



CITY OF OREM
PLANNING COMMISSION MEETING
56 North State Street, Orem, Utah
June 17, 2026

*This meeting may be held electronically
to allow a Commission member to participate.*

4:30 PM WORK SESSION – AGENDA REVIEW, CITY COUNCIL CONFERENCE ROOM, 56
NORTH STATE STREET, OREM, UT

1 Agenda Prep

2 Discussion of New State Mandated Detached Accessory Dwelling Units

5:30 PM REGULAR SESSION – CITY COUNCIL CHAMBERS

1. CALL TO ORDER

2. INVOCATION/INSPIRATIONAL THOUGHT: BY INVITATION

3. CONSENT AGENDA ITEMS

3.1 Approval of the June 3, 2026 Minutes

4. ACTION ITEMS

**4.1 Preliminary Plat — Home Again Lane — Request to create new flag lots generally
at 600 South 900 East**

**4.2 Site Plan — Costco Fuel Center Relocation — Request to relocate the Costco Fuel
Center to another onsite location, located at approximately 648 East 800 South**

5. PUBLIC HEARINGS

5.1 None

6. ADJOURN

**THE PUBLIC IS INVITED TO PARTICIPATE IN ALL PLANNING COMMISSION MEETINGS.
If you need a special accommodation to participate in the Planning Commission Meetings and Study Sessions,
please call the Development Services Office at least 3 working days prior to the meeting.
(Voice 801-229-7183)**

This agenda is also available on the City's webpage at orem.org

**CITY OF OREM
PLANNING COMMISSION MEETING MINUTES
June 3, 2026**

The following items are discussed in these minutes:

CONSENT AGENDA ITEMS:

- **3.1** - Approval of Minutes from the 05-20-26 Planning Commission Meeting
- **3.2** - Plat Amendment - Spaugy Plat C - Located approximately at 575 North 600 East

ACTION ITEMS:

- None

PUBLIC HEARINGS:

- **5.1 Text Amendment** - Updates to Chapter 10 of the Orem City Code Relating to Flood Damage Prevention
- **5.2 Rezone - "360 W 1500 South" - Continued from May 20th** - Request to rezone the property located generally at 360 W 1500 South from Public Facilities (PF) to Residential (R8) for the development of a residential subdivision. Approximately 5.45-acres.

A recording of the meeting can be viewed online at
https://www.youtube.com/live/Ay_DQTBxzQQ?si=4je2INdOefHPA8Gw.

PLANNING COMMISSION WORK SESSION

Place: Orem City Council Conference Room, 56 North State Street

Chair Komen called the Planning Commission meeting to order at 4:31 PM.

Those present: Madeline Komen, Darren Hawkins, Micah Ladle, Susan Madsen, Karl Radmall, Jeff Reeves, Planning Commissioners; Quinn Mecham, City Council Liaison; Gary McGinn, Director of Community Development; Jared Hall, Matthew Taylor, Rebecca Gourley, Grace Bjarnson, Emma Tenney, Planning and Zoning Staff; Taggart Bowen, City Engineer.

Those excused: Britton Runolfson, Planning Commission Member.

1. Discussion of Agenda Items

DRAFT MINUTES FOR JUNE 3, 2026

Matthew Taylor discussed a FEMA text amendment on tonight's agenda, noting that the City participates in the National Flood Insurance Program.

2. Discussion of Planning Commission Priorities

Staff will be bringing forward a text amendment regarding Detached Accessory Dwelling Units (DADUs), addressing associated issues with loans and short-term rentals. Staff intends to provide a draft to the Planning Commission by July for review.

- The Commission discussed various other planning priorities and ongoing items, including:
- Deep lots
- Food trucks, including setting up a group to discuss options (noting it may take a year to address certain land issues)
- Double frontage lots
- Commercial zoning in Orem
- The General Plan and defining livability
- The legal process of accessory apartments, comparing regulation/administration to fund administration
- The number of renters in a home
- Ensuring projects raise money to offset costs
- A review of zones to create zoning structures that reduce the need for development agreements
- Housing affordability
- The potential implications for Orem regarding an amphitheater in Provo Canyon
- The Active Transportation Plan

Staff also discussed how to help the Planning Commission see the long-term results of the ordinances they pass, noting that there can be unintended consequences, and suggested doing field trips.

A recording of the discussion can be viewed online at https://www.youtube.com/live/Ay_DQTBxzQQ?si=4je2INdOefHPA8Gw.

The meeting was adjourned at 5:20 PM.

PLANNING COMMISSION MEETING

Place: Orem City Council Chambers, 56 North State Street

At **5:30 PM**, Chair Komen called the Planning Commission meeting to order. An inspirational thought was offered by Darren Hawkins, who encouraged the Commission to think not just about structures, but to imagine the people living there and their everyday lives as they make decisions.

DRAFT MINUTES FOR JUNE 3, 2026

Those present: Madeline Komen, Darren Hawkins, Micah Ladle, Susan Madsen, Karl Radmall, Jeff Reeves, Planning Commissioners; Crystal Muhlestein, City Council Member; Gary McGinn, Director of Community Development; Jared Hall, Matthew Taylor, Emma Tenney, Grace Bjarnson, Planning and Zoning Staff; Taggart Bowen, City Engineer.

Those excused: Britton Runolfson, Planning Commission Member.

Agenda Item 3, Consent Agenda Items

- **3.1** - Approval of Minutes from the 05-20-26 Planning Commission Meeting
- **3.2** - Plat Amendment - Spaugy Plat C - Located approximately at 575 North 600 East

Planning Commission Action: Commissioner Susan Madsen motioned to approve the Consent Agenda. Commissioner Karl Radmill seconded the motion.

YES: Madeline Komen, Darren Hawkins, Micah Ladle, Susan Madsen, Karl Radmall, Jeff Reeves

NO: None

ABSTAIN: None

Agenda Item 4, Action Items

None

Agenda Item 5, Public Hearings

5.1 TEXT AMENDMENT - UPDATES TO CHAPTER 10 OF THE OREM CITY CODE RELATING TO FLOOD DAMAGE PREVENTION

Matthew Taylor presented this item. He noted that the City participates in the National Flood Insurance Program (NFIP), which lowers flood insurance rates for residents. He shared that 16% of houses have a 1 in 4 chance of flooding during a 30-year mortgage. Insurance reduces future flood damage through proper floodplain management, and structures in a floodplain should not impede water flow or potential flooding. Due to new FEMA maps released in 2024, code changes are now required to match FEMA revisions. The adoption deadline for these updates is June 23, 2026.

Chair Komen opened the meeting to public comment. No one spoke, and the public comment section was closed.

DRAFT MINUTES FOR JUNE 3, 2026

Planning Commission Action: Commissioner Karl Radmall motioned to approve the text amendment for updates to Chapter 10 of the Orem City Code. Commissioner Jeff Reeves seconded the motion.

YES: Madeline Komen, Darren Hawkins, Micah Ladle, Susan Madsen, Karl Radmall, Jeff Reeves

NO: None

ABSTAIN: None

The motion passed.

5.2 REZONE - “360 W 1500 SOUTH” - LOCATED APPROXIMATELY AT 360 W 1500 SOUTH - Continued from May 20th

The City of Orem is the applicant for this item, a request to rezone the property located generally at 360 W 1500 South from Public Facilities (PF) to Residential (R8) for the development of a residential subdivision. Jared Hall spoke on behalf of the City to present this item, noting it had previously been presented to the Planning Commission a month earlier.

Chair Komen asked whether the request involves changing both R12 and PF zones to R8. Mr. Hall confirmed that it does.

In the May 20th meeting, Mr. Hall had presented two concept plans: one features a straight-through road, and the other features a cul-de-sac. He noted that more neighbors seem to favor the cul-de-sac option. He explained that the rezone will allow the area to tap into the sewer system, provide access to abutting properties, make an easement available, and allow for a residential subdivision to be created. Additionally, profits from the subdivision could potentially be put toward other parks in Orem.

Chair Komen raised a question regarding the street going through to the surrounding development. City Engineer Taggart Bowen stated that they currently have a curb in place, but it is not finalized.

Chair Komen opened the meeting to public comment.

A video from a resident living near the Sharon area was shown, giving context to the topography of the area. In the video, the resident stated that she would rather have neighborhood children playing at a park than in the street.

DRAFT MINUTES FOR JUNE 3, 2026

The video can be viewed online at <https://youtu.be/UvwguzaCJcE?si=RvKtSApmxIgkNU3I>.

As no public was present to speak, Chair Komen closed the public comment.

During the Commission discussion, it was clarified that the primary focus of the evening's item was whether the zoning change itself is appropriate.

Commissioner Radmall noted that Orem has limited access to new single-family homes and expressed that this property is a great candidate for single-family housing.

Commissioner Madsen stated that the bulk of the neighbors' concerns have been answered and reminded the Commission that an R8 designation does not preclude a park from being built.

Mr. Bowen described the slope in the area, and Gary McGinn added that there is a significant grade from the east side of the property onto neighboring lots to the east. He noted that neighbors would not be able to subdivide the backs of their lots without proper access.

Planning Commission Action: Commissioner Karl Radmall moved that the Planning Commission forward a recommendation of approval to the City Council for the request to rezone the property located generally at 360 W 1500 South from Public Facilities (PF) to Residential (R8) for the development of a residential subdivision. Commissioner Reeves seconded the motion.

YES: Madeline Komen, Darren Hawkins, Micah Ladle, Susan Madsen, Karl Radmall, Jeff Reeves

NO: None

ABSTAIN: None

The motion passed.

Final Meeting Comments:

Gary McGinn reminded those present of the upcoming Oremfest celebrations. He encouraged everyone to come early to the carnival and highlighted the Monday car show at the SCERA Center for the Arts.

Adjournment:

DRAFT MINUTES FOR JUNE 3, 2026

Chair Komen asked for a motion to adjourn. Commissioner Hawkins motioned to adjourn, Commissioner Reeves seconded. All present Commissioners voted yes.

The Planning Commission Meeting adjourned at **5:59 PM**.

A recording of the meeting can be viewed online at

https://www.youtube.com/live/Ay_DQTBxzQQ?si=4je2INdOefHPA8Gw.

Reviewed and Approved: DRAFT

	PLANNING COMMISSION June 17 th , 2026	Item 4.1
	Home Again Lane Subdivision 600 South 900 East Preliminary Approval, 3 lot single-family residential subdivision in the R8 Zone.	Prepared By: Jared Hall Applicant: Brigham Ashton

Notices:

Posted in 2 public places.
Posted on City Webpage and City hotline.
Posted at Utah.gov/pmn.

Site Information:

General Plan Designation:
Low Density Residential

Neighborhood: **Sharon**

Zoning: **R8**

Total Acreage: **1.05 acres**

Action:

The Planning Commission is the Land Use Authority for this item.

REQUEST: The applicant requests preliminary subdivision approval for a 3-lot residential deep lot subdivision.

BACKGROUND: In this proposed subdivision, three lots will be created using deep lot standards to allow all access to 900 East. The subdivision has been proposed in such a way that a future public right-of-way could connect from 900 East to the stub of 620 South at the rear of the subject property.

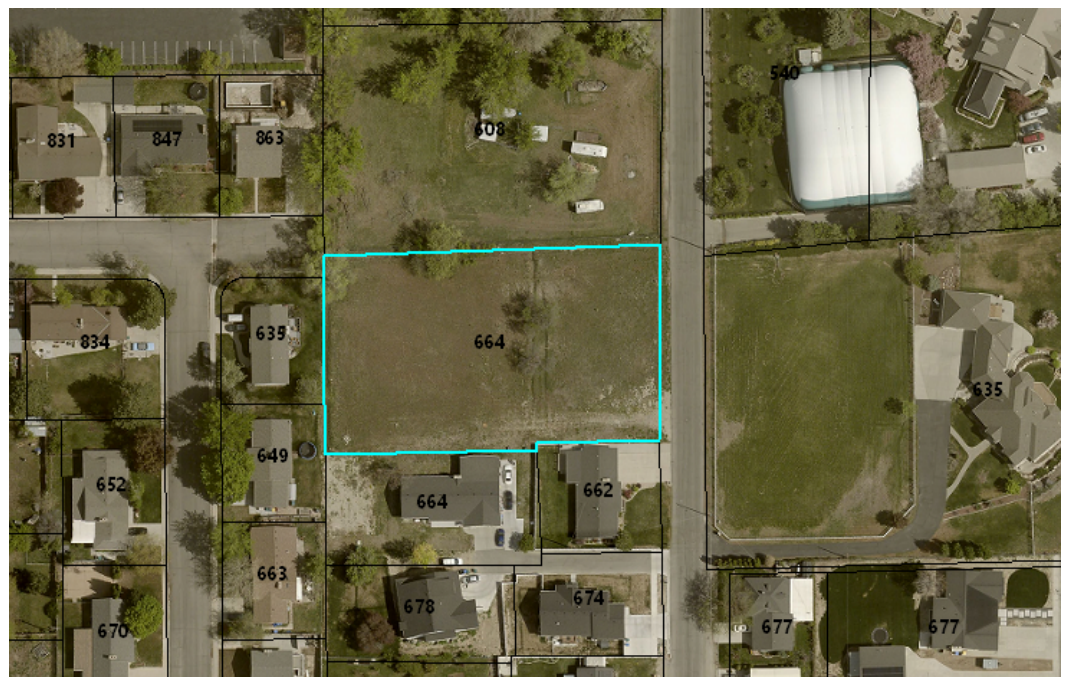


Figure 1: Subject Property, 600 South 900 East, aerial

REVIEW & ANALYSIS:

Zoning – The subject property is zoned R8, Single Family Residential. With just over an acre the property can accommodate three new building lots easily and provide access and appropriate setbacks. The proposed subdivision is for single-family residential dwellings. The proposed preliminary subdivision includes two deep lots (sometimes referred to as “flag lots”) which is permissible under Article 17-8-1 of the subdivision

ordinance if approved by the Planning Commission. Deep lots can be created to allow the development of land where there is limited access for frontage on the public right-of-way (ROW). The subject property has just under 167' of frontage along 900 East. The only way to allow for the development of the rear of the property is to subdivide using the deep lot regulations. The proposed lots meet the requirements of the R8 Zone and of Article 17-8-1 for deep lot subdivision.

Public Improvements – The subject property is accessed from 900 East. Public right-of-way (ROW) improvements are planned including curb + gutter, five-foot wide sidewalks, and park strips. The drive access that will serve the deep lots (Lots 2 & 3) will be paved and will include the installation of curb + gutter. The applicants have also agreed to include an easement wide enough to accommodate the future installation of sidewalks and to reserve the entirety of the paved access for potential future public right-of-way. In short, the subdivision will allow for the possibility that the drive access could become a dedicated public street connecting 900 East with the stub of 620 South in the future if the property to the north further subdivides or develops.

Lots – The preliminary subdivision has been reviewed for compliance with the R8 Zone development standards as well as for all requirements specific to deep lot subdivision. Minimum required setbacks are shown on the preliminary plat illustrating that they can be met.

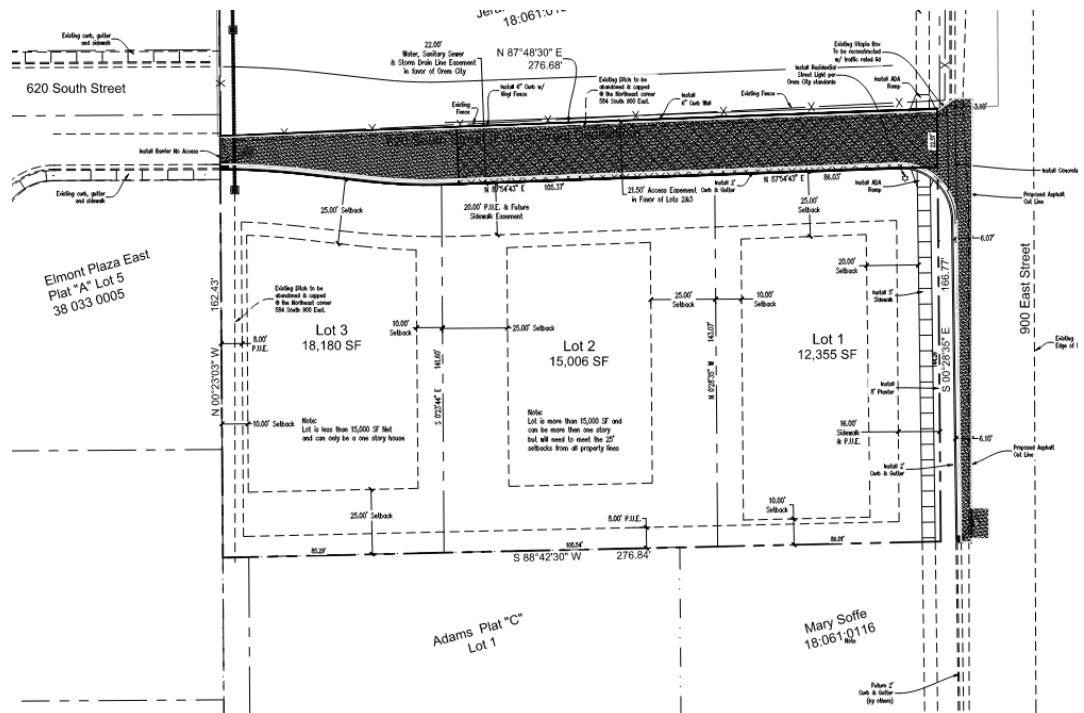


Figure 2: from the Preliminary Plat, Rolling Sand

Under the requirements of Article 17-8-1, a deep lot must be a minimum of 125% of the required lot size of the zone (R8), or 10,000 ft² in this case. Lot 2 and Lot 3 both meet that requirement.

	required area	proposed area
Lot 1	8,000 ft ²	12,355 ft ²
Lot 2	10,000 ft ²	15,006 ft ²
Lot 3	10,000 ft ²	18,180 ft ²

Other Deep Lot Restrictions – Article 17-8 carries includes some other requirements for deep lots that should be noted.

- Curbing: The private drive access – whether owned as part of the deep lot or provided as an easement over the original lot – must include concrete curbs on both sides. *17-8-C(5)*
- Height: Houses constructed on deep lots in the R8 Zone are not allowed to exceed one story above grade (unless the net area is greater than 15,000 ft²) and then must maintain 25’ setbacks to all property lines. *17-8-C(7)(a)*

Compliance with these sections of the subdivision code should be conditions of approval if the preliminary approval is granted.

Access – Lot 1 has direct access from 900 East. Lot 3 includes a 20’ wide physical arm of property extending to 900 East. Lots 1 and 2 both will have access easements running over the entire arm.

Parking – No parking is allowed in the 20’ access easement (the stem portion of Lot 3) and each lot will have space for private driveways, garages, or other parking areas to provide the required off-street parking.

Other – There are no elevations or home plans for the proposed lots: the subdivision will be recorded and the new building lot (Lot 2) will be made available for purchase by individuals to build on. The only allowable uses are single family detached homes.

DEVELOPMENT REVIEW COMMITTEE: The Preliminary Subdivision has passed the technical reviewing body, and the Development Review Committee (DRC) reviewed and recommended approval of the subdivision at their public meeting on Monday, June 9th, 2026.

ACTIONS: The Planning Commission is the designated Land Use Authority for preliminary subdivisions. The Commission may approve or deny the request for preliminary subdivision or may choose to continue their consideration of the request and ask for additional information or analysis. If

the preliminary subdivision is approved, a final subdivision application will be reviewed for compliance by city staff and then prepared for recording. Staff has noted conditions that should be included if the Planning Commission chooses to approve the preliminary subdivision.

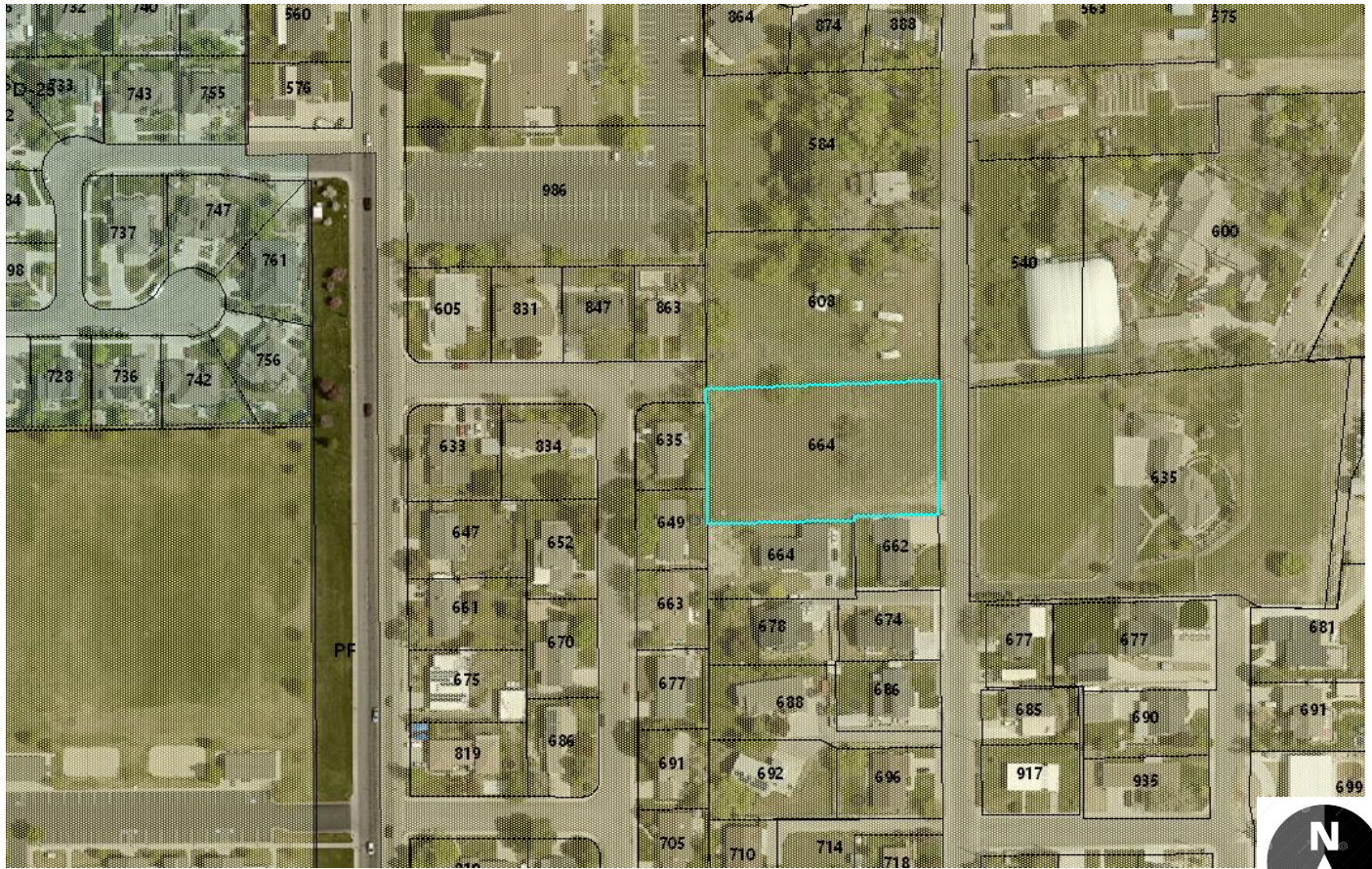
Alternative Motions –

“I move that the Planning Commission [choose: **APPROVE** or **DENY**] the Preliminary Approval for the Home Again Lane Subdivision, subject to the following conditions:

1. The applicant shall file a Final Subdivision application meeting all requirements of the Orem City Zoning and Subdivision Ordinances and provide easements for access and future dedication of right-of-way.
2. The Final Subdivision Plat shall comply with deep lot requirements as contained in Article 17-8 of the Orem City Code.

“I move that the Planning Commission continue this request to [choose appropriate date or condition].”

Home Again Lane – 664 South 900 East



Legend

- PD-25
- R8
- PF

Neighborhood
Sharon

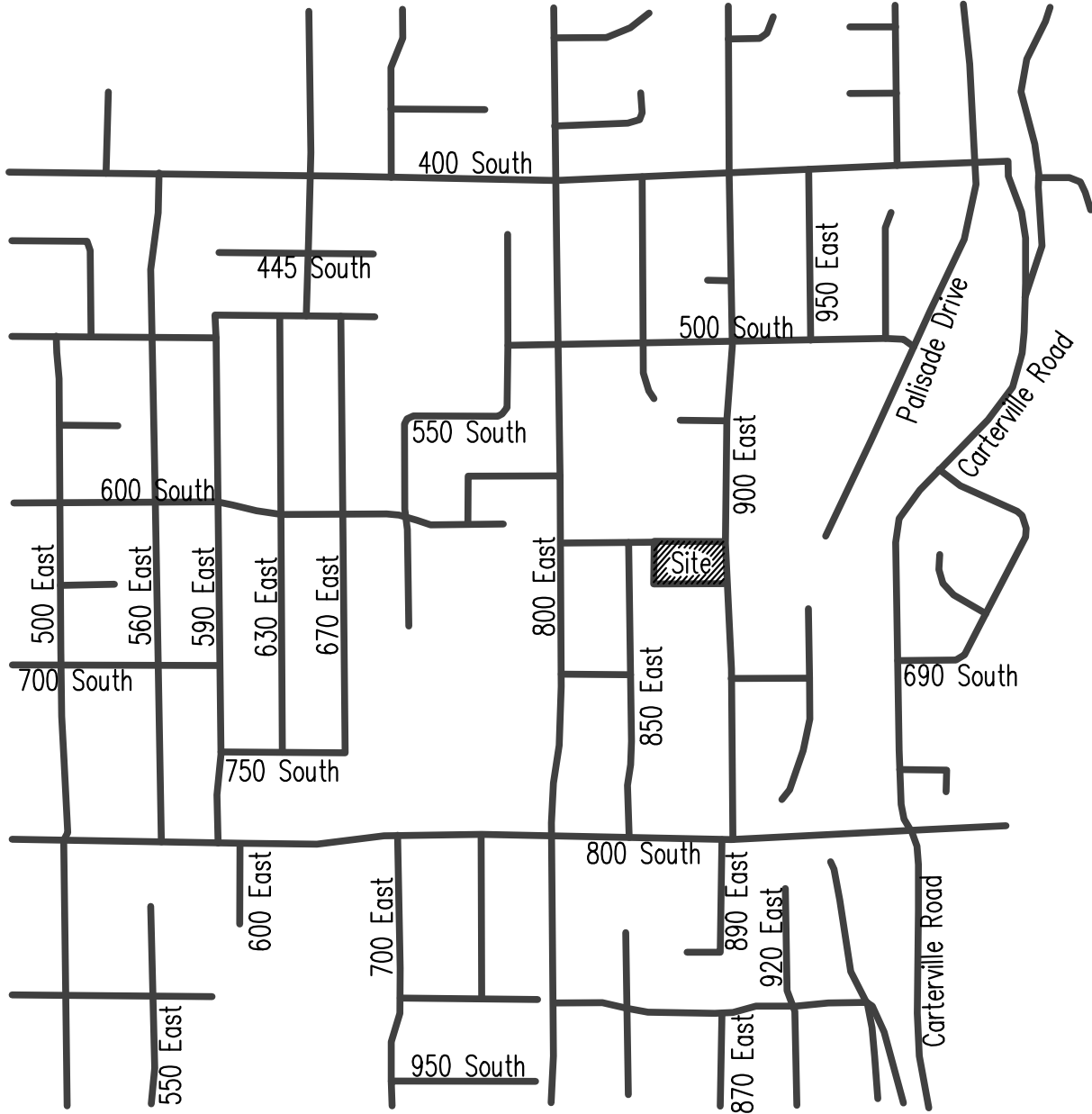


Home Again Lane

Orem

Utah

Legend	
Symbol	Description
	Proposed 8" Sanitary Sewer Main
	Existing Sanitary Sewer Main (size noted on plan)
	Proposed Culinary Water Main (size noted on plan)
	Existing Culinary Water Main (size noted on plan)
	Existing Storm Drain pipe (size noted on plan)
	Proposed Storm Drain pipe (size noted on plan)
	Cable TV utility lines
	Existing Power lines
	New underground Power lines
	Outside Boundary line
	Existing surface improvements
	Existing Sidewalk
	Existing Sidewalk
	Existing Contour Elevation
	Finish Contour Elevation
	Finish Spot Elevation
	Drainage Flow Direction
	Water Meter (size noted on plan)
	Culinary Water Valve
	Fire Hydrant
	Sanitary Sewer Manhole
	Storm Drain Manhole
	Storm Drain Box
	top of asphalt
	top of sidewalk
	back of top of curb
	back of top of sidewalk
	Sanitary Sewer Manhole
	Storm Drain Manhole
	Water Valve
	Gas valve
	Water Meter
	edge of existing asphalt
	Public Utility Easement



Vicinity Map

NOTES:

- The fire protection items (fire hydrant, water mains, access roads, etc.) shown on this site plan are preliminary only. Detailed fire protection plans shall be submitted with the building plans. Plan reviews by the fire Prevention Bureau shall be completed prior to the issuance of a building permit. The plan reviews by the Fire Prevention Bureau may identify additional fire protection requirements mandated by the International Fire Code. Fire hydrant foot valves shall be installed at the connection point with the main water lines.
- All landscaped areas shall have an automatic, underground sprinkling system with a back-flow device to the building. Back-flow devices shall be installed and tested in accordance with the City Code. Water meters shall be located at the back of sidewalk or curb in an area that is accessible for reading and servicing. Water meters shall not be located within areas enclosed with fences or within 10 feet (10') of any existing or proposed structure.
- If required by the City Code or by the applicant's permit for Industrial Wastewater Discharge, a sampling manhole and fat and oil separator/grease trap shall be installed I.A.W. City standards and specifications.
- All signage shall comply with the requirements of the City Code.
- All utilities, including water and sewer laterals, water and sewer mains, storm water drains, storm water sumps, sewer manholes, water valves, etc., shall not be located under covered parking areas and shall be installed according to the City Code.
- All roof drainage shall be routed through on-site storm water management facilities.
- At the time of construction, the City of may determine based on professional experience and judgment and at its sole discretion, the need for the Owner/Developer to pay for, remove, and replace any existing substandard improvements such as curbs, gutters, sidewalks, drive approaches, driveways, decorative concrete, wheelchair ramps, etc., or any unused drive approaches.
- All construction shall conform to the City of construction standards and specifications unless the improvement is within the UDOT right-of-way, in which case the construction shall conform to UDOT construction standards and specifications.

Planning Department

56 North State Street
Orem, Utah 84057
Phone (801) 229-7058

Public Works Department

Phone (801) 229-7506

Public Safety

95 East Center Street
Orem, Utah 84057
801-229-7323

Emergency 911
Utah County Animal Shelter 801-785-3442

Engineering

Engineer: Taggart Bowen
56 North State Street
Orem, Utah 84057
Phone (801) 229-7000

Building Inspection

56 North State Street
Orem, Utah 84057
Phone (801) 229-7185
Fax (801) 229-7191

Public Works Department

1450 West 550 North
Orem, Utah 84057
Phone (801) 229-7508

Gas

Dominion Energy
1640 North Mountain Springs Parkway
Springville, Utah 84663
Phone (801) 853-6585

Electricity

Rocky Mountain Power
70 North 200 East
American Fork, Utah 84003
Phone (801) 756-1220
Fax (801) 756-1274
Mark Steele

Telephone

Qwest
75 East 100 North
Provo, Utah 84606
Phone (801) 356-7050
Cell (801) 473-3385
Kasey Lunt

Cable T.V.

Comcast Cable Communications, Inc.
1350 East Miller Avenue
Salt Lake City, Utah 84106
Phone (801) 485-0500
Fax (801) 487-1887

Developer:

Alan & Karen Ashton
641 S. Palisade Drive
Orem Utah 84097
utcustomhomes@gmail.com

Engineer:

Dudley and Associates, Inc.
353 East 1200 South
Orem, Utah 84058
801-224-1252

Site Data:

Zone = R-8
Total Area = 45541 SF or 1.05 Acres
Total number of Lots = 3

Sheet Index

1.0	Cover Sheet
1.1	General Notes
2.0	Preliminary Plat
3.0	Utility Plan
4.0	Grading and Drainage Plan
5.0	Street Improvement Plan 900 East
6.0	Street Improvement Plan
7.0	Detail Sheet
8.0	Detail Sheet

UTILITY GENERAL NOTES

1. All installation and materials shall, at a minimum, conform to standards, specifications, and plans.
2. The contractor shall obtain a permit for utility construction at least 48 hours prior to construction.
3. Contractor shall coordinate with all utility companies for installation requirements and specifications.
4. All necessary inspections and/or certifications required by codes and/or utility service companies shall be preformed prior to announced building possession and the final connection of service.
5. The contractor is specifically cautioned that the location and/or elevation of existing utilities as shown on these plans is based on records of the various utility companies, and where possible, measurements taken in the field. The information is not to be relied on as being exact or complete. The contractor must call the appropriate utility companies at least 48 hours before any excavation to request exact field location of utilities. It shall be the responsibility of the contractor to relocate all existing utilities which conflict with the proposed improvements shown on the plans.
6. Underground utilities shall be installed, inspected and approved before backfilling.
7. Contractor shall notify Engineering inspectors 72 hours before connecting to any existing utility.
8. All fill material is to be in place and compacted before installation of proposed utilities.
9. Existing utilities shall be verified in field prior to installation of any new lines.
10. All ductile and gray iron fittings shall be manufactured in accordance with the following AWWA standards: C-104 cement mortar lining, C-110 gray-iron and ductile iron joints. All fittings shall be seal coated with bituminous material. All fitting shall be 250 PSI minimum pressure rating.
11. Manholes shall be precast conforming to ASTM C-478. Concrete bases shall be poured in place or precast.
12. All utility pipes shall be bedded and backfilled in accordance with the detail drawings and site work specifications.
13. Tops of existing manholes shall be raised as necessary to be flush with proposed pavement elevations. Any existing manholes in unpaved areas shall be 6 inches above finished ground elevations with water tight lids.
14. All concrete for encasements shall have a minimum 28 day compression strength at 4000 PSI.
15. Site work contractor shall be responsible for all improvements to with 5 ft. of proposed building unless specified otherwise. Site work contractor shall coordinate with building contractor on all utility building entrance locations.
16. In the event of a vertical conflict between waterlines, sanitary lines, storm lines and gas lines (existing and proposed), the sanitary line shall be ductile iron pipe with mechanical joints at least 10 feet on both sides of crossing, the waterline shall have mechanical joints with appropriate thrust blocking as required to provide a minimum of 18-inch clearance meeting requirements of ANSI A21.10 or ANSI 21.11 (AWWA C-151) (CLASS 50).
17. Drawings do not purport to show all existing utilities.
18. Contractor shall verify utility locations prior to subsurface work for light poles (boring etc.) and similar structures.
19. See notice requirement under general project notes.
20. The general contractor shall ensure that all sub-contractors have installed utilities in accordance with the specifications and design (line, grade, no sags, etc.) prior to scheduling close-out meetings with the city.
21. All utilities shall be pre-tested prior to the city witnessing the test to ensure that said utilities will pass during city witness of testing.

SURVEY CONTROL NOTE:

The contractor or surveyor shall be responsible for following the National Society of Professional Surveyors (NSPS) model standards for any surveying or construction layout to be completed using Dudley & Associates ALTA Survey or Dudley & Associates construction improvement plans. Prior to proceeding with construction staking, the surveyor shall be responsible for verifying horizontal and vertical control from the survey monuments and for verifying any additional control points shown provided by Dudley & Associates. The surveyor shall also use the benchmarks as shown on the plan, and verify them against no less than three existing hard improvement elevations included on these plans or on electronic data provided by Dudley & Associates. If any discrepancies are encountered, the surveyor shall immediately notify the engineer and resolve the discrepancies before proceeding with any construction staking.

PRIVATE ENGINEER'S NOTICE TO CONTRACTORS

The Contractor agrees that he shall assume sole and complete responsibility for job site conditions during the course of construction of this project, including safety of all persons and property, that this requirement shall apply continuously and not be limited to normal working hours; and that the contractor shall defend, indemnify, and hold the owner and the engineer harmless from any and all liability, real or alleged, in connection with the performance of work on this project, excepting for liability arising from the sole negligence of the owner or the engineer.

SANITARY SEWER GENERAL NOTES

1. See this sheet for general project notes.
2. All sanitary sewer construction shall be in conformance with the standards and specifications.
3. All gravity sanitary sewer lines shall be in conformance with the standards and specifications.
4. Sanitary sewer lines shall be SDR-35 PVC. Sewer line construction and materials shall conform to ASTM standards and specifications.
5. Rim elevations shown are approximate only and are not to be taken as final elevation. Pipeline contractor shall use precast concrete adjustments rings, grout, and steel shims to adjust the manhole frame to the required final grade in conformance with the standard specifications. All frames shall be adjusted to final grade prior to the final lift of asphalt.
6. All sanitary sewer main testing shall be accordance with the standards and specifications copies of all test results shall provided to the engineer, the owner, and the governing authority prior to the start of the warranty period.
7. Compaction of all trenches within the project site must be attained and compaction results submitted to Department of Public Works.
8. The contractor is responsible for protecting all existing structures and improvements during installation of sanitary sewer line.
9. The contractor is responsible for the following:
 - (A) Obtaining all required permits from the city or regulatory authorities at the contractors cost including permits required for work within the public right-of-way.
 - (B) Restoration of any existing improvements including (but not limited to) fences, sod, landscaping, pavement, sprinkler systems.
 - (C) Verification and protection of all existing utilities within the limits of construction.
 - (D) Providing as-built drawings to the City and engineer.
 - (E) All permitting, development, location, connecting and inspection.
 - (F) Verifying all standard details conform to the current standards and specifications.
 - (G) For obtaining and understanding all city, county, and state standards and specifications pertaining to the construction of sanitary sewer improvements.
 - (H) Reference architectural plans for all connections to building services and verify locations as shown.
10. The contractor shall provide all materials necessary for construction or installation of all proposed improvements shown.
11. The contractor shall pothole the existing sewer main and provide an as-built elevation of the main to the engineer prior to any new construction.
12. Sanitary sewer pipes shall be bedded in accordance with standards.

STORM DRAIN GENERAL NOTES

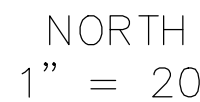
1. The contractor shall be responsible for the following:
 - (A) Obtaining all required permits from the city or regulatory authorities at the contractor's cost including permits required for work within the public right-of-way.
 - (B) Restoration of any existing improvements including (but not limited to) fences, sod, landscaping, pavement, sprinklers systems.
 - (C) Verification and protection of all existing utilities within the limits of construction.
 - (D) Providing as-built drawings to the city and engineer.
 - (E) All permitting, development, location, connection and inspection.
 - (F) Scheduling all required inspections.
2. All storm drain construction shall be in conformance with standards, specifications, and plans.
3. Distances for storm drains are the horizontal distances from center of manhole or inlet to center of manhole or inlet. Therefore, distances shown on plans are approximate and could vary due to vertical alignment.
4. Rim elevations shown are approximate only and are not to be taken as final elevation. Pipeline contractor shall use precast concrete adjustments rings, grout, and steel shims to adjust the manhole frame to the required final grade in conformance with standards, specifications and plans. All frames shall be adjusted to final grade prior to the final lift of asphalt.
5. Compaction of all trenches within the project site must be attained and compaction results submitted to the engineer prior to final acceptance.
6. Storm drain pipes entering structures shall be grouted to assure connection at structure is watertight.
7. All storm drain pipes entering structures shall be grouted to assure connection at structure is watertight.
8. All storm drain manholes in paved areas shall be flush with pavement and shall have traffic bearing lids. Manholes in unpaved areas shall be 6" above finished grade. All storm drain lids shall be labeled "storm drain".
9. Contractors shall verify horizontal and vertical location of all existing storm drain structures, pipes, and all utilities prior to construction.
10. Storm drains shall be bedded in accordance with the City standards.

GRADING PLAN GENERAL NOTES

1. Contours shown are for finished paving, sidewalk, slab, or ground adjustment to sub-grade is the contractor's responsibility.
2. All disturbed areas that are un-surfaced or are not designated as landscape areas are to be seeded, fertilized, and watered until a healthy stand of grass is obtained.
3. If during the overall grading process, conditions are encountered which could indicate an unidentified situation is present, the soils engineer shall be contacted for recommendations.
4. Unless otherwise shown, not proposed slope shall exceed three (3) horizontal to one (1) vertical. All sloped areas must be protected from erosion.
5. If stripped materials consisting of vegetation and organic materials are stockpiled on the site, topsoil may be placed to a height of five feet. Silt fence shall be placed around the base of the stockpile and the stockpile shall be seeded with native seed mix immediately after stripping operations are complete.
6. On-site materials suitable for fill beneath drives and asphalt areas beyond 5' (five) of the building shall be compacted in accordance with guidelines presented in the soils report.
7. Spot elevations shall take precedence over contours and slopes shown. The contractor shall notify the engineer of the spot elevations that do not appear to be consistent with the contours and slopes. Spot elevations and specific profile design shall be used for setting elevations of curb, gutter and utilities.
8. Benchmark verification: Contractor shall use benchmarks and datums shown hereon to set project benchmark(s), by running level loop between at least two benchmarks, and shall provide survey notes of such to project engineer prior to commencing construction.
9. All utilities (manholes, valve covers, cleanouts, vaults, boxes, etc.) shall be adjusted to final grade prior to the final lift of asphalt.
10. All earth moving and placement operations shall be in conformance with the recommendations identified in the soils report. The contractor shall have a signed and sealed copy of the soils report on the site at all times.
11. The contours shown in the detention/retention pond area represent final grade. The top 6 inches of material in the detention/retention pond and berm areas shall be top soil as specified in the project standards.
12. Grades within asphalt areas shall be constructed to within 0.10 feet of the design grade. However, the contractor shall maintain positive drainage in all pavement areas and along all curbs. All curbs shall be built in accordance to the plan. Curbs or pavement areas which do not provide proper drainage must be removed and replaced at the contractor's expense.
13. Spot elevations represent flow line or top of asphalt unless otherwise noted.
14. The contractor is responsible for providing his own estimate of earthwork quantities.
15. All landscaped islands shall have a crown of topsoil prior to landscaping. Refer to landscape plan for specifications.
16. Were new curb and gutter is being constructed adjacent to existing asphalt or concrete pavement, the following shall apply: Prior to placement of any concrete, the contractor shall have a licensed surveyor verify the grade and cross slope of the curb and gutter forms. The contractor shall submit the slopes and grades to the engineer immediately of any section which does not conform to the design or typical cross section. The contractor shall be solely responsible for curb and gutter pours without the approval of the engineer.
17. The earthwork for all building foundations and slabs shall be in accordance with architectural building plans and specifications.
18. Pre cast structures may be used at contractor's option.
19. Existing drainage structures to be inspected and repaired as needed, and existing pipes to be cleaned out to remove
20. Existing grade contour intervals shown at 1 foot intervals.
21. Proposed grade contour intervals shown at 1 foot intervals.
22. If any existing structures to remain are damaged during construction, it shall be the contractor's responsibility to repair and/or replace the existing structure as necessary to return it to existing conditions or better.
23. The contractor shall adhere to all terms & conditions as outlined in the general permit for storm water discharge associated with construction activities.
24. Contractor shall adjust and/or cut existing pavement as necessary to assure a smooth fit and continuous grade.
25. Contractor shall assure positive drainage away from buildings for all natural and paved areas.
26. Topographical information taken from a topographic survey by (Dudley & Associates). If contractor does not accept existing topography as shown on the plans, without exception, he shall have made, at his expense, a topographic survey by a registered land surveyor and submit it to the owner for review.
27. All unsurfaced areas disturbed by grading operation shall receive 4 inches of topsoil. Contractor shall apply stabilization fabric to all slopes 3H:1V or steeper. Contractor shall place sod or hydroseed to disturbed areas in accordance with city/county specifications and maintain until a healthy stand of grass is obtained.
28. Construction shall comply with all applicable governing codes and be constructed to same.
29. Contractor is responsible for verifying all utilities and notifying the appropriate utility company prior to beginning construction.
30. Site work shall meet or exceed site specifications.
31. All concrete to have a minimum 28 day compression strength of 4000 PSI.

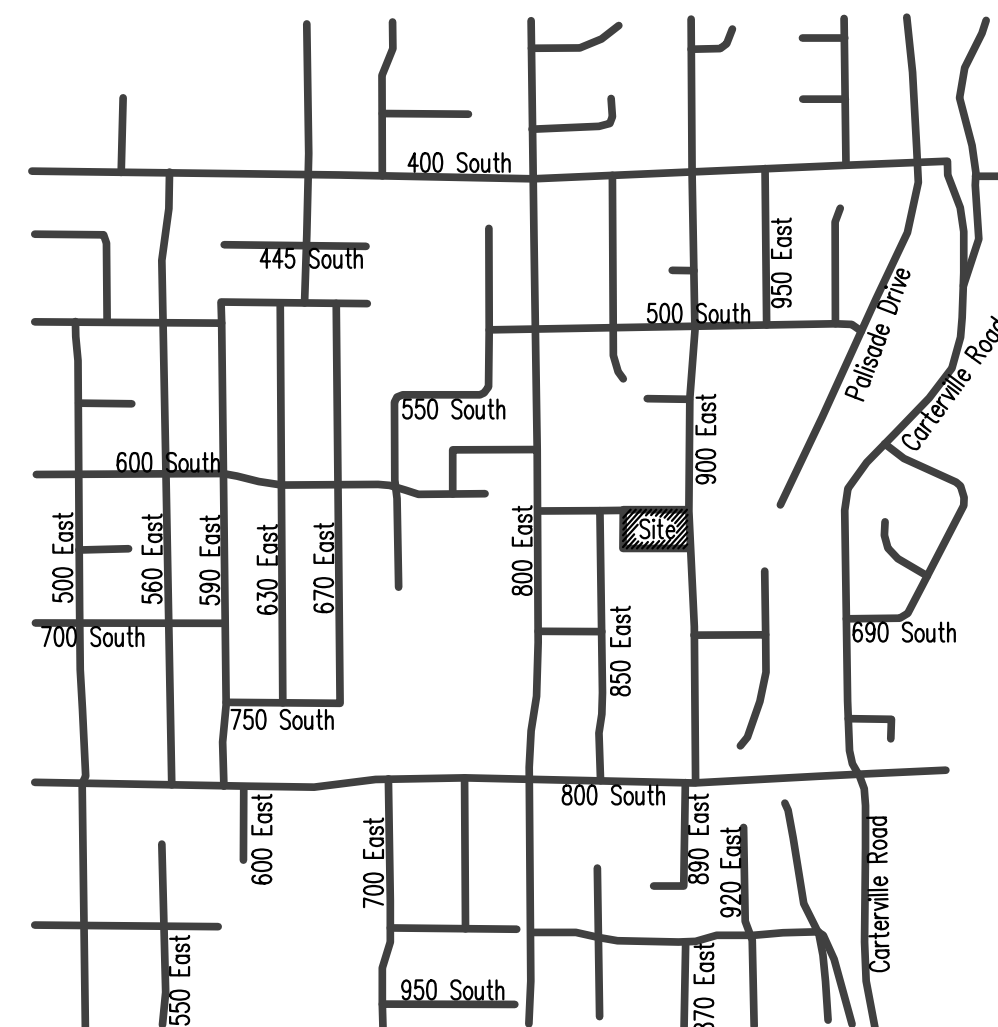
GENERAL NOTES

1. All materials, workmanship, and construction of site improvements shall meet or exceed specifications set forth in the City Public Works, Regulations and applicable state and federal regulations (including ADA guidelines). Where there is a conflict between these plans and the specifications, or any applicable standards, the higher quality standard shall apply. All work with public R.O.W. or easements shall be inspected and approved by the City Public Works Inspector and/or UDOT. Inspection services and construction certification to be provided by engineer of record.
2. The contractor is specifically cautioned that the location and/or elevation of existing utilities, as shown on these plans, is based on records of the various utility companies and where possible, measurements taken in the field, the information is not to be relied upon as being exact or complete. The contractor must call the local utility location center at least 48 hours before any excavation to requested exact field locations of the utilities. Prior to construction, the contractor shall verify pertinent locations and elevations, especially at the connection points and at potential utility conflicts. It shall be the responsibility of the contractor to relocate all existing utilities that conflict with the proposed improvements shown on these plans.
3. The contractor shall be responsible for obtaining all necessary permits from all applicable agencies. The contractor shall notify the City Public Works Inspector at least 48 hours prior to the start of any earth disturbing activity, or construction on any and all public improvements.
4. The contractor shall coordinate with City and all utility companies involved with regard to relocations or adjustments of existing utilities during construction and to assure that the work is accomplished in a timely fashion and with a minimum disruption of service. The contractor shall be responsible for contacting all parties affected by any disruption of any utility service.
5. The contractor shall have one (1) signed copy of the approved plans, one (1) copy of the appropriated standards and specifications, and a copy of any permits and extension agreements needed for the job, on-site at all times.
6. The contractor shall be responsible for all aspects of safety including, but not limited to, excavation, trenching, shoring, traffic control and security.
7. If during the construction process, conditions are encountered by the contractor, his subcontractors, or other affected parties which could indicate a situation that is not identified in the plans or specifications, the contractor shall contact the engineer immediately.
8. All references to any published standards shall refer to the latest revision of said standard, unless specifically stated otherwise.
9. The contractor shall submit a traffic control plan in accordance with the manual on uniform traffic control devices to the appropriate right-of-way authority (city, county or state) for approval, prior to any construction activities within, or affecting the right-of-way. The contractor shall be responsible for providing any and all traffic control devices as may be required buy the construction activities.
10. The contractor is responsible for providing all labor and materials necessary for the completion of the intended improvements shown on these drawings or designated to be provided, installed, constructed, removed and relocated unless specifically noted otherwise.
11. The contractor shall be responsible for keeping roadways free and clear of all construction debris and dirt tracked from the site.
12. The contractor shall be responsible for recording as-built information on a set of record drawings kept at the construction site, and available to the City Public Works Inspector at all times.
13. Dimensions for layout and construction are not to be scaled from any drawing. If pertinent dimensions are not shown, contact the consultant engineer for clarification and annotate the dimension on the as-built record drawings.
14. All structural erosion control measures shall be installed, at the limits of construction, prior to any other ground-disturbing activity. All erosion control measures shall be maintained in good repair by the contractor, until such time as the entire disturbed areas are stabilized with hard surface or landscaping.
15. The contractor shall sequence installation of utilities in such a manner as to minimize potential utility conflicts, in general, storm sewer and sanitary sewer should be constructed prior to installation of water lines and dry utilities.
16. All work within the public right-of-way is subject to the jurisdiction of the City Engineering Department Standard Details Specifications and Utah Department of Transportation Standard Details and Specifications.
17. The contractor shall submit a phasing plan for all work in all public roads and R.O.W.'s to the City before beginning any work on these streets. Contractor shall begin work only after City approves the phasing plan, and a preconstruction meeting is held between the city, the engineer and the contractor.
18. All operations conducted on the premises, including the warming up, repair, arrival, departure, or running of trucks, earthmoving equipment, construction equipment and any other associated equipment shall be limited to the period between 7:00 a.m. and 10:00 p.m. everyday, unless otherwise approved by the city.
19. It is the responsibility of the contractor to coordinate all utility relocations consistent with the contractor's schedule for this project. Whether shown or not shown as it relates to the construction activities contemplated in these plans.
20. Contractor shall be responsible for obtaining all temporary power and water to the site, paying all fees excluding top fees and system development fees, referring to the geotechnical report prepared by (EarthTec Testing and Engineering P.C.)
21. In general, limits of site work are up to (and excluding) constructing sidewalks.

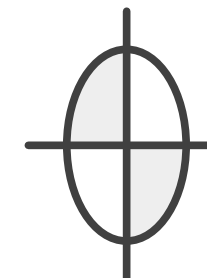


Orem

Utah



Vicinity Map



DUDLEY AND ASSOCIATES
ENGINEERS PLANNERS SURVEYORS
353 EAST 1200 SOUTH, OREM, UTAH
801-224-1252

Utah

Home Again Lane

Preliminary Plat

Orem City

NOTES:

1. The fire protection items (fire hydrant, water mains, access roads, etc.) shown on this site plan are preliminary only. Detailed fire protection plans shall be submitted with the building plans. Plan reviews by the fire Prevention Bureau shall be completed prior to the issuance of a building permit. The plan reviews by the Fire Prevention Bureau may identify additional fire protection requirements mandated by the International Fire Code. Fire hydrant foot valves shall be installed at the connection point with the main water lines.
2. All landscaped areas shall have an automatic, underground sprinkling system with a back-flow device to the building. Back-flow devices shall be installed and tested in accordance with the City Code. Water meters shall be located at the back of sidewalk or curb in an area that is accessible for reading and servicing. Water meters shall not be located within areas enclosed with fences or within 10 feet (10') of any existing or proposed structure.
3. If required by the City Code or by the applicant's permit for Industrial Wastewater Discharge, a sampling manhole and fat and oil separator/grease trap shall be installed A.W. City standards and specifications.
4. All signage shall comply with the requirements of the City Code.
5. All utilities, including water and sewer laterals, water and sewer mains, storm water drains, storm water sumps, sewer manholes, water valves, etc., shall not be located under covered parking areas and shall be installed according to the City Code.
6. All roof drainage shall be routed through on-site storm water management facilities.
7. At the time of construction, the City of may determine based on professional experience and judgment and at its sole discretion, the need for the Owner/Developer to pay for, remove, and replace any existing substandard improvements such as curbs, gutters, sidewalks, drive approaches, driveways, decorative concrete, wheelchair ramps, etc., or any unused drive approaches.
8. All construction shall conform to the City of construction standards and specifications unless the improvement is within the UDOT right-of-way, in which case the construction shall conform to UDOT construction standards and specifications.

Developer:

Alan & Karen Ashton
641 S. Palisade Drive
Orem Utah 84097
utcustomhomes@gmail.com

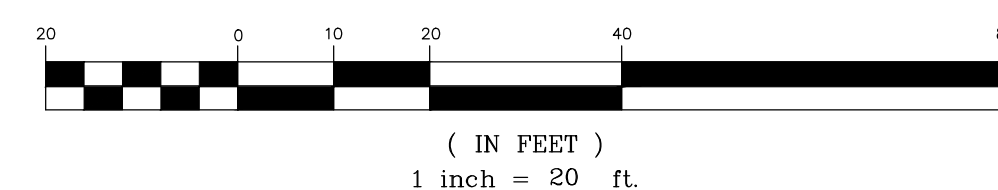
Engineer:

Dudley and Associates, Inc.
353 East 1200 South
Orem, Utah 84058
801-224-1252

Site Data:

Zone = R-8
Total Area = 45541 SF or 1.05 Acres
Total number of Lots = 3

GRAPHIC SCALE



Sheet No.
C - 2

CAUTION!!! Notice to contractors

The Contractor is specifically cautioned that the location and/or elevation of existing utilities as shown on these plans is based on records of the various utility companies and where possible from measurements taken in the field. The information is not to be considered exact or complete. The Contractor must notify the utility location center at least 48 hours prior to any excavation to request the exact location of the utilities in the field. It shall be the responsibility of the Contractor to relocate all existing utilities which conflict with the proposed improvements shown on the plan.

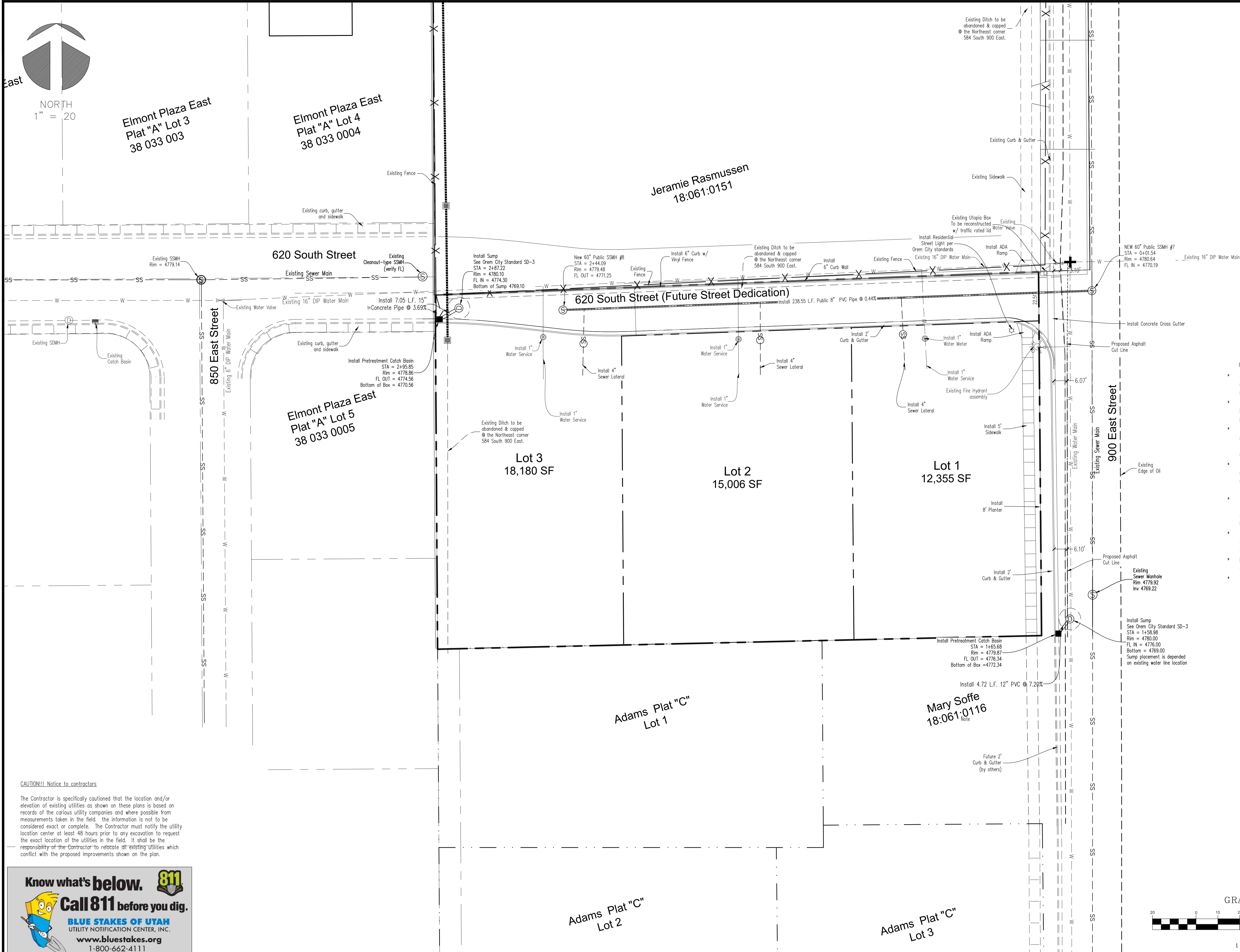
Know what's below.  **Call 811 before you dig.**

BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC.
www.bluestakes.org
1-800-662-4111

Adams Plat "C"
Lot 1

Mary Soffe
18:061:0116
Note

Fu
Curb &
(by



CAUTION!!! Notice to contractors

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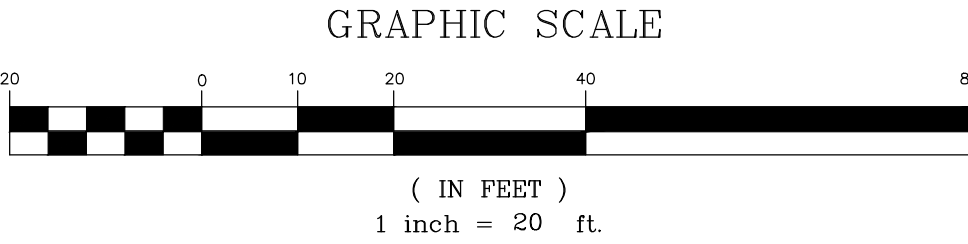


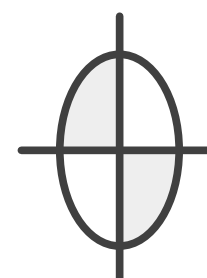
Know what's below.
Call 811 before you dig.



BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC.
www.bluestakes.org
1-800-662-4111

- City of Orem Water Standards Notes
- 3' minimum horizontal separation, 3' minimum vertical separation must be maintained from city utilities.
 - All water meters are to be located in landscaping. Water meters cannot be placed within driveways.
 - Trees and deep-rooted vegetation must maintain 36" of horizontal clearance, 10' vertical clearance from all water meters, fire hydrants, and water valves.
 - All landscape sprinkler connections must be a minimum of 36" from water meter. No sprinkler lines shall run through the meter can.
 - All fire lines are the responsibility of the property owner from the main shut off valve and must be maintained by the property owner.
 - All residential landscape sprinkler connections shall be protected by a approved back flow assembly.
 - No city utility shall be located under covered parking areas.
 - All utilities shall be installed according to chapter 21 of the city code.





DUDLEY AND ASSOCIATES
ENGINEERS PLANNERS SURVEYORS
353 EAST 1200 SOUTH, OREM, UTAH
801-224-1252

Home Again Lane

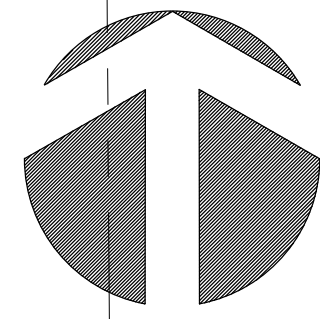
Utility Plan

Utah
Orem

Revisions
5-16-2026
6-5-2026

Date	3-25-2026
Scale	1"=20'
By	BHT
Tracing No.	L -

Sheet No.	C -3
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NORTH
1" = 20'

Elmont Plaza East
Plat "A" Lot 3
38 033 003

Elmont Plaza East
Plat "A" Lot 4
38 033 0004

620 South Street

850 East Street

Elmont Plaza East
Plat "A" Lot 5
38 033 0005

Lot 3
18,180 SF

Lot 2
15,006 SF

Lot 1
12,355 SF

Adams Plat "C"
Lot 1

Mary Soffe
18:061:0116
Note

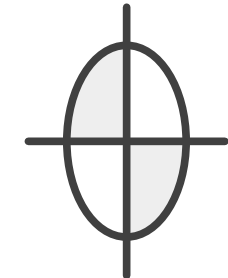
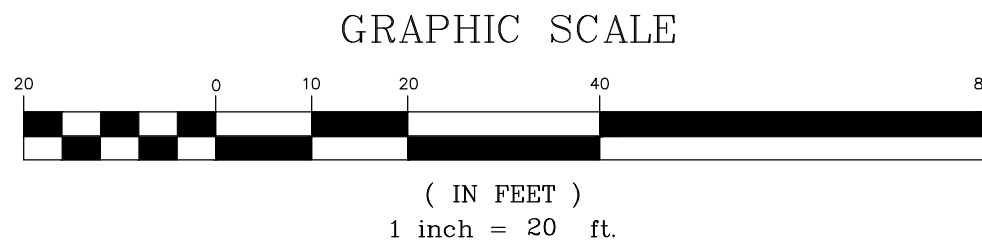
Adams Plat "C"

plat "C"

CAUTION!!! Notice to contractors

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Know what's below. 811
Call 811 before you dig.
BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC.
www.bluestakes.org
1-800-662-4111



DUDLEY AND ASSOCIATES
ENGINEERS PLANNERS SURVEYORS
353 EAST 1200 SOUTH, OREM, UTAH
801-224-1252

Home Again Lane

Grading and Drainage Plan

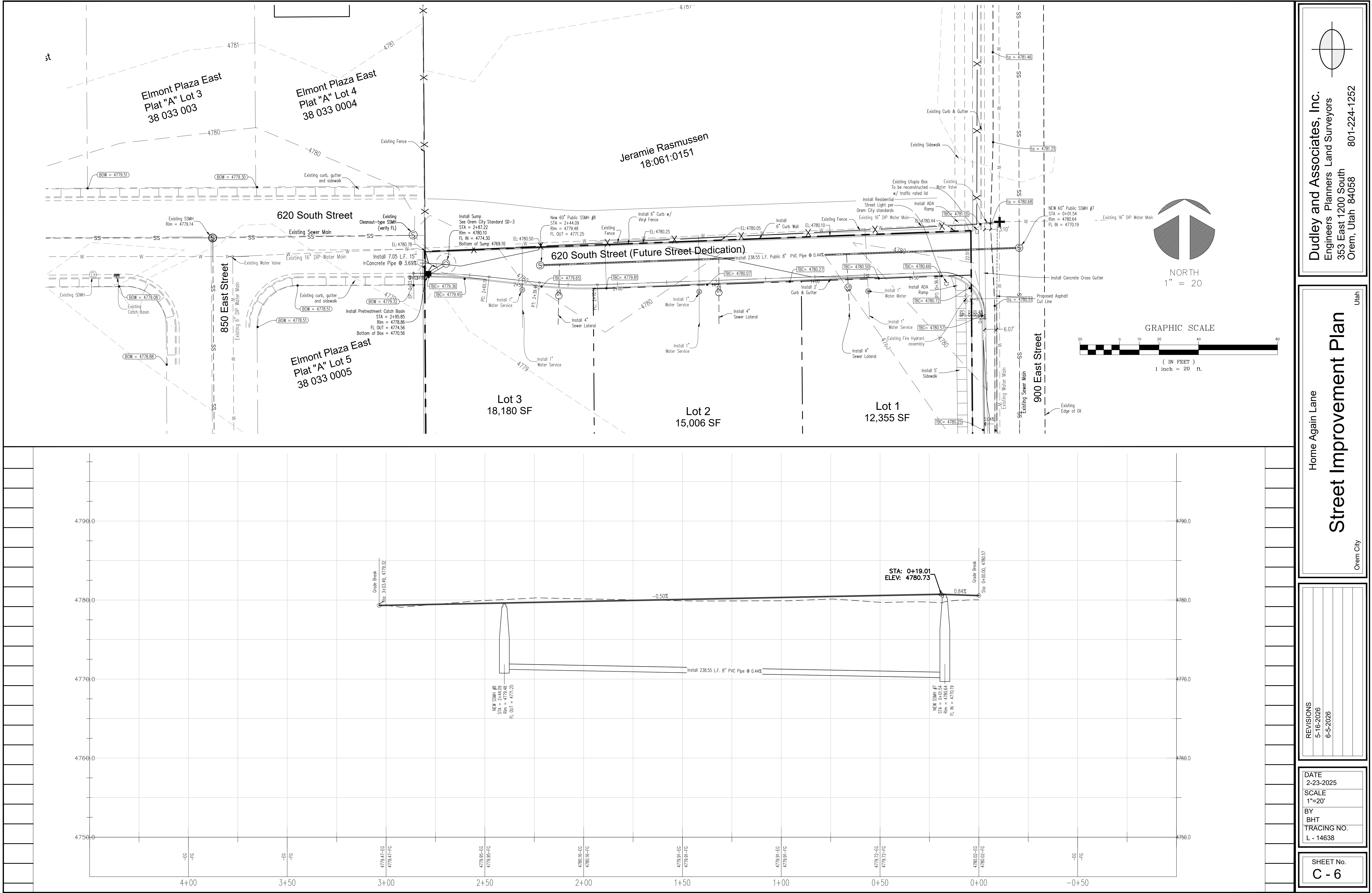
Utah

Orem City

Revisions
5-16-2026
6-5-2026

Date
3-25-2026
Scale
1"=20'
By
BHT
Tracing No.
L -

Sheet No.
C -4



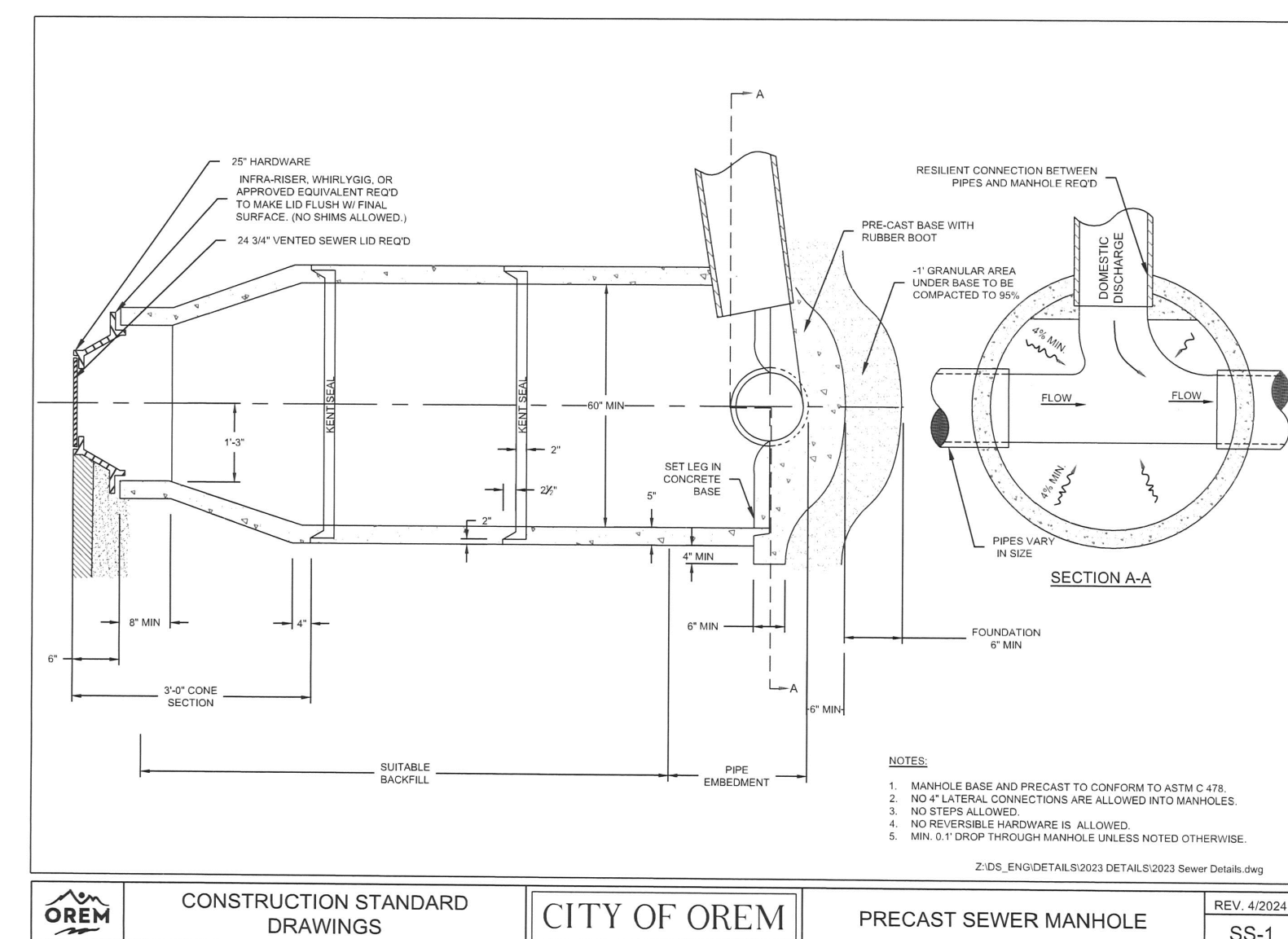
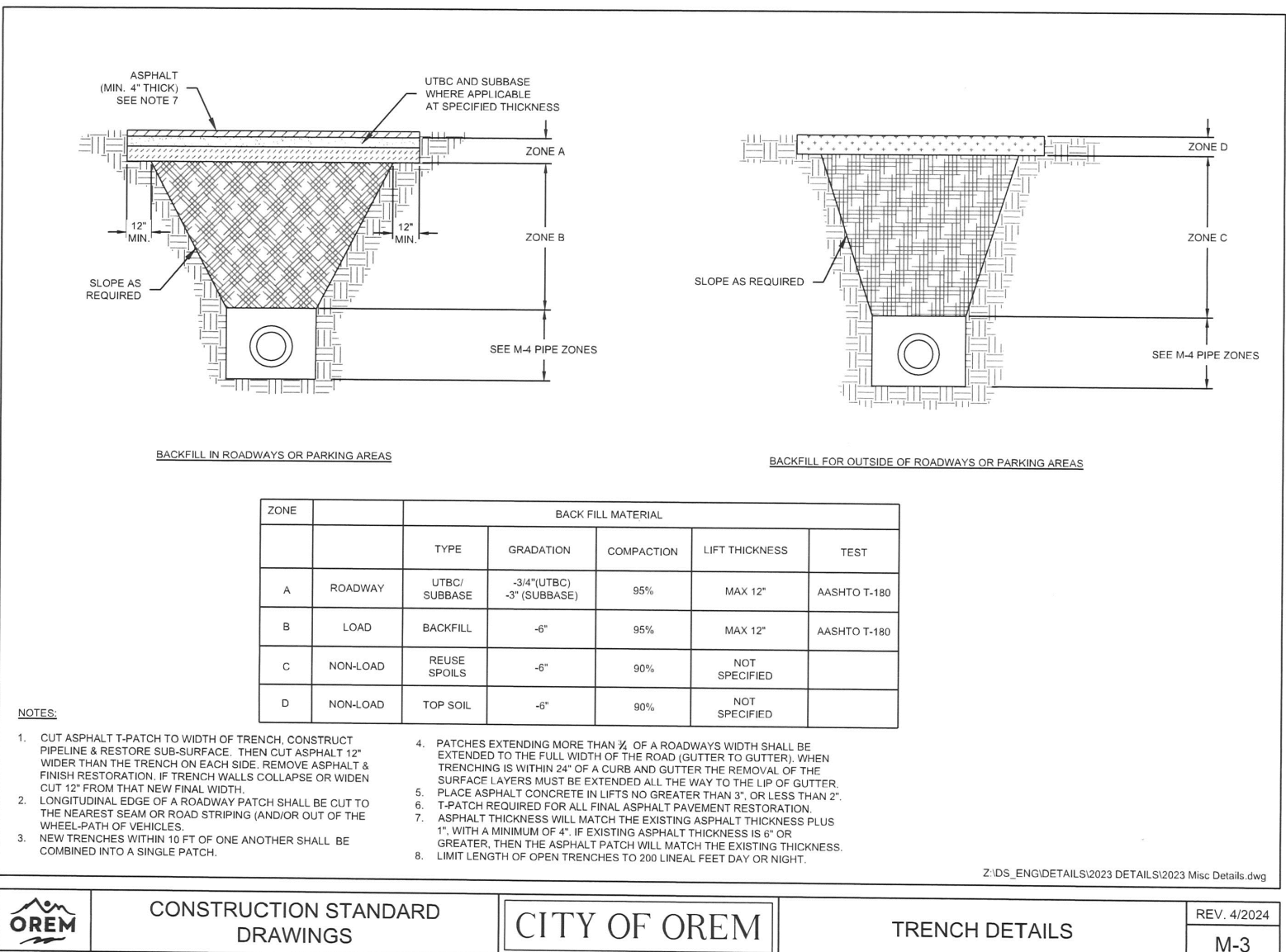
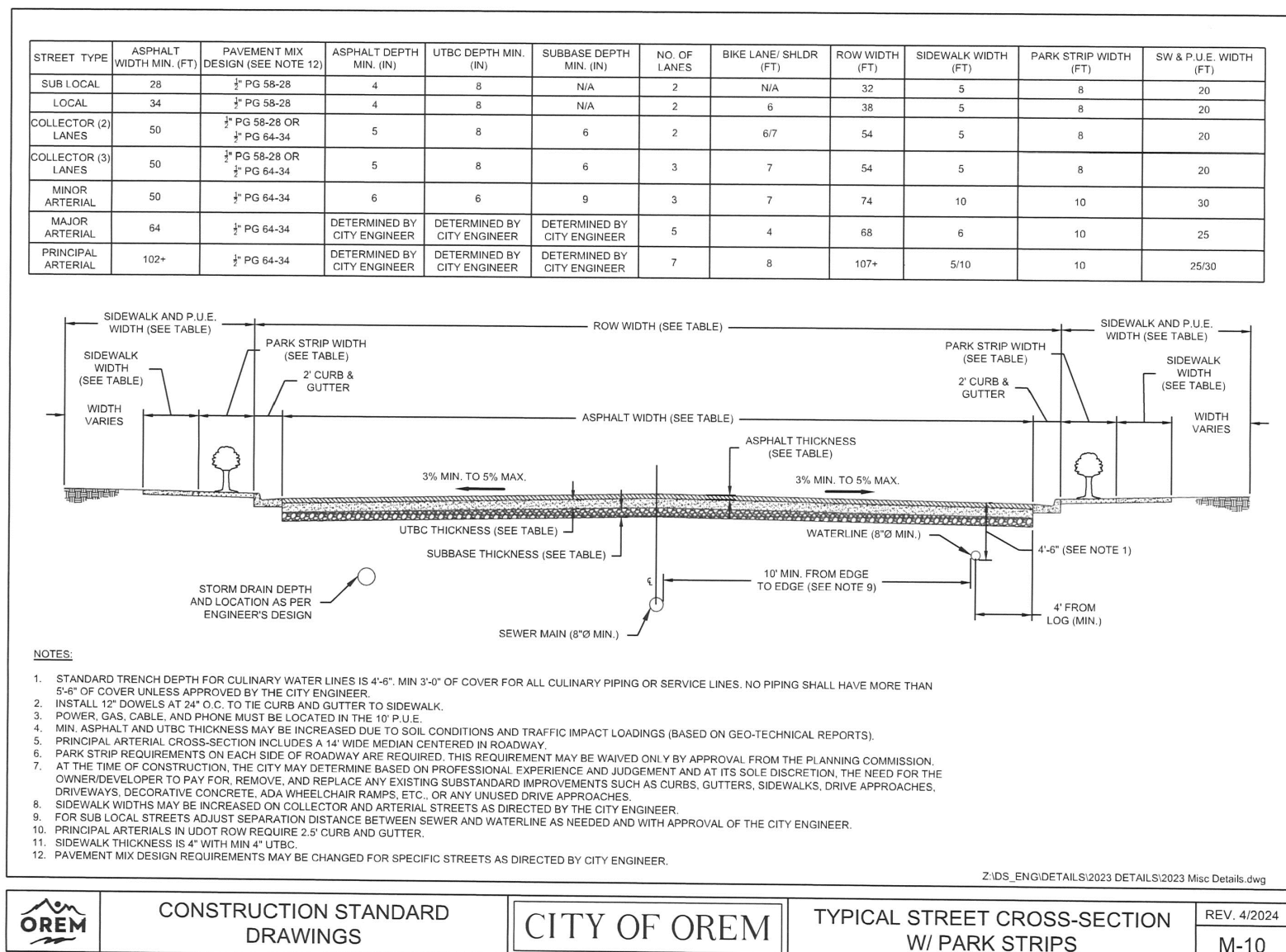
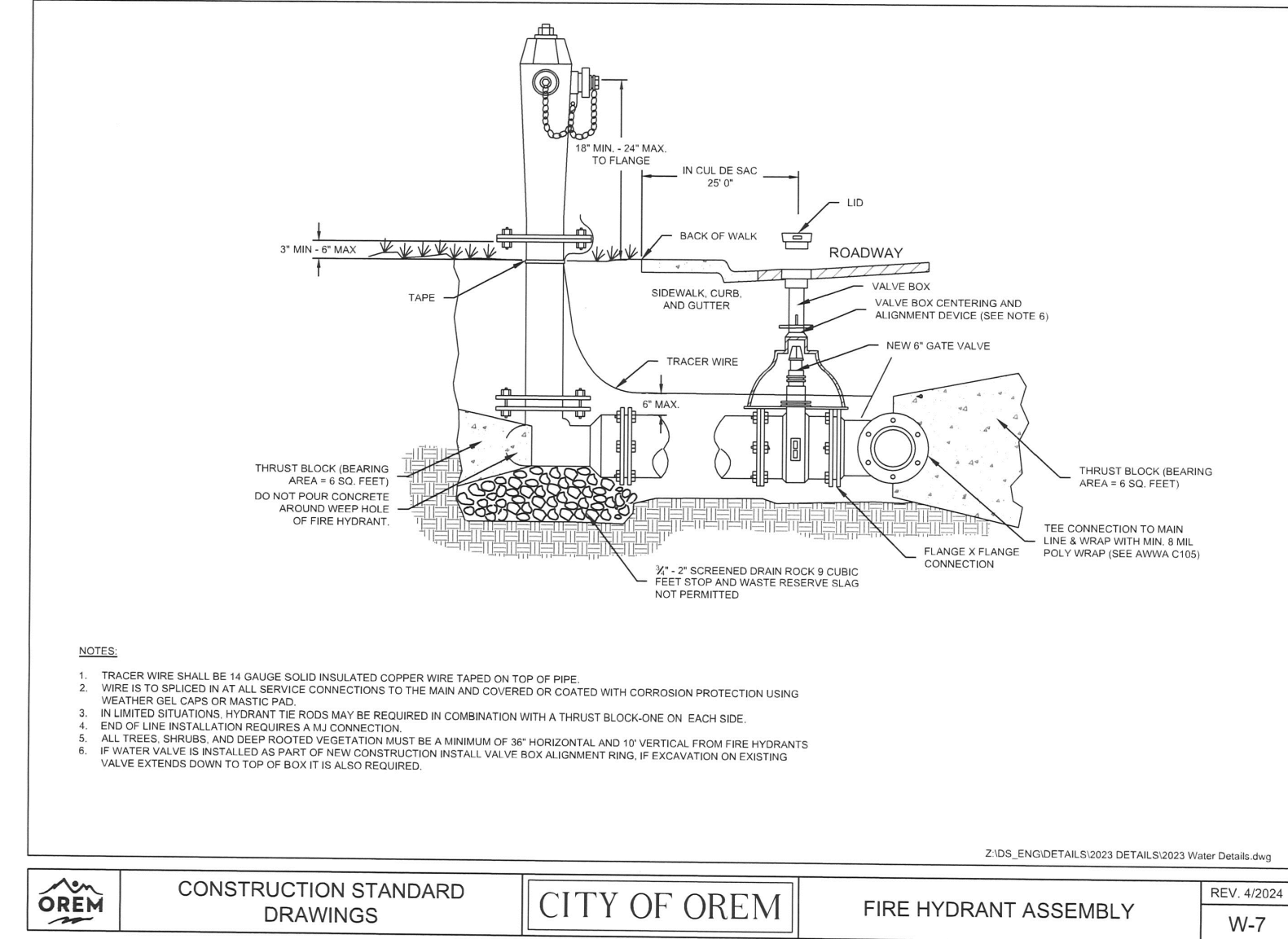
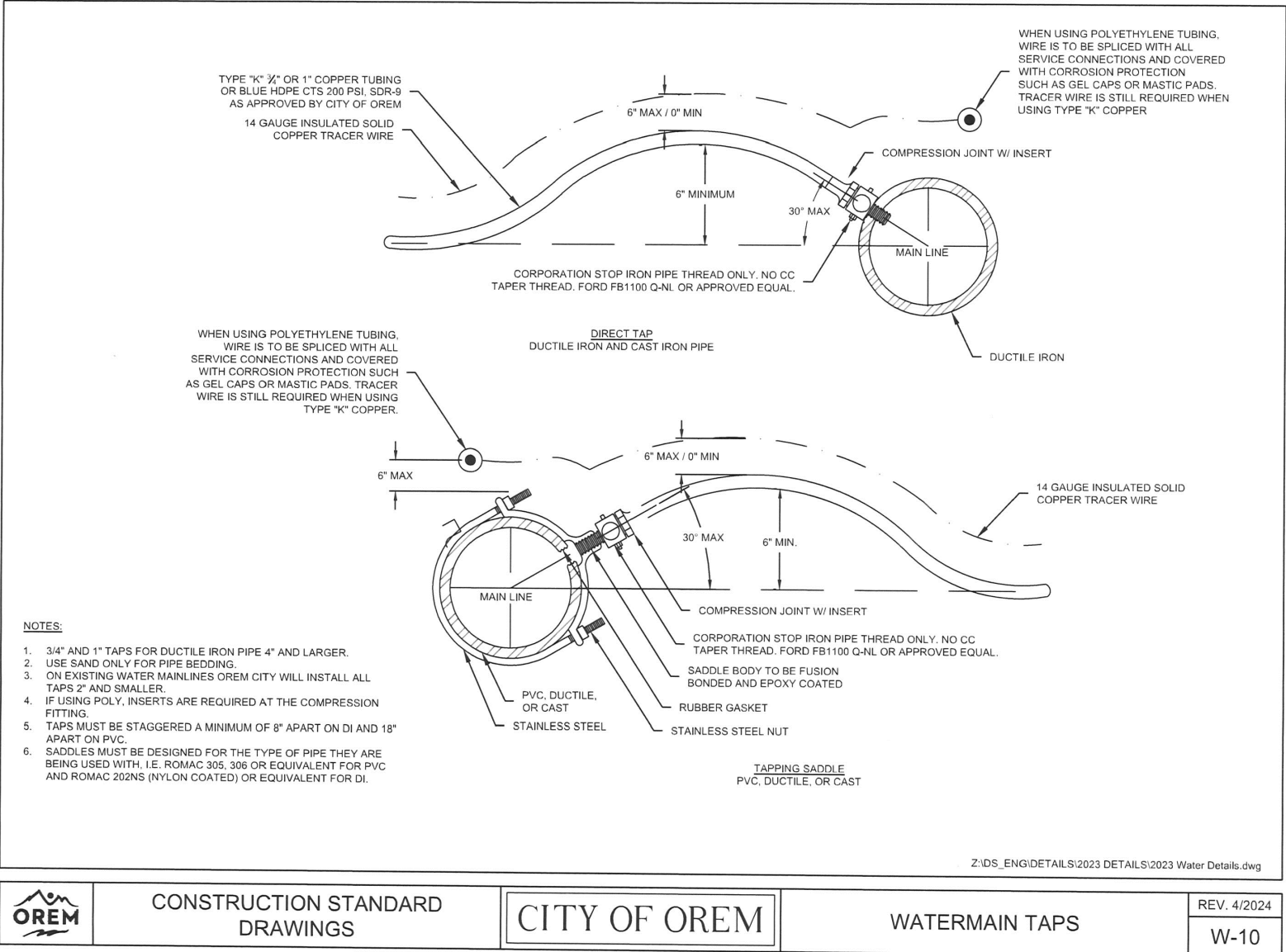
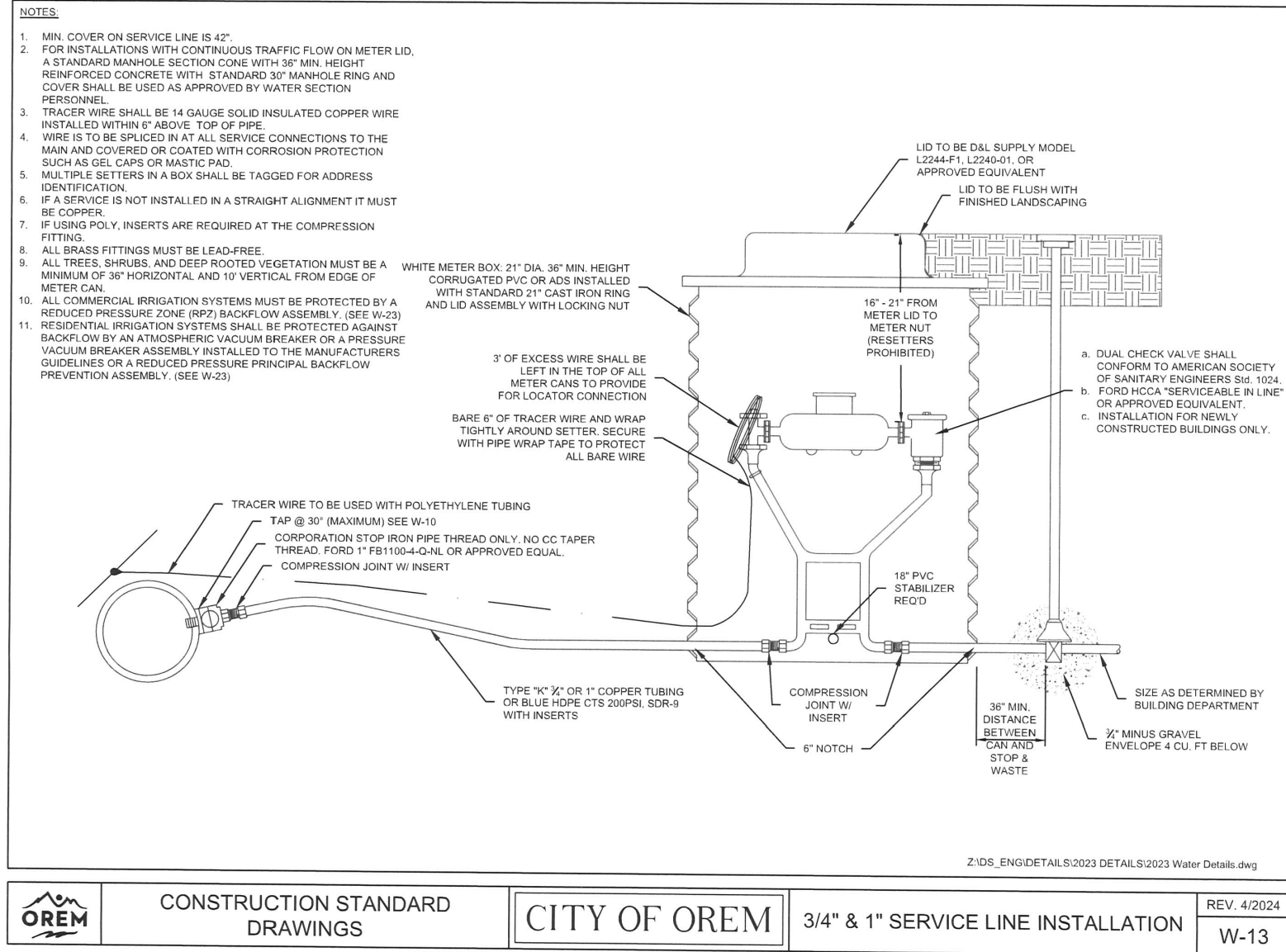
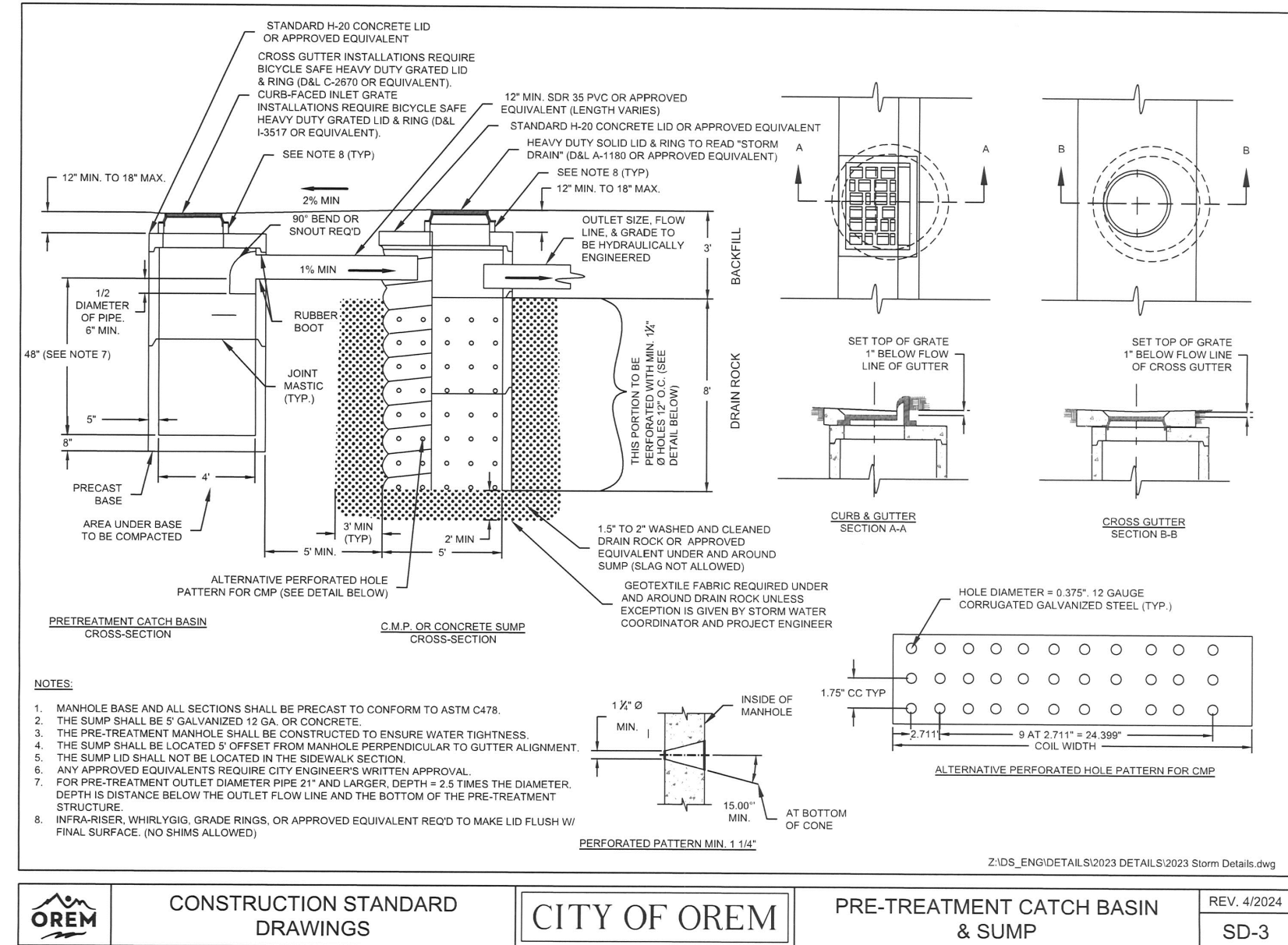
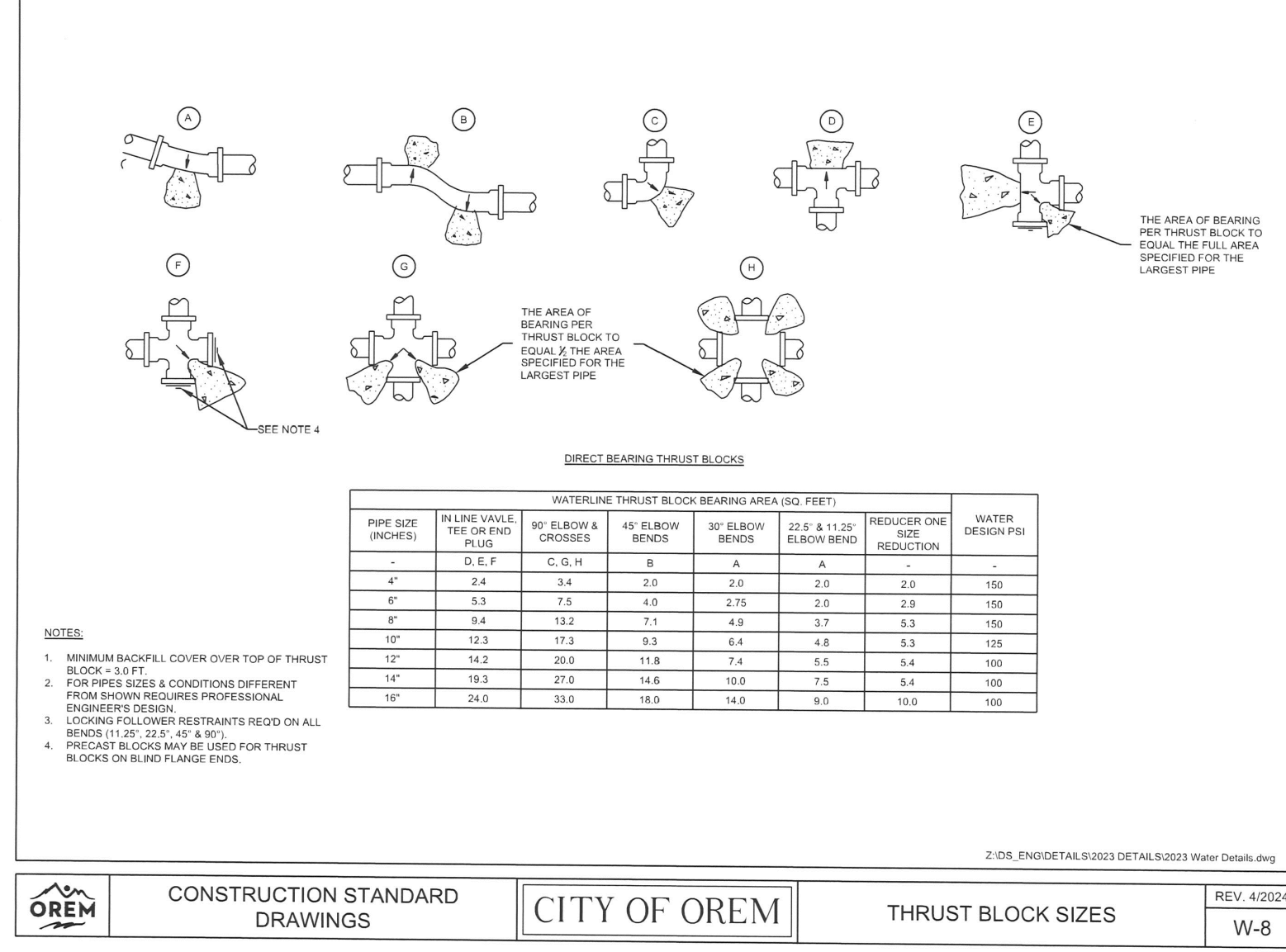
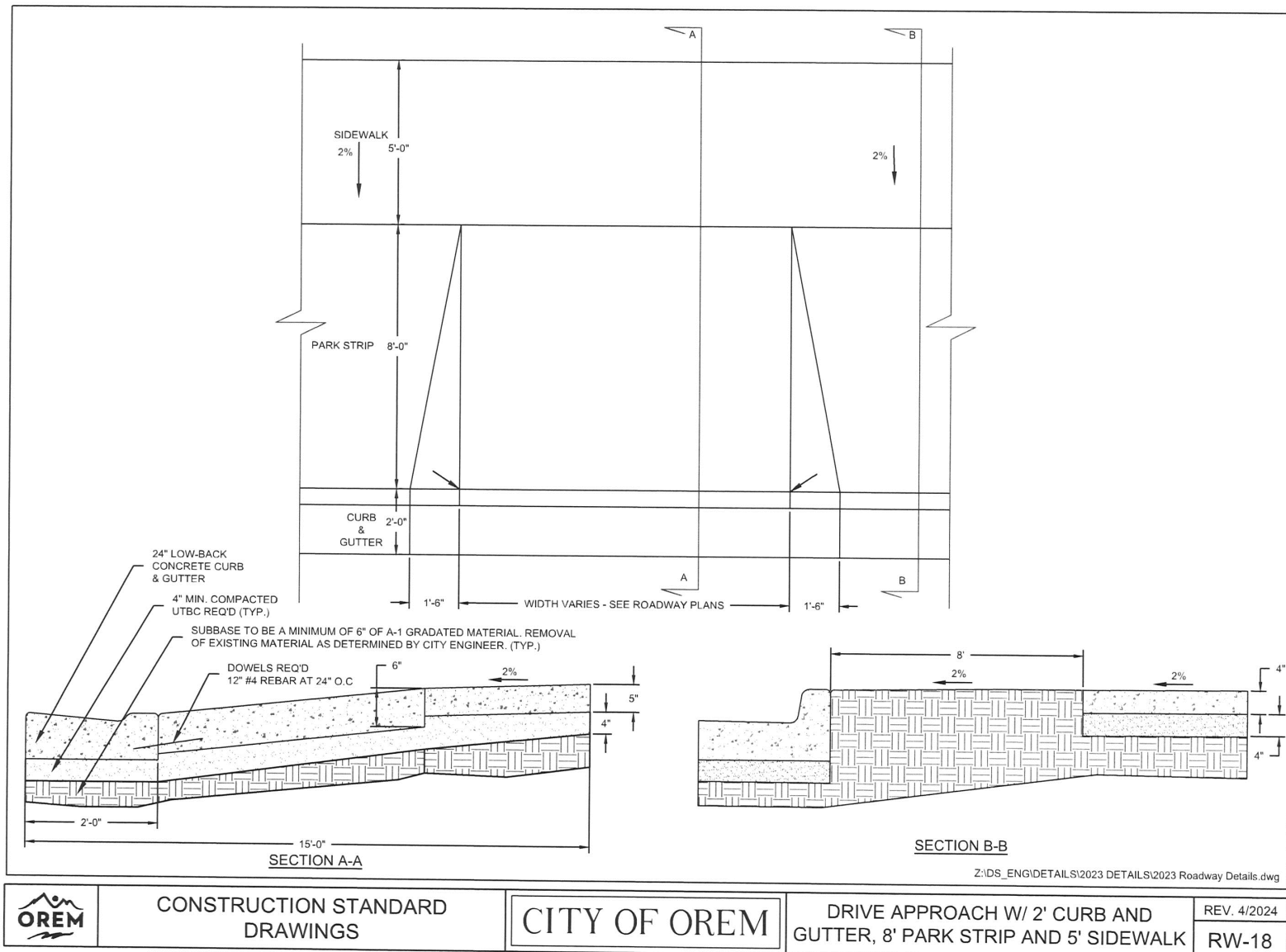
Dudley and Associates, Inc.
Engineers Planners Land Surveyors
353 East 1200 South
Orem, Utah 84058
801-224-1252

Home Again Lane
Street Improvement Plan
Orem City
Utah

REVISIONS
5-16-2026
6-5-2026

DATE
2-23-2025
SCALE
1"=20'
BY
BHT
TRACING NO.
L - 14638

SHEET No.
C - 6



DUDLEY AND ASSOCIATES
ENGINEERS PLANNERS SURVEYORS
353 EAST 1200 SOUTH, OREM, UTAH
801-224-1252

Home Again Lane
DETAIL SHEET

Revisions

Date

Scale

By
BHT
Tracing No.

Sheet No.
C-7

Provo Bench Canal & Irrigation Company

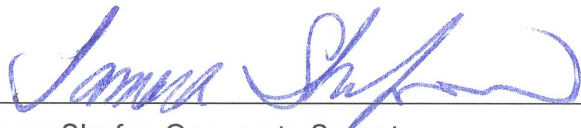
1156 South State Street Suite 201, Orem Utah 84097

provobenchcanal.com / tamara@provobenchcanal.com /801-225-6746

June 5, 2026

To Whom It May Concern,

This will verify that the irrigation ditches located in the property at 620 South 900 East in Orem can be abandoned and will not convey further irrigation and will be capped at an appropriate location to ensure no continued use.



Tamara Shafer, Corporate Secretary

Board of Trustees

Juan Garrido (President)
Reed Price (Vice President)
Steven Heaps
Rick Maloy
Van Broderick
Greg Ferguson
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801-358-9176

Secretary

Tamara Shafer 801-225-6746

Treasurer

Jaden Shafer 801-225-6746



Street view of 664 South 900 East

	PLANNING COMMISSION June 17th, 2026		Item 4.2
	Costco Fuel Center Relocation 648 East 800 South Site Plan Approval, On-Site Relocation of the Costco Fuel Center		Prepared By: Rebecca Gourley Applicant: Joshua Beach

Notices:

Posted in 2 public places.
 Posted on City Webpage and City hotline.
 Posted at Utah.gov/pmn.

Site Information:

General Plan Designation:
Regional Commercial

Zoning: **PD-34**

Total Acreage: **13.163**

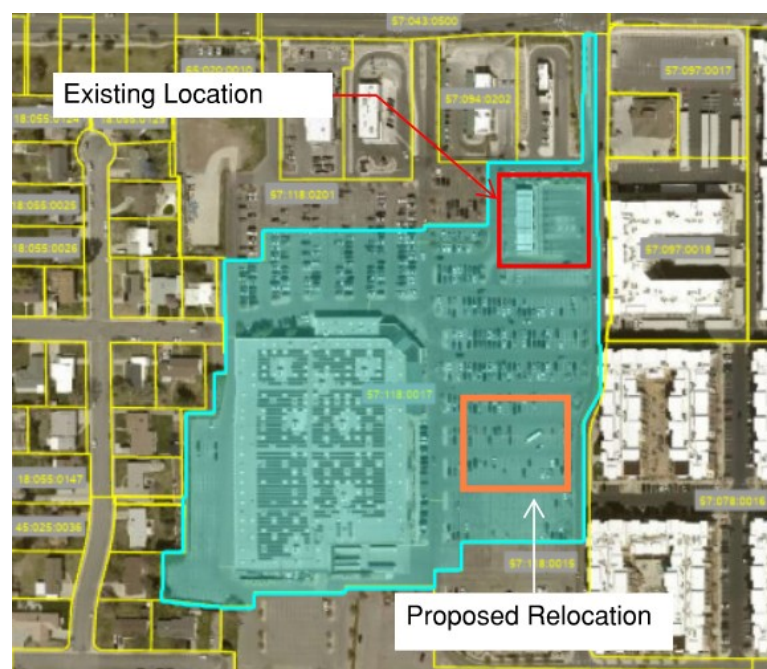
Action:

The Planning Commission is the Land Use Authority and the approving body for this item.

REQUEST: The applicant requests site plan approval to relocate the existing Costco Fuel Center to the southern portion of the parking lot. Changes to parking, utility, and traffic flow are included.

BACKGROUND: On January 19th, 2026, Mr. Beach applied for site plan approval to relocate and expand the Costco Fuel Center. The current Fuel Center is located at approximately 648 East 800 South, south of the Quick Quack and former Quench It. It provides 8 multi-product gas dispensers and 8 queue lines, allowing a total of 16 customers to fuel at a time.

The applicant proposes to relocate and re-orient the Fuel Center to the southern end of the Costco parking lot. The new Fuel Center will provide 16 multi-product gas dispensers and 8 queue lines, allowing a total of 32 customers to fuel at a time.



REVIEW:

Zoning: The subject site location is zoned PD-34. The purpose of the zone is to “allow development of a regional shopping center and mixed-use development” (22-11-47) by permitting a variety of uses. These uses include, but are not limited

to, apartments; live-work units; fast food and restaurant establishments; retail sales of furniture, apparel and accessories; grocery stores; and gasoline service stations with or without a store. A full list of these uses can be accessed in section 22-11-47(C) of the Orem City Code.

Building Materials: Per section 22-11-47(H)(7), building materials in the PD-34 are restricted. The Fuel Center and its accompanying control station are to be built primarily with metal fascia, which is a permitted material, and the design is to match the existing structures. Elevations are attached to the Planning Commission packet.

Landscaping: The PD-34 zone requires landscaping in all non-hardscaped areas, which includes end islands and parkstrip barriers. This site plan meets all landscaping requirements by providing mulch, bushes, and a total of 24 trees throughout the site.

Utilities: The project proposes a new electrical service line for the facility, as well as two relocated fire hydrants. The site will maintain three 40,000-gallon underground storage tanks (UST), one 30,000-gallon diesel UST, and one 3,000-gallon split-additive UST. A bio-retention basin has been proposed on the south side of the project. Excess stormwater is to be rerouted to the existing retention system for the site.

Access & Traffic: The Fuel Center proposes access from 700 East. The applicant proposes white solid lines and arrow markings to demarcate the lane and traffic flow. The Fuel Center access lane meets distance requirements from the Aston's access intersections.

The applicant provided a 2022 transportation assessment. It was determined that this project is not anticipated to generate a significant number of new vehicle trips, as fuel purchases are limited to Costco members. Traffic Engineering found this report sufficient and determined additional traffic studies were not necessary.

Parking: The southern parking lot currently accommodates 372 parking stalls. The site plan proposes reducing the amount of parking stalls in the southern parking lot to 158, while adding 281 stalls to the northern lot. This will result in a net increase of 68 parking stalls.

DEVELOPMENT REVIEW COMMITTEE: The Development Review Committee (DRC) reviewed the site plan application on Tuesday, May 26th, 2026. The DRC recommended approval and did not forward any specific conditions to the Planning Commission.

ACTIONS: The Planning Commission is the designated Land Use Authority for the site plan. The Commission may approve or deny the request for site plan approval or may choose to continue their consideration of the request and ask for additional information or analysis.

ALTERNATIVE MOTIONS:

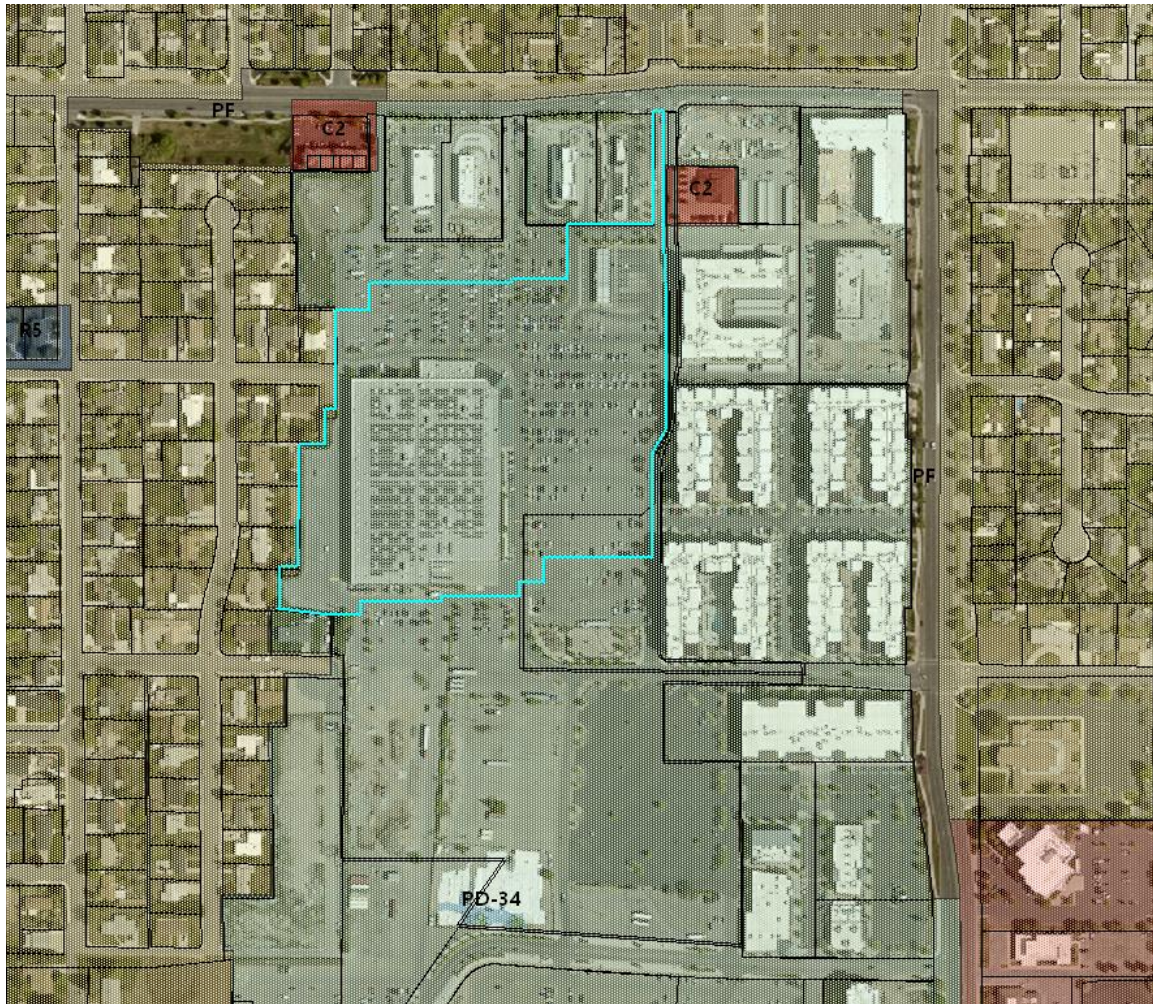
Motion to Approve or Deny -

“I move that the Planning Commission [choose **APPROVE** or **DENY**] the Site Plan for the Costco Fuel Center Relocation.”

Motion to Continue the Request –

“I move that the Planning Commission continue this request to [choose appropriate date or condition].”

Costco Store and Fuel Center – 648 East 800 South



Legend



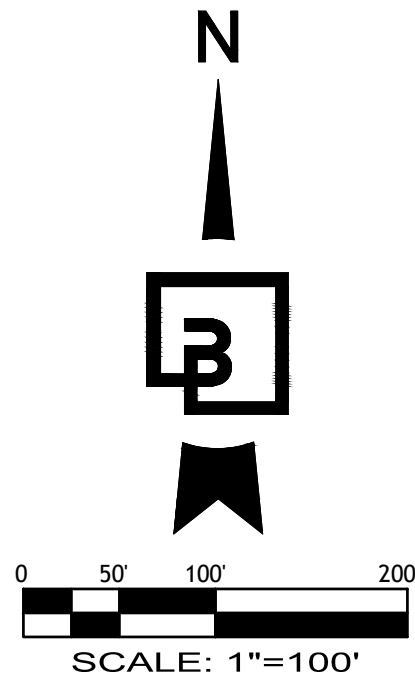
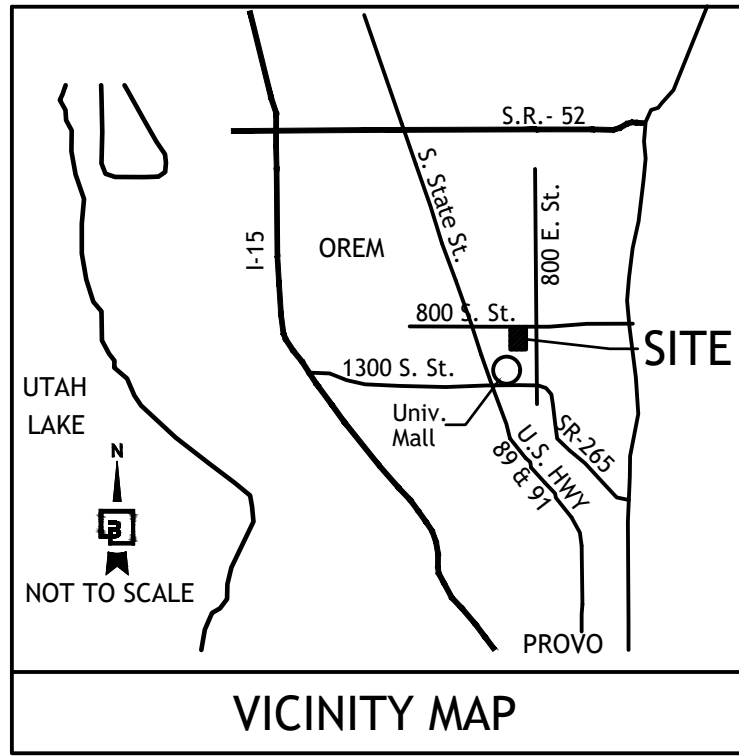
PD-34

Site Area

Current Zone: PD-34
Acres: 13.168

Neighborhood

Hillcrest



COSTCO WHOLESALE

PRELIMINARY COVER SHEET COSTCO WHOLESALE FUEL FACILITY 648 E 800 SOUTH - OREM, UT 84097 COSTCO WHOLESALE FUEL FACILITY #484

GENERAL SITE DEVELOPMENT NOTES:

- THE CONTRACTOR SHALL OBTAIN AND HAVE AVAILABLE COPIES OF THE APPLICABLE GOVERNING AGENCY STANDARDS AT THE JOB SITE DURING THE RELATED CONSTRUCTION OPERATIONS.
- CONTRACTOR SHALL ENSURE THAT ALL NECESSARY PERMITS HAVE BEEN OBTAINED PRIOR TO COMMENCING WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DIMENSION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION WHETHER SHOWN ON THESE PLANS OR NOT. UTILITIES OTHER THAN THOSE SHOWN MAY EXIST ON THIS SITE. ONLY THOSE UTILITIES WITH EVIDENCE OF THEIR INSTALLATION VISIBLE AT GROUND SURFACE OR SHOWN ON RECORD DRAWING PROVIDED BY OTHERS ARE SHOWN HEREON. EXISTING UNDERGROUND UTILITY LOCATIONS SHOWN ARE APPROXIMATE ONLY AND ARE SUBJECT TO A DEGREE OF UNKNOWN VARIATION. SOME UNDERGROUND LOCATIONS SHOWN HEREON MAY HAVE BEEN TAKEN FROM PUBLIC RECORDS. BARGHAUSEN CONSULTING ENGINEERS, LLC, ASSUMES NO LIABILITY FOR THE ACCURACY OF PUBLIC RECORDS OR RECORDS OF OTHERS. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL CONSULT CORE STATES GROUP TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THE PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR THE RELATIVE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF WORK AS DEFINED BY THE DRAWINGS AND IN FULL COMPLIANCE WITH LOCAL REGULATIONS AND CODES.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE APPROPRIATE UTILITIES INVOLVED PRIOR TO CONSTRUCTION.
- INSPECTION OF SITE WORK WILL BE ACCOMPLISHED BY A REPRESENTATIVE OF THE GOVERNING JURISDICTION. INSPECTION OF PRIVATE FACILITIES WILL BE ACCOMPLISHED BY A REPRESENTATIVE OF THE OWNER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE INSPECTOR 24 HOURS IN ADVANCE OF BACKFILLING ALL CONSTRUCTION.
- PRIOR TO ANY CONSTRUCTION OR DEVELOPMENT ACTIVITY THE CONTRACTOR SHALL CONTACT THE AGENCY AND/OR UTILITY INSPECTION PERSONNEL AND ARRANGE ANY REQUIRED PRE-CONSTRUCTION MEETING(S). CONTRACTOR SHALL PROVIDE ONE WEEK MINIMUM ADVANCE NOTIFICATION TO OWNER, FIELD ENGINEER AND ENGINEER OF PRE-CONSTRUCTION MEETINGS.
- THE CONTRACTOR IS RESPONSIBLE FOR WORKER AND SITE SAFETY AND SHALL COMPLY WITH THE LATEST OSHA STANDARDS AND REGULATIONS, OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE "MEANS AND METHODS" REQUIRED TO MEET THE INTENT AND PERFORMANCE CRITERIA OF OSHA, AS WELL AS ANY OTHER ENTITY THAT HAS JURISDICTION FOR EXCAVATION AND/OR TRENCHING PROCEDURES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SAFEGUARDS, SAFETY DEVICES, PROTECTIVE EQUIPMENT, FLAGGERS, AND ANY OTHER NEEDED ACTIONS TO PROTECT THE LIFE, HEALTH, AND SAFETY OF THE PUBLIC, AND TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THE CONTRACTOR. ANY WORK WITHIN THE TRAVELED RIGHT-OF-WAY THAT MAY INTERRUPT NORMAL TRAFFIC FLOW SHALL REQUIRE AT LEAST ONE FLAGGER FOR EACH LANE OF TRAFFIC AFFECTED.
- PROTECTIVE MEASURES SHALL BE TAKEN BY THE CONTRACTOR TO PROTECT ALL ADJACENT PUBLIC AND PRIVATE PROPERTIES AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF ALL EXISTING UTILITY SERVICES THAT ARE TO REMAIN OPERATIONAL WITHIN THE CONSTRUCTION AREA WHETHER SHOWN OR NOT SHOWN ON THE PLANS.
- TWO (2) COPIES OF THESE APPROVED PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS. ONE (1) SET WITH RECORDS OF AS-BUILT INFORMATION SHALL BE SUBMITTED TO CORE STATES GROUP AT COMPLETION OF PROJECT.
- CONTRACTOR SHALL OBTAIN SERVICES OF A LICENSED LAND SURVEYOR TO STAKE HORIZONTAL CONTROL FOR ALL NEW IMPROVEMENTS. STAKING CONTROL SHALL BE TAKEN FROM ELECTRONIC PLAN FILES PROVIDED BY CORE STATES GROUP.
- CONTRACTOR SHALL REQUEST FROM CORE STATES GROUP, PRIOR TO ANY CONSTRUCTION STAKING OR CONSTRUCTION WORK, A FORMAL CONSTRUCTION RELEASE PLAN SET OR SPECIFIC RELEASE IN WRITING. THE APPROVED AGENCY PERMIT DRAWINGS WILL NOT BE CONSIDERED CONSTRUCTION RELEASE PLANS BY CORE STATES GROUP UNLESS CORE STATES GROUP HAS GIVEN A FORMAL WRITTEN RELEASE OR ISSUED A CONSTRUCTION RELEASE PLAN SET.

SOILS REPORT NOTES:

- THE FOLLOWING SOILS REPORT FOR THE SITE SHALL BE CONSIDERED PART OF THESE CONSTRUCTION DOCUMENTS:

GEOTECHNICAL RECOMMENDATIONS
PROPOSED FUEL FACILITY EXPANSION
COSTCO WHOLESALE WAREHOUSE C#W 18-0124
KLEINFELDER PROJECT NO. 20193429.001A
648 EAST 800 SOUTH STREET OREM, UTAH 84067
DATED DECEMBER 18, 2019

SOIL INVESTIGATION AS PERFORMED BY:
KLEINFELDER
849 WEST LEVOY DRIVE, SUITE 200
SALT LAKE CITY, UT 84123
PHONE: (801) 261-3336

- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL PROVISIONS OF THE SOILS REPORT FOR THE SITE BE OBSERVED AND COMPLIED WITH DURING ALL PHASES OF THE SITE PREPARATION, GRADING OPERATIONS, FOUNDATION, SLAB, AND PAVING CONSTRUCTION.
- ANY PROVISIONS OF THE SOILS REPORT WHICH CONFLICT WITH INFORMATION SHOWN ELSEWHERE ON THESE DRAWINGS, OR WHICH REQUIRE FURTHER CLARIFICATION, SHALL BE BROUGHT TO THE ATTENTION OF CORE STATES GROUP.
- A REPRESENTATIVE OF THE SOILS ENGINEER SHALL BE AVAILABLE TO OBSERVE AND APPROVE THE EARTHWORK OPERATIONS AND TO VERIFY FIELD CONDITIONS AS WORK PROCEEDS. THE SOILS ENGINEER SHALL SUBMIT FIELD REPORTS DOCUMENTING THAT THE METHODS AND MATERIALS OF THE EARTHWORK OPERATIONS WERE IN ACCORDANCE WITH THE RECOMMENDATION OF THE SOILS INVESTIGATION AND THAT THE WORK WAS PERFORMED TO THE SATISFACTION OF THE ENGINEER. THE CONTRACTOR SHALL MAKE ALL PROVISIONS FOR SOILS INSPECTIONS AS RECOMMENDED WITHIN THE SOILS REPORT. AT A MINIMUM, THIS INCLUDES THE OBSERVATION OF THE FOLLOWING BY A SOILS ENGINEER:
 - OVER-EXCAVATION RECOMMENDATIONS
 - PLACEMENT OF STRUCTURAL FILL MATERIAL BENEATH PAVEMENT
- THE CONTRACTOR SHALL QUALIFY ANY LIMITATIONS TO SOILS INSPECTIONS WITHIN BID PROPOSAL.

EXISTING TOPOGRAPHY/SURVEY INFORMATION NOTE:

A TOPOGRAPHIC AND BOUNDARY SURVEY PREPARED BY SMITH AND ASSOCIATES, DATED FEBRUARY 2, 2022, HAS BEEN PROVIDED AS THE EXISTING CONDITIONS MAP TO CORE STATES GROUP HAS NOT VERIFIED THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED. THE SITE DESIGN HAS BEEN BASED ON THE ABOVE-NOTED SURVEYS. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF CORE STATES GROUP.



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BASIS OF ELEVATIONS:

THE VERTICAL FOR THE ELEVATION DATA SHOWN HEREON IS THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

FEMA FLOODPLAIN:

THE SUBJECT SITE IS LOCATED WITHIN ZONE X (FEMA FIRM NO. 4902160005A DATED SEPTEMBER 24, 1984)

BASIS OF BEARINGS:

SOUTH 00°12'36" EAST, BEING THE BEARING OF THE CENTERLINE 800 EAST STREET AND THE EAST LINE OF SOUTHEAST QUARTER (SE 1/4) OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 2 EAST, SALT LAKE BASE AND MERIDIAN, CITY OF OREM, UTAH, AS SHOWN IN ENTRY NO. 19427:2001 AS MAP FILING NO. 8962 OF PLATS, OFFICIAL RECORDS UTAH COUNTY, STATE OF UTAH.

GRADING QUANTITIES:

TOTAL CUT (CY) = 1,765
TOTAL FILL (CY) = 2,147
TOTAL IMPORT/EXPORT (CY) = 380
ESTIMATED SHORED TANK EXCAVATION (CY) = 2,100

EARTHWORK QUANTITIES ARE APPROXIMATE AND HIGHLY DEPENDANT ON SOIL CONDITIONS ENCOUNTERED DURING CONSTRUCTION. CONTRACTOR SHOULD PERFORM INDEPENDENT ESTIMATE FOR BIDDING.

LEGEND			
	EXISTING CONCRETE		PROPOSED CONCRETE
	EXISTING CURB		PROPOSED SLURRY SEAL
	EXISTING CURB AND GUTTER		PROPOSED HEAVY-DUTY ASPHALT
	EXISTING EDGE OF PAVEMENT		PROPOSED LIGHT-DUTY ASPHALT
	EXISTING STORM DRAIN		PROPOSED BARRIER CURB
	EXISTING WATER LINE		PROPOSED CURB AND GUTTER
	EXISTING STORM MANHOLE		SAWCUT LINE
	EXISTING LOT LIGHT		PROPOSED SPOT GRADE
	EXISTING STORM CLEANOUT		PROPOSED GRADE LABEL
	EXISTING SIGN		MATCH EXISTING GRADE
	EXISTING TELECOM LINE		PROPOSED TOP OF PAVEMENT/ TOP OF CURB
	EXISTING SANITARY SEWER		EXISTING MINOR CONTOUR
	EXISTING POWER		EXISTING MAJOR CONTOUR
	EXISTING FIBER OPTIC		PROPOSED MAJOR CONTOUR
	EXISTING WATER		PROPOSED MINOR CONTOUR
	EXISTING LOT LIGHT POWER		
	EXISTING TREE		
	EXISTING TRANSFORMER		
	EXISTING FIRE HYDRANT		

	SQUARE FOOTAGE	ACREAGE	PERCENT
TOTAL AREA	227,630	5.226	
TOTAL BUILDING AREA	11,695 FUEL CANOPY 125 CONTROLLER 11,780 TOTAL	0.270	5.32%
TOTAL EXISTING IMPERVIOUS AREA	217,080	4.983	95.37%
TOTAL EXISTING LANDSCAPED AREA	10,550	0.242	4.635%
TOTAL EXISTING PARKING SPACES	500 SPACES		
TOTAL IMPERVIOUS AREA	208,282	4.781	91.50%
TOTAL LANDSCAPED AREA	19,348	0.444	8.50%
TOTAL PARKING SPACES	439 SPACES (NET 61 SPACE LOSS)		

NOTE: ABOVE CALCULATIONS ARE LIMITED TO WITHIN THE LIMITS OF DISTURBANCE ONLY

PROJECT DATA:

PROJECT ADDRESS: 648 E 800 S
OREM, UTAH 84097
JURISDICTION: CITY OF OREM
PARCEL NO: 57-043:0017
ZONING: PD34 - MIXED USE

DISTURBED AREA SUMMARY:

TOTAL AREA = 223,282 SF (5.13 ACRES)

IMPERVIOUS:	EXISTING 207,665 SF	PROPOSED 212,108 SF
PERVIOUS:	15,617 SF	11,174 SF

NET ADDITION OF IMPERVIOUS = 4,443 SF

CITY OF OREM ACCEPTANCE:

CITY ENGINEER: _____ APPROVAL DATE: _____

SIGNATURE: _____

UTILITY CONFLICT NOTE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DIMENSION, AND DEPTH OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT BY POTHOLING THE UTILITIES AND SURVEYING THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. THIS SHALL INCLUDE CALLING UTILITY LOCATE @ 811 AND THEN POTHOLOING ALL OF THE EXISTING UTILITIES AT LOCATIONS OF NEW UTILITY CROSSINGS TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. LOCATIONS OF SAID UTILITIES AS SHOWN ON THESE PLANS ARE BASED UPON THE UNVERIFIED PUBLIC INFORMATION AND ARE SUBJECT TO VARIATION. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL CONSULT CORE STATES GROUP TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.

Revision

Appr.

Cd.

By

Date

No.

Title:

PRELIMINARY COVER SHEET

648 E 800 S

OREM, UT 84097

COSTCO WHOLESALE FUEL FACILITY #484

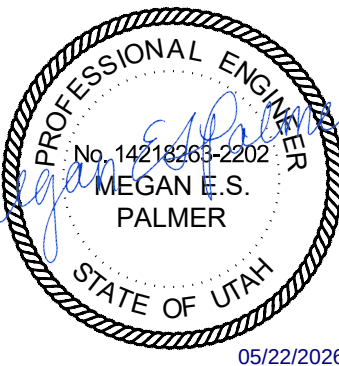


COSTCO WHOLESALE

730 LAKE DRIVE

ISSAQUAH, WA 98027

For:



Scale:

Horizontal

Vertical

1" = 100'

N/A

Designed

Drawn

Checked

Approved

Date

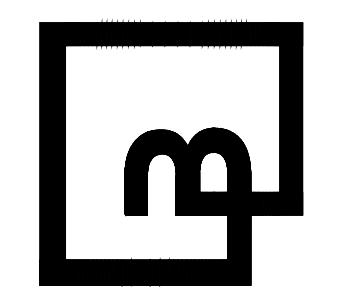
Barghausen Consulting Engineers, LLC.

18215 72nd Avenue South

Kent, WA 98032

425.251.6222

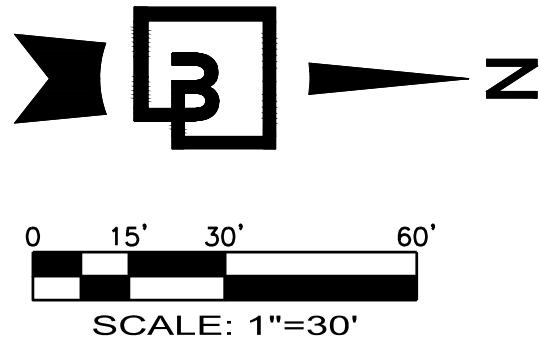
barghausen.com



Job Number
7093

Sheet

P1 of 7

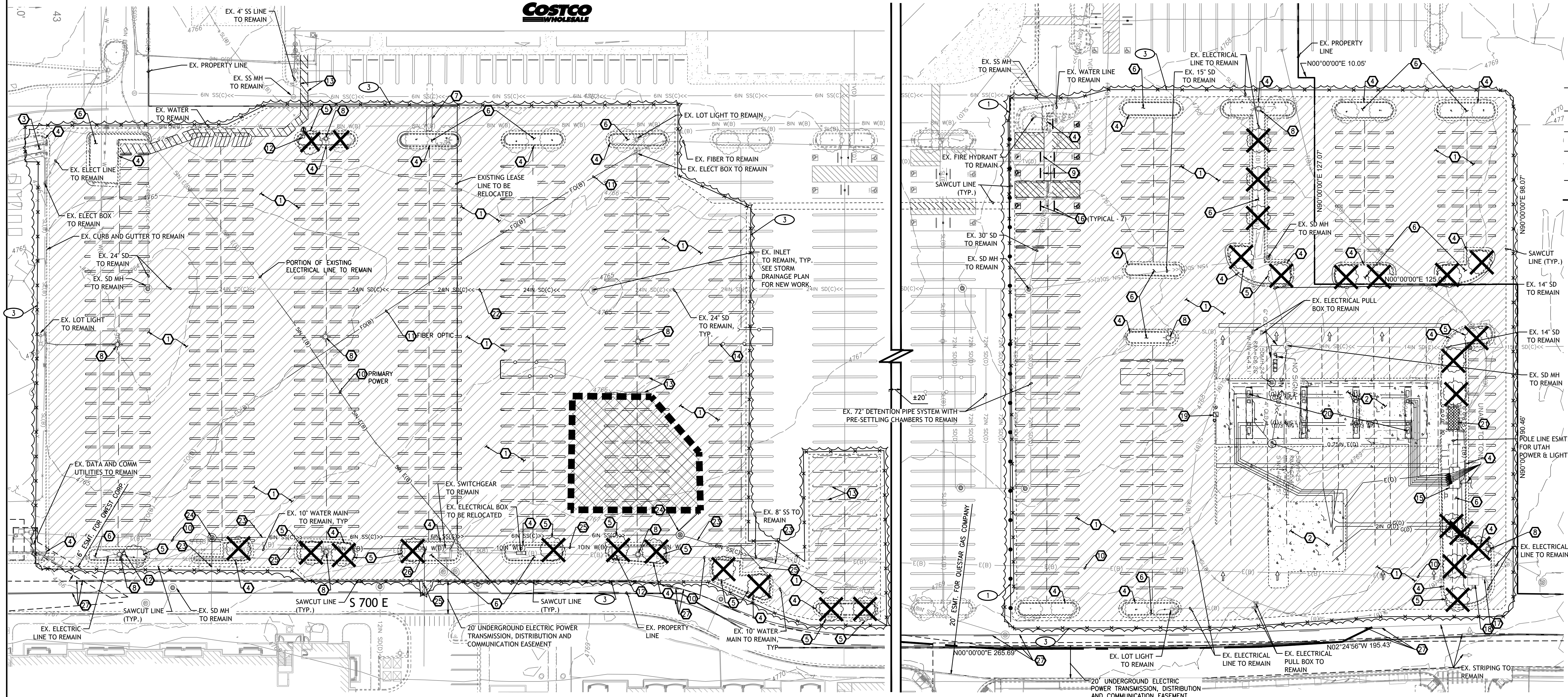


PRELIMINARY DEMOLITION PLAN

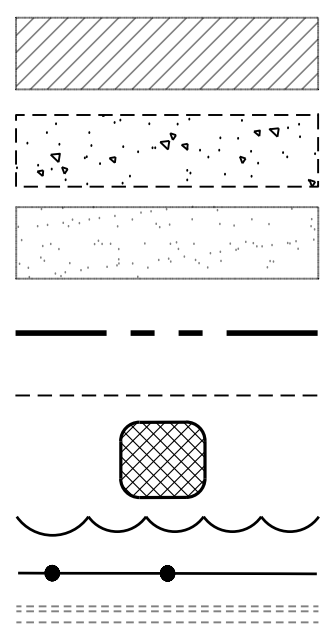
COSTCO WHOLESALE FUEL FACILITY

648 E 800 SOUTH - OREM, UT 84097

COSTCO WHOLESALE FUEL FACILITY #484



LEGEND



FULL DEPTH ASPHALT PAVEMENT REMOVAL

FULL DEPTH CONCRETE PAVEMENT REMOVAL

EXISTING CONCRETE TO REMAIN

PROPERTY LINE

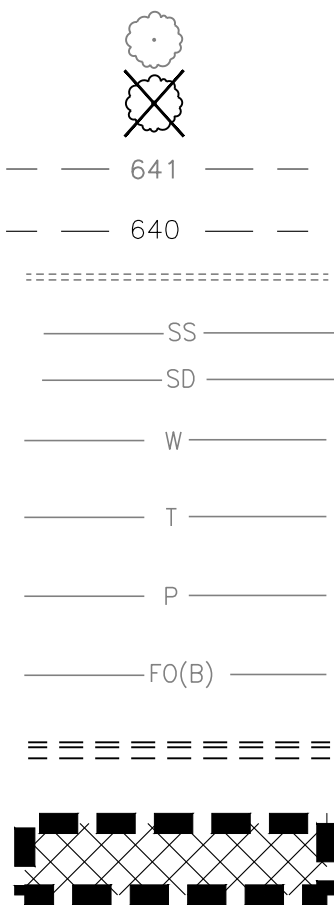
SAW CUT LINE

PROPOSED INLET PROTECTION

LIMITS OF DISTURBANCE

COMPOST FILTER SOCK

EXISTING CURB AND GUTTER TO REMAIN



EXISTING TREE TO REMAIN

EXISTING TREE TO BE REMOVED

EXISTING MINOR CONTOUR

EXISTING MAJOR CONTOUR

EXISTING CURB TO REMAIN

EXISTING SANITARY SEWER

EXISTING STORM DRAIN

EXISTING UNDERGROUND WATER LINE

EXISTING UNDERGROUND TELEPHONE LINE

EXISTING UNDERGROUND POWER

EXISTING UNDERGROUND FIBER OPTIC

EXISTING CURB AND GUTTER TO BE DEMOLISHED

PROPOSED EXCAVATION

GENERAL DEMOLITION NOTES:

1. ALL PAVEMENTS, SLABS, GROUND COVER, UTILITIES, ETC., INSIDE DEMOLITION LIMITS SHALL BE REMOVED UNLESS OTHERWISE SHOWN ON THE PLANS.
2. CONTRACTOR SHALL CONTACT AND COORDINATE WITH THE VARIOUS UTILITY COMPANIES ON REQUESTING DISCONNECTIONS, REMOVALS AND/OR RELOCATION OF EXISTING SERVICE.
3. CONTRACTOR SHALL ASSURE THAT ALL NECESSARY PERMITS AND CONSTRUCTION APPROVALS HAVE BEEN OBTAINED PRIOR TO COMMENCING WORK.
4. CONTRACTOR SHALL REPLACE ALL EXISTING CURB, PAVEMENT AND/OR LANDSCAPING DAMAGED AS A RESULT OF CONSTRUCTION ACTIVITY.
5. CONTRACTOR SHALL, PRIOR TO CONSTRUCTION OR REMOVAL OF IMPROVEMENTS, FIELD VERIFY AND CONFIRM LIMITS OF DEMOLITION AS WELL AS EXISTING UTILITIES AND IMPROVEMENTS TO REMAIN.

EROSION/SEDIMENT CONTROL CALLOUTS:

1. CONTRACTOR TO INSTALL COMPOST FILTER SOCK, SILT FENCE OR OTHER APPROVED PERIMETER PROTECTION AT ALL PERIMETER LOCATIONS OF PROJECT SITE AS REQUIRED TO PREVENT SILT-LADEN RUNOFF FROM LEAVING SITE, AND AS DIRECTED BY INSPECTOR OF AUTHORITY HAVING JURISDICTION. SEE DETAIL ON SHEET C3.
2. AT DOWNSTREAM RECEIVING STORM INLET - CONTRACTOR TO INSTALL STORM DRAIN INLET PROTECTION AT ALL AREA INLET LOCATIONS AS REQUIRED TO PREVENT SILT-LADEN WATER FROM ENTERING STORM DRAINAGE SYSTEM, AND AS DIRECTED BY INSPECTOR OF AUTHORITY HAVING JURISDICTION. SEE DETAIL ON SHEET C3.
3. CONTRACTOR TO INSTALL TEMPORARY CONSTRUCTION FENCING WITH GATE AS NEEDED TO SECURE AREA OF WORK. CONTRACTOR SHALL COORDINATE PLACEMENT OF TEMPORARY FENCING WITH WAREHOUSE MANAGER AND ADJUST AS NECESSARY DURING CONSTRUCTION.

DEMOLITION CALLOUTS

1. EXISTING ASPHALT PAVEMENT TO BE REMOVED AND DISPOSED OF OFF-SITE, TYPICAL.
2. EXISTING CONCRETE PAVEMENT TO BE REMOVED AND DISPOSED OF OFF-SITE, TYPICAL.
3. EXISTING CONCRETE SIDEWALK TO BE REMOVED AND DISPOSED OF OFF-SITE, TYPICAL.
4. EXISTING CURB AND GUTTER TO BE REMOVED AND DISPOSED OF OFF-SITE, TYPICAL.
5. EXISTING TREE TO BE REMOVED, TYPICAL OF 25.
6. EXISTING LANDSCAPED ISLAND TO BE REMOVED, TYPICAL.
7. EXISTING PORTION OF SPEED BUMP TO BE REMOVED FOR NEW WORK.
8. EXISTING LOT LIGHT AND ASSOCIATED APPURTENANCES TO BE REMOVED. COORDINATE WITH OWNER FOR REUSE, OR DISPOSAL. SEE ARCHITECTURAL PLANS FOR NEW LOCATION.
9. EXISTING SIGN TO BE RELOCATED. REFER TO ARCHITECTURAL PLANS FOR NEW LOCATION.
10. EXISTING ELECTRICAL LINES TO BE REMOVED WHERE PRACTICAL. ABANDON IN PLACE PORTION UNDER PAVING TO REMAIN. COORDINATE WITH POWER PURVEYOR TO ENSURE ELECTRIC IS DISCONNECTED PRIOR TO BEGINNING CONSTRUCTION. REFER TO UTILITY PLAN FOR APPROXIMATE INTERCEPT POINTS.
11. EXISTING FIBER OPTIC LINES TO BE REMOVED WHERE PRACTICAL. ABANDON IN PLACE PORTION UNDER PAVING TO REMAIN. COORDINATE WITH PURVEYOR PRIOR TO BEGINNING CONSTRUCTION. REFER TO UTILITY PLAN FOR APPROXIMATE INTERCEPT POINTS.
12. EXISTING FIRE HYDRANT TO BE REMOVED/RELOCATED.
13. EXISTING PAINT STRIPING TO BE REMOVED.
14. EXISTING CART CORRAL TO BE RELOCATED OR REPLACED.
15. EXISTING CONTROLLER ENCLOSURE TO BE REMOVED.
16. EXISTING PARKING WHEEL STOPS TO BE REMOVED AND RETAINED. SEE SITE PLAN C4.
17. EXISTING ELECTRICAL BOX TO BE RELOCATED TO NEW PLANTER.
18. EXISTING TRANSFORMER TO BE REMOVED AND RELOCATED.
19. EXISTING ESO AND BOLLARDS TO BE DEMOLISHED.
20. EXISTING FUEL FACILITY AND ALL ASSOCIATED ELEMENTS TO BE REMOVED.
21. EXISTING ADDITIVE TANK AND BOLLARDS TO BE REMOVED.
22. EXISTING 127 LF EX. 24\"/>

TREE PROTECTION NOTE:

EXISTING TREES TO REMAIN WITHIN LIMITS OF DISTURBANCE ARE TO BE PROTECTED IN PLACE AS NECESSARY AND PER ANY APPLICABLE LOCAL JURISDICTIONAL STANDARDS. TREES DAMAGED DURING CONSTRUCTION MUST BE REPLACED IN KIND.

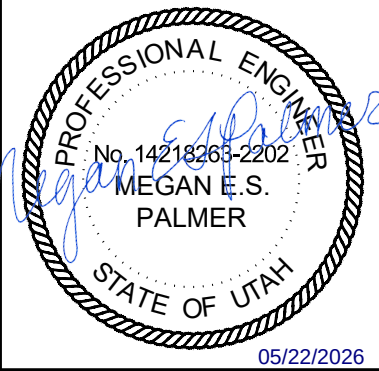
Revision

No. Date By Cdd. Appr.

Title: PRELIMINARY DEMOLITION PLAN
648 E 800 S
OREM, UT 84097

For: **Costco Wholesale**
COSTCO WHOLESALE
730 LAKE DRIVE
ISSAQUAH, WA 98027

Scale:



Horizontal 1\"/>

Vertical N/A

Designed DL

Drawn RDC

Checked DL

Approved JGH

Date 7/14/25

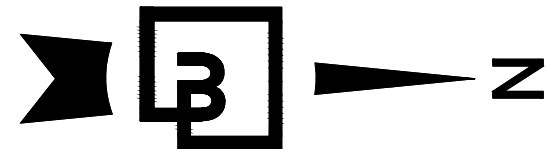
Job Number 7093

Sheet P2 of 7

Barghausen Consulting Engineers, LLC.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222 barghausen.com

APPROVED FOR CONSTRUCTION
C.E. TRB
P.D.E. KJP
IMPROVEMENTS INSTALLED WITHOUT CITY INSPECTION WILL BE REJECTED
05/26/2026

OREM
FAMILY CITY USA



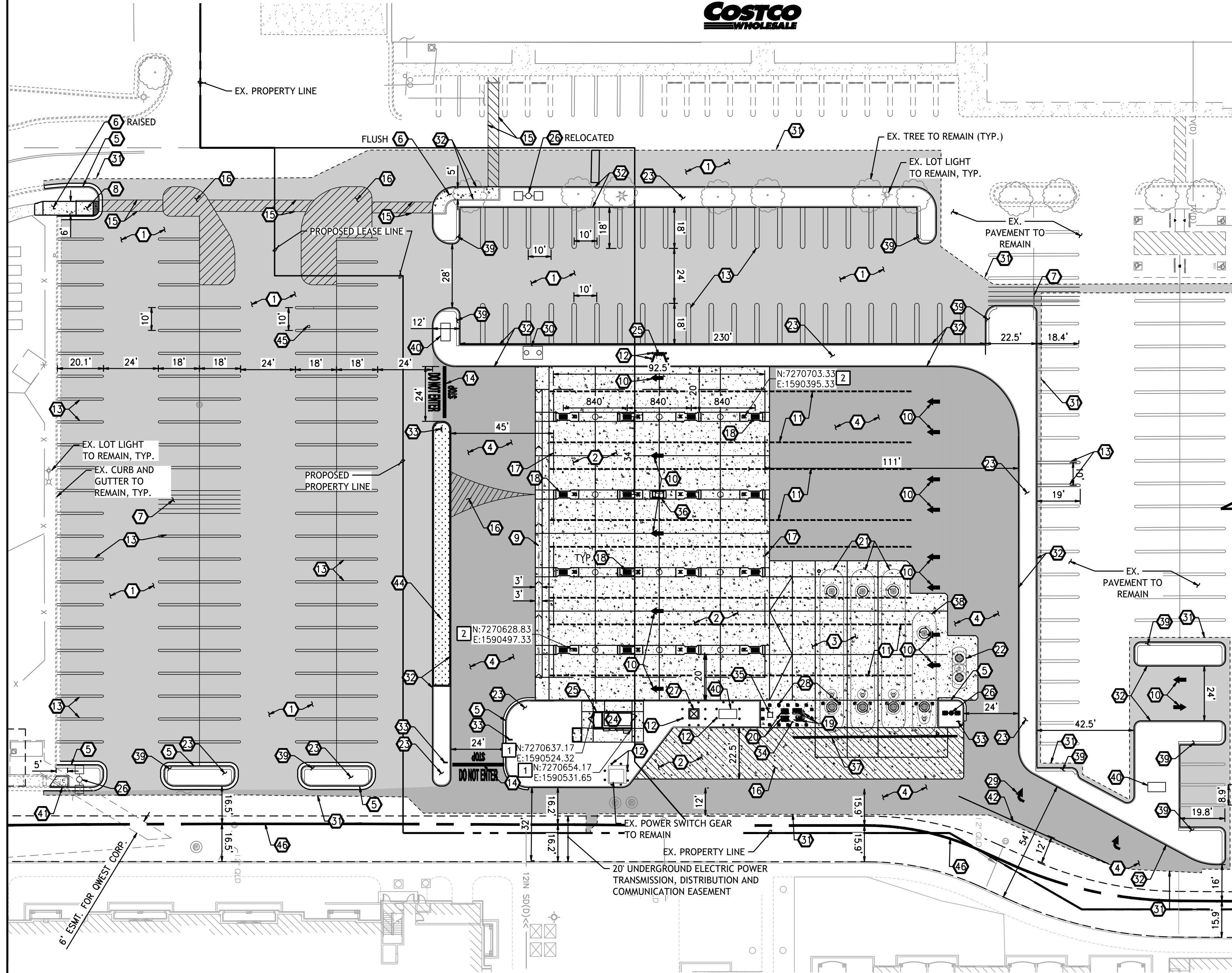
0 15' 30' 60'
SCALE: 1"=30'

PRELIMINARY SITE PLAN

COSTCO WHOLESALE FUEL FACILITY

648 E 800 SOUTH - OREM, UT 84097

COSTCO WHOLESALE FUEL FACILITY #484



PAVING LEGEND

	PROPOSED LIGHT DUTY ASPHALT INCLUDING FULL DEPTH BASE LAYER
	PROPOSED HEAVY DUTY ASPHALT INCLUDING FULL DEPTH BASE LAYER
	PROPOSED SLURRY SEAL
	PROPOSED CONCRETE

TREE PROTECTION NOTE:

EXISTING TREES TO REMAIN WITHIN LIMITS OF DISTURBANCE ARE TO BE PROTECTED IN PLACE AS NECESSARY AND PER ANY APPLICABLE LOCAL JURISDICTIONAL STANDARDS. TREES DAMAGED DURING CONSTRUCTION MUST BE REPLACED IN KIND.

UTILITY CONFLICT NOTE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DIMENSION, AND DEPTH OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT BY POT-HOLING THE UTILITIES AND SURVEYING THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. THIS SHALL INCLUDE CALLING UTILITY LOCATE @ 811 AND THEN POT-HOLING ALL OF THE EXISTING UTILITIES AT LOCATIONS OF NEW UTILITY CROSSINGS TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. LOCATIONS OF SAID UTILITIES AS SHOWN ON THESE PLANS ARE BASED UPON THE UNVERIFIED PUBLIC INFORMATION AND ARE SUBJECT TO VARIATION. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL CONSULT BARGHAUSEN CONSULTING ENGINEERS, LLC. TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.

⑦ SITE DEVELOPMENT NOTES:

1. PROPOSED LIGHT DUTY ASPHALT PAVEMENT PER DETAIL SHT C10.
2. PROPOSED REINFORCED CONCRETE FUELING AREA SLAB (HEAVY) PER DETAIL SHT C10.
3. PROPOSED REINFORCED CONCRETE UNDERGROUND TANK SLAB PER DETAIL SHT C10.
4. PROPOSED HEAVY DUTY ASPHALT PAVEMENT PER DETAIL SHT C10.
5. PROPOSED CONCRETE CURB AND GUTTER PER DETAIL SHT C10.
6. PROPOSED SIDEWALK (WIDTH AS NOTED) PER DETAIL SHT C10.
7. PROPOSED CART CORRAL PER ARCHITECTURAL PLANS.
8. PROPOSED ADA COMPLIANT CURB RAMP PER ARCHITECTURAL PLANS.
9. PROPOSED CONCRETE SWALE PER DETAIL SHT C10.
10. PROPOSED ARROW PAVEMENT MARKING PER ARCHITECTURAL PLANS.
11. PROPOSED LANE PAVEMENT PAINT STRIPING PER ARCHITECTURAL PLANS.
12. PROPOSED CONCRETE FILLED IN-GROUND BOLLARD, TYPICAL PER DETAIL ARCHITECT PLANS.
13. PROPOSED PARKING PAVEMENT MARKINGS DOUBLE LINE PARKING SPACE, TYPICAL, PER ARCHITECTURAL PLANS.
14. PROPOSED PAVEMENT MARKING "DO NOT ENTER", WITH REVERSED "STOP" PER ARCHITECTURAL PLANS.
15. PROPOSED PAVEMENT MARKINGS STRIPED CROSSWALK PER ARCHITECTURAL PLANS.
16. PROPOSED PAVEMENT MARKINGS STRIPED AREA PER ARCHITECTURAL PLANS.
17. PROPOSED FUELING CANOPY LIMITS (APPROXIMATELY 126' X 92'-6").
18. PROPOSED MULTI-PRODUCT DISPENSER AND PUMP ISLAND, TYPICAL OF 16, PER DETAIL SHT C11.

⑦ SITE DEVELOPMENT NOTES (CONTINUED):

19. PROPOSED TMS ADDITIVE INJECTION (1 EACH FOR GAS AND DIESEL) PER MECHANICAL PLANS.
20. PROPOSED VENT RISER PER MECHANICAL PLANS.
21. PROPOSED UNDERGROUND 40K FUEL TANKS PER MECHANICAL PLANS.
22. PROPOSED 3.5K UNDERGROUND ADDITIVE TANK PER MECHANICAL PLANS.
23. PROPOSED LANDSCAPE PER LANDSCAPE PLANS.
24. PROPOSED CONTROLLER ENCLOSURE PER ARCHITECTURAL PLANS.
25. PROPOSED EMERGENCY SHUT-OFF SWITCH PER MECHANICAL PLANS.
26. PROPOSED LOT LIGHT PER ARCHITECTURAL PLANS.
27. PROPOSED ELECTRICAL TRANSFORMER WITH BOLLARDS. COORDINATE WITH POWER DESIGN.
28. PROPOSED SURFACE MOUNTED BOLLARD, TYPICAL PER ARCHITECTURAL PLANS.
29. PROPOSED WHITE PAINTED "RIGHT-TURN ONLY" LANE MARKING.
30. PROPOSED 1K GALLON OIL/WATER SEPARATOR VAULT PER STORM DRAINAGE PLAN DETAIL C6 AND DETAIL SHT C12.
31. APPROXIMATE SAW CUT LIMITS, TYPICAL.
32. PROPOSED BARRIER CURB PER DETAIL SHT C10.
33. PROPOSED SIGN PER ARCHITECTURAL PLANS.
34. PROPOSED OVERFILL ALARM PER MECHANICAL PLANS.
35. PROPOSED ARID PERMEATOR PER MECHANICAL PLANS.
36. PROPOSED WARMING HUT PER ARCHITECTURAL PLANS.
37. PROPOSED PERMANENT TANK SHORING. COORDINATE WITH TANK PLANS.

⑦ SITE DEVELOPMENT NOTES (CONTINUED):

38. PROPOSED 30K DIESEL UNDERGROUND TANK PER MECHANICAL PLANS.
39. PROPOSED STEP OFF CURB PER ARCHITECTURAL PLANS.
40. PROPOSED SWITCH GEAR. COORDINATE POWER DESIGN.
41. PROPOSED FLUSH CONCRETE PAD WITH DEPRESSED CURB. CONNECT TO EXISTING CONCRETE ACCESS.
42. PROPOSED 4" WIDE WHITE PAINTED SOLID LANE LINE.
43. PROPOSED RE-INSTALLED WHEEL STOPS.
44. PROPOSED BIORETENTION AREA PER GRADING DETAILS, DETAIL 5 AND DETAIL SHT C13.
45. PROPOSED ELECTRICAL JUNCTION BOX.
46. PROPOSED CENTERLINE STRIPING. SEE WORK ON SHEET C5.

HORIZONTAL CONTROL NOTE:

1. HORIZONTAL CONTROL WITH RESPECT TO THE CONTROLLER ENCLOSURE IS MEASURED AT THE FACE OF THE FOUNDATION.
2. HORIZONTAL CONTROL WITH RESPECT TO THE FUEL CANOPY COLUMNS IS MEASURED AT THE CENTER OF THE COLUMN. REFER TO ARCHITECTURAL PLANS FOR CORRESPONDING GRID COORDINATE.

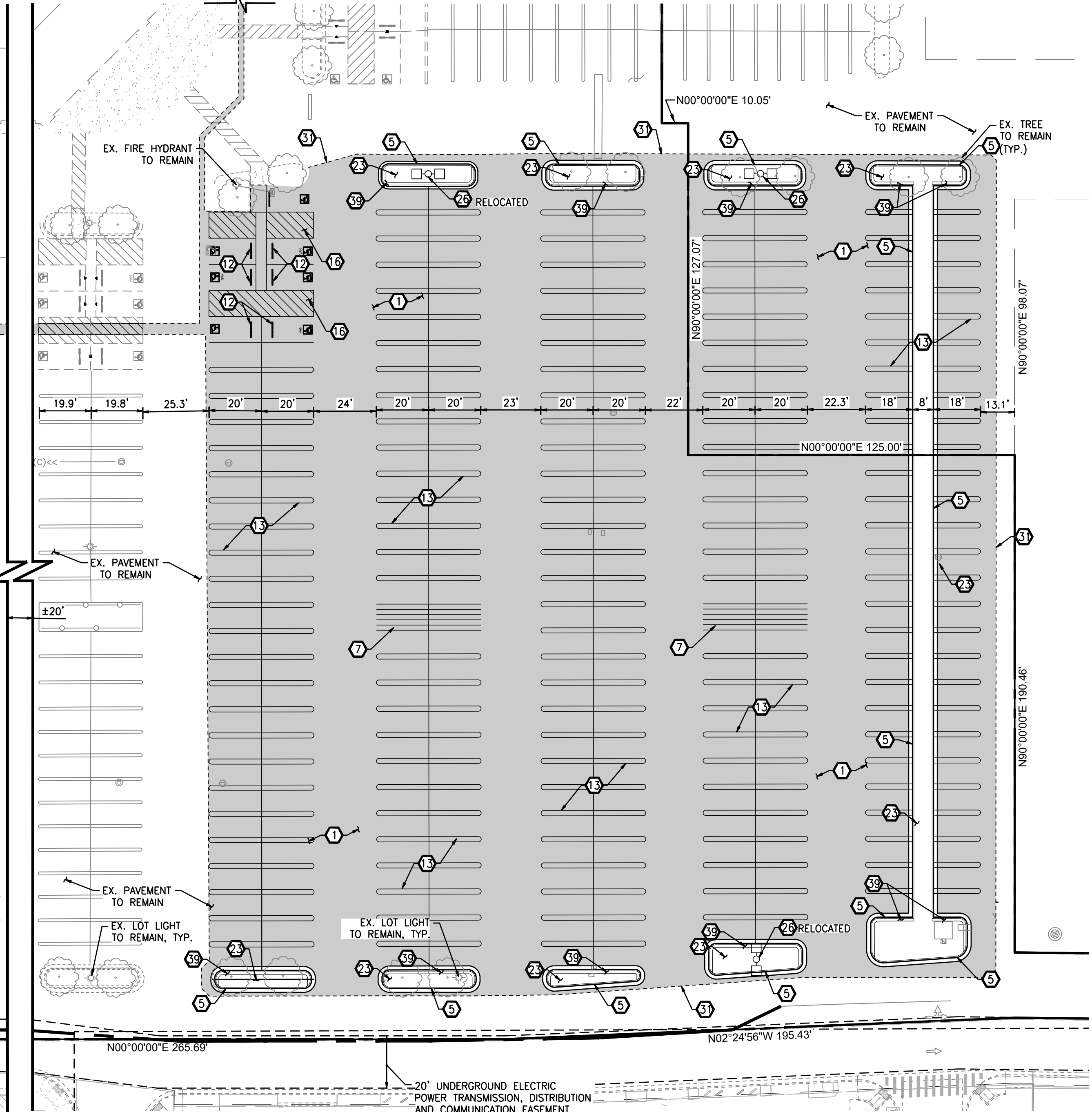
CONTRACTOR SHALL HAVE ALL CURB, SIDEWALK, STRUCTURES, CONCRETE PADS AND ANY OTHER ABOVE GROUND PERMANENT STRUCTURE DEPICTED ON THESE PLANS STAKED FOR CONSTRUCTION BY A LICENSED SURVEYOR. LICENSED SURVEYOR SHALL STAKE ALL ITEMS USING COORDINATE GEOMETRY (RECTIFIED TO SITE CONTROL) CONTAINED IN CAD DRAWING FILES PROVIDED BY CORE STATES GROUP. IT IS THE CONTRACTORS RESPONSIBILITY TO RETRIEVE LATEST CAD FILES FROM CORE STATES GROUP REFLECTING ANY ISSUED PLAN REVISIONS.

COORDINATE CONNECTION WITH COSTCO WAREHOUSE PRIOR TO CONSTRUCTION

EX. BUILDING LINE

SAWCUT, TRENCH AND PATCH. REPLACE ANY CURBS, SIDEWALK, LANDSCAPING, ETC THAT ARE REMOVED OR DAMAGED TO INSTALL.

240 FEET



Revision
No. Date By Ctd. Appr.

Title:

PRELIMINARY SITE PLAN

648 E 800 S

OREM, UT 84097

COSTCO WHOLESALE FUEL FACILITY #484

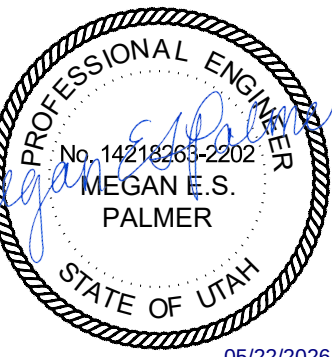


COSTCO WHOLESALE

730 LAKE DRIVE

ISSAQUAH, WA 98027

For:



Scale:

Horizontal 1" = 30'
Vertical N/A

Designed DL

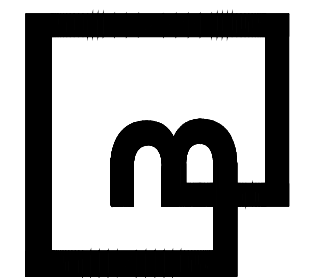
Drawn RDC

Checked DL

Approved JGH

Date 7/14/25

Barghausen Consulting Engineers, LLC.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222 barghausen.com

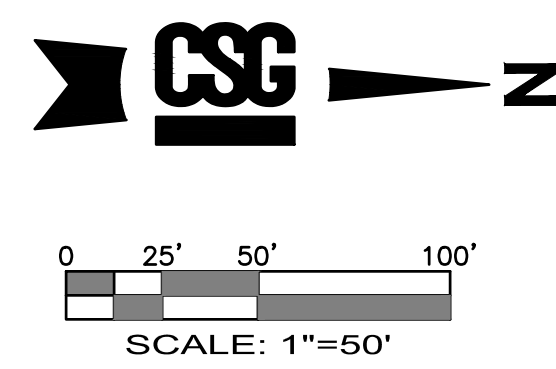


Job Number
7093

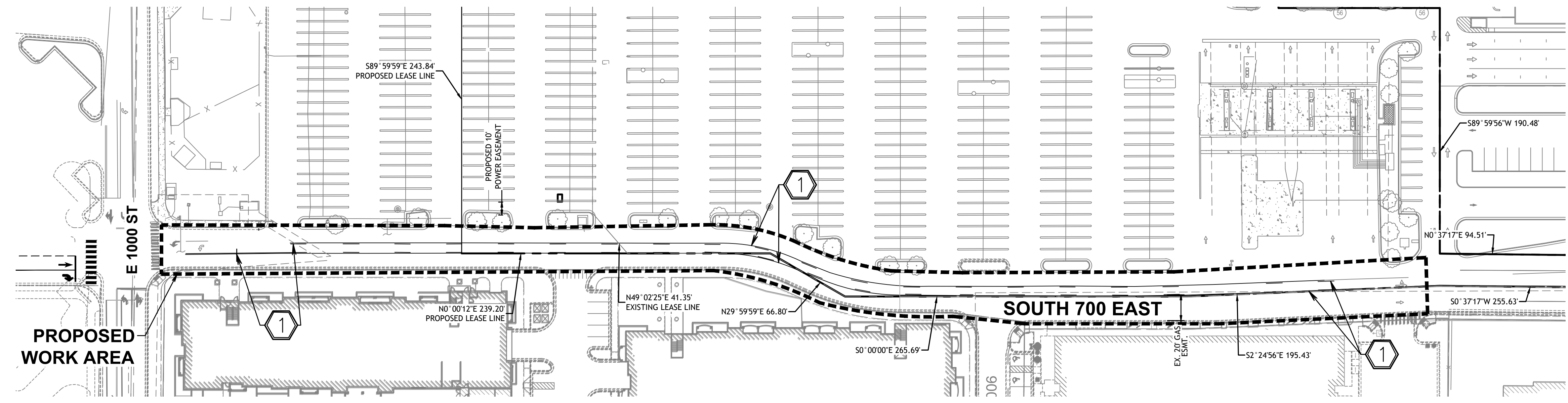
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P3 of 7

STRIPING PLAN
COSTCO WHOLESALE FUEL FACILITY
648 E 800 SOUTH - OREM, UT 84097
COSTCO WHOLESALE FUEL FACILITY #484

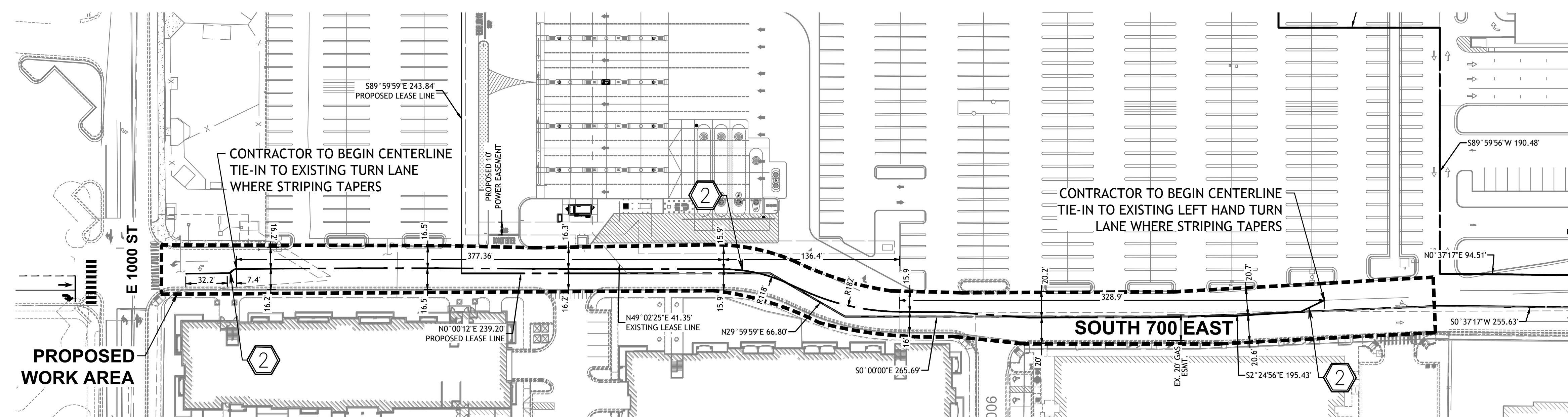


- DEMOLITION CALLOUTS**
- EXISTING PAINT MARKING TO BE REMOVED.
CONTRACTOR TO SANDBLAST PAVEMENT TO REMOVE
EXISTING SUB STANDARD NARROW TURN LANE
STRIPING.



ENLARGED VIEW
EXISTING STRIPING DEMO
SCALE 1" = 50'

- SITE DEVELOPMENT NOTES:**
- PROPOSED CENTERLINE LANE PAVEMENT STRIPING.
SEE ARCHITECTURAL PLANS FOR DETAILS.



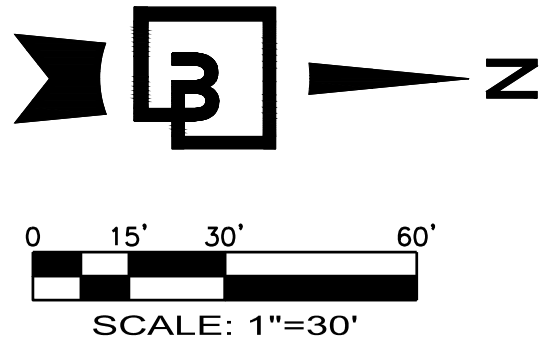
ENLARGED VIEW
PROPOSED CENTERLINE STRIPING
SCALE 1" = 50'

UTILITY CONFLICT NOTE:

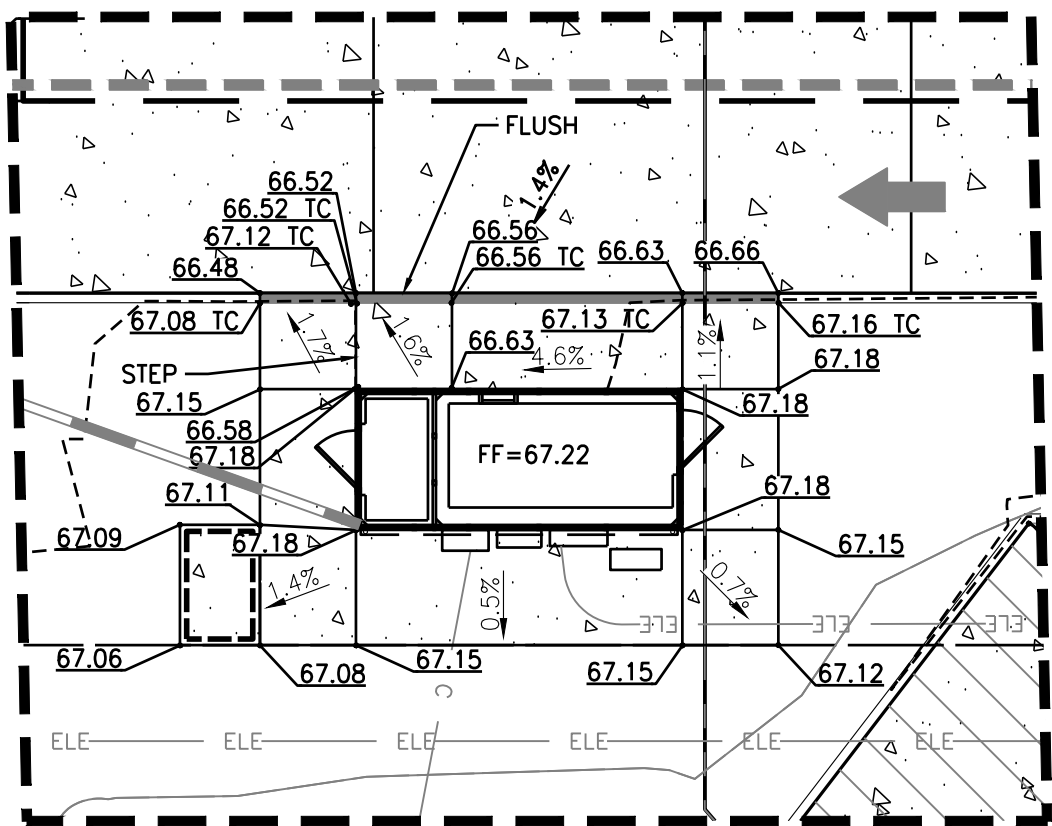
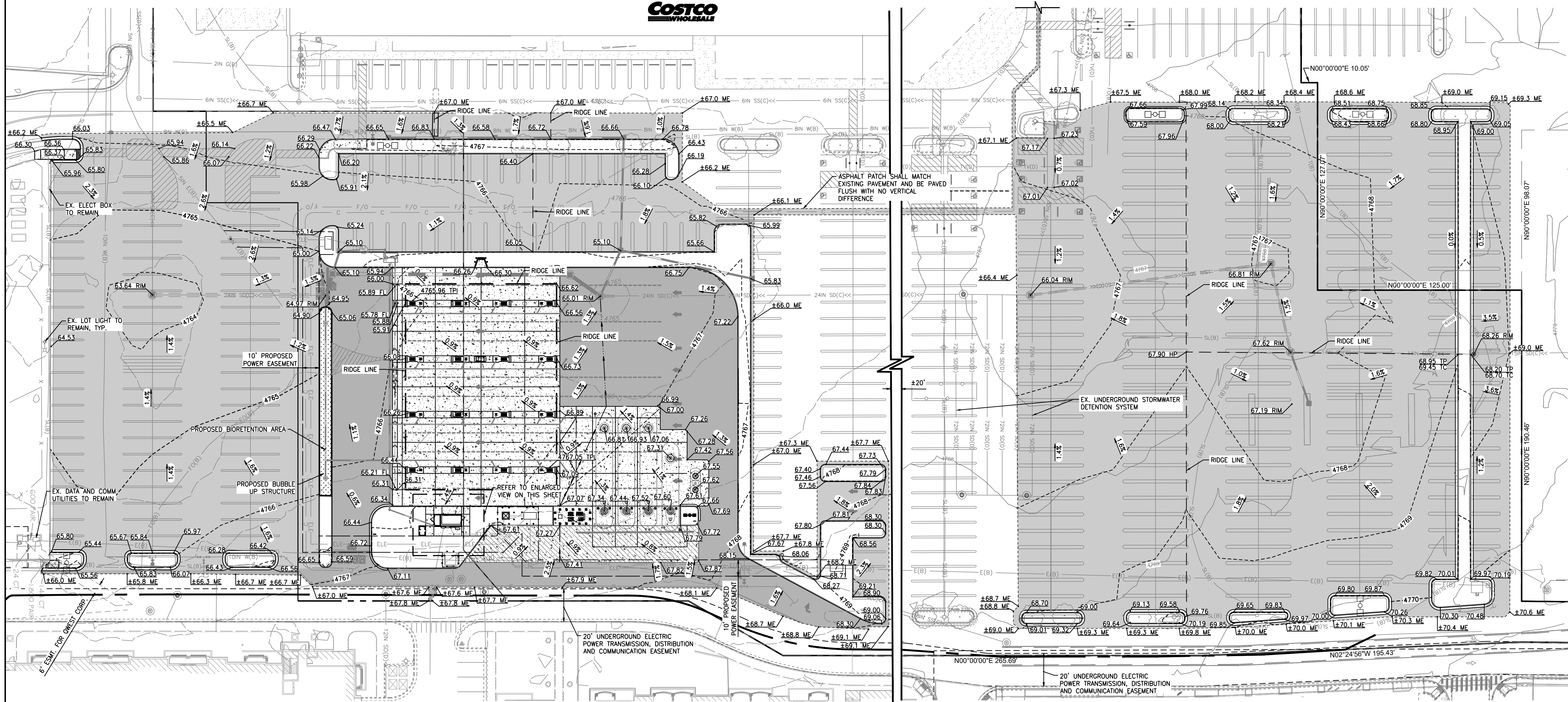
THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DIMENSION, AND DEPTH OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT BY POT-HOLING THE UTILITIES AND SURVEYING THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. THIS SHALL INCLUDE CALLING UTILITY LOCATE @ 811 AND THEN POT-HOLING ALL OF THE EXISTING UTILITIES AT LOCATIONS OF NEW UTILITY CROSSINGS TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. LOCATIONS OF SAID UTILITIES AS SHOWN ON THESE PLANS ARE BASED UPON THE UNVERIFIED PUBLIC INFORMATION AND ARE SUBJECT TO VARIATION. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL CONSULT BARGHAUSEN CONSULTING ENGINEERS, LLC. TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.

APPROVED
FOR CONSTRUCTION
C.E. TRB
P.D.E. KJP
OREM
FAMILY CITY USA
IMPROVEMENTS INSTALLED
WITHOUT CITY INSPECTION
WILL BE REJECTED
05/26/2026

Job Number 7093		Sheet P4 of 7	
For: Barghausen Consulting Engineers, LLC. 18215 72nd Avenue South Kent, WA 98032 425.251.6222 barghausen.com			
Scale: Horizontal 1" = 30' Vertical N/A			
Designed: DL Drawn: RDC Checked: DL Approved: JGH Date: 7/14/25			
Professional Engineer No. 14218363-2022 MEGAN E.S. PALMER STATE OF UTAH 05/22/2026			
Title: PRELIMINARY STRIPING PLAN 648 E 800 S OREM, UT 84097 COSTCO WHOLESALE FUEL FACILITY #484			
Revision No. Date By Cdd. Appr.			



PRELIMINARY GRADING PLAN
COSTCO WHOLESALE FUEL FACILITY
648 E 800 SOUTH - OREM, UT 84097
COSTCO WHOLESALE FUEL FACILITY #484



ENLARGED VIEW
CONTROLLER ENCLOSURE
SCALE: 1" = 10'

GRADING NOTES

- ALL SPOT ELEVATIONS SHOWN ARE TO FINISH SURFACE (TOP OF ASPHALT OR TOP OF CONCRETE PAVEMENT, NOT TOP OF CURB/SIDEWALK) UNLESS OTHERWISE NOTED.
TC = TOP OF CONCRETE SIDEWALK/CURB
TP = TOP OF PAVEMENT
ME = MATCH EXISTING ELEVATIONS
FL = FLOW LINE
FC = FLUSH CURB
GB = GRADE BREAK
GP = GUTTER PLATE LIP
TW = TOP OF WALL
HP=HIGH POINT
- CONTRACTOR SHALL MATCH EXISTING ELEVATIONS AT ALL SAWCUT LOCATIONS. CONNECTION SHALL BE FLUSH AND FREE OF ANY VERTICAL CHANGES.
- PERMANENT SLOPES SHOULD BE INCINED NO STEEPER THAN 2H:1V AND BE PLANTED WITH A DEEP-ROOTED, RAPID-GROWTH VEGETATIVE COVER AS SOON AS POSSIBLE AFTER COMPLETION OF SLOPE CONSTRUCTION. ALTERNATIVELY, THE SLOPE SHOULD BE COVERED IN PLASTIC, STRAW, ETC. UNTIL IT CAN BE LANDSCAPED.
- IMPORTED STRUCTURAL FILL SHOULD CONFORM TO SECTION 9-03.9(3) OF THE GEOTECH REPORTS STANDARD SPECIFICATIONS. THE CONTRACTOR SHOULD SUBMIT SAMPLES OF EACH OF THE REQUIRED EARTHWORK MATERIALS TO THE GEOTECH FOR APPROVAL PRIOR TO USE. THE SAMPLES SHOULD BE SUBMITTED AT LEAST 4 DAYS PRIOR TO USE.
- ALL SPOT ELEVATIONS SHOWN HAVE BEEN TRUNCATED TO INCREASE VISUAL CLARITY. ALL ELEVATIONS SHOWN ARE PLUS 4700', EG. 4770.25 = 70.25.
STANDARD ELEVATION: 4770.25
TRUNCATED ELEVATION: 70.25
- ELEVATION SHOWN ON TANK LIDS ARE THE TANK PAD ELEVATIONS, ADD 2-INCHES FOR CROWN ELEVATIONS.

APPROVED
FOR CONSTRUCTION
C.E. TRB
P.D.E. JXP
IMPROVEMENTS INSTALLED
WITHOUT CITY INSPECTION
WILL BE REJECTED
05/26/2026

Revision

No. Date By Ctd. Appr.

PRELIMINARY GRADING PLAN

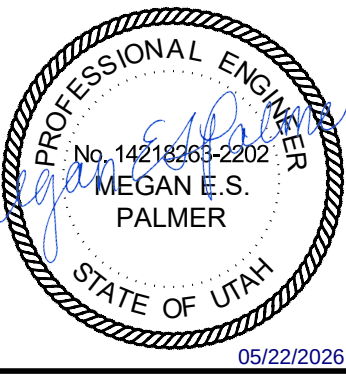
648 E 800 S
OREM, UT 84097

COSTCO WHOLESALE FUEL FACILITY #484



COSTCO WHOLESALE
730 LAKE DRIVE
ISSAQUAH, WA 98027

For:



Scale:

Horizontal

1" = 30'

Vertical

N/A

Designed

Drawn

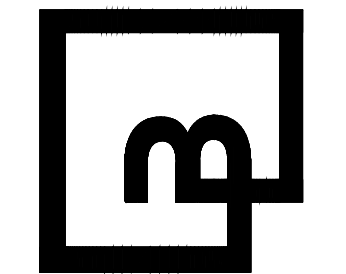
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Approved

Date

7/14/25

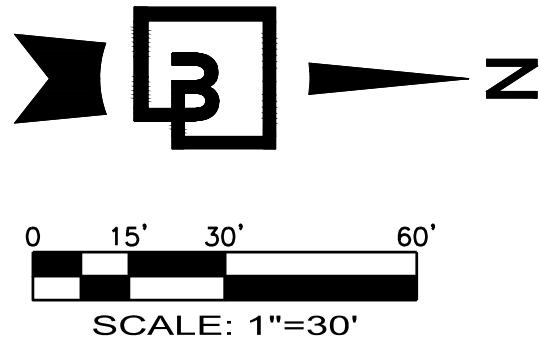
Barghausen
Consulting Engineers, LLC.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222
barghausen.com



Job Number
7093

Sheet

P5 of 7

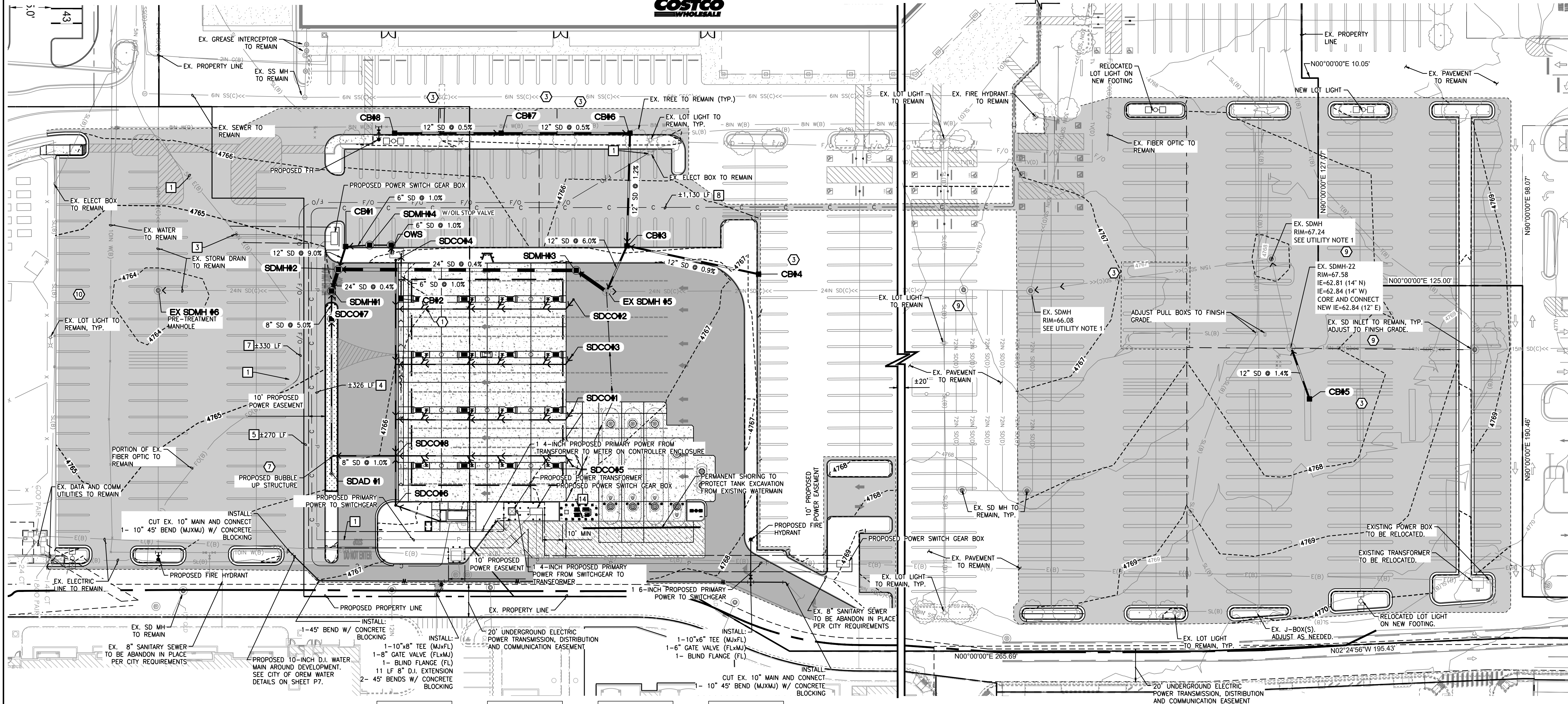


PRELIMINARY UTILITY PLAN

COSTCO WHOLESALE FUEL FACILITY

648 E 800 SOUTH - OREM, UT 84097

COSTCO WHOLESALE FUEL FACILITY #484



UTILITY CONFLICT NOTE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DIMENSION, AND DEPTH OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT BY POT-HOLING THE UTILITIES AND SURVEYING THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. THIS SHALL INCLUDE CALLING UTILITY LOCATE # 811 AND THEN POT-HOLING ALL OF THE EXISTING UTILITIES AT LOCATIONS OF NEW UTILITY CROSSINGS TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. LOCATIONS OF SAID UTILITIES AS SHOWN ON THESE PLANS ARE BASED UPON THE UNVERIFIED PUBLIC INFORMATION AND ARE SUBJECT TO VARIATION. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL CONSULT BARGHAUSEN CONSULTING ENGINEERS, LLC. TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.

STORM STRUCTURE TABLE
CB#1 RIM=4765.01 IE=4761.59 (6" N) IE=4761.59 (12" E)
CB#2 RIM=4765.78 IE=4762.70 (6" W)
CB#3 RIM=4765.10 IE=4762.10 (12" N) IE=4762.10 (12" W) IE=4762.10 (12" SE)
CB#4 RIM=4765.86 IE=4762.84 (12" S)
CB#5 RIM=4767.01 IE=4763.32 (12" W)
CB#6 RIM=4766.67 IE=4762.93 (12" S) IE=4762.93 (12" E)
CB#7 RIM=4766.59 IE=4763.32 (12" S) IE=4763.32 (12" N)

STORM STRUCTURE TABLE
CB#8 RIM=4766.65 IE=4763.65 (12" N)
EX SDMH #5 RIM=4766.00 IE=4760.26 (12" NW) IE=4759.32 (15" N) IE=4759.22 (24" SW)
EX SDMH #6 RIM=4763.64 IE=4758.04 (24" N)
EX SDMH #22 RIM=4767.62 IE=4762.84 (12" E) IE=4762.84 (15" W)
OVS RIM=4765.99 IE=4762.42 (6" N) IE=4761.92 (6" W)
SDAD #1 RIM=4765.15 IE=4760.47 (8" W)
SDCO#1 RIM=4766.88 IE=4762.80 (6" SE)

STORM STRUCTURE TABLE
SDCO#2 RIM=4766.45 IE=4763.48 (6" SE)
SDCO#3 RIM=4766.64 IE=4763.14 (6" SE)
SDCO#4 RIM=4766.32 IE=4763.06 (8" E)
SDCO#5 RIM=4767.05 IE=4762.55 (6" SW)
SDCO#6 RIM=4766.87 IE=4761.75 (6" N) IE=4761.75 (8" W)
SDCO#7 RIM=4765.15 IE=4760.00 (8" E) IE=4760.00 (8" W)
SDCO#8 RIM=4766.23 IE=4761.45 (8" E) IE=4761.45 (8" W) IE=4761.45 (6" N) IE=4761.45 (8" S)

STORM STRUCTURE TABLE
SDMH#1 RIM=4764.97 IE=4759.15 (8" E) IE=4758.48 (24" W) IE=4758.48 (24" S)
SDMH#2 RIM=4765.07 IE=4760.27 (12" W) IE=4758.55 (24" N) IE=4758.54 (24" E)
SDMH#3 RIM=4766.41 IE=4759.13 (24" NE) IE=4759.13 (24" S)
SDMH#4 RIM=4765.14 IE=4761.74 (6" N) IE=4761.74 (6" S)

STORM WATER KEYNOTES

- PROPOSED STORMWATER DOWNSPOUT CONNECTION. (TYPICAL OF 16).
- PROPOSED STORMWATER CLEANOUT.
- PROPOSED STORMWATER CATCH BASIN.
- PROPOSED 48" STORMWATER MANHOLE.
- PROPOSED 1,000 GALLON OIL/WATER SEPARATOR.
- PROPOSED STORMWATER CANOPY DISCHARGE BUBBLE UP EMITTER TO BIO-RETENTION PLANTER.
- PROPOSED 18" AREA DRAIN, BIO-RETENTION PLANTER OVERFLOW STRUCTURE.
- PROPOSED BIO-RETENTION PLANTER, MEETING LID REQUIREMENT FOR FUEL CANOPY DISCHARGE. PLANTER WILL HAVE TYPICAL BIO-GRADE SOILS, PLANTER TO HAVE 8" PERFORMED UNDER-DRAIN PIPING ENTIRE LENGTH OF PLANTER.
- EXISTING MANHOLE TO REMAIN. EXISTING MANHOLE LID TO BE REMOVED AND REPLACED WITH STANDARD GRATED LID.
- EXISTING MANHOLE TO REMAIN. CONTRACTOR TO DETERMINE IN THE FIELD IF MANHOLE CONE NEEDS TO BE REPLACED WITH A ECCENTRIC CONE AND ROTATED OUT OF THE CURB LINE. REPLACE LID WITH STANDARD GRATED LID.

UTILITY NOTES

- THE LIDS/COVERS/INLETS OF ALL "TO REMAIN" UTILITY STRUCTURES LOCATED WITHIN PROJECT LIMITS SHALL BE ADJUSTED TO NEW FINISH PAVEMENT GRADES.

UTILITY KEYNOTES

- APPROXIMATELY LOCATION OF UTILITY LINE RE-ROUTE POINT OF INTERSECT.
- PROPOSED ELECTRICAL TRANSFORMER WITH BOLLARD PROTECTION.
- PROPOSED RELOCATED ELECTRICAL VAULT/BOX.
- PROPOSED ELECTRICAL LINE.
- PROPOSED LOT LIGHTING SERVICE LINE RE-ROUTE.
- PROPOSED ELECTRICAL LINE UNDERGROUND POWER FROM TRANSFORMER TO CONTROLLER ENCLOSURE.
- PROPOSED RE-ROUTED FIBER OPTIC (DATA/COMMUNICATIONS) LINE.
- PROPOSED UNDERGROUND FUEL TANKS.
- PROPOSED DATA/COMMUNICATIONS SERVICE TO CONTROLLER FROM COSTCO WAREHOUSE.
- PROPOSED TMS INJECTION.
- PROPOSED VENT RISER.
- PROPOSED UNDERGROUND ADDITIVE TANK.
- PROPOSED EMERGENCY SHUT-OFF SWITCH.
- PROPOSED OVERFILL ALARM.

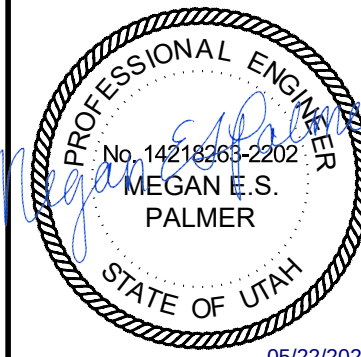


Revision
No. Date By Ctd. Appr.

PRELIMINARY UTILITY PLAN
648 E 800 S
OREM, UT 84097

Costco
WHOLESALE
COSTCO WHOLESALE
730 LAKE DRIVE
ISSAQUAH, WA 98027

For:



Scale:

Horizontal

1" = 30'

Vertical

N/A

Designed

Drawn

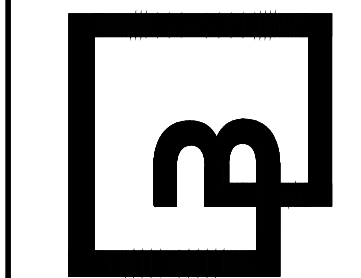
Checked

Approved

Date

7/14/25

Barghausen
Consulting Engineers, LLC.
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Kent, WA 98032
425.251.6222
barghausen.com



Job Number
7093

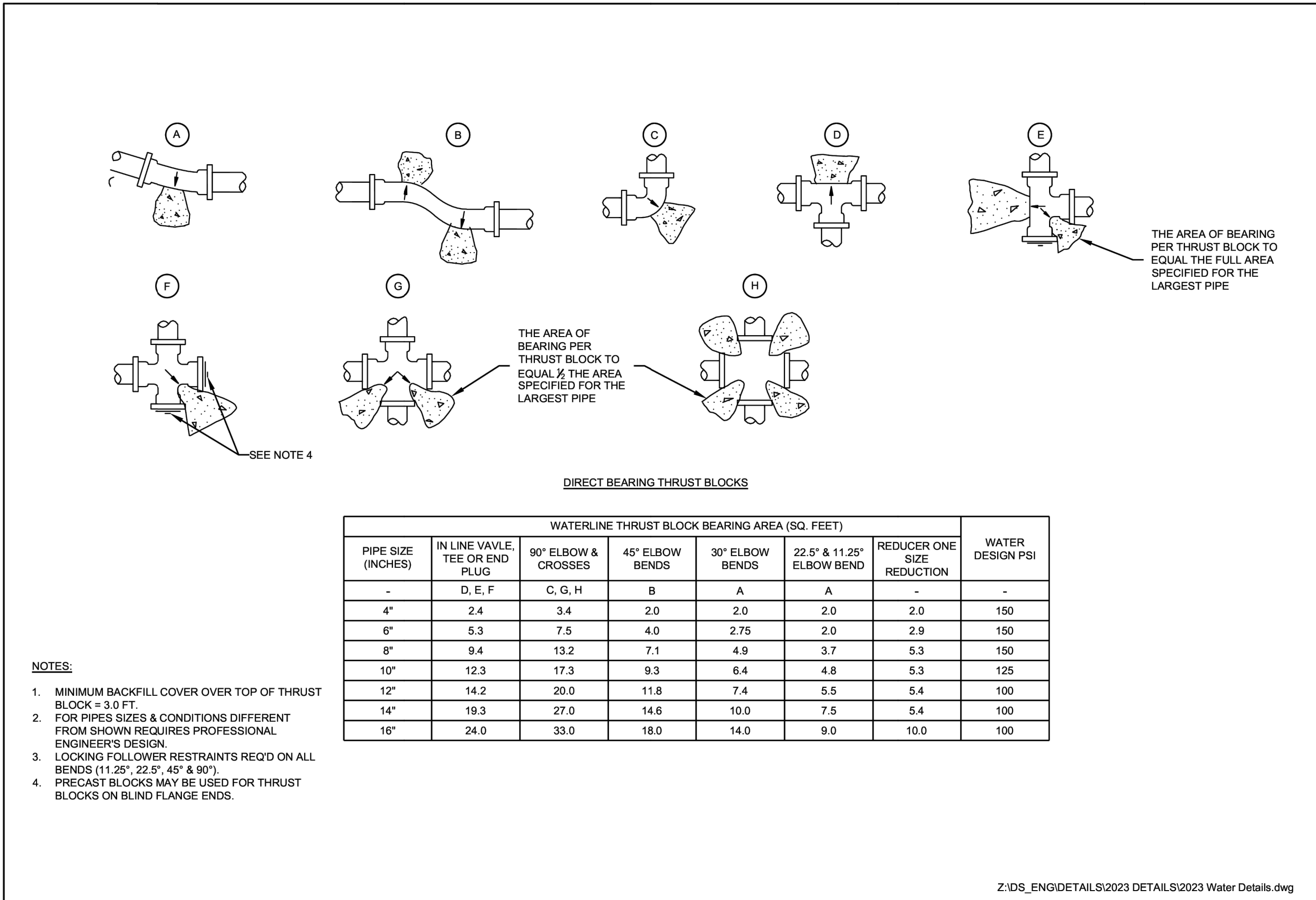
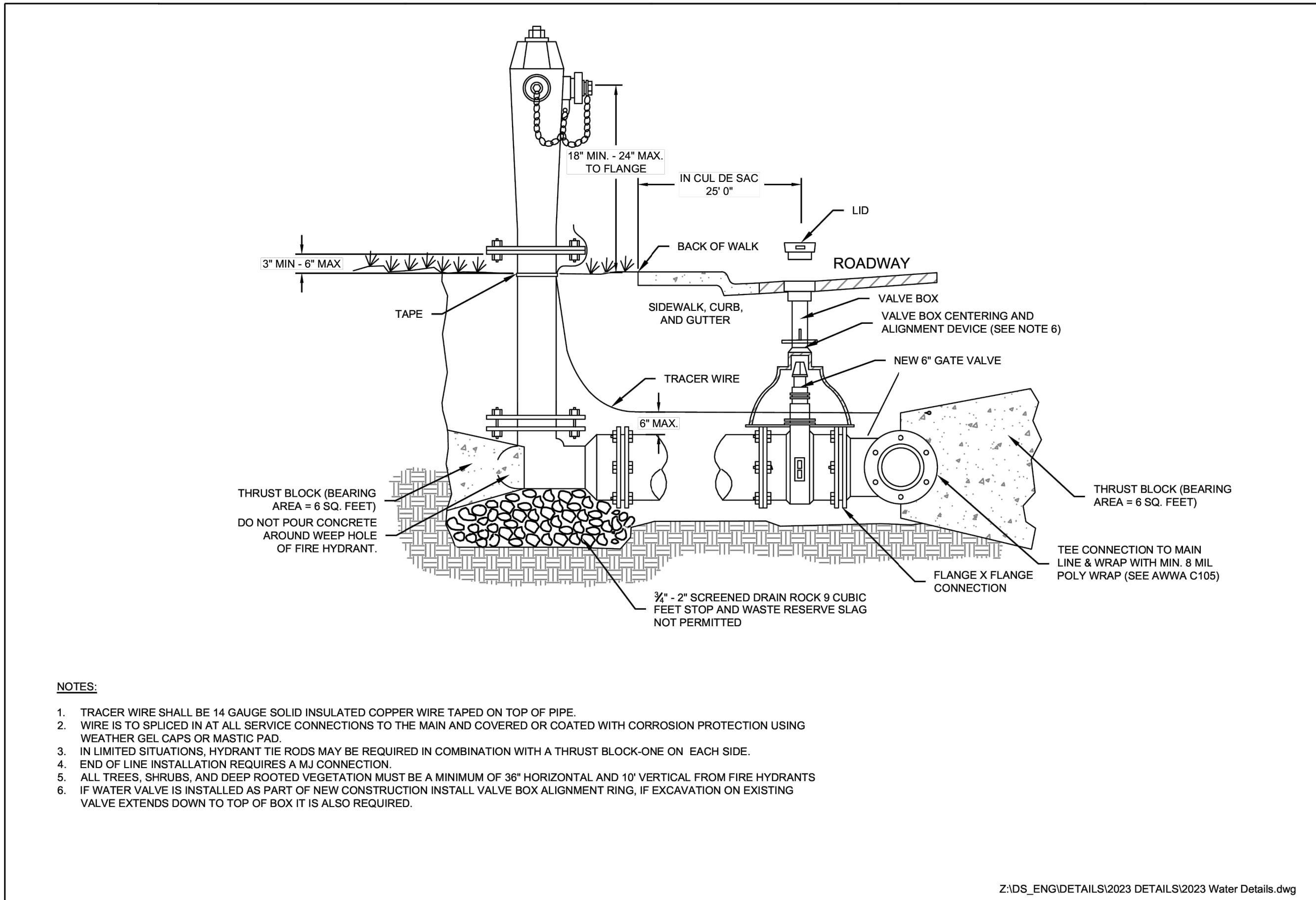
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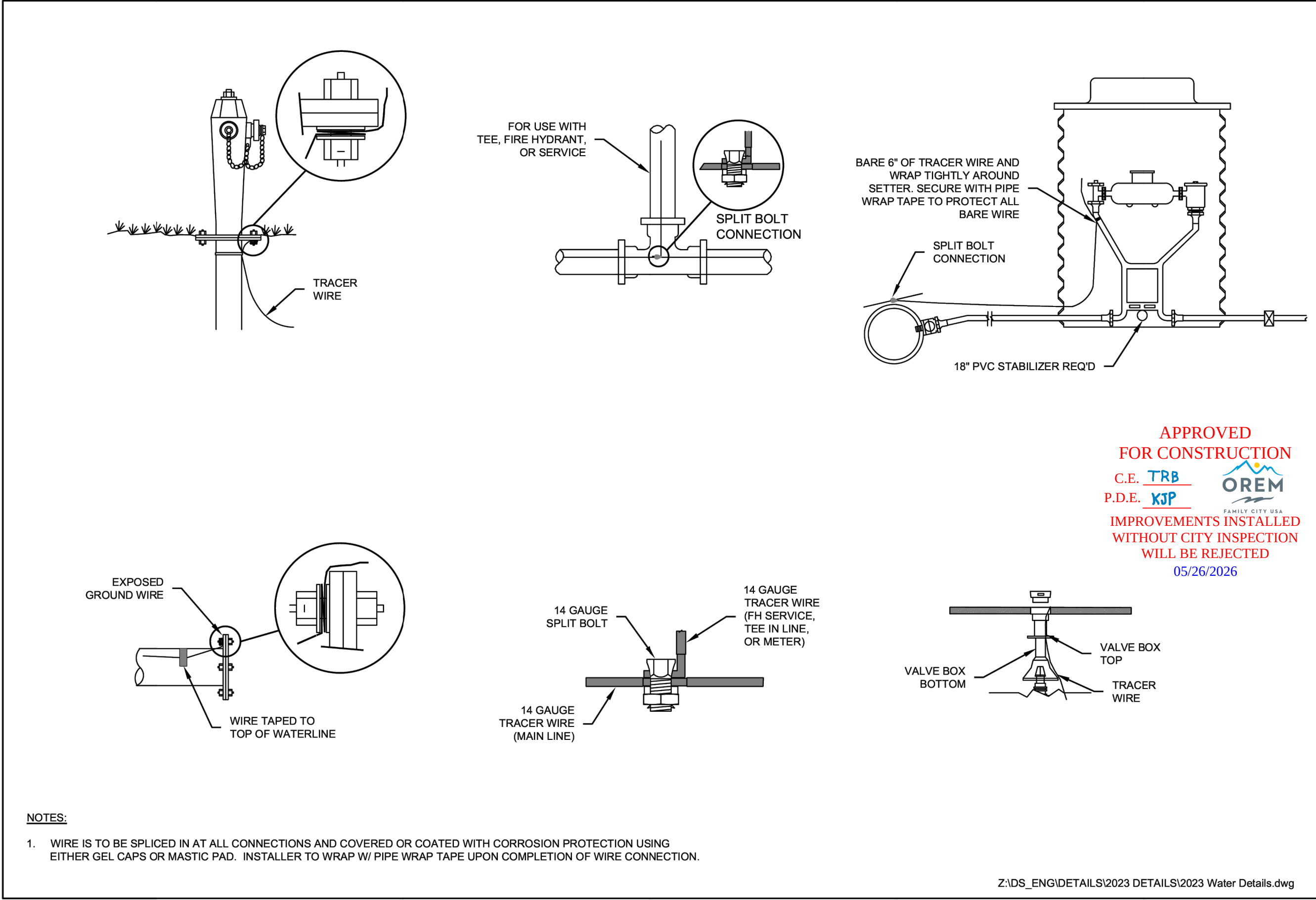
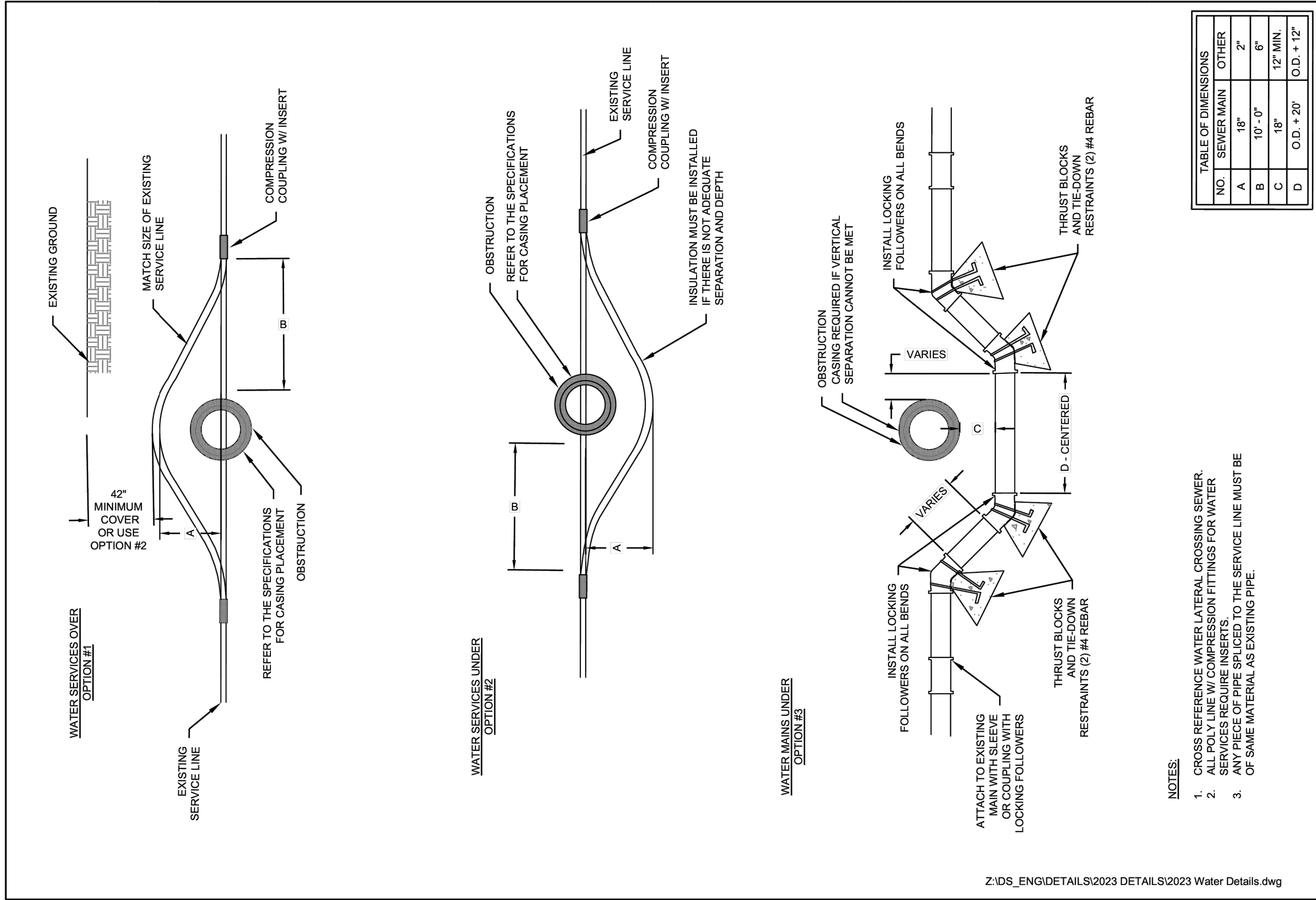
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PRELIMINARY DETAILS
COSTCO WHOLESALE FUEL FACILITY
648 E 800 SOUTH - OREM, UT 84097
COSTCO WHOLESALE FUEL FACILITY #484



OREM CONSTRUCTION STANDARD DRAWINGS CITY OF OREM FIRE HYDRANT ASSEMBLY REV. 4/2024 W-7

OREM CONSTRUCTION STANDARD DRAWINGS CITY OF OREM THRUST BLOCK SIZES REV. 4/2024 W-8



OREM CONSTRUCTION STANDARD DRAWINGS CITY OF OREM TRACER WIRE DETAILS REV. 4/2024 W-11

PRELIMINARY DETAILS
648 E 800 S
OREM, UT 84097
COSTCO WHOLESALE FUEL FACILITY #484

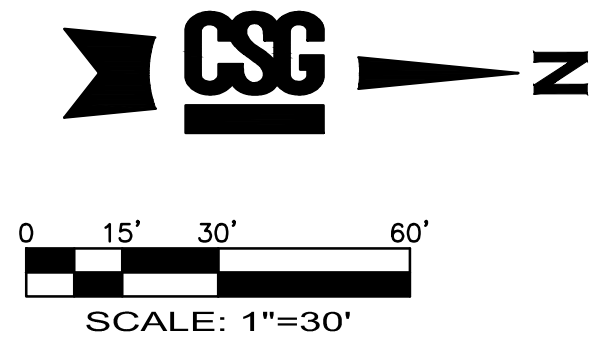
Costco WHOLESALE
COSTCO WHOLESALE
730 LAKE DRIVE
ISSAQUAH, WA 98027

For: PROFESSIONAL ENGINEER
No. 14218563-2002
MEGAN E.S. PALMER
STATE OF UTAH
05/22/2026

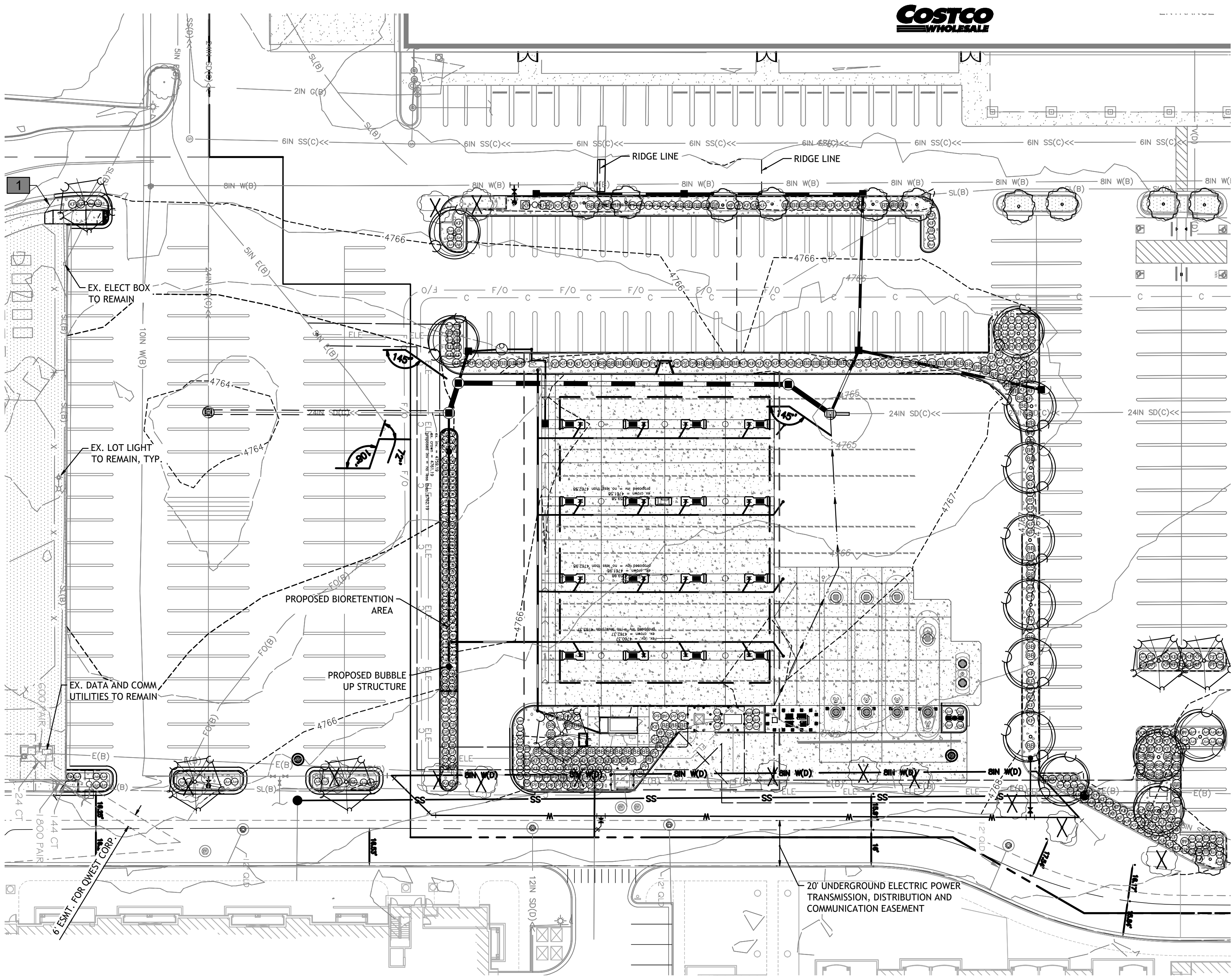
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18215 72nd Avenue South
Kent, WA 98032
425.251.6222
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Job Number 7093 Sheet P7 of 7



LANDSCAPE PLAN - SOUTH
COSTCO WHOLESALE FUEL FACILITY
648 E 800 SOUTH - OREM, UT 84097
COSTCO WHOLESALE FUEL FACILITY #484



SEE SHEET L2 FOR LEGEND, REFERENCE NOTE SCHEDULE AND PLANT SCHEDULE

IRRIGATION NOTE
LANDSCAPE CONTRACTOR DESIGN/BUILD IRRIGATION SYSTEM. CONNECT TO EXISTING IRRIGATION SYSTEM TO PROVIDE AUTOMATIC IRRIGATION TO LANDSCAPE AREAS SHOWN HERE. NOTIFY LANDSCAPE ARCHITECT IF EXISTING IRRIGATION SYSTEM COMPONENTS OR WATER PRESSURE ARE INADEQUATE TO PROVIDE IRRIGATION TO AREAS SHOWN HERE. IRRIGATION POINT OF CONNECTION TO BE DETERMINED.

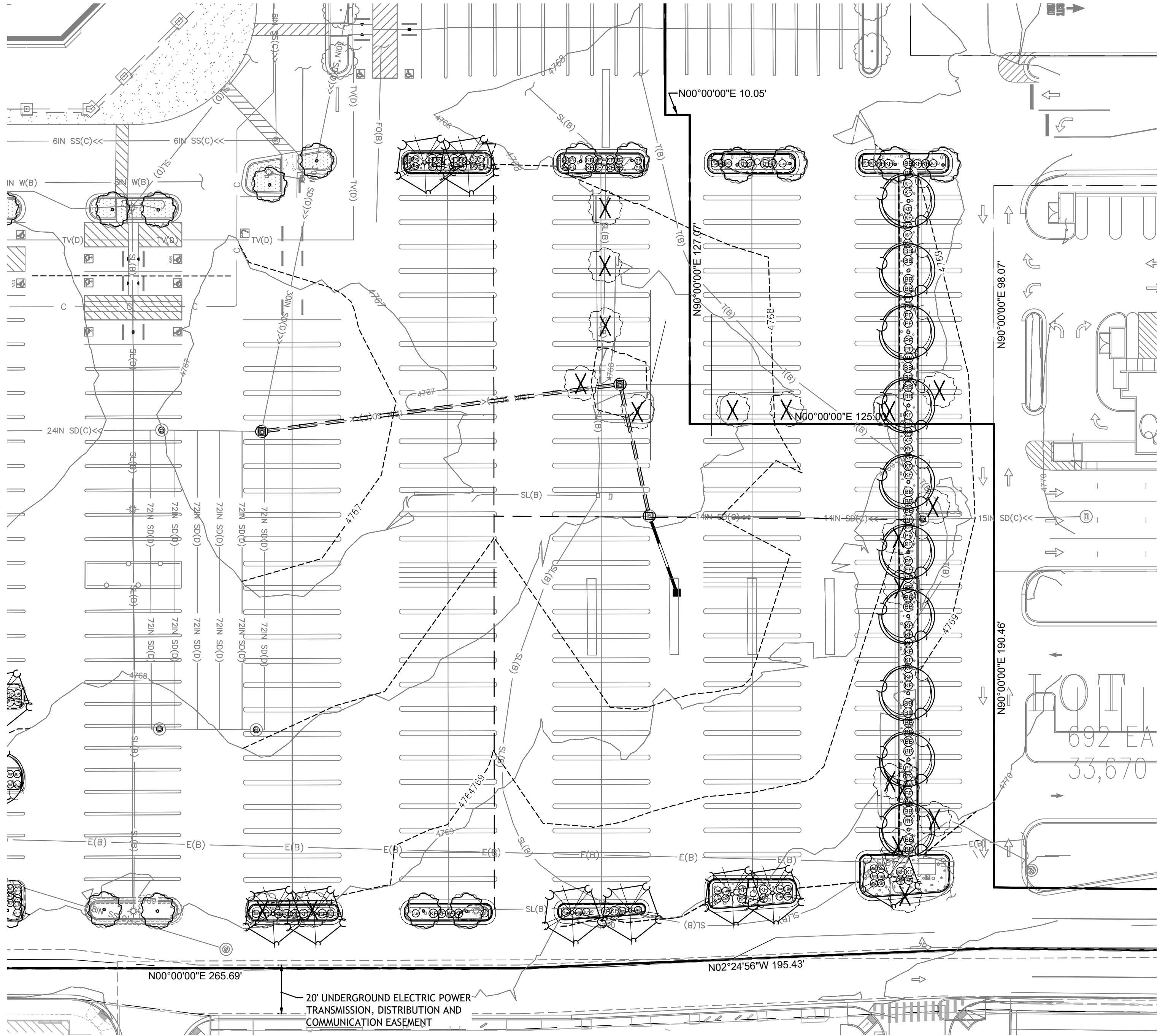
APPROVED
FOR CONSTRUCTION
C.E. **TRB**
P.D.E. **KJP**
FAMILY CITY USA
OREM
IMPROVEMENTS INSTALLED
WITHOUT CITY INSPECTION
WILL BE REJECTED
05/26/2026

Job Number 7093		Sheet L1 of 3	
For: Barghausen Consulting Engineers, LLC. 18215 72nd Avenue South Kent, WA 98032 425.251.6222 barghausen.com			
Title: LANDSCAPE PLAN - SOUTH 648 E 800 S OREM, UT 84097 COSTCO WHOLESALE FUEL FACILITY #484			
Revision No. Date By Appr. Permitt Submittal 1 5/4/26 JMW JMW JMW JMW JMW			



0 15' 30' 60'
SCALE: 1"=30'

LANDSCAPE PLAN - NORTH
COSTCO WHOLESALE FUEL FACILITY
648 E 800 SOUTH - OREM, UT 84097
COSTCO WHOLESALE FUEL FACILITY #484



IRRIGATION NOTE

LANDSCAPE CONTRACTOR DESIGN/BUILD IRRIGATION SYSTEM. CONNECT TO EXISTING IRRIGATION SYSTEM TO PROVIDE AUTOMATIC IRRIGATION TO LANDSCAPE AREAS SHOWN HERE. NOTIFY LANDSCAPE ARCHITECT IF EXISTING IRRIGATION SYSTEM COMPONENTS OR WATER PRESSURE ARE INADEQUATE TO PROVIDE IRRIGATION TO AREAS SHOWN HERE. IRRIGATION POINT OF CONNECTION TO BE DETERMINED.

MAINTAIN A 3' HORIZONTAL AND 10' VERTICAL SEPARATION FROM FIRE HYDRANTS AND WATER VALVES FROM ALL TREES, SHRUBS AND DEEP-ROOTED VEGETATION.

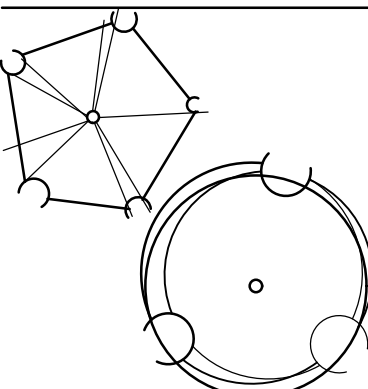
LEGEND

- EXISTING TREE TO BE RETAINED. PROTECT DURING CONSTRUCTION. SIZE OF SYMBOL EQUATES TO SIZE OF DRIPLINE
- EXISTING TREE TO BE REMOVED

REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
1	LAWN/PLANTER EDGE - SHOVEL CUT TRANSITION.
	EXISTING LANDSCAPE AND IRRIGATION TO BE RETAINED. PROTECT DURING CONSTRUCTION
	ROCK MULCH. MATCH EXISTING TYPE, COLOR, AND DEPTH. INSTALL IN ALL THE NEW LANDSCAPE BEDS.

PLANT SCHEDULE

SYMBOL	BOTANICAL / COMMON NAMES	SIZE CONDITION	SPACING	QUANTITY	REMARKS
	TREES:				
	TILIA CORDATA X EUCHLORA 'REDMOND' / REDMOND LINDEN	2" CAL* B & B	AS SHOWN	17	STAKE & GUY ONE GROWING SEASON; NURSERY GROWN FOR STREET TREE USE, BRANCHED AT 5'
	GLEDTISIA TRI. INERMIS 'MORaine' / THORNLESS HONEYLOCUST	2" CAL* B & B	AS SHOWN	25	STAKE & GUY ONE GROWING SEASON; NURSERY GROWN FOR STREET TREE USE, BRANCHED AT 5'
	*CALIPER IS MEASURED 4' ABOVE ROOT FLARE				
	SHRUBS:				
Bg	HELIOTRICHON SEMP. 'SAPPHIRE' / BLUE OAT GRASS	1 GAL	AS SHOWN	128	FULL AND BUSHY
PF	POTENTILLA FRUITICOSA 'HAPPY FACE' / POTENTILLA, OR OTHER YELLOW-FLOWERING CULTIVAR	1 GAL	AS SHOWN	136	FULL AND BUSHY
KF	CALAMAGROSTIS ACUT. 'KARL FOERSTER' / FEATHER REED GRASS	1 GAL	AS SHOWN	201	FULL AND BUSHY
Blu	JUNIPERUS SCOPULORUM 'BLUE ARROW' / UPRIGHT JUNIPER	5 GAL	AS SHOWN	19	FULL AND BUSHY
	GROUNDCOVERS:				
Jun	JUNIPERUS HORIZONTALIS 'BLUE RUG' / LOW-GROWING JUNIPER	1 GAL	AS SHOWN	44	HOLD 12" FROM BORDERS, SHRUBS, AND TREES
	ALL PLANTS ARE CONSIDERED DROUGHT TOLERANT				

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FAMILY CITY USA
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Revision
No. Date By Cld. Appr.
5/4/26 JMW JMW JMW JMW PERMIT SUBMITTAL

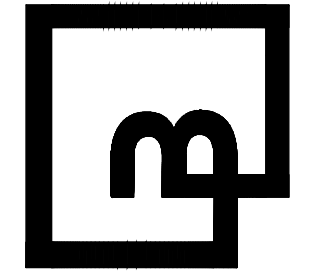
Title:
LANDSCAPE PLAN - NORTH
648 E 800 S
OREM, UT 84097
COSTCO WHOLESALE FUEL FACILITY #484

For:
Costco Wholesale
COSTCO WHOLESALE
730 LAKE DRIVE
ISSAQUAH, WA 98027



Scale:
Horizontal 1" = 30'
Vertical
Designed JMW
Drawn JMW
Checked JMW
Approved JMW
Date 5/4/26

Barghausen
Consulting Engineers, LLC.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222
barghausen.com



Job Number
7093
Sheet
L2 of 3



Know what's below.
Call before you dig.
Dial 811
Or 1-800-662-4111

LANDSCAPE PLANTING NOTES AND MATERIALS

SCOPE OF WORK

FURNISH ALL MATERIALS, LABOR, EQUIPMENT AND RELATED ITEMS NECESSARY TO ACCOMPLISH TOPSOIL, TREATMENT AND PREPARATION OF SOIL, FINISH GRADING, PLACEMENT OF SPECIFIED PLANT MATERIALS, FERTILIZER, STAKING, MULCH, CLEAN-UP, DEBRIS REMOVAL, AND 30-DAY MAINTENANCE.

QUALIFICATIONS:
LANDSCAPE CONTRACTOR TO BE SKILLED AND KNOWLEDGEABLE IN THE FIELD OF WORK AND HAVE A MINIMUM OF FIVE (5) YEAR'S EXPERIENCE INSTALLING SIMILAR WORK. CONTRACTOR TO BE LICENSED TO PERFORM THE WORK SPECIFIED WITHIN THE PRESIDING JURISDICTION.

JOB CONDITIONS:
IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW THE SITE AND REPORT ANY DISCREPANCIES TO THE OWNER OR THE OWNER'S REPRESENTATIVES. ALL PLANT MATERIAL AND FINISH GRADES ARE SUBJECT TO APPROVAL BY THE OWNER.

PROTECTION:
SAVE AND PROTECT ALL EXISTING PLANTINGS SHOWN TO REMAIN. DO NOT PLANT UNTIL OTHER CONSTRUCTION OPERATIONS WHICH CONFLICT HAVE BEEN COMPLETED. IF AN IRRIGATION SYSTEM IS TO BE INSTALLED DO NOT PLANT UNTIL THE SYSTEM HAS BEEN INSTALLED, TESTED, AND APPROVED BY THE OWNER. HANDLE PLANTS WITH CARE - DO NOT DAMAGE OR BREAK ROOT SYSTEM, BARK, OR BRANCHES. REPAIR AND/OR REPLACE ITEMS DAMAGED AS A RESULT OF WORK, OR WORK NOT IN COMPLIANCE WITH PLANS AND SPECIFICATIONS, AS DIRECTED BY OWNER AT NO ADDITIONAL COST TO THE OWNER.

REPAIR OF EXISTING PLANTINGS:
DURING THE COURSE OF WORK, REPAIR ALL EXISTING PLANTING AREAS BY PRUNING DEAD GROWTH, RE-ESTABLISHING FINISH GRADE AND RE-MULCHING TO SPECIFIED DEPTH.

IRRIGATION SYSTEM:
LANDSCAPE CONTRACTOR TO VERIFY AVAILABLE WATER PRESSURE PRIOR TO BEGINNING ANY WORK ON THE PROPOSED IRRIGATION SYSTEM. PROVIDE WRITTEN RESULTS OF WATER PRESSURE TO LANDSCAPE ARCHITECT.

CONTRACTOR TO REMODEL THE EXISTING SYSTEM TO ACCOMMODATE NEW AND REMOVED LANDSCAPE BEDS.

REPAIR OF IRRIGATION SYSTEM:
DURING THE COURSE OF WORK, REPAIR ANY DAMAGE TO THE IRRIGATION SYSTEM TO MATCH CONDITIONS PRIOR TO THE DAMAGE.

30-DAY MAINTENANCE:
CONTRACTOR TO PROVIDE OWNER WITH A SCOPE OF WORK AT TIME OF INITIAL PROJECT BID TO PROVIDE LANDSCAPE AND IRRIGATION MAINTENANCE FOR 30 DAYS FOLLOWING STORE OPENING. WORK TO INCLUDE MAINTENANCE AS DESCRIBED BELOW, IN PLANTING AND IRRIGATION MAINTENANCE.

SUBMITTALS:
SUBMIT THE FOLLOWING TO THE LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO THE START OF ANY WORK:

- DOCUMENTATION THAT ALL PLANT MATERIAL HAS BEEN ORDERED.
- TOPSOIL ANALYSIS AND RECOMMENDED AMENDMENTS.
- TREE STAKING AND GUYING MATERIALS.
- ONE (1) QUART SIZE OF TOPSOIL AND MULCH.
- PLANTING SCHEDULE INCLUDING DATES AND TIMES.
- MAINTENANCE INSTRUCTIONS FOR ONE (1) FULL YEAR.

MATERIALS:

PLANT MATERIALS:
PLANT MATERIALS TO BE GRADE NO. 1, SIZED IN ACCORDANCE WITH (AAN) AMERICAN STANDARDS FOR NURSERY STOCK (ANSI Z60.1-2004). PRUNE PLANTS RECEIVED FROM THE NURSERY ONLY UPON AUTHORIZATION BY THE LANDSCAPE ARCHITECT. "B & B" INDICATES BALLED AND BURLAPPED; "CONT." INDICATES CONTAINER; "BR" INDICATES BARE ROOT; "CAL" INDICATES CALIPER AT 6" ABOVE SOIL LINE; "GAL" INDICATES GALLON.

- SPECIFIED PLANT CANOPY SIZE OR CALIPER IS THE MINIMUM ACCEPTABLE CONTAINER OR BALL SIZE AND ESTABLISHES MINIMUM PLANT CONDITION TO BE PROVIDED.

QUALITY:
PLANT MATERIAL TO COMPLY WITH STATE AND FEDERAL LAWS FOR DISEASE INSPECTION. PLANTS TO BE FULLY LIVE, VIGOROUS, WELL FORMED, WITH WELL DEVELOPED FIBROUS ROOT SYSTEMS. ROOT BALLS OF PLANTS TO BE SOLID AND FIRMLY HELD TOGETHER, SECURELY CONTAINED AND PROTECTED FROM INJURY AND DESICCATION. PLANTS DETERMINED BY LANDSCAPE ARCHITECT TO HAVE BEEN DAMAGED; HAVE DEFORMITIES OF STEM, BRANCHES, OR ROOTS; LACK SYMMETRY; HAVE MULTIPLE LEADERS OR "Y" CROTCHES LESS THAN 30 DEGREES IN TREES; OR DO NOT MEET SIZE OR ANSI STANDARDS WILL BE REJECTED. PLANT MATERIAL TO BE FROM A SINGLE NURSERY SOURCE FOR EACH SPECIFIED SPECIES/HYBRID. NURSERY SOURCES TO BE THOSE LOCATED IN THE SAME REGION AS THE JOB SITE.

SUBSTITUTION:
NO SUBSTITUTION OF PLANT MATERIAL, SPECIES OR VARIETY, WILL BE PERMITTED UNLESS WRITTEN EVIDENCE IS SUBMITTED TO THE OWNER FROM TWO QUALIFIED PLANT BROKERAGE OFFICES. SUBSTITUTIONS WHICH ARE PERMITTED TO BE IN WRITING FROM THE OWNER AND LANDSCAPE ARCHITECT. THE SPECIFIED SIZE, SPECIES AND NEAREST VARIETY, AS APPROVED, TO BE FURNISHED. SUBSTITUTIONS MAY REQUIRE SUBMITTAL TO REVISED LANDSCAPE PLAN TO CITY FOR APPROVAL.

LABEL AT LEAST ONE (1) TREE, SHRUB, AND GROUNDCOVER OF EACH VARIETY WITH A SECURELY ATTACHED WATERPROOF TAG BEARING LEGIBLE DESIGNATION OF BOTANICAL AND COMMON NAMES.

DELIVER PLANT MATERIAL AFTER PREPARATION OF PLANTING AREAS HAVE BEEN COMPLETED AND PLANT IMMEDIATELY. IF PLANTING IS DELAYED MORE THAN SIX (6) HOURS AFTER DELIVERY, SET MATERIAL IN SHADE, PROTECT FOR WEATHER AND MECHANICAL DAMAGE, AND KEEP ROOT BALLS MOIST BY COVERING WITH MULCH, BURLAP OR OTHER ACCEPTABLE MEANS OF RETAINING MOISTURE.

SOIL PREPARATION:
TOPSOIL, AMENDMENT, AND BACKFILL, ARE GENERAL REQUIREMENTS FOR ALL LANDSCAPE AREAS, UNLESS NOTED OTHERWISE ON THE PLANS. SOIL AMENDMENTS AND FERTILIZER NOTED BELOW ARE TO BE USED FOR BID PRICE BASIS ONLY. SPECIFIC AMENDMENTS AND FERTILIZERS WILL BE MADE AFTER SOIL SAMPLES ARE LABORATORY TESTED BY THE CONTRACTOR. PROVIDE CHANGE ORDER FOR ADDITIONAL OR REDUCTION OF MATERIALS REQUIRED OR NOT REQUIRED BY THE SOILS REPORT.

SOIL FERTILITY AND AGRICULTURAL SUITABILITY ANALYSIS:
AFTER ROUGH GRADING AND PRIOR TO SOIL PREPARATION, CONTRACTOR TO OBTAIN TWO REPRESENTATIVE SOIL SAMPLES, FROM LOCATIONS AS DIRECTED BY THE LANDSCAPE ARCHITECT, TO A SOIL TESTING LABORATORY. SUBMIT RESULTS TO LANDSCAPE ARCHITECT FOR REVIEW. TESTS TO INCLUDE FERTILITY AND SUITABILITY ANALYSIS WITH WRITTEN RECOMMENDATIONS FOR SOIL AMENDMENT, FERTILIZER, CONDITIONERS, APPLIED POST-CONSTRUCTION MAINTENANCE PROGRAM. TESTS TO BE CONTRACTED WITH AND PAID FOR BY THE CONTRACTOR.

- TOPSOIL:
CONTRACTOR IS RESPONSIBLE FOR SUPPLYING ALL TOPSOIL AND FOR DETERMINING THE VOLUME OF TOPSOIL REQUIRED PER THE INFORMATION ON PLANS AND NOTED HERE-IN. CONTRACTOR IS RESPONSIBLE FOR ANY NECESSARY WEED CONTROL RESULTING FROM CONTAMINATED OFF SITE SOURCES.
- TOPSOIL TO CONSIST OF 1/3 BY VOLUME SANDY LOAM, 1/3 BY VOLUME COMPOSTED GARDEN MULCH, AND 1/3 BY VOLUME COARSE WASHED SAND OR EQUIVALENT.

LANDSCAPE NOTES AND DETAILS

COSTCO WHOLESALE FUEL FACILITY

648 E 800 SOUTH - OREM, UT 84097

COSTCO WHOLESALE FUEL FACILITY #484

- D) TOPSOIL PREPARATION AND INSTALLATION:
- VERIFY SUBGRADES TO ~7 INCHES IN LANDSCAPE AREAS AND ~18/24 INCHES IN PARKING LOT ISLANDS BELOW FINISH ELEVATION, OR AS INDICATED ON PLANS. THIS ACCOMMODATES, TOPSOIL, AMENDMENTS, AND MULCH.
 - ERADICATE ANY SURFACE VEGETATION ROOTED IN THE SUB-GRADE PRIOR TO SUB-GRADE PREPARATION.
 - THOROUGHLY SCARIFY AND RIP ALL LANDSCAPE SUB-GRADES WHICH HAVE BECOME COMPACTED TO A DEPTH OF 12 INCHES WITH MULTIPLE PASSES. 90 DEGREES TO EACH OTHER. SCARIFY AREAS INACCESSIBLE TO MECHANIZED EQUIPMENT AND AROUND EXISTING PLANTINGS NOTED TO REMAIN WITH HAND TOOLS.
 - REMOVE SOIL LUMPS, ROCK, VEGETATION AND/OR DEBRIS LARGER THAN 2 INCHES FROM ALL SUB-GRADE PRIOR TO PLACEMENT OF SPECIFIED TOPSOIL.
 - REMOVE ANY ASPHALT EXTENDING BEYOND 6 INCHES FROM CURBS INTO ADJACENT LANDSCAPE AREAS.
 - PARKING LOT PLANTER ISLANDS TO BE OVER EXCAVATED BY BACKHOE. REMOVE PAVING WASTE, GRAVEL BASE MATERIAL AND UNDERLYING SUBSOIL TO 18 INCHES BELOW TOP OF PAVING. SCARIFY AND OVER EXCAVATE PLANT PIT BOTTOM 12 INCHES TO MINIMIZE STRUCTURAL COMPACTION.
- E) TOPSOIL PLACEMENT:
- PROVIDE A TOTAL FINISH COURSE OF 4 INCHES OF TOPSOIL FOR LANDSCAPE AREAS AND 18/24 INCHES IN PARKING LOT ISLANDS.
 - IN ALL LANDSCAPE AREAS, PLACE 2 INCHES (6 INCHES IN PARKING LOT ISLANDS) OF TOPSOIL MIX WITH AMENDMENTS OVER THE PREPARED SUB-GRADE AND THOROUGHLY ROTOTILL WITH MULTIPLE PASSES INTO THE TOP 6 INCHES OF SUB-GRADE FOR A TOTAL DEPTH OF 8 INCHES IN LANDSCAPE AREAS (12 INCHES IN PARKING LOT ISLANDS). PLACE AN ADDITIONAL 2 INCH LIFT OF TOPSOIL, IN ALL LANDSCAPE AREAS AND A MINIMUM 12 INCH LIFT IN ALL PARKING LOT ISLANDS, FOR THE FINAL TOPSOIL DEPTH OF 4 INCHES IN LANDSCAPE AREAS AND 18/24 INCHES IN PARKING LOT ISLANDS.
 - PLACE ADDITIONAL TOPSOIL AND SOIL MIX AS REQUIRED TO MEET FINISH ELEVATIONS.

NON-ORGANIC MULCH (TOPDRESSING):
MATCH EXISTING ROCK MULCH (TYPE, COLOR AND DEPTH). INSTALL IN ALL NEW BEDS.

STAKES:
2-INCH DIAMETER BY 8-FOOT MINIMUM LODGEPOLE PINE STAKES.

GUY MATERIAL:
1-INCH WIDE POLYETHYLENE CHAIN LOCK TYPE TIES; OR, 3/8" DIAMETER RUBBER. NO WIRE.

EXECUTION:
CONTAMINANTS:
VERIFY THAT ALL SOIL CONTAMINANTS (E.G., PAINT, SEALANTS, SOLVENTS, OILS, GREASES, CONCRETE/ASPHALT SPOILS, ETC.) HAVE BEEN SATISFACTORY REMOVED FROM ALL PLANTING AREAS. DO NOT BEGIN WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

FINISH GRADES:
FINE GRADE AND REMOVE ROCKS, DEBRIS, AND FOREIGN OBJECTS OVER 2 INCHES DIAMETER FROM TOP SURFACE OF PREPARED LANDSCAPE AREAS. FINISH ELEVATIONS TO BE DEFINED AS 3 INCHES BELOW CURBS, WALKS AND/OR OTHER ADJACENT HARDSCAPE FOR ALL PLANTING BED AREAS AND 1-INCH BELOW CURBS, WALKS AND/OR OTHER ADJACENT HARDSCAPE FOR ALL LAWN AREAS. FINISH GRADE REFER TO GRADES PRIOR TO INSTALLATION OF MULCH OR LAWN. ALL FINISH GRADES TO BE SMOOTH EVEN GRADES, LIGHTLY COMPACTED, AS SHOWN ON THE PLAN AND DETAILED. PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS AND STRUCTURES. SITE CIVIL DRAWINGS IDENTIFY FINAL ELEVATIONS. MOISTEN PREPARED AREAS BEFORE PLANTING IF SOIL IS DRY. WATER THOROUGHLY AND ALLOW SURFACE TO DRY BEFORE PLANTING. DO NOT CREATE MUDDY SOIL.

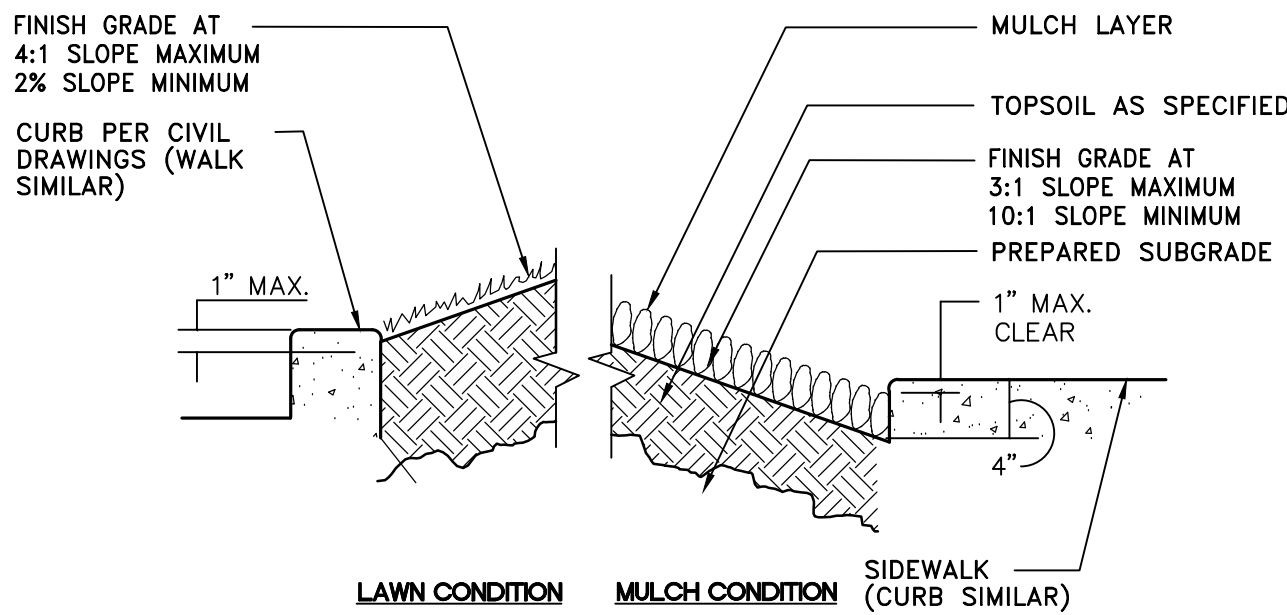
TREES AND SHRUBS:
ARRANGE TREES AND SHRUBS ON SITE IN PROPOSED LOCATIONS PER DRAWINGS. EXCAVATE PIT, PLANT AND STAKE OR GUY, AS CALLED OUT AND DETAILED. ALL TREES, SHRUBS, AND SUPPORTS TO STAND VERTICAL. BACKFILL SHALL BE PIT SPOILS. SETTLE BACKFILL USING WATER ONLY. NO MECHANICAL COMPACTION.

GROUNDCOVERS:
EXCAVATE PITS TO A MINIMUM OF 3 INCHES BELOW, AND TWICE THE ROOT BALL DIAMETER. WATER THOROUGHLY AND TAKE CARE TO ENSURE THAT ROOT CROWN IS AT PROPER GRADE, AS DETAILED.

MULCH:
MULCH ALL LANDSCAPE AREAS NOT COVERED BY LAWN AND/OR SEED. APPLY SUFFICIENT QUANTITY TO PROVIDE A 2-INCH DEPTH.

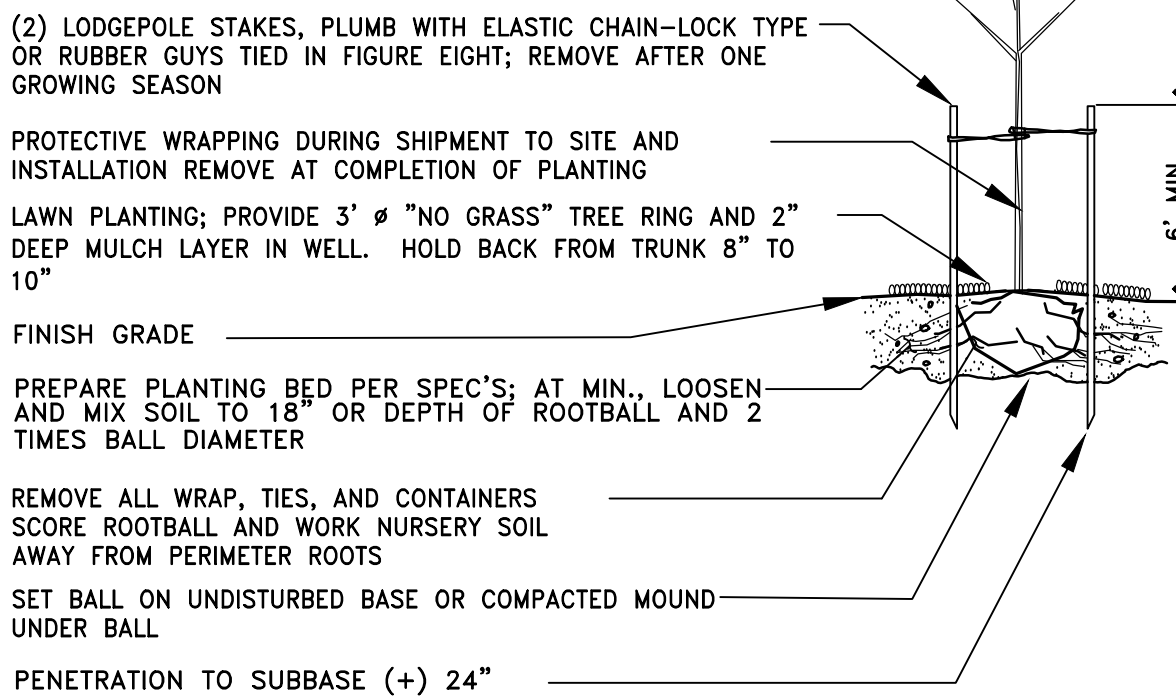
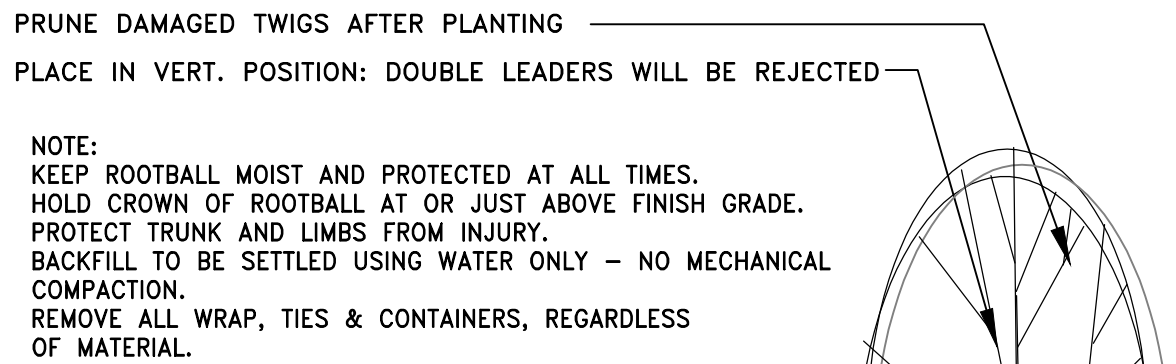
CLEANUP AND PROTECTION:
DURING LANDSCAPE WORK, KEEP ALL PAVEMENT CLEAN AND WORK AREAS IN AN ORDERLY CONDITION. PROTECT LANDSCAPE WORK AND MATERIALS FROM DAMAGE DUE TO LANDSCAPE OPERATIONS AND TRESPASSERS. MAINTAIN PROTECTION DURING INSTALLATION AND MAINTENANCE PERIOD. TREAT, REPAIR, OR REPLACE DAMAGE LANDSCAPE WORK AS DIRECTED BY THE OWNER.

PLANTING MAINTENANCE:
PROVIDE FULL MAINTENANCE BY SKILLED EMPLOYEES OF LANDSCAPE INSTALLERS. CONTRACTOR TO MAINTAIN PLANTINGS THROUGH COMPLETED INSTALLATION, AND UNTIL ACCEPTANCE OF LANDSCAPE INSTALLATION. PLANTING MAINTENANCE TO INCLUDE WATERING, WEEDING, CULTIVATING, TIGHTENING AND REPAIRING OF TREE GUYS, RESETTling PLANTS TO PROPER GRADES OR POSITION, RE-ESTABLISHING SETTLED GRADES; AND MOWING LAWNS WEEKLY AFTER LAWN ESTABLISHMENT. HERBICIDE IS NOT RECOMMENDED FOR ONE YEAR FOLLOWING LANDSCAPE INSTALLATION. INCLUDED IS REPLACEMENT OF DEAD PLANTS AND PLANTS SHOWING LOSS OF 40 PERCENT OR MORE OF CANOPY.



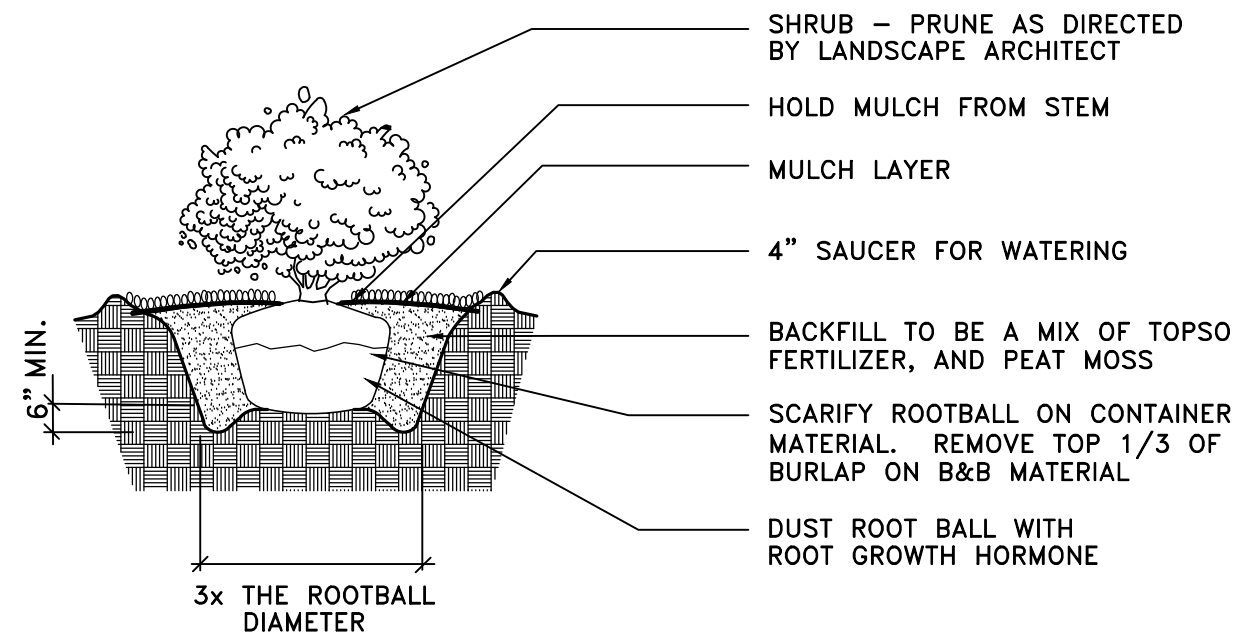
PLANTER SECTION DETAIL

NOT TO SCALE



DECIDUOUS TREE PLANTING/STAKING DETAIL

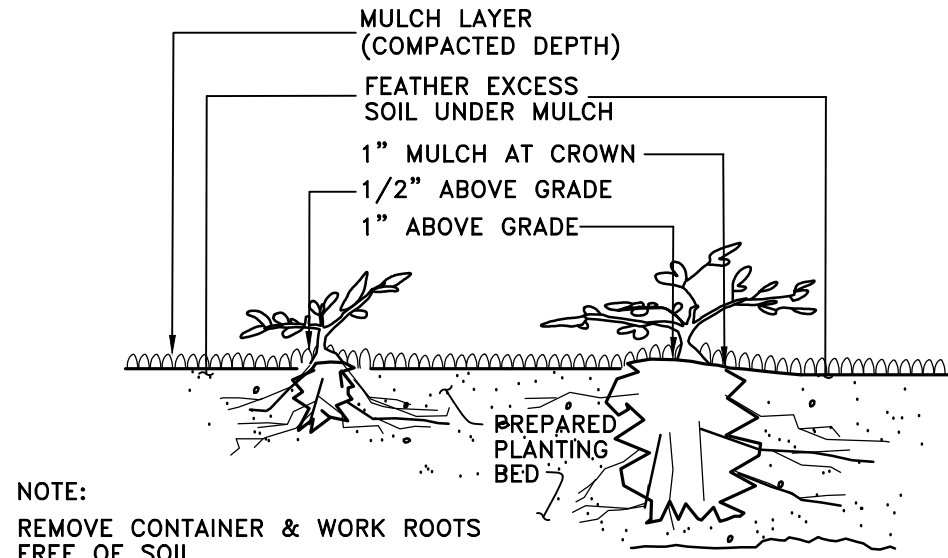
NOT TO SCALE



NOTE:
APPLY ADDITIONAL 4 OZ. 8-32-16 FERTILIZER INTO TOP 2" OF PLANTING MIX.
PLANT SHRUB HIGH ENOUGH TO ALLOW POSITIVE DRAINAGE AWAY FROM ROOTBALL. ROUGHEN ALL SURFACES OF PIT.
CUT AND REMOVE BURLAP FROM ROOT BALL

SHRUB PLANTING DETAIL

NOT TO SCALE

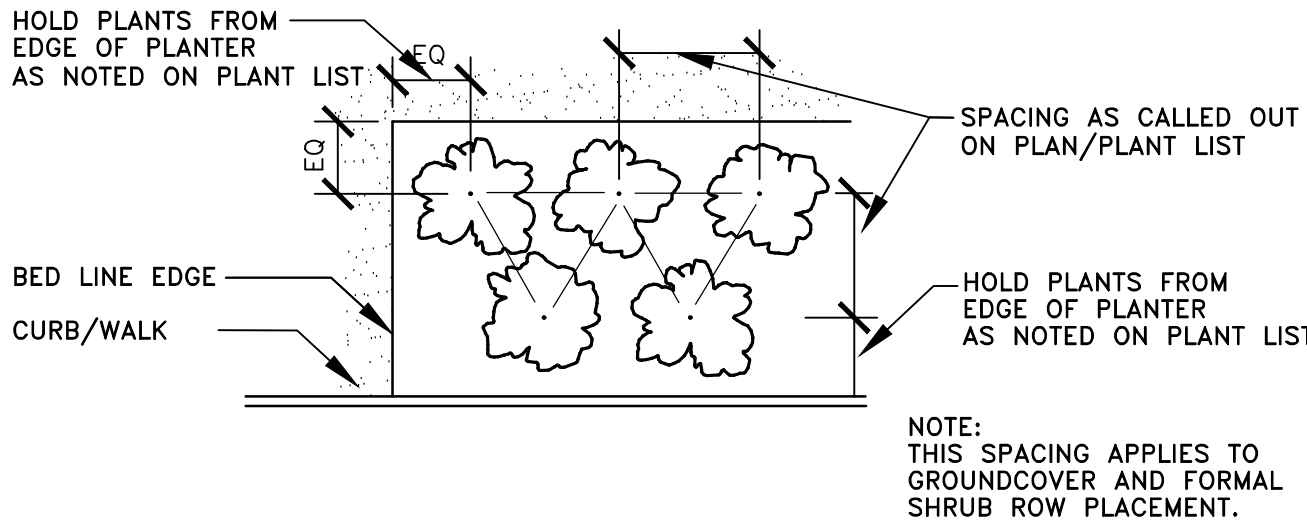


NOTE:
REMOVE CONTAINER & WORK ROOTS FREE OF SOIL.
BACKFILL TO BE SETTLED USING WATER ONLY
SEE PLANT LIST FOR PLANT SPACING

LESS THAN 1 GAL (PLANTED BEFORE MULCH)
1 GAL CONTAINER and LARGER (PLANTED BEFORE MULCH)

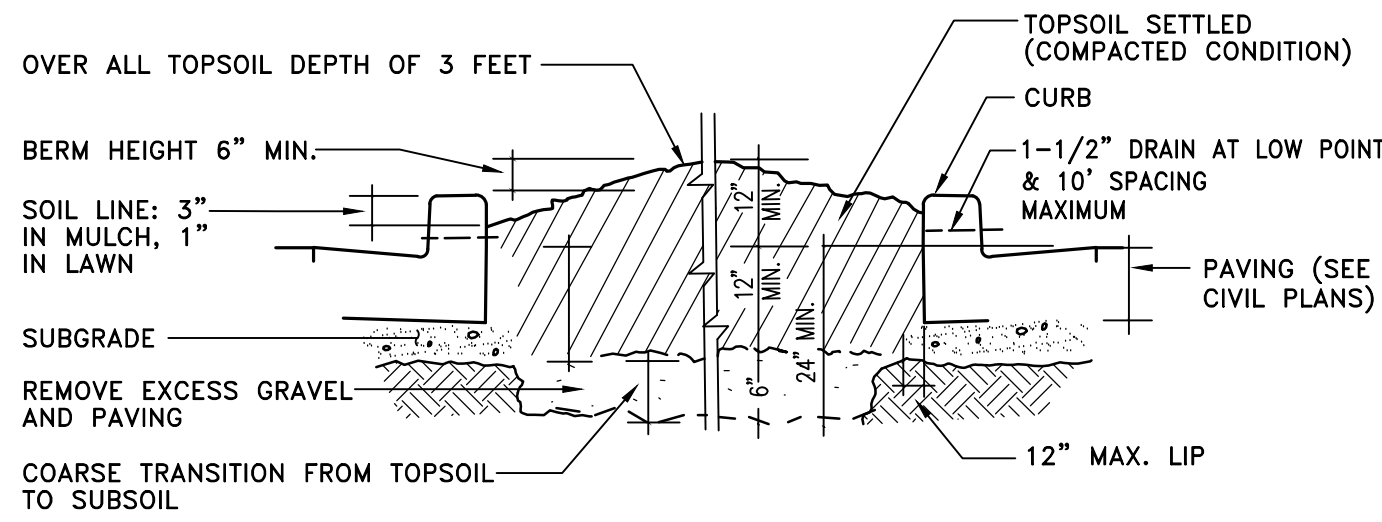
GROUNDCOVER PLANTING DETAIL

NOT TO SCALE



PLANT MATERIAL SPACING DETAIL

NOT TO SCALE



NOTE:
OVER EXCAVATE PARKING LOT PLANTERS TO LOOSEN COMPACTED SUBBASE

GRADING • PARKING LOT PLANTERS DETAIL

NOT TO SCALE

DEDUCT ALT #1: IF LANDSCAPE CONTRACTOR CAN DEMONSTRATE THAT PLANTER ISLANDS ARE NOT FULL OF NON-SOIL MATERIALS (CONCRETE WASTE, LUMBER, ROAD BASE, GRAVEL), FULL EXCAVATION AND REPLACE WITH 18"-21" OF TOPSOIL CAN BE ELIMINATED AND IN ITS PLACE, 6" OF COMPOST CAN BE PLACED ON SUB-GRADE AND CULTIVATED INTO TOP 12" OF EXISTING SOIL. TOP OF FINISH GRADE AND DEPTH OF MULCH STILL APPLIES

Title: LANDSCAPE NOTES AND DETAILS

648 E 800 S

OREM, UT 84097

COSTCO WHOLESALE FUEL FACILITY #484

COSTCO WHOLESALE

COSTCO WHOLESALE

730 LAKE DRIVE

ISSAQUAH, WA 98027

For:



Scale:

Horizontal

Vertical

Designed

Drawn

Checked

Approved

Date

5/4/26

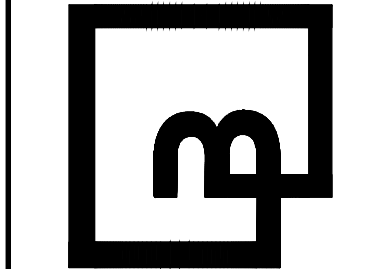
Barghausen Consulting Engineers, LLC.

18215 72nd Avenue South

Kent, WA 98032

425.251.6222

barghausen.com



Job Number

7093

Sheet

L3 of 3



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APPROVED
FOR CONSTRUCTION
C.E. TRB
P.D.E. KJP
IMPROVEMENTS INSTALLED
WITHOUT CITY INSPECTION
WILL BE REJECTED
05/26/2026

Technical Memorandum

July 1, 2022

Project# 27683

To: Ryan Clark, Development Services Director – City of Orem
Jason Bench, Planning Division Manager – City of Orem

From: Jamie Markosian, PE; Amy Lopez; Becca Hoffman, EIT

CC: Sam Kelly, City Engineer – City of Orem
Kayleen Burnett, Real Estate Manager – Costco Wholesale

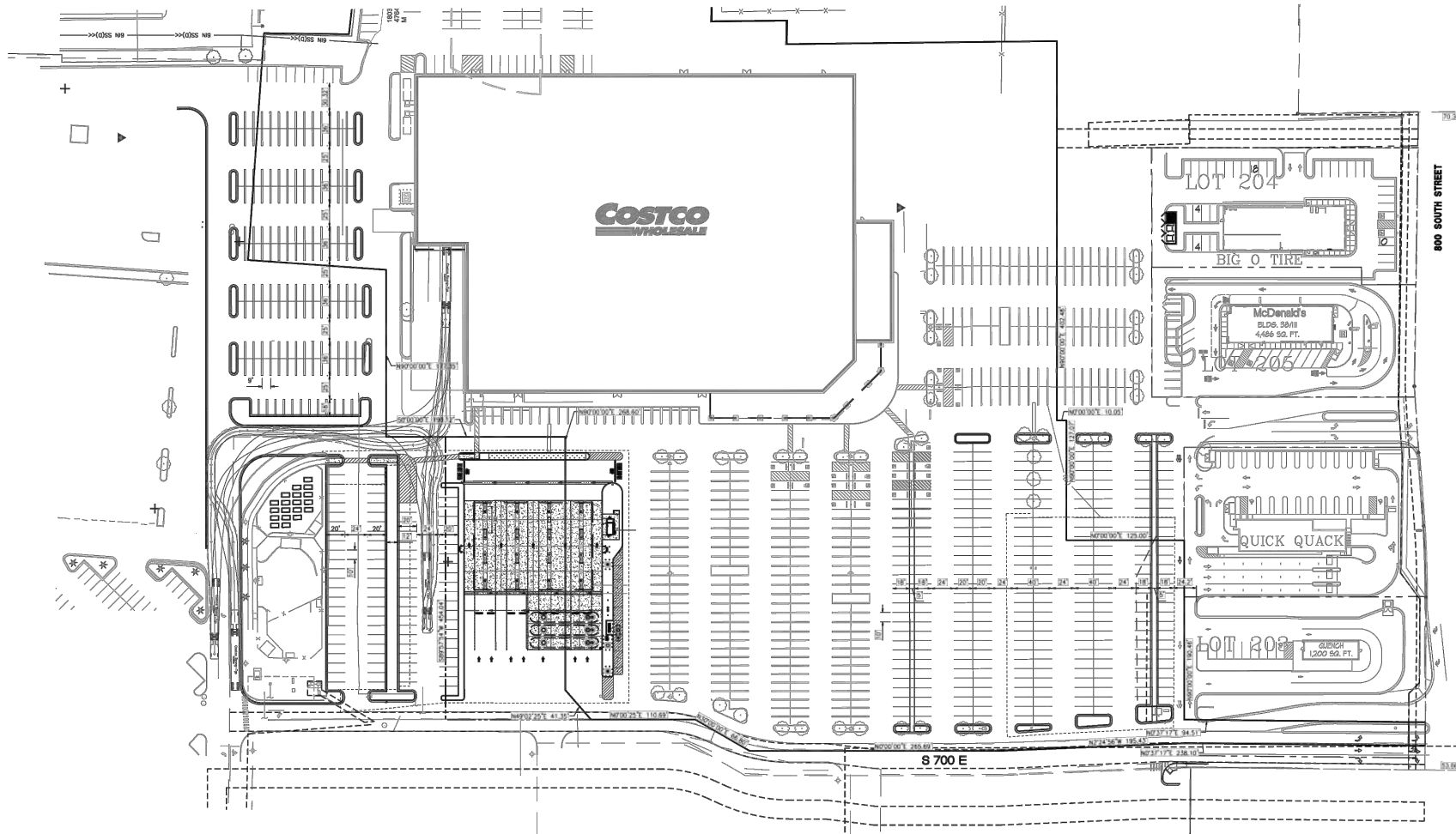
RE: Orem Costco Fuel Station On-Site Relocation and Expansion
(16 to 32 Fueling Positions)



Kittelson & Associates, Inc. (Kittelson) has prepared a transportation assessment for the relocation and expansion of the existing Costco Gasoline fuel station located at 648 East 800 South Street in Orem, Utah. Of particular focus was the anticipated trip generation and vehicle queuing at the fuel station following the relocation. The overall site plan for the Orem Costco Gasoline expansion is provided in Figure 1. Figure 2 provides a detailed view of the fuel station area.

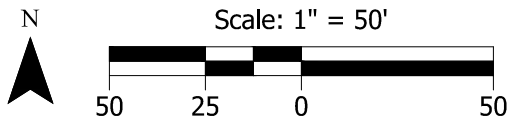
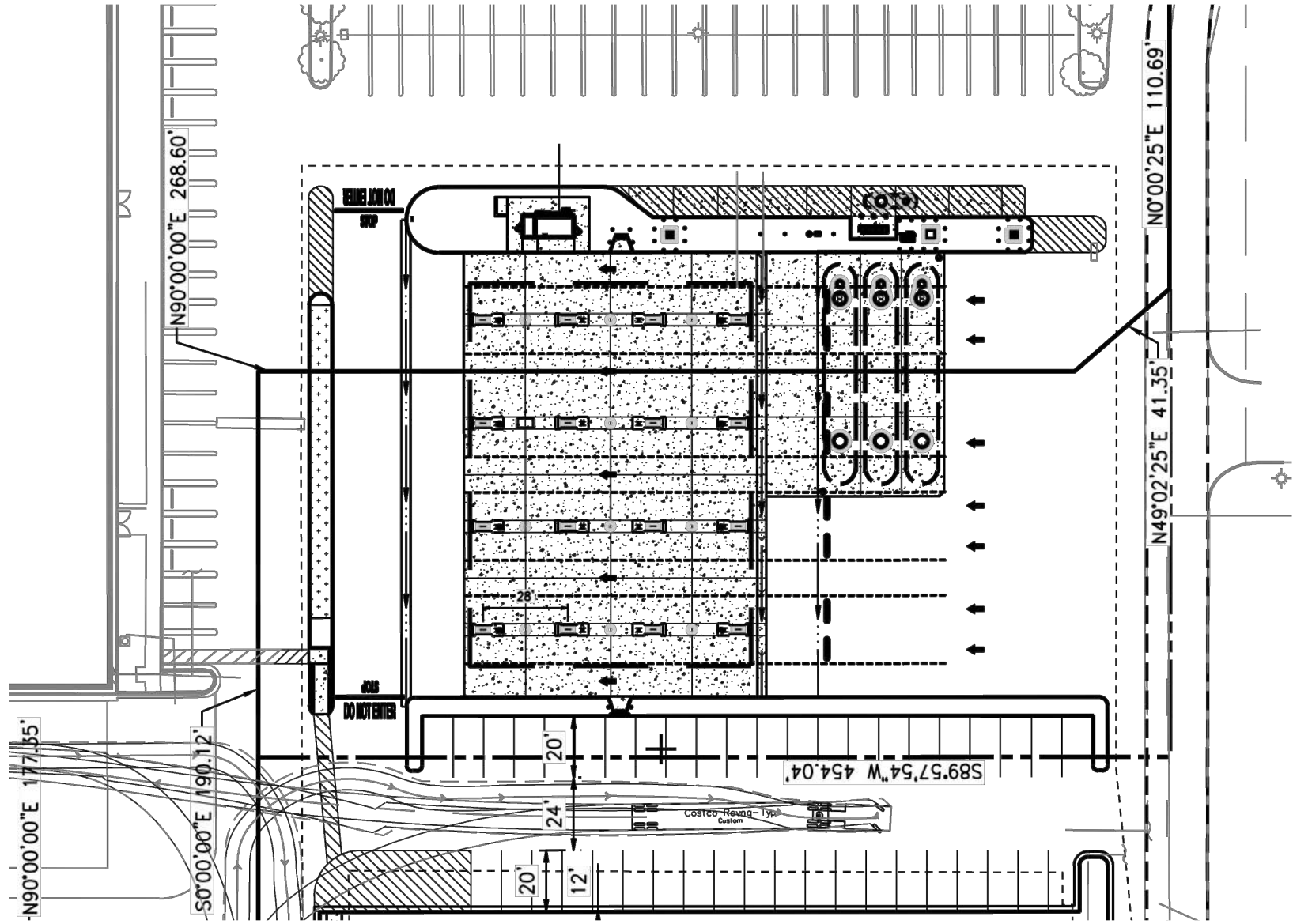
Project Description

Costco Wholesale is proposing an on-site relocation of the existing gasoline fuel station at the Orem, UT warehouse. As shown in Figure 1, the existing fuel station is currently located in the northeast corner of the site and consists of four islands (eight dispensers) with a total of sixteen (16) vehicle fueling positions. The relocation will move the fuel station to the southeast corner of the site. Through the relocation process the fuel station will expand from the current sixteen fueling positions to thirty-two (32) fueling positions, with sixteen dispensers. The relocation and expansion of the Costco Gasoline facility will further improve service provided to members at this location who can currently experience long queues and wait times during the peak periods.



Overall Site Plan for Expansion
Orem, UT

Figure
1



Detailed Site Plan
Orem, UT

Figure
2

Costco Trip Generation Database

For more than 20 years, Kittelson has maintained a database of traffic data and travel characteristics for Costco Wholesale, including its fuel stations. The database contains transportation information such as trip rates, trip type percentages, and parking demand for Costco locations throughout the United States as well as Canada and Mexico. The database is updated periodically each time new Costco traffic counts or other such information become available to Kittelson.

The Costco transportation database contains a large quantity of data related to Costco Gasoline fuel stations. Trip generation rates and trip type information for over 35 Costco Gasoline facilities located throughout the US are included. Costco has invested significant effort into developing this use-specific trip generation database for both their warehouses and their fuel stations because of the unique characteristics of Costco member travel that exist due to membership requirements and the nature of Costco sales. These unique elements apply to the trip generation for Costco warehouses, Costco Gasoline fuel stations, and the interaction of trips between the two.

The Costco-specific trip generation data presented herein follows nationally-accepted practices for trip generation data collection as recommended by the Institute of Transportation Engineers (ITE) and presents a robust data set upon which to confidently and accurately predict the trip generation of the expansion of the fuel station.

Orem Fuel Station Trip Generation Estimate

Given that there is currently an existing fuel station on site and the relocation of that fuel station will serve to expand the fuel station, this memorandum developed a trip generation estimate treating the relocation as a fuel station expansion to account for existing trips to the existing fuel station. In developing a trip generation estimate for fuel station expansion, it is important to recognize that a fuel station exists today, and the project is a relocation and expansion of this existing use, not the addition of a new use. Furthermore, the market area of the Orem Costco is already defined through existing membership and operations. As such, the change in fuel station trip generation would not increase directly in proportion to the increased number of fueling positions. Rather, the additional fueling positions will serve to process the current peak demand at the fuel station more efficiently and effectively, thus reducing wait times, vehicle queuing, and vehicle idling.

In addition to the unique characteristics of Costco operations and membership requirements, the Costco warehouse and fuel station have independent hours of operations. During the weekday AM peak hour, only the fuel station is open, whereas during the weekday PM peak hour, both the warehouse and fuel station are open. Given this, the weekday AM peak hour is not considered a critical period for Costco traffic operations since the warehouse is closed to members. As a result, the weekday PM and Saturday midday peak hours are the most critical periods for traffic operations and are therefore the primary focus for analysis in the memorandum.

To best evaluate the anticipated transportation characteristics of the fuel station expansion, data from the Costco trip generation database as well as data collected on-site were used. Kittelson reviewed before and after data from other comparable Costco fuel station expansion sites to determine a representative relationship between trip generation and the addition of fueling positions to an existing fuel station.

Before and After Fuel Expansion Data Summary

Kittelson conducted trip generation counts at 11 other Costco fuel station locations that have expanded in size. These locations include sites where fuel stations have expanded from 16 or 20 fueling positions to 30 or 32 fueling positions. Of these 11 locations, the comparable expansion sites identified were:

- Santee, CA – expansion from 16 to 32 fueling positions
- South San Francisco (El Camino), CA – expansion from 16 to 32 fueling positions
- Sunnyvale, CA – expansion from 20 to 32 fueling positions
- Scottsdale, AZ – expansion from 20 to 32 fueling positions
- South San Francisco (SFO Airport) – expansion from 20 to 32 fueling positions

These sites were selected due to their comparable number of trips prior to their fuel station expansions, as well as their similar expansion sizing.

To work with a representative sample size, trip generation data were collected before and after the expansion at each of these locations. Only data collected during similar months of the year before and after the expansion were included in this summary (for example, trip generation data for the months of March and April before the expansion were compared to trip generation data for the months of March and April after the expansion).

The total number of weekday PM peak hour and Saturday midday peak hour trip ends counted for the five listed sites are provided in Table 1 and Table 2, respectively. Note the total number of trip ends does not reflect any reductions due to internal capture (i.e., trips shared with the warehouse), pass-by, or diverted trips.

Table 1. Weekday PM Peak Hour Trip Growth

Average Weekday PM Peak Hour Trips Generated			
Location	Before Expansion	After Expansion	% Change
Santee, CA	480	758	57.9%
South San Francisco (El Camino), CA	550	856	55.6%
Sunnyvale, CA	612	846	38.2%
Scottsdale, AZ	642	688	7.2%
South San Francisco (SFO Airport), CA	688	894	29.9%
Average	-	-	37.8%

Source: Kittelson & Associates, 2022

Table 2. Saturday Midday Peak Hour Trip Growth

Average Saturday Midday Peak Hour Trips Generated			
Location	Before Expansion	After Expansion	% Change
Santee, CA	460	924	100.9%
South San Francisco (El Camino), CA	496	880	77.4%
Sunnyvale, CA	646	982	52.0%
Scottsdale, AZ	692	720	4.1%
South San Francisco (SFO Airport), CA	680	1,022	50.3%
Average	-	-	56.9%

Source: Kittelson & Associates, 2022

As shown in Table 1 and Table 2, each of the sites demonstrated an increase in the number of daily peak hour trips. However, the increase is substantially less than what would be calculated from a direct linear relationship to the number of vehicle fueling positions. Using a linear relationship, expanding the fuel station

from 16 to 32 fueling positions would equate to an increase in activity or trip generation of 100%. However, the actual before and after data show an average increase of 37.8% and 56.9% during the weekday PM and Saturday midday peak hours, respectively.

These data demonstrate that increasing the number of fueling positions at the Orem Costco fuel station will not result in a direct linear increase in trip generation. The before and after data captures the change in demand that results from reducing peak hour queues and wait times at the fuel stations due to latent demand and more efficient operations during peak hours. In all cases, peak queues and wait times are significantly reduced. Those members who previously chose not to purchase fuel because of the wait times will likely do so once the operations are improved.

Trip Type

The data collected at existing Costco Gasoline fuel stations indicate the trip generation characteristics described below for internal trip capture between the fuel station and the warehouse, as well as pass-by trips and diverted capture from the surrounding street system. The unique nature of Costco operations and its membership requirements result in different trip characteristics than those observed at typical fuel stations summarized in the standard reference *Trip Generation Manual*, published by the Institute of Transportation Engineers (ITE). The percentages of pass-by or diverted trips at Costco fuel stations is considerably lower than those quoted in the *ITE Trip Generation Manual* for typical fuel stations. Correspondingly, membership requirements also have a significant effect on trip internalization (or sharing of trips) between the warehouse and the fuel station. Fewer people exclusively visit a Costco fuel station (in comparison to a typical standalone fuel station) because they have another primary purpose for visiting the site (that being a trip to the warehouse).

Internal Trips

A key finding from the studies conducted at Costco facilities is the fact that approximately 35% of the PM peak hour trips to and from Costco fuel stations and 40% of the Saturday midday trips are internal capture trips. Internal capture trips account for those members who patronize both the warehouse and the fuel station during a single visit to the Costco site. As such, although they account for a trip to both the warehouse and the fuel station, they only account for one overall vehicle trip to the site and on the surrounding transportation system. Based on studies that include surveys of members at Costco fuel stations and membership card transaction data, on average 35% and 40% of the members buying gas during the weekday PM and Saturday midday peak hours, respectively, are members whose main purpose to the site is to visit the Costco warehouse. At some sites this number ranges as high as 75%. However, to remain conservative, the average rates are applied to this analysis.

Pass-by Trips

Another key trip characteristic that must be considered is that of pass-by trip capture. Pass-by trips represent members (and trips) that are currently traveling on the surrounding street network for some other primary purpose (such as a trip from work to home) and stop into the site en route during their normal travel. As such, pass-by trips do not result in a net increase in traffic on the surrounding transportation system and their only effect occurs at the immediate intersections and site access driveways where they become turning movements. Based on studies of customer surveys at Costco fuel stations, on average 31% and 30% of the members buying gas during the weekday PM and Saturday midday peak hours, respectively, can be classified as pass-by trip capture from the surrounding street system. This is lower than the average pass-by rate quoted in the *ITE Trip Generation manual* for typical service stations (45%) and is attributable to the unique travel characteristics that result from Costco's membership requirements.

Diverted Trips

Diverted trips are similar to pass-by trips in that they represent members (and trips) that are currently traveling on the surrounding street network for some other primary purpose and stop into the site en route during their travel. However, as the name indicates, diverted trips divert from the normal roadways they would be traveling on to go to the Costco site. Based on studies of customer surveys at Costco fuel stations, on average 40% and 35% of the members buying gas during the weekday PM and Saturday midday peak hours, respectively, can be classified as diverted trip capture from the surrounding street system.

Trip Generation Estimate

The peak hour for trip generation was defined as the analyzed hour during which the most vehicles entered the Orem Costco Gasoline facility. Arrival data were collected between 6:00 AM and 9:30 PM and on a typical weekday and between 7:00 AM and 7:00 PM on a typical Saturday in April 2022. The weekday PM peak hour of the fuel station is between 4:50 and 5:50 PM and the Saturday midday peak hour of the fuel station is between 11:10 AM and 12:10 PM. Under existing conditions, the Orem Costco Gasoline facility generates approximately 538 total trip ends (or 269 vehicles) during the weekday PM peak hour, and 546 total trip ends (or 273 vehicles) during the Saturday mid-day peak hour. This information is included as Attachment A.

Applying the data from Table 1 and Table 2, the observed increase in activity from other Costco Gasoline expansion sites to the existing trip generation provides an estimate of the expected number of additional total trips that will result from the Orem fuel station expansion. The trip generation estimates of the fuel station for the weekday PM peak hour and the Saturday midday peak hour, as well as weekday and Saturday daily trips are summarized in Table 3.

Table 3. Orem Costco Gasoline Expansion Trip Generation Estimate

Trip Type	Weekday PM Peak Hour Trip Ends		Saturday Midday Peak Hour Trip Ends		Weekday Daily Trip Ends		Saturday Daily Trip Ends	
	Estimated Existing	Expected Increase	Estimated Existing	Expected Increase	Estimated Existing	Expected Increase	Estimated Existing	Expected Increase
Total Trip Ends	538	203	546	311	6,192	3,163	5,540	3,872
Internal Trips (35% PM, 40% Sat)	(188)	(71)	(218)	(124)	(2,167)	(1,107)	(2,216)	(1,549)
Total External Trip Ends	350	132	328	186	4,025	2,056	3,324	2,323
Pass-by Trips (31% PM, 30% Sat)	(108)	(41)	(98)	(56)	(1,288)	(658)	(1,030)	(720)
Diverted Trips (40% PM, 35% Sat)	(140)	(53)	(115)	(65)	(1,570)	(802)	(1,163)	(813)
Net New Trips	101	38	115	65	1,167	596	1,130	790

Source: Kittelson & Associates, 2022

As can be seen from Table 3, the additional fueling positions are estimated to generate approximately 132 additional weekday PM peak hour total external trip ends (or 66 total additional vehicles) and 186 additional Saturday midday peak hour total external trip ends (or 93 total additional vehicles). However, only 38 and 65 of these trip ends would be new trips in the surrounding transportation system during the weekday PM and Saturday midday peak hours, respectively.

Fuel Station Operations and Queuing

As outlined above, the primary purpose of the fuel station relocation and expansion is to improve the current operations and queuing that the existing facility experiences. While there is a minimal increase in trips expected with the fuel station expansion, other Costco expansion locations show that this is greatly outweighed by the benefits of providing more pumps to expedite the processing of vehicles during peak times. All expansion locations were found to have more efficient processing of vehicles, shorter wait times, shorter queues, and less idling after the expansion. For example, average peak period queues have been observed at some Costco fuel stations to decrease by 30-75% after expansion. By increasing the amount of fueling positions available to process the fuel station demand by eight, a similar reduction in peak period queues and wait times is anticipated at the Orem location.

Existing queuing data were collected in one-minute increments in April 2022 at the Orem Costco fuel station between 6:00 AM and 9:30 PM on a typical weekday and between 7:00 AM and 7:00 PM on a typical Saturday. This information is included as Attachment A. For the queuing analysis, the peak hour was defined as the hour during which the average queue was the longest. The weekday PM peak hour is between 5:30 PM and 6:30 PM and the Saturday midday peak hour is between 1:00 PM and 2:00 PM. Table 4 summarizes the existing observed queuing conditions at the fuel station. Note the maximum queue shown in Table 4 comprises the vehicles queued behind the fuel pumps in the queuing area and vehicles queued in the coned-off approach to the fuel station.

Table 4. Existing Peak Hour Orem Costco Queuing*

	Minimum Queue	Maximum Queue	Average Queue	95 th Percentile Queue
Weekday PM Peak Period	13	35	23	31
Saturday Midday Peak Period	9	35	25	35

* Queued vehicles waiting in line behind the pumps – does not include vehicles at fueling positions

Source: Kittelson & Associates, 2022

Exhibit A provides a visual comparison between minimum and maximum queues observed during data collection on Saturday April 9, 2022.

Exhibit A. Minimum and Maximum Queue Lengths - April 9, 2022 Data Collection



As depicted in Exhibit A, queue lengths during the peak hour periods extend beyond the existing queue storage area at the fuel station and spill back into coned off areas provided in the parking lot.

To demonstrate the change in maximum queue lengths after a Costco fuel station expands, Kittelson compared the maximum queues at the five representative locations for the weekday PM and Saturday

midday peak hours. Table 5 presents the change in weekday PM peak hour maximum queues. Table 6 presents the change in Saturday midday peak hour maximum queues.

Table 5. Weekday PM Peak Hour Maximum Queue - Before & After Data Summary

Average Weekday PM Peak Hour Queue (number of vehicles)			
Location	Before Expansion	After Expansion	% Increase
Santee, CA	29	10	-65.5%
South San Francisco (El Camino), CA	48	14	-70.8%
Sunnyvale, CA	30	24	-20.0%
Scottsdale, AZ	29	10	-65.5%
South San Francisco (SFO Airport), CA	24	11	-54.2%
Average			-55.2%

Source: Kittelson & Associates, 2022

Table 6. Saturday Midday Peak Hour Maximum Queue - Before & After Data Summary

Average Weekday PM Peak Hour Queue (number of vehicles)			
Location	Before Expansion	After Expansion	% Increase
Santee, CA	23	15	-34.8%
South San Francisco (El Camino), CA	39	10	-74.4%
Sunnyvale, CA	49	33	-32.7%
Scottsdale, AZ	33	19	-42.4%
South San Francisco (SFO Airport), CA	47	25	-46.8%
Average			-46.2%

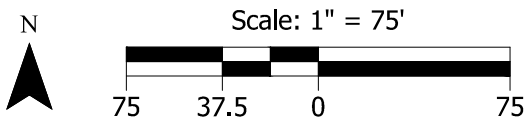
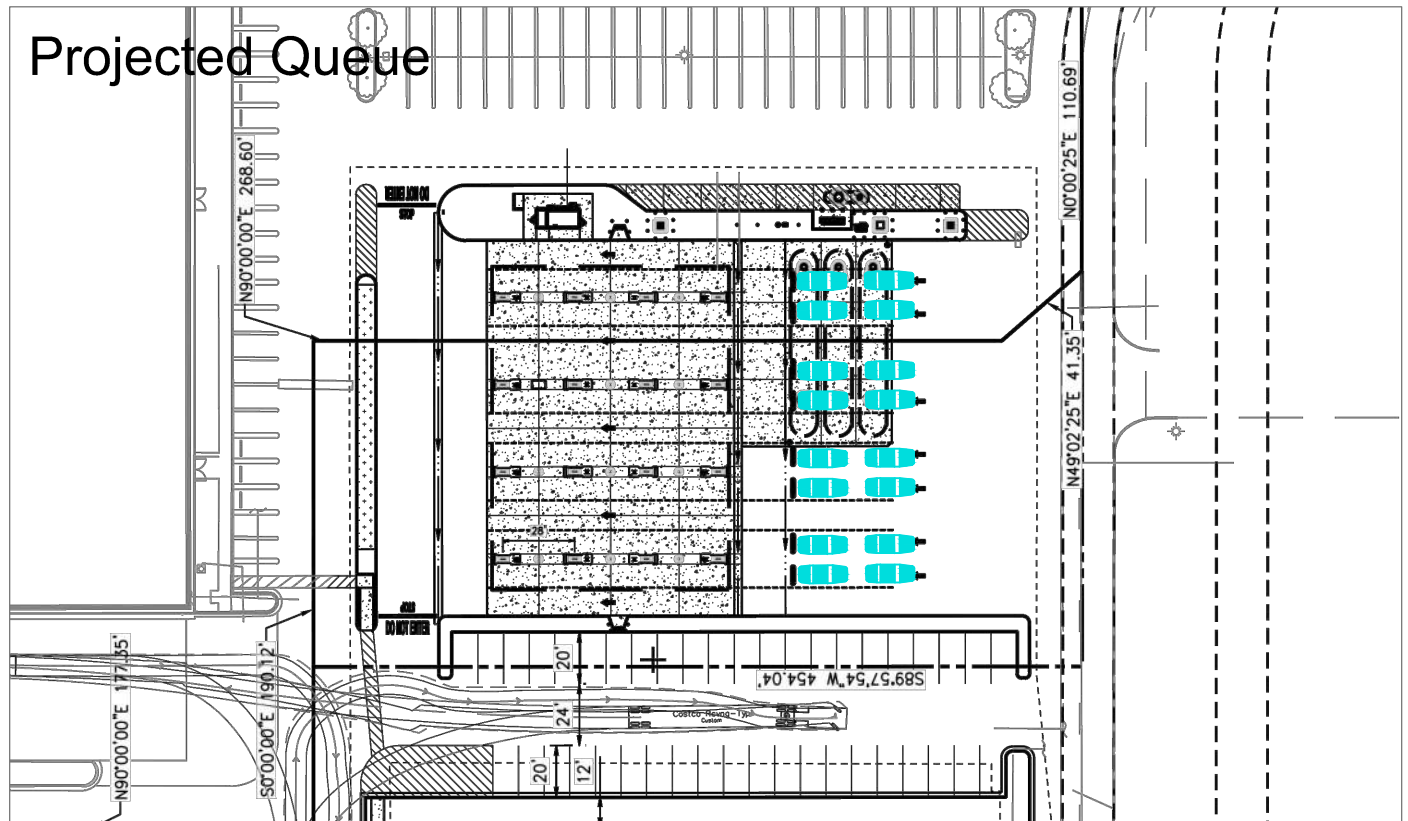
Source: Kittelson & Associates, 2022

As shown in Table 5 and Table 6, Costco fuel station expansions at similar sites demonstrate a substantial reduction in recorded maximum queues during the peak hours. During the weekday PM peak hour, these sites see an average queue reduction of 55.2%, despite the noted increase in overall trips recorded in the same one-hour period. During the Saturday midday peak hour, these sites see an average queue reduction of 46.2% following expansion.

Applying this average reduction to the observed weekday PM peak hour maximum queue at the Orem fuel station would reduce the maximum observed one-minute **queue from 35 vehicles to 16 vehicles**. During the Saturday midday peak hour, the maximum queue would be reduced **from 35 vehicles to 19 vehicles**. These data underscore the fact that adding dispensers to the existing Costco fuel station will reduce wait times, queues, and idling once it is expanded.

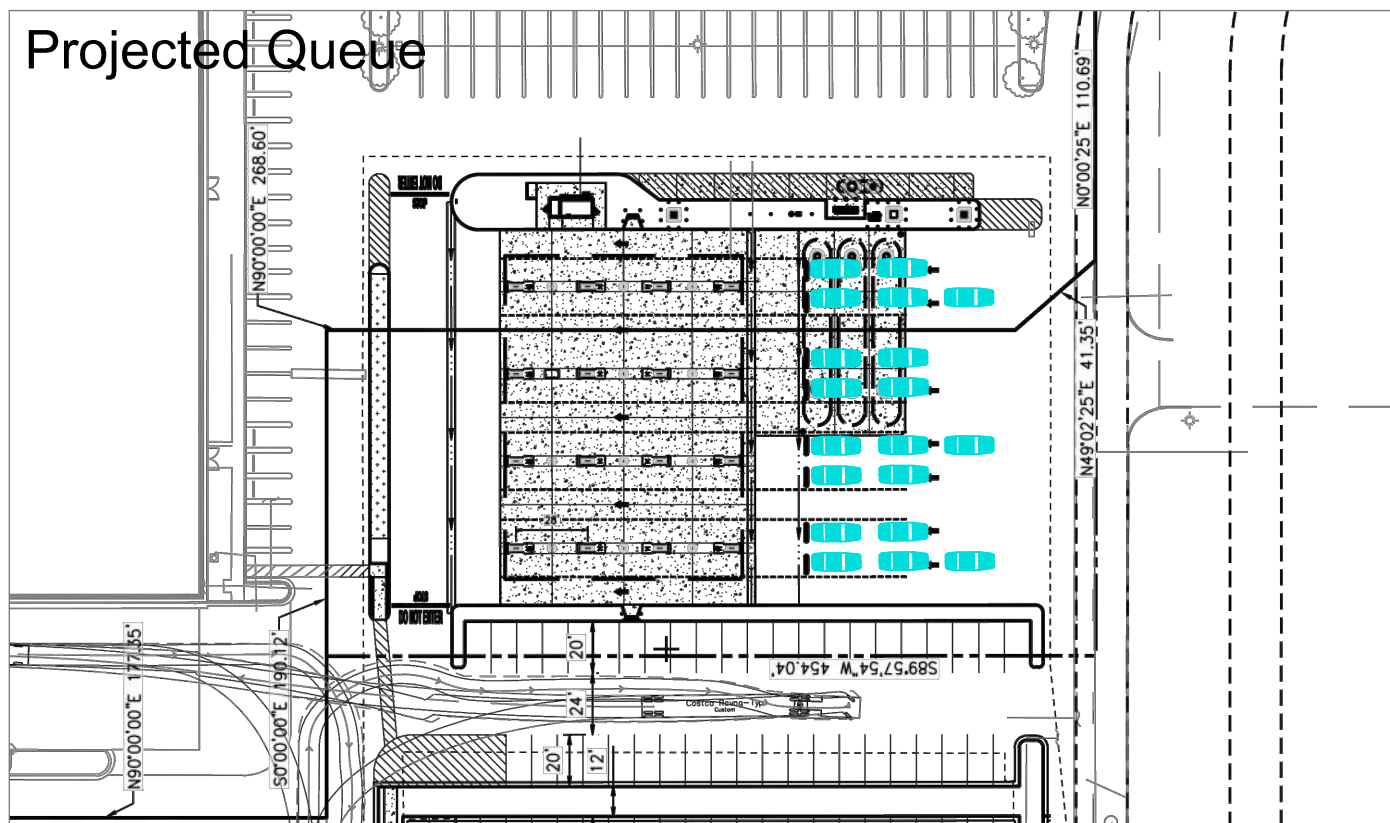
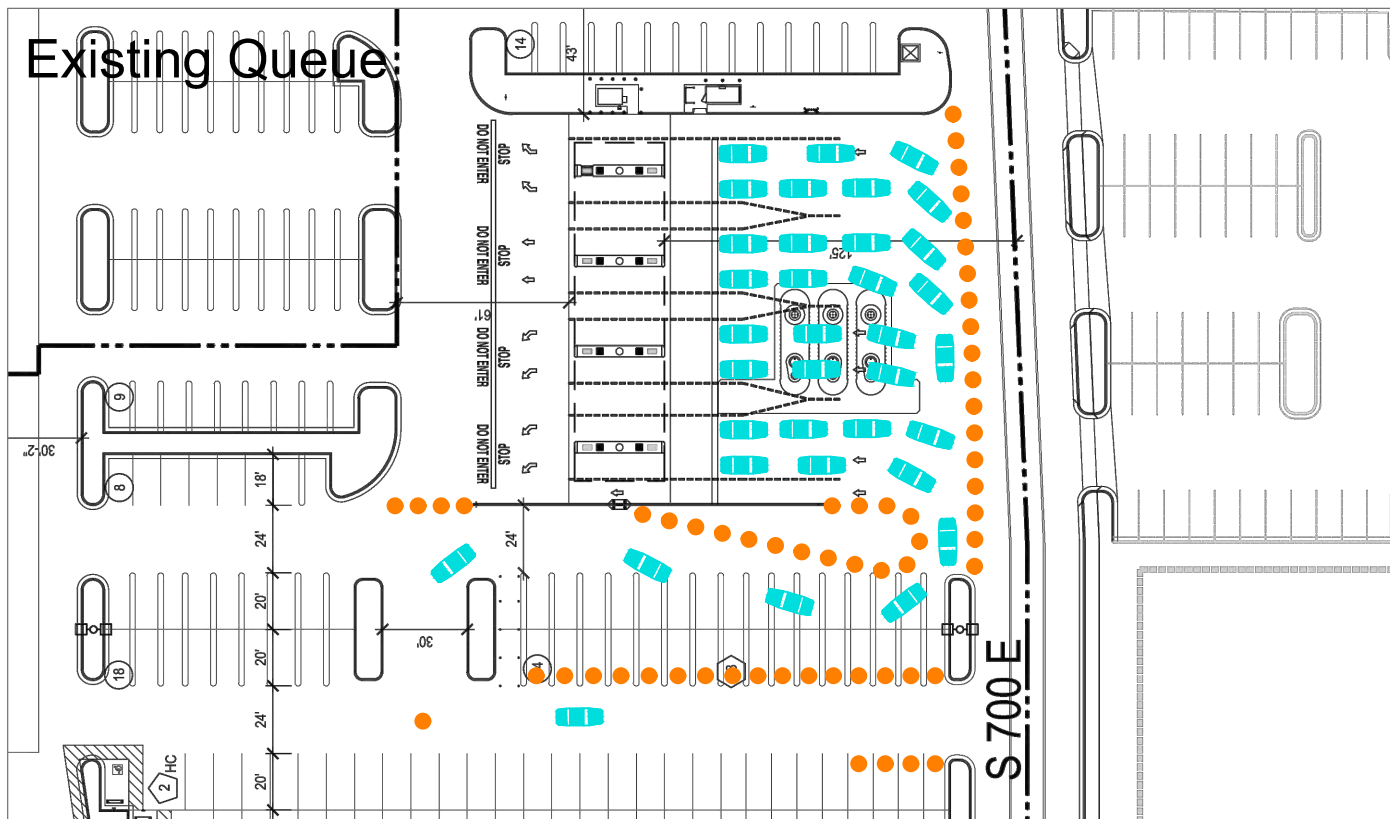
Similar to the opening of more cashiers/check-out lanes at a supermarket, the additional fueling positions available do not determine how many people wait in the queue but serve to process those waiting more efficiently. Reduced queues and wait times have been constantly observed at expanded Costco Gasoline fuel stations constructed with a higher number of fueling positions. The average time it takes for a vehicle to fuel does not significantly change by the addition of more fueling positions but because there are more fueling positions available to process vehicles, all expansion locations were found to have overall improved processing of vehicles, shorter wait times, shorter queues, and less idling after the expansion.

Figure 3 presents the existing and projected maximum queue during the weekday PM peak hour. Figure 4 presents the existing and projected maximum queue during the Saturday midday peak hour.

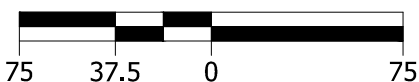


Weekday PM Peak Hour
Maximum Queues
Orem, UT

Figure
3



Scale: 1" = 75'



Saturday Midday Peak Hour
Maximum Queues
Orem, UT

Figure
4

On-Site Circulation

Vehicle queues from the exiting fuel center have historically spilled back from the main queueing area behind the pump bays, interfering with north-south traffic on West 700 East. Mitigations have been implemented by the Orem Costco staff to develop a temporary new approach to the fuel center queueing area and pumps, which has eliminated queueing conflicts between fuel center queues and inbound-outbound traffic on West 700 East. As demonstrated by the analysis of this memorandum, expansion of the fuel station from sixteen (16) fueling positions to thirty-two (32) fueling positions will substantially reduce the number of queued vehicles. Coupled with the relocation to the southeast corner of the site, the expansion will contain and direct traffic in the queueing area of the fuel station and minimize queue contact with West 700 East.

The relocation of the fueling station will allow for additional prime parking stalls to be added in place of the existing fuel station and make available the parking spaces being blocked off by the temporary coning scheme for use by Costco members. Further, additional pedestrian walkway enhancements may be accommodated for more direct routes to the front door of the warehouse.

A primary benefit of relocating the fuel station further into the site is the relocation of tanker truck traffic. Tanker trucks currently frequent the site one to four times per day to deliver fuel to the fuel station, and at the existing fuel station encounter several contact points with vehicle and pedestrian traffic. The on-site relocation will minimize fuel tanker interaction between Costco members and adjacent residents/business traffic where the existing fuel center is located at the intersection of large multi-family residential buildings and several high turn-over commercial pads. The expansion will provide additional capacity to clear queued vehicles during times when tankers are present, lessening the impact they have on Costco membership.

Conclusion

The Orem Costco Gasoline fuel station relocation and expansion is anticipated to redirect and reduce queues by expediting the processing of vehicles. As with similar Costco Gasoline fuel station expansion locations, the expansion will ensure more efficient processing of vehicles, shorter wait times, shorter queues, and less idling time.

The Costco-specific trip generation data presented herein follow nationally-accepted practices for data collection as recommended by ITE and present a robust dataset upon which to confidently and accurately predict the trip generation of the fuel station expansion. Should additional information be necessary to understand the anticipated effects of the fuel station expansion, please contact Jamie Markosian at (208) 472-9813 or jmarkosian@kittelton.com.

Attachment A

Raw Data

L2 Data Collection

Gas Ins

Location: Orem Costco Gas Station

Date: Saturday - April 9, 2022

Time: 7:00 AM - 7:00 PM

7:00 AM	11
7:05 AM	5
7:10 AM	16
7:15 AM	9
7:20 AM	8
7:25 AM	6
7:30 AM	9
7:35 AM	11
7:40 AM	11
7:45 AM	11
7:50 AM	9
7:55 AM	20
8:00 AM	18
8:05 AM	14
8:10 AM	14
8:15 AM	10
8:20 AM	14
8:25 AM	14
8:30 AM	12
8:35 AM	9
8:40 AM	15
8:45 AM	17
8:50 AM	16
8:55 AM	10
9:00 AM	16
9:05 AM	25
9:10 AM	21
9:15 AM	30
9:20 AM	23
9:25 AM	17
9:30 AM	17
9:35 AM	24
9:40 AM	21
9:45 AM	13
9:50 AM	20
9:55 AM	19
10:00 AM	21
10:05 AM	25
10:10 AM	23
10:15 AM	20
10:20 AM	18
10:25 AM	26
10:30 AM	22
10:35 AM	21
10:40 AM	20
10:45 AM	21
10:50 AM	21
10:55 AM	19

11:00 AM	22
11:05 AM	22
11:10 AM	21
11:15 AM	23
11:20 AM	27
11:25 AM	17
11:30 AM	25
11:35 AM	21
11:40 AM	20
11:45 AM	16
11:50 AM	28
11:55 AM	22
12:00 PM	30
12:05 PM	23
12:10 PM	21
12:15 PM	23
12:20 PM	17
12:25 PM	18
12:30 PM	16
12:35 PM	23
12:40 PM	18
12:45 PM	22
12:50 PM	19
12:55 PM	20
1:00 PM	22
1:05 PM	24
1:10 PM	21
1:15 PM	23
1:20 PM	20
1:25 PM	20
1:30 PM	19
1:35 PM	21
1:40 PM	17
1:45 PM	24
1:50 PM	22
1:55 PM	20
2:00 PM	20
2:05 PM	23
2:10 PM	18
2:15 PM	19
2:20 PM	21
2:25 PM	24
2:30 PM	24
2:35 PM	23
2:40 PM	24
2:45 PM	22
2:50 PM	19
2:55 PM	23

3:00 PM	24
3:05 PM	14
3:10 PM	18
3:15 PM	19
3:20 PM	24
3:25 PM	19
3:30 PM	17
3:35 PM	21
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3:45 PM	25
3:50 PM	19
3:55 PM	18
4:00 PM	18
4:05 PM	20
4:10 PM	20
4:15 PM	20
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4:30 PM	22
4:35 PM	16
4:40 PM	20
4:45 PM	22
4:50 PM	26
4:55 PM	20
5:00 PM	15
5:05 PM	20
5:10 PM	20
5:15 PM	23
5:20 PM	22
5:25 PM	21
5:30 PM	19
5:35 PM	19
5:40 PM	19
5:45 PM	19
5:50 PM	23
5:55 PM	21
6:00 PM	15
6:05 PM	19
6:10 PM	18
6:15 PM	24
6:20 PM	20
6:25 PM	15
6:30 PM	24
6:35 PM	16
6:40 PM	15
6:45 PM	22
6:50 PM	24
6:55 PM	16
Total	2770

L2 Data Collection

Gas Ins

Location: Orem Costco Gas Station

Date: Tuesday - April 12, 2022

Time: 6:00 AM - 9:30 PM

6:00 AM	5
6:05 AM	3
6:10 AM	5
6:15 AM	4
6:20 AM	1
6:25 AM	6
6:30 AM	4
6:35 AM	3
6:40 AM	6
6:45 AM	1
6:50 AM	2
6:55 AM	12
7:00 AM	7
7:05 AM	4
7:10 AM	6
7:15 AM	6
7:20 AM	15
7:25 AM	13
7:30 AM	10
7:35 AM	6
7:40 AM	8
7:45 AM	8
7:50 AM	8
7:55 AM	15
8:00 AM	14
8:05 AM	11
8:10 AM	7
8:15 AM	15
8:20 AM	16
8:25 AM	15
8:30 AM	11
8:35 AM	10
8:40 AM	11
8:45 AM	11
8:50 AM	12
8:55 AM	16
9:00 AM	18
9:05 AM	16
9:10 AM	15
9:15 AM	9
9:20 AM	16
9:25 AM	11
9:30 AM	14
9:35 AM	11
9:40 AM	24
9:45 AM	19
9:50 AM	9
9:55 AM	18
10:00 AM	19
10:05 AM	13
10:10 AM	20
10:15 AM	25
10:20 AM	21
10:25 AM	24
10:30 AM	23
10:35 AM	13
10:40 AM	18
10:45 AM	16
10:50 AM	20
10:55 AM	18

11:00 AM	21
11:05 AM	24
11:10 AM	14
11:15 AM	23
11:20 AM	20
11:25 AM	18
11:30 AM	17
11:35 AM	18
11:40 AM	22
11:45 AM	13
11:50 AM	24
11:55 AM	16
12:00 PM	24
12:05 PM	22
12:10 PM	17
12:15 PM	22
12:20 PM	12
12:25 PM	15
12:30 PM	23
12:35 PM	26
12:40 PM	19
12:45 PM	28
12:50 PM	18
12:55 PM	25
1:00 PM	23
1:05 PM	25
1:10 PM	20
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1:20 PM	24
1:25 PM	24
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2:00 PM	16
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2:30 PM	18
2:35 PM	22
2:40 PM	17
2:45 PM	26
2:50 PM	14
2:55 PM	23
3:00 PM	20
3:05 PM	18
3:10 PM	21
3:15 PM	24
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3:25 PM	14
3:30 PM	26
3:35 PM	23
3:40 PM	18
3:45 PM	18
3:50 PM	14
3:55 PM	23

4:00 PM	22
4:05 PM	17
4:10 PM	27
4:15 PM	19
4:20 PM	15
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4:30 PM	27
4:35 PM	19
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7:10 PM	24
7:15 PM	16
7:20 PM	17
7:25 PM	23
7:30 PM	19
7:35 PM	16
7:40 PM	21
7:45 PM	20
7:50 PM	13
7:55 PM	19
8:00 PM	12
8:05 PM	18
8:10 PM	17
8:15 PM	11
8:20 PM	14
8:25 PM	16
8:30 PM	10
8:35 PM	16
8:40 PM	10
8:45 PM	8
8:50 PM	10
8:55 PM	6

9:00 PM	7
9:05 PM	4
9:10 PM	10
9:15 PM	8
9:20 PM	3
9:25 PM	2
Total	3096

Queueing

Location: Orem Costco Gas Station
Date: Tuesday - April 12, 2022
Time: 7:00 AM - 7:00 PM

	Time	Queue	Time	Queue		Time	Queue	Time	Queue		Time	Queue	Time	Queue
Tank In	6:00 AM	0	8:00 AM	0		10:00 AM	4	12:00 PM	4		2:00 PM	28	4:00 PM	21
	6:01 AM	0	8:01 AM	1		10:01 AM	6	12:01 PM	7		2:01 PM	27	4:01 PM	16
	6:02 AM	0	8:02 AM	3		10:02 AM	5	12:02 PM	14		2:02 PM	23	4:02 PM	19
	6:03 AM	0	8:03 AM	1		10:03 AM	3	12:03 PM	12		2:03 PM	20	4:03 PM	27
	6:04 AM	1	8:04 AM	2		10:04 AM	2	12:04 PM	9		2:04 PM	26	4:04 PM	29
	6:05 AM	0	8:05 AM	1		10:05 AM	3	12:05 PM	6		2:05 PM	18	4:05 PM	26
	6:06 AM	0	8:06 AM	0		10:06 AM	1	12:06 PM	6		2:06 PM	18	4:06 PM	26
	6:07 AM	0	8:07 AM	1		10:07 AM	1	12:07 PM	7		2:07 PM	15	4:07 PM	30
	6:08 AM	0	8:08 AM	1		10:08 AM	1	12:08 PM	11		2:08 PM	15	4:08 PM	25
	6:09 AM	0	8:09 AM	0		10:09 AM	3	12:09 PM	14		2:09 PM	14	4:09 PM	26
	6:10 AM	0	8:10 AM	0		10:10 AM	3	12:10 PM	10		2:10 PM	18	4:10 PM	22
	6:11 AM	0	8:11 AM	1		10:11 AM	1	12:11 PM	10		2:11 PM	23	4:11 PM	30
	6:12 AM	0	8:12 AM	0		10:12 AM	2	12:12 PM	12		2:12 PM	24	4:12 PM	27
	6:13 AM	0	8:13 AM	1		10:13 AM	3	12:13 PM	8		2:13 PM	19	4:13 PM	29
	6:14 AM	0	8:14 AM	0		10:14 AM	5	12:14 PM	4		2:14 PM	24	4:14 PM	31
	6:15 AM	1	8:15 AM	1		10:15 AM	5	12:15 PM	6		2:15 PM	24	4:15 PM	28
	6:16 AM	0	8:16 AM	1		10:16 AM	11	12:16 PM	7		2:16 PM	20	4:16 PM	25
	6:17 AM	0	8:17 AM	2		10:17 AM	14	12:17 PM	5		2:17 PM	17	4:17 PM	28
	6:18 AM	0	8:18 AM	2		10:18 AM	18	12:18 PM	10		2:18 PM	18	4:18 PM	28
	Tank Out	6:19 AM	0	8:19 AM	1		10:19 AM	15	12:19 PM	11		2:19 PM	17	4:19 PM
6:20 AM		0	8:20 AM	4		10:20 AM	19	12:20 PM	8		2:20 PM	21	4:20 PM	8
6:21 AM		0	8:21 AM	1		10:21 AM	13	12:21 PM	10		2:21 PM	22	4:21 PM	28
6:22 AM		0	8:22 AM	4		10:22 AM	12	12:22 PM	7		2:22 PM	28	4:22 PM	26
6:23 AM		0	8:23 AM	1		10:23 AM	12	12:23 PM	6		2:23 PM	22	4:23 PM	22
6:24 AM		0	8:24 AM	2		10:24 AM	13	12:24 PM	5		2:24 PM	24	4:24 PM	19
6:25 AM		0	8:25 AM	0		10:25 AM	10	12:25 PM	3		2:25 PM	25	4:25 PM	21
6:26 AM		2	8:26 AM	1		10:26 AM	12	12:26 PM	1		2:26 PM	21	4:26 PM	19
6:27 AM		1	8:27 AM	3		10:27 AM	14	12:27 PM	2		2:27 PM	20	4:27 PM	14
6:28 AM		1	8:28 AM	2		10:28 AM	16	12:28 PM	5		2:28 PM	20	4:28 PM	19
6:29 AM		1	8:29 AM	5		10:29 AM	14	12:29 PM	2		2:29 PM	17	4:29 PM	21
6:30 AM		0	8:30 AM	1		10:30 AM	15	12:30 PM	6		2:30 PM	18	4:30 PM	17
6:31 AM		0	8:31 AM	2		10:31 AM	17	12:31 PM	5		2:31 PM	24	4:31 PM	19
6:32 AM		0	8:32 AM	1		10:32 AM	16	12:32 PM	9		2:32 PM	21	4:32 PM	21
6:33 AM		0	8:33 AM	1		10:33 AM	14	12:33 PM	9		2:33 PM	19	4:33 PM	24
6:34 AM		1	8:34 AM	2		10:34 AM	18	12:34 PM	7		2:34 PM	23	4:34 PM	25
6:35 AM		0	8:35 AM	0		10:35 AM	13	12:35 PM	4		2:35 PM	23	4:35 PM	24
6:36 AM		0	8:36 AM	0		10:36 AM	11	12:36 PM	7		2:36 PM	25	4:36 PM	24
6:37 AM		0	8:37 AM	2		10:37 AM	8	12:37 PM	5		2:37 PM	27	4:37 PM	24
6:38 AM		0	8:38 AM	0		10:38 AM	11	12:38 PM	12		2:38 PM	29	4:38 PM	16
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L2 Data Collection

Queuing

Location: Orem Costco Gas Station

Date: Saturday, April 9, 2022

Time: 7:00 AM - 7:00 PM

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	7:01 AM	2	9:01 AM	0		11:01 AM	13	1:01 PM	30		3:01 PM	35	5:01 PM	35
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November 14, 2025

(DATE CHANGE)

Costco Wholesale Fuel Facility Re-Location

Costco Wholesale is considering a proposal to re-locate and expand the existing Costco Fuel Facility located at 648 E 800 S, Orem, UT 84097. Pursuant to Orem City Code Section 22-14-20(I), this meeting is being held to discuss the project with you. This is an opportunity for you to review the plans and provide input and recommendations regarding the project. Plans, renderings, and additional information will be presented at the meeting. This application has not yet been reviewed by the City and is subject to change during the review process.

The Neighborhood Meeting is scheduled for:

December 8th, 2025
7:00 p.m.

at

University Place Mall Offices
575 E University Parkway Suite N260
Orem, UT 84097



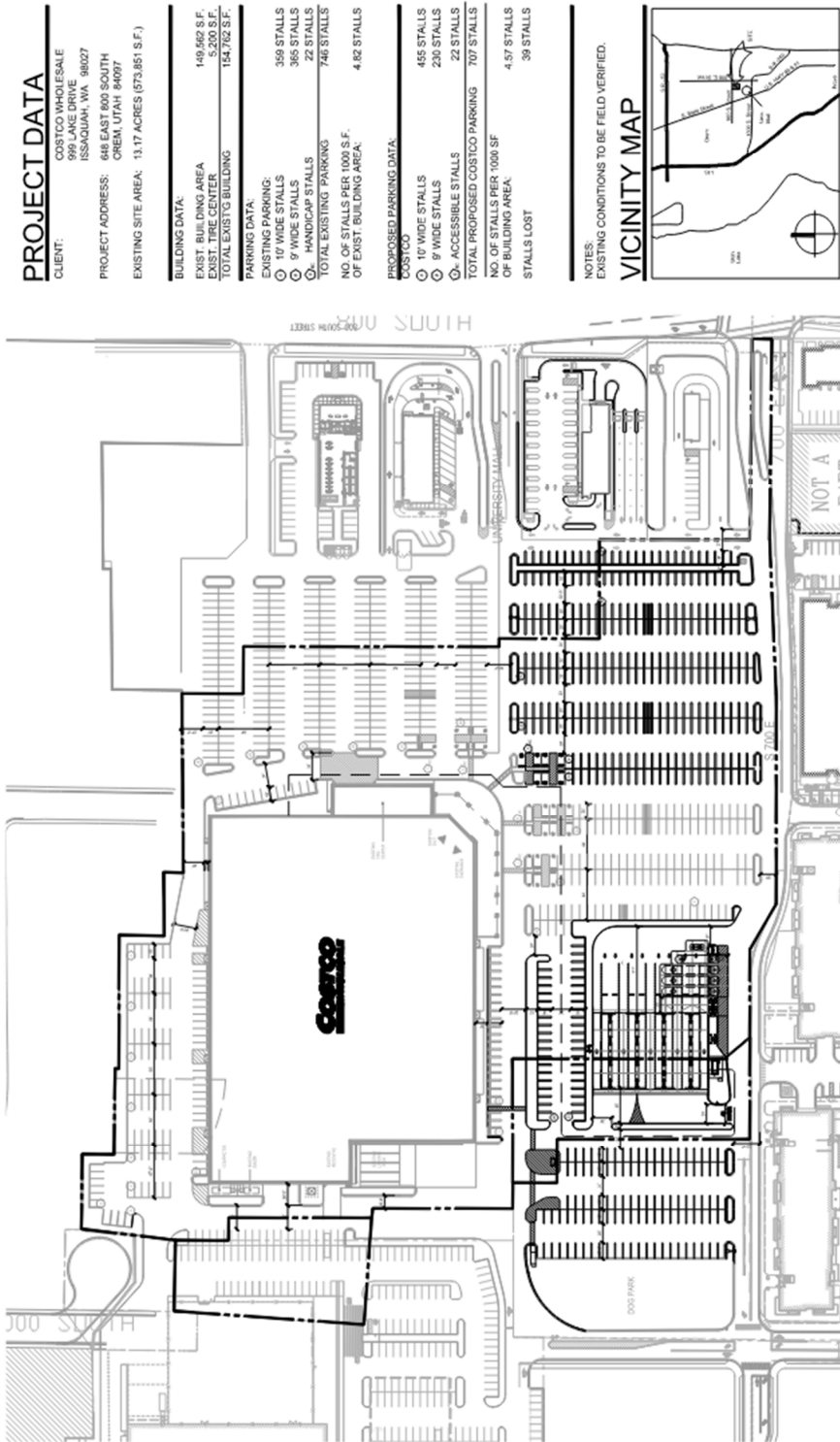
We look forward to discussing this proposal with you.

For more information please contact:

Josh Beach (Senior Planner)

jbeach@core-states.com

425-880-7232



COSTCO WHOLESALE

OREM, UTAH

OVERALL SITE PLAN

OCTOBER 3, 2025

Costco Fuel Facility Relocation 648 East 800 South Orem, UT 84097

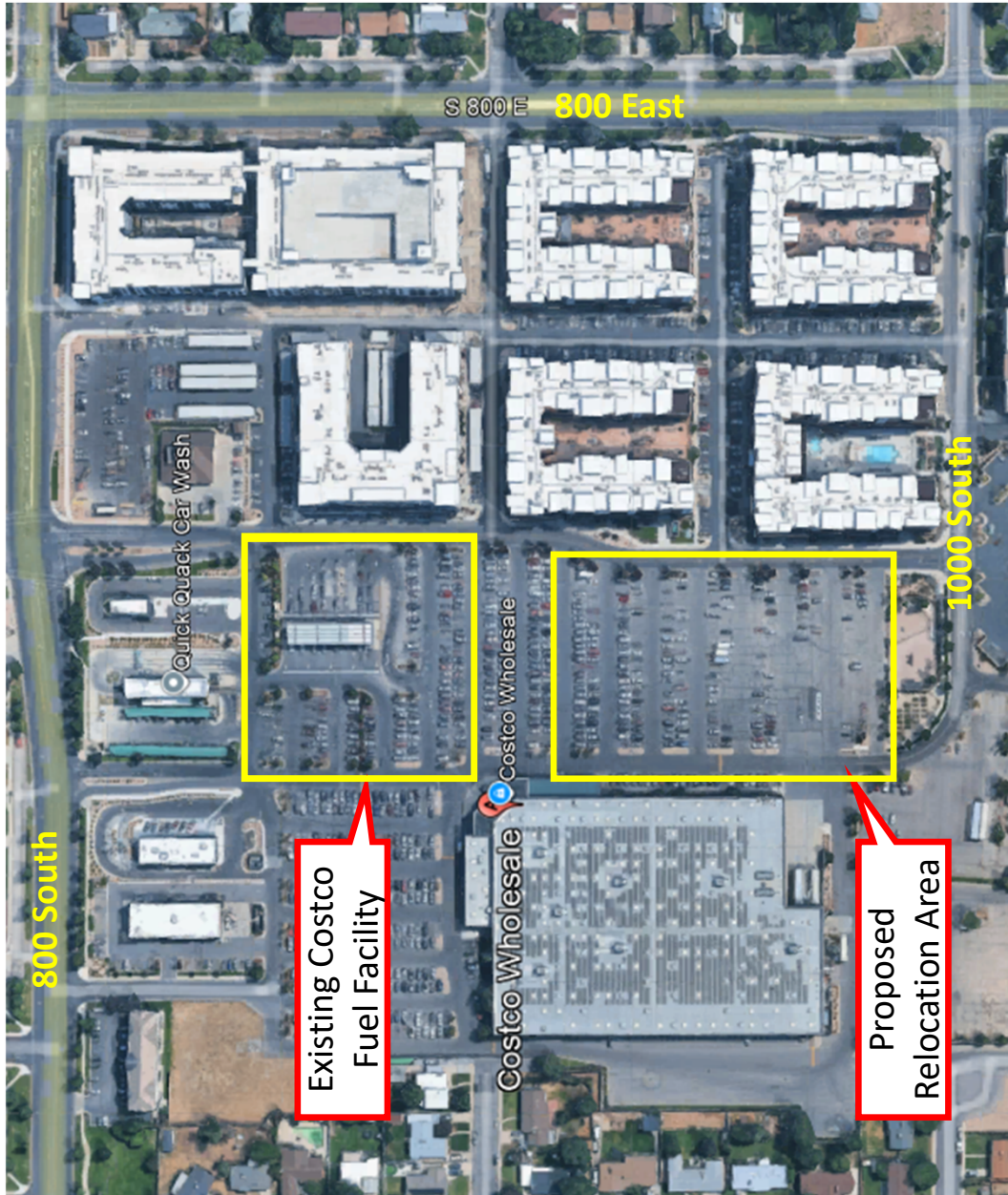
Site Plan Review



December 8, 2025

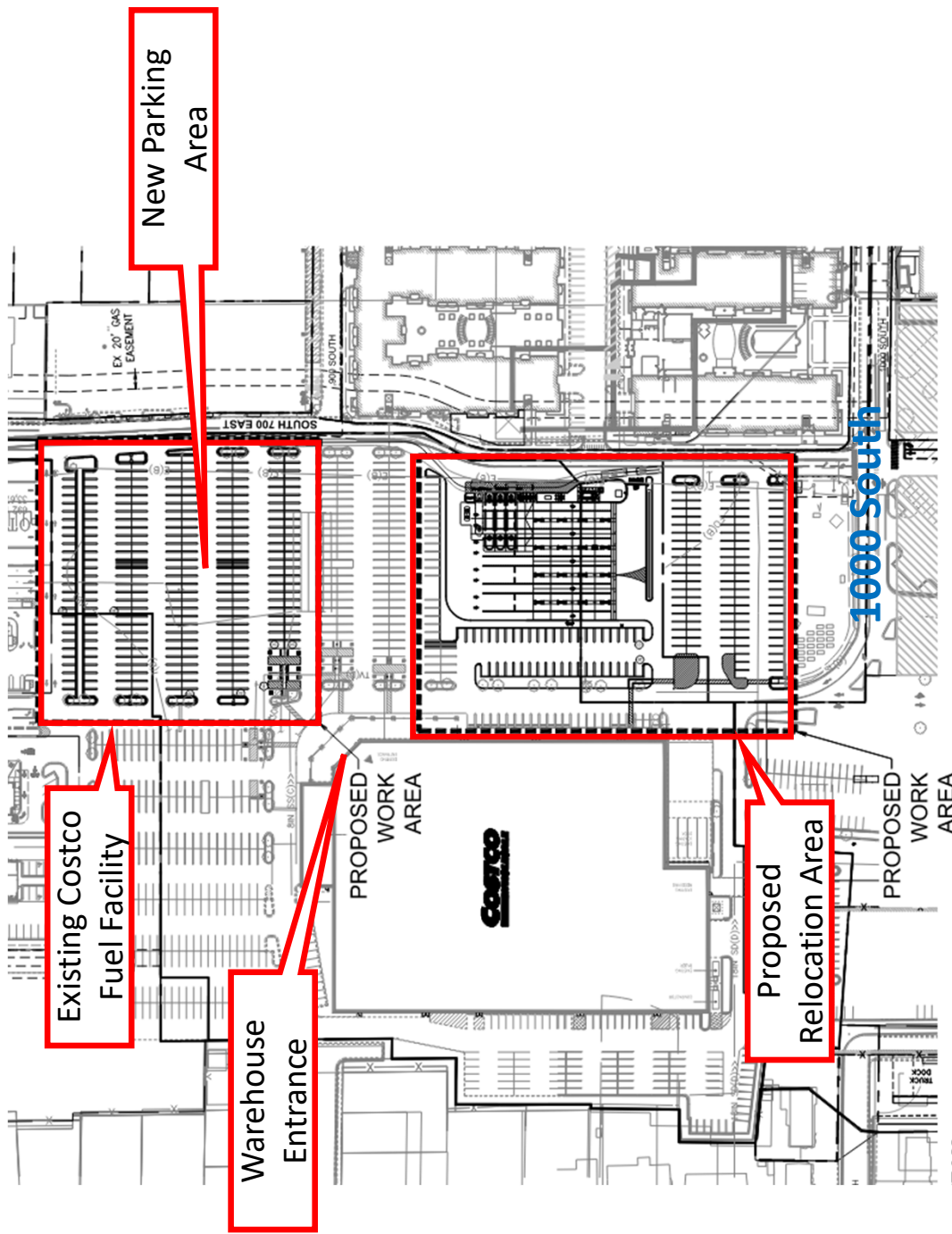
Project Location:

- Existing facility:
NE corner of site
- Relocated facility will be
located south of existing
facility



Parking

- The warehouse parking lot will be reconfigured to accommodate relocation
- Number of spaces required by code - 557
- Number of spaces proposed - 698



Overall Site Plan

Existing:

- 4 islands
- 8 multi-product dispensers
- 16 fueling positions
- 3,919-square-foot canopy

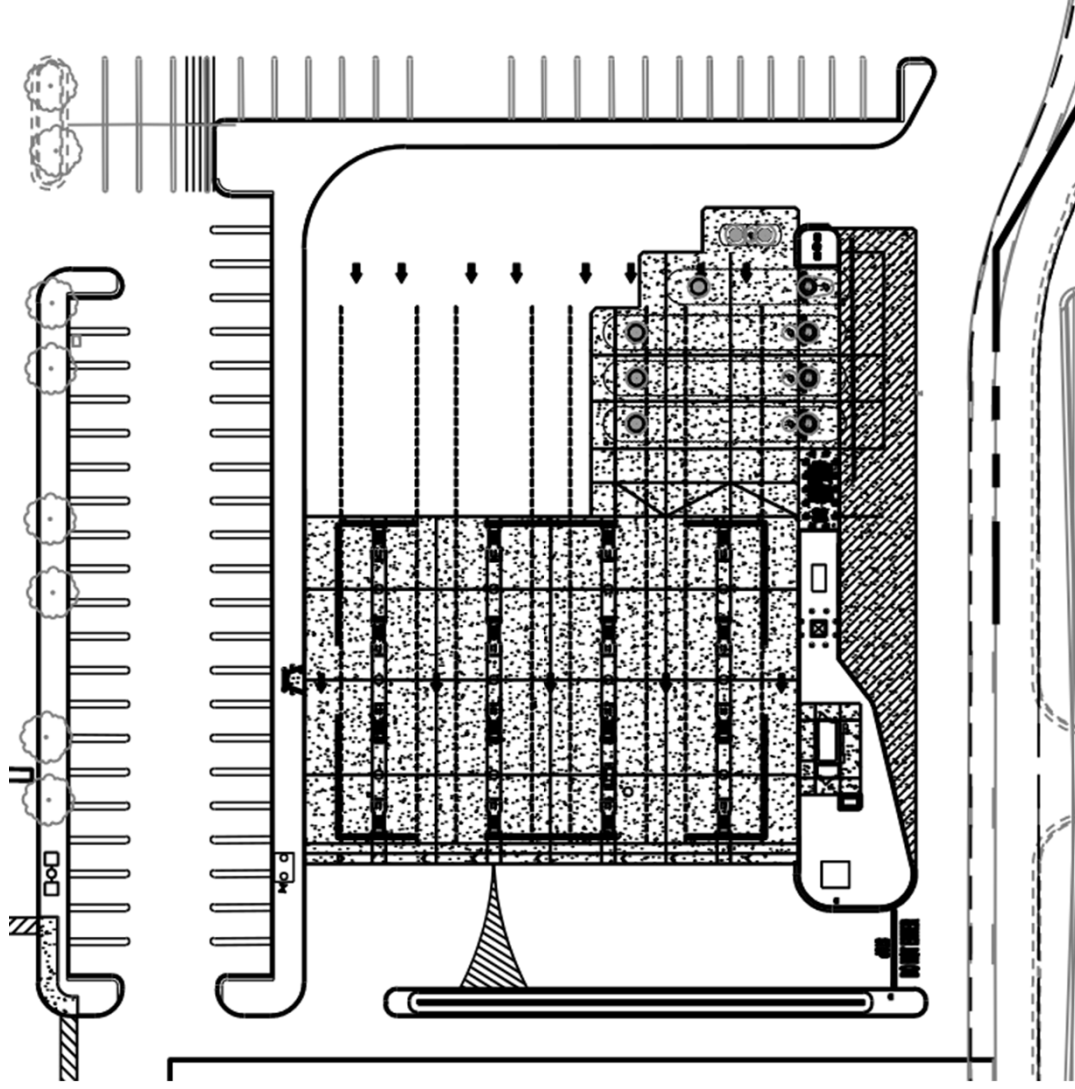
Relocated Facility:

- 4 islands
- 16 MPDs (+8)
- 32 fueling positions (+16)
- 11,655 square-foot canopy

Intent of new facility:

New state of the art facility

- Improved fuel facility operations
 - Increased capacity
 - Reduced queues
 - Shortened wait times
 - Improved site circulation
- More efficient fuel-purchasing experience



Detailed Site Plan

Relocated Facility:

- 4 islands
- 16 MPDs (+8)
- 32 fueling positions (+16)
- 11,655 square-foot canopy

Intent:

- Greater, more efficient queuing capacity
- More spacing between dispensers
- Improved fuel facility operations
 - Reduced queues
 - Shortened wait times
 - More efficient fuel-purchasing experience

Queue Length (Avg. No of vehicles):

Existing

- Existing Weekday PM Peak Hour: 23
- Saturday Midday Peak Hour: 25

After Relocation

- Weekday PM Peak Hour: 12 (-55%)
- Saturday Midday Peak Hour: 11 (-46%)

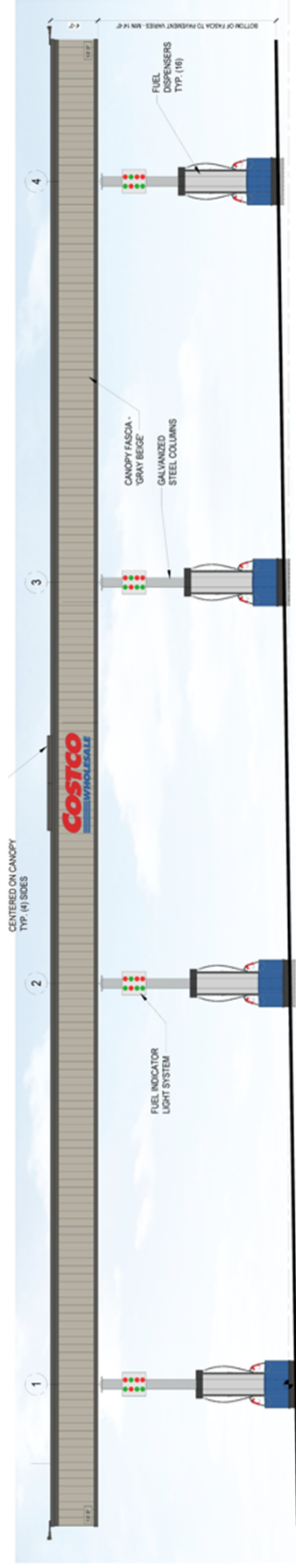
*Technical Memorandum by Kittelson Associates, July 01, 2022



Traffic Study* Findings

Architectural Elements:

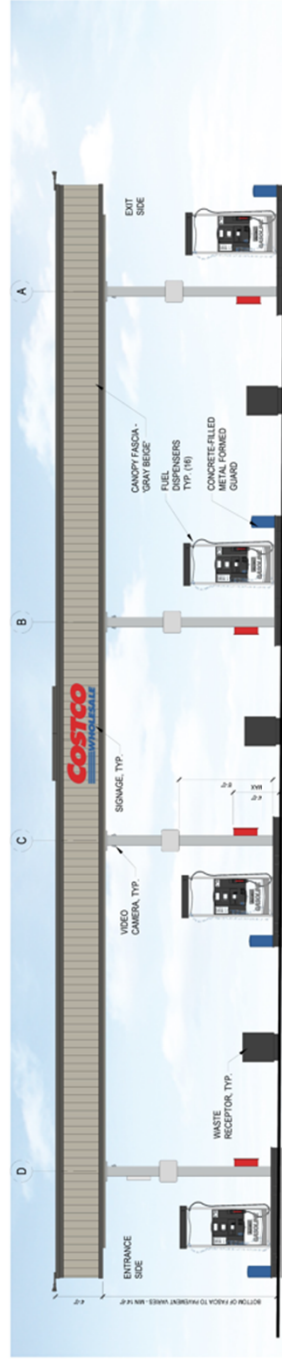
- Galvanized steel columns
- Metal canopy fascia



1 CANOPY AND DISPENSER ISLANDS (ENTRY ELEVATION)

SCALE: 1/4" = 1'-0"

0125



11 CANOPY AND DISPENSER ISLANDS

SCALE: 1/4" = 1'-0"

0125



3 CANOPY SIGNAGE

SCALE: 1/2" = 1'-0"

1216

SIGNAGE AREA TABULATION (WALL SIGNS)			
ITEM	DESCRIPTION	AREA (S.F.)	TOTAL S.F.
1	CANOPY SIGNAGE	21.14	21.14
2	ENTRANCE SIGNAGE	1.14	1.14
3	EXIT SIGNAGE	1.14	1.14
4	WASTE RECEPTOR SIGNAGE	1.14	1.14
5	VIDEO CAMERA SIGNAGE	1.14	1.14
6	FUEL DISPENSER SIGNAGE	1.14	1.14
7	CONCRETE FILLER SIGNAGE	1.14	1.14
8	WASTE RECEPTOR SIGNAGE	1.14	1.14
9	VIDEO CAMERA SIGNAGE	1.14	1.14
10	FUEL DISPENSER SIGNAGE	1.14	1.14
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100	WASTE RECEPTOR SIGNAGE	1.14	1.14

Elevations



Questions / Comments

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Kayleen Burnett - Kburnet@costco.com



Neighborhood Meeting Sign-in Sheet

Costco Fuel Center Relocation

December 8, 2025 7:00 to 8:00 PM

Name (printed)	Address	Telephone	Email
Elaine Crismon	1069 So. 545 E		elaine.crismon@gmail
Jerry Crismon	1069 S. 545 E	801-226-6534	jerry.crismon@gmail
Lane Miller			
Josh Beech			
Jamie Morkosian			
Kayleen Burnett			
Al Esquivel			