1457

SWMP CERTIFICATION STATEMENT

1. INCLUDE THE FOLLOWING STATEMENT ON THE SWPPP STAMPED AND SIGNED BY A LICENSED PROFESSIONAL:

   "I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS."

SWMP GENERAL NOTES

1. AUTOCAD FILES WILL BE PROVIDED BY THE OWNER FOR CONTRACTOR USE IN STAKING AND OTHER CONSTRUCTION SURVEY NEEDS. THE CONTRACTOR WILL PROVIDE PAYSON CITY AS-BUILT DATA TO VERIFY THE FACILITIES ARE CONSTRUCTED PER PLAN.

2. EXISTING GROUND CONTOURS, SURFACE FEATURES, EQUIPMENT, AND FACILITIES TO BE SURVEYED AND INCLUDED IN THE AUTOCAD FILES.

3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE ACCURACY AND LOCATION OF ALL EXISTING SITE FEATURES. NOTIFY BLUE STAKES (811) PRIOR TO ANY EXCAVATION.

SWMP STANDARD NOTES

1. SOLID WASTE, INDUSTRIAL WASTE, YARD WASTE AND ANY OTHER POLLUTANTS OR WASTE ON ANY CONSTRUCTION SITE SHALL BE CONTROLLED THROUGH THE USE OF STRUCTURAL AND NON-STRUCTURAL BMPS. WASTE AND/OR RECYCLING CONTAINERS SHALL BE PROVIDED AND MAINTAINED BY THE OWNER OR CONTRACTOR ON CONSTRUCTION SITES WHERE THERE IS THE POTENTIAL FOR RELEASE OF WASTE. UNCONTAINED WASTE THAT MAY BLOW, WASH, OR OTHERWISE BE RELEASED FROM THE SITE IS PROHIBITED. SANITARY WASTE FACILITIES SHALL BE PROVIDED AND MAINTAINED BY THE OWNER OR CONTRACTOR.

2. READY-MIXED CONCRETE, OR ANY MATERIALS RESULTING FROM THE CLEANING OF VEHICLES OR EQUIPMENT CONTAINING OR USED IN TRANSPORTING OR APPLYING IT, SHALL BE CONTAINED ON CONSTRUCTION SITES FOR PROPER DISPOSAL. RELEASE OF THESE MATERIALS IS PROHIBITED.

3. COVER SHALL BE APPLIED WITHIN 14 DAYS TO INACTIVE SOIL STOCKPILES, AND SHALL BE MAINTAINED FOR STOCKPILES THAT ARE PROPOSED TO REMAIN IN PLACE LONGER THAN 30 CALENDAR DAYS.

4. BMPS SHALL BE IMPLEMENTED TO PREVENT THE RELEASE OF SEDIMENT FROM CONSTRUCTION SITES. VEHICLE TRACKING OF MUD SHALL NOT BE ALLOWED TO ENTER THE STORMWATER SYSTEM OR WATERS OF THE STATE. SEDIMENT TRACKED ONTO PUBLIC STREETS SHALL BE REMOVED.

5. TECHNIQUES SHALL BE USED TO PREVENT DUST, SEDIMENT, OR DEBRIS BLOWING FROM THE SITE. WATER TRUCK MAY BE REQUIRED TO KEEP WIND EROSION IN CHECK.

6. STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR DEGRADATION OF WATERS OF THE STATE.

7. ALL EARTH DISTURBANCES SHALL BE DESIGNED, CONSTRUCTED, AND COMPLETED TO LIMIT THE EXPOSED AREA OF ANY DISTURBED LAND TO THE SHORTEST POSSIBLE PERIOD OF TIME.

8. BULK STORAGE STRUCTURES FOR PETROLEUM PRODUCTS AND OTHER CHEMICALS SHALL HAVE ADEQUATE PROTECTION SO AS TO CONTAIN ALL SPILLS AND PREVENT ANY SPILLED MATERIAL FROM ENTERING THE STORMWATER SYSTEM OR WATERS OF THE STATE.

9. AREAS BEING DISTURBED BY THE GRADING SHALL BE RESEEDED WITH VEGETATION AS SHOWN ON THE PLANS.

10. ANY DISTURBANCE TO TEMPORARY AND PERMANENT BMPS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

11. THE PROPERTY OWNER AND SUBSEQUENT PROPERTY OWNERS WILL BE RESPONSIBLE FOR CONTINUED COMPLIANCE WITH THE REQUIREMENTS OF THIS SECTION DURING CONSTRUCTION ACTIVITY ON THE SITE.

12. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED AND DISPOSED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED, OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, WHICHEVER OCCURS FIRST.

13. TEMPORARY SEEDING AND MULCHING WITH TACK IS REQUIRED IN DISTURBED AREAS THAT WILL REMAIN DORMANT FOR MORE THAN 30 DAYS DURING THE GROWING SEASON, APRIL 1 - OCTOBER 31. OUTSIDE OF THE GROWING SEASON OR ON STEEP SLOPES, HYDRAULIC MULCHING MAY BE USED AS AN ALTERNATIVE TO SEEDING AND MULCHING. NO MEASURES REQUIRED WHEN SURFACE SOIL IS FROZEN AND MINISCULE CHANCE OF RAINFALL OR THAWING EVENT WHILE SURFACE IS UNSTABILIZED. SURFACE ROUGHENING MUST BE COMPLETED REGARDLESS OF WEATHER AND TIME OF YEAR.

REVEGETATION NOTES

1. PROVIDE SEEDING ON DISTURBED AREAS.

2. THE SEEDBED SHOULD BE WELL SETTLED AND FIRM, BUT FRIABLE ENOUGH SO THAT SEED CAN BE PLACED AT THE RECOMMENDED SEEDING DEPTH. THE IDEAL FIRMNESS IS WHEN ONE-HALF INCH BOOT PRINT REMAINS AFTER WALKING ACROSS THE SOIL SURFACE. IF THE TOPSOIL IS OVER-COMPACTED BY TRAFFIC OR EQUIPMENT, THREE STEPS ARE REQUIRED TO PREPARE THE SEEDBED. FIRST, THE SOIL SHOULD BE TILLED TO BREAK UP ROOT RESTRICTING LAYERS. SECOND, IT SHOULD BE HARROWED. THIRD, THE SOIL SHOULD BE ROLLED OR PACKED. THESE STEPS ESTABLISH THE NECESSARY SEEDBED.

3. SEEDING SHALL OCCUR BEFORE DISTURBED AREAS BECOME CRUSTED OR POLISHED AND WITHIN 30 DAYS OF COMPLETION OF EARTH-DISTURBING WORK.

4. SEEDING SHALL BE DONE USING A GRASS DRILL. THE DRILL SHOULD BE EQUIPPED WITH A SATISFACTORY SEEDING MECHANISM, AGITATOR, DOUBLE DISK FURROW OPENERS, DEPTH BANDS, AND PACKER WHEELS OR DRAG CHAINS. THE DISTANCE BETWEEN DRILL ROWS SHOULD NOT EXCEED TWELVE INCHES. SEED MAY BE BROADCAST IN AREAS THAT ARE INACCESSIBLE FOR DRILLING. IF THE SEED IS BROADCAST, THEN THE SEEDING RATES SHOULD BE DOUBLED. THE BROADCASTED SEED SHOULD BE UNIFORMLY DISTRIBUTED OVER THE GROUND SURFACE AND MIXED INTO THE SOIL EITHER WITH A HARROW OR BY HAND RAKING. PLANTING (BROADCAST OR DRILL METHOD) WILL BE MOST SUCCESSFUL IF PERFORMED WHEN THE GROUND IS NOT FROZEN. DO NOT SEED WHEN THE SOIL SURFACE IS FROZEN. THE SEEDS SHOULD BE PLANTED BETWEEN 0.5 AND 1.0 INCHES DEEP.

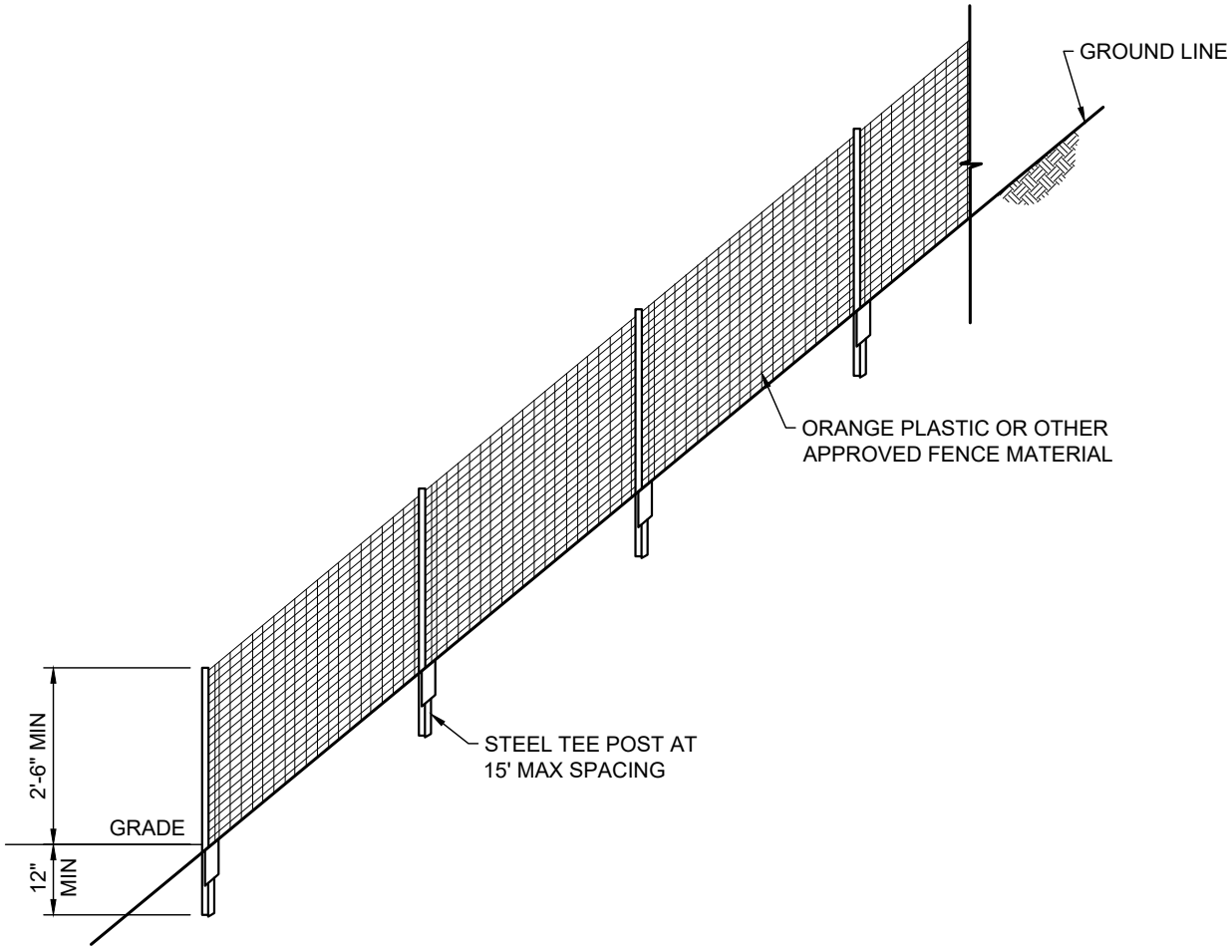
5. MULCH SHALL BE APPLIED TO THE SEEDED AREA TO HELP MODERATE SOIL TEMPERATURES, TO IMPROVE SOIL MOISTURE ABSORPTION, AND TO IMPROVE SOIL HOLDING CAPACITY OF MOISTURE. GRASS HAY OR CEREAL GRAIN STRAW THAT IS FREE OF WEED SEED IS RECOMMENDED FOR MULCH. APPLY 4,000 POUNDS OF MULCH PER ACRE TO THE SOIL SURFACE. AT LEAST HALF OF THE MATERIAL SHOULD BE TEN INCHES OR MORE IN LENGTH. DO NOT USE FINE MATERIALS. THE MULCH SHOULD BE ANCHORED EITHER WITH COMMERCIAL NETTING PRODUCTS (ON SLOPES STEEPER THAN 3:1) OR MECHANICALLY. MECHANICAL ANCHORING CAN BE ACCOMPLISHED USING A HEAVY DISK IMPLEMENT WITH DULL BLADES TO PUNCH THE MULCH INTO THE SOIL TWO TO THREE INCHES DEEP. CRIMPING SHOULD NOT SEVER THE MULCH. DO NOT MULCH WHEN WIND VELOCITIES EXCEED FIFTEEN MILES PER HOUR.

6. ALL TILLAGE, SEEDING, AND CRIMPING OPERATIONS SHOULD BE PERFORMED ACROSS THE SLOPE WHEN PRACTICAL.

7. NO LIMESTONE OR FERTILIZER SHALL BE APPLIED.

8. PROTECT AND CARE FOR THE SEEDED AREAS UNTIL FINAL ACCEPTANCE (70% VEGETATION TO PRE-CONSTRUCTION LEVEL AND APPROVED BY PAYSON CITY).

9. UTILIZE A DROUGHT RESISTANT, NATIVE SEED MIX, INCLUDE SEED MIX IN THE SWMP REPORT.



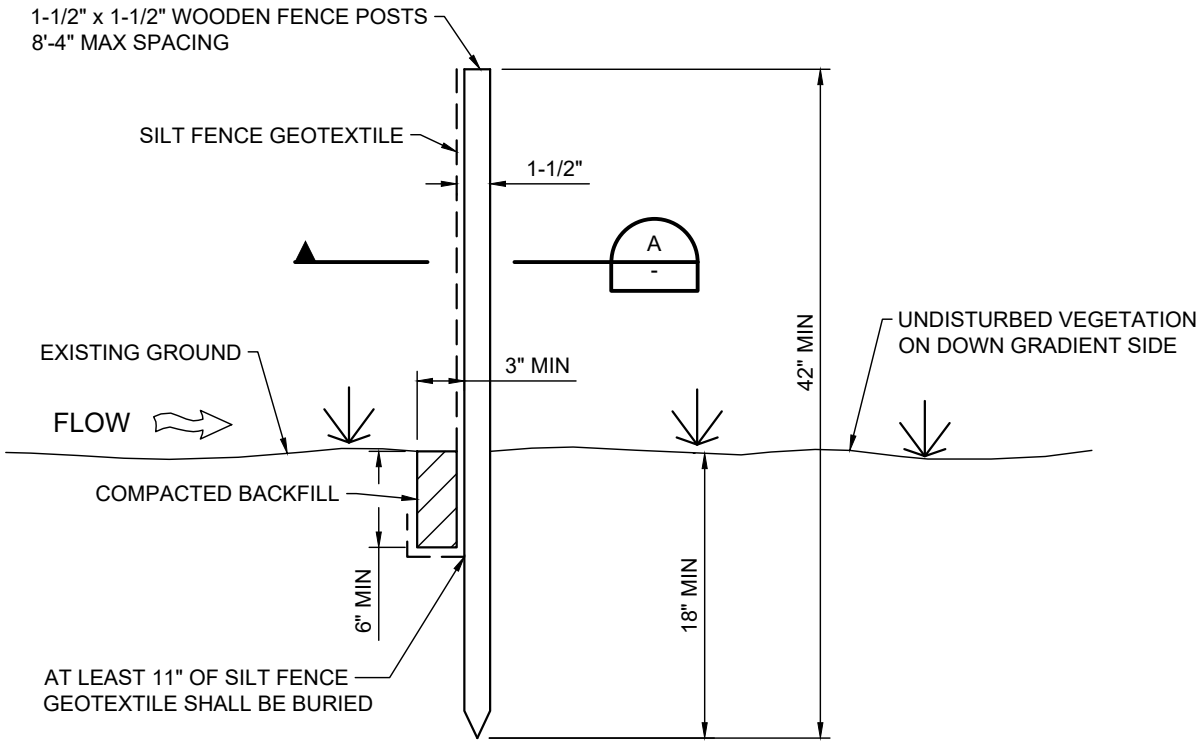
CONSTRUCTION FENCE INSTALLATION NOTES

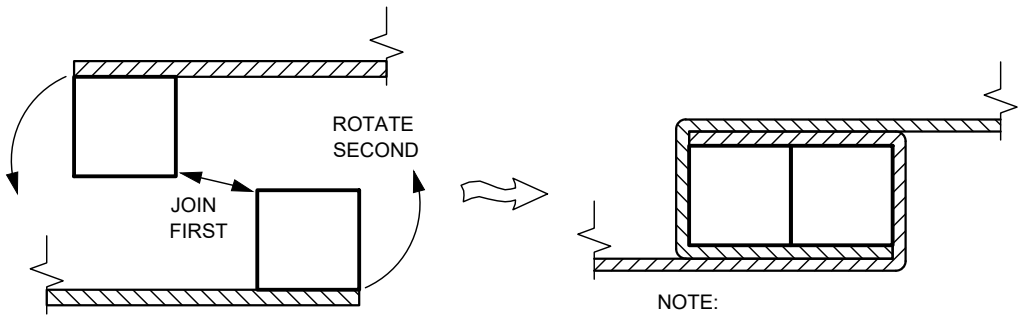
1. SEE PLAN VIEW FOR:
   - TYPE OF CONSTRUCTION LIMIT INDICATOR (FENCE OR MARKERS).
   - LOCATION AND LENGTH OF FENCE OR LINE OF MARKERS.
2. CONSTRUCTION FENCE OR MARKERS INDICATED ON PLANS SHALL BE INSTALLED PRIOR TO OTHER BMPS AND ANY LAND-DISTURBING ACTIVITIES.
3. STEEL TEE POSTS SHALL BE UTILIZED FOR SUPPORT OF CONSTRUCTION FENCE. MAXIMUM SPACING FOR TEE POSTS SHALL BE 15'.

CONSTRUCTION FENCE MAINTENANCE NOTES

1. ANY DAMAGED FENCE OR MARKERS SHALL BE REPAIRED ON A DAILY BASIS.
2. FENCE OR MARKERS SHALL BE REMOVED AT THE END OF CONSTRUCTION. IF ANY DISTURBED AREA EXISTS AFTER FENCE REMOVAL, IT SHALL BE DRILL SEEDED AND CRIMP MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE PROJECT ENGINEER.

PAYSON UTAH SEPTEMBER 2023	CONSTRUCTION FENCE DETAIL	STANDARD PLAN SWP-2	SHEET 1 OF 1





POST SHALL BE JOINED AS SHOWN, THEN ROTATED 180° IN DIRECTION SHOWN AND DRIVEN INTO THE GROUND

NOTE:
THICKNESS OF GEOTEXTILE HAS BEEN EXAGGERATED.

JOINTS - SECTION A-

NOT TO SCALE

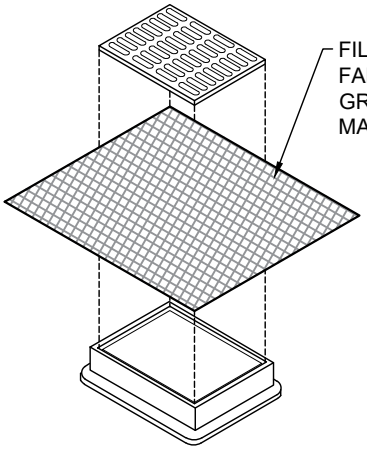
SILT FENCE INSTALLATION NOTES:

1. SEE PLAN VIEW FOR LOCATION AND LENGTH OF FENCE.
2. ANCHOR TRENCH SHALL BE EXCAVATED WITH TRENCHER, OR WITH SILT FENCE INSTALLATION MACHINE; NO ROAD GRADERS, BACKHOES, ETC. SHALL BE USED. TRENCH SHALL BE COMPACTED BY HAND; WITH "JUMPING JACK", OR BY WHEEL ROLLING. COMPACTION SHALL BE SUCH THAT SILT FENCE RESISTS BEING PULLED OUT OF ANCHOR TRENCH BY HAND.
3. SILT FENCE GEOTEXTILE SHALL MEET THE FOLLOWING REQUIREMENTS:
   - 6 TO 12 GALLONS PER MINUTE PER SQUARE FOOT FLOW CAPACITY.
   - 90 LB. TENSILE STRENGTH PER ASTM D1622.
   - UV DESIGN AT 500 HRS. MIN. 70% STRENGTH RETAINED PER ASTM D4355.
4. SILT FENCE INDICATED ON INITIAL SWPP PLAN SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

SILT FENCE MAINTENANCE NOTES:

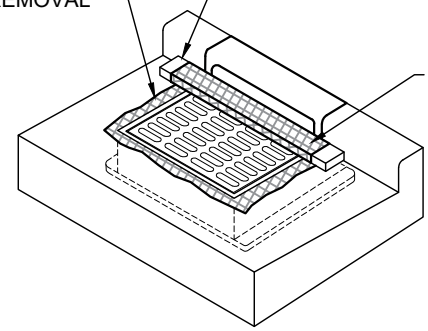
1. THE CONTRACTOR SHALL INSPECT SILT FENCE DAILY DURING AND AFTER AND STORM EVENT AND MAKE REPAIRS OR CLEAN OUT UPSTREAM SEDIMENT AS NECESSARY.
2. SEDIMENT ACCUMULATED UPSTREAM OF SILT FENCE SHALL BE REMOVED WHEN THE UPSTREAM SEDIMENT REACHES A DEPTH OF 6-INCHES.
3. SILT FENCE SHALL BE REMOVED AS INDICATED ON THE PLAN SET. IF ANY DISTURBED AREA EXISTS AFTER REMOVAL, IT SHALL BE SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE PROJECT ENGINEER.

PAYSON UTAH SEPTEMBER 2023	SILT FENCE DETAIL	STANDARD PLAN SWP-3	SHEET 1 OF 1



FILTER FABRIC - EXTEND FABRIC 10" MIN AROUND GRATE PERIMETER FOR MAINTENANCE OR REMOVAL

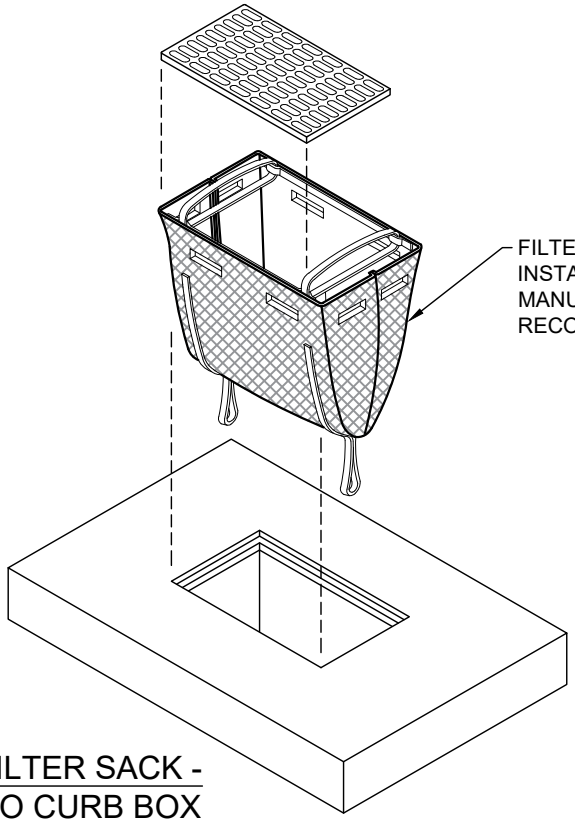
FILTER FABRIC - NO CURB BOX



2x4 EXTENDS 8" BEYOND GRATE ON BOTH SIDES. SECURE TO GRATE.

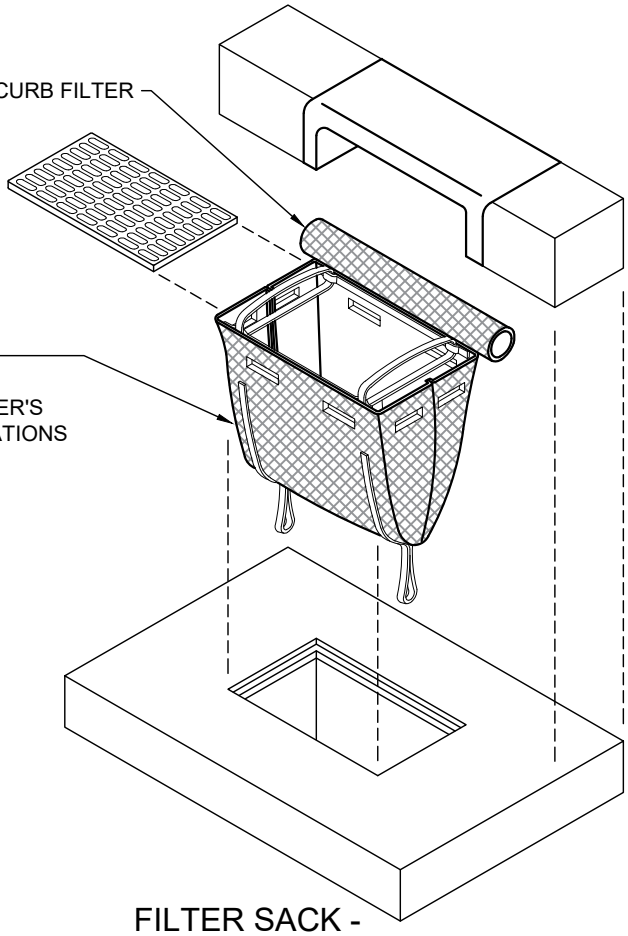
WRAP 2x4 WITH FABRIC AND STAPLE

FILTER FABRIC - CURB BOX



FILTER SACK INSTALL PER MANUFACTURER'S RECOMMENDATIONS

FILTER SACK - NO CURB BOX



CURB FILTER

FILTER SACK - CURB BOX

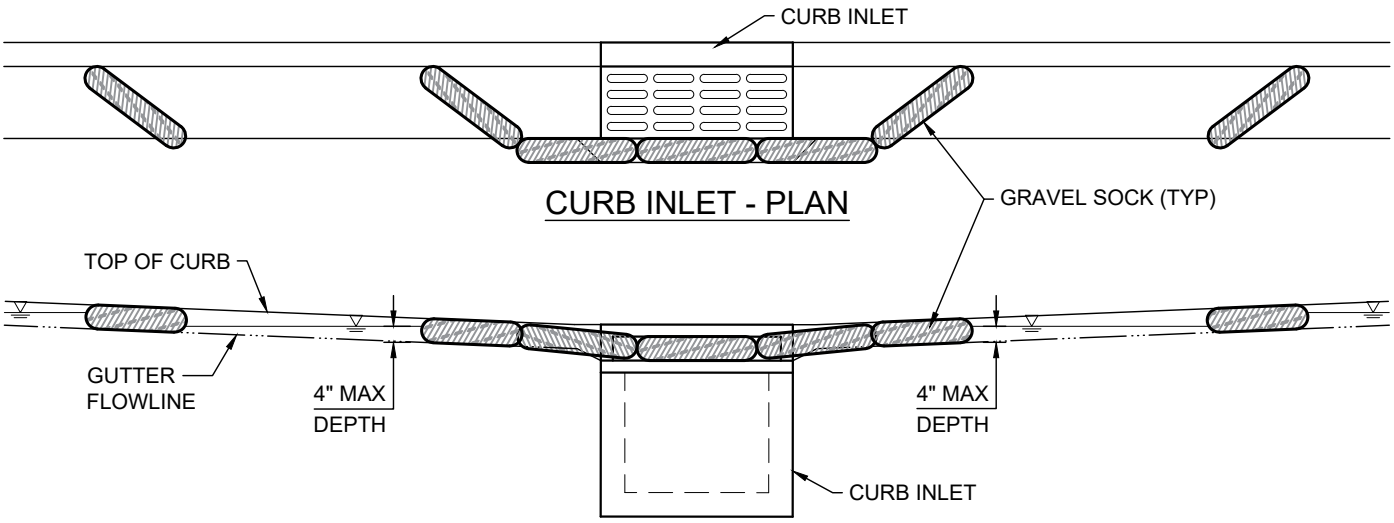
INLET PROTECTION INSTALLATION NOTES:

1. SEE PLAN VIEW FOR LOCATION OF INLET PROTECTION.
2. INSTALL FILTER FABRIC OR FILTER SACK PER MANUFACTURER'S RECOMMENDATIONS.

INLET PROTECTION MAINTENANCE NOTES:

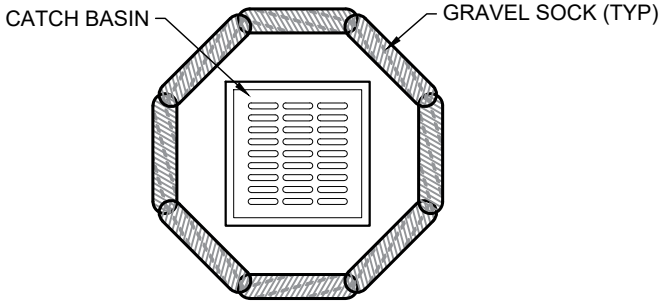
1. THE CONTRACTOR SHALL INSPECT INLET PROTECTION DAILY DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT SEDIMENT AS NECESSARY.
2. INLET PROTECTION SHALL BE REMOVED AND INLETS CLEANED AND INSPECTED PRIOR TO ACCEPTANCE.

PAYSON UTAH SEPTEMBER 2023	INLET PROTECTION DETAIL FILTER FABRIC ALTERNATE	STANDARD PLAN SWP-4	SHEET 1 OF 2

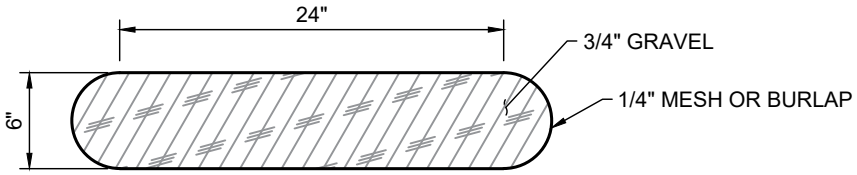


CURB INLET - PLAN

CURB INLET - SECTION



CATCH BASIN - PLAN



GRAVEL SOCK

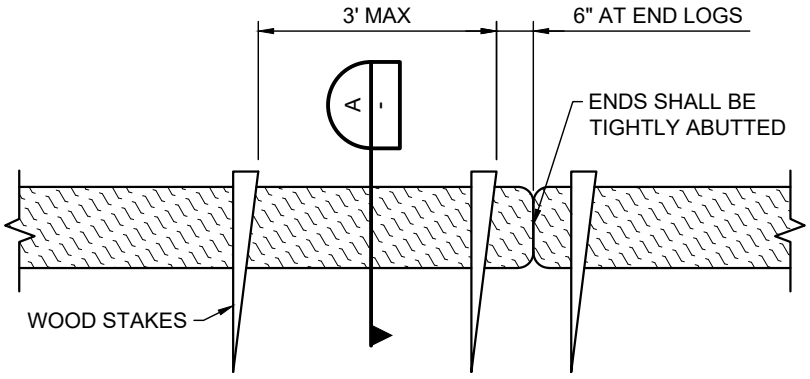
INLET PROTECTION INSTALLATION NOTES:

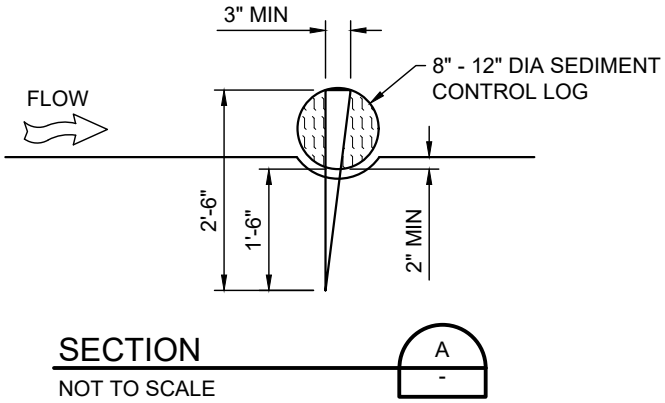
1. SEE PLAN VIEW FOR LOCATION OF INLET PROTECTION.
2. INSTALL GRAVEL SOCK IN RUNOFF FLOW PATH.

INLET PROTECTION MAINTENANCE NOTES:

1. THE CONTRACTOR SHALL INSPECT INLET PROTECTION DAILY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT SEDIMENT AS NECESSARY.
2. REPLACE BROKEN OR TORN GRAVEL SOCKS AND CLEAN ANY SPILLED GRAVEL OUT OF ROADWAY, GUTTER, AND/OR INLET BOX.
3. INLET PROTECTION SHALL BE REMOVED AND INLETS CLEANED AND INSPECTED PRIOR TO ACCEPTANCE.

PAYSON UTAH SEPTEMBER 2023	INLET PROTECTION DETAIL GRAVEL SOCK ALTERNATE	STANDARD PLAN SWP-4	SHEET 2 OF 2





SECTION
A
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NOT TO SCALE

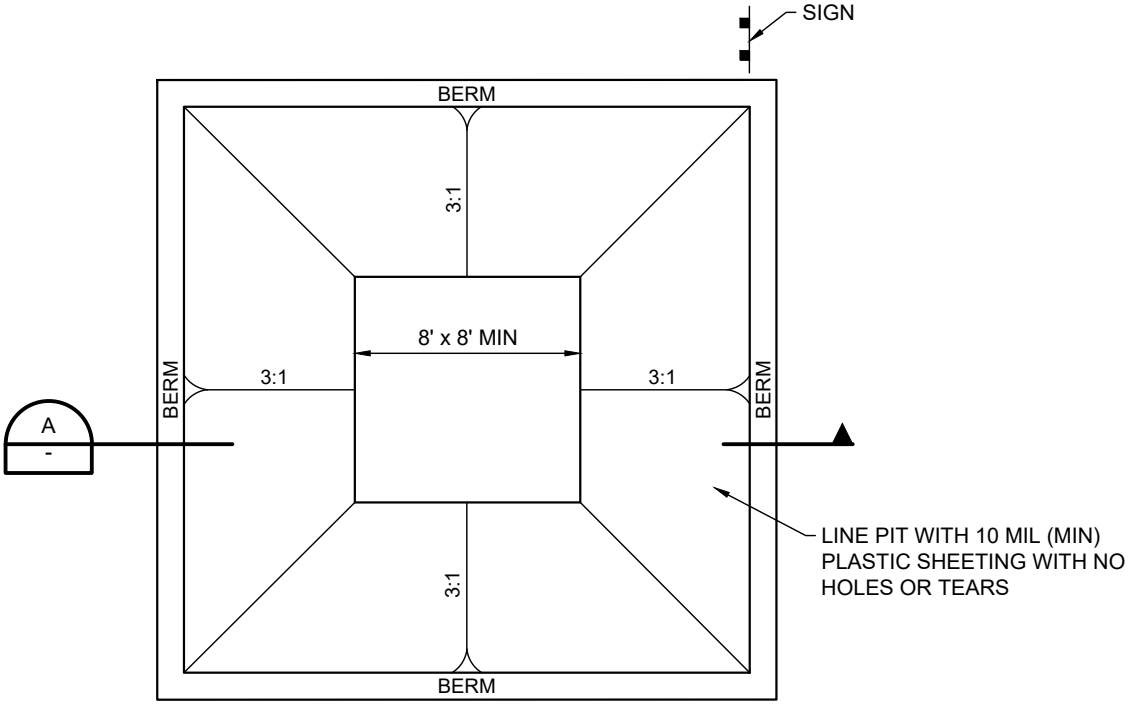
SEDIMENT CONTROL LOG INSTALLATION NOTES:

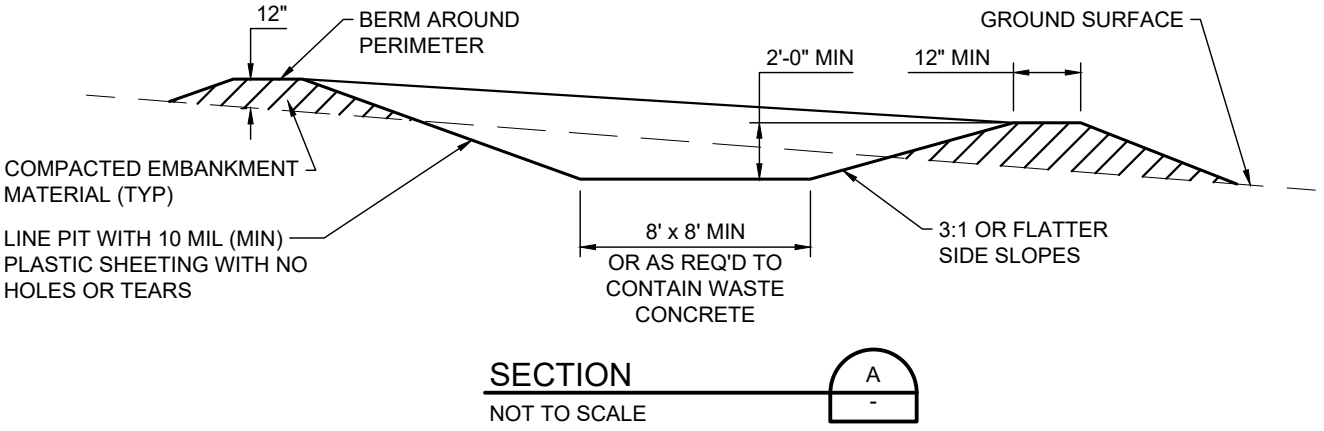
1. SEE PLAN VIEW FOR LOCATION AND LENGTH OF SEDIMENT CONTROL LOG.
2. SEDIMENT CONTROL LOGS INDICATED ON SWPP PLAN SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.
3. SEDIMENT CONTROL LOGS SHALL CONSIST OF STRAW, COMPOST, EXCELSIOR, OR COCONUT FIBER.
4. NOT FOR USE IN CONCENTRATED FLOW AREAS.
5. THE SEDIMENT CONTROL LOG SHALL BE TRENCHED INTO THE GROUND A MINIMUM OF 2".

SEDIMENT CONTROL LOG MAINTENANCE NOTES:

1. THE CONTRACTOR SHALL INSPECT SEDIMENT CONTROL LOGS DAILY. DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT UPSTREAM SEDIMENT AS NECESSARY.
2. SEDIMENT ACCUMULATED UPSTREAM OF SEDIMENT CONTROL LOGS SHALL BE REMOVED WHEN THE UPSTREAM SEDIMENT DEPTH IS WITHIN 1/2 THE HEIGHT OF THE CREST OF LOG.
3. SEDIMENT CONTROL LOG SHALL BE REMOVED ONCE SITE STABILIZED. IF ANY DISTURBED AREA EXISTS AFTER REMOVAL, IT SHALL BE DRILL SEEDED AND CRIMP MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE PROJECT ENGINEER.

PAYSON UTAH SEPTEMBER 2023	SEDIMENT CONTROL LOG DETAIL	STANDARD PLAN SWP-5	SHEET 1 OF 1





SECTION A-

NOT TO SCALE

CONCRETE WASHOUT AREA INSTALLATION NOTES

1. SEE PLAN VIEW FOR LOCATIONS OF CONCRETE WASHOUT AREA.
2. THE CONCRETE WASHOUT AREA SHALL BE INSTALLED PRIOR TO ANY CONCRETE PLACEMENT ON SITE.
3. STABILIZED CONSTRUCTION ENTRANCE IS REQUIRED AT THE ACCESS POINT.
4. SIGNS SHALL BE PLACED AT CONSTRUCTION ENTRANCE, AT THE WASHOUT AREA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CONCRETE WASHOUT AREA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.
5. EXCAVATED MATERIAL SHALL BE UTILIZED IN PERIMETER BERM CONSTRUCTION.
6. WASHOUT SHOULD BE SIGNED IN AN OBVIOUS MANNER.

CONCRETE WASHOUT AREA MAINTENANCE NOTES

1. THE CONCRETE WASHOUT AREA SHALL BE CLEANED OUT, REPAIRED OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR WASTED CONCRETE. WASHOUT SHOULD NEVER OVERTOP WASHOUT DETENTION WALLS.
2. WHEN WASHOUT CONCRETE IS SOLID, POUR EXCESS "CLEAN" WATER OFF, REMOVE CONCRETE FROM SITE AND DISPOSE OF PROPERLY.
3. AT END OF CONSTRUCTION, ALL CONCRETE SHALL BE REMOVED FROM SITE AND DISPOSED OF AT AN APPROVED WASTE SITE.
4. WHEN THE CONCRETE WASHOUT AREA IS REMOVED, THE DISTURBED AREA SHALL BE DRILL SEEDED AND CRIMP MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE PROJECT ENGINEER.
5. INSPECT WEEKLY, DURING AND AFTER ANY STORM EVENT.

PAYSON UTAH SEPTEMBER 2023	CONCRETE WASHOUT DETAIL IN GROUND ALTERNATE	STANDARD PLAN SWP-6	SHEET 1 OF 2

SMALL ECO-PAN

1. 1.5 CUBIC YARDS, 7' x 7' x 14"
2. 550 LBS DRY WEIGHT
3. 3 TON / 300 GALLON LOAD CAPACITY
4. 10-15 MIX WASHOUTS

LARGE ECO-PAN

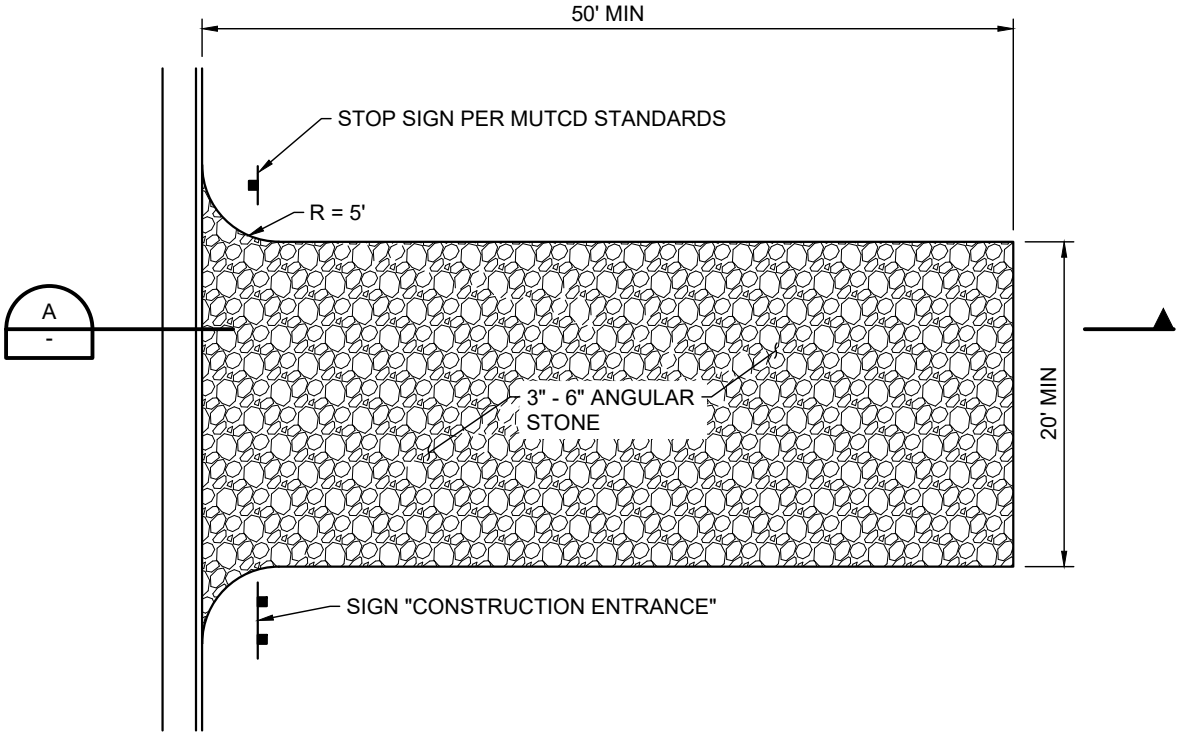
1. 2.35 CUBIC YARDS, 7' x 7' x 28"
2. 850 LBS DRY WEIGHT
3. 5 TON / 475 GALLON LOAD CAPACITY
4. 20-30 MIX WASHOUTS

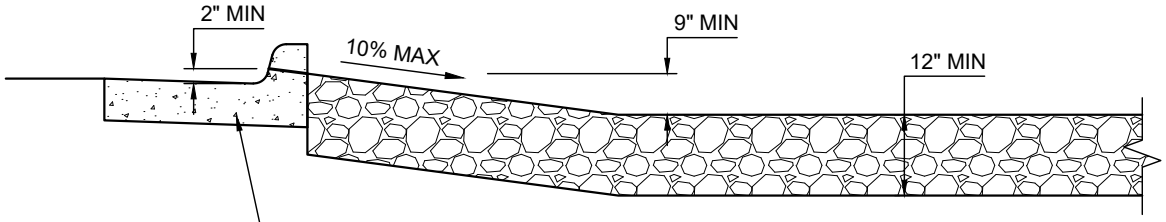
CONCRETE WASHOUT AREA INSTALLATION NOTES

1. SEE PLAN VIEW FOR LOCATIONS OF CONCRETE WASHOUT AREA.
2. UTILIZE ECO-PAN OR EQUIVALENT REMOVABLE / DISPOSABLE CONCRETE WASHOUT FACILITY.
3. THE CONCRETE WASHOUT AREA SHALL BE INSTALLED PRIOR TO ANY CONCRETE PLACEMENT ON SITE.
4. STABILIZED CONSTRUCTION ENTRANCE IS REQUIRED AT THE ACCESS POINT.
5. SIGNS SHALL BE PLACED AT CONSTRUCTION ENTRANCE, AT THE WASHOUT AREA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CONCRETE WASHOUT AREA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.

CONCRETE WASHOUT AREA MAINTENANCE NOTES

1. THE CONCRETE WASHOUT AREA SHALL BE CLEANED OUT OR REPLACED AS NECESSARY TO MAINTAIN CAPACITY FOR WASTED CONCRETE. WASHOUT SHOULD NEVER OVERFLOW.
2. AT END OF CONSTRUCTION, ALL CONCRETE SHALL BE REMOVED FROM SITE AND DISPOSED OF AT AN APPROVED WASTE SITE.
3. WHEN THE CONCRETE WASHOUT AREA IS REMOVED, THE DISTURBED AREA SHALL BE DRILL SEEDED AND CRIMP MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE PROJECT ENGINEER.
4. INSPECT WEEKLY, DURING AND AFTER ANY STORM EVENT.





NO MATERIAL INCLUDING WOOD, PIPES, GRAVEL, OR ASPHALT, SHALL BE PLACED IN GUTTER TO FACILITATE MOUNTING CURB; HOWEVER, CURB MAY BE CUT DOWN TO A HEIGHT OF 2" OR HIGHER FOR EASIER ACCESS AND REPLACED AT PROJECT COMPLETION WITH A PUBLIC WORKS PERMIT.

SECTION A
-
NOT TO SCALE

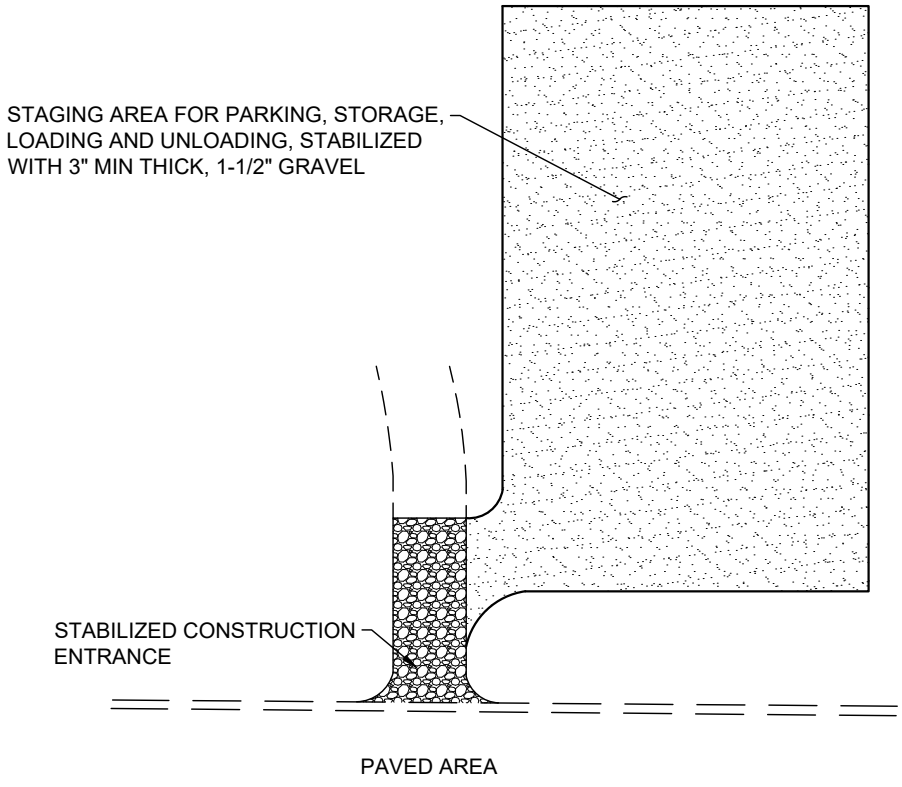
STABILIZED CONSTRUCTION ENTRANCE INSTALLATION NOTES

1. STABILIZED CONSTRUCTION ENTRANCE SHALL BE INSTALLED AT EVERY ACCESS POINT TO SITE.
2. STABILIZED CONSTRUCTION ENTRANCE SHALL CONSIST OF HARD, DENSE, DURABLE STONE, ANGULAR IN SHAPE AND RESISTANT TO WEATHERING. ROUNDED STONE OR BOULDERS WILL NOT BE ACCEPTABLE. THE STONES SHALL BE 3" WITH A MAXIMUM SIZE OF 6". THE STONE SHALL HAVE A SPECIFIC GRAVITY OF AT LEAST 2.6. CONTROL OF GRADATION WILL BE BY VISUAL INSPECTIONS.
3. ANY CRACKED OR DAMAGED CURB AND GUTTER AND SIDEWALK SHALL BE REPLACED BY PERMITTEE.
4. ALL ACCESS POINTS TO THE SITE SHALL BE SHOWN ON THE PLANS.

STABILIZED CONSTRUCTION ENTRANCE MAINTENANCE NOTES

1. CONTRACTOR SHALL INSPECT STABILIZED CONSTRUCTION ENTRANCE DAILY. AGGREGATE SURFACE SHALL BE CLEAN AND LOOSE ENOUGH TO RUT SLIGHTLY UNDER WHEEL LOADS AND CAUSE LOOSE STONE TO DISLODGE MUD FROM TIRES. WHEN GRAVEL BECOMES COMPACTED OR FILLED WITH SEDIMENT SO THAT THE EFFECTIVENESS OF THE PAD IS DIMINISHED, CONTRACTOR SHALL RIP, TURN OVER, OR OTHERWISE LOOSEN GRAVEL, PLACE ADDITIONAL NEW AGGREGATE, OR REPLACE WITH NEW STONE AS NECESSARY TO RESTORE EFFECTIVENESS.
2. STABILIZED CONSTRUCTION ENTRANCE SHALL BE REMOVED AT THE END OF CONSTRUCTION, THE GRAVEL MATERIAL REMOVED OR, IF APPROVED BY THE PROJECT ENGINEER, USED ON SITE, AND THE AREA TOPSOILED, DRILL SEEDED AND CRIMP MULCHED OR OTHERWISE STABILIZED.

PAYSON UTAH SEPTEMBER 2023	STABILIZED CONSTRUCTION ENTRANCE DETAIL	STANDARD PLAN SWP-7	SHEET 1 OF 1



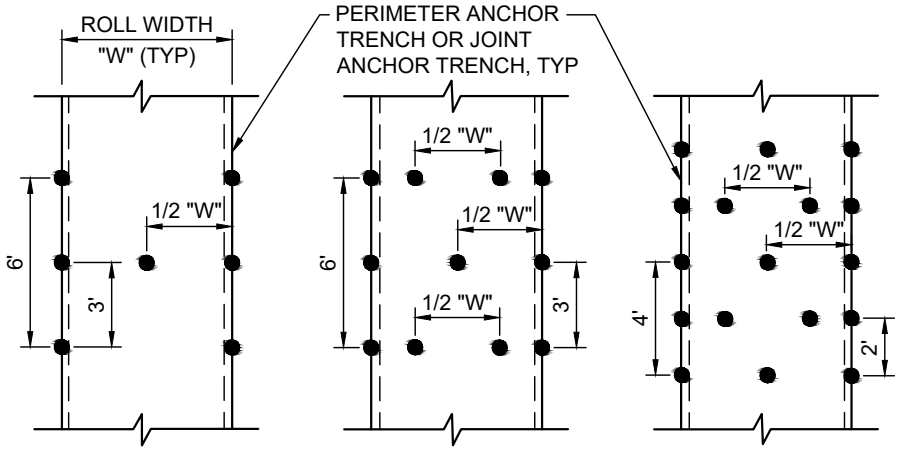
STABILIZED STAGING AREA INSTALLATION NOTES

1. SEE PLAN VIEW FOR GENERAL LOCATION OF STAGING AREA. CONTRACTOR MAY MODIFY LOCATION AND SIZE OF STABILIZED STAGING AREA WITH APPROVAL OF THE PROJECT ENGINEER.
2. STABILIZED STAGING AREA SHALL BE LARGE ENOUGH TO FULLY CONTAIN PARKING, STORAGE, AND UNLOADING AND LOADING OPERATIONS.
3. IF REQUIRED, SITE ACCESS ROADS SHALL BE STABILIZED IN THE SAME MANNER AS THE STAGING AREA.
4. STAGING AREA SHALL BE STABILIZED PRIOR TO ANY OTHER OPERATIONS ON THE SITE.
5. THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM OF 3" OF GRANULAR MATERIAL (NOT RECYCLED CONCRETE).

STABILIZED STAGING AREA MAINTENANCE NOTES

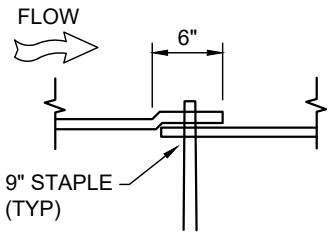
1. THE CONTRACTOR SHALL INSPECT THE STABILIZED STAGING AREA WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT UPSTREAM SEDIMENT AS NECESSARY.
2. CONTRACTOR SHALL PROVIDE ADDITIONAL THICKNESS OF GRANULAR MATERIAL IF ANY RUTTING OCCURS OR UNDERLYING SUBGRADE BECOMES EXPOSED.
3. STABILIZED STAGING AREA SHALL BE ENLARGED IF NECESSARY TO CONTAIN PARKING, STORAGE, AND UNLOADING AND LOADING OPERATIONS.
4. ANY ACCUMULATED DIRT OR MUD SHALL BE REMOVED FROM THE SURFACE OF THE STABILIZED STAGING AREA.
5. THE STABILIZED STAGING AREA SHALL BE REMOVED AT THE END OF CONSTRUCTION. THE GRANULAR MATERIAL SHALL BE REMOVED OR, IF APPROVED, USED ON SITE, AND THE AREA TOPSOILED, DRILL SEEDED AND CRIMP MULCHED OR OTHERWISE STABILIZED.

PAYSON UTAH SEPTEMBER 2023	STABILIZED STAGING AREA DETAIL	STANDARD PLAN SWP-8	SHEET 1 OF 1



STAKING PATTERNS

SHALL BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATION. IF NO MANUFACTURER'S SPECIFICATION IS AVAILABLE USE THE ACCEPTABLE STAKING PATTERN (AS SHOWN ABOVE)



OVERLAPPING JOINT

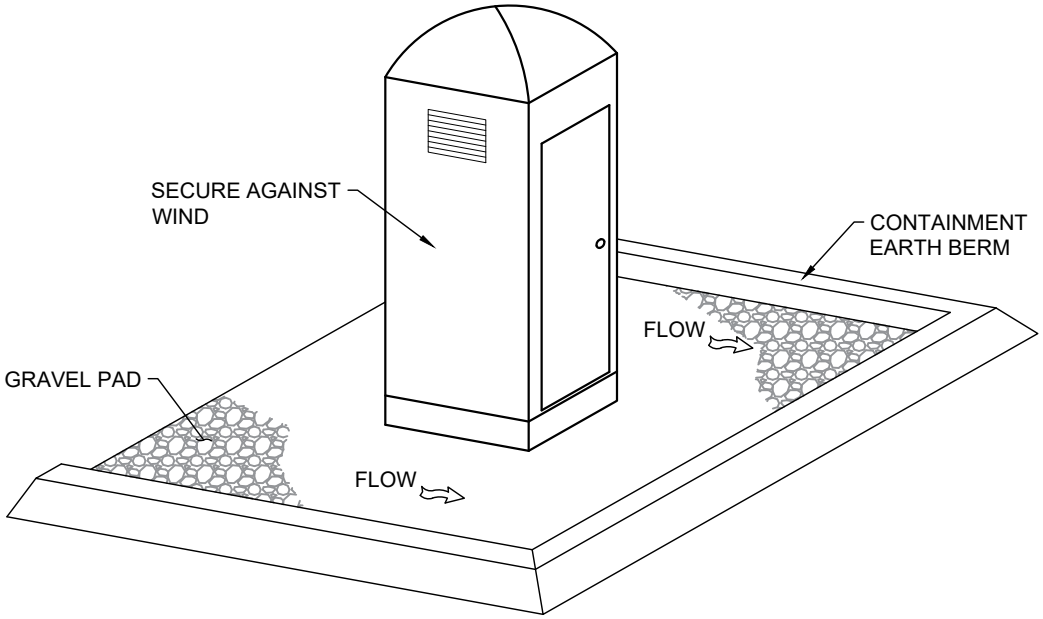
EROSION CONTROL BLANKET INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   - LOCATION OF PERIMETER OF EROSION CONTROL BLANKET.
   - TYPE OF BLANKET (STRAW-COCONUT).
   - AREA "A" IN SQUARE YARDS OF EACH TYPE OF BLANKET.
   - DEPTH, "D", BLANKET SHALL BE INSTALLED ABOVE CHANNEL INVERT.
2. ALL EROSION CONTROL BLANKETS AND NETTING SHALL BE MADE OF 100% NATURAL AND BIODEGRADABLE MATERIAL; NO PLASTIC OR OTHER SYNTHETIC MATERIAL, EVEN IF PHOTO DEGRADABLE, SHALL BE ALLOWED.
3. IN AREAS WHERE EROSION CONTROL BLANKET IS SHOWN ON THE PLANS, THE PERMITTEE SHALL PLACE TOPSOIL AND PERFORM FINAL GRADING, SURFACE PREPARATION, AND SEEDING BELOW THE BLANKET IN ACCORDANCE WITH THE REQUIREMENTS OF THE LANDSCAPING PLAN, SEEDING AND MULCHING. SUBGRADE SHALL BE SMOOTH AND MOIST PRIOR TO BLANKET INSTALLATION AND THE BLANKET SHALL BE IN FULL CONTACT WITH SUBGRADE, NO GAPS OR VOIDS SHALL EXIST UNDER THE BLANKET.
4. EROSION CONTROL BLANKET SHALL BE PLACED SMOOTHLY, BUT LOOSELY, ON THE SOIL SURFACE, WITHOUT STRETCHING.
5. PERIMETER ANCHOR TRENCH SHALL BE USED AT OUTSIDE PERIMETER OF ALL BLANKET AREAS.
6. JOINT ANCHOR TRENCH SHALL BE USED TO JOIN ROLLS OF BLANKETS TOGETHER (LONGIITUDINALLY AND TRANSVERSELY) FOR ALL BLANKETS EXCEPT STRAW, WHICH MAY USE AN OVERLAPPING JOINT.
7. INTERMEDIATE ANCHOR TRENCH SHALL BE USED AT SPACING OF ONE-HALF THE ROLL LENGTH FOR COCONUT AND EXCELSIOR BLANKETS.
8. THE OVERLAPPING JOINT DETAIL SHALL BE USED TO JOIN ROLLS OF BLANKETS TOGETHER FOR BLANKETS ON SLOPES.
9. MATERIAL SPECIFICATIONS OF EROSION CONTROL BLANKET SHALL CONFORM TO TABLE 7.1. A SAMPLE OF BLANKET SHALL BE SUBMITTED AT LEAST TWO WEEKS IN ADVANCE OF ITS USE FOR APPROVAL BY THE PROJECT ENGINEER.
10. ANY AREAS OF SEEDING AND MULCHING DISTURBED IN THE PROCESS OF INSTALLING EROSION CONTROL BLANKET SHALL BE RESEEDED AND MULCHED IN ACCORDANCE WITH THE LANDSCAPING PLAN.
11. SEE DRAINAGE DESIGN PLANS FOR MAJOR DRAINAGEWAY STABILIZATION MEASURES THAT MAY EXCEED THE DESIGN CONDITIONS ASSOCIATED WITH THE DETAILS ABOVE.

EROSION CONTROL BLANKET TYPE				
TYPE	COCONUT CONTENT	STRAW CONTENT	EXCELSIOR CONTENT	NETTING MIN.
STRAW-COCONUT	30% MIN.	70% MAX.	-	DOUBLE/NATURAL

EROSION CONTROL BLANKET INSTALLATION NOTES

1. THE CONTRACTOR SHALL INSPECT EROSION CONTROL BLANKETS WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS AS NECESSARY.
2. EROSION CONTROL BLANKET IS TO BE LEFT IN PLACE UNLESS REQUESTED TO BE REMOVED BY THE PROJECT ENGINEER.
3. ANY EROSION CONTROL BLANKET PULLED OUT, TORN, OR OTHERWISE DAMAGED SHALL BE RE-INSTALLED. ANY SUBGRADE AREAS BELOW THE BLANKET THAT HAVE ERODED TO CREATE A VOID UNDER THE BLANKET, OR THAT REMAIN DEVOID OF GRASS SHALL BE REPAIRED, RESEEDED AND MULCHED AND THE EROSION CONTROL BLANKET REINSTALLED.



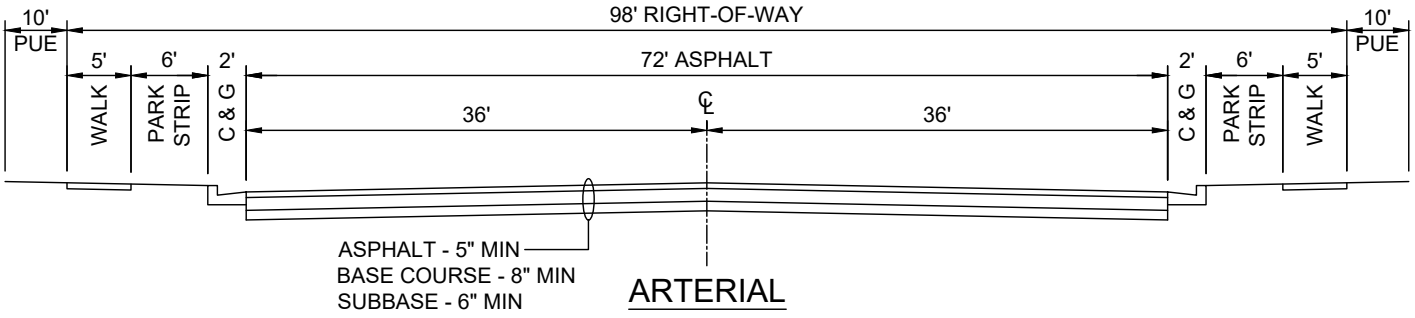
PORTABLE TOILET INSTALLATION NOTES:

1. SEE PLAN VIEW FOR LOCATION OF TEMPORARY ON-SITE PORTABLE TOILET FOR CONSTRUCTION PERSONNEL.
2. LOCATE PORTABLE TOILETS IN CONVENIENT LOCATIONS THROUGHOUT THE SITE.
3. PREPARE LEVEL, GRAVEL SURFACE AND PROVIDE CLEAR ACCESS TO THE TOILETS FOR SERVICING AND FOR ON-SITE PERSONNEL.
4. CONSTRUCT EARTH BERM PERIMETER (6" TALL BY 6" WIDE), CONTROL FOR SPILL/PROTECTION LEAK.

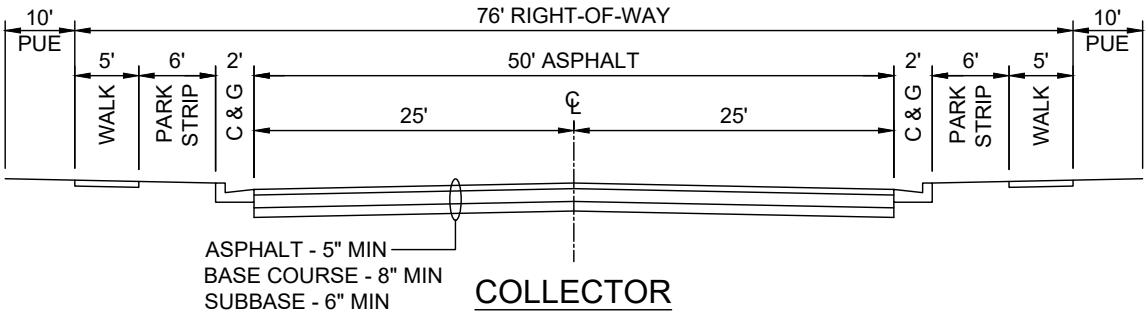
PORTABLE TOILET MAINTENANCE NOTES:

1. PORTABLE TOILETS SHOULD BE MAINTAINED IN GOOD WORKING ORDER BY LICENSED SERVICE WITH DAILY OBSERVATION LEAK DETECTION.
2. REGULAR WASTE COLLECTION SHOULD BE ARRANGED WITH LICENSED SERVICE.
3. ALL WASTE SHOULD BE DEPOSITED IN SANITARY SEWER SYSTEM FOR TREATMENT WITH APPROPRIATE AGENCY APPROVAL.

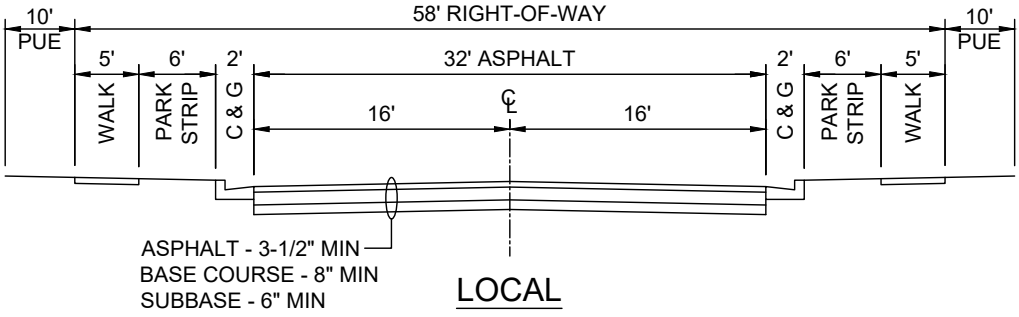
PAYSON UTAH SEPTEMBER 2023	PORTABLE TOILET	STANDARD PLAN SWP-10	SHEET 1 OF 1



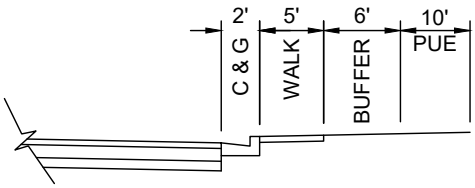
ARTERIAL



COLLECTOR



LOCAL



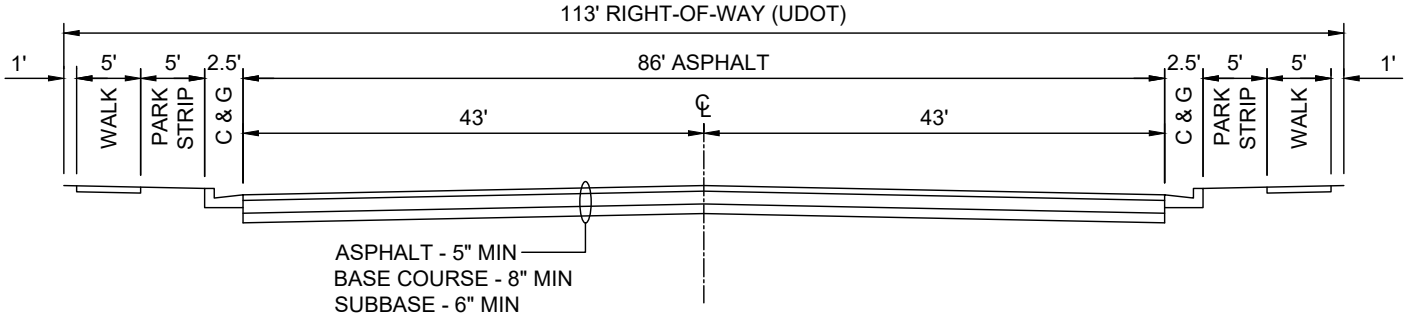
LOCAL

NOTE: A 5' SIDEWALK ADJACENT TO THE CURB IS ONLY ALLOWED IN HISTORIC AREAS WHERE THE MAJORITY OF THE BLOCK HAS MONOLITHIC CURB AND SIDEWALK. THIS CONFIGURATION REQUIRES APPROVAL OF THE CITY ENGINEER.

NOTES:

1. THE TYPICAL SECTION IS A 5' SIDEWALK WITH A 6' PARK STRIP. A 5' SIDEWALK ADJACENT TO THE CURB IS ONLY ALLOWED IN HISTORIC AREAS AT THE DISCRETION OF THE CITY ENGINEER.
2. SEE SHEET 4 OF THIS DETAIL FOR STANDARD UTILITY PLACEMENT.
3. TOTAL ASPHALT THICKNESS, 3-1/2" OR 5" AT CONSTRUCTION. PAYSON CITY WILL PERFORM THE SLURRY SEAL AFTER 90% OF THE HOMES HAVE BEEN BUILT OR AFTER THE 1-YEAR WARRANTY PERIOD IS OVER. THE COST OF THE SLURRY SEAL IS PAID AT THE TIME OF BONDING.
4. REFER TO THE LATEST REVISION OF THE ADOPTED TRANSPORTATION MASTER PLAN FOR STRIPING WIDTHS OF THE ROADS.
5. SOME ROADS MAY REQUIRE AN ADDITIONAL 5' OF RIGHT-OF-WAY ON ONE SIDE AND A 10' TRAIL IN LIEU OF A 5' SIDEWALK. REFER TO THE PAYSON CITY TRAILS MASTER PLAN FOR LOCATION OF TRAIL ROUTES.

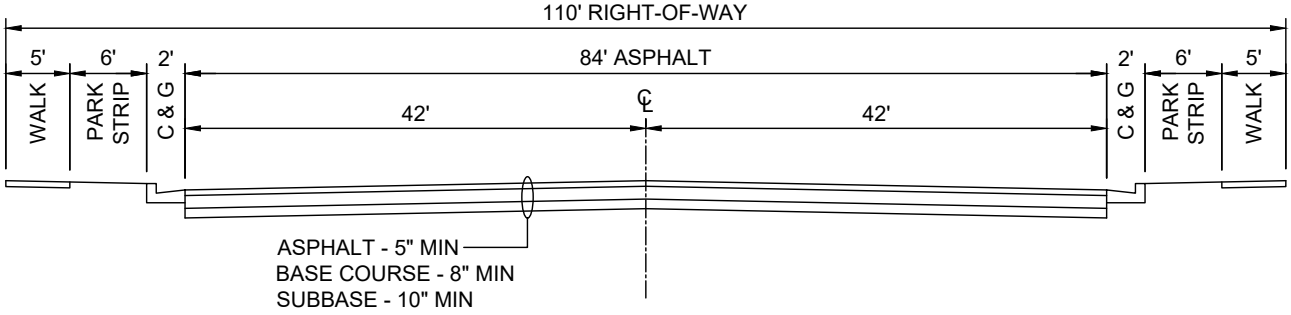
PAYSON UTAH SEPTEMBER 2023	STANDARD STREET CROSS SECTIONS TYPICAL CITY OWNED STREETS	STANDARD PLAN ST-1	SHEET 1 OF 4



MAIN ST (SR-115)

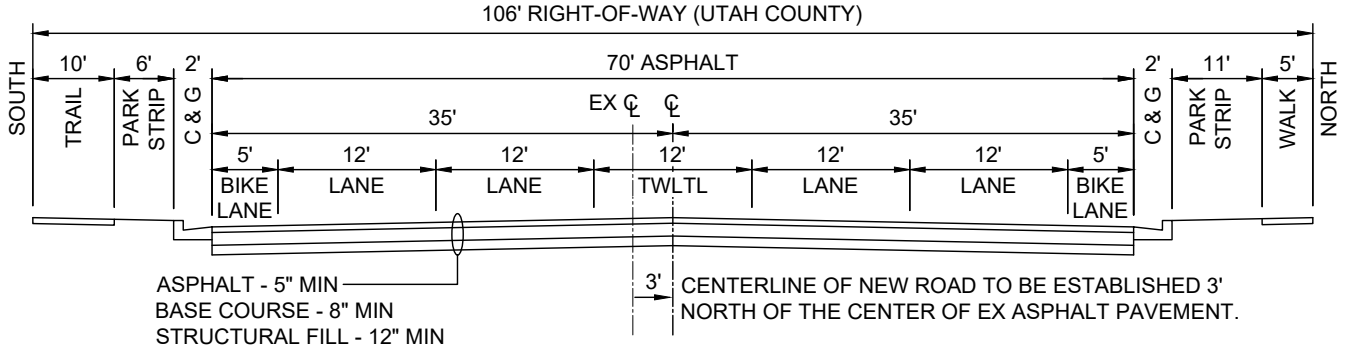
NORTH OF SR-198

NOTE: MAIN ST NORTH OF SR-198, SR-115, IS A UDOT FACILITY. THE CROSS SECTION SHOWN ABOVE IS APPROXIMATE. DEVELOPMENT ALONG THE SR-115 CORRIDOR IS SUBJECT TO UDOT REVIEW AND APPROVAL. DEVELOPER IS RESPONSIBLE FOR VERIFYING THE ACTUAL CROSS SECTION REQUIRED AND OBTAINING ALL REQUIRED PERMITS AND APPROVALS FROM UDOT. APPROVAL FROM UDOT MUST BE SUBMITTED IN WRITING TO PAYSON CITY PRIOR TO PRE-CONSTRUCTION MEETING.



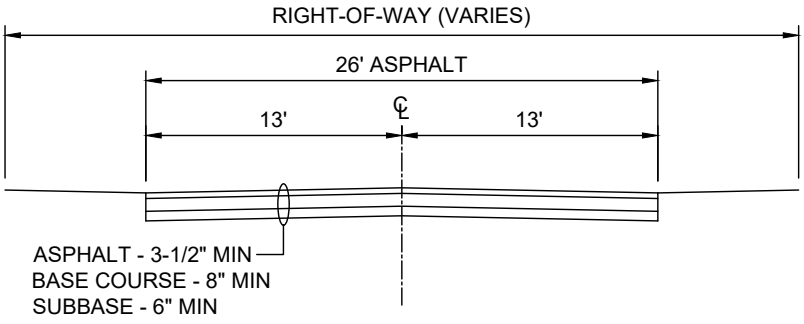
ARROWHEAD TRAIL

NOTE: THE MINIMUM PAVEMENT SECTION IN ARROWHEAD TRAIL IS 5" HMA, 8" BASE COURSE, AND 10" SUBBASE. A GEOTECH REPORT IS REQUIRED TO DETERMINE IF THESE THICKNESSES ARE ADEQUATE OR WILL NEED TO BE INCREASED. ANY DEVELOPMENT TYING INTO ARROWHEAD TRAIL IS REQUIRED TO BUILD HALF THE ROAD FROM THE CENTERLINE. SEE WCG FIGURE #2 IN PAYSON CITY DEVELOPMENT GUIDELINES FOR ARROWHEAD TRAIL RIGHT-OF-WAY TRANSITION AT SALEM CITY BOUNDARY.

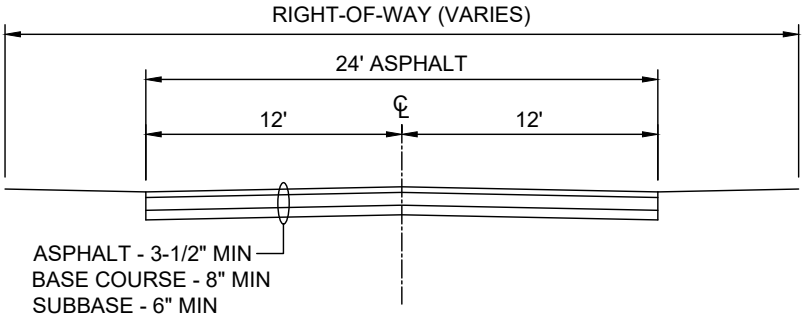


900 NORTH (9600 SOUTH)

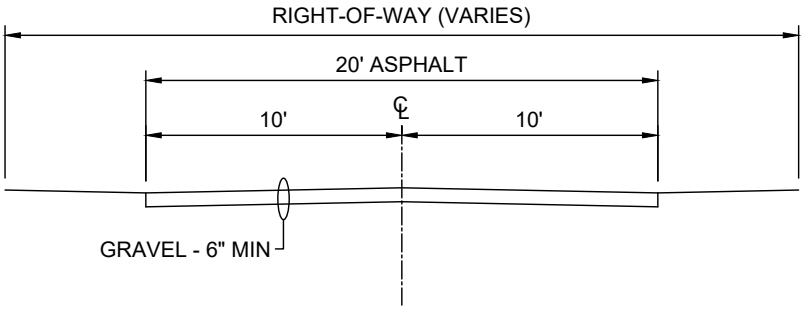
NOTE: 900 NORTH IS A UTAH COUNTY FACILITY WITH COORDINATE 9600 SOUTH. UPON ANNEXATION INTO PAYSON CITY, PROPERTIES ALONG 9600 SOUTH WILL RECEIVE A PAYSON CITY ADDRESS WITH 900 NORTH AS THE STREET. DEVELOPMENT ALONG THE 900 NORTH (9600 SOUTH) CORRIDOR IS SUBJECT TO UTAH COUNTY REVIEW AND APPROVAL. DEVELOPER IS RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS AND APPROVALS FROM UTAH COUNTY. APPROVAL FROM UTAH COUNTY MUST BE SUBMITTED IN WRITING TO PAYSON CITY PRIOR TO PRE-CONSTRUCTION MEETING.



INFILL LOTS



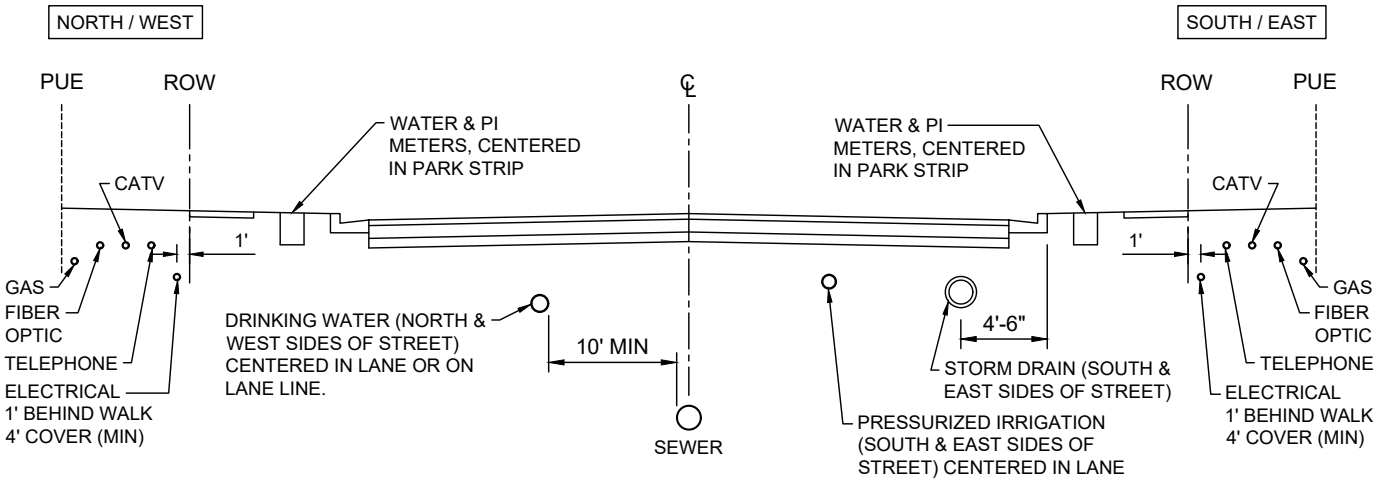
MH ZONES



ZONE A-5-H

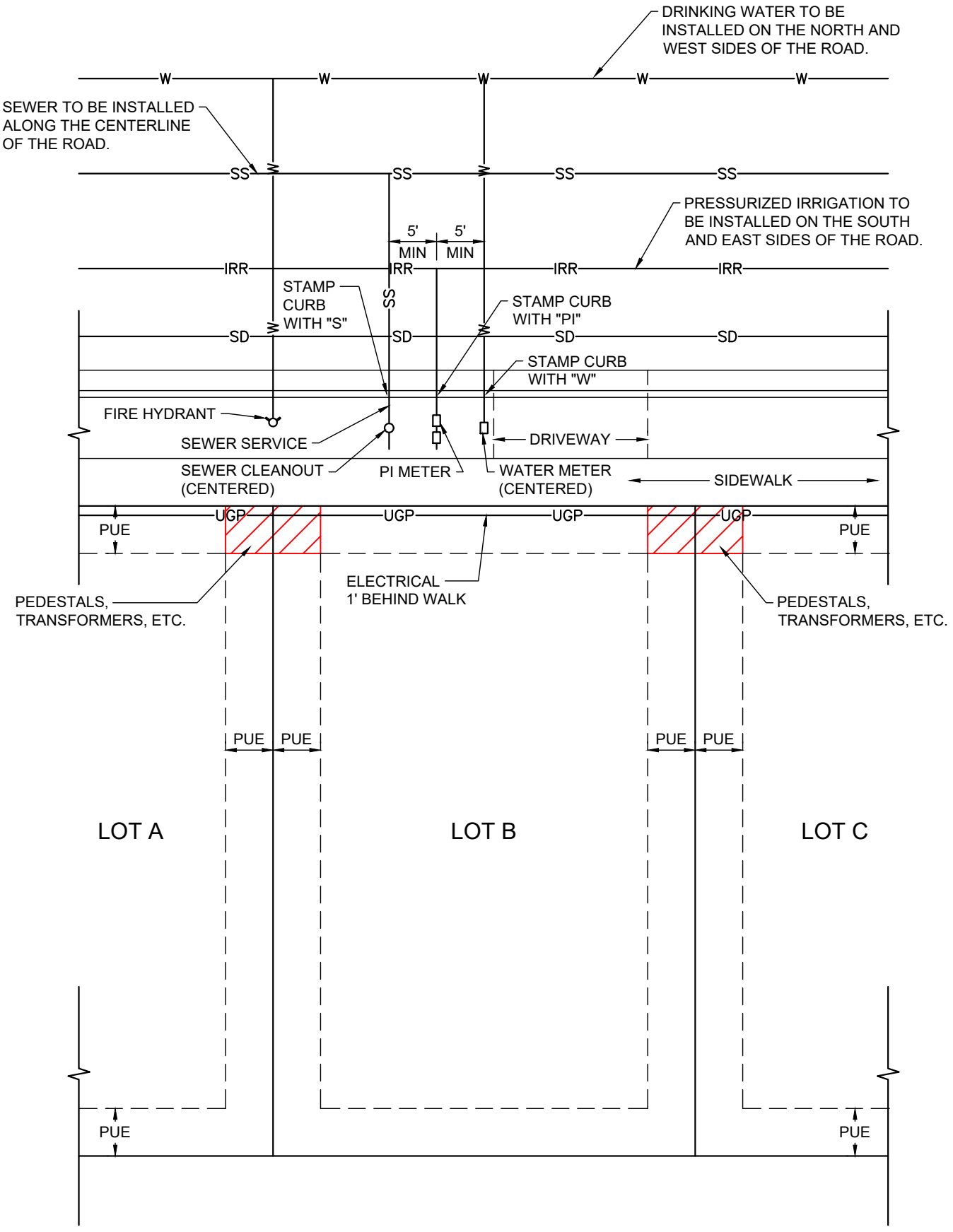
NOTES:

1. THE MH AND A-5-H CROSS SECTIONS ARE ONLY FOR THE USES PERMITTED BY THE ZONE DESIGNATION AND ARE PRIVATE ROADS.
2. OTHER PRIVATE ROADS ARE ONLY ALLOWED FOR INFILL DEVELOPMENT OR PARCELS WITH PHYSICAL BARRIERS AND ARE NOT ALLOWED FOR ALL OTHER GREEN FIELD DEVELOPMENT.
3. A SUBDIVISION OF 5 ACRES OR MORE IN SIZE DOES NOT QUALIFY FOR PRIVATE ROADS NO MATTER WHAT BARRIERS EXIST.

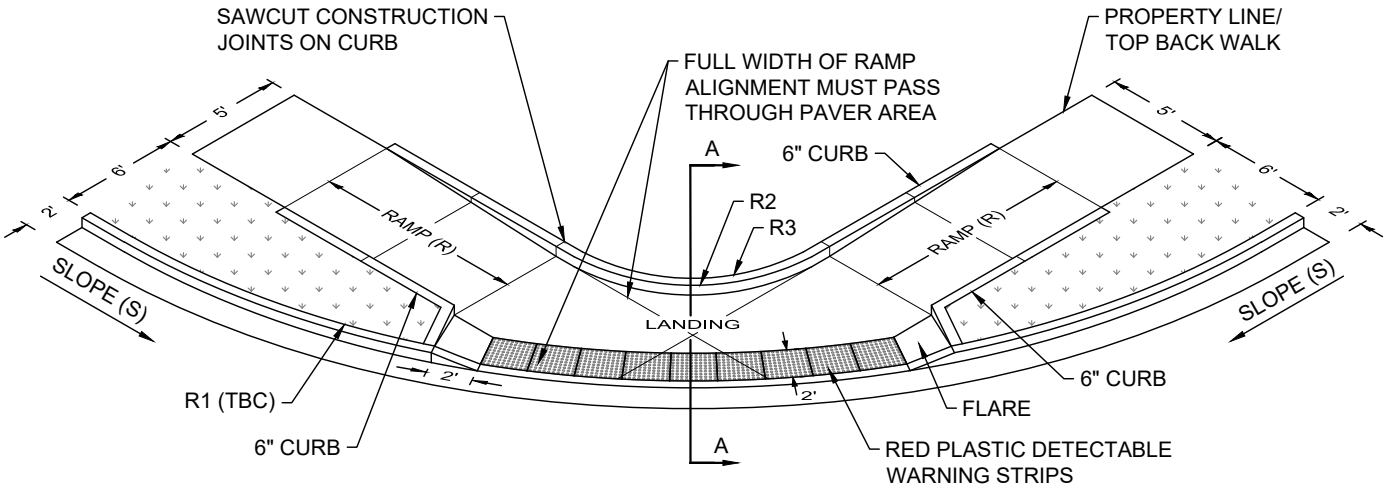


NOTES:

1. LOCATE CULINARY WATER AND PRESSURIZED IRRIGATION METER BOXES IN THE CENTER OF THE PLANTER STRIP. IF THERE IS MONOLITHIC CURB, GUTTER, AND SIDEWALK, INSTALL METER BOXES 3' BEHIND BACK OF WALK.
2. LOCATE ALL ABOVE GROUND APPURTENANCES (i.e. ELECTRICAL TRANSFORMERS AND TELEPHONE PEDESTALS) 1' BEHIND BACK OF WALK IN PUBLIC UTILITY EASEMENT.
3. SLOPE THE SIDEWALK TOWARD THE CURB AT 1/4" SLOPE.
4. INSTALL FIRE HYDRANTS ON THE WATER MAIN SIDE OF THE STREET, CENTERED IN THE PARK STRIP OR A MINIMUM OF 2' BEHIND BACK OF WALK FOR MONOLITHIC.
5. DRY UTILITIES MAY BE JOINT TRENCHED WITH ELECTRICAL. REFER TO PAYSON CITY POWER STANDARDS AND SPECIFICATIONS.

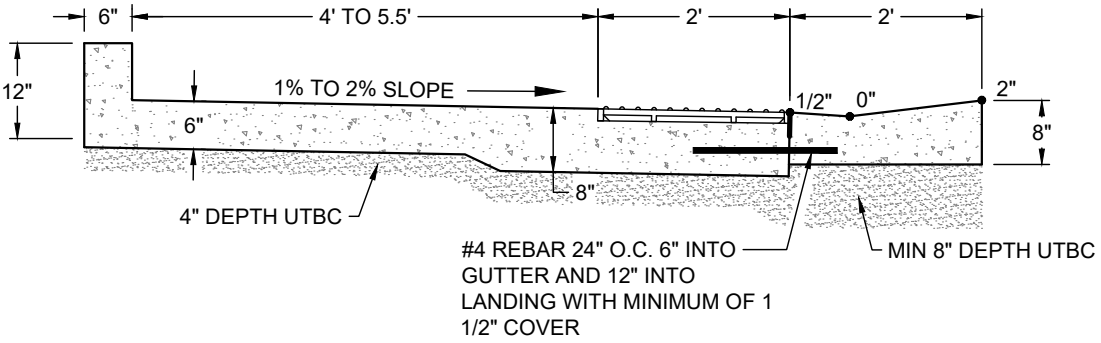


PAYSON UTAH SEPTEMBER 2023	STANDARD PLOT PLAN	STANDARD PLAN ST-2	SHEET 1 OF 1



SLOPE OF CURB AND GUTTER TO LANDING (S)	RAMP LENGTH (R)	CURB WALL
0.45% OR LESS	5'	NO
0.45% TO 2.0%	10'	YES
2% OR MORE	15'	YES

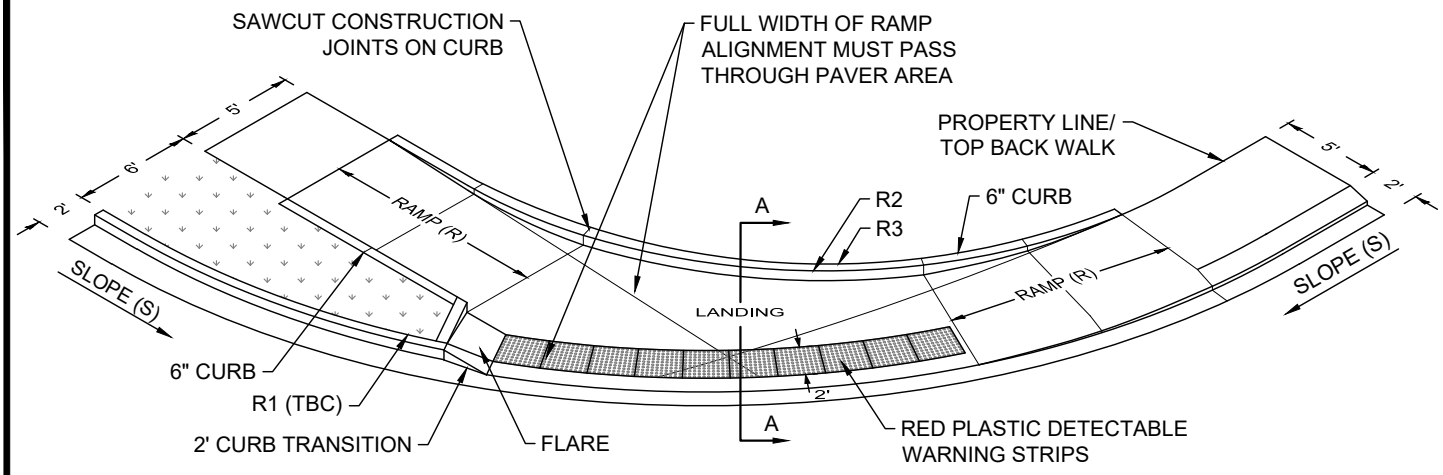
R1 = 35' RADIUS		R1 = 30' RADIUS		R1 = 25' RADIUS	
PROPERTY LINE RADIUS (R2)	TOP BACK CURB RADIUS (R3)	PROPERTY LINE RADIUS (R2)	TOP BACK CURB RADIUS (R3)	PROPERTY LINE RADIUS (R2)	TOP BACK CURB RADIUS (R3)
12'-0"	11'-6"	7'-0"	6'-6"	5'-6"	5'-0"



SECTION A-A

NOTES:

1. CONTRACTOR SHALL INSTALL DETECTABLE WARNING PLATES ACCORDING TO THE STANDARDS FOR PLASTIC DETECTABLE WARNING PLATES AND MATCH PATTERN IN THIS DRAWING. RADIAL PLATES SHALL BE A PLASTIC RED COLORED PLATE AND SHALL BE ACCORDING TO THE CORRECT TBC RADIUS.
2. THE MAXIMUM SLOPE OF A STREET WITHIN 25' OF THE BEGINNING OF RADIUS IS 5.5%. VARIATION TO THE SLOPE MUST BE APPROVED BY THE CITY ENGINEER.
3. THE SLOPE OF THE FLOWLINE OF GUTTER THROUGH A PEDESTRIAN RAMP SHALL BE 2.0% OR LESS OR APPROVED BY CITY ENGINEER.
4. CURB AND GUTTER SLOPE (S) AND RAMP LENGTHS (R) SHALL BE CLEARLY LABELED AND DRAWN ON ALL PLANS, SEE TABLE FOR (R2) AND (R3).
5. RAMPS SHALL NOT EXCEED A 1:12 SLOPE.
6. STANDARD PEDESTRIAN RAMPS HAVE BEEN DESIGNED FOR NEW CONSTRUCTION. REPLACEMENT OF EXISTING PEDESTRIAN RAMPS SHALL BE DESIGNED AND STAMPED BY A PROFESSIONAL ENGINEER AND APPROVED BY THE CITY ENGINEER OR HIS/HER DESIGNEE.
7. COLD WEATHER CONCRETE MIX AND INSTALLATION PER APWA STANDARDS AND SPECIFICATIONS REQUIRED OCTOBER 1 THRU MARCH 31, OR AS REQUIRED BY THE PUBLIC WORKS DIRECTOR OR DESIGNEE.



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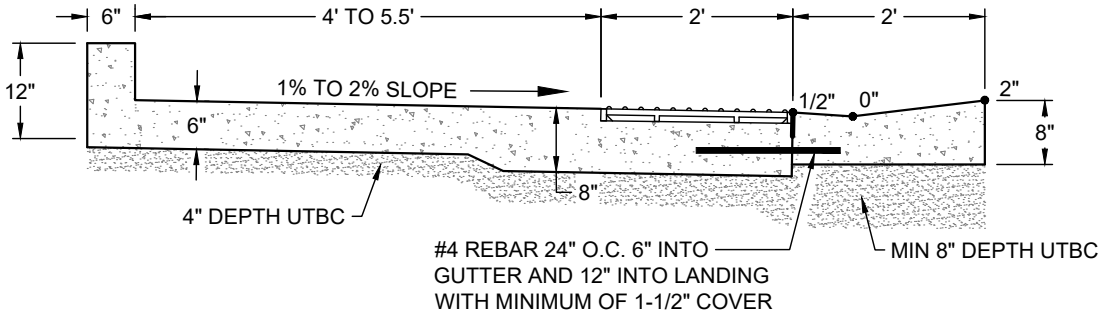
PROPERTY LINE RADIUS (R2)	TOP BACK CURB RADIUS (R3)	PROPERTY LINE RADIUS (R2)	TOP BACK CURB RADIUS (R3)	PROPERTY LINE RADIUS (R2)	TOP BACK CURB RADIUS (R3)
23'-6"	23'-0"	19'-6"	19'-0"	13'-0"	12'-6"



SECTION A-A

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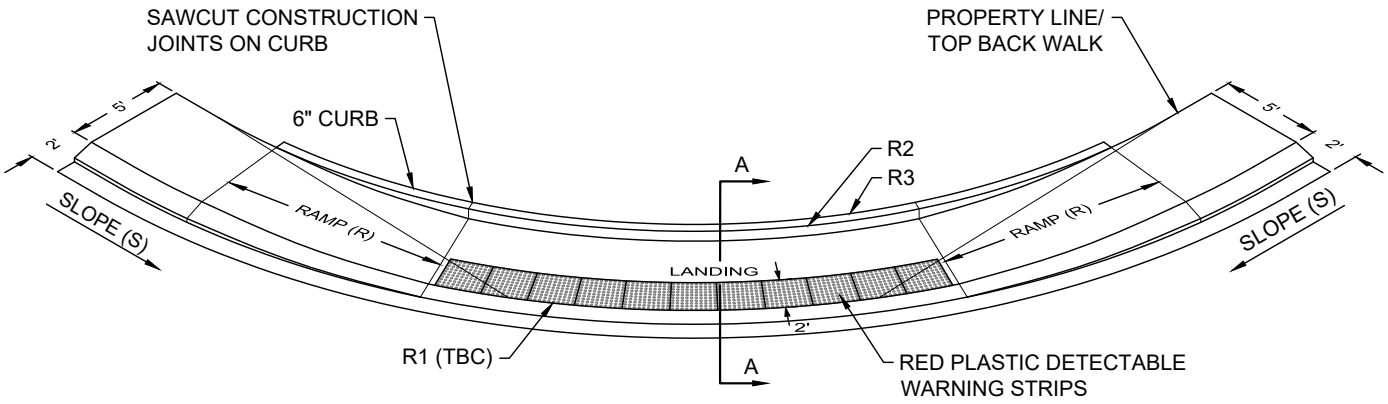

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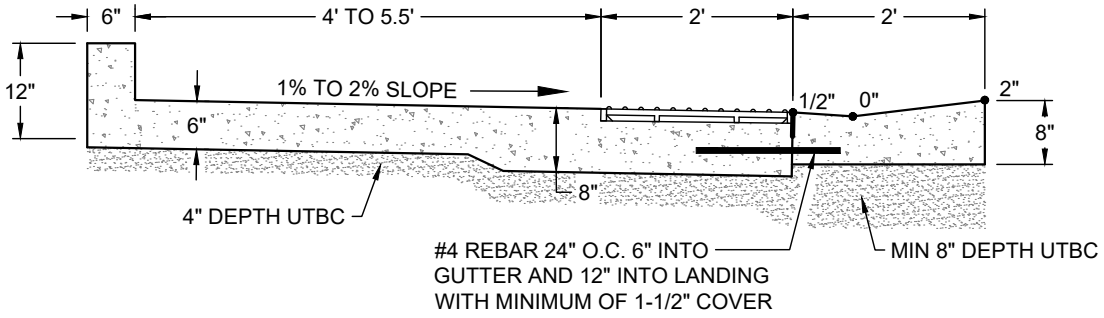
30'-6"	30'-0"	25'-6"	25'-0"	20'-6"	20'-0"



SECTION A-A

NOTES:

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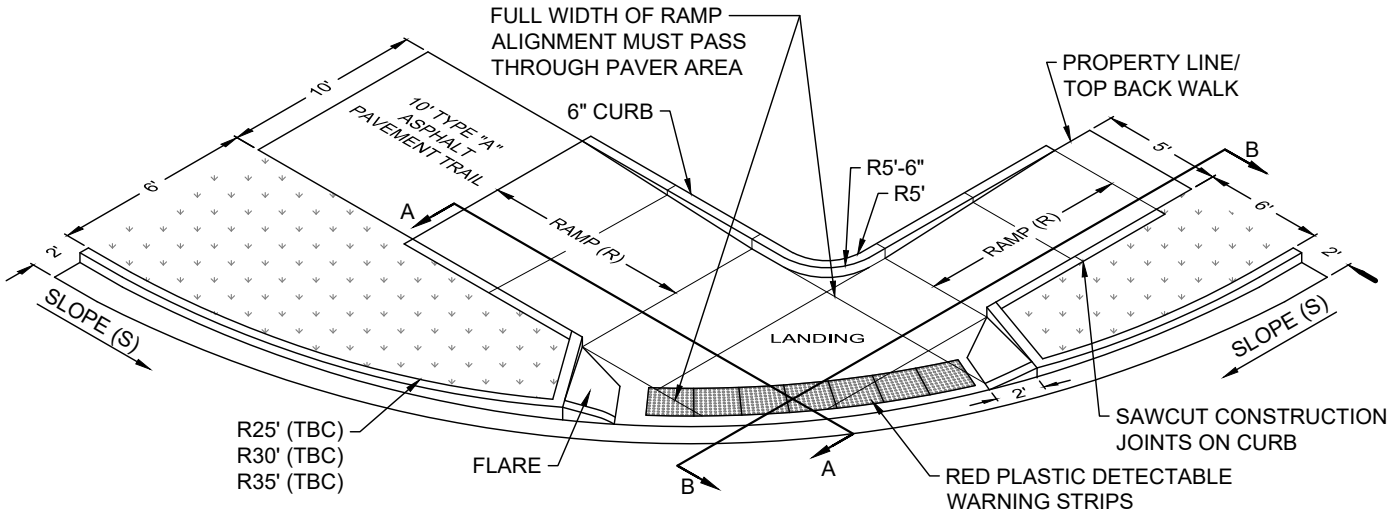

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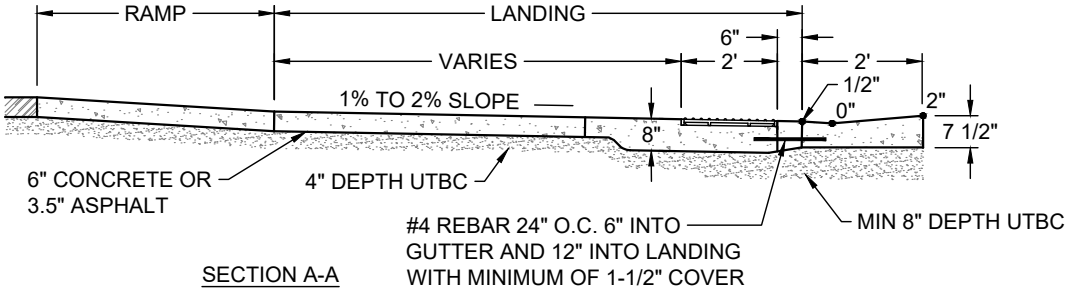
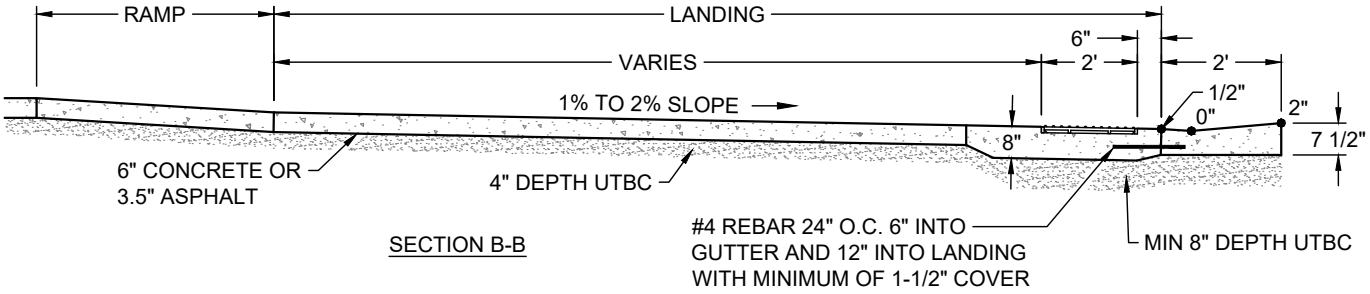


SECTION A-A

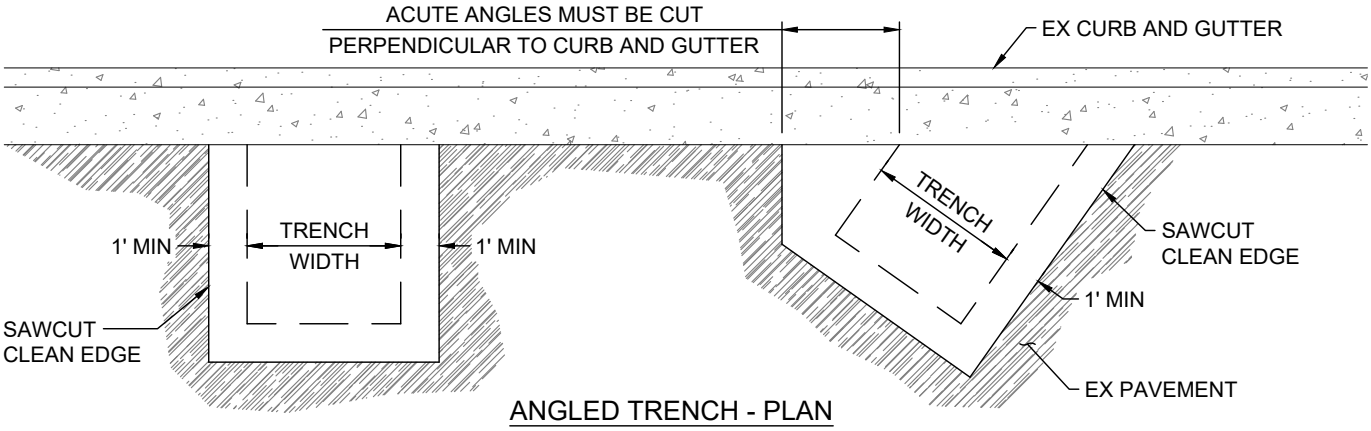


SECTION B-B

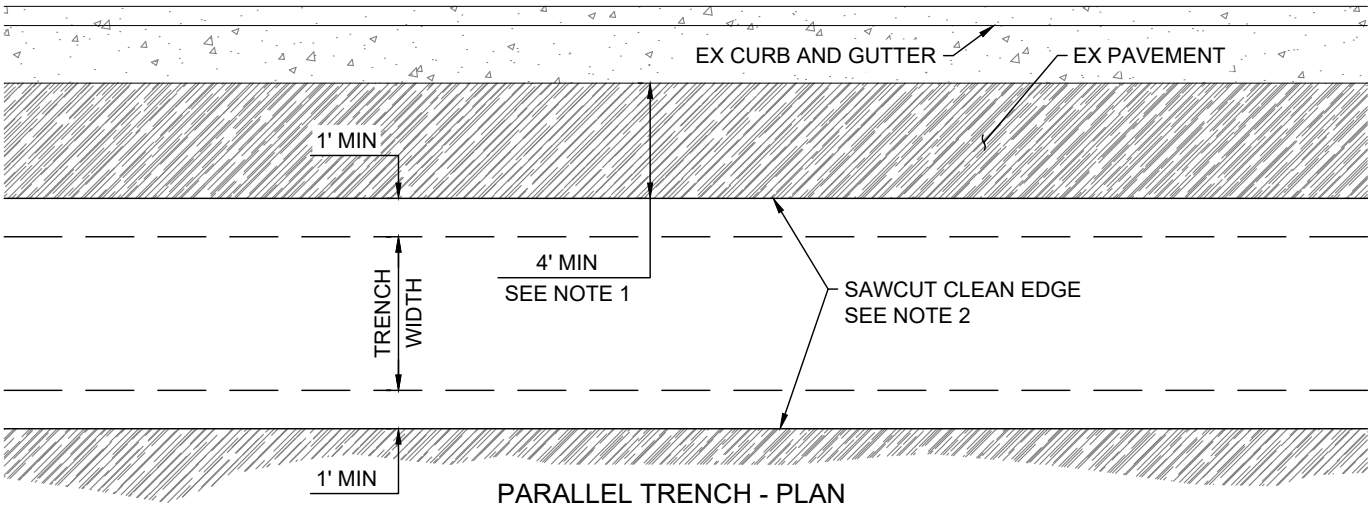
NOTES:

1. CONTRACTOR SHALL INSTALL DETECTABLE WARNING PLATES ACCORDING TO THE STANDARDS FOR PLASTIC DETECTABLE WARNING PLATES AND MATCH PATTERN IN THIS DRAWING. RADIAL PLATES SHALL BE A PLASTIC RED COLORED PLATE AND SHALL BE ACCORDING TO THE CORRECT TBC RADIUS.
2. THE MAXIMUM SLOPE OF A STREET WITHIN 25' OF THE BEGINNING OF RADIUS IS 5.5%. VARIATION TO THE SLOPE MUST BE APPROVED BY THE CITY ENGINEER.
3. THE SLOPE OF THE FLOWLINE OF GUTTER THROUGH A PEDESTRIAN RAMP SHALL BE 2.0% OR LESS OR APPROVED BY CITY ENGINEER.
4. CURB AND GUTTER SLOPE (S) AND RAMP LENGTHS (R) SHALL BE CLEARLY LABELED AND DRAWN ON ALL PLANS, SEE TABLE FOR (R2) AND (R3).
5. RAMPS SHALL NOT EXCEED A 1:12 SLOPE.
6. STANDARD PEDESTRIAN RAMPS HAVE BEEN DESIGNED FOR NEW CONSTRUCTION. REPLACEMENT OF EXISTING PEDESTRIAN RAMPS SHALL BE DESIGNED AND STAMPED BY A PROFESSIONAL ENGINEER AND APPROVED BY THE CITY ENGINEER OR HIS/HER DESIGNEE.
7. COLD WEATHER CONCRETE MIX AND INSTALLATION PER APWA STANDARDS AND SPECIFICATIONS REQUIRED OCTOBER 1 THRU MARCH 31, OR AS REQUIRED BY THE PUBLIC WORKS DIRECTOR OR DESIGNEE.

PAYSON UTAH SEPTEMBER 2023	CORNER PEDESTRIAN RAMP SIDEWALK CONNECTING TO TRAIL	STANDARD PLAN ST-3	SHEET 4 OF 4



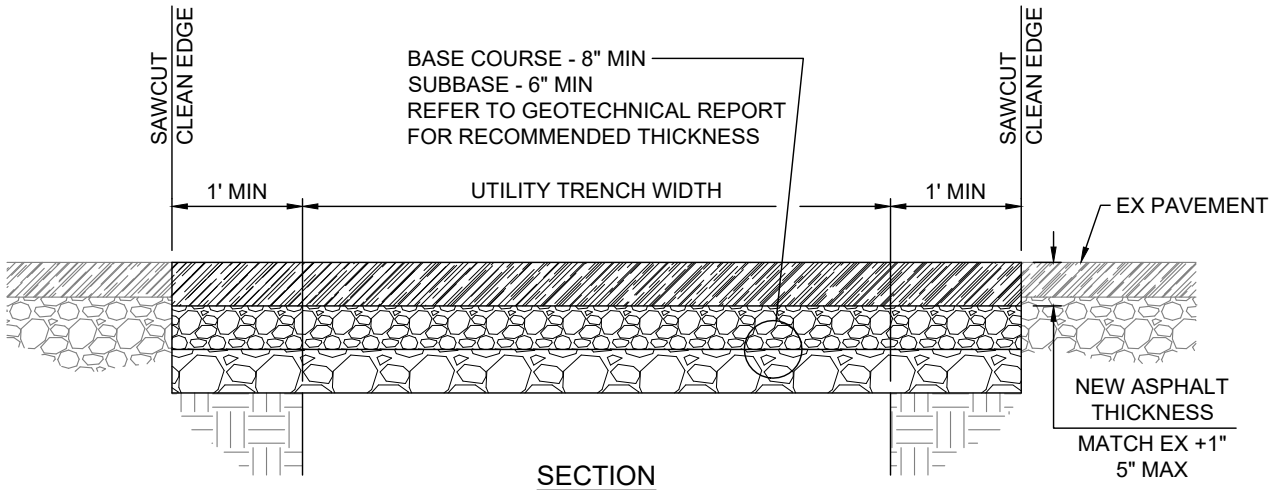
ANGLED TRENCH - PLAN



PARALLEL TRENCH - PLAN

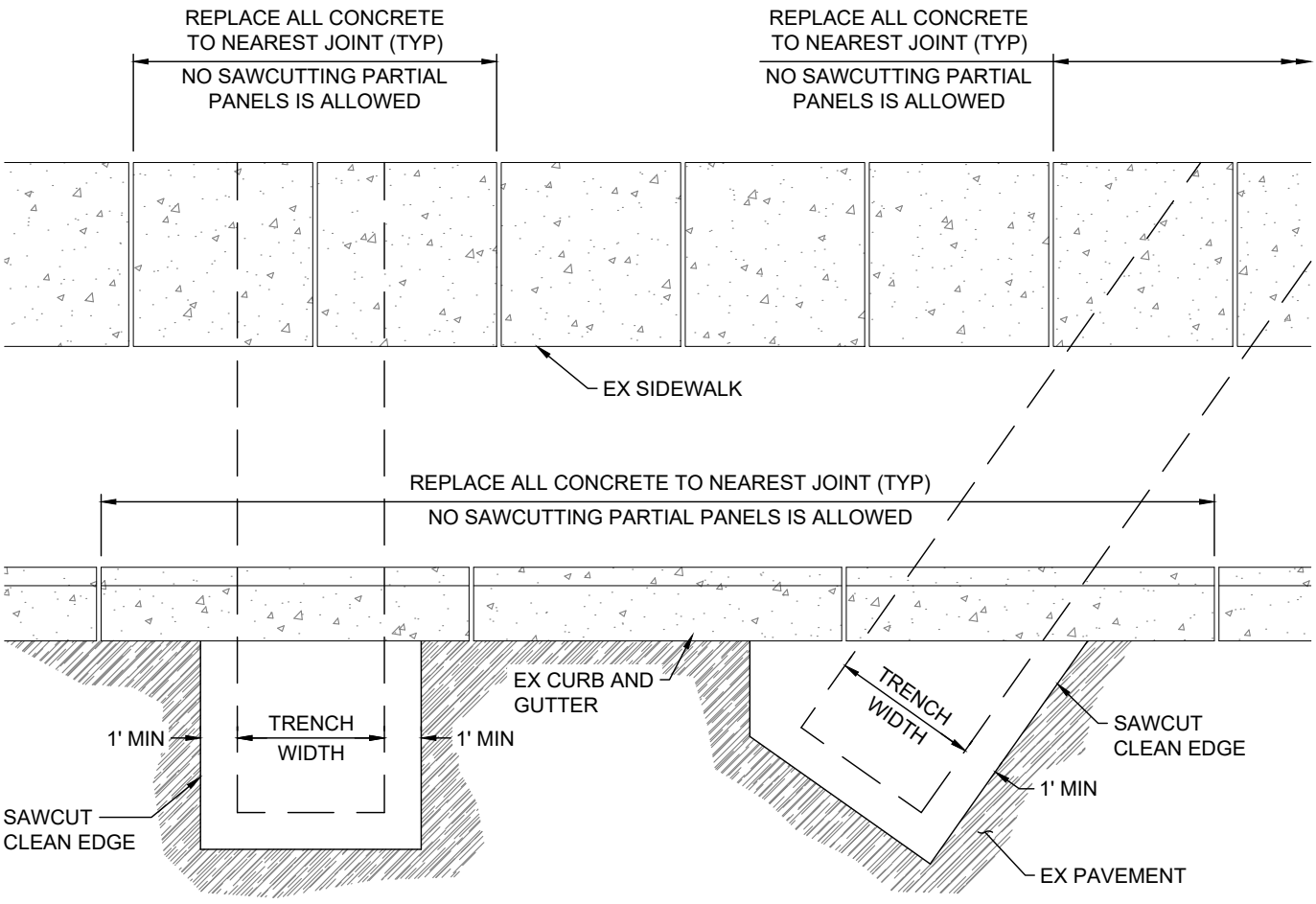
NOTES:

1. IF DISTANCE BETWEEN CLEAN SAWCUT EDGE AND EX GUTTER IS LESS THAN 4', REMOVE AND REPLACE ASPHALT TO LIP OF GUTTER.
2. SAWCUT EDGE MUST NOT BE IN WHEEL PATH. REPLACE TO CENTER OF ROAD, CENTER OF LANE, OR LANE LINE. WHICHEVER IS CLOSEST AND MORE THAN 1' FROM EDGE OF TRENCH.



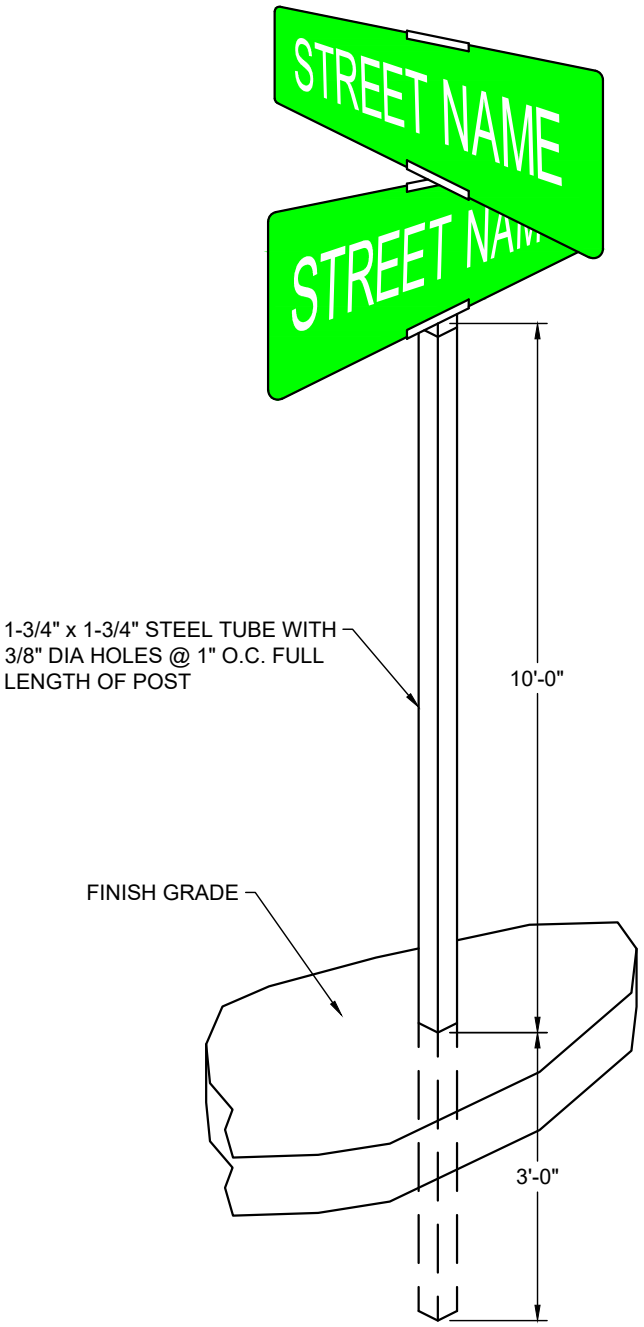
SECTION

PAYSON UTAH SEPTEMBER 2023	PAVEMENT RESTORATION	STANDARD PLAN ST-4	SHEET 1 OF 2



NOTES:

1. REPLACE ALL DAMAGED CONCRETE TO THE NEAREST JOINT
2. NO SAWCUTTING PARTIAL PANELS IS ALLOWED
3. ALL SIDEWALK WITHIN THE PAYSON CITY RIGHT-OF-WAY TO BE 6" THICK CONCRETE PAVEMENT.
4. WHERE THERE IS NO PLANTER STRIP, EXPANSION JOINT IS REQUIRED BETWEEN THE BACK OF CURB AND ADJACENT CONCRETE.



STREET NAME

PUBLIC STREET SIGN

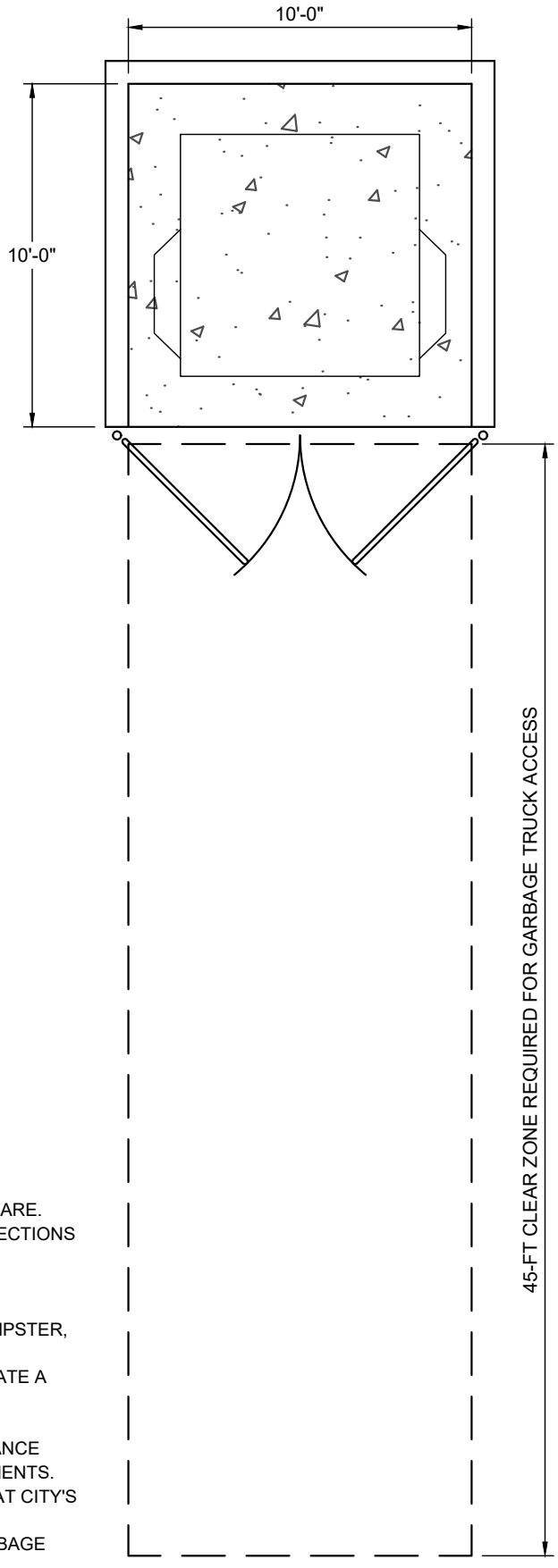
STREET NAME

PRIVATE STREET SIGN

NOTES:

1. STREET NAME SIGN TO BE 8" ALUMINUM SIGN, DOUBLE SIDED WITH HIGH INTENSITY PRISMATIC SHEETING AND 6" UPPER CASE STREET NAME LETTERING.
2. PROOFS TO BE APPROVED BY PAYSON CITY PUBLIC WORKS PRIOR TO MANUFACTURING.
3. PUBLIC STREET SIGN TO BE GREEN BACKGROUND WITH WHITE LETTERING.
4. PRIVATE STREET SIGN TO BE BLUE BACKGROUND WITH WHITE LETTERING.
5. NO CITY LOGO REQUIRED ON STREET NAME SIGN.
6. ALL BOLTS, NUTS, WASHERS, AND ACCESSORIES TO BE STAINLESS OR GALVANIZED STEEL.

PAYSON UTAH SEPTEMBER 2023	STREET NAME SIGN AND POST DETAIL	STANDARD PLAN ST-5	SHEET 1 OF 1

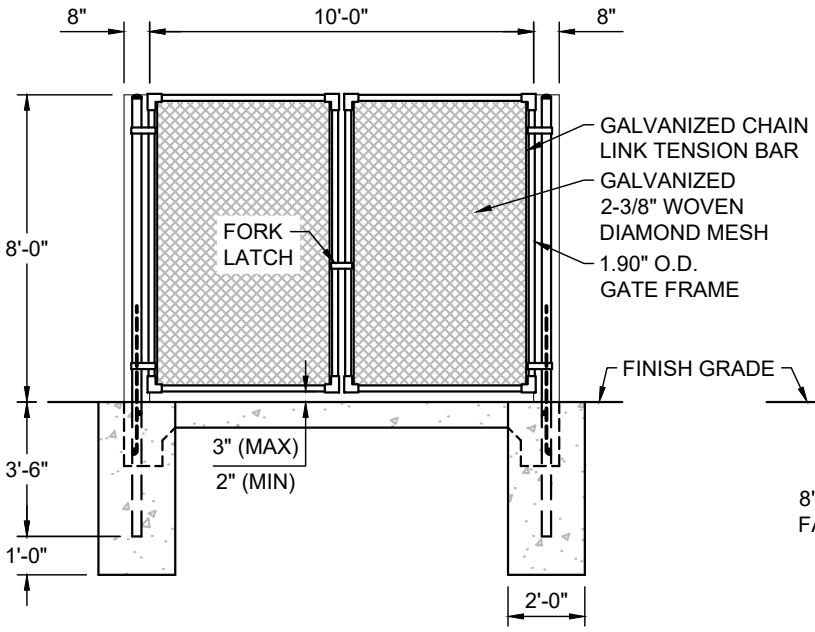


NOTES:

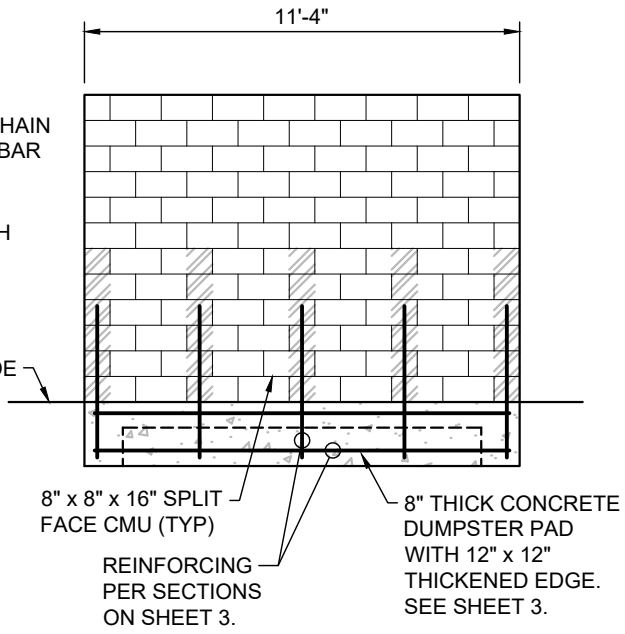
1. SEE SHEET 2 FOR MATERIALS AND HARDWARE.
2. INSTALL 8-IN THICK CONCRETE PAD PER SECTIONS ON SHEET 3.
3. REFER TO DEVELOPMENT GUIDELINES TO DETERMINE REQUIRED DUMPSTER SIZE.
4. ENCLOSURE SHOWN IS FOR A SINGLE DUMPSTER, REGARDLESS OF SIZE.
5. ENCLOSURE MAY BE WIDENED TO FACILITATE A SECOND DUMPSTER.
6. MATERIALS SHOWN ARE A MINIMUM REQUIREMENT. REFER TO ZONING ORDINANCE FOR SPECIFIC ARCHITECTURAL REQUIREMENTS.
7. REQUIRED MATERIALS MAY BE CHANGED AT CITY'S REQUEST.
8. 45-FT CLEAR ZONE IS REQUIRED FOR GARBAGE TRUCK ACCESS.

PAYSON UTAH SEPTEMBER 2023	MASONRY DUMPSTER ENCLOSURE DETAIL	STANDARD PLAN ST-6	SHEET 1 OF 3

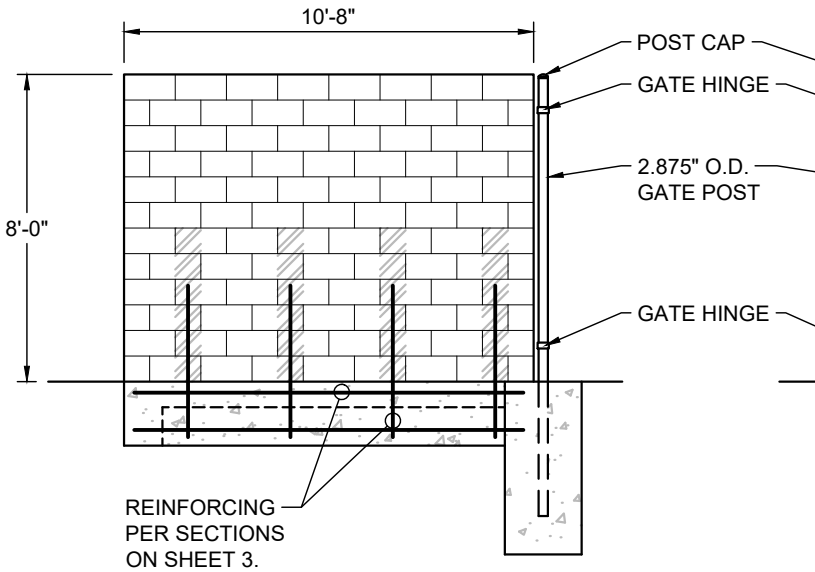
ELEVATION - FRONT



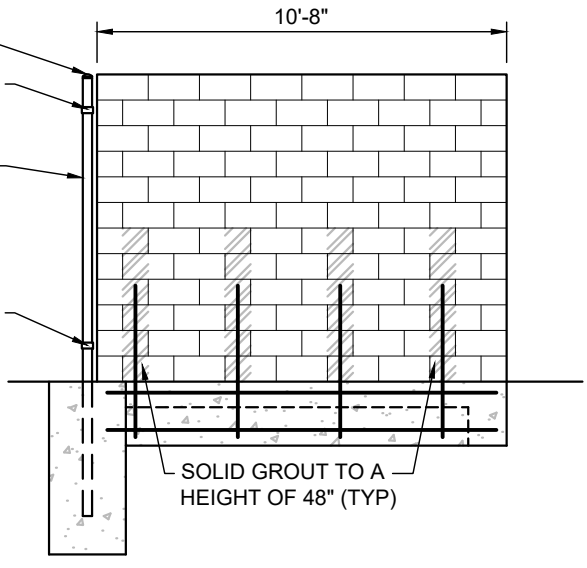
ELEVATION - BACK



ELEVATION - LEFT



ELEVATION - RIGHT

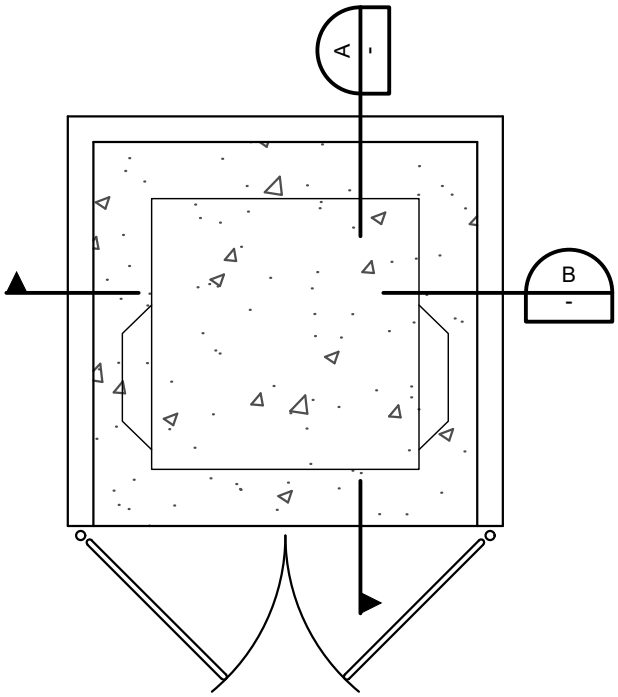


NOTES:

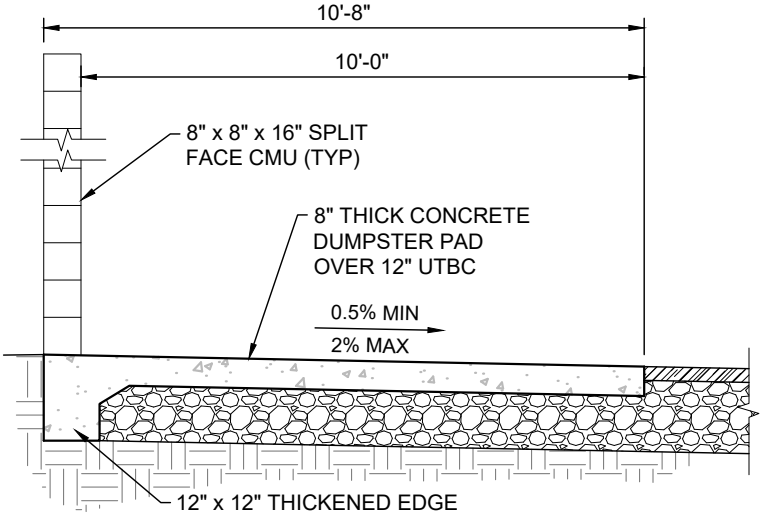
1. ALL GATE POSTS, FRAME, FABRIC, BOLTS, NUTS, WIRE, AND ACCESSORIES TO BE GALVANIZED OR STAINLESS STEEL.

NOTES:

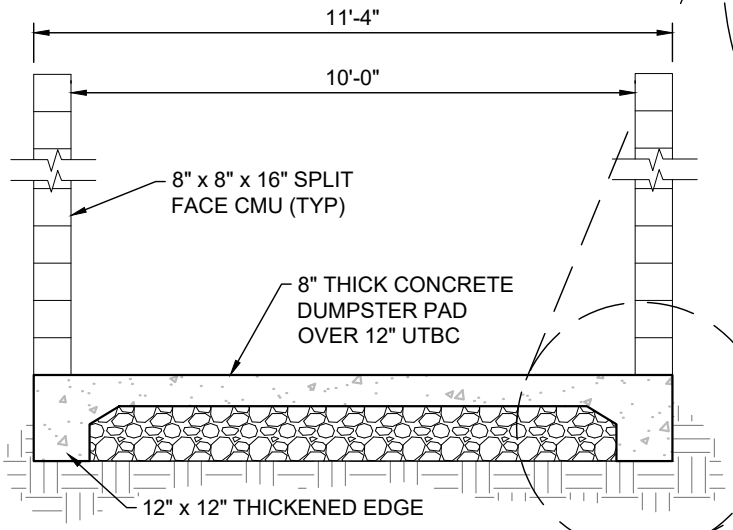
1. UNTREATED BASE COURSE (UTBC) PER APWA SECTION 32 11 23. INSTALL PER APWA SECTION 32 05 10. COMPACT TO 95% OR GREATER MODIFIED PROCTOR DENSITY PER APWA SECTION 31 23 26.
2. INSTALL CONCRETE PAD PER APWA SECTION 03 30 10.
   a. USE ONLY 4000 PSI (MIN) CONCRETE FROM A UTAH STATE APPROVED BATCH PLANT. SUBMIT BATCH TICKET WITH INSTALLATION. SMALL BATCH CONCRETE OR CONCRETE FROM ANY SOURCE OTHER THAN A UTAH STATE APPROVED BATCH PLANT IS NOT ACCEPTABLE AND WILL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.
3. REBAR TO BE GALVANIZED OR EPOXY COATED, DEFORMED, 60 KSI YIELD GRADE STEEL PER ASTM A615.



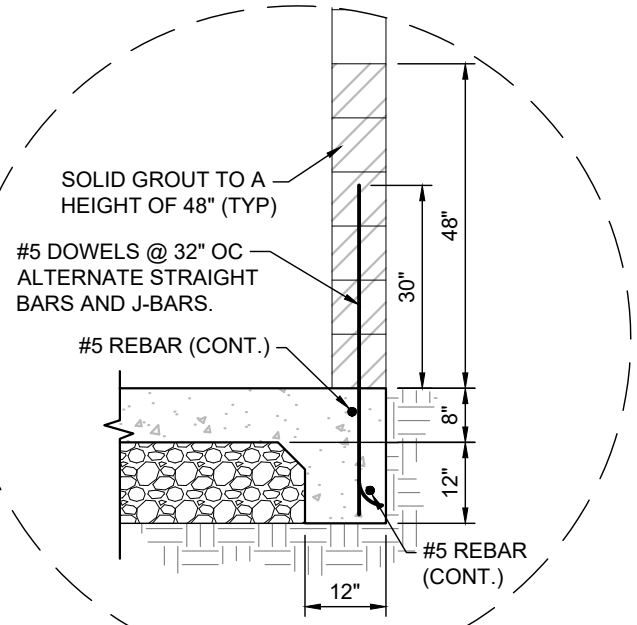
PLAN VIEW



SECTION A - NOT TO SCALE



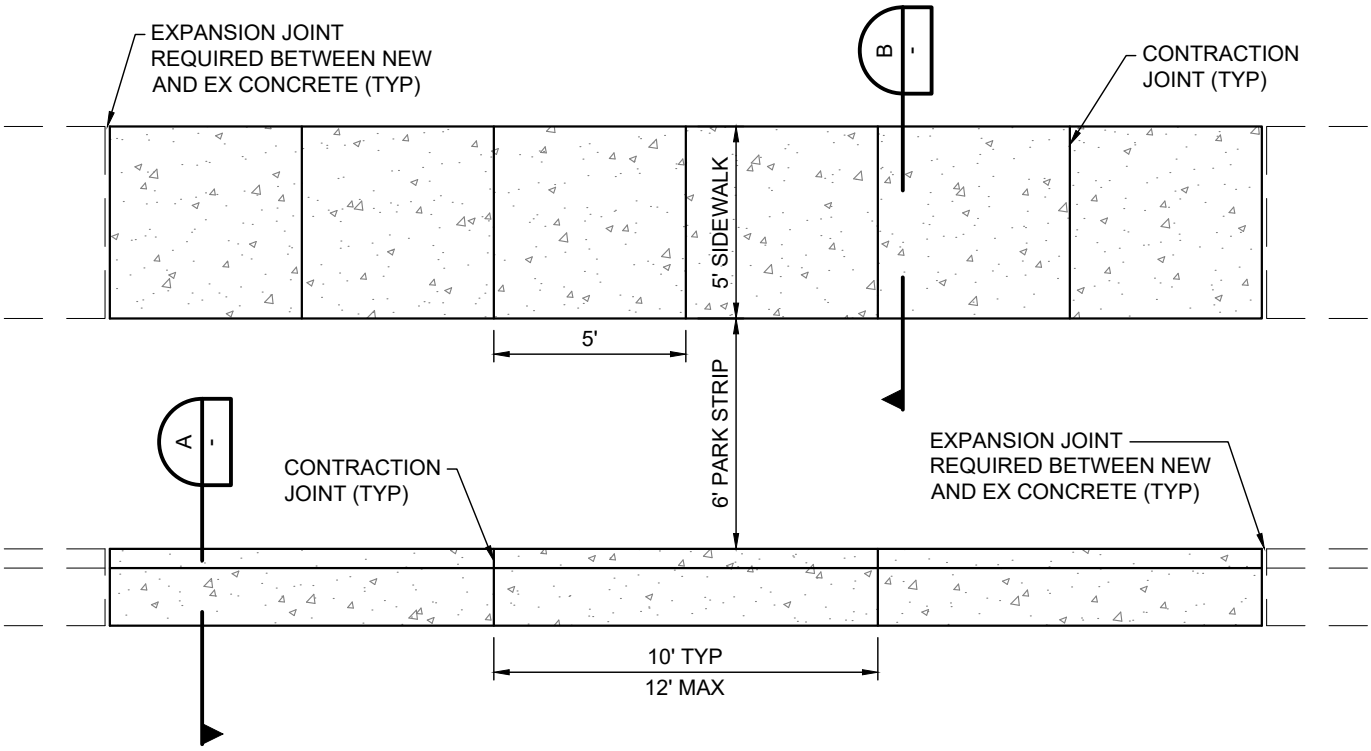
SECTION B - NOT TO SCALE

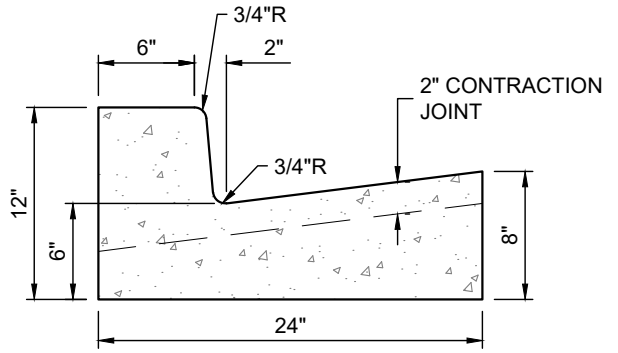


STEM WALL - ENLARGED

NOT TO SCALE

PAYSON UTAH SEPTEMBER 2023	MASONRY DUMPSTER ENCLOSURE DETAIL	STANDARD PLAN ST-6	SHEET 3 OF 3

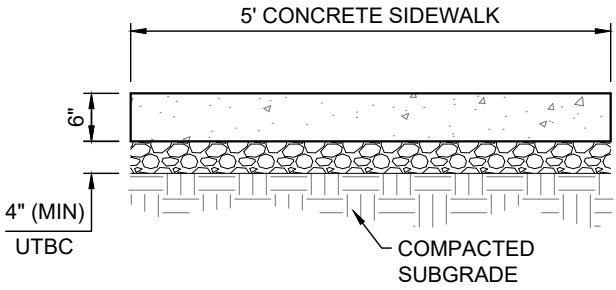




CURB AND GUTTER - SECTION

A
-

NOT TO SCALE



SIDEWALK - SECTION

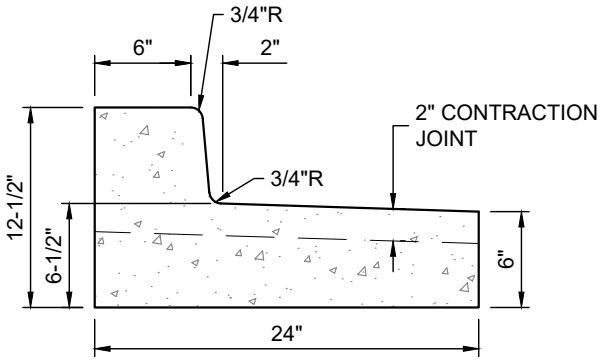
B
-

NOT TO SCALE

NOTES:

1. UNTREATED BASE COURSE (UTBC)
   a. MATERIAL PER APWA SECTION 32 11 23. GRAVEL IS NOT ACCEPTABLE AS A BASE COURSE.
   b. INSTALL PER APWA SECTION 32 05 10. 6" MIN THICKNESS UNDER CURB AND GUTTER, 4" MIN UNDER SIDEWALK.
   c. COMPACT TO 95% OR GREATER MODIFIED PROCTOR DENSITY PER APWA SECTION 31 23 26.
2. CONCRETE
   a. USE ONLY 4000 PSI (MIN) CONCRETE FROM A UTAH STATE APPROVED BATCH PLANT. SUBMIT BATCH TICKET WITH INSTALLATION. SMALL BATCH CONCRETE OR CONCRETE FROM ANY SOURCE OTHER THAN A UTAH STATE APPROVED BATCH PLANT IS NOT ACCEPTABLE AND WILL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.
   b. INSTALL CONCRETE PER APWA SECTION 03 30 10.
   c. CONTRACTION JOINTS TO BE VERTICAL, 1/8" WIDE, 2" DEEP.
   d. INSTALL 1/2" THICK TYPE F1 FULL DEPTH EXPANSION JOINT PER APWA SECTION 32 13 73 WHERE REQUIRED.
   e. PROVIDE 1/2" RADIUS EDGES UNLESS NOTED OTHERWISE.
   f. BROOM FINISH AND APPLY CURING AGENT.
3. CONCRETE CURING AGENT TO BE CLEAR MEMBRANE FORMING COMPOUND WITH FUGITIVE DYE (TYPE ID CLASS A) PER APWA SECTION 03 39 00.

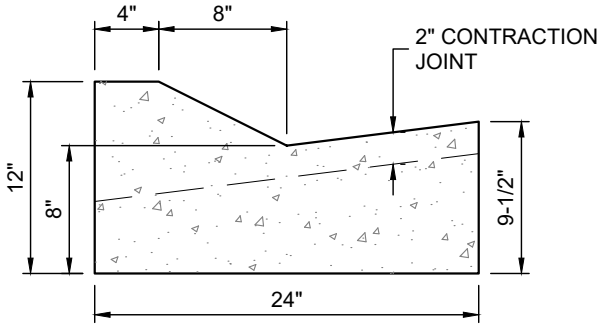
PAYSON UTAH SEPTEMBER 2023	CURB, GUTTER, AND SIDEWALK DETAIL	STANDARD PLAN ST-7	SHEET 1 OF 2



RELEASE CURB AND GUTTER

C
-

SECTION - NOT TO SCALE



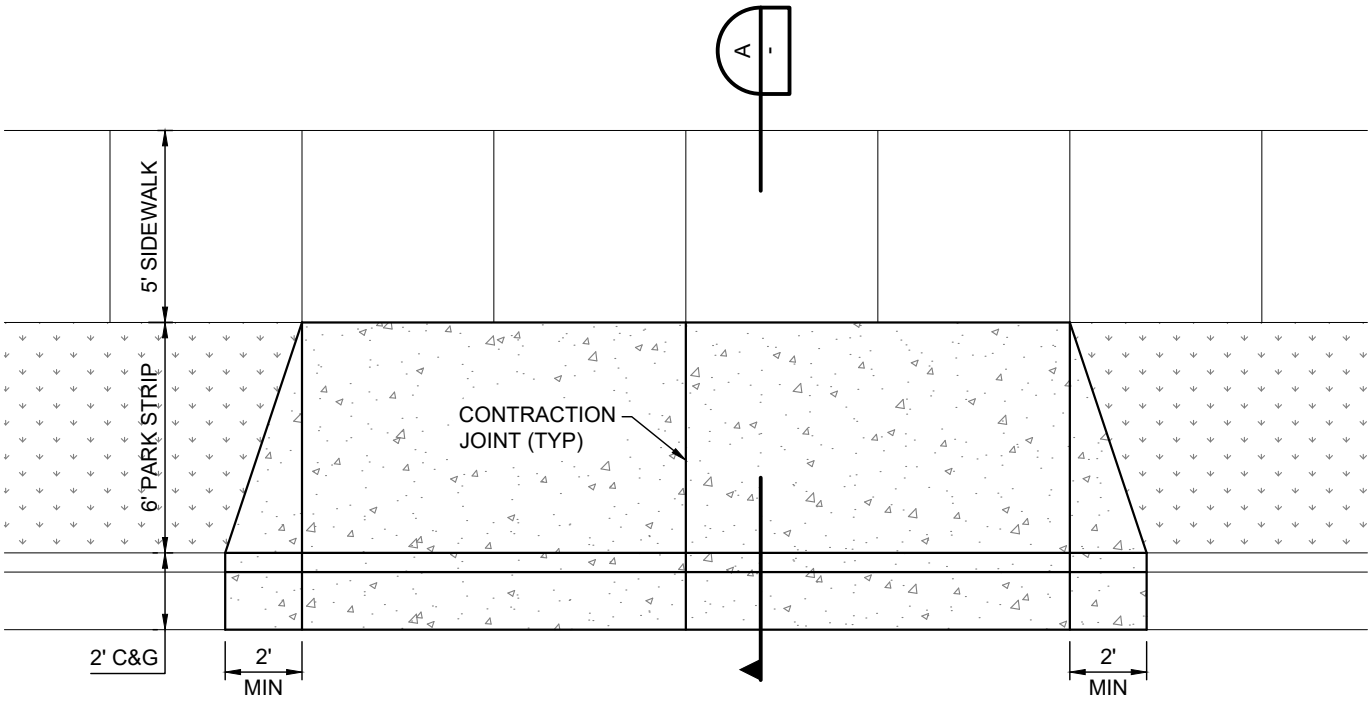
MOUNTABLE CURB AND GUTTER

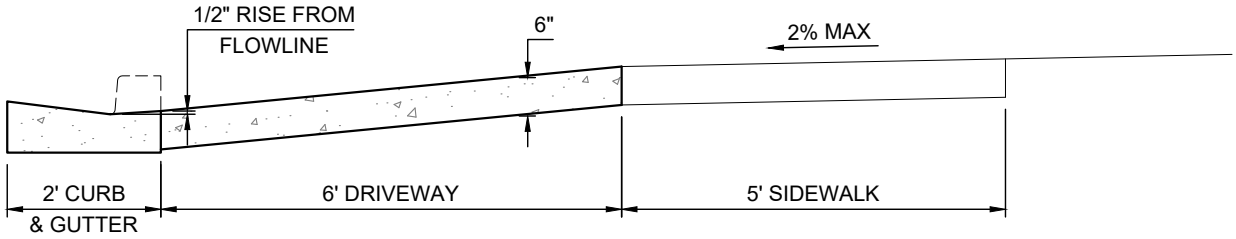
D
-

SECTION - NOT TO SCALE

NOTES:

1. UNTREATED BASE COURSE (UTBC)
   a. MATERIAL PER APWA SECTION 32 11 23. GRAVEL IS NOT ACCEPTABLE AS A BASE COURSE.
   b. INSTALL PER APWA SECTION 32 05 10. 6" MIN THICKNESS UNDER CURB AND GUTTER, 4" MIN UNDER SIDEWALK.
   c. COMPACT TO 95% OR GREATER MODIFIED PROCTOR DENSITY PER APWA SECTION 31 23 26.
2. CONCRETE
   a. USE ONLY 4000 PSI (MIN) CONCRETE FROM A UTAH STATE APPROVED BATCH PLANT. SUBMIT BATCH TICKET WITH INSTALLATION. SMALL BATCH CONCRETE OR CONCRETE FROM ANY SOURCE OTHER THAN A UTAH STATE APPROVED BATCH PLANT IS NOT ACCEPTABLE AND WILL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.
   b. INSTALL CONCRETE PER APWA SECTION 03 30 10.
   c. CONTRACTION JOINTS TO BE VERTICAL, 1/8" WIDE, 2" DEEP.
   d. INSTALL 1/2" THICK TYPE F1 FULL DEPTH EXPANSION JOINT PER APWA SECTION 32 13 73 WHERE REQUIRED.
   e. PROVIDE 1/2" RADIUS EDGES UNLESS NOTED OTHERWISE.
   f. BROOM FINISH AND APPLY CURING AGENT.
3. CONCRETE CURING AGENT TO BE CLEAR MEMBRANE FORMING COMPOUND WITH FUGITIVE DYE (TYPE ID CLASS A) PER APWA SECTION 03 39 00.





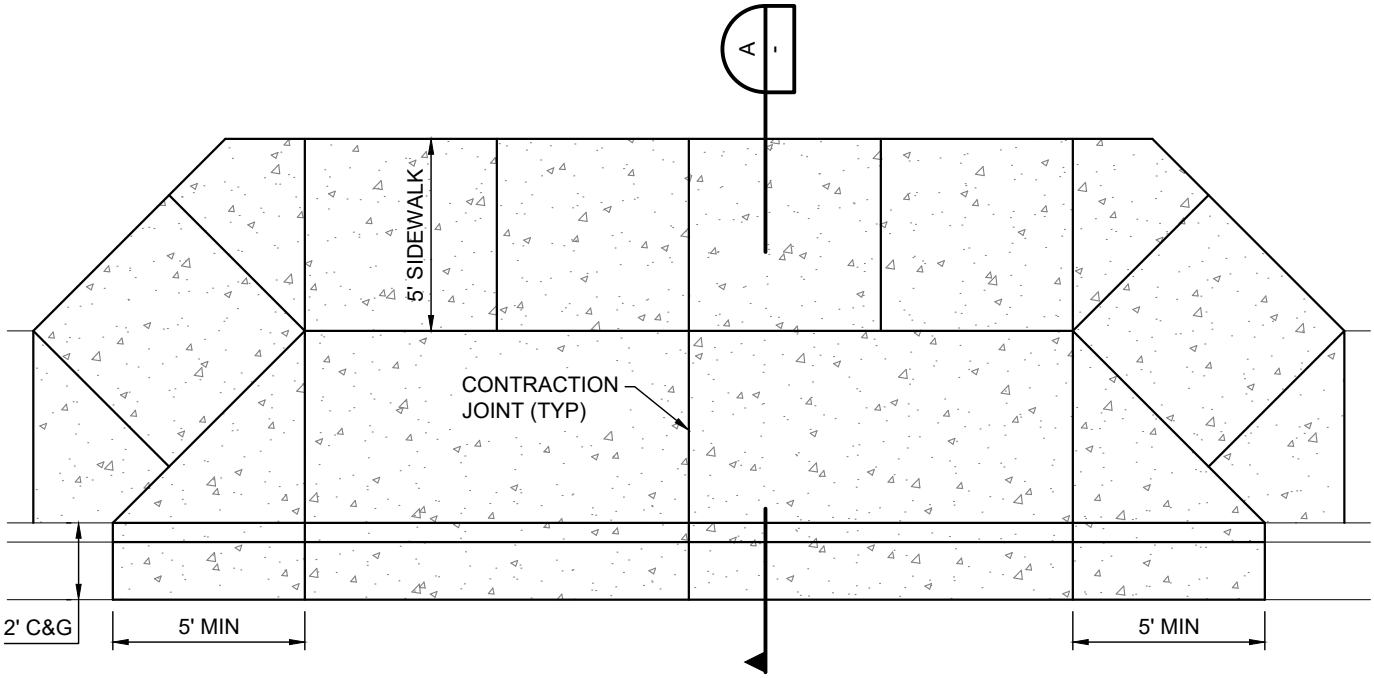
DRIVEWAY - SECTION A-

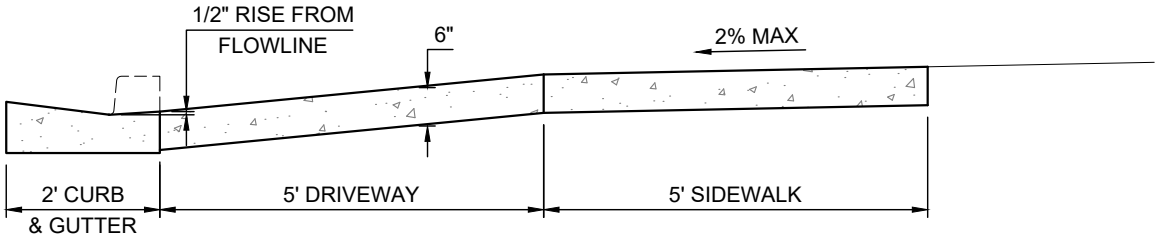
NOT TO SCALE

NOTES:

1. UNTREATED BASE COURSE (UTBC)
   a. MATERIAL PER APWA SECTION 32 11 23. GRAVEL IS NOT ACCEPTABLE AS A BASE COURSE.
   b. INSTALL PER APWA SECTION 32 05 10. 6" MIN THICKNESS.
   c. COMPACT TO 95% OR GREATER MODIFIED PROCTOR DENSITY PER APWA SECTION 31 23 26.
2. CONCRETE
   a. USE ONLY 4000 PSI (MIN) CONCRETE FROM A UTAH STATE APPROVED BATCH PLANT. SUBMIT BATCH TICKET WITH INSTALLATION. SMALL BATCH CONCRETE OR CONCRETE FROM ANY SOURCE OTHER THAN A UTAH STATE APPROVED BATCH PLANT IS NOT ACCEPTABLE AND WILL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.
   b. INSTALL CONCRETE PER APWA SECTION 03 30 10.
   c. CONTRACTION JOINTS TO BE VERTICAL, 1/8" WIDE, 2" DEEP.
   d. INSTALL 1/2" THICK TYPE F1 FULL DEPTH EXPANSION JOINT PER APWA SECTION 32 13 73 WHERE REQUIRED.
   e. PROVIDE 1/2" RADIUS EDGES UNLESS NOTED OTHERWISE.
   f. BROOM FINISH AND APPLY CURING AGENT.
3. CONCRETE CURING AGENT TO BE CLEAR MEMBRANE FORMING COMPOUND WITH FUGITIVE DYE (TYPE ID CLASS A) PER APWA SECTION 03 39 00.

PAYSON UTAH SEPTEMBER 2023	DRIVEWAY APPROACH FLARE APPROACH WITH PARK STRIP	STANDARD PLAN ST-8	SHEET 1 OF 3



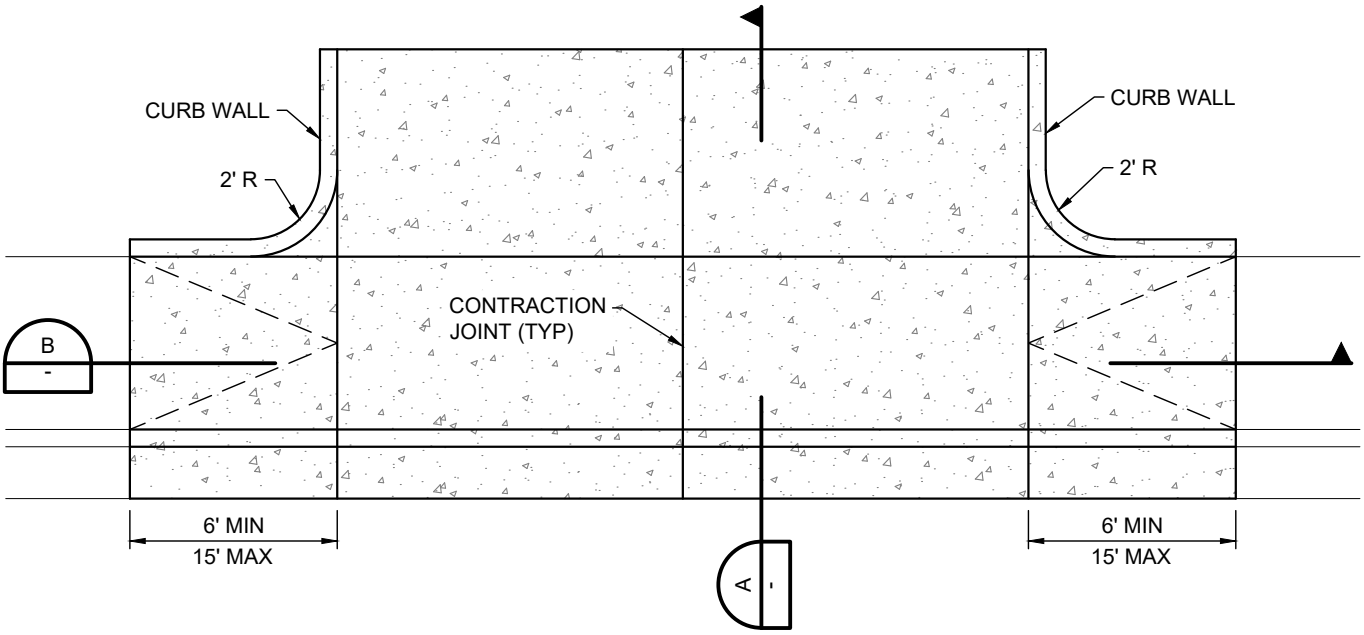


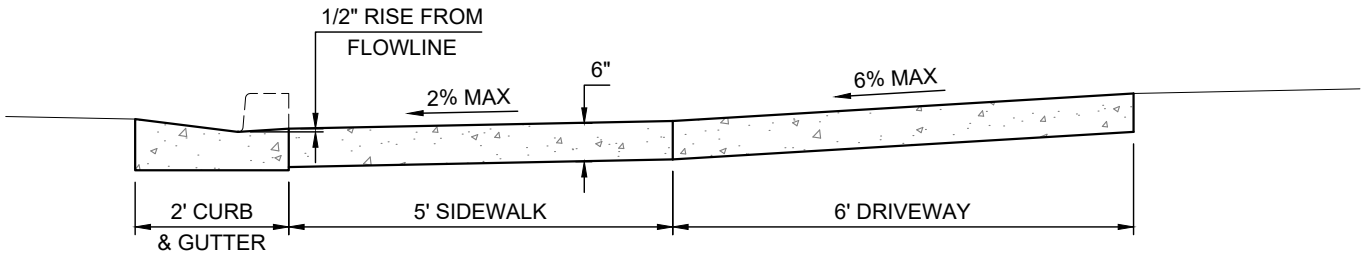
DRIVEWAY - SECTION A-

NOT TO SCALE

NOTES:

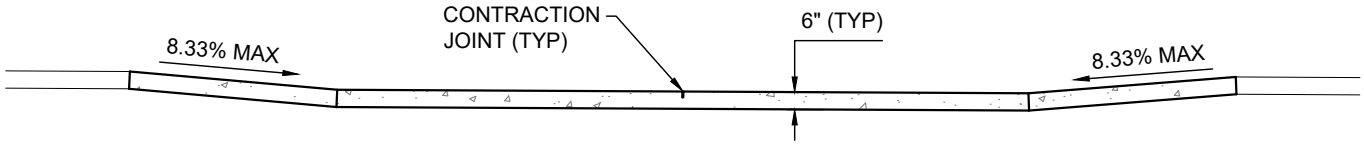
1. UNTREATED BASE COURSE (UTBC)
   a. MATERIAL PER APWA SECTION 32 11 23. GRAVEL IS NOT ACCEPTABLE AS A BASE COURSE.
   b. INSTALL PER APWA SECTION 32 05 10. 6" MIN THICKNESS.
   c. COMPACT TO 95% OR GREATER MODIFIED PROCTOR DENSITY PER APWA SECTION 31 23 26.
2. CONCRETE
   a. USE ONLY 4000 PSI (MIN) CONCRETE FROM A UTAH STATE APPROVED BATCH PLANT. SUBMIT BATCH TICKET WITH INSTALLATION. SMALL BATCH CONCRETE OR CONCRETE FROM ANY SOURCE OTHER THAN A UTAH STATE APPROVED BATCH PLANT IS NOT ACCEPTABLE AND WILL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.
   b. INSTALL CONCRETE PER APWA SECTION 03 30 10.
   c. CONTRACTION JOINTS TO BE VERTICAL, 1/8" WIDE, 2" DEEP.
   d. INSTALL 1/2" THICK TYPE F1 FULL DEPTH EXPANSION JOINT PER APWA SECTION 32 13 73 WHERE REQUIRED.
   e. PROVIDE 1/2" RADIUS EDGES UNLESS NOTED OTHERWISE.
   f. BROOM FINISH AND APPLY CURING AGENT.
3. CONCRETE CURING AGENT TO BE CLEAR MEMBRANE FORMING COMPOUND WITH FUGITIVE DYE (TYPE ID CLASS A) PER APWA SECTION 03 39 00.





DRIVEWAY - SECTION A -

NOT TO SCALE



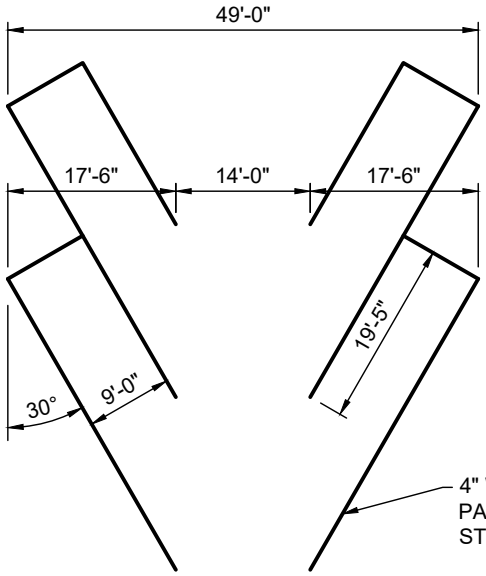
DRIVEWAY - SECTION B -

NOT TO SCALE

NOTES:

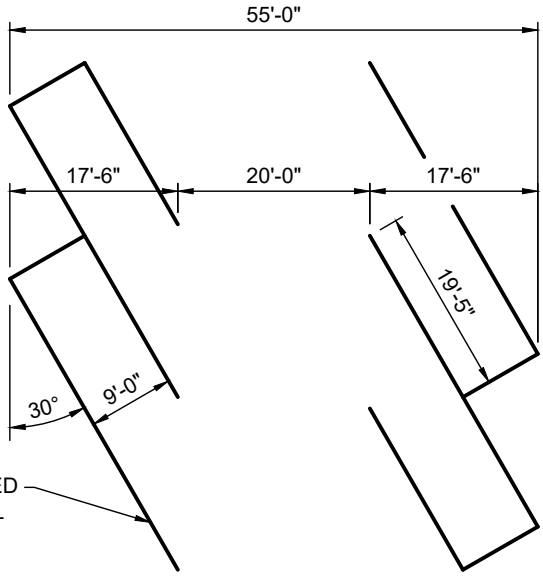
1. UNTREATED BASE COURSE (UTBC)
   a. MATERIAL PER APWA SECTION 32 11 23. GRAVEL IS NOT ACCEPTABLE AS A BASE COURSE.
   b. INSTALL PER APWA SECTION 32 05 10. 6" MIN THICKNESS.
   c. COMPACT TO 95% OR GREATER MODIFIED PROCTOR DENSITY PER APWA SECTION 31 23 26.
2. CONCRETE
   a. USE ONLY 4000 PSI (MIN) CONCRETE FROM A UTAH STATE APPROVED BATCH PLANT. SUBMIT BATCH TICKET WITH INSTALLATION. SMALL BATCH CONCRETE OR CONCRETE FROM ANY SOURCE OTHER THAN A UTAH STATE APPROVED BATCH PLANT IS NOT ACCEPTABLE AND WILL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.
   b. INSTALL CONCRETE PER APWA SECTION 03 30 10.
   c. CONTRACTION JOINTS TO BE VERTICAL, 1/8" WIDE, 2" DEEP.
   d. INSTALL 1/2" THICK TYPE F1 FULL DEPTH EXPANSION JOINT PER APWA SECTION 32 13 73 WHERE REQUIRED.
   e. PROVIDE 1/2" RADIUS EDGES UNLESS NOTED OTHERWISE.
   f. BROOM FINISH AND APPLY CURING AGENT.
3. CONCRETE CURING AGENT TO BE CLEAR MEMBRANE FORMING COMPOUND WITH FUGITIVE DYE (TYPE ID CLASS A) PER APWA SECTION 03 39 00.

PAYSON UTAH SEPTEMBER 2023	DRIVEWAY APPROACH DIP APPROACH WITHOUT PARK STRIP	STANDARD PLAN ST-8	SHEET 3 OF 3



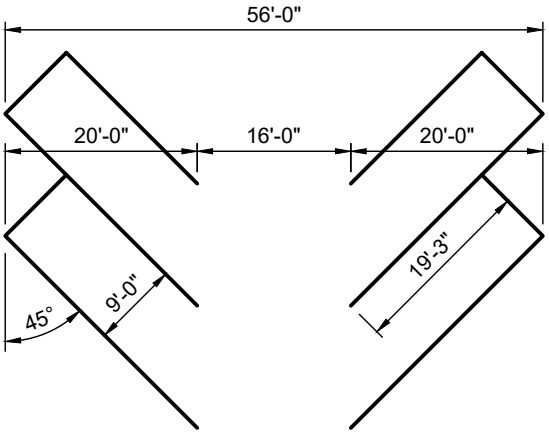
30° PARKING - ONE-WAY 1

NOT TO SCALE



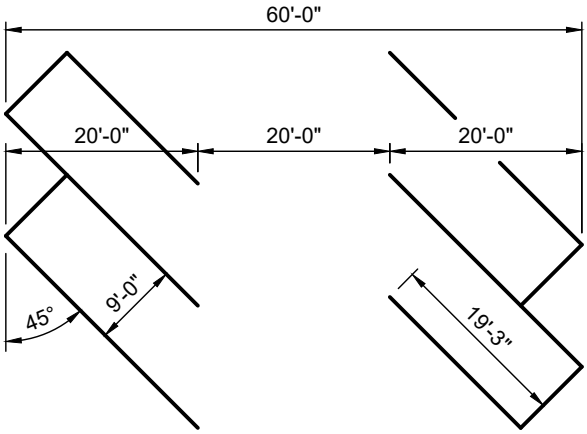
30° PARKING - TWO-WAY 2

NOT TO SCALE



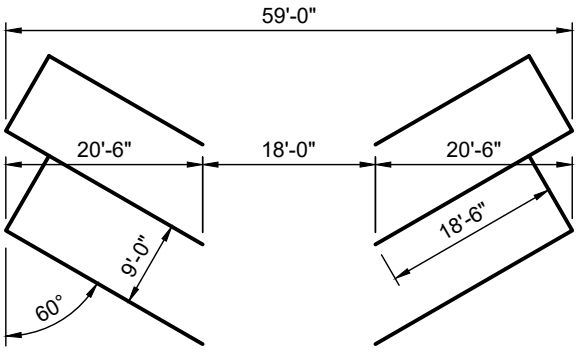
45° PARKING - ONE-WAY 3

NOT TO SCALE



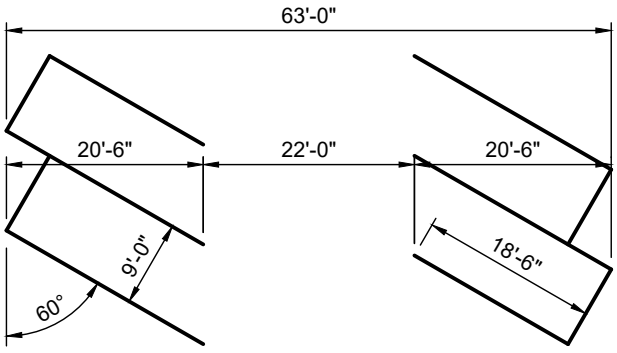
45° PARKING - TWO-WAY 4

NOT TO SCALE



60° PARKING - ONE-WAY 5

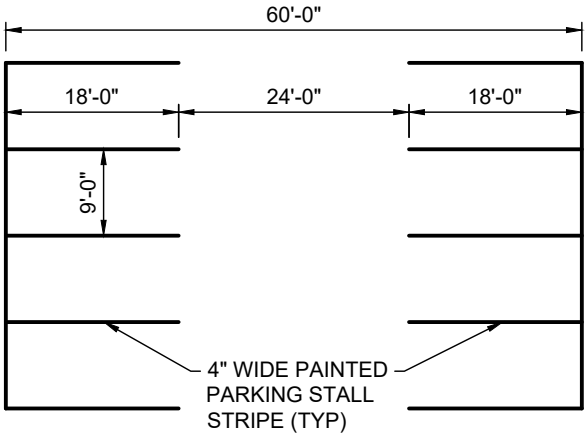
NOT TO SCALE



60° PARKING - TWO-WAY 6

NOT TO SCALE

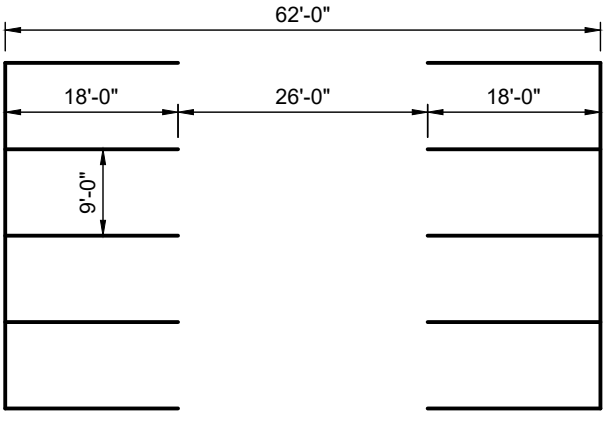
PAYSON UTAH SEPTEMBER 2023	PARKING LAYOUT REQUIREMENTS	STANDARD PLAN ST-9	SHEET 1 OF 2



PERPENDICULAR PARKING

7
-

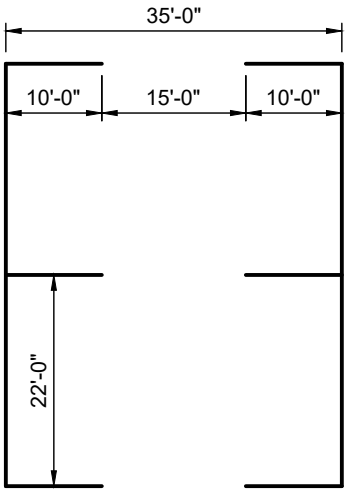
NOT TO SCALE



PERPENDICULAR PARKING
FIRE APPARATUS ACCESSIBLE

8
-

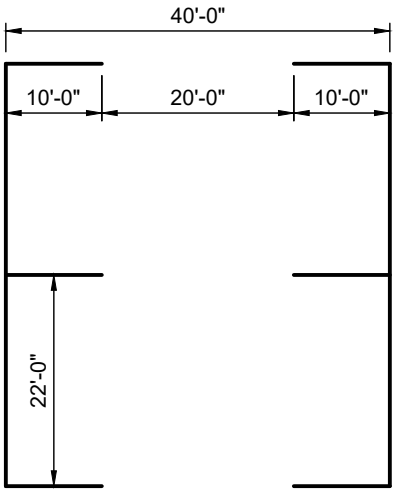
NOT TO SCALE



PARALLEL
PARKING -
ONE-WAY

9
-

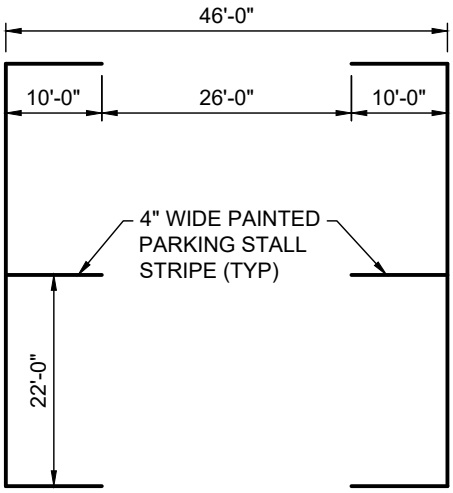
NOT TO SCALE



PARALLEL
PARKING -
TWO-WAY

10
-

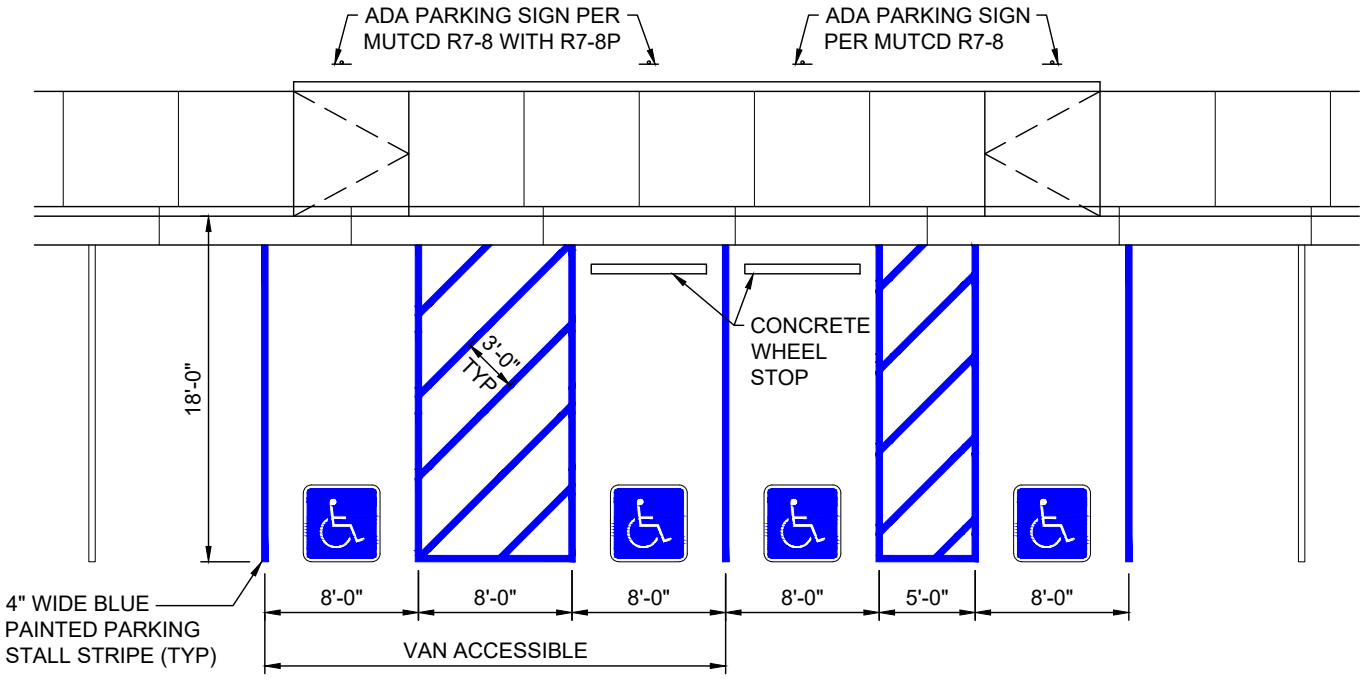
NOT TO SCALE



PARALLEL PARKING
FIRE APPARATUS
ACCESSIBLE

11
-

NOT TO SCALE



ADA ACCESSIBLE PARKING - PLAN

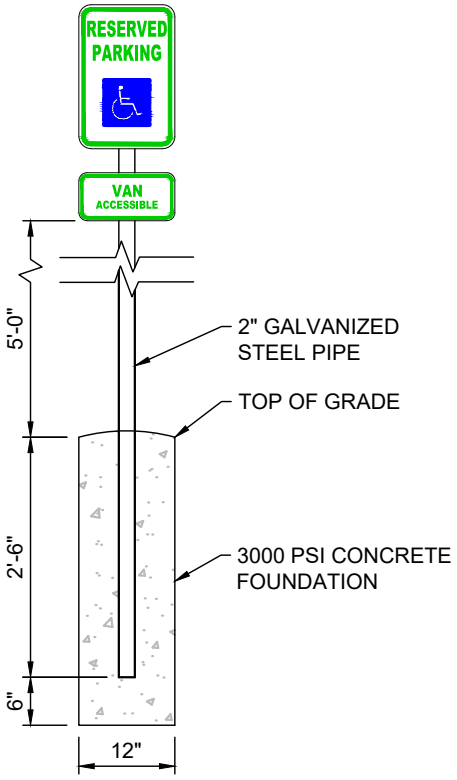
1

NOT TO SCALE

ADA PARKING SIGN

2

NOT TO SCALE

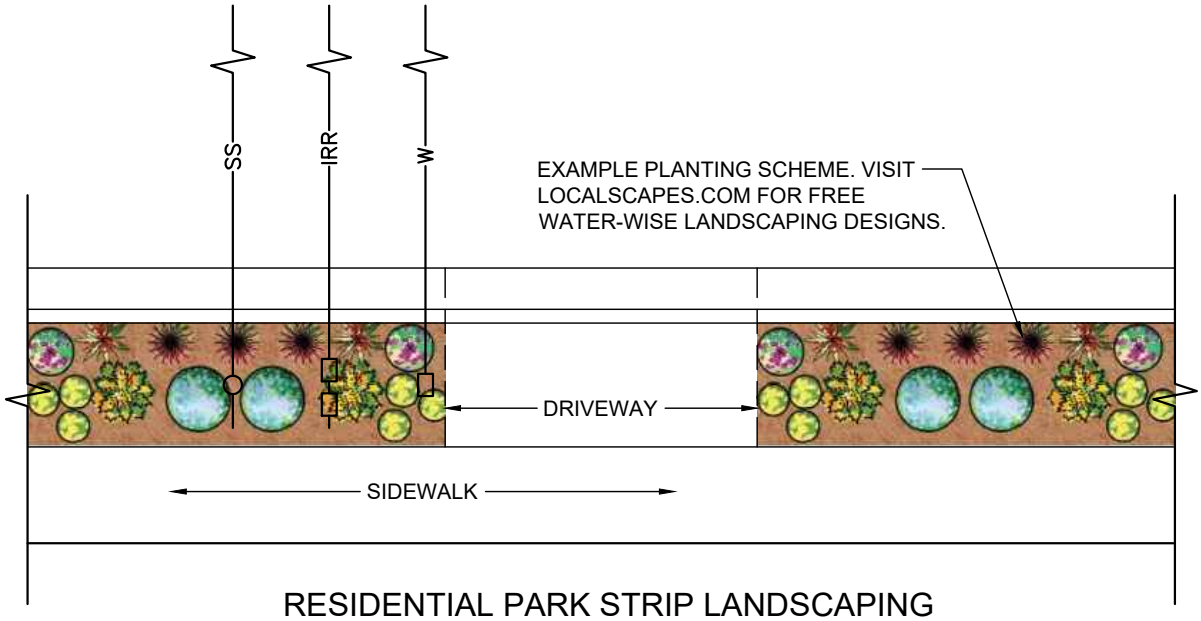


SIGN POLE AND BASE

3

NOT TO SCALE

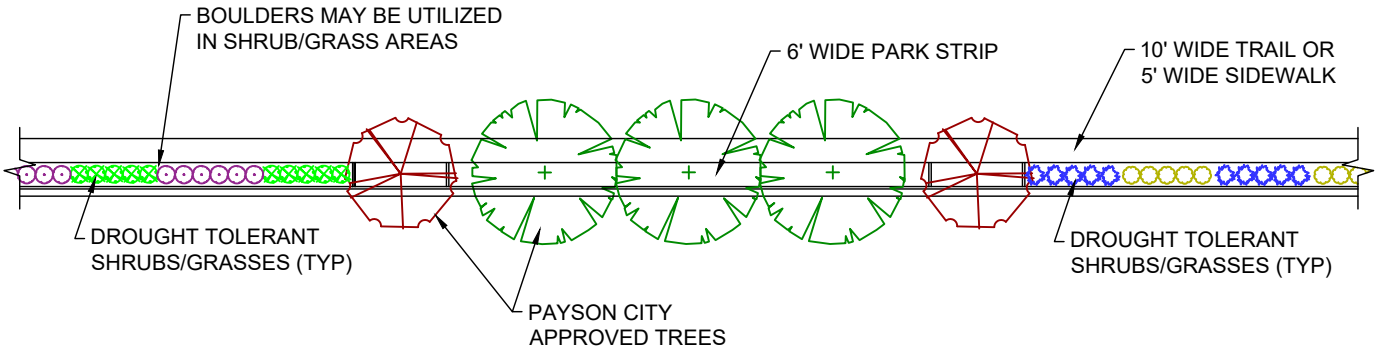
PAYSON UTAH SEPTEMBER 2023	ADA ACCESSIBLE PARKING	STANDARD PLAN ST-10	SHEET 1 OF 1



RESIDENTIAL PARK STRIP LANDSCAPING

NOTES:

1. WATER-WISE LANDSCAPING REQUIRED FOR ALL NEW DEVELOPMENT.
2. THE TYPICAL SECTION IS A 5' SIDEWALK WITH A 6' PARK STRIP.
3. ROCK OR BARK MULCH REQUIRED FOR GROUND COVER.
4. MULCH TO MEET PAYSON CITY DESIGN STANDARDS.
5. PROVIDE A MINIMUM OF 2 DIFFERING MULCH STYLES/COLORS.
6. GRAVEL IS NOT AN ACCEPTABLE GROUND COVER.
7. ANY BOULDERS UTILIZED SHOULD MEASURE 24" TO 48" IN DIAMETER ALONG THE SMALLEST AXIS.
8. PROVIDE 12 GAUGE STEEL OR CONCRETE CURB EDGING.
9. LAWN IS NOT PERMITTED IN A PARK STRIP LESS THAN 8' WIDE.
10. SPRAY STYLE SPRINKLER HEADS NOT PERMITTED IN PARK STRIP LESS THAN 8' WIDE.
11. UTILIZE NATIVE, DROUGHT TOLERANT PLANTS IRRIGATED WITH A DRIP SPRINKLER SYSTEM.
12. PLANTING SHOWN ABOVE IS AN EXAMPLE, NOT THE REQUIRED PLANTING SCHEME. CHOSEN PLANTING SCHEME REQUIRES APPROVAL FROM PAYSON CITY PLANNING.
13. VISIT LOCALSCAPES.COM FOR FREE WATER-WISE PLANTING DESIGNS AND PRODUCTS.
14. THE MINIMUM DRIVEWAY CUT IS 18'. STANDARD RESIDENTIAL DRIVEWAY CUT IS 24'. MAXIMUM CURB CUT IS 40'.
14. 10' (MIN) HORIZONTAL SEPARATION REQUIRED BETWEEN CULINARY WATER AND SEWER LATERAL.
15. REFER TO PAYSON CITY ORDINANCES FOR ADDITIONAL LANDSCAPING REQUIREMENTS.
16. PLANTING MATERIALS MUST BE PLACED TO AVOID CONFLICT WITH STREET LIGHTING AND MAINTAIN CLEAR VIEW AREAS.



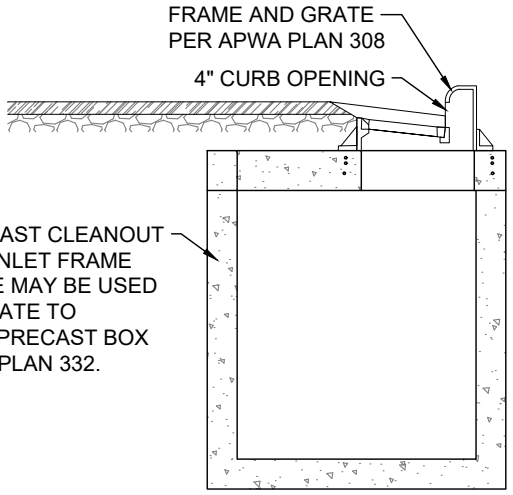
NON-RESIDENTIAL PARK STRIP LANDSCAPING

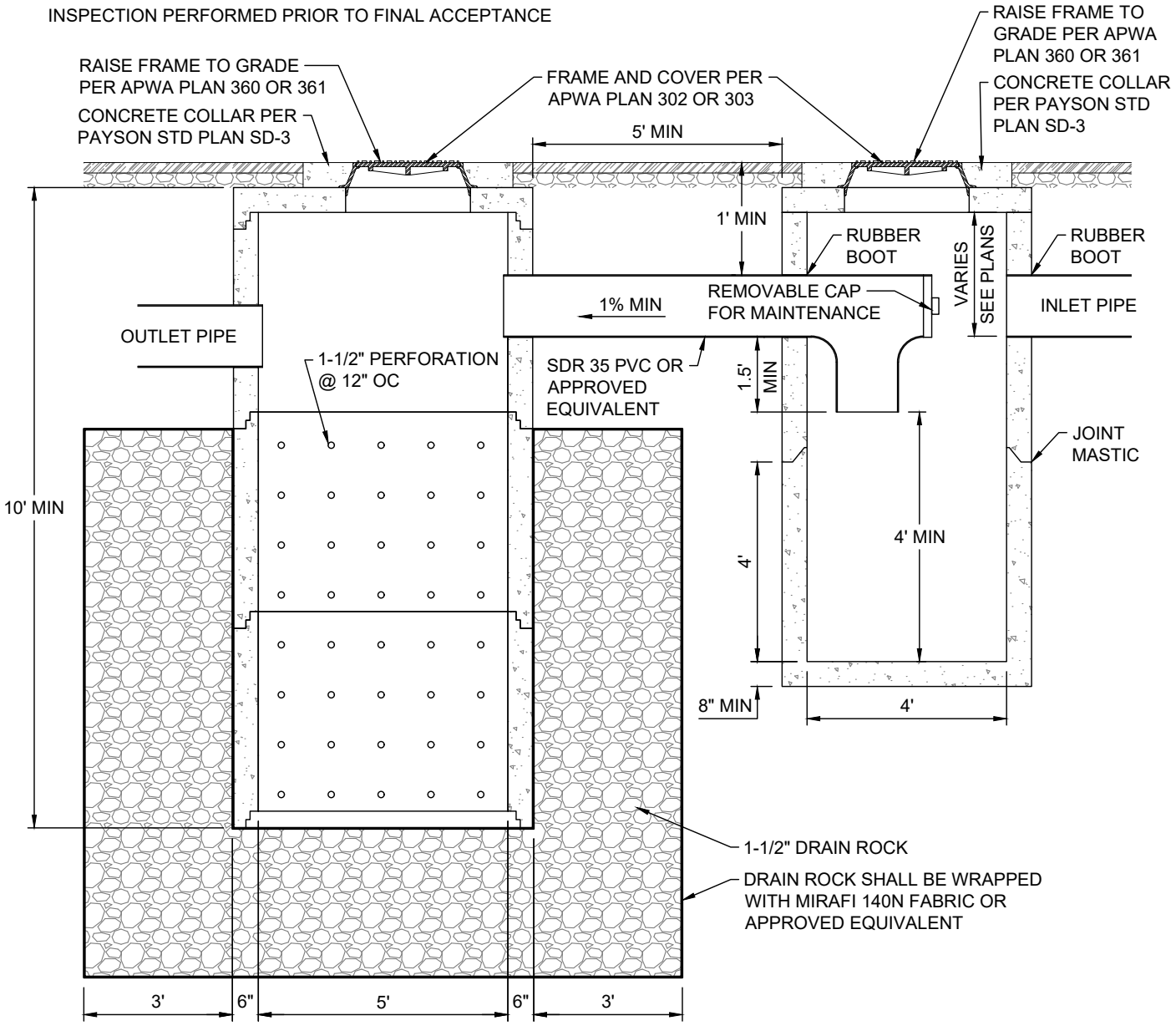
NOTES:

1. WATER-WISE LANDSCAPING REQUIRED FOR ALL NEW DEVELOPMENT.
2. THE TYPICAL SECTION IS A 5' SIDEWALK WITH A 6' PARK STRIP. 10' WIDE TRAIL IN LIEU OF 5' WIDE SIDEWALK IS REQUIRED IN SOME LOCATIONS. CONFIRM REQUIRED SECTION WITH PAYSON CITY DEVELOPMENT SERVICES.
3. ROCK OR BARK MULCH REQUIRED FOR GROUND COVER.
4. MULCH TO MEET PAYSON CITY DESIGN STANDARDS.
5. PROVIDE A MINIMUM OF 2 DIFFERING MULCH STYLES/COLORS.
6. GRAVEL IS NOT AN ACCEPTABLE GROUND COVER.
7. ANY BOULDERS UTILIZED SHOULD MEASURE 24" TO 48" IN DIAMETER ALONG THE SMALLEST AXIS.
8. PROVIDE 12 GAUGE STEEL OR CONCRETE CURB EDGING.
9. LAWN IS NOT PERMITTED IN A PARK STRIP LESS THAN 8' WIDE.
10. SPRAY STYLE SPRINKLER HEADS NOT PERMITTED IN PARK STRIP LESS THAN 8' WIDE.
11. UTILIZE NATIVE, DROUGHT TOLERANT PLANTS IRRIGATED WITH A DRIP SPRINKLER SYSTEM.
12. PLANTING SHOWN ABOVE IS AN EXAMPLE, NOT THE REQUIRED PLANTING SCHEME. CHOSEN PLANTING SCHEME REQUIRES APPROVAL FROM PAYSON CITY DEVELOPMENT SERVICES.
13. REFER TO PAYSON CITY ORDINANCES FOR ADDITIONAL LANDSCAPING REQUIREMENTS.
14. PLANTING MATERIALS MUST BE PLACED TO AVOID CONFLICT WITH STREET LIGHTING AND MAINTAIN CLEAR VIEW AREAS.

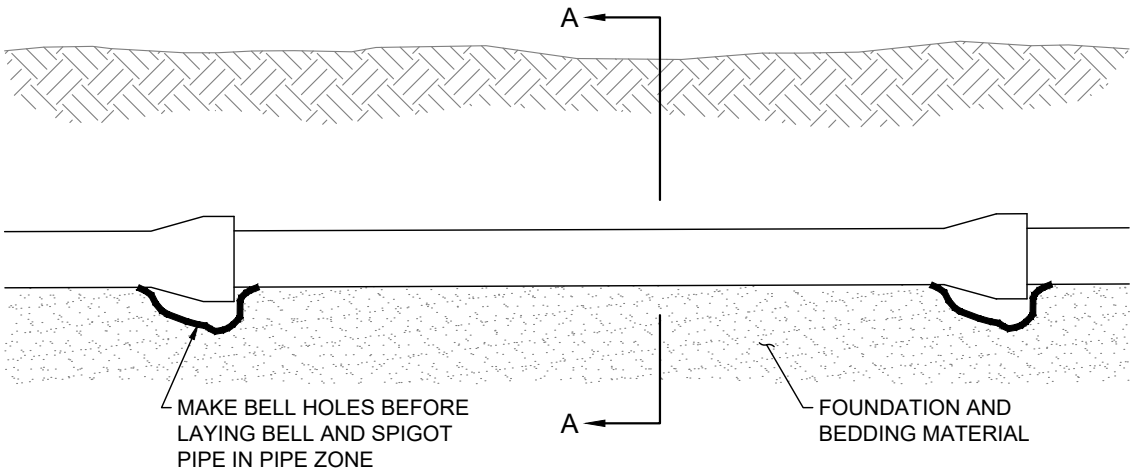
NOTES:

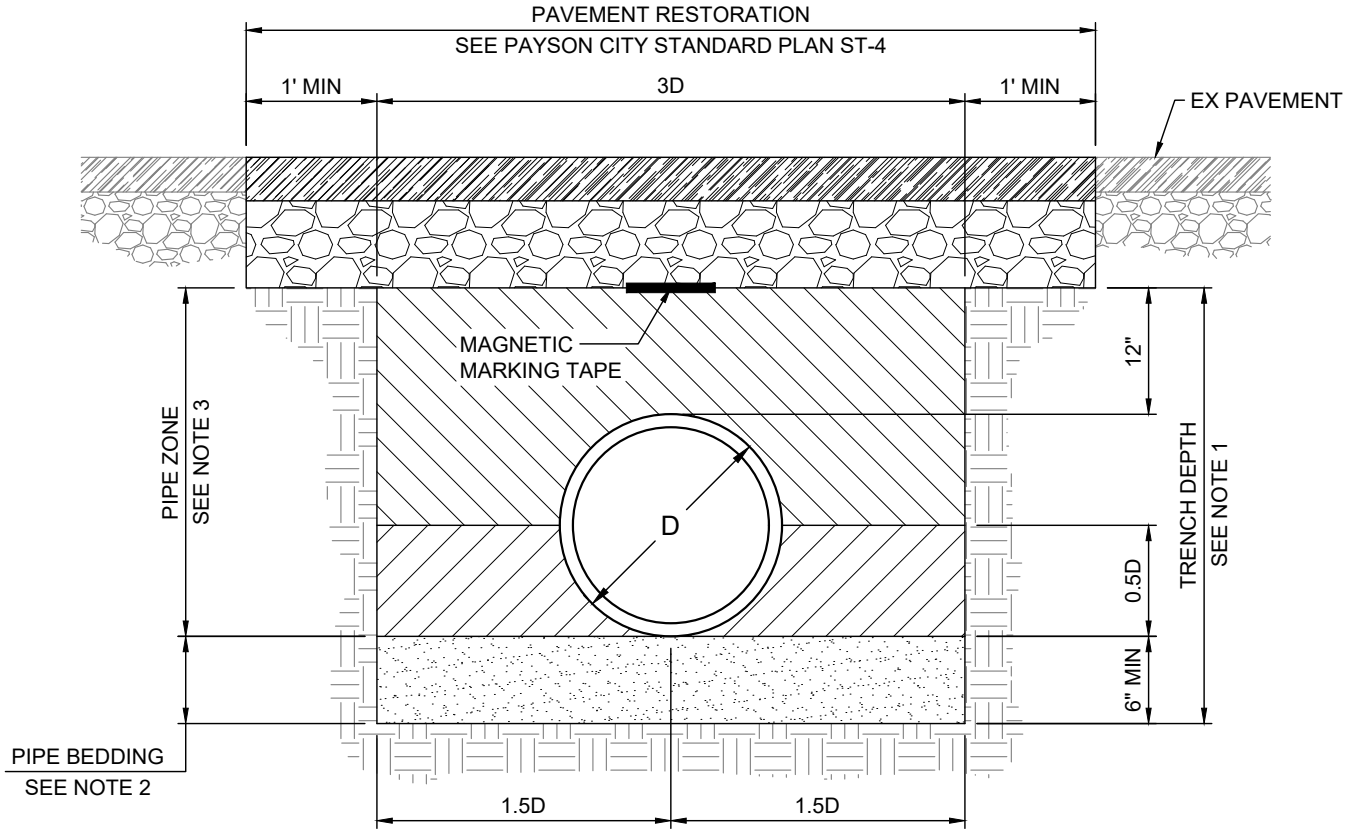
1. ALL STRUCTURES AND PARTS OF STRUCTURES SHALL BE PRE-CAST TO CONFORM TO ASTM C478
2. THE PRE-TREATMENT STRUCTURE SHALL BE CONSTRUCTED TO ENSURE WATER TIGHTNESS
3. SNOUT OR APPROVED EQUIVALENT PRE-TREATMENT DEVICE MAY BE USED AS ALTERNATE TO PIPE CONFIGURATION SHOWN IN THE DETAIL BELOW
4. THE SUMP SHALL BE LOCATED 5' (MIN) OFFSET FROM PRE-TREATMENT STRUCTURE AND PERPENDICULAR TO GUTTER ALIGNMENT
5. THE SUMP LID SHALL NOT BE LOCATED IN THE SIDEWALK SECTION
6. ANY APPROVED EQUIVALENTS REQUIRE CITY ENGINEER'S WRITTEN APPROVAL
7. D & L I-3518 OR APPROVED EQUIVALENT IS PREFERRED FOR CURB FACED INLETS
8. SWPP BMPS TO BE REMOVED AND ALL STORM DRAIN STRUCTURES AND LINES TO BE CLEANED AND CCTV INSPECTION PERFORMED PRIOR TO FINAL ACCEPTANCE





PAYSON UTAH SEPTEMBER 2023	PRE-TREATMENT STRUCTURE AND SUMP DETAIL	STANDARD PLAN SD-1	SHEET 1 OF 1



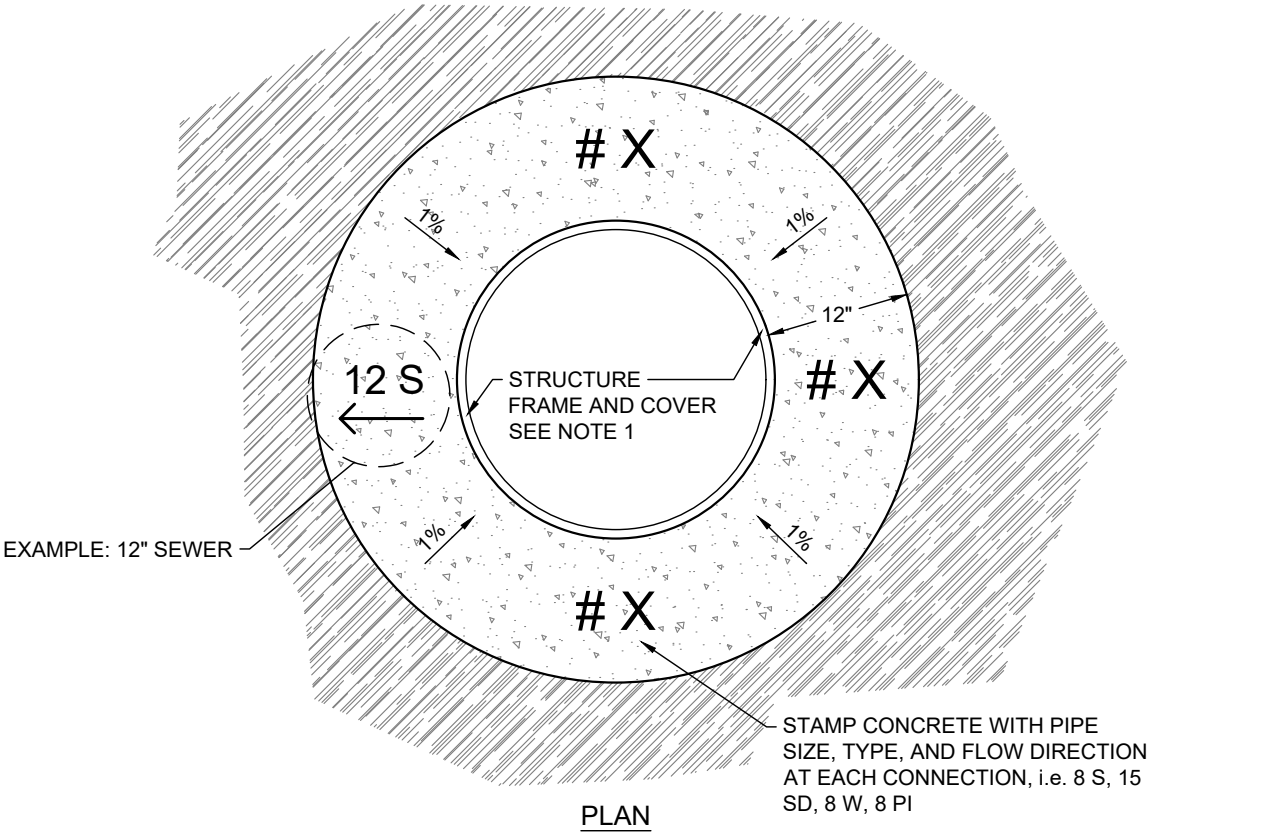


SECTION A

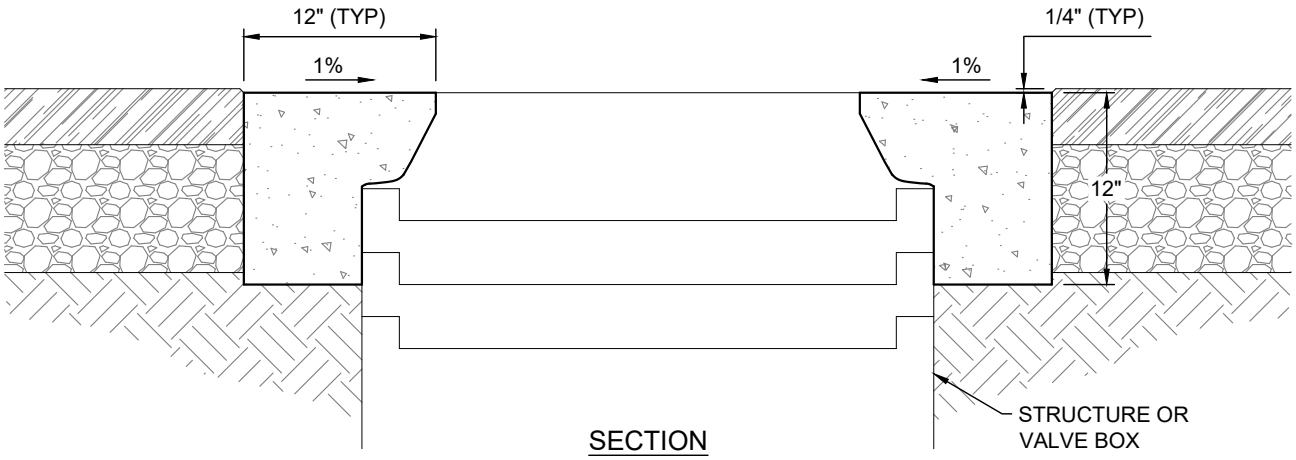
NOTES:

1. IF DEPTH OF TRENCH IS GREATER THAN 4-FT AND SHORES OR TRENCH SUPPORTS ARE NOT USED, SLOPES ARE REQUIRED PER OSHA REGULATIONS. REFER TO APWA PLAN 381 FOR ADDITIONAL INFORMATION.
2. PIPE BEDDING: UNTREATED BASE COURSE PER APWA SECTION 32 11 23. INSTALL PER APWA SECTION 33 05 20.
3. PIPE ZONE BACKFILL: A-1-A OR NATIVE MATERIAL (UPON APPROVAL) PER APWA SECTION 31 05 13. MATERIAL MUST MEET APWA STANDARD FOR GRANULAR BORROW. COMPACT TO 96% DENSITY PER ASTM D-1557. CONTRACTOR MUST SUBMIT GRADATION AND PROCTOR DENSITY DATA OF NATIVE MATERIAL TO BE CONSIDERED FOR BACKFILL. ALL NATIVE MATERIAL TO BE USED AS FILL MUST HAVE ALL ORGANIC MATERIAL, RUBBISH, DEBRIS, AND OTHER OBJECTIONABLE MATERIALS REMOVED.

PAYSON UTAH SEPTEMBER 2023	STORM AND SANITARY SEWER PIPE TRENCH	STANDARD PLAN SD-2	SHEET 1 OF 1



PLAN

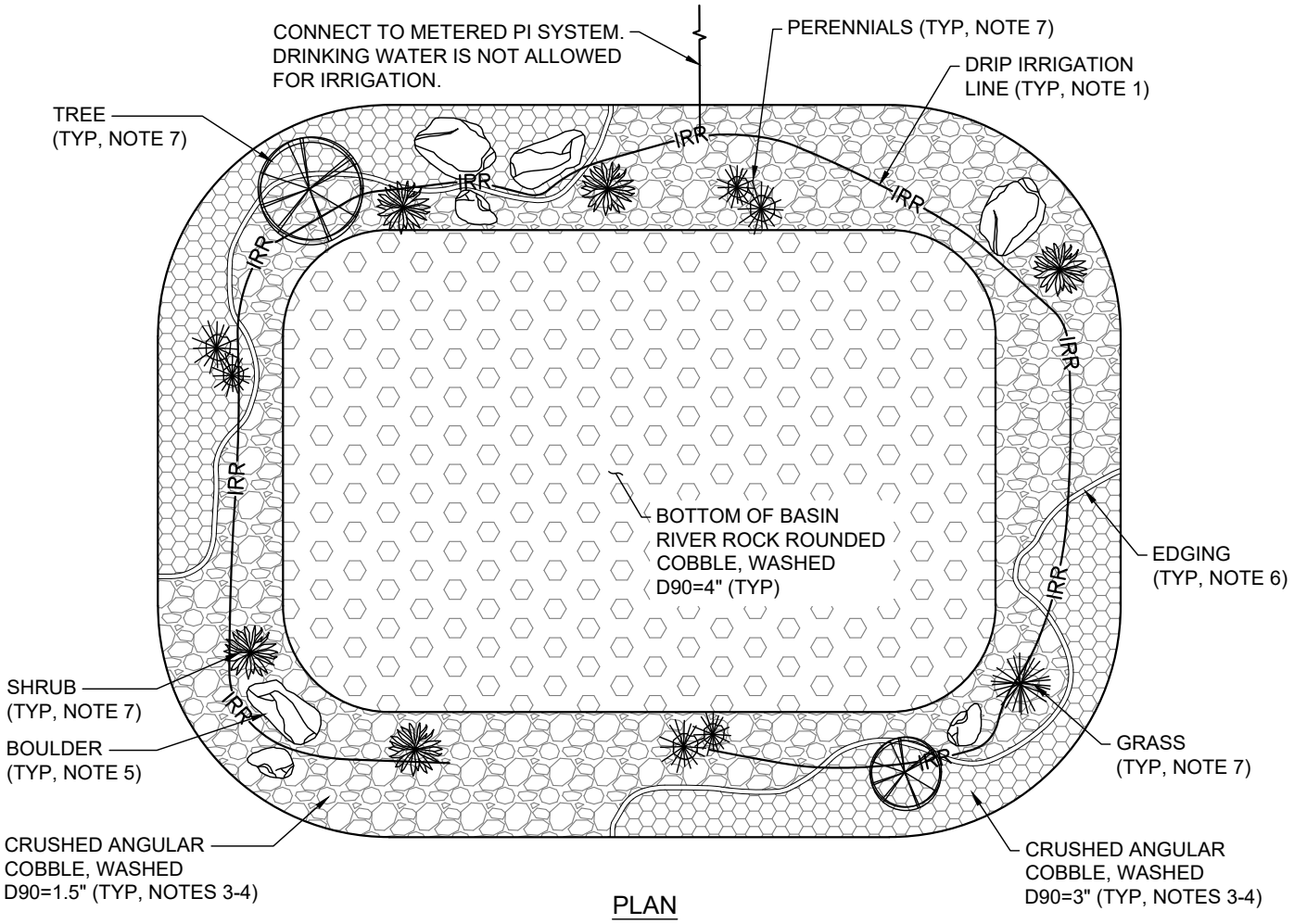


SECTION

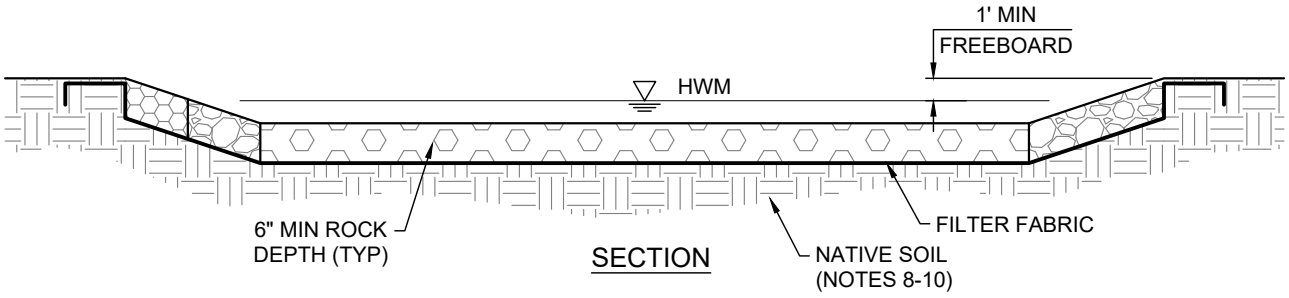
NOTES:

1. STRUCTURE FRAME AND COVER:
   STORM DRAIN - APWA PLAN 302 OR 303
   SANITARY SEWER - APWA PLAN 402
   WATER - APWA PLAN 502 OR CAST IRON VALVE BOX
2. USE ONLY 4000 PSI CONCRETE MEETING APWA SECTION 03 30 04.
3. PROVIDE A NEAT VERTICAL AND CONCENTRIC JOINT BETWEEN CONCRETE AND PAVED SURFACE. CLEAN EDGES OF ALL DIRT, OIL, AND LOOSE DEBRIS.
4. INSTALL 12" THICK CONCRETE COLLAR ACCORDING TO APWA SECTION 03 30 10. APPLY BROOM FINISH AND CURING AGENT PER APWA SECTION 03 39 00.
5. PROVIDE 1/4" LIP FROM TOP OF PAVEMENT TO TOP OF CONCRETE COLLAR. SLOPE COLLAR TOWARDS THE CENTER AND STRUCTURE COVER. NO DEVIATION FROM THIS STANDARD IS PERMITTED. LIPS GREATER THAN 1/4" WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.

PAYSON UTAH SEPTEMBER 2023	CONCRETE COLLAR DETAIL	STANDARD PLAN SD-3	SHEET 1 OF 1



PLAN

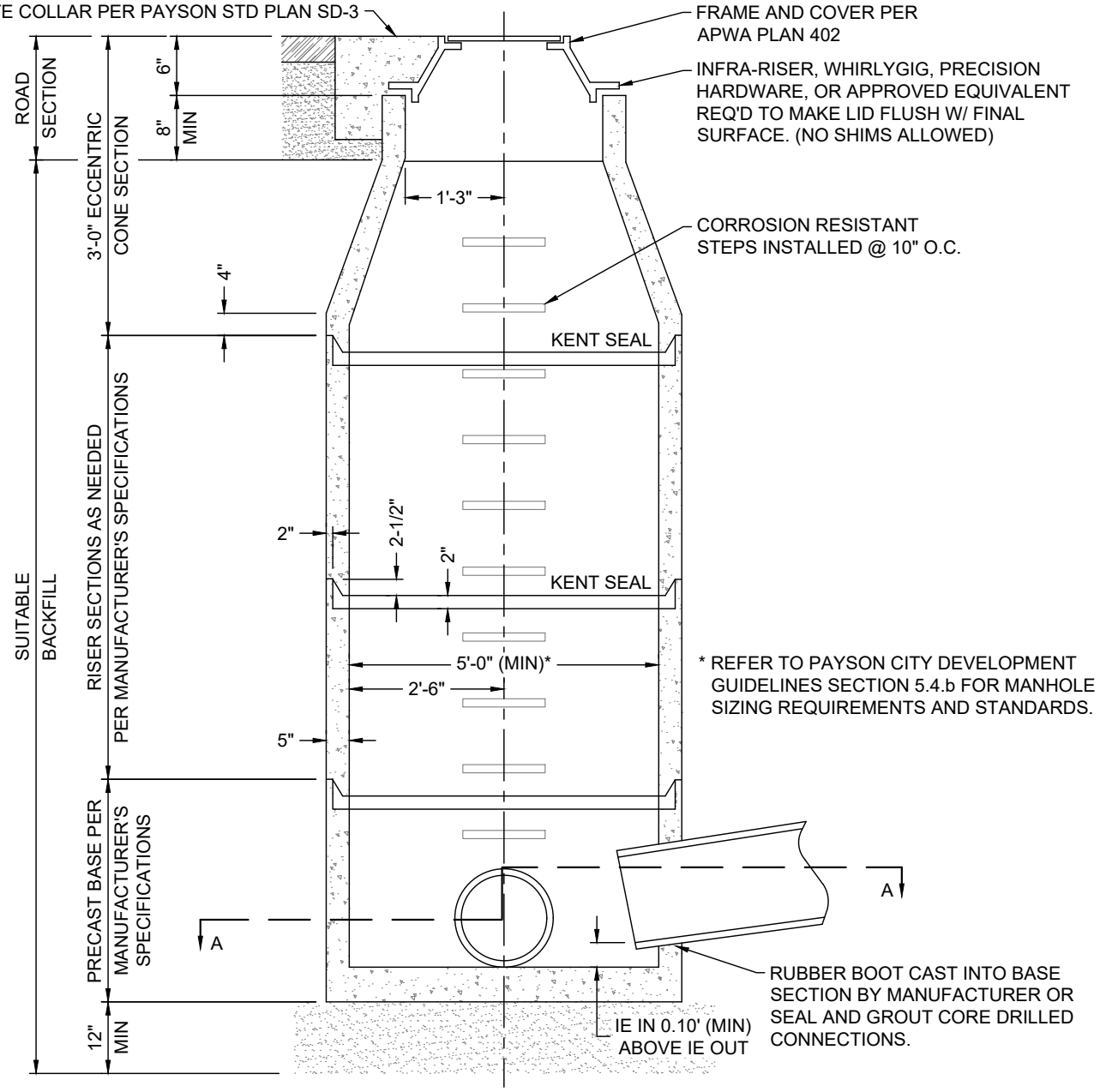


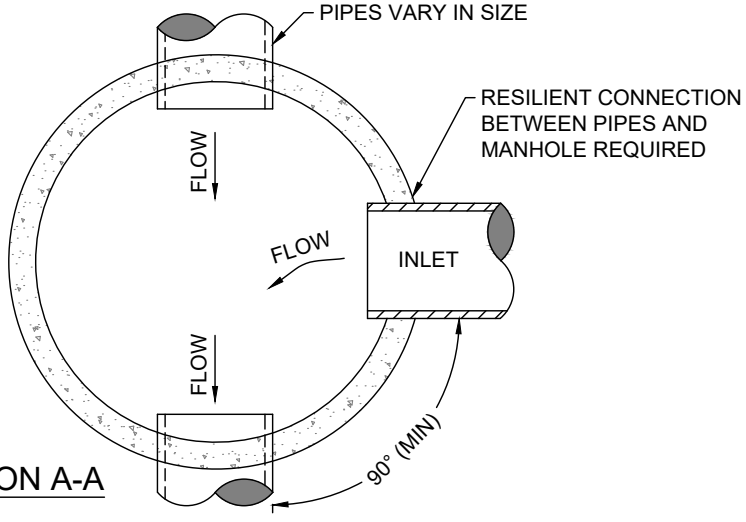
SECTION

NOTES:

1. WATER WISE LANDSCAPING REQUIRED. USE ONLY DRIP EMITTERS OR BUBBLERS FOR IRRIGATION.
2. INSTALL FILTER FABRIC PER MANUFACTURER'S SPECIFICATIONS.
3. ROCK MULCH TO MEET PAYSON CITY DESIGN STANDARDS.
4. PROVIDE A MINIMUM OF 2 DIFFERING ROCK MULCH STYLES.
5. PROVIDE BOULDERS THAT MEASURE 24" TO 48" IN DIAMETER ALONG THE SMALLEST AXIS.
6. PROVIDE 12 GAUGE STEEL OR CONCRETE CURB EDGING.
7. SELECT PLANTS NATIVE TO THE AREA THAT ARE LOW MAINTENANCE, WATER -CONSERVING PLANTS.
8. BASIN MUST PROVIDE STORAGE FOR 100-YR STORM EVENT AND COMPLETELY DRAIN WITHIN 72 HOURS. OVER EXCAVATION OF NATIVE CLAYS AND INSTALLATION OF FREE DRAINING MATERIAL MAY BE REQUIRED.
9. IF INFILTRATION IS THE PRIMARY METHOD OF POND DRAINAGE, A PERCOLATION TEST MUST BE PERFORMED IN THE LOCATION OF THE FUTURE POND TO CONFIRM INFILTRATION RATE. PERCOLATION TEST MUST BE PERFORMED AT THE LOWEST ANTICIPATED POND ELEVATION.
10. A SUMP MAY BE REQUIRED TO FACILITATE INFILTRATION AND GET THROUGH CLAY OR OTHER SLOW INFILTRATING SOIL LAYERS. A GEOTECHNICAL BORING IS REQUIRED TO DETERMINE THE DEPTH OF SOILS THAT WILL ALLOW PERCOLATION.

PAYSON UTAH SEPTEMBER 2023	DETENTION / RETENTION BASIN DETAIL	STANDARD PLAN SD-4	SHEET 1 OF 1



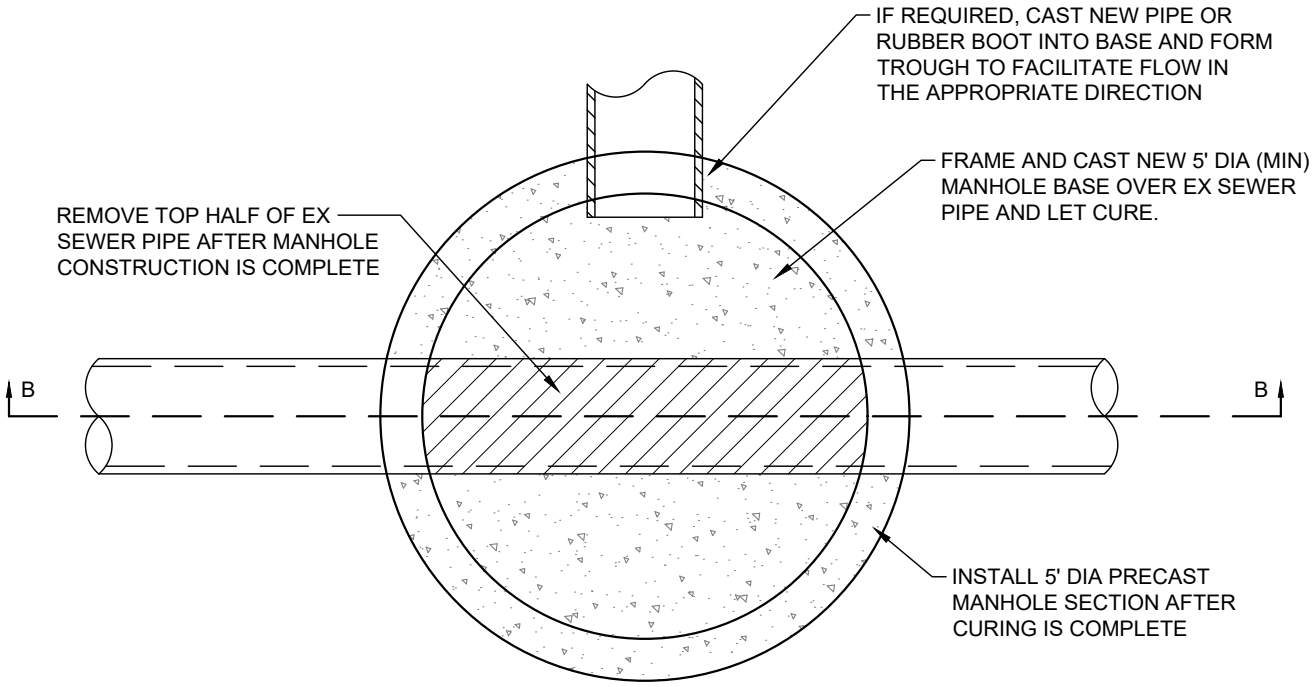


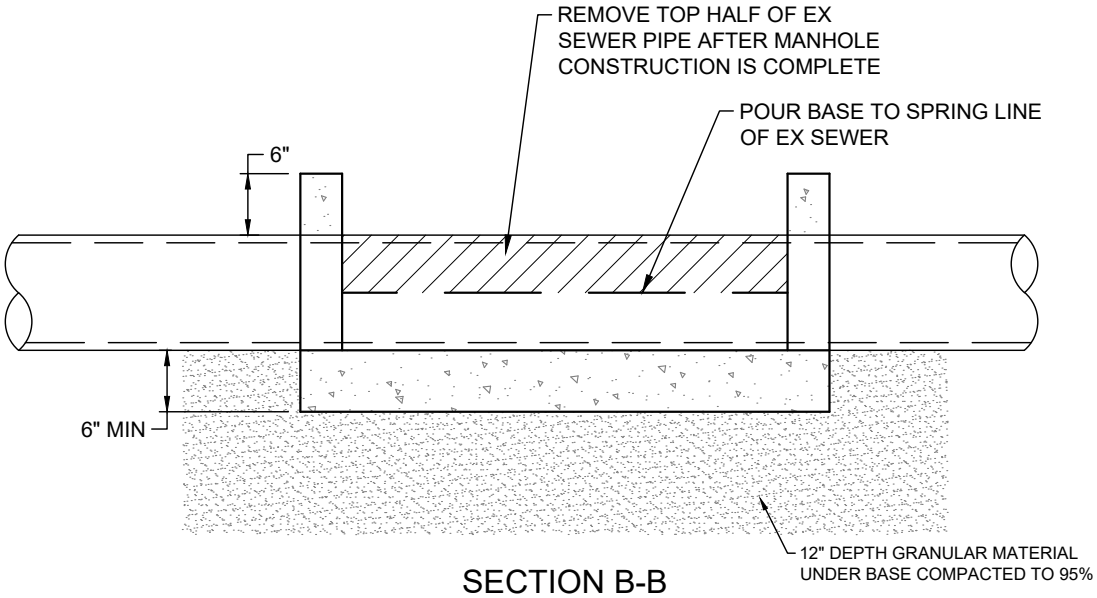
SECTION A-A

NOTES:

1. MANHOLE BASE AND PRECAST TO CONFORM TO ASTM C478.
2. NO 4" LATERAL CONNECTIONS ALLOWED INTO MANHOLES.
3. NO REVERSIBLE HARDWARE ALLOWED.
4. 90° MINIMUM ANGLE BETWEEN INLET AND OUTLET PIPES. NO ACUTE ANGLES ARE PERMITTED.

PAYSON UTAH SEPTEMBER 2023	PRECAST SANITARY SEWER MANHOLE	STANDARD PLAN SS-1	SHEET 1 OF 2



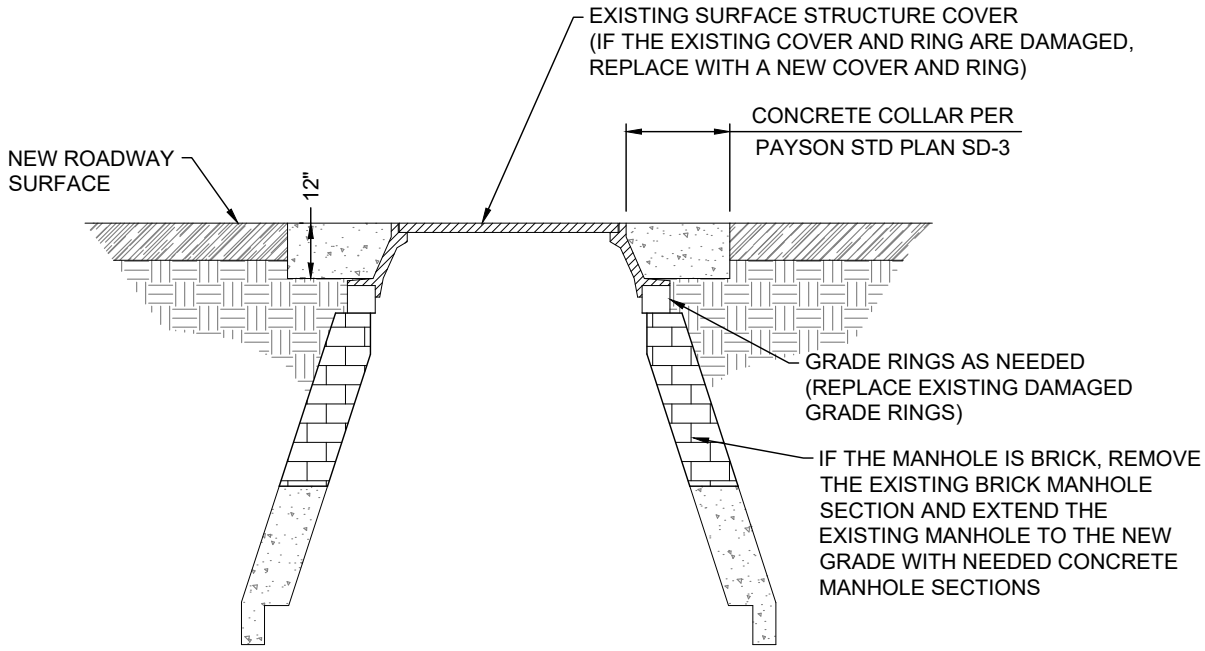


SECTION B-B

NOTES:

1. CAST-IN-PLACE MANHOLE BASE IS TO BE USED ONLY WHEN EXISTING SEWER IS TO REMAIN IN SERVICE DURING CONSTRUCTION.
2. ONLY BASE IS PERMITTED TO BE CAST-IN-PLACE. "DOG HOUSE", RISER SECTIONS, AND CONE TO BE PRECAST.
3. ALL PRECAST TO CONFORM TO ASTM C478.
4. REFER TO SHEET 1 FOR MANHOLE DETAIL.

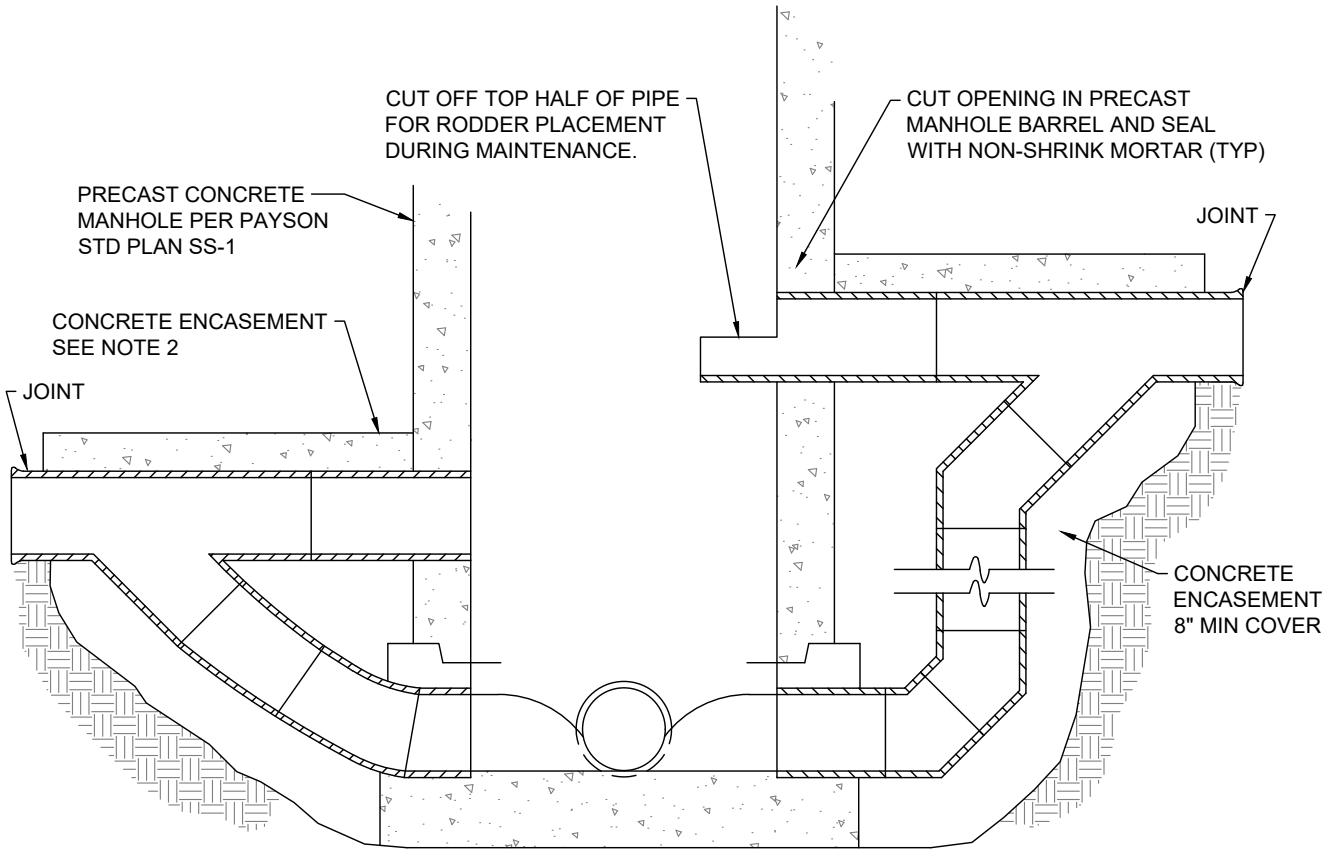
PAYSON UTAH SEPTEMBER 2023	PRECAST SANITARY SEWER MANHOLE (WITH CAST-IN-PLACE BASE ON EXISTING SEWER)	STANDARD PLAN SS-1	SHEET 2 OF 2



NOTES:

1. CONCRETE COLLARS PER PAYSON STANDARD PLAN SD-3.
2. SURFACE/COVERS/LIDS STRUCTURES SHALL BE BURIED NO MORE THAN 10 CONTINUOUS CALENDAR DAYS
3. KEEP LID 1/4" LOW WHEN LEVELING HARDWARE DURING COLLAR INSTALLATION
4. 12" MAX CONCRETE RISERS AND 3" MAX METAL GRADE RINGS ALLOWED
5. REVERSIBLE HARDWARE IS NOT ALLOWED

PAYSON UTAH SEPTEMBER 2023	RECONSTRUCT BRICK MANHOLE	STANDARD PLAN SS-2	SHEET 1 OF 1



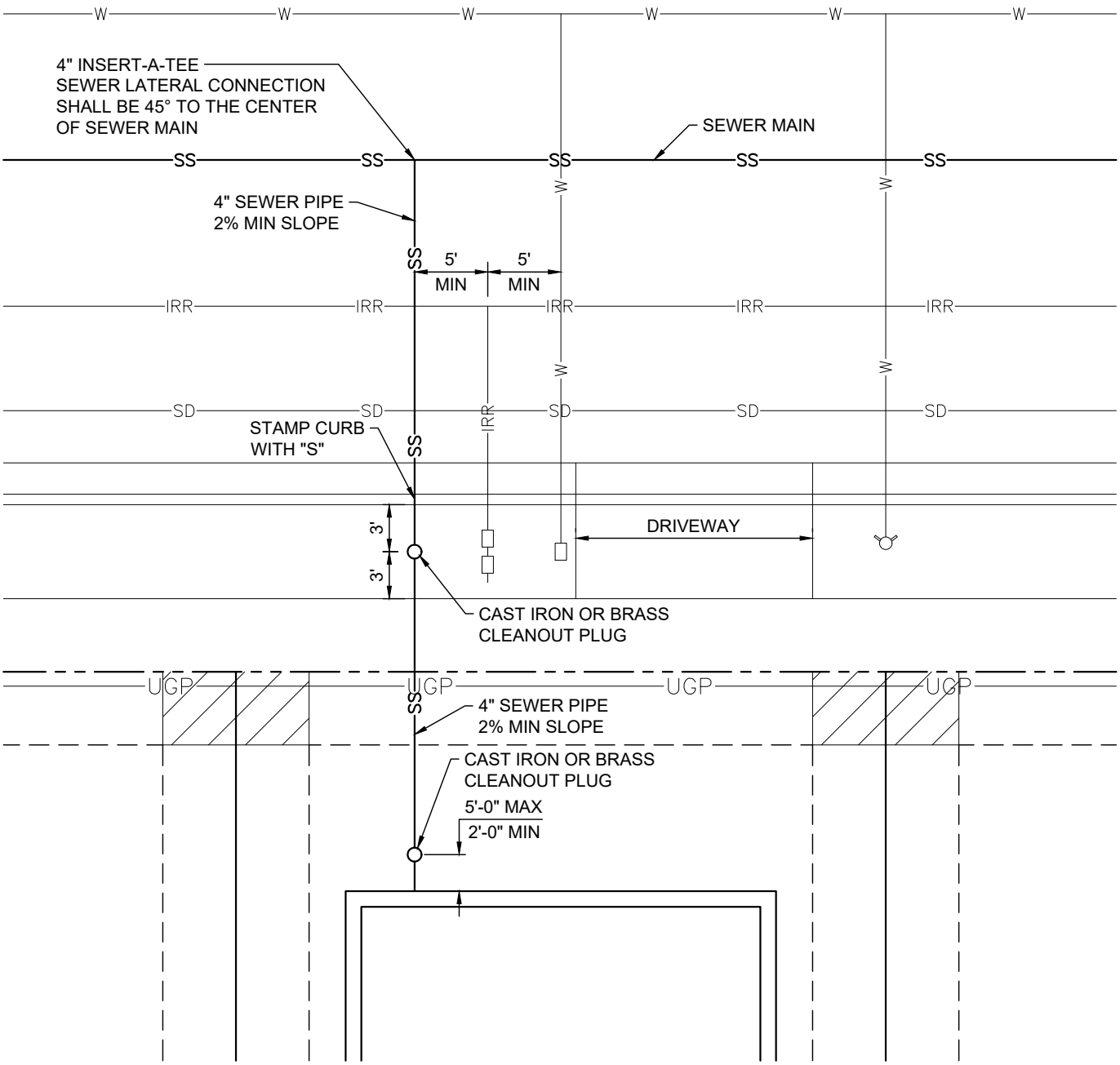
SHALLOW DROP

DEEP DROP

NOTES:

1. 2500 PSI CONCRETE PLACED AGAINST UNDISTURBED MATERIAL OR SHEETING
2. EXTEND ENCASEMENT TO FIRST JOINT BEYOND EXCAVATION FOR DROP CONNECTION
3. DROP PIPE TO BE SAME DIAMETER AS SEWER DISCHARGING INTO MANHOLE FOR SEWERS UP TO AND INCLUDING 12" DIAMETER

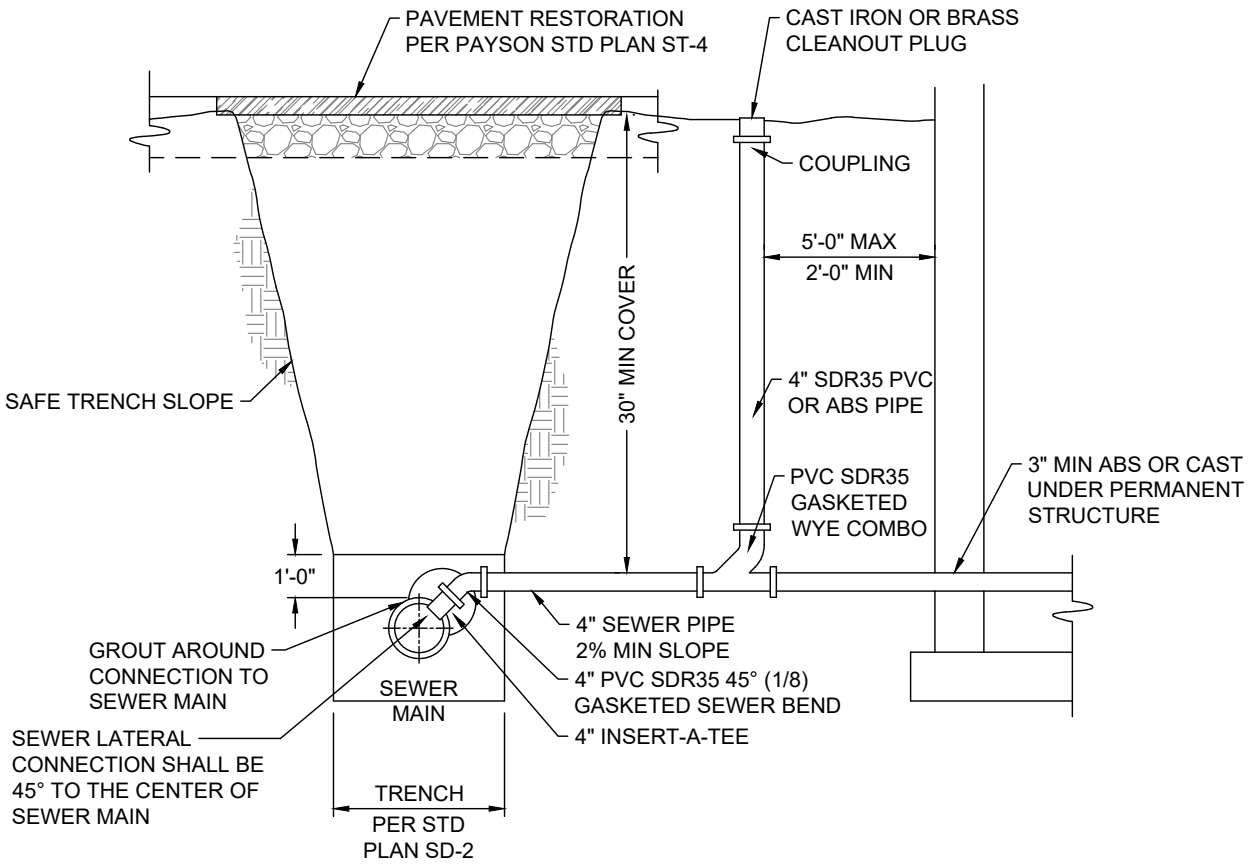
PAYSON UTAH SEPTEMBER 2023	DROP MANHOLE SECTION	STANDARD PLAN SS-3	SHEET 1 OF 1

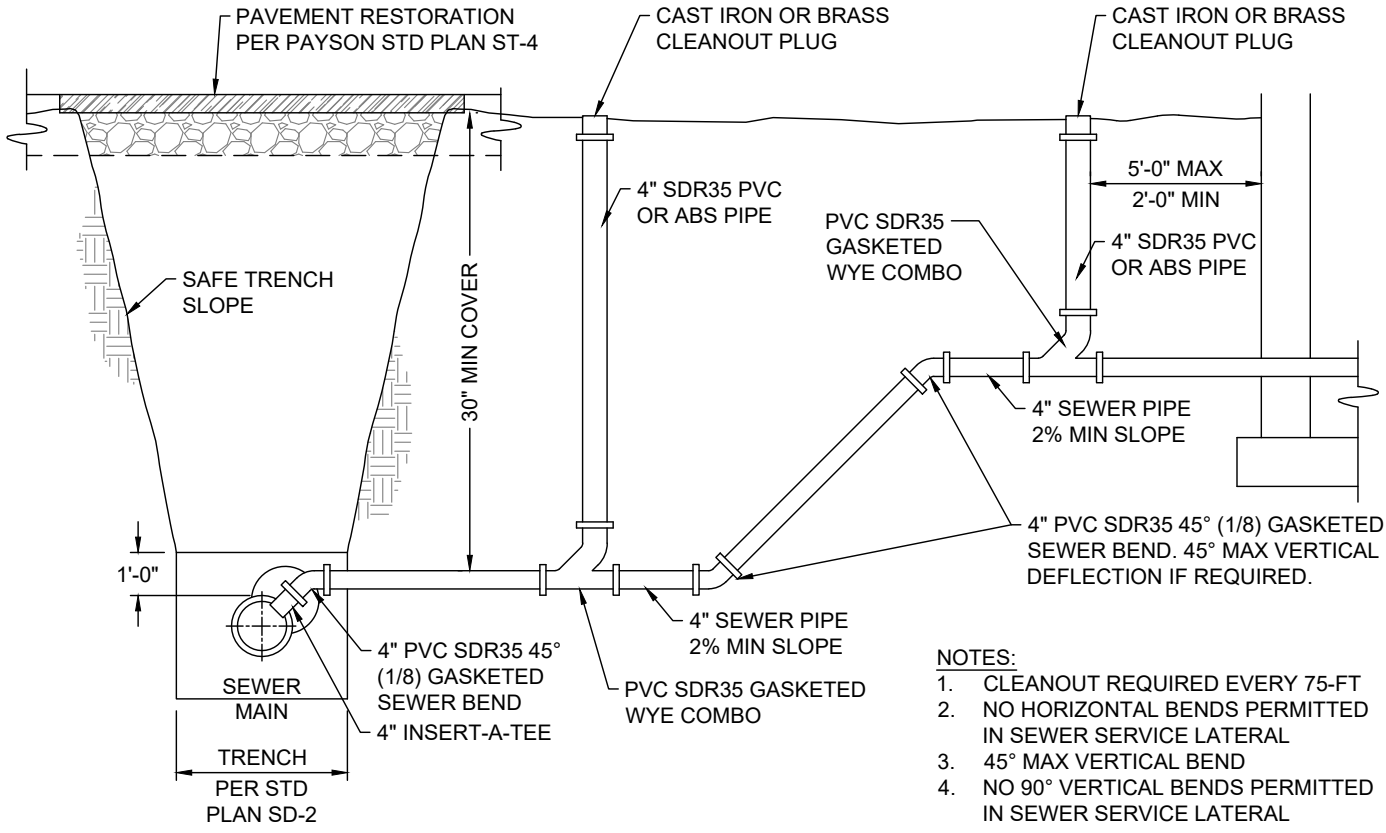


NOTES:

1. CLEANOUT REQUIRED EVERY 100-FT
2. NO HORIZONTAL BENDS PERMITTED IN SEWER SERVICE LATERAL
3. 45° MAX VERTICAL BEND
4. NO 90° VERTICAL BENDS PERMITTED IN SEWER SERVICE LATERAL

PAYSON UTAH SEPTEMBER 2023	RESIDENTIAL SEWER LATERAL CONNECTION	STANDARD PLAN SS-4	SHEET 1 OF 2

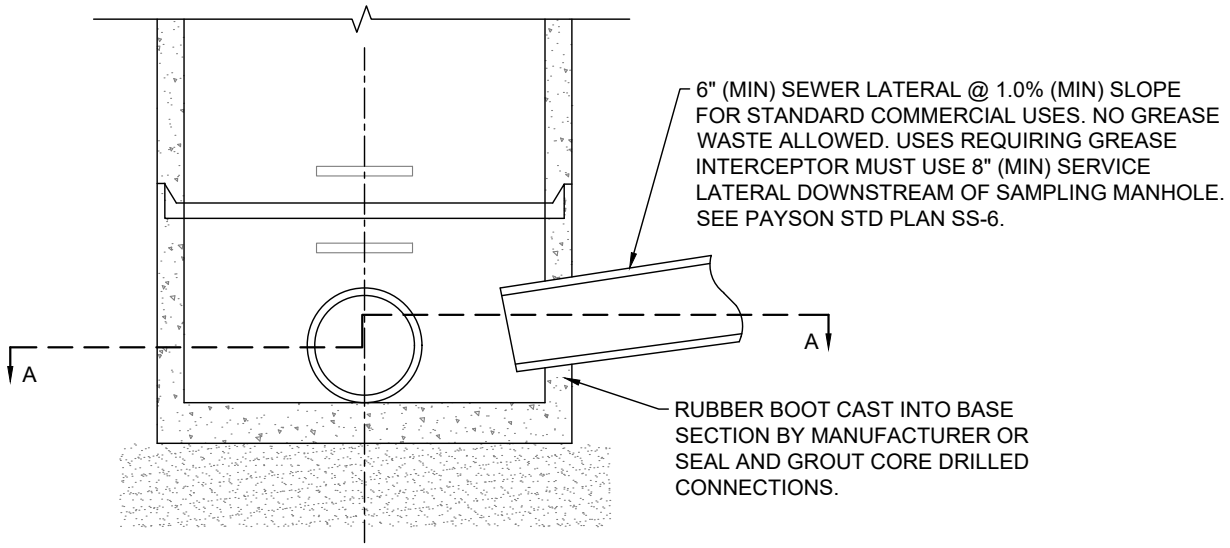


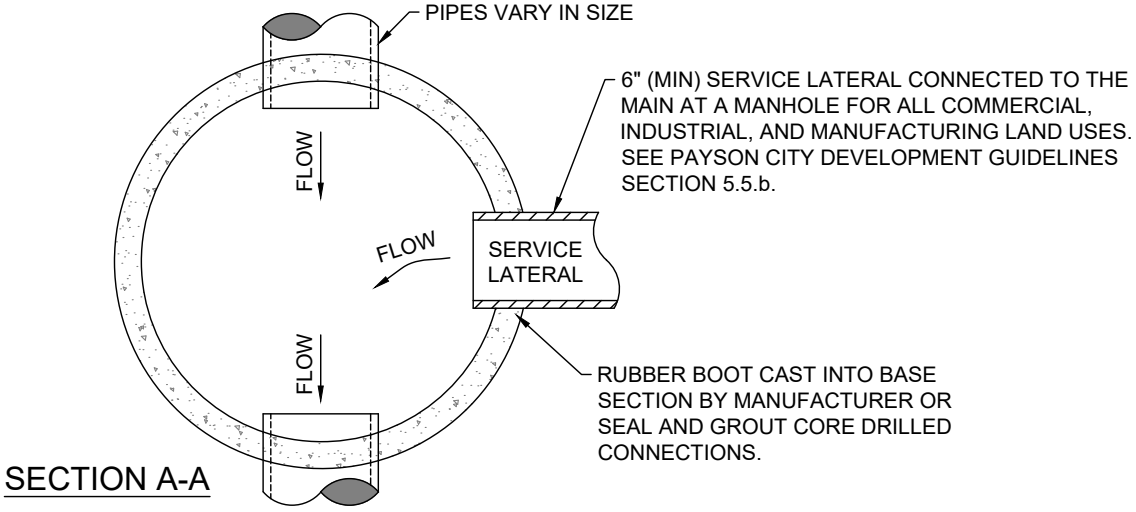


NOTES:

1. CLEANOUT REQUIRED EVERY 75-FT
2. NO HORIZONTAL BENDS PERMITTED IN SEWER SERVICE LATERAL
3. 45° MAX VERTICAL BEND
4. NO 90° VERTICAL BENDS PERMITTED IN SEWER SERVICE LATERAL

PAYSON UTAH SEPTEMBER 2023	RESIDENTIAL SEWER LATERAL CONNECTION	STANDARD PLAN SS-4	SHEET 2 OF 2

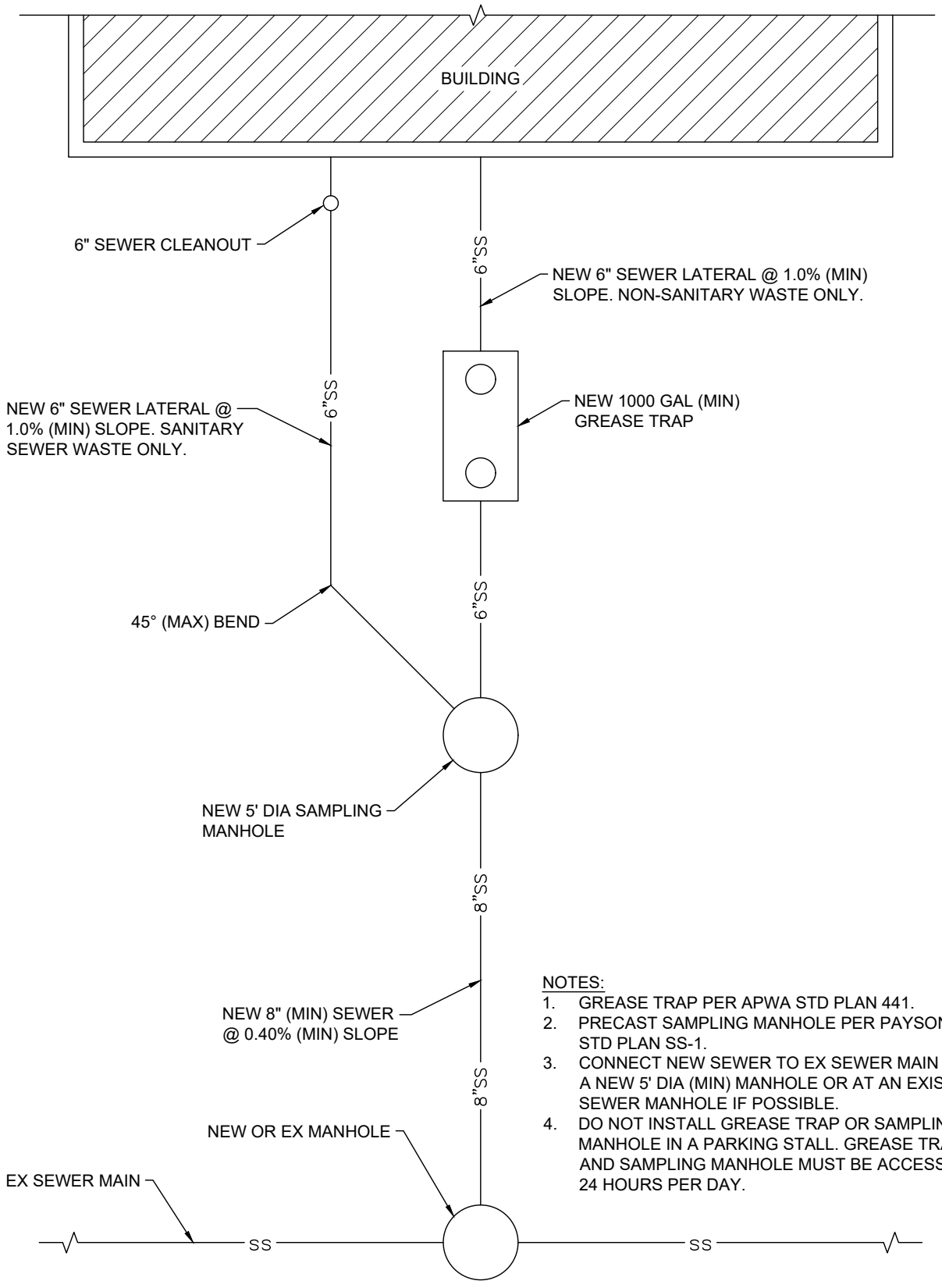




SECTION A-A

NOTES:
1. MANHOLE BASE AND PRECAST TO CONFORM TO ASTM C478
2. NO 4" LATERAL CONNECTIONS ALLOWED INTO MANHOLES
3. NO REVERSIBLE HARDWARE ALLOWED

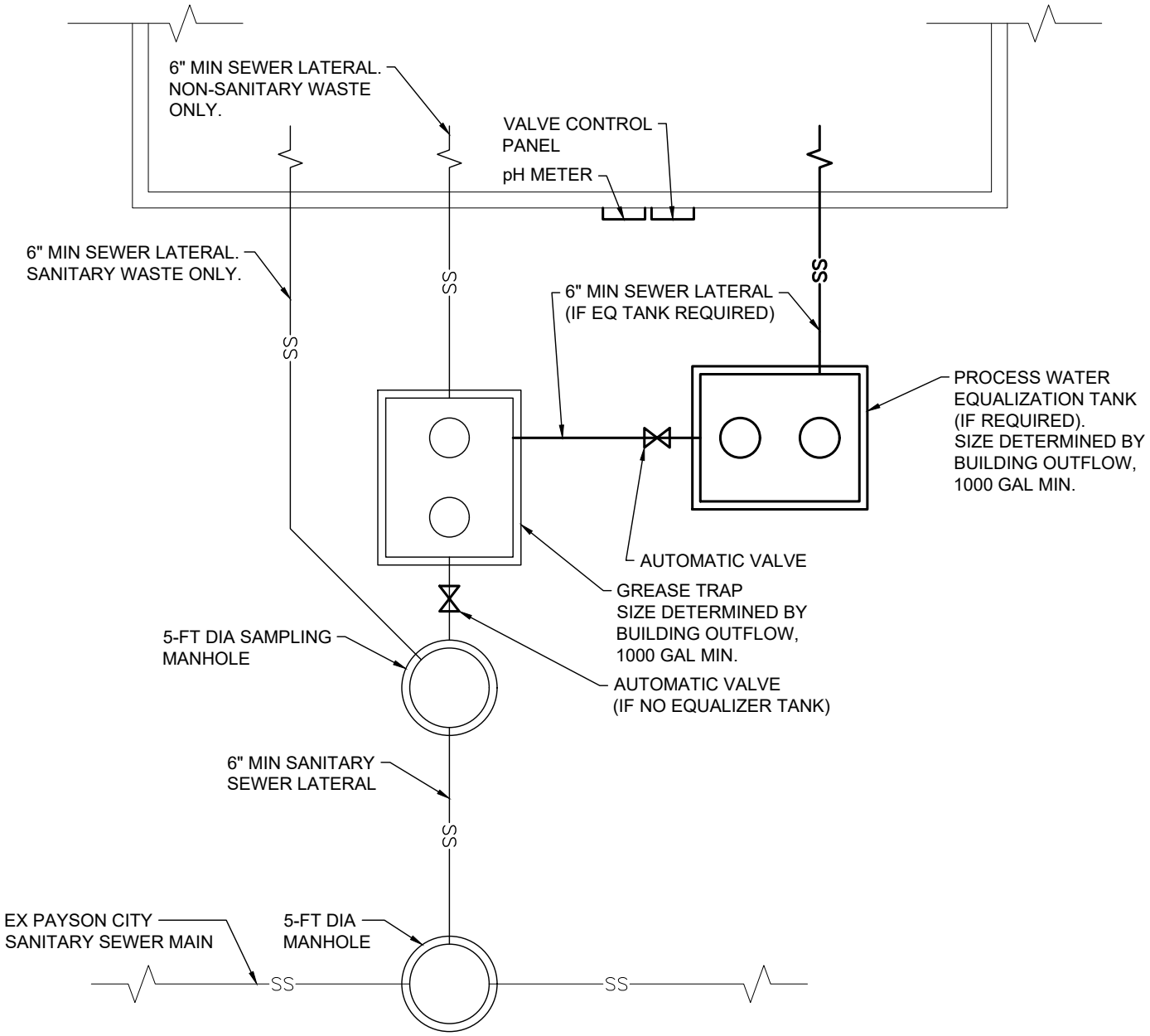
PAYSON UTAH SEPTEMBER 2023	NON-RESIDENTIAL SEWER LATERAL CONNECTION (COMMERCIAL, INDUSTRIAL, AND MANUFACTURING LAND USES)	STANDARD PLAN SS-5	SHEET 1 OF 1



NOTES:

1. GREASE TRAP PER APWA STD PLAN 441.
2. PRECAST SAMPLING MANHOLE PER PAYSON STD PLAN SS-1.
3. CONNECT NEW SEWER TO EX SEWER MAIN WITH A NEW 5' DIA (MIN) MANHOLE OR AT AN EXISTING SEWER MANHOLE IF POSSIBLE.
4. DO NOT INSTALL GREASE TRAP OR SAMPLING MANHOLE IN A PARKING STALL. GREASE TRAP AND SAMPLING MANHOLE MUST BE ACCESSIBLE 24 HOURS PER DAY.

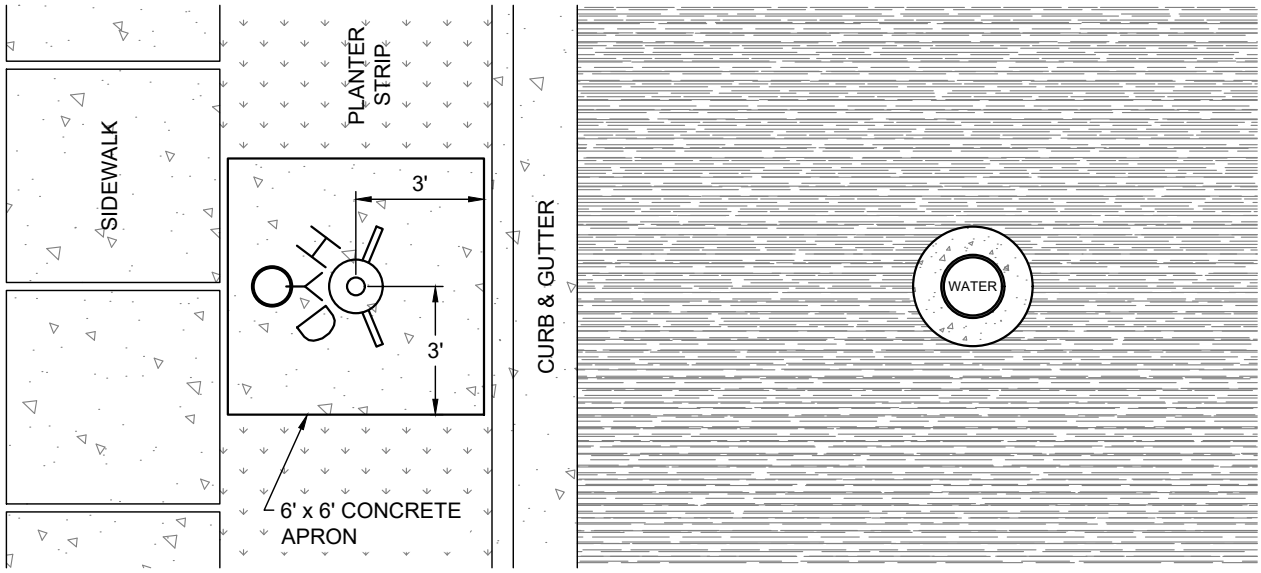
PAYSON UTAH SEPTEMBER 2023	SEWER LATERAL WITH GREASE TRAP	STANDARD PLAN SS-6	SHEET 1 OF 1



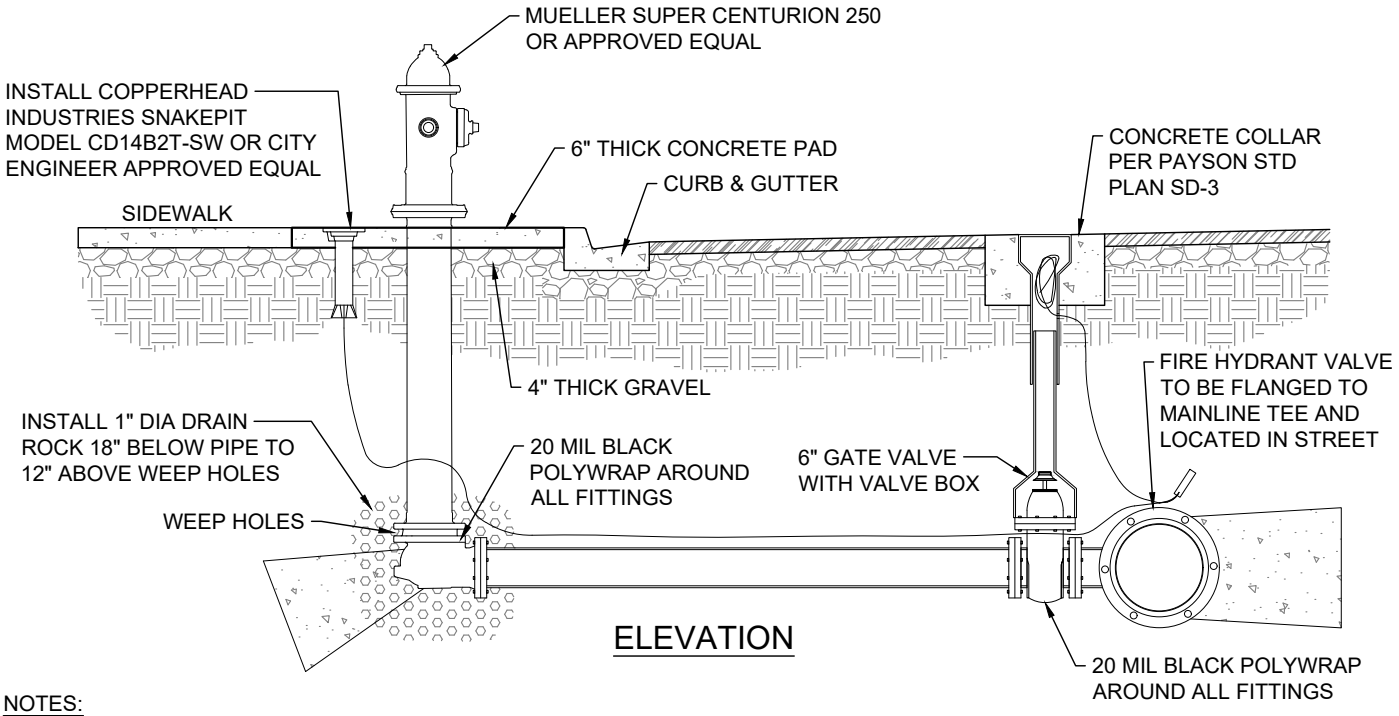
NOTES:

1. DETAIL APPLIES TO ALL FACILITIES THAT PRODUCE WASTEWATER TOO ACIDIC TO BE INTRODUCED INTO THE PAYSON CITY WASTEWATER TREATMENT FACILITY.
2. ALL SEWER STRUCTURES AND MANHOLES DOWNSTREAM OF FACILITY MUST BE ACID RESISTANT.
3. IF REQUIRED, PROCESS WATER TO REMAIN IN EQUALIZATION TANK UNTIL pH REACHES A VALUE WITHIN THE PERMITTED RANGE.
4. IF NO EQUALIZATION TANK IS REQUIRED, CONNECT pH METER TO SAMPLING MANHOLE AND INSTALL AUTOMATIC VALVE ON SEWER LATERAL DOWNSTREAM OF SAMPLING MANHOLE.
5. CONFIGURE VALVE TO CLOSE AUTOMATICALLY IF pH REACHES A VALUE OUTSIDE THE RANGE SPECIFIED ON THE PERMIT.
6. PROCESS WATER TO PASS THROUGH GREASE INTERCEPTOR PRIOR TO RELEASE INTO CITY SEWER SYSTEM.
7. FACILITY REQUIRING PRE-TREATMENT OF PROCESS WATER MUST HAVE CONTINUOUS pH MONITORING AND SUBMIT REPORTS TO THE PAYSON CITY WASTEWATER TREATMENT PLANT AT INTERVALS AS REQUIRED BY THE PRE-TREATMENT PERMIT.
8. PROCESS WATER SAMPLES MUST BE TAKEN IN PERSON BY A REPRESENTATIVE OF PAYSON CITY, AT INTERVALS AS REQUIRED BY THE PRE-TREATMENT PERMIT.
9. FAILURE TO FOLLOW THE PROCEDURES OUTLINED WILL RESULT IN THE ASSESSMENT OF THE MAXIMUM PENALTY ALLOWED BY LAW AND THE FACILITY VIOLATING THESE PROCEDURES WILL BE REPORTED TO THE ENVIRONMENTAL PROTECTION AGENCY (EPA) AND THE DIVISION OF WATER QUALITY (DWQ).
10. ADDITIONALLY THE FACILITY WILL BE DISCONNECTED FROM THE CITY SEWER SYSTEM AND WILL REMAIN SHUT DOWN UNTIL AN APPROPRIATE ALTERNATIVE IS IN PLACE.
11. ALL REQUIRED MAINTENANCE AND TESTING OF PROCESS WATER AND PRE-TREATMENT STRUCTURE AND CONTROLS TO BE AT THE EXPENSE OF THE BUSINESS OWNER.

PAYSON UTAH SEPTEMBER 2023	PROCESS WATER PRE-TREATMENT DETAIL	STANDARD PLAN SS-7	SHEET 1 OF 1



PLAN VIEW

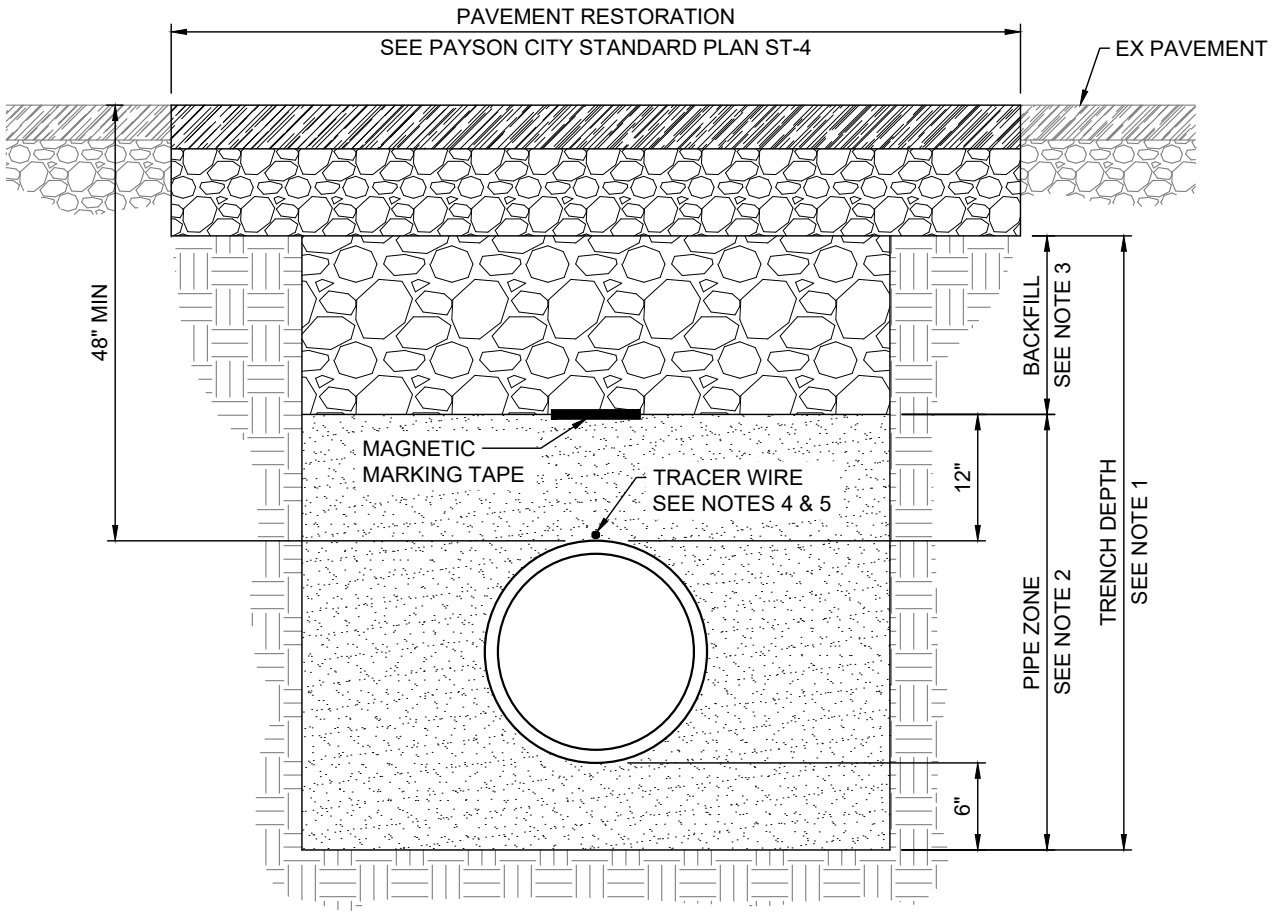


ELEVATION

NOTES:

1. LOCATE FIRE HYDRANT IN MIDDLE OF 6' x 6' CONCRETE APRON.
2. UNTREATED BASE COURSES: PROVIDE MATERIAL SPECIFIED IN APWA SECTION 32 11 23. DO NOT USE GRAVEL OR SEWER ROCK. PLACE PER APWA SECTION 32 05 10. COMPACT PER APWA SECTION 31 23 26 TO A MODIFIED PROCTOR DENSITY OF 95-PERCENT OR GREATER. MAXIMUM LOOSE LIFT THICKNESS IS 8-INCHES.
3. CONCRETE: CLASS 4000 PER APWA SECTION 03 30 04. PLACE PER APWA SECTION 32 16 13. CURE PER APWA SECTION 03 39 00.
   a. IF NECESSARY, PROVIDE CONCRETE THAT ACHIEVES DESIGN STRENGTH IN LESS THAN 7 DAYS. USE CAUTION, HOWEVER, AS SPIDER CRACKS DEVELOP IF AIR TEMPERATURE EXCEEDS 90°F.
   b. UNLESS SHOWN OTHERWISE, PROVIDE 1/2-INCH RADIUS IN CONCRETE EDGES EXPOSED TO PUBLIC VIEW.
4. EXPANSION JOINTS: FULL DEPTH 1/2-INCH THICK TYPE F1 JOINT FILLER MATERIAL PER APWA SECTION 32 16 13 MUST BE PLACED BETWEEN THE SIDEWALK AND THE APRON.
5. FINISH: FINE HAIR BROOM.
6. HYDRANT: INSTALL HYDRANT PER MANUFACTURER'S SPECIFICATIONS.
7. HYDRANT VALVE: INSTALL VALVE ON THE MAIN WITH A FLANGE CONNECTION TO TEE.
8. ALL EX HYDRANTS 10 YEARS OR OLDER WITHIN THE PROJECT LIMITS MUST BE REPLACED.

PAYSON UTAH SEPTEMBER 2023	FIRE HYDRANT LOCATION AND 6' x 6' APRON	STANDARD PLAN W-1	SHEET 1 OF 1



SECTION

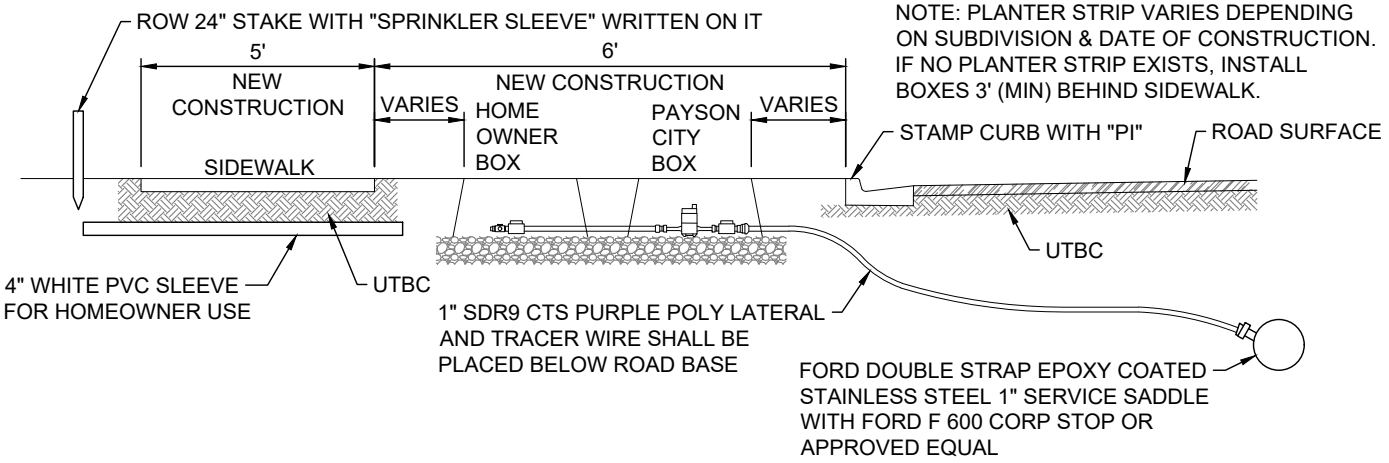
NOTES:

1. IF DEPTH OF TRENCH IS GREATER THAN 4-FT AND SHORES OR TRENCH SUPPORTS ARE NOT USED, SLOPES ARE REQUIRED PER OSHA REGULATIONS. REFER TO APWA PLAN 381 FOR ADDITIONAL INFORMATION.
2. PIPE ZONE: SAND (TYPE IV MATERIAL) PER APWA SECTION 31 05 13. COMPACT TO 92% DENSITY PER ASTM D-1557.
3. BACKFILL: A-1-A OR NATIVE MATERIAL (UPON APPROVAL) PER APWA SECTION 31 05 13. MATERIAL MUST MEET APWA STANDARD FOR GRANULAR BORROW. COMPACT TO 96% DENSITY PER ASTM D-1557. CONTRACTOR MUST SUBMIT GRADATION AND PROCTOR DENSITY DATA OF NATIVE MATERIAL TO BE CONSIDERED FOR BACKFILL. ALL NATIVE MATERIAL TO BE USED AS FILL MUST HAVE ALL ORGANIC MATERIAL, RUBBISH, DEBRIS, AND OTHER OBJECTIONABLE MATERIALS REMOVED.
4. USE 12 GAUGE (MIN) SINGLE STRAND COATED TRACER WIRE. AVOID SPLICING CONNECTION OF TRACER WIRE IF POSSIBLE. WHEN SPLICING IS NEEDED USE GREASE FILLED NUT AND WRAP WITH TAPE. TAPE TRACER WIRE TO PIPE BELLS. CONTINUITY TO BE TESTED AND APPROVED PRIOR TO FINAL ACCEPTANCE.
5. TRACER WIRE AT VALVES SHALL BE BROUGHT NEAR SURFACE ON THE OUTSIDE OF VALVE BOX. NOTCH A HOLE ON THE UPPER SLEEVE AND FEED TRACER WIRE INTO VALVE BOX.

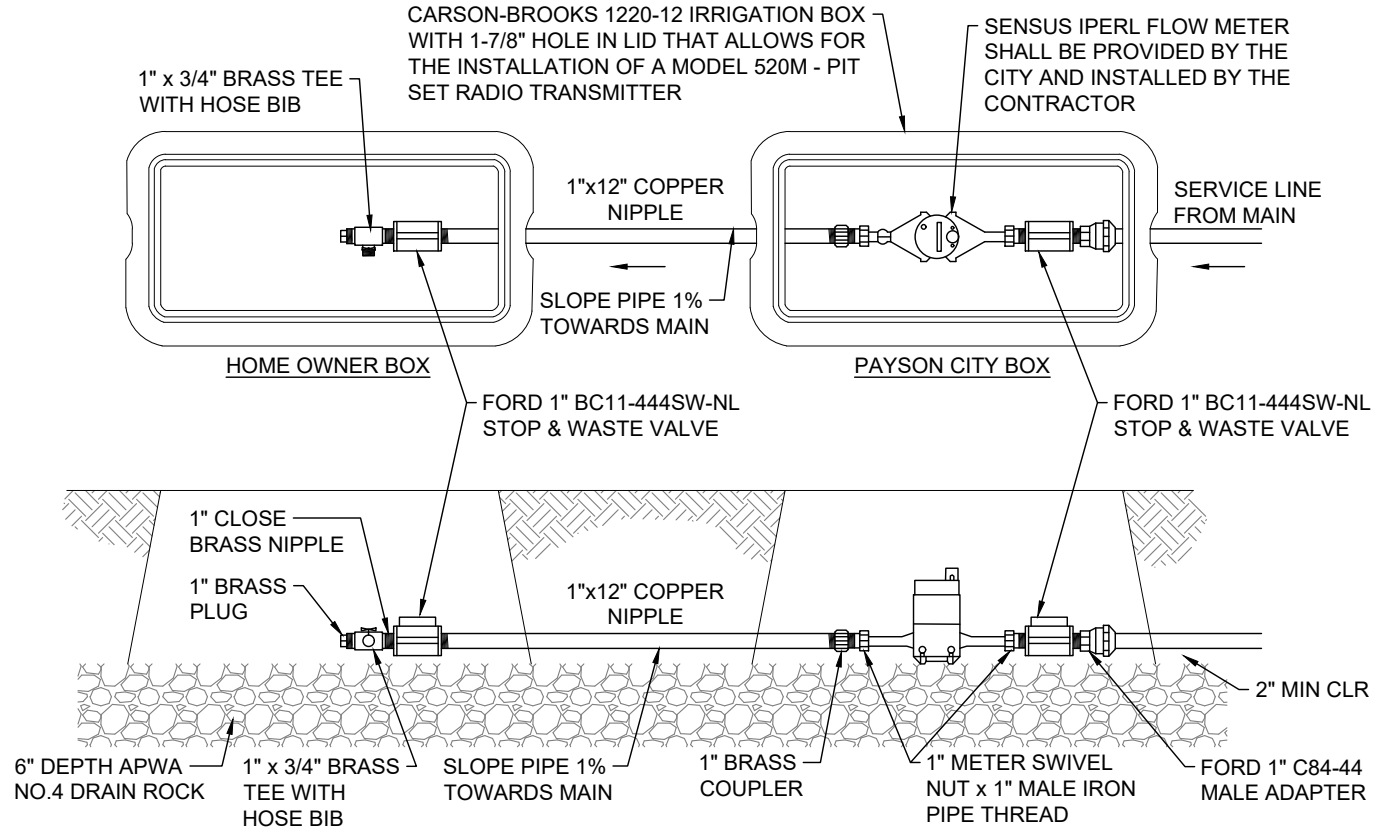
WATER LINE INSTALLATION:

6. HOT TAPS ARE NOT PERMITTED WITHOUT WRITTEN APPROVAL FROM THE CITY ENGINEER.
7. NOTIFY PAYSON CITY PUBLIC WORKS 48 HOURS PRIOR TO MAKING CONNECTION TO ANY EXISTING WATER LINES. SHUT DOWN NOTICES TO ALL AFFECTED CONNECTIONS MUST BE SENT A MINIMUM OF 48 HOURS BEFORE SHUT DOWN. SHUT DOWN MAY NOT LAST FOR MORE THAN 12 HOURS.
8. INSTALL VALVES ON EACH LEG OF A MAIN LINE JUNCTION. USE FLANGED CONNECTIONS FOR VALVES ON NEW FITTINGS. WHEN CONNECTING TO AN EXISTING FITTING, USE MECHANICAL JOINTS AND SET NEW VALVE 5-FT FROM EXISTING FITTING. JOINT RESTRAINTS (EBAA MEGALUG OR APPROVED EQUAL) ARE REQUIRED ON ALL MECHANICAL JOINT CONNECTIONS.
9. REQUIRED VALVE SPACING IS ONE BLOCK OR 20 SERVICE CONNECTIONS, WHICHEVER IS LESS.

PAYSON UTAH SEPTEMBER 2023	WATER MAIN PIPE TRENCH	STANDARD PLAN W-2	SHEET 1 OF 1

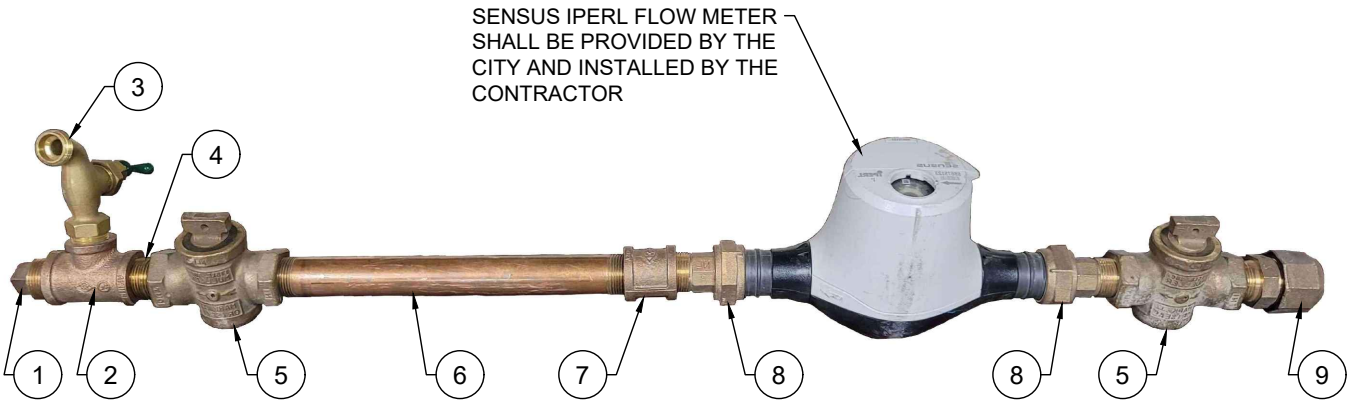


SERVICE TAP



SERVICE METER CONFIGURATION

PAYSON UTAH SEPTEMBER 2023	1" PRESSURIZED IRRIGATION METER AND SERVICE	STANDARD PLAN W-3	SHEET 1 OF 2



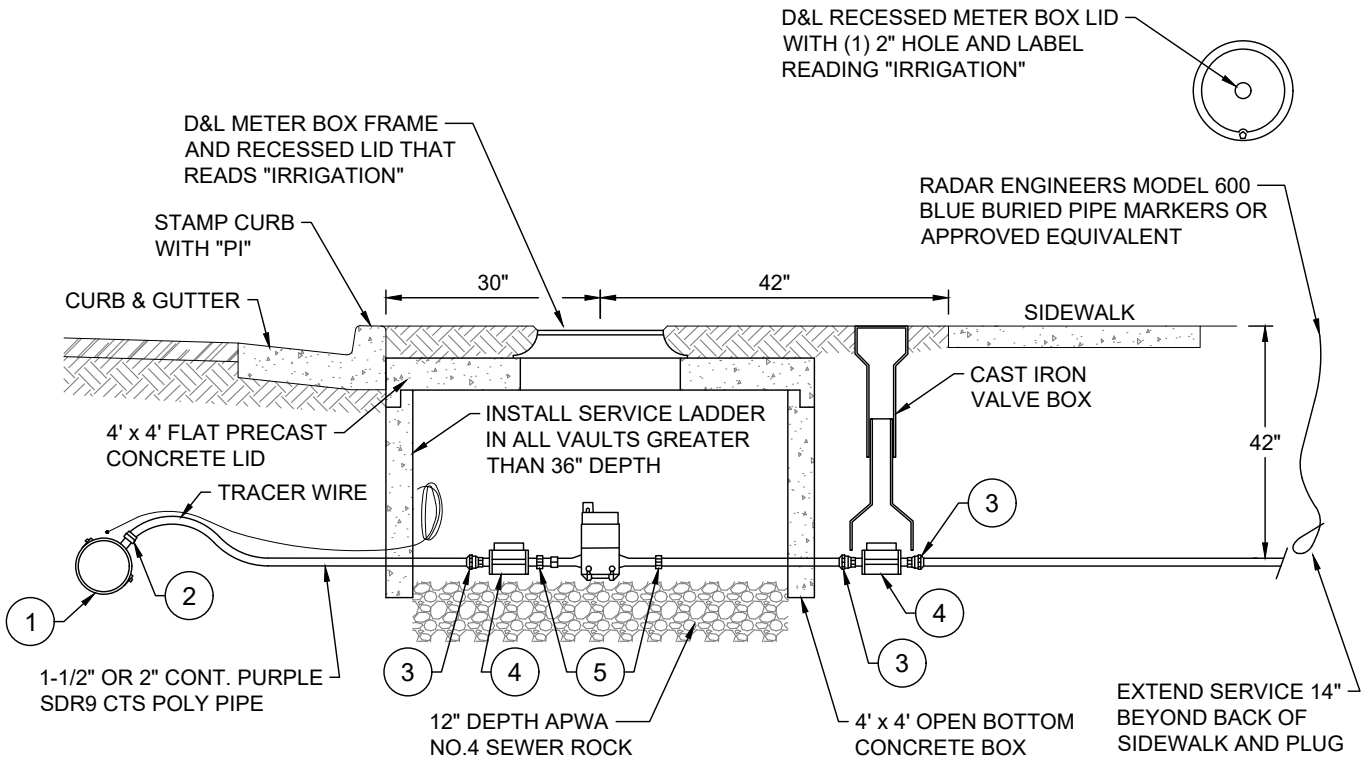
SERVICE METER ASSEMBLED CONFIGURATION

PARTS LIST			
ITEM	QTY	DESCRIPTION	FORD PART #
1	1	1" BRASS PLUG	CSP-4-I-NL
2	1	1" x 3/4" BRASS TEE	T111-443-NL
3	1	3/4" BRASS HOSE BIB	-
4	1	1" CLOSE BRASS NIPPLE	C88-44-NL
5	2	1" BRASS STOP & WASTE VALVE	BC11-444SW-NL
6	1	1" x 12" COPPER NIPPLE	-
7	1	1" BRASS COUPLER	C11-44-NL
8	2	1" METER SWIVEL NUT x 1" MALE IRON PIPE THREAD	C38-44-NL
9	1	1" MALE ADAPTER	C84-44-Q-NL

NOTES:

1. ALL MATERIALS TO BE BRASS AND SDR9 CTS POLY.
2. INSPECTION REQUIRED PRIOR TO BACKFILLING.
3. INSTALL ALL BACKFILL IN LIFTS NOT EXCEEDING 6" AFTER COMPACTION. COMPACT EACH LIFT TO AN AVERAGE DRY DENSITY OF 96% OF OPTIMUM WITH NO DENSITY TEST RESULT LESS THAN 92% OF OPTIMUM.
4. PLACE TAPS A MINIMUM OF 24" APART. USE A TAPPING TOOL WHICH IS SIZED CORRESPONDING TO THE SIZE OF THE SERVICE LINE TO BE INSTALLED. NO TAPS WITHIN 24" OF END OF PIPE.
5. A DOUBLE STRAP EPOXY COATED STAINLESS STEEL SERVICE SADDLE CLAMP AND TEFLON TAPE IS REQUIRED ON ALL TAPS.
6. INSTALL SERVICE LINE 12" BELOW FROST LINE OR 36" MINIMUM.
7. STANDARD SERVICE SIZE SHALL BE 2" FOR DUAL SERVICES AND 1" FOR SINGLE SERVICES.
8. STAINLESS STEEL LINER INSERTS REQUIRED INSIDE OF TUBING AT COMPRESSION FITTINGS.
9. ALL FITTINGS SHALL BE COMPATIBLE WITH SERVICE SIZE.
10. SERVICE LATERAL SHALL SLOPE TOWARDS PRESSURIZED IRRIGATION MAIN.
11. SPRINKLER SLEEVE SHALL NOT BE IN LINE WITH ANY UTILITY BOXES.
12. NO OTHER CONNECTIONS OR EQUIPMENT ARE PERMITTED BY CONTRACTOR OR HOME OWNER INSIDE PAYSON CITY BOX.
13. 3' MINIMUM OFFSET FROM DRIVEWAYS. **DO NOT ENCLOSE METER BOX IN CONCRETE.**

PAYSON UTAH SEPTEMBER 2023	1" PRESSURIZED IRRIGATION METER AND SERVICE	STANDARD PLAN W-3	SHEET 2 OF 2



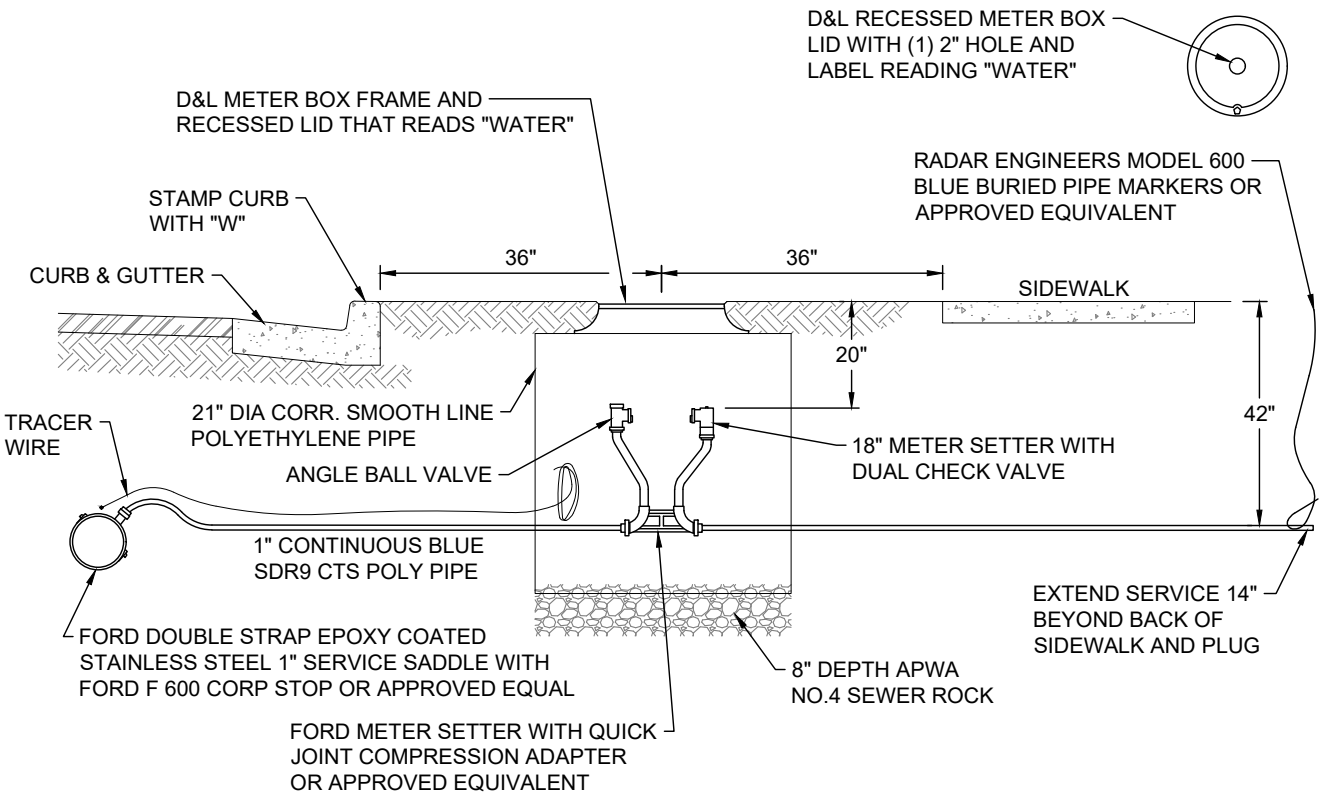
FORD PART LIST			
NOTE #	DESCRIPTION	1-1/2" PART #	2" PART #
1	DOUBLE STRAP EPOXY COATED STAINLESS STEEL SERVICE SADDLE	F202-XXX-CC6	F202-XXX-CC7
2	CORP STOP	F600-6-G-NL	F600-7-G-NL
3	MALE ADAPTER	C84-66-Q-NL	C84-77-Q-NL
4	STOP AND WASTE	B44-666SW-Q-NL	B44-777SW-Q-NL
5	2" x 2-1/2" STRAIGHT METER COUPLING x MALE IRON PIPE THREAD	C48-66-Q-NL	C48-77-Q-NL

* USE ONLY FORD PARTS OR CITY ENGINEER APPROVED EQUIVALENTS

NOTES:

1. ALL MATERIALS TO BE BRASS AND SDR9 CTS POLY.
2. INSPECTION REQUIRED PRIOR TO BACKFILLING.
3. INSTALL ALL BACKFILL IN LIFTS NOT EXCEEDING 6" AFTER COMPACTION. COMPACT EACH LIFT TO AN AVERAGE DRY DENSITY OF 96% OF OPTIMUM WITH NO DENSITY TEST RESULT LESS THAN 92% OF OPTIMUM.
4. PLACE TAPS A MINIMUM OF 24" APART. USE A TAPPING TOOL WHICH IS SIZED CORRESPONDING TO THE SIZE OF THE SERVICE LINE TO BE INSTALLED. NO TAPS WITHIN 24" OF END OF PIPE.
5. A DOUBLE STRAP EPOXY COATED STAINLESS STEEL SERVICE SADDLE CLAMP AND TEFLON TAPE IS REQUIRED ON ALL TAPS.
6. INSTALL SERVICE LINE 12" BELOW FROST LINE OR 36" MINIMUM.
7. STAINLESS STEEL LINER INSERTS REQUIRED INSIDE OF TUBING AT COMPRESSION FITTINGS.
8. ALL FITTINGS SHALL BE COMPATIBLE WITH SERVICE SIZE.
9. SERVICE LATERAL SHALL SLOPE TOWARDS PRESSURIZED IRRIGATION MAIN.
10. SPRINKLER SLEEVE SHALL NOT BE IN LINE WITH ANY UTILITY BOXES.
11. NO OTHER CONNECTIONS OR EQUIPMENT ARE PERMITTED BY CONTRACTOR OR HOME OWNER INSIDE PAYSON CITY BOX.

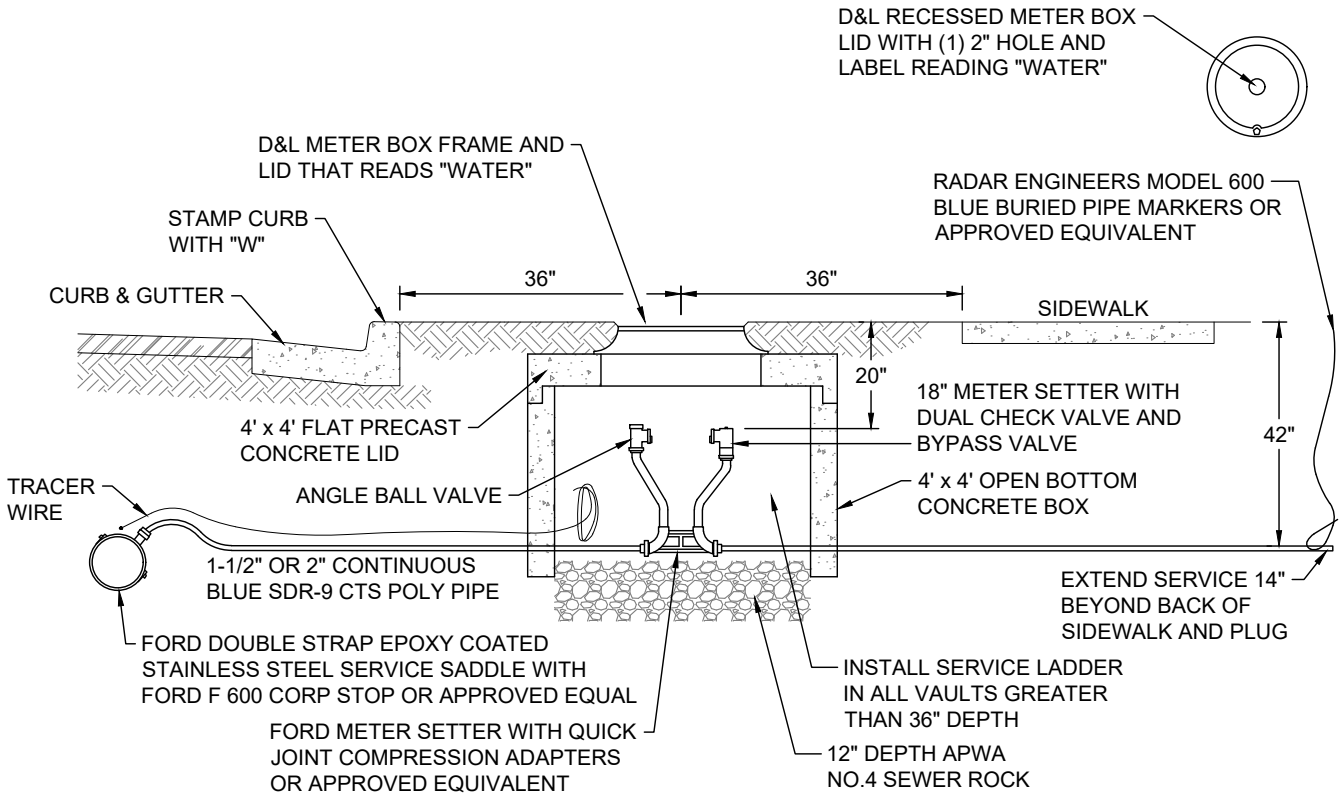
PAYSON UTAH SEPTEMBER 2023	1-1/2" AND 2" PI METER AND SERVICE	STANDARD PLAN W-4	SHEET 1 OF 1



NOTES:

1. ALL MATERIALS TO BE BRASS AND SDR9 CTS POLY.
2. INSPECTION REQUIRED PRIOR TO BACKFILLING.
3. INSTALL ALL BACKFILL IN LIFTS NOT EXCEEDING 6" AFTER COMPACTION. COMPACT EACH LIFT TO AN AVERAGE DRY DENSITY OF 96% OF OPTIMUM WITH NO DENSITY TEST RESULT LESS THAN 92% OF OPTIMUM.
4. PLACE TAPS A MINIMUM OF 24" APART. USE A TAPPING TOOL WHICH IS SIZED CORRESPONDING TO THE SIZE OF THE SERVICE LINE TO BE INSTALLED. NO TAPS WITHIN 24" OF END OF PIPE.
5. A DOUBLE STRAP EPOXY COATED STAINLESS STEEL SERVICE SADDLE CLAMP AND TEFLON TAPE IS REQUIRED ON ALL TAPS.
6. INSTALL SERVICE LINE 12" BELOW FROST LINE OR 42" MINIMUM.
7. STANDARD SERVICE SIZE IS 1".
8. STAINLESS STEEL LINER INSERTS REQUIRED INSIDE OF TUBING AT COMPRESSION FITTINGS.
9. ALL FITTINGS SHALL BE COMPATIBLE WITH SERVICE SIZE.
10. 3' MINIMUM OFFSET FROM DRIVEWAYS. **DO NOT ENCLOSE METER BOX IN CONCRETE.**

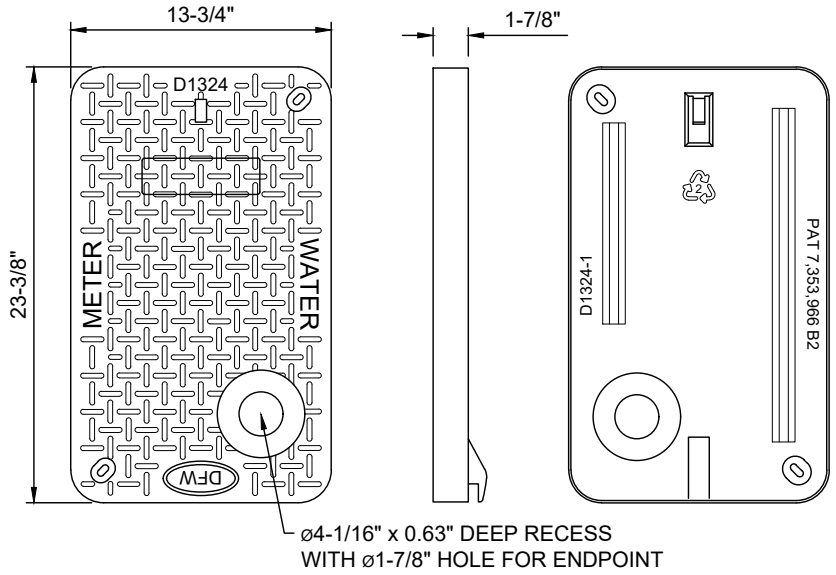
PAYSON UTAH SEPTEMBER 2023	1" DRINKING WATER METER AND SERVICE	STANDARD PLAN W-5	SHEET 1 OF 1



NOTES:

1. ALL MATERIALS TO BE BRASS AND SDR9 CTS POLY.
2. INSPECTION REQUIRED PRIOR TO BACKFILLING.
3. INSTALL ALL BACKFILL IN LIFTS NOT EXCEEDING 6" AFTER COMPACTION. COMPACT EACH LIFT TO AN AVERAGE DRY DENSITY OF 96% OF OPTIMUM WITH NO DENSITY TEST RESULT LESS THAN 92% OF OPTIMUM.
4. PLACE TAPS A MINIMUM OF 24" APART. USE A TAPPING TOOL WHICH IS SIZED CORRESPONDING TO THE SIZE OF THE SERVICE LINE TO BE INSTALLED. NO TAPS WITHIN 24" OF END OF PIPE.
5. A DOUBLE STRAP EPOXY COATED STAINLESS STEEL SERVICE SADDLE CLAMP AND TEFLON TAPE IS REQUIRED ON ALL TAPS.
6. INSTALL SERVICE LINE 12" BELOW FROST LINE OR 42" MINIMUM.
7. STAINLESS STEEL LINER INSERTS REQUIRED INSIDE OF TUBING AT COMPRESSION FITTINGS.
8. ALL FITTINGS SHALL BE COMPATIBLE WITH SERVICE SIZE.
9. 3' MINIMUM OFFSET FROM DRIVEWAYS. **DO NOT ENCLOSE METER BOX IN CONCRETE.**

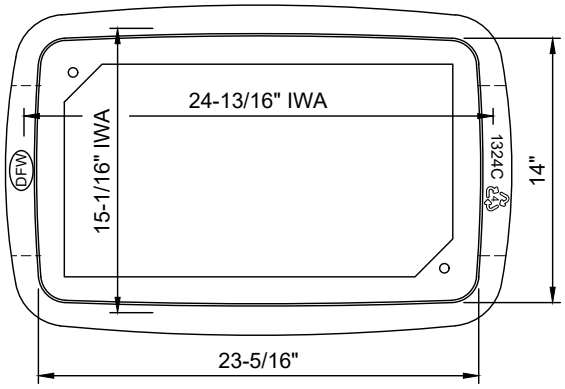
PAYSON UTAH SEPTEMBER 2023	1-1/2" AND 2" DRINKING WATER METER AND SERVICE	STANDARD PLAN W-6	SHEET 1 OF 1

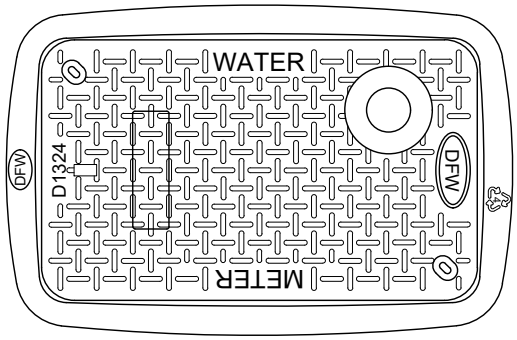


DFW1324C-4T 63D-LID

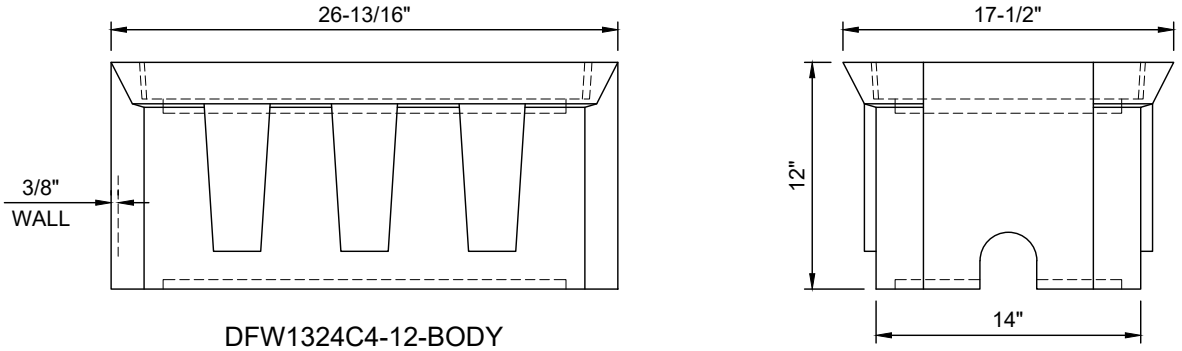
NOTES:
1. DIMENSIONS ±1/8" UNO
2. LID MATERIAL: HDPE
3. BODY MATERIAL: LLDPE
4. WALL THICKNESS: 3/8" MIN
5. IWA = INSIDE WORK AREA

LID KEY	
4	GRAY COLOR
T	MOLDED HOLE
63D	SENSUS 520





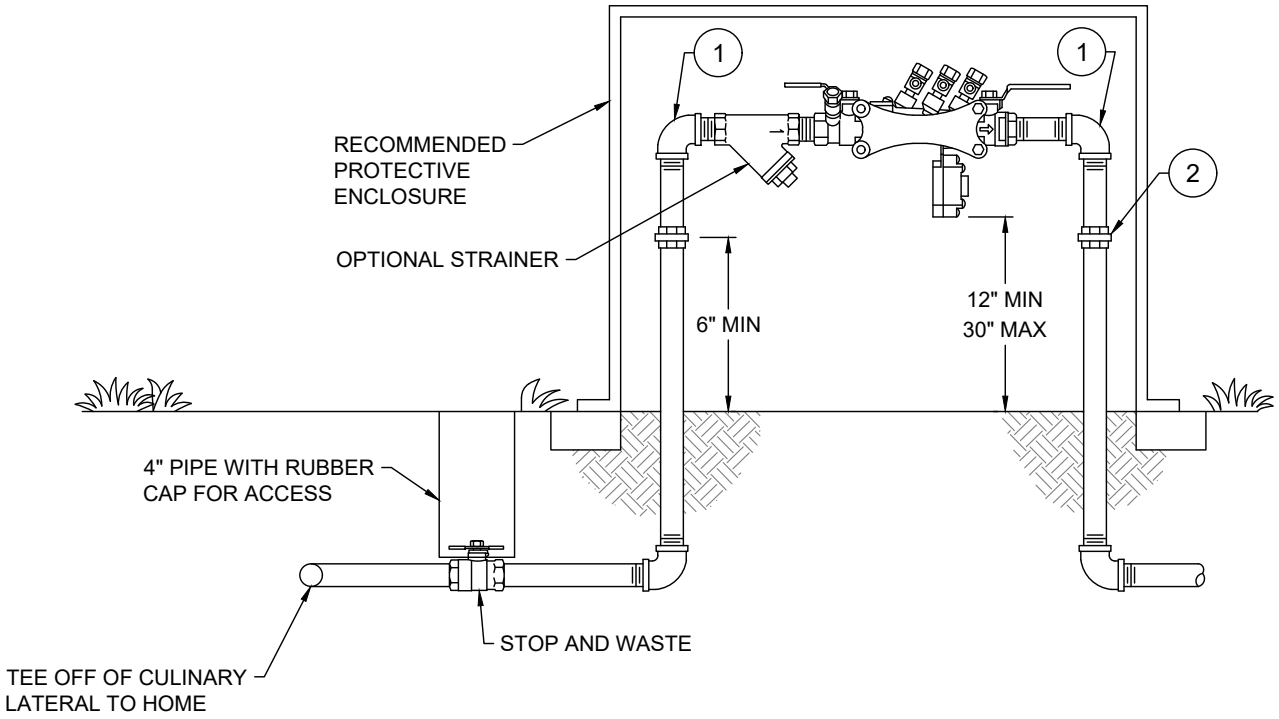
DFW1324C4-12-4T 63D



DFW1324C4-12-BODY

NOTES:
1. THIS DETAIL IS ONLY FOR USE IN APPLICATIONS WHERE THE WATER OR PRESSURIZED IRRIGATION METER IS INSTALLED IN CONCRETE OR ASPHALT PAVEMENT.
2. STANDARD METER BOXES ORIGINALLY INSTALLED IN LANDSCAPED LOCATIONS WHICH ARE BEING CHANGED TO HARDSCAPE MUST BE REPLACED WITH A TRAFFIC RATED DFW METER BOX AND LID WITH RECESSED HOLE FOR SENSUS TRANSMITTER DEVICE MEETING THE SPECIFICATIONS OF THE ABOVE DETAIL OR A CITY ENGINEER APPROVED EQUAL.

PAYSON UTAH SEPTEMBER 2023	DFW METER BOX AND LID FOR 1" WATER METER IN HARDSCAPE APPLICATIONS	STANDARD PLAN W-7	SHEET 1 OF 1

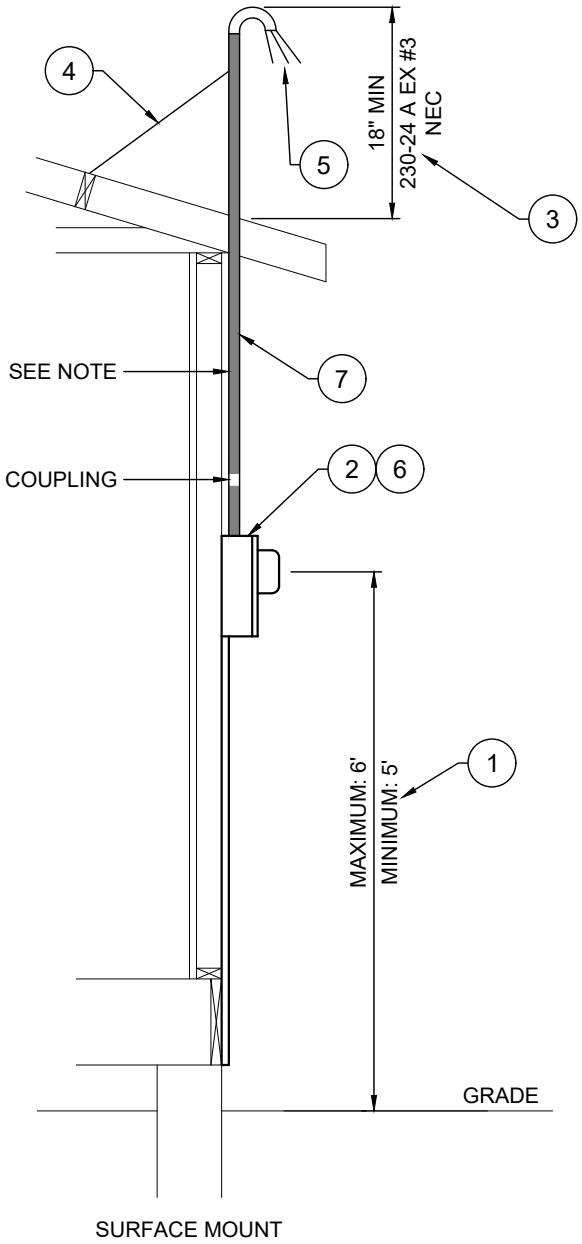


OUTDOOR INSTALLATION

NOTES:

1. 90° ELBOW BRASS/COPPER 1" THRU 3"
2. PIPE UNION BRASS/COPPER
3. BACKFLOW ASSEMBLY SHALL BE REVIEWED AND APPROVED BY PAYSON CITY. ZURN BRAND OR APPROVED EQUIVALENT.
4. ALL PIPE FITTINGS TO BE TYPE K HARD COPPER
5. ALL TEST COCKS - 4 REQUIRED - SHALL BE FITTED WITH BRASS PLUGS AND INSTALLED WITH TEFLON TAPE
6. COMPRESSION TYPE FITTINGS ARE NOT ALLOWED
7. INSTALL THE BACKFLOW PREVENTION ASSEMBLY IMMEDIATELY DOWNSTREAM OF THE AGENCY WATER METER
8. CALL FOR UNDERGROUND INSPECTION BEFORE BACKFILLING
9. THE ENTIRE ASSEMBLY AND EVERYTHING AFTER THE CULINARY METER IS THE RESPONSIBILITY OF THE HOME OWNER TO MAINTAIN AND THE YEARLY TESTING ON ASSEMBLY.

PAYSON UTAH SEPTEMBER 2023	BACKFLOW PREVENTION ASSEMBLY 1" THRU 3" PIPE SIZES	STANDARD PLAN W-8	SHEET 1 OF 1



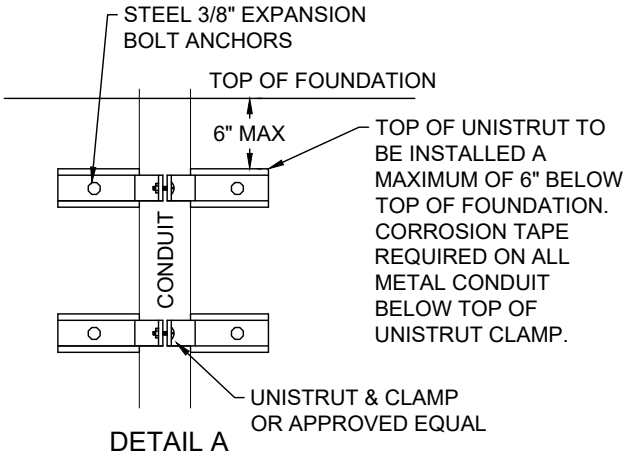
SURFACE MOUNT

NOTES:

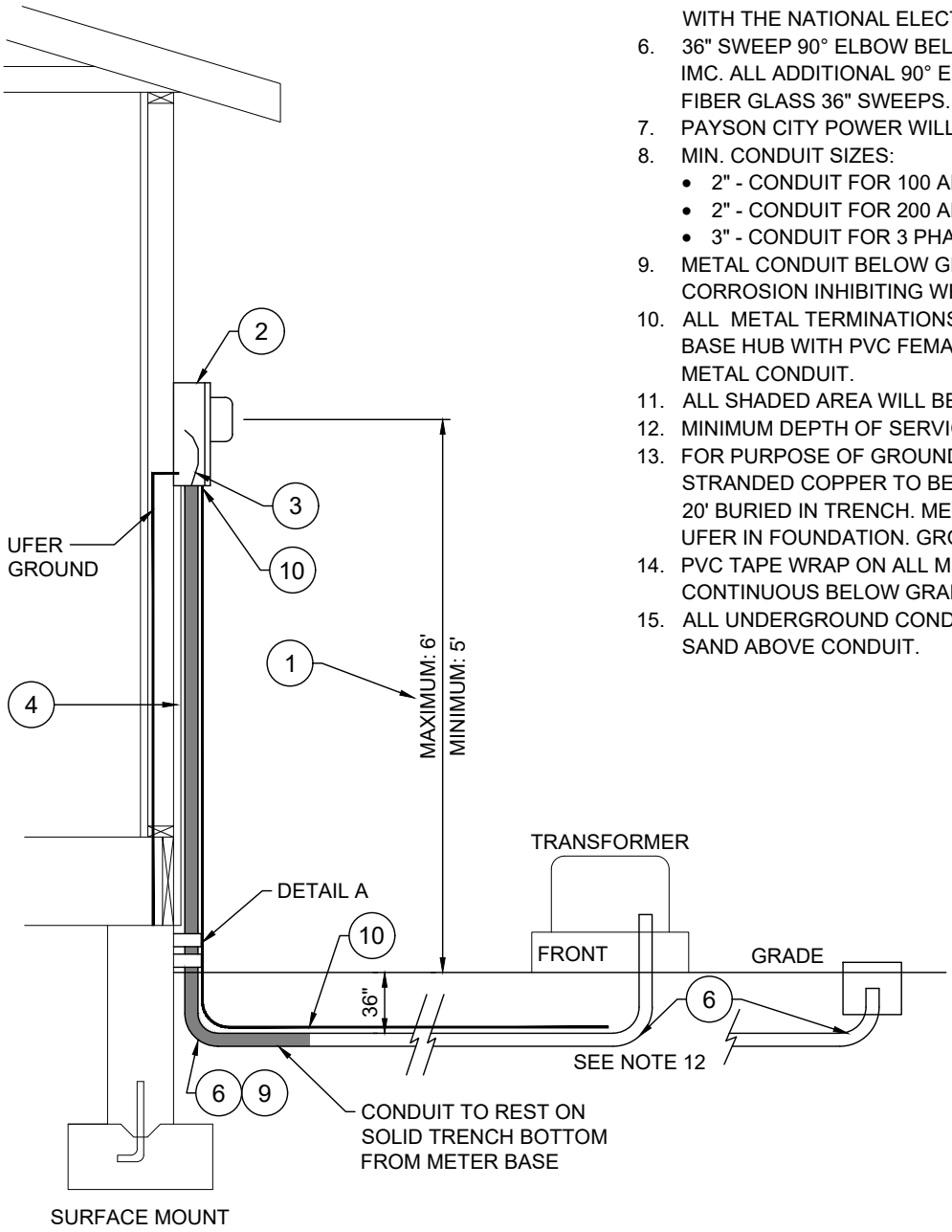
1. HEIGHT OF METER 5'-6" AND NOT TO EXCEED 6', AND NOT LOWER THAN 5'.
2. METER BASE (A MANUAL BYPASS IS REQUIRED ON 3 PHASE).
3. STANDPIPE SHALL BE A MINIMUM 2" RIGID METALLIC, OR IMC, AND EXTEND ABOVE ROOF A MINIMUM OF 18" AS OF NEC 230-24.
4. BRIDAL GUY TO BE INSTALLED IF NECESSARY.
5. CONDUCTORS FURNISHED AND INSTALLED BY CONTRACTOR TO EXTEND 18" FROM THE WEATHER HEAD AND SHALL COMPLY WITH THE NATIONAL ELECTRIC CODE.
   - 100 AMP 1/0 URD
   - 125 AMP 1/0 URD
   - 150 AMP 2/0 URD
   - 200 AMP 4/0 URD

   OXIDE INHIBITING COMPOUND SHALL BE USED ON ALL ALUMINUM CONNECTIONS.
6. ALL METAL TERMINATIONS SHALL HAVE BOLT ON METER BASE HUB.
7. PAYSON CITY POWER WILL FURNISH AND INSTALL METERS.
8. MIN. CONDUIT SIZES:
   - 2" - CONDUIT FOR 100 AMP SERVICE.
   - 2" - CONDUIT FOR 200 AMP SERVICE.
   - 3" - CONDUIT FOR 3 PHASE, 200 AMP SERVICE.
9. ALL SHADED AREA WILL BE RIGID METALLIC CONDUIT OR IMC.
10. NO COUPLING WITHIN 10' OF WEATHER HEAD.
11. (2) 5/8" X 8' COPPER CLAD GROUND RODS SPACED 8' APART SHALL BE USED WITH A MINIMUM OF #6 COPPER CONNECTING TO THE METER BASE. METER BASE TO BE TIED TO UFER WHERE APPLICABLE.

PAYSON UTAH SEPTEMBER 2023	OVERHEAD SERVICES - 200 AMP MAX (SINGLE PHASE AND THREE PHASE)	STANDARD PLAN P-1	SHEET 1 OF 1



DETAIL A

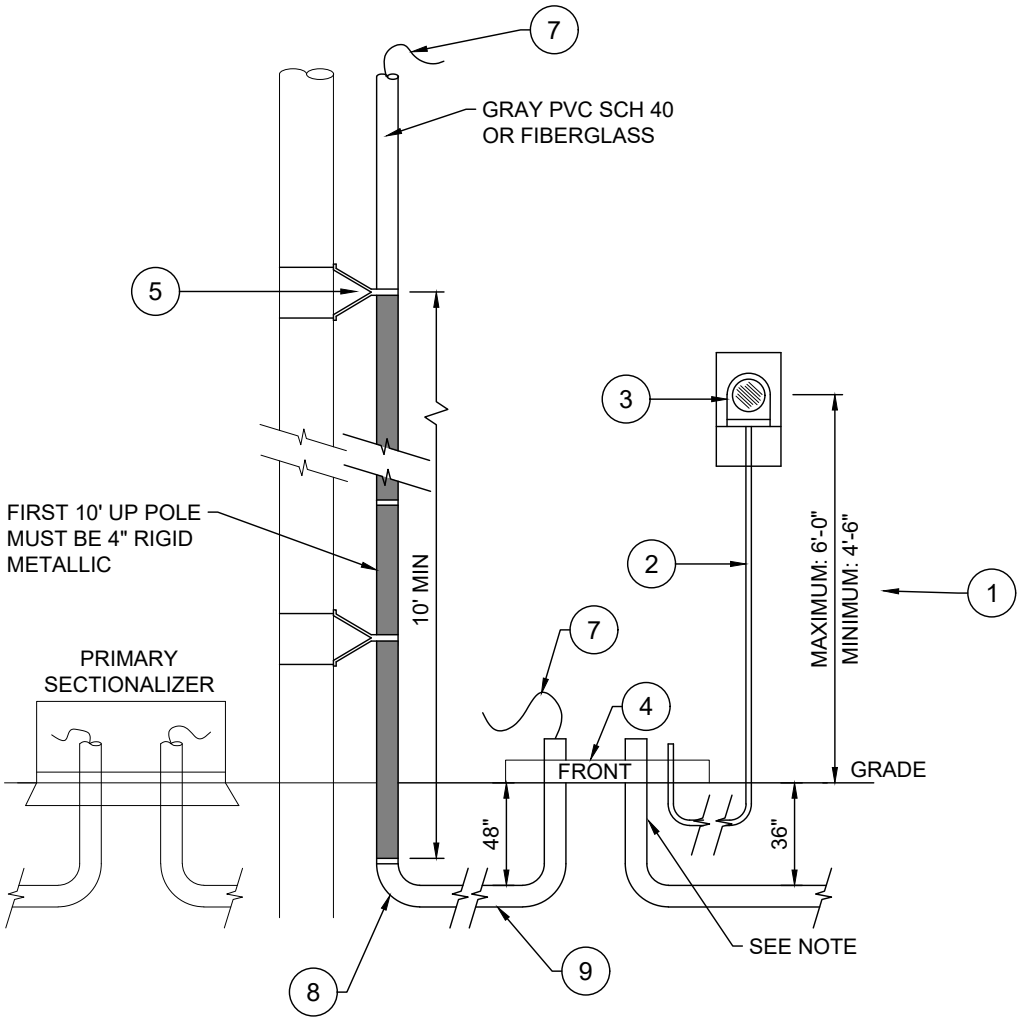


NOTES:

1. HEIGHT OF METER 5'-6" AND NOT TO EXCEED 6', AND NOT LOWER THAN 5'.
2. METER BASE. (A MANUAL BYPASS IS REQUIRED ON 3 PHASE).
3. MINIMUM SIZE SERVICE WIRE PROVIDED BY CONTRACTOR.
   - 100 AMP 1/0 URD
   - 125 AMP 1/0 URD
   - 150 AMP 2/0 URD
   - 200 AMP 4/0 URD

   OXIDE INHIBITING COMPOUND SHALL BE USED ON ALL ALUMINUM CONNECTIONS.
4. CONDUIT TO BE RIGID METALLIC OR IMC FROM GROUND TO METER BASE, (MIN 2") FURNISHED AND INSTALLED BY CONTRACTOR.
5. CONDUIT FROM BUILDING TO CONNECTION POINT WILL BE GRAY PVC-SCH. 40, OR APPROVED EQUAL, FURNISHED AND INSTALLED BY THE CONTRACTOR. CONDUIT WILL COMPLY WITH THE NATIONAL ELECTRIC CODE.
6. 36" SWEEP 90° ELBOW BELOW METER BASE WILL BE RIGID OR IMC. ALL ADDITIONAL 90° ELBOWS WILL BE PREFABRICATED FIBER GLASS 36" SWEEPS.
7. PAYSON CITY POWER WILL FURNISH AND INSTALL METERS.
8. MIN. CONDUIT SIZES:
   - 2" - CONDUIT FOR 100 AMP SERVICE.
   - 2" - CONDUIT FOR 200 AMP SERVICE.
   - 3" - CONDUIT FOR 3 PHASE, 200 AMP SERVICE.
9. METAL CONDUIT BELOW GRADE WILL BE PROTECTED BY A CORROSION INHIBITING WRAP. (10 MILL. PVC PIPE WRAP)
10. ALL METAL TERMINATIONS SHALL HAVE BOLT ON METER BASE HUB WITH PVC FEMALE ADAPTOR TO TRANSITION TO METAL CONDUIT.
11. ALL SHADED AREA WILL BE RIGID METALLIC CONDUIT OR IMC.
12. MINIMUM DEPTH OF SERVICE TRENCH TO BE 36".
13. FOR PURPOSE OF GROUNDING, A MINIMUM OF #2 BARE STRANDED COPPER TO BE INSTALLED WITH A MINIMUM OF 20' BURIED IN TRENCH. METER BASE SHALL ALSO BE TIED TO UFER IN FOUNDATION. GROUNDING TO MEET NEC.
14. PVC TAPE WRAP ON ALL METAL PIPE BELOW CLAMP, CONTINUOUS BELOW GRADE TO PVC PIPE.
15. ALL UNDERGROUND CONDUIT TO BE BACKFILLED WITH 2' OF SAND ABOVE CONDUIT.

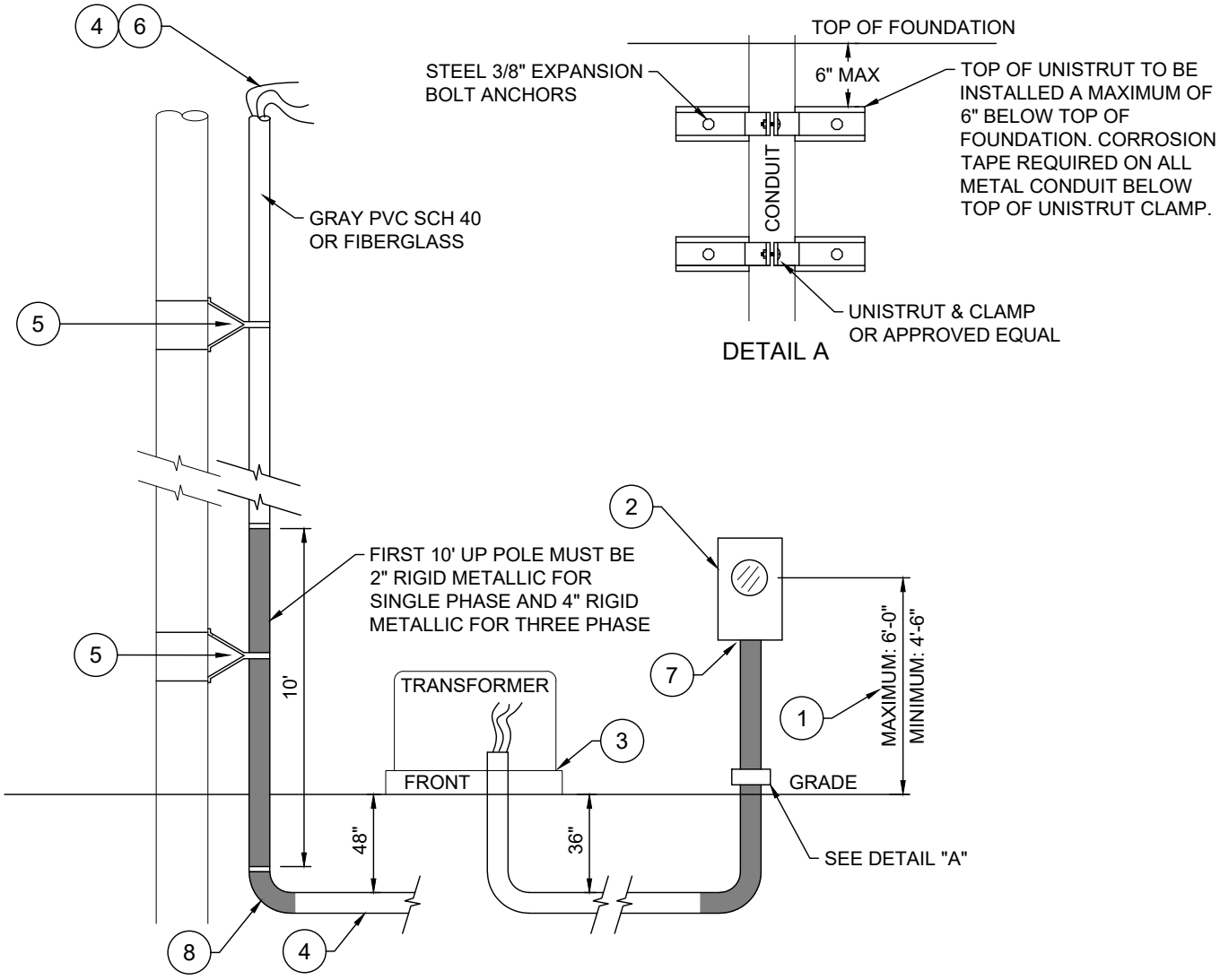
PAYSON UTAH SEPTEMBER 2023	UNDERGROUND SERVICES - 200 AMP MAX (SINGLE PHASE AND THREE PHASE)	STANDARD PLAN P-2	SHEET 1 OF 3



NOTES:

1. HEIGHT OF METER NOT TO EXCEED 6', AND NOT LOWER THAN 4'-6".
2. METERING CONDUIT: METALLIC 1" RIGID CONDUIT. TO BE LOCATED NEAR THE FRONT OF PAD SECONDARY OPENING AND HAVE GROUND WIRE AND BUSHING ATTACHED. ALL TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.
3. METER SOCKET: INSTALLED BY PAYSON CITY POWER. CALL 801-465-5270 FOR MOUNTING INFORMATION.
4. PAD OR VAULT FLOOR: FURNISHED AND INSTALLED BY CONTRACTOR.
5. CONDUIT FROM BUILDING TO CONNECTION POINT WILL BE GRAY PVC SCH 40 OR APPROVED EQUAL, FURNISHED AND INSTALLED BY THE CONTRACTOR. CONDUIT WILL COMPLY WITH THE NATIONAL ELECTRIC CODE.
6. 36" SWEEP 90° ELBOW BELOW METER BASE WILL BE RIGID OR IMC. ALL ADDITIONAL 90° ELBOWS WILL BE PREFABRICATED FIBER GLASS 36" SWEEPS.
7. PAYSON CITY POWER WILL FURNISH AND INSTALL METERS.
8. MIN. CONDUIT SIZES:
   - 2" - CONDUIT FOR 100 AMP SERVICE
   - 2" - CONDUIT FOR 200 AMP SERVICE
   - 3" - CONDUIT FOR 3 PHASE, 200 AMP SERVICE
9. ALL SHADED AREA WILL BE RIGID METALLIC CONDUIT.
10. MINIMUM DEPTH OF SERVICE TRENCH TO BE 36".
11. GROUNDING TO MEET NEC.

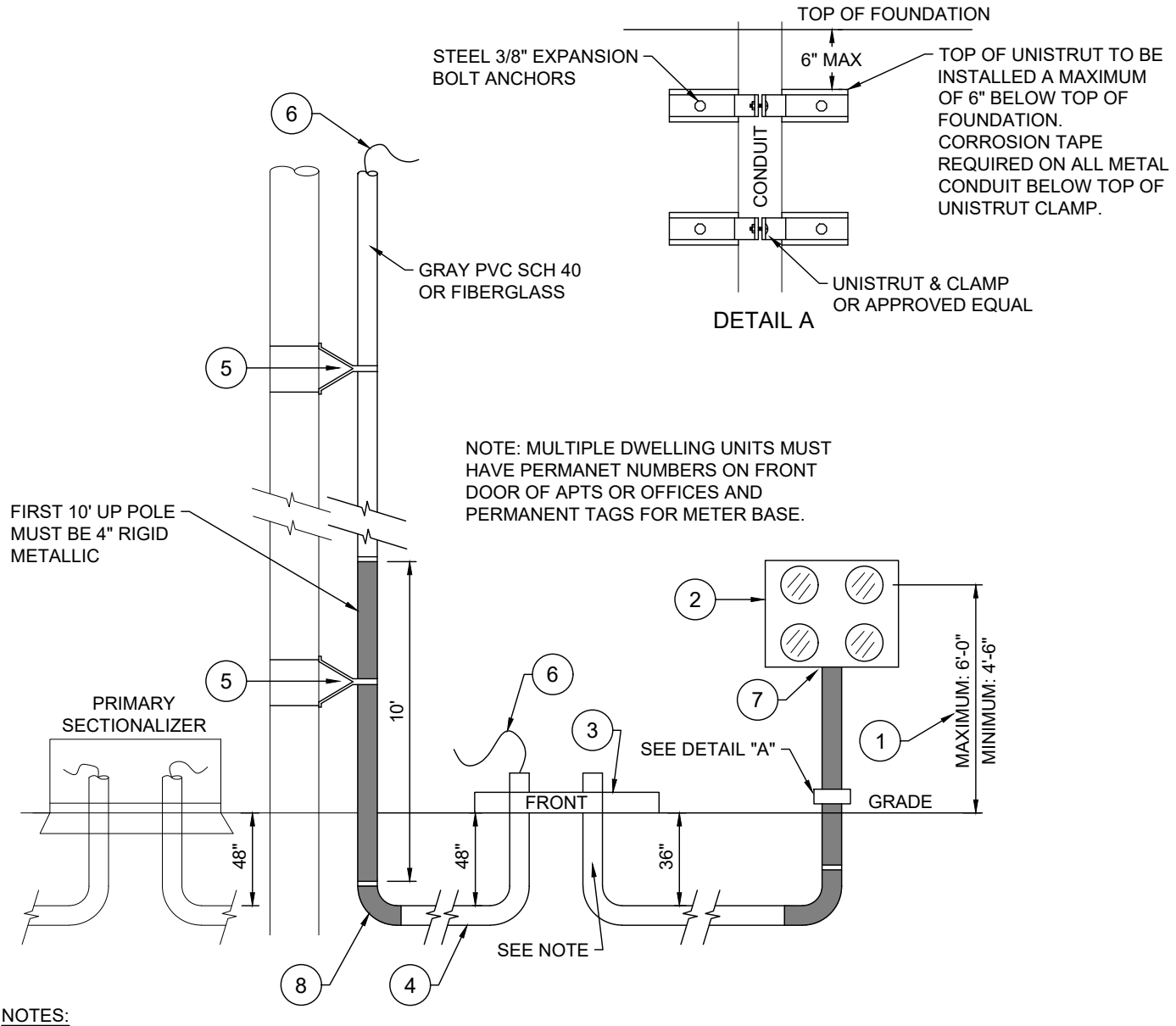
PAYSON UTAH SEPTEMBER 2023	UNDERGROUND SERVICES - 200 AMP MAX (SINGLE PHASE AND THREE PHASE)	STANDARD PLAN P-2	SHEET 2 OF 3



NOTES:

1. HEIGHT OF METER 5'-6" AND NOT TO EXCEED 6', AND NOT LOWER THAN 5'.
2. METER SOCKET TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.
3. PAD OR VAULT FLOOR FURNISHED AND INSTALLED BY CONTRACTOR TO GRADE.
4. SERVICE CONDUIT WILL MEET WESTERN UNDERGROUND COMMITTEE SPEC.3.1. CONDUIT AND CONDUCTORS WILL COMPLY WITH NATIONAL ELECTRICAL CODE, AND BE FURNISHED AND INSTALLED BY CONTRACTOR.
   - 4.1. SINGLE PHASE
     - 4.1.1. 100 AMP 1/0 URD
     - 4.1.2. 125 AMP 1/0 URD
     - 4.1.3. 150 AMP 2/0 URD
     - 4.1.4. 200 AMP 4/0 URD
5. CONTRACTOR TO FURNISH STAND-OFF BRACKETS, CLAMPS AND LAGS, MINIMUM OF ONE FOR EVERY TEN FOOT LENGTH OF CONDUIT.
6. CONTRACTOR TO FURNISH AND INSTALL 2500 LB MULE TAPE FOR PULLING IN PRIMARY CONDUCTORS WITH TEN FEET EXTENDING FROM EACH END.
7. ALL METAL TERMINATIONS SHALL HAVE BOLT ON METER BASE HUB.
8. METAL CONDUIT BELOW GRADE WILL BE PROTECTED BY A CORROSION INHIBITING WRAP. (10 MILL PVC PIPE WRAP). ALL ADDITIONAL 90° ELBOWS WILL BE PREFABRICATED FIBER GLASS 36" SWEEPS.
9. ALL SHADED AREA WILL BE RIGID METALLIC CONDUIT.
10. MINIMUM DEPTH OF SERVICE TRENCH TO BE 36" (3 FEET) FROM TOP OF CONDUIT.
11. MINIMUM DEPTH OF TRENCH FOR PRIMARY LINE WILL BE 48" (4 FEET) FROM TOP OF CONDUIT.

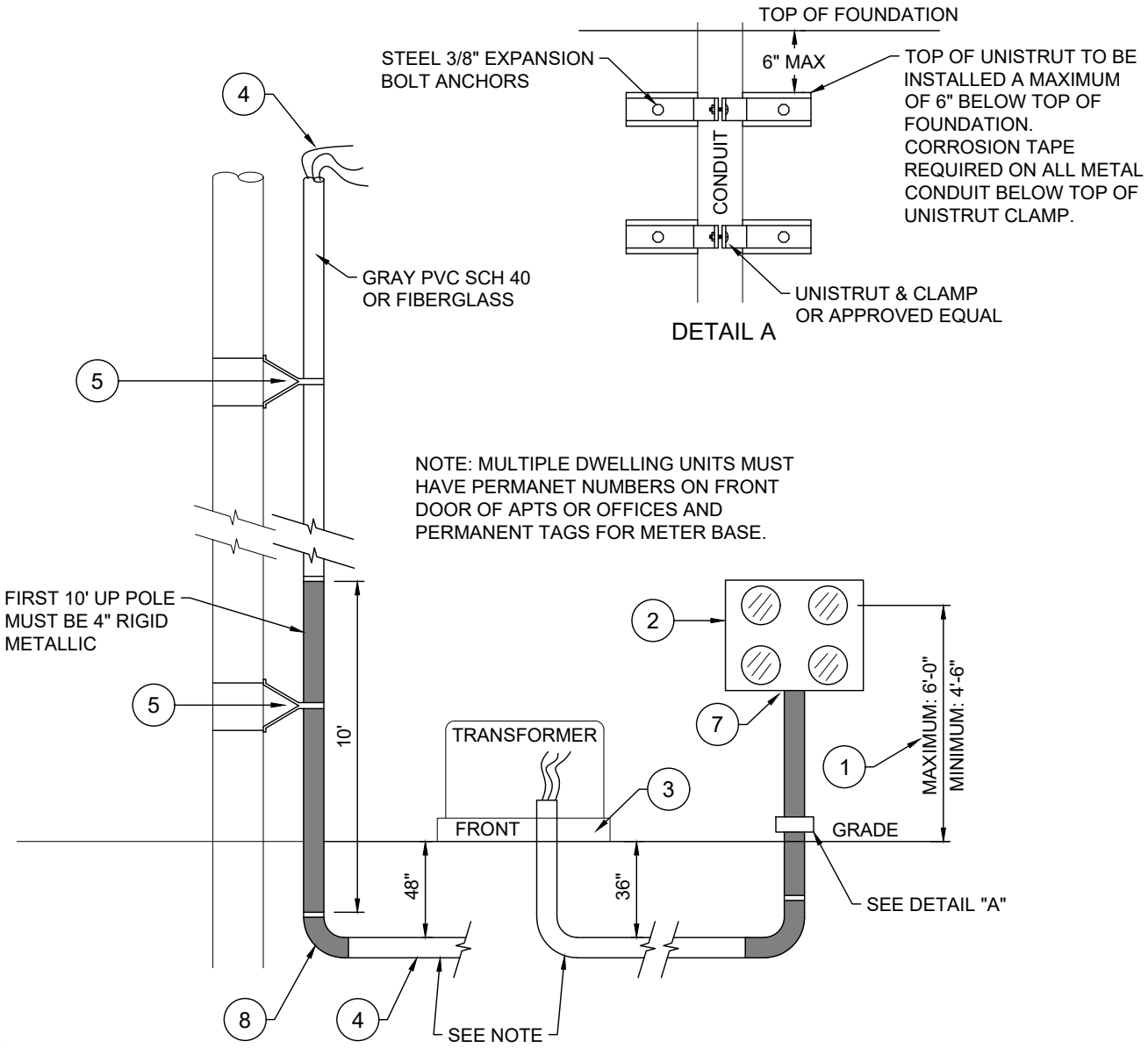
PAYSON UTAH SEPTEMBER 2023	UNDERGROUND SERVICES - 200 AMP MAX (SINGLE PHASE AND THREE PHASE)	STANDARD PLAN P-2	SHEET 3 OF 3



NOTES:

1. HEIGHT OF METER 5'-6" AND NOT TO EXCEED 6', AND NOT LOWER THAN 5'.
2. METER SOCKET TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.
3. PAD OR VAULT FLOOR FURNISHED AND INSTALLED BY CONTRACTOR TO GRADE.
4. PRIMARY CONDUIT: 4" GRAY PVC SCH 40 OR EQUAL AND MEET NEC. FURNISHED AND INSTALLED BY THE CONTRACTOR.
5. CONTRACTOR TO FURNISH STAND-OFF BRACKETS, CLAMPS AND LAGS, MINIMUM OF ONE FOR EVERY TEN FOOT LENGTH OF CONDUIT.
6. CONTRACTOR TO FURNISH AND INSTALL 2500 LB MULE TAPE FOR PULLING IN PRIMARY CONDUCTORS WITH TEN FEET EXTENDING FROM EACH END.
7. ALL METAL TERMINATIONS SHALL HAVE BOLT ON METER BASE HUB.
8. METAL CONDUIT BELOW GRADE WILL BE PROTECTED BY A CORROSION INHIBITING WRAP. (10 MILL PVC PIPE WRAP). ALL 90° ELBOWS WILL BE PREFABRICATED FIBER GLASS 36" SWEEPS.
9. SERVICE CONDUIT WILL MEET WESTERN UNDERGROUND COMMITTEE SPEC.3.1. CONDUIT AND CONDUCTORS WILL COMPLY WITH NATIONAL ELECTRICAL CODE, AND BE FURNISHED AND INSTALLED BY CONTRACTOR.
10. NO COLORED TAPE ALLOWED. WIRE MUST BE COLORED PER INDUSTRY STANDARD FOR IDENTIFICATION AND SIZED BY THE UTILITY.
    - 10.1. 120/208 3 PHASE - WHITE, BLACK, RED, AND BLUE
    - 10.2. 480 VOLT 3 PHASE - WHITE, BROWN, ORANGE, YELLOW
11. ALL SHADED AREA WILL BE RIGID METALLIC CONDUIT.
12. MINIMUM DEPTH OF SERVICE TRENCH TO BE 36" (3 FEET) FROM TOP OF CONDUIT.
13. MINIMUM DEPTH OF TRENCH FOR PRIMARY LINE WILL BE 48" (4 FEET) FROM TOP OF CONDUIT.

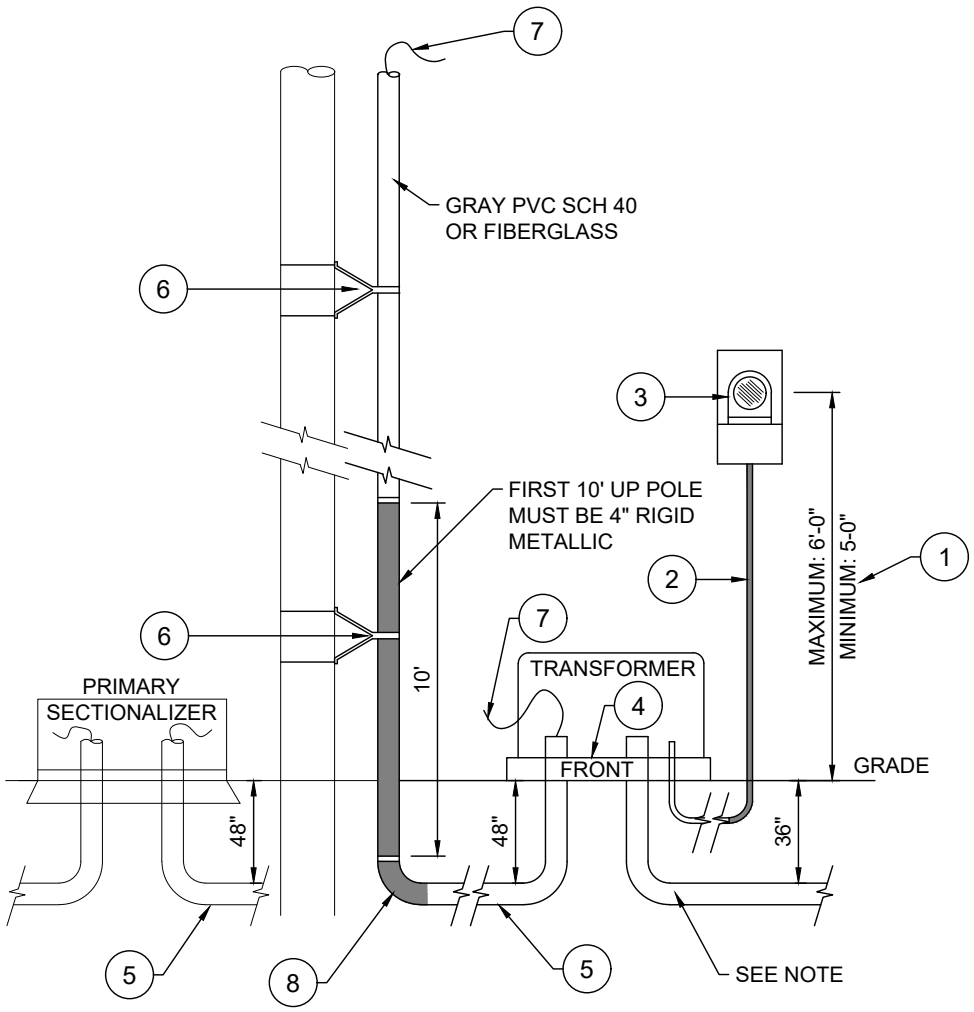
PAYSON UTAH SEPTEMBER 2023	UNDERGROUND SERVICES - ABOVE 200 AMP MULTIPLE METERED UNITS (SINGLE PHASE AND THREE PHASE)	STANDARD PLAN P-3	SHEET 1 OF 2



NOTES:

1. HEIGHT OF METER 5'-6" AND NOT TO EXCEED 6', AND NOT LOWER THAN 5'.
2. METER SOCKET TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.
3. PAD OR VAULT FLOOR FURNISHED AND INSTALLED BY CONTRACTOR TO GRADE.
4. PRIMARY CONDUIT: 4" GRAY PVC SCH 40 OR EQUAL AND MEET NEC. FURNISHED AND INSTALLED BY THE CONTRACTOR.
5. CONTRACTOR TO FURNISH STAND-OFF BRACKETS, CLAMPS AND LAGS, MINIMUM OF ONE FOR EVERY TEN FOOT LENGTH OF CONDUIT.
6. CONTRACTOR TO FURNISH AND INSTALL 2500 LB MULE TAPE FOR PULLING IN PRIMARY CONDUCTORS WITH TEN FEET EXTENDING FROM EACH END.
7. ALL METAL TERMINATIONS SHALL HAVE BOLT ON METER BASE HUB.
8. METAL CONDUIT BELOW GRADE WILL BE PROTECTED BY A CORROSION INHIBITING WRAP. (10 MILL PVC PIPE WRAP). ALL 90° ELBOWS WILL BE PREFABRICATED FIBER GLASS 36" SWEEPS.
9. SERVICE CONDUIT WILL MEET WESTERN UNDERGROUND COMMITTEE SPEC.3.1. CONDUIT AND CONDUCTORS WILL COMPLY WITH NATIONAL ELECTRICAL CODE, AND BE FURNISHED AND INSTALLED BY CONTRACTOR.
10. NO COLORED TAPE ALLOWED. WIRE MUST BE COLORED PER INDUSTRY STANDARD FOR IDENTIFICATION AND SIZED BY THE UTILITY.
    - 10.1. 120/208 3 PHASE - WHITE, BLACK, RED, AND BLUE
    - 10.2. 480 VOLT 3 PHASE - WHITE, BROWN, ORANGE, YELLOW
11. ALL SHADED AREA WILL BE RIGID METALLIC CONDUIT.
12. MINIMUM DEPTH OF SERVICE TRENCH TO BE 36" (3 FEET) FROM TOP OF CONDUIT.
13. MINIMUM DEPTH OF TRENCH FOR PRIMARY LINE WILL BE 48" (4 FEET) FROM TOP OF CONDUIT.

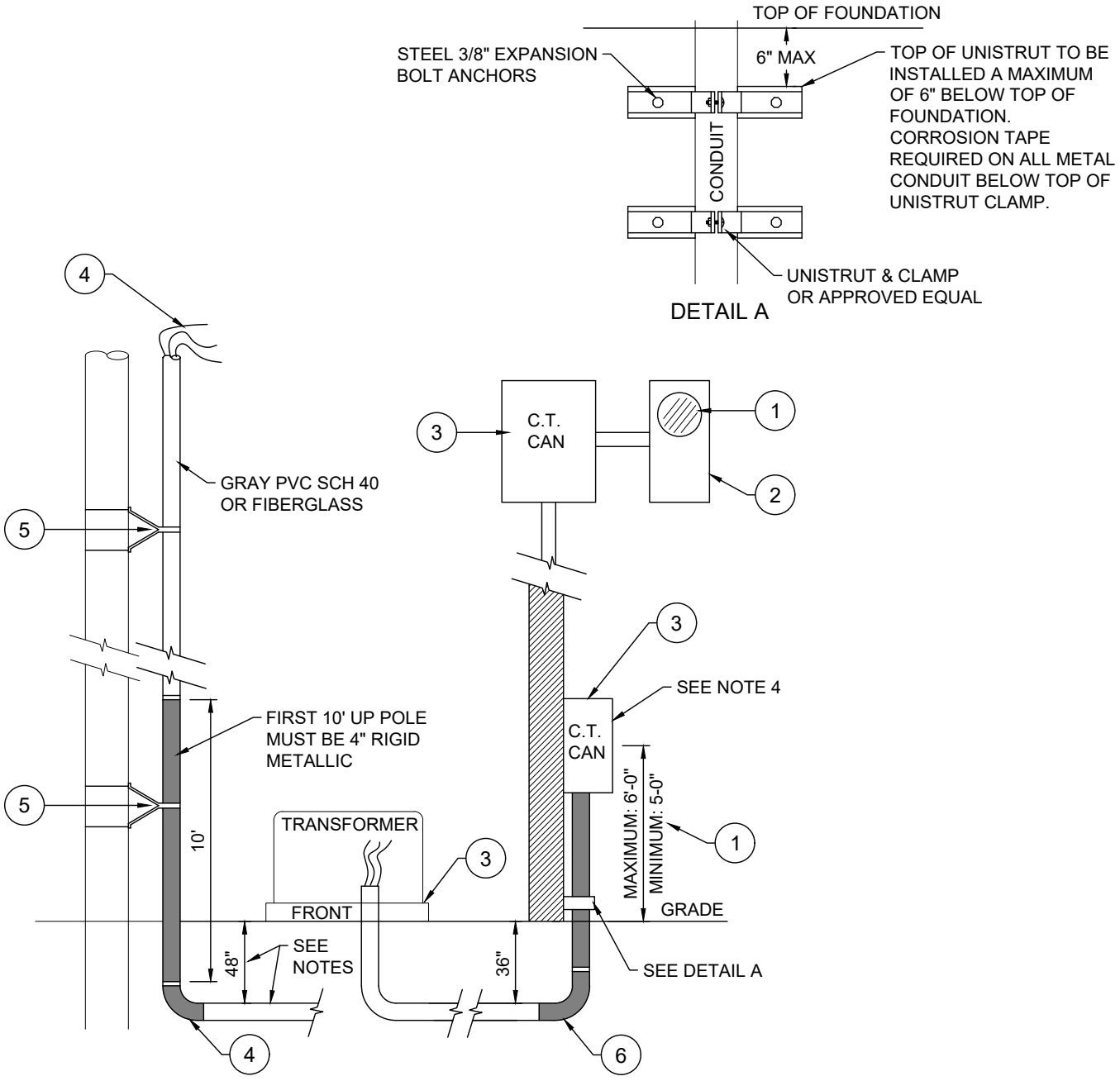
PAYSON UTAH SEPTEMBER 2023	UNDERGROUND SERVICES - ABOVE 200 AMP MULTIPLE METERED UNITS (SINGLE PHASE AND THREE PHASE)	STANDARD PLAN P-3	SHEET 2 OF 2



NOTES:

1. HEIGHT OF METER 5'-6" AND NOT TO EXCEED 6', AND NOT LOWER THAN 5'.
2. METERING CONDUIT: METALLIC 1" RIGID CONDUIT. TO BE LOCATED NEAR THE FRONT OF PAD SECONDARY OPENING AND HAVE GROUND WIRE AND BUSHING ATTACHED. ALL TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.
3. METER SOCKET: INSTALLED BY PAYSON CITY POWER. CALL 801-465-5274 FOR MOUNTING INFORMATION.
4. PAD OR VAULT FLOOR: FURNISHED AND INSTALLED BY CONTRACTOR.
5. PRIMARY CONDUIT: 2" FOR SINGLE PHASE AND 4" GRAY PVC SCH 40 FOR THREE PHASE, OR APPROVED EQUAL, AND MEET NEC. FURNISHED AND INSTALLED BY THE CONTRACTOR UNLESS OTHERWISE APPROVED BY UTILITY
6. CONTRACTOR TO FURNISH STANDOFF BRACKETS, CLAMP AND LAGS. MINIMUM OF ONE FOR EVERY 10 FEET OF CONDUIT
7. CONTRACTOR TO FURNISH AND INSTALL 2500 LB MULE TAPE FOR PULLING IN PRIMARY CONDUCTORS WITH TEN FEET EXTENDING FROM EACH END.
8. METAL CONDUIT BELOW GRADE WILL BE PROTECTED BY A CORROSION INHIBITING WRAP. ALL 90° ELBOWS WILL BE PREFABRICATED FIBER GLASS 36" SWEEPS.
9. ALL SHADED AREA WILL BE RIGID METALLIC CONDUIT.
10. MINIMUM DEPTH OF SERVICE TRENCH TO BE 36" (3 FEET) FROM THE TOP OF THE CONDUIT.
11. SERVICE CONDUIT AND CONDUCTORS FURNISHED AND INSTALLED BY THE CUSTOMER WILL COMPLY WITH THE NATIONAL ELECTRICAL CODE.
12. NO COLORED TAPE ALLOWED. WIRE MUST BE COLORED PER INDUSTRY STANDARD FOR IDENTIFICATION AND SIZED BY THE UTILITY.
    - 12.1. 120/208 3 PHASE - WHITE, BLACK, RED, AND BLUE
    - 12.2. 480 VOLT 3 PHASE - WHITE, BROWN, ORANGE, YELLOW
13. ALL METAL TERMINATIONS SHALL HAVE BOLT ON METER BASE HUB.

PAYSON UTAH SEPTEMBER 2023	UNDERGROUND SERVICES - ABOVE 200 AMP DEDICATED TRANSFORMER (SINGLE PHASE AND THREE PHASE)	STANDARD PLAN P-4	SHEET 1 OF 1

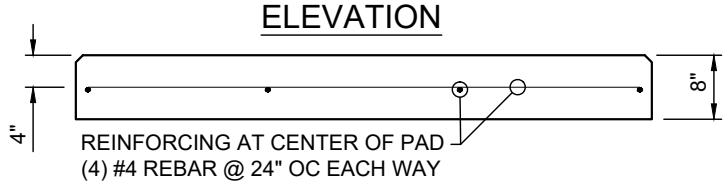


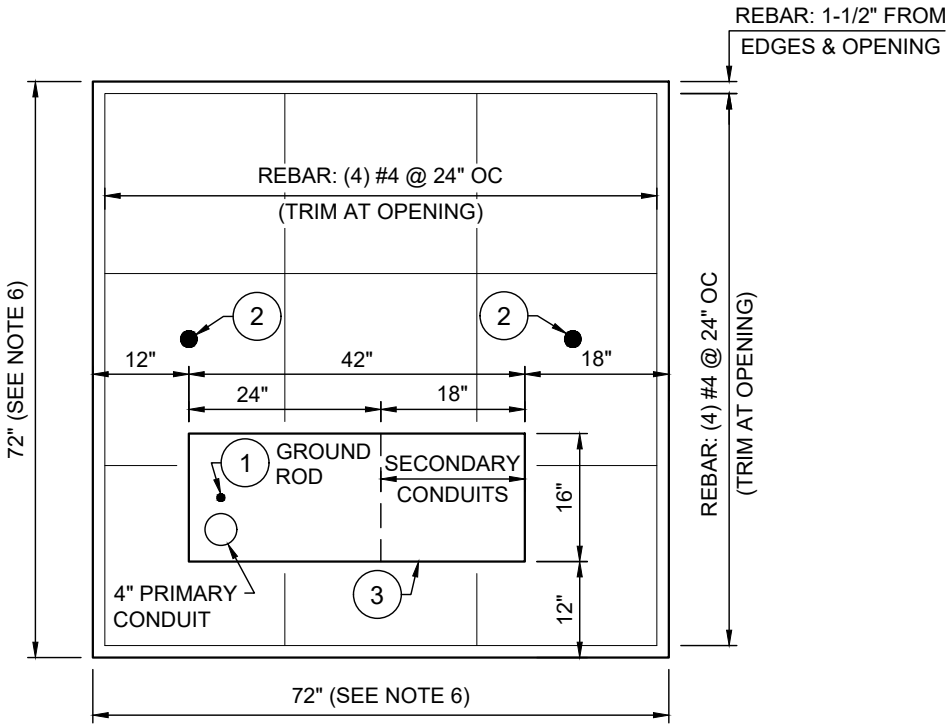
NOTES:

1. HEIGHT OF METER NOT TO EXCEED 6', AND NOT LOWER THAN 5'.
2. METER SOCKET TO BE INSTALLED BY PAYSON CITY POWER. CALL 801-465-5270 FOR MOUNTING INFORMATION.
3. C.T. CAN FURNISHED AND INSTALLED BY CONTRACTOR.
4. ALL 90° ELBOWS WILL BE PREFABRICATED FIBER GLASS 36" SWEEPS.
5. CONTRACTOR TO FURNISH STAND-OFF BRACKETS, CLAMPS, LAGS AND UNISTRUT, 1-1/2" DEEP. INSTALL A MINIMUM OF ONE FOR EVERY TEN FOOT LENGTH OF CONDUIT.
6. METAL CONDUIT BELOW GRADE WILL BE PROTECTED BY A CORROSION INHIBITING WRAP. (10 MIL PVC WRAP)
7. SERVICE CONDUIT WILL MEET WESTERN UNDERGROUND COMMITTEE SPEC.3.1. CONDUIT AND CONDUCTORS WILL COMPLY WITH NATIONAL ELECTRICAL CODE, AND BE FURNISHED AND INSTALLED BY CONTRACTOR.
8. NO COLORED TAPE ALLOWED. WIRE MUST BE COLORED PER INDUSTRY STANDARD FOR IDENTIFICATION AND SIZED BY THE UTILITY.
   - 8.1. 120/208 3 PHASE - WHITE, BLACK, RED, AND BLUE
   - 8.2. 480 VOLT 3 PHASE - WHITE, BROWN, ORANGE, YELLOW
9. ALL SHADED AREA WILL BE RIGID METALLIC CONDUIT.
10. MINIMUM DEPTH OF SERVICE TRENCH TO BE 36" (3 FEET) FROM THE TOP OF THE CONDUIT.
11. ALL METAL TERMINATIONS SHALL HAVE BOLT ON METER HUB.

PAYSON UTAH SEPTEMBER 2023	UNDERGROUND SERVICES - ABOVE 200 AMP SINGLE METER SECONDARY SERVICE (SINGLE PHASE)	STANDARD PLAN P-5	SHEET 1 OF 1

ELEVATION





PLAN VIEW

KEYED NOTES:

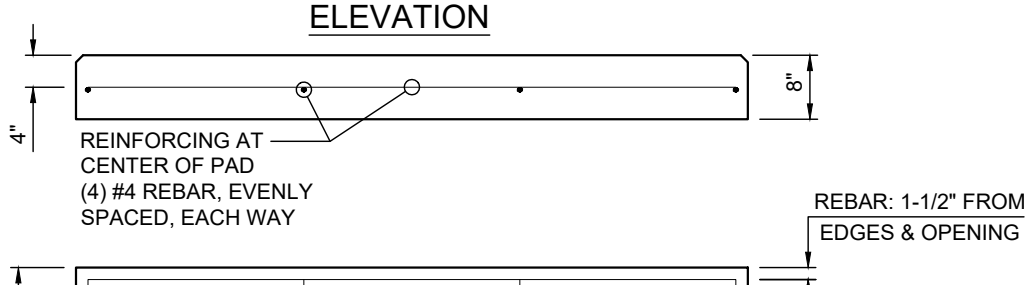
1. 5/8" X 8'-0" COPPER CLAD GROUND ROD
2. PAD ANCHOR (2 PLACES FOR PRECAST PAD)
3. 42" X 16" OPENING

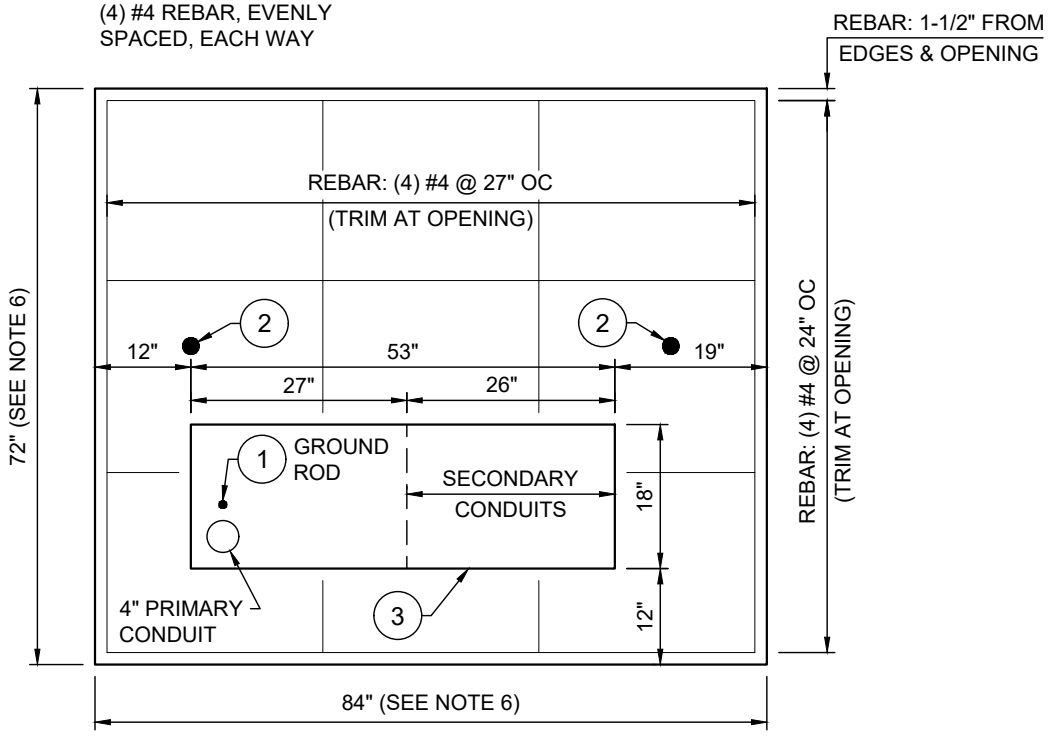
NOTES:

1. PAD MAY BE PRECAST OR CAST-IN-PLACE
2. CONCRETE TO BE 4000 PSI MIN
3. CAST-IN-PLACE MIX MUST BE APPROVED PRIOR TO INSTALLATION
4. MIX SHOULD MEET APWA SPECIFICATIONS AT A MINIMUM
5. INSTALLATION LOCATION TO BE APPROVED BY PAYSON POWER
6. DIMENSIONS APPROXIMATE. CONSULT WITH PAYSON POWER FOR EQUIPMENT SPECIFIC PAD DIMENSIONS.

PAYSON UTAH SEPTEMBER 2023	CONCRETE TRANSFORMER PAD THREE PHASE TRANSFORMER - 0 kVA TO 150 kVA	STANDARD PLAN P-6	SHEET 1 OF 4

ELEVATION





PLAN VIEW

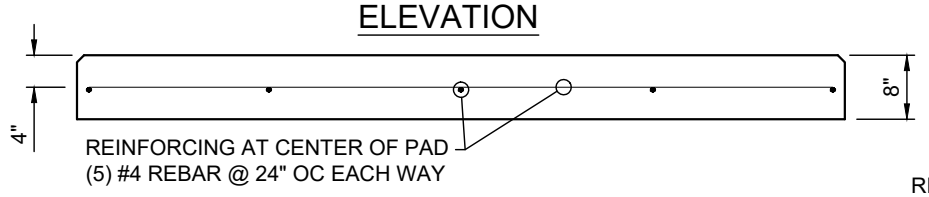
KEYED NOTES:

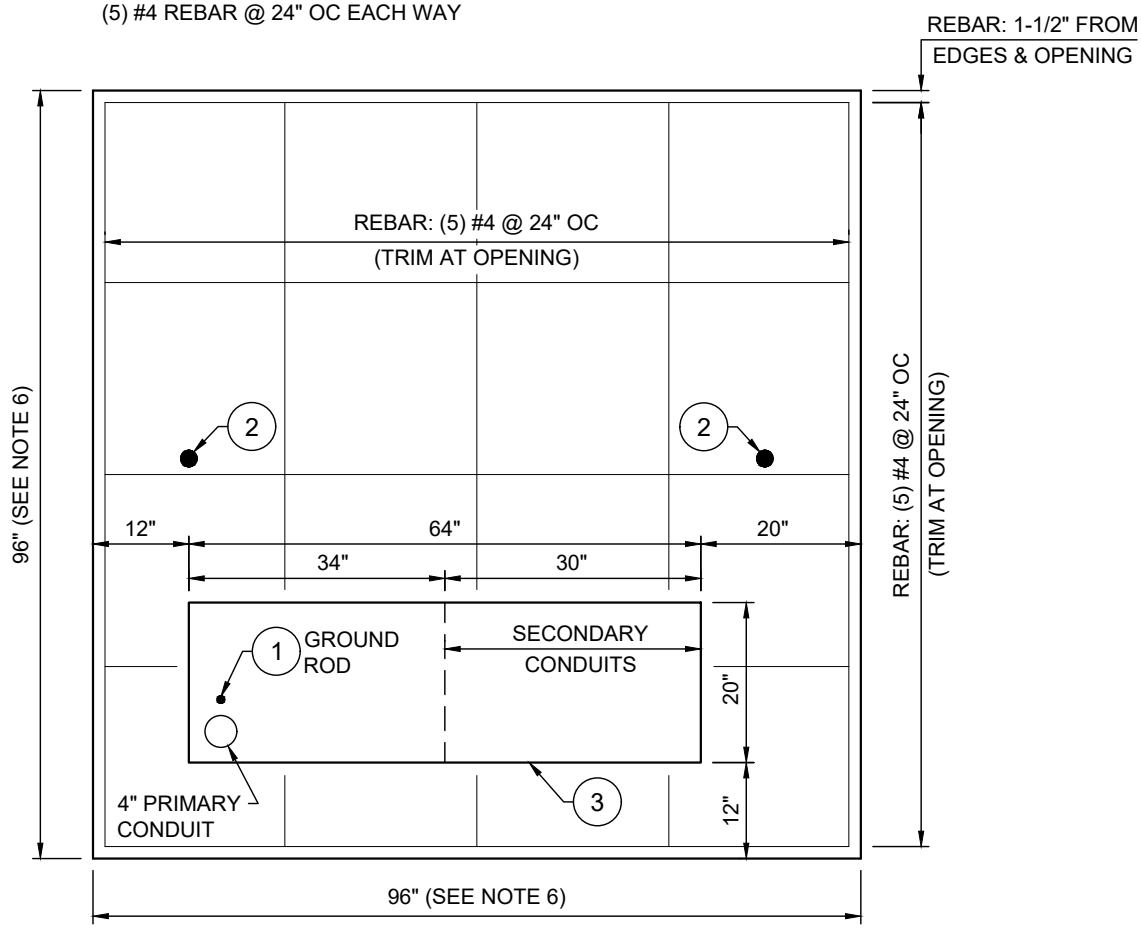
1. 5/8" X 8'-0" COPPER CLAD GROUND ROD
2. PAD ANCHOR (2 PLACES FOR PRECAST PAD)
3. 53" X 18" OPENING

NOTES:

1. PAD MAY BE PRECAST OR CAST-IN-PLACE
2. CONCRETE TO BE 4000 PSI MIN
3. CAST-IN-PLACE MIX MUST BE APPROVED PRIOR TO INSTALLATION
4. MIX SHOULD MEET APWA SPECIFICATIONS AT A MINIMUM
5. INSTALLATION LOCATION TO BE APPROVED BY PAYSON POWER
6. DIMENSIONS APPROXIMATE. CONSULT WITH PAYSON POWER FOR EQUIPMENT SPECIFIC PAD DIMENSIONS.

ELEVATION





PLAN VIEW

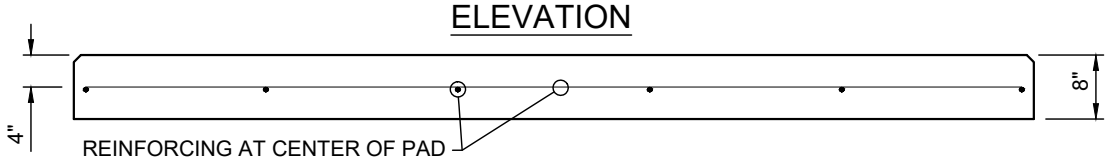
KEYED NOTES:

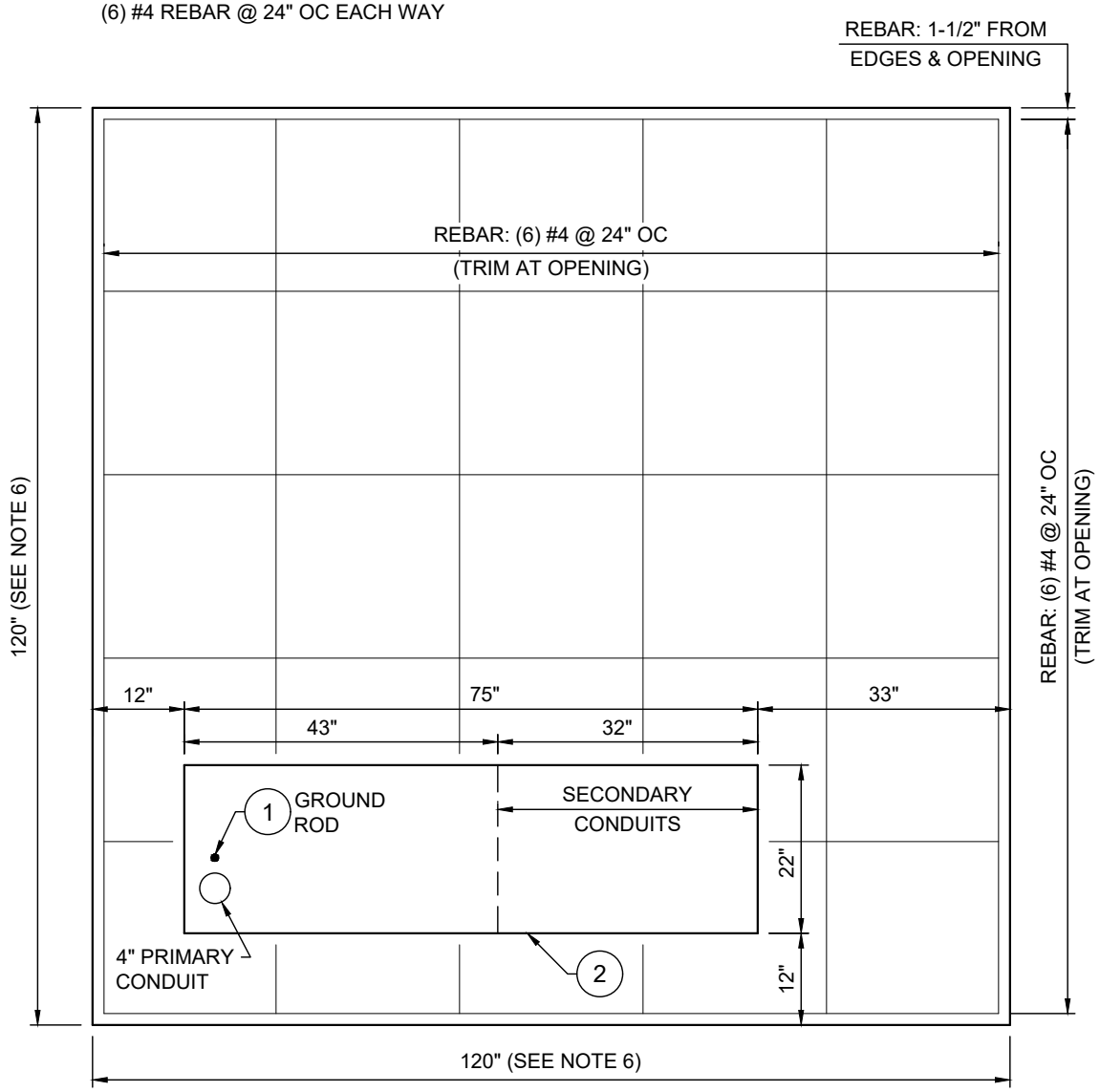
1. 5/8" X 8'-0" COPPER CLAD GROUND ROD
2. PAD ANCHOR (2 PLACES FOR PRECAST PAD)
3. 64" X 20" OPENING

NOTES:

1. PAD MAY BE PRECAST OR CAST-IN-PLACE
2. CONCRETE TO BE 4000 PSI MIN
3. CAST-IN-PLACE MIX MUST BE APPROVED PRIOR TO INSTALLATION
4. MIX SHOULD MEET APWA SPECIFICATIONS AT A MINIMUM
5. INSTALLATION LOCATION TO BE APPROVED BY PAYSON POWER
6. DIMENSIONS APPROXIMATE. CONSULT WITH PAYSON POWER FOR EQUIPMENT SPECIFIC PAD DIMENSIONS.

ELEVATION





PLAN VIEW

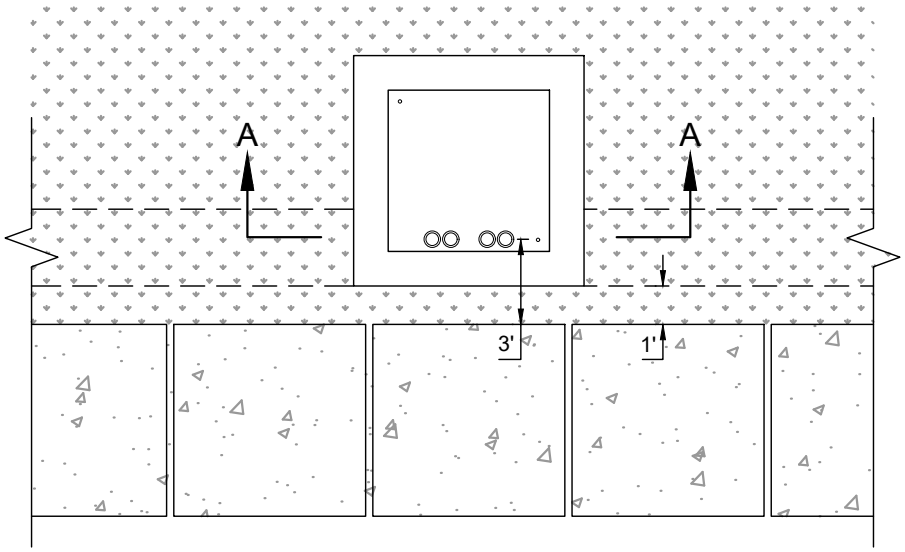
KEYED NOTES:

1. 5/8" X 8'-0" COPPER CLAD GROUND ROD
2. 75" X 22" OPENING

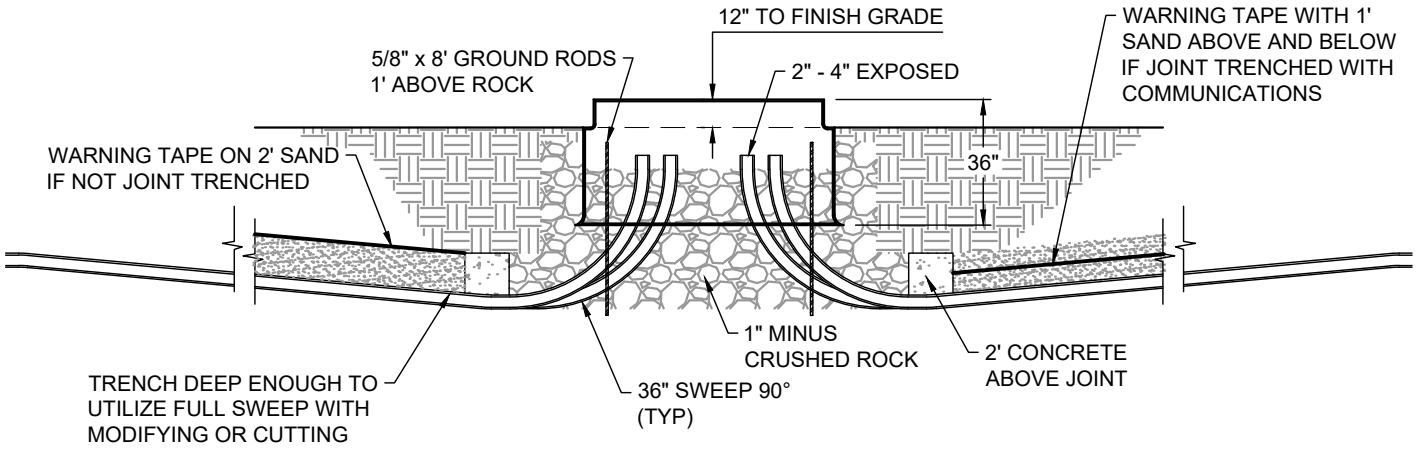
NOTES:

1. PAD MAY BE PRECAST OR CAST-IN-PLACE
2. CONCRETE TO BE 4000 PSI MIN
3. CAST-IN-PLACE MIX MUST BE APPROVED PRIOR TO INSTALLATION
4. MIX SHOULD MEET APWA SPECIFICATIONS AT A MINIMUM
5. INSTALLATION LOCATION TO BE APPROVED BY PAYSON POWER
6. DIMENSIONS APPROXIMATE. CONSULT WITH PAYSON POWER FOR EQUIPMENT SPECIFIC PAD DIMENSIONS.

PAYSON UTAH SEPTEMBER 2023	CONCRETE TRANSFORMER PAD THREE PHASE TRANSFORMER - 1500 kVA TO 2500 kVA	STANDARD PLAN P-6	SHEET 4 OF 4



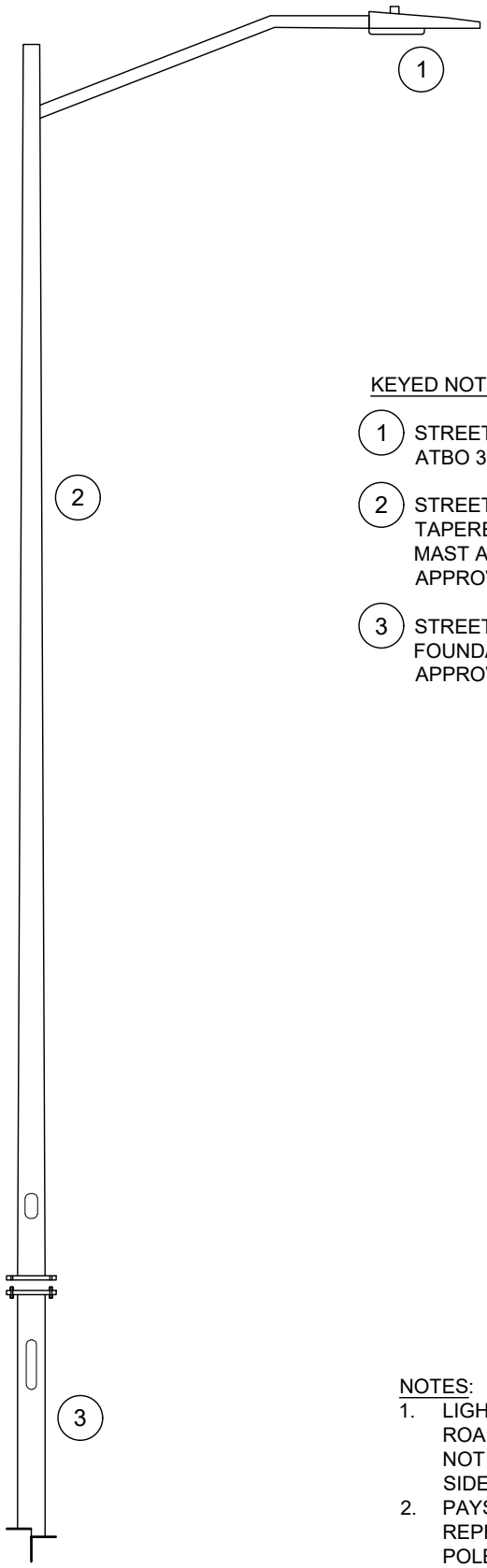
PLAN VIEW



SECTION A-A

NOTES:
1. 30' OF 4/0 BARE COPPER FOR GROUNDING, CITY WILL INSTALL
2. LONG SIDE OF BOX TO PARALLEL SIDEWALK
3. ALL 90° ELBOWS WILL BE PREFABRICATED FIBER GLASS 36" SWEEPS

PAYSON UTAH SEPTEMBER 2023	PAD SWITCH SLEEVE	STANDARD PLAN P-7	SHEET 1 OF 1



KEYED NOTES:

1. STREET LIGHT FIXTURE: AMERICAN ELECTRIC LIGHTING ATBO 30BLEDE10 MVOLT R4 P7 PCSS OR APPROVED EQUIVALENT
2. STREET LIGHT POLE: HOLOPHANE FRTAU206GBMAUS8 SB 2 ROUND TAPERED ALUMINUM POLE 25 FT, 6.0 x 4.0 x 0.188 WALL, BOLT ON MAST ARM SINGLE 8 FT, SATIN BRUSH ALUMINUM FINISH OR APPROVED EQUIVALENT
3. STREET LIGHT POLE FOUNDATION: AB CHANCE C11232JG4VL POLE FOUNDATION 6" DIAMETER FITS 9' TO 14' POLE BASE HEIGHT 60" OR APPROVED EQUIVALENT

NOTES:

1. LIGHT POLES TO BE LOCATED NEAR THE INTERSECTION OF TWO ROADS AND IN THE PLANTER STRIP. IF A PLANTER STRIP DOES NOT EXIST AND THERE IS A MONOLITHIC CURB, GUTTER, AND SIDEWALK, LOCATE THE POLE BEHIND THE SIDEWALK.
2. PAYSON CITY POWER SUPERINTENDENT OR ONE OF HIS REPRESENTATIVES WILL APPROVE THE LOCATION OF THE LIGHT POLE PRIOR TO ITS PLACEMENT.

PAYSON UTAH SEPTEMBER 2023	STREET LIGHT POLE AND BASE DETAIL	STANDARD PLAN P-8	SHEET 1 OF 1