

CITY OF CENTRAL POINT PLANNING COMMISSION AGENDA January 5, 2016 - 6:00 p.m.

- I. MEETING CALLED TO ORDER
- II. ROLL CALL
- III. CORRESPONDENCE
- IV. MINUTES

Review and approval of November 3, 2015 Minutes.

V. PUBLIC APPEARANCES

VI. BUSINESS

- A. Consideration of a Conditional Use Permit application for the construction of a 161,992 square foot membership warehouse and fuel facility on an 18.28 acre site at the southwest corner of Hamrick and Table Rock Road. The project site is within the Federal Way Business Park Subdivision in the Industrial (M-1) zoning district, and is identified on the Jackson County Assessor's map as 37S 2W 12B, Tax Lots 213, 214, 215, and 216. File No. 15022. Approval Criteria: CPMC 17.76, Conditional Use Permits. Applicant: Costco Wholesale; Agent: Steve Bullock, MG2.
- B. Consideration of a Site Plan and Architectural Review application for the construction of a 161,992 square foot membership warehouse and fuel facility. The 18.28 acre project site is located within the Federal Way Business Park Subdivision in the Industrial (M-1) zoning district and is identified on the Jackson County Assessor's map as 37S 2W 12B, Tax Lots 213, 214, 215, and 216. File No. 15028. Approval Criteria: CPMC 17.72, Site Plan & Architectural Review. Applicant: Costco Wholesale; Agent: Steve Bullock, MG2.
- Consideration of a Class "C" Variance request to the M-1 sign area standard per CPMC 17.48.080(A)(1) for a membership warehouse in Industrial (M-1) zone. The project site is located within the Federal Way Business Park Subdivision at the corner of Hamrick and Table Rock Road, and is identified on the Jackson County Assessor's map as 37S 2W 12B, Tax Lots 213, 214, 215 and 216.

 Approval Criteria: CPMC 17.13.500, Class C Variances. Applicant: Costco Wholesale; Agent: Steve Bullock, MG2.

VII. DISCUSSION

A.

VIII. ADMINISTRATIVE REVIEWS

IX. MISCELLANEOUS

X. ADJOURNMENT

City of Central Point Planning Commission Minutes November 3, 2015

I. MEETING CALLED TO ORDER AT 6:00 P.M.

II. ROLL CALL

Commissioners Chuck Piland, Craig Nelson, Kay Harrison, Mike Oliver, Tim Schmeusser, Tom VanVoorhees and Susan Szczesniak were present. Also in attendance were: Tom Humphrey, Community Development Director, Don Burt, Planning Manager, Stephanie Holtey, Community Planner and Karin Skelton, Planning Secretary,

III. CORRESPONDENCE

None

IV. MINUTES

Tom Van Voorhees pointed out that his name was misspelled throughout the October 6, 2015 minutes. No other revisions were noted as necessary. Tom Van Voorhees made a motion to approve the October 6, 2015 minutes with the correction noted. Kay Harrison seconded the motion. **ROLL CALL**: Mike Oliver, yes; Susan Szczesniak, abstained; Tim Schmeusser, yes; Tom Van Voorhees, yes; Craig Nelson, abstained, Kay Harrison, yes. Motion passed.

V. PUBLIC APPEARANCES

None

VI. BUSINESS

A. Stephanie Holtey presented the Findings of Fact and Conclusions of Law in support of the Planning Commission's October 6, 2015 decision to approve the White Hawk Transit Oriented Development Master plan per the Revised Staff Report dated October 6, 2015. She advised the commissioners there was a typographical error on page 58 of the findings which would be corrected. She reviewed the information in the revised staff report and asked for questions and comments from the Planning Commissioners. There were no questions or comments.

Kay Harrison made a motion to approve Resolution 825 approving the Master Plan for the White Hawk Transit Oriented Development. Mike Oliver seconded the motion. **ROLL CALL**: Mike Oliver, yes; Susan Szczesniak, yes; Tim Schmeusser, yes; Tom Van Voorhees, yes; Craig Nelson, yes; Kay Harrison, yes. Motion passed.

B. Ms. Holtey presented the Planning Commission with Findings of Fact and Conclusions of Law with regard to a three lot partition plat application in the Eastside Transit Oriented Development District. She indicated that the numbering on page 149 would be corrected and page 111 is a duplicate of a page contained in Exhibit A and should be discarded. Ms. Holtey asked if the Planning Commission had any questions or comments.

Mr. Oliver stated that it seemed to be taking a long time to address the traffic on Gebhard Road. He also noted that the Master Plan excludes covered parking, which is required in the TOD.

Ms. Holtey replied that the Master Plan had been conditioned to require that the developer provide the required covered parking or submit an application for a Class "C" Variance, which would be decided by the Planning Commission.

Mr. Oliver stated that covered parking would seem to be important to some individuals and might be a factor in their choice to locate in the development. He also said that the traffic speed study needed to be done as soon as possible.

Mr. Humphrey answered that when the City of Central Point assumed the authority for Gebhard Road, it would be able to address the speed issues.

A question was asked as to the length of time construction would be abated between the proposed phases of the project. Ms. Holtey stated that the municipal code allowed phasing of the project and that the construction of each phase would be market driven.

Craig Nelson made a motion to approve Resolution 826. Susan Szczesniak seconded the motion. ROLL CALL: Mike Oliver, yes; Susan Szczesniak, yes; Tim Schmeusser, yes; Tom Van Voorhees, yes; Craig Nelson, yes; Kay Harrison, yes. Motion passed.

C. Don Burt presented the Amendment of the 2008 Population Element. He informed the Commissioners that in 2013, House Bill 2253 required all counties to prepare a population element. Before that all population projections were variable. He stated that the population element forecast will be required to be updated every four years by Portland State University. He added that the state would pay for the population element to be updated. He said that having Portland State do the population forecast would ensure that it would be consistent

Planning Commission Minutes November 3, 2015 Page 3

in all areas. He said that at this time he was requesting the Planning Commission direct staff to start the amendment of the 2008 population element.

Mike Oliver made a motion to direct staff to start the amendment of the 2008 population element. Tom Van Voorhees seconded the motion. ROLL CALL: Mike Oliver, yes; Susan Szczesniak, yes; Tim Schmeusser, yes; Tom Van Voorhees, yes; Craig Nelson, yes; Kay Harrison, yes. Motion passed.

D. Tom Humphrey presented the Planning Commission with maps of the CP-3 Urban Reserve Area. He informed them that the city is preparing a conceptual land use plan for CP-3. He indicated on the map the acreage included in the CP-3 boundary. The area consists of 38 acres and the land is split, with 58% (22 acres) in the flood plain which would be open space and 42% (16-17 acres) would be designated employment land. His request to the Planning Commission was to offer their input as to what they might envision on the employment designated land.

The commissioners asked if there were any plans for a bridge over Bear Creek. Mr. Humphrey stated that if there is much traffic congestion there might have to be a bridge for additional access. He requested the Planning Commission draw what they might like to see in that area. The Commissioners discussed traffic concerns, including the possibility of a bridge and the best location for it, the idea of possibly relocating Penninger Road to the north, and the impact on the greenway bike path. Mr. Humphrey suggested the Commissioners take the maps home and draw in what they thought would work well in the area and then return them to him. He stated that the only limitation is the 58%-42% split between open space and employment designations.

E. Mr. Humphrey then introduced a document prepared by the DLCD in 2007 which focused on types of public hearings. He stated that the city attorney had requested they review the rules governing public hearings. He defined a legislative hearing and a quasi-judicial hearing. He explained that a legislative hearing is when the City is acting as a lawmaker. A Quasi-judicial hearing is when the City is acting as a judge. He stated that it is important to disclose ex parte, bias or conflict of interest at the outset of a meeting or there could be grounds for an appeal. He advised the commission that ex parte could include conversations regarding the issue(s), site visits or similar actions prior to a hearing. Any of these things should be noted at the beginning of the hearing and, if deemed necessary, anyone having had such contact or a conflict may need to recuse himself/herself.

The Commissioners stated that as Central Point was a small town it was difficult not to have conversations regarding current projects.

Planning Commission Minutes November 3, 2015 Page 4

Mr. Humphrey responded that it is important that everything be disclosed at any hearing and that if the commissioners would like more information regarding the legal implications, he would set up a meeting with the city Attorney.

VIII. ADMINISTRATIVE REVIEWS

None

IX. MISCELLANEOUS

None

X. ADJOURNMENT

7:45 p.m. Commission Chair Piland moved that the meeting be adjourned. All members said "aye". Meeting adjourned.

The foregoing minutes of the November 3, 2015, Planning Commission meeting were approved by the Planning Commission at its meeting on the 5th day of January, 2016.

Chuck Piland, Planning Commission Chair

CONSIDERATION OF A CONDITIONAL USE PERMIT APPLICATION FOR THE CONSTRUCTION OF A 161,992 SQUARE FOOT COSTCO MEMBERSHIP WAREHOUSE ON AN 18.28 ACRE SITE AT THE SOUTHWEST CORNER OF HAMRICK AND TABLE ROCK ROAD.



STAFF REPORT

Community Development
Tom Humphrey, AICP
Community Development Director

STAFF REPORT January 5, 2016

ITEM (File No. 15022)

Consideration of a Conditional Use Permit application for the construction of a 161,992 square foot Costco membership warehouse on an 18.28 acre site at the southwest corner of Hamrick and Table Rock Road. The project site is within the Federal Way Business Park in the Industrial (M-1) zoning district, and is identified on the Jackson County Assessor's map as 37S 2W 12B, Tax Lots 213, 214, 215, and 216. Applicant: Costco Wholesale; Agent: Steve Bullock, MG2.

SOURCE:

Stephanie Holtey, Community Planner II

BACKGROUND

At this time Costco Wholesale ("Applicant") is requesting a Conditional Use Permit to construct a new membership warehouse and fuel facility. The 18.28 acre project site is located on four (4) lots within the Federal Way Business Park Subdivision with frontage on Table Rock Road (Jackson County), Hamrick Road (City of Central Point) and Federal Way (City of Central Point). Land east of the site is located in the City of Medford. It's the Applicant's intent to relocate its existing operation on Crater Lake Highway to Central Point with a scheduled opening date of Fall 2016. Achievement of this objective requires approval of the CUP, as well as a Site Plan and Architectural Review (File No. 15028) and Class "C" Variance to the M-1 sign area standard (File No. 15032) (Agenda Items VI, B and C).

General Project Description:

Costco proposes to construct a 161,992 square foot membership warehouse located on the southwest site boundary north of the existing Fed Ex Distribution Facility (Attachment "A-3"). A total of 783 parking spaces are proposed along with perimeter and interior landscape improvements.

Architecturally the proposed Costco will be a large metal building similar to industrial warehouses like the Fed Ex Distribution building adjacent to the project site. In this case the building design provides for variation in building materials and roof lines, as well as articulation and detailing around the main entrance canopy. The color palette is a blend of earth tones (brown, grey) with Costco red and blue on the proposed signage.

According to the applicant's findings (Attachment "B") the warehouse will be open to members from 10 a.m. to 9 p.m. on weekdays and until 5 p.m. or 6 p.m. on weekends. Deliveries for the warehouse typically occur between 3 a.m. and noon to minimize conflicts between large delivery trucks and Costco's members.

A four (4) island fuel facility is proposed on the southeast site boundary to the west of the existing Fed Ex Distribution Facility (Attachment "A-3"). Each island provides six (6) fuel dispensers and provides stacking for 10 cars. In total the fuel facility includes 24 fuel dispensers and provides stacking for 70 cars. A canopy will

cover the fuel dispensers (Attachment "A-13"). The fuel facility will be open to members from 6am to 10pm daily. Depending on demand, fuel deliveries may occur multiple times per day.

ISSUES

The City has evaluated the proposed use and identified four (4) issues:

Traffic. On opening day it is estimated that Costco will generate an additional 10,670 new daily trips.
Due to the large volume of estimated traffic for the proposed use, the applicant prepared a Traffic Impact
Analysis (TIA) based on input from affected agencies including the City of Central Point, Jackson County
Roads and the Oregon Department of Transportation (ODOT). It should be noted that the City of
Medford was invited to participate in developing the TIA scope of work on June 2, 2015 and August 13,
2013, but no comments were received.

The TIA identified impacts to four (4) intersections at opening day (Table 1, Items 1-4) and one (1) intersection in 2020 (Table 1, Item 5). Additionally the City of Medford, in a letter dated December 24, 2015 (Attachment "_"), submitted comments requesting further study of the intersection of Morningside Street at Table Rock Road, which was not included in the TIA. Based on information by provided by the City of Medford, there is an insufficient nexus between the proposed development and the requested project contribution. As a result, this intersection will not be addressed further.

		1187-4-1		Current Conditions (2015)		Build Year Conditions (2016)		Future Year Conditions (2030)	
No.	Intersection	Governing Agency	Peak Period	LOS	V/C Ratio	LOS	V/C Ratio	Los	V/C Ratio
			PM Peak	С	0.61		0.77		0.84
1	NB I-5 Off Ramp	ODOT	Midday Peak	В	0.41		0.61		0.63
			PM Peak	C	-	Е	•	С	
2	Table Rock Road & Hamrick Road	Jackson County	Midday Peak	В		F		В	Į.
			PM Peak	F	-	F	-	С	-
3	Table Rock Road & Airport Road	Jackson County	Midday Peak	С	-	Е		В	
			PM Peak	C		E	•	F	-
4	Biddle Road & Airport Road	Clty of Medford	Midday Peak	В		С		F	0.0
5	Hamrick Road & East Pine Street	City of Central Point, Jackson	PM Peak Midday	С		С		D	
		County	Peak	В		В		В	

It should be noted that one year after the scheduled date of opening for Costco, the County will begin construction of the Table Rock Road project. The project will widen Table Rock Road between Biddle and Airport Road to include four travel lanes, a center turn lane, bike lanes and sidewalks and intersection signalization at Table Rock and Airport Road. Completion of the Table Rock Road project resolves traffic impacts of the proposed use on infrastructure along Table Rock Road (i.e. Projects 2 and 3). A detailed summary of the traffic impacts and mitigation are set forth in the Public Works Department Staff Report (Attachment "C").

¹ See Brown v. City of Medford, 251 Or App 42 (2012).

Resolution: To assure timely completion of traffic mitigation measures relative to the day of opening for the proposed use, staff is recommending:

- a. NB I-5 Off Ramp. Prior to building permit issuance, the applicant shall comply with the Oregon Department of Transportation (ODOT) requirement to contribute \$500K (38%) toward the construction of dual right turn lanes from the off-ramp to East Pine Street (IAMP Project No. 9). ODOT has agreed to fund the remaining improvement cost and expedite construction, which is necessary to prevent failure of the northbound off-ramp.
- b. <u>Table Rock Road and Hamrick Road</u>. Prior to certificate of occupancy, the applicant will be required to provide the following temporary improvements on Table Rock Road per Jackson County Roads:
 - i. Construct median islands in front of the access drives on Table Rock Road to limit movements to right-in/right-out; and,
 - ii. Construct a center left turn lane and refuge within the existing Table Rock Road right-ofway at Hamrick Road to ease left turn delays.
- c. <u>Table Rock Road at Airport Road</u>. Per Jackson County Roads, no mitigation measures are recommended since operational deficiencies will be resolved upon completion of the Table Rock Road widening project.
- d. Biddle Road and Airport Road. Currently this intersection operates at a LOS C. According to the applicant's TIA, the intersection will operate at LOS E on the day of opening. Although the TIA acknowledged mitigation is necessary, no mitigation improvements were recommended. This is further reinforced by comments received from the City of Medford on December 24, 2015, which noted the need for mitigation but did not specify necessary improvements (Attachment "I"). In the absence of recommended mitigation the City of Central Point's Traffic Engineer evaluated the intersection and recommended that the identified impacts to the intersection at Biddle Road and Airport Road can be mitigated as set forth in Condition No. 3.
- 2. **Parking**. The applicant's parking plan proposes 783 parking spaces for warehouse members. The maximum parking spaces allowed based on the allocation of uses is 698 spaces. In accordance with CPMC 17.64.040(B)(2), the applicant is requesting an adjustment to allow for the proposed increase in parking based on a parking demand analysis specific to Costco Wholesale operations in Oregon (Attachment "B", pages 59-60).

Resolution: The applicant's parking demand analysis recommends a minimum parking ratio of 4.83 parking spaces per 1,000 s.f. of Gross Floor Area (GFA)to maintain a 90% utilization rate. According the Institute of Traffic Engineers (ITE) Parking Generation, 4th Edition, when more than 90% of the parking spaces in a parking lot are occupied, there is an increase in illegal parking and repeating circulation. Costco's parking plan provides slightly more parking than the minimum recommendation to accommodate typical peak periods as well as provide additional spaces for seasonal peaks. Staff

recommends that the requested increase in parking is warranted.

3. **Signage**. The applicant's signage plan includes wall signs that are proportional to scale and size of the building. Although none of the proposed signs exceed 3.8% of the wall area on any elevation, they exceed the maximum sign area allowed in the M-1 zone.

Resolution: Approval of the requested signage for the proposed use is subject to approval of a Class "C" Variance, which will be presented to the Planning Commission for consideration (File No. 15032, Agenda Item VI-C). Based on the applicant's proportionality rationale for the proposal, the variance request is deemed reasonable. However, if the variance is not approved, the applicant will be required to demonstrate compliance with the M-1 sign area standards prior to building permit issuance.

4. Lot Consolidation. The project site includes four (4) lots within the Federal Way Business Park Subdivision. Based on staff's evaluation of the lot dimensions and site plan, the proposed warehouse occupies three (3) of the existing lots. The applicant has indicated it is their intent to consolidate the lots.

Resolution: As a condition of approval, the lot consolidation must be completed prior to building permit issuance.

FINDINGS

The Costco Wholesale Conditional Use Permit has been evaluated for compliance with the applicable Conditional Use Criteria set forth in CPMC 17.76 and found to comply as evidenced in the Planning Department Supplemental Findings (Attachment "J").

CONDITIONS OF APPROVAL

- 1. Prior to building permit issuance for the four consolidated lots, a Subdivision Re-plat shall be prepared and recorded and a copy of the recorded Subdivision Re-plat and Deed provided to the City.
- 2. The applicant shall satisfy conditions as listed in the Public Works Department Staff Report dated December 10, 2015.
- 3. Prior to issuance of a building permit, the applicant shall provide to the City of Medford Public Works Department engineered improvement drawings for the construction of a limited median along Biddle Road that allows right-in, right-out, left-in movements on Airport Road ("Improvements") accompanied by a written agreement including a bond/cash deposit/letter of credit ("Surety") in the amount of the Improvement assuring the City of Medford that the Improvements will be completed prior to issuance of a certificate of occupancy by the City of Central Point. The applicant shall provide the City of Central Point Public Works Department one copy of the engineered plans and Surety agreement within five (5) days of submittal to the City of Medford.
- 4. Prior to issuance of building permits for the proposed signage, the applicant shall either demonstrate compliance with the signage standards set forth in CPMC 17.48.080(A)(1) or receive a variance to the signage area standard.

ATTACHMENTS

Attachment "A-1" - Site Comparison

Attachment "A-2" - Site Circulation

Attachment "A-3" - Concept Site Plan

Attachment "A-4" - Central Point Costco Grading & Drainage

Attachment "A-5" - Central Point Costco Utilities

Attachment "A-6" - Preliminary Landscape Plan

Attachment "A-7" - Concept Floor Plan

Attachment "A-8" – Concept Exterior Elevations

Attachment "A-9" - Concept Elevations

Attachment "A-10" - Entry View

Attachment "A-11" - NW Corner View

Attachment "A-12" - East View

Attachment "A-13" - Concept Fuel Facility Plan

Attachment "A-14" - Concept Lighting Plan

Attachment "B" - Applicant's Findings

Attachment "C" - Traffic Impact Analysis

Attachment "D" - Public Works Staff Report dated December 15, 2015

Attachment "E" - Jackson County Roads Staff Report dated December 10, 2015

Attachment "F" - Oregon Department of Transportation Staff Report dated December 14, 2015

Attachment "G" - City of Medford Planning Department Comments dated December 3, 2015

Attachment "H" - Rogue Valley Sewer Services Staff Report dated November 16, 2015

Attachment "I" - City of Medford Staff Report dated December 24, 2015

Attachment "J" - Planning Department Supplemental Findings

Attachment "K" - Resolution No. 827

ACTION

Consider the Conditional Use Application and either: 1) approve; 2) approve with modifications; or 3) deny the application.

RECOMMENDATION

Approve the Conditional Use Permit for Costco Wholesale subject to the conditions of approval per the Staff Report dated January 5, 2016.





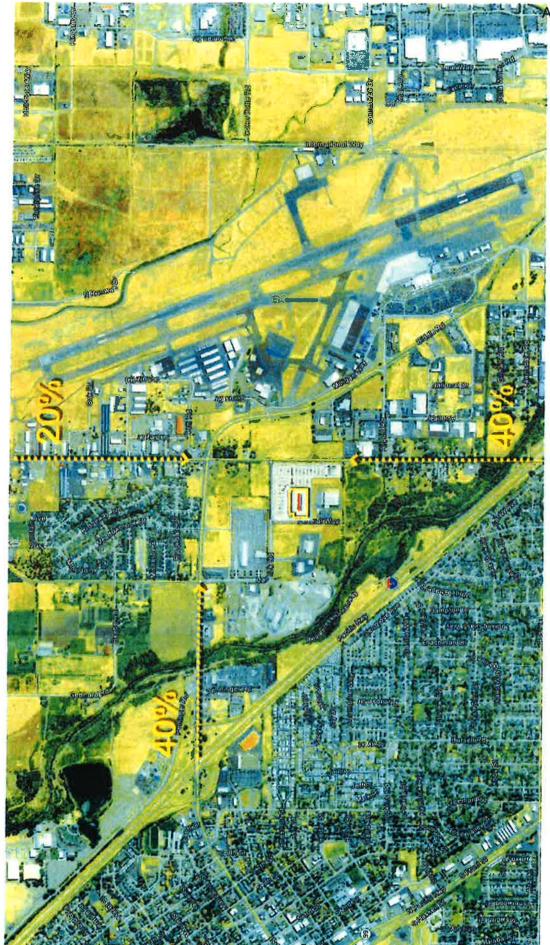


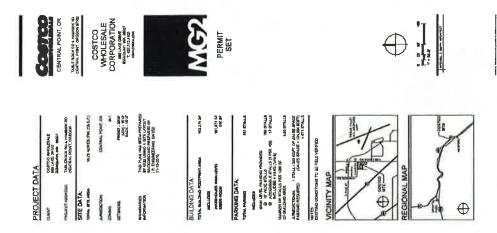


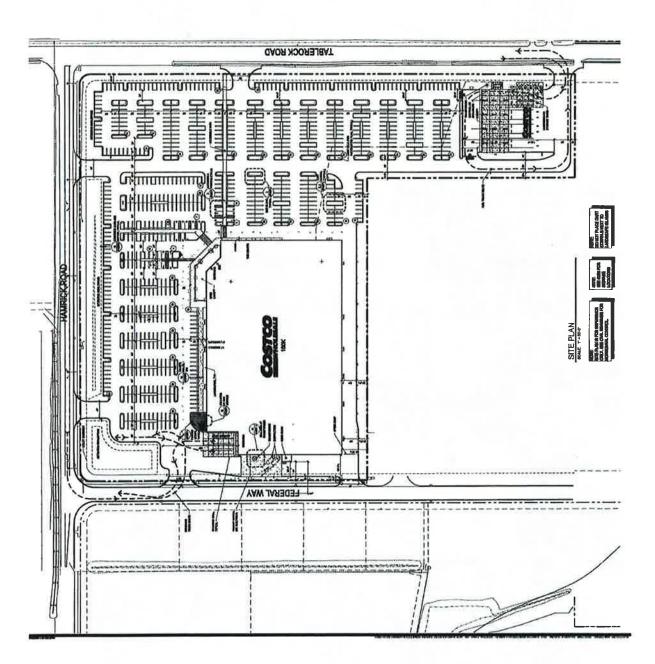


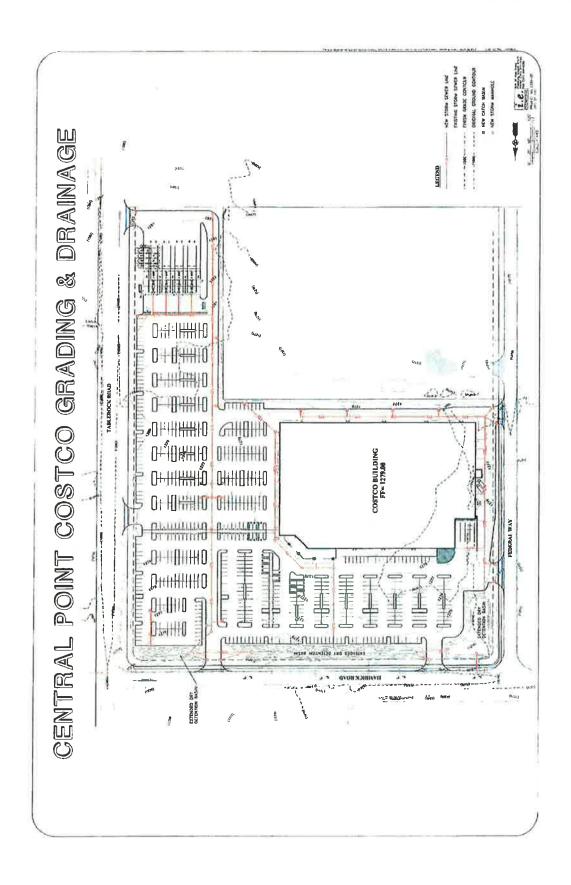


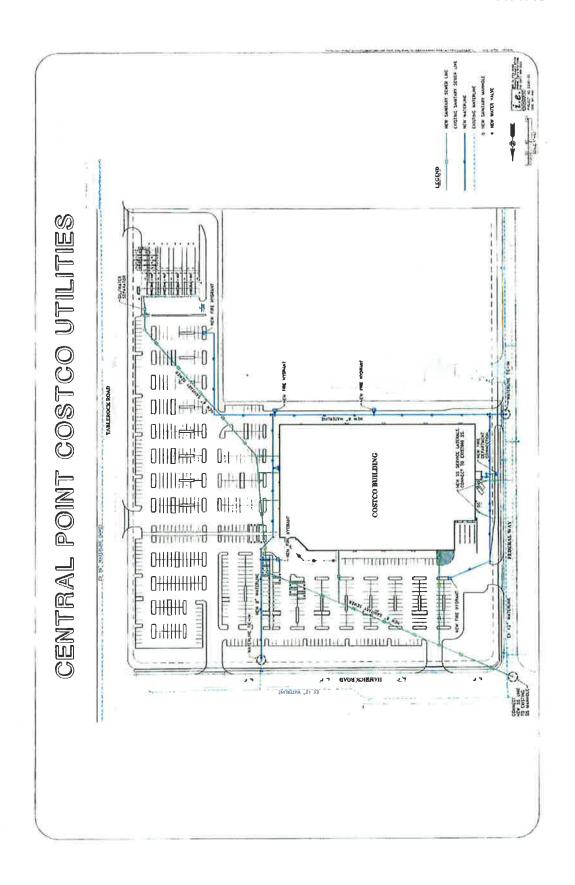












2.77

WEISMANDESIGNGROUP Tally to Comme

OUCHOUS RUBRA	RED DAK	
DECIDADUS ACCENT TREES		
LAGERSTROEMIA I NATCHEZ	HATORE GRAPE BEGINE	UN (3) 1" CAL, B-10" HJ,
CERCIS OCCIDENTALIS	WESTERN PEDBUD	1-1/2" CAL, 8-10 HT., WELL-BRANCHED IR
PRUNUS SEPRELATA "KWANZAN"	KNANZAN PLOWERING CHERKY	2" CAL 13-12 HT. FULL, WELL-BRANCHED.
COMIFEROUS EVERGREEN TREES	TREES	
CALOCEDRUS OCCURRENS	INCENSE CEDAP	5-7 III FULL AND BUSHY TO BASE BASE
DILLA P. YASHCATA	HOGAN CEDAN	
PETGOLSUCA VOLDESA	DOUGLAS HIR	
LARGE SHRUBS		
SHOPPING 2 THROOP	SKYROGKET JUNIPER	4-5 Hr. PULL & BUSHY BAB ON CONT.
ARBUTO'S GINTO COMPLETE.	The andmosts great	SPACING AS SHEWS. 24-30. HT, FULL & BUSHY, 3450 OR CONT.
CISTON PURPUPELS	PURPLE RCCKROSH	ANDRE AS SHOWS
COTOMLASTER PARNET	PANET COIONGASIE	
MAHONA AUNTOLIUM	OREGON GRAPE.	
TEUCHOE DHERRY I MUNHORIN	SPRING BONGLET MBURNUM	
MEDIUM SHRUBS		
EUCNYMUS A 'COMPACTA'	CONFACT SURVISE BUDN	21-24" HEIGHT AND SPREAD, FULL AND BUSHY, CONTANTE OR BASE
ALEX CRENATA "CONVERA	CONTACT JAMES NOUS	_
ROSA PLICOSA	RUGOSA KOSE	MIN 18-21" HT & SPREAD FULL & BUSHY
MAHONIA A COMPACTA	COMPACT MAHONAA	A STANSFER OF THE STANSFER OF
SPRACA & COLDICAME	COLDSTANE SPRAEA	
SWALL SHRUBS		
HONDRS T YOUNDER PHOLY	THE STREET STREET	NAME OF THE PROPERTY OF THE PR
PINUS IA AKIGO	NUCHO HINE	DOED LIN CANT, SCACING AS SHOWN

MAY 2" CAL, MIN 10-12" HT, MATCHED WELL-BRANCHED ABOVE E" HI BASS

CHIKGO BILOBA 'AUTUMN GOLD AUTUMN GOLG GANKGO (MAIE DNLT) GLEWISIA T INCRINE SHADEMASTER SHADEMASTUR HOMERLOCUST

PRELIMINARY LANDSCAPE LEGEND (57460.X 59004 AT (1-20))

DECEMBER SAME TREES.

ACE 4 PREDAMINATION SAME SAME.

AGE PLATANDES WARRAY PARKENY UANE

CELTS OCCUBATALUS

EUCHTHUS A	ALEX CREVA	
9	3	

EAD, FULL & BURNT, AS SHOWN D FLUI & BUSH'S AS SHOWN OFTO LITTRENS LAUREL NEWNUS & DOTTO LUMBER



DAVE VIBURANCE

1 GAL PENNISH HAY ALCPECURODES "MANELY" FOLKHAIN GRASS FEATHER REED PINK MUNEY CRASS BLUE OAT SKASS SWOPE FERM CALAMAGRESTS & WARL FOERSTER COLON SOMEWARDS RIMENSON CAPILLARY

CONT., SPACING AS SHOWN

POLYSTICHUM MUNITUM GROUNDCOVERS

COSTO CENTRAL POINT, OR

START FIRST ROW 12, FROM EDGE

WED STRAMSERRY CREEPING MAHON ARCTOS JAPHYLOS UVA-URS. FRADARY CHROCKES PERBAMA, ACCOU MAHONA REPENS

1 GAL CONT AT 18" ON CENTER TRIANG SPACING STELLO D'ORO DAYLLU

St. Storeshood SE SECTION DETENTION SWALE PLANTING MIX

SOD LAWN SEED LAVA SOT 5 GAL. CONT. SHRUBS AT S' O.C.

PRELIMINARY LANDSCAPE PLAN

SEPTEMBER 25, 2015

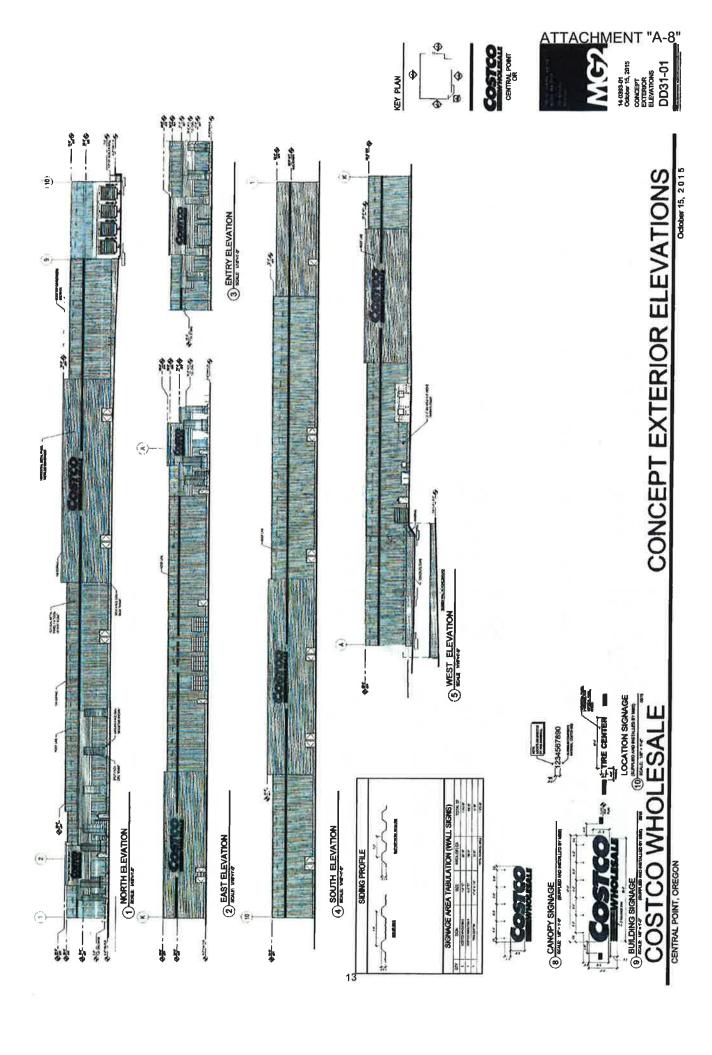
COSTCO WHOLESALE

CENTRAL POINT, OREGON

TABLEROCK ROAD 3 **89** 8 A A **C** 00000 ### ### # 19G (783 STALLS) (S) STILL 50 (1470') 75 (2,630) **CO** 3 % % 9 % MANALUM S DIMENSION IN INTERIOR ISLANDS FOR LANDSCAPING TOTAL INTERIOR TREES REQUIRED (1 TRICE PER & STALLS) -MAXXMUM 10 STALLS BETWEEN INTERIOR INLAND WITH TREC ADDITIONAL TREES ON STREET FRONTAGE > HAMRICK ROAD TOTAL HITTIGS THEES PROVIDED . LANDSCAPE CALCULATIONS SHRUBS REQUIRED (10 PER 100 LINEAL FT) SCHOOL SALING LAST OF DESCRIPTION TREES REQUIRED (3 PER 100 UNEAL FT) -SHPUBS REQUIRED (18 PER 100 LINEAL FT.) TREES ACCURAGE (2 AGR 100 LINEAL FT.) ~ TOTAL MISSION THESE PROVIDED . WHITE PLATFIC AREA WEEN MONHOUS PLAKTING AREA WIGHT C8000 1 2000 149 TREES PROVIDED ... SHRUES PROVIDED ... 15 ME UNIT CARNES MASS OF MODES OF LANGES AND STATE OF THE CARNES OF THE MHDE GROUNDCONER IS SHOWN. IT SHALL BE PLANTED AT THE SPECKED SPACING TRANSCHILLING BED, INCLUDING AREAS UNDERWATH METS AND SHRUBS, START FIRST ROW 12" FROM, EDGE OF RED. CONTRACTOR SHALL PROWING DATAL PHOTOS OF A REPRESSITATIVE THEE, SHARLS NO TRANSMOORES FOR ALL MATERIALS IN LEGEND OF SECURIOUS PROMINGE THE CONTRACT OF PROCEDING TO PROCEDE AND ACCEPTANCE PROMINGE TO PROCEED AND ACCEPTANCE FOR A PROPOSOBLE STANDARD TO PROMINGE AND ACCEPTANCE OF THE STANDARD TO PROPOSOBLE MATERIAL STA SEE O'ME DRAWNGS FOR GRADING UTLITES AND EROSION CONTROL MULCH ALL SHRUB AND CROUNDCOVER AREAS WITH A MIRRINUM STRICTING OF SPECIFIED MULCH ALL NEW LOADSCAPE MEAS ARE TO BE WATEHED WITH AN AUTOWATH WATER CONSERVAG RRIGHATION SYSTEM SEE HOTTES BELOW PREJAMENING PROPOSED SYSTEM. AL TAIN AND THE STATE OFFICE ORDER PROVIDE FOR THE FOR PSS Max persental 4" DDPP HISP DANJOT NPGRT ROPSON, USE ADDRIDAL, TOPSON.
 MEDAD 10 GROWN INDS ANNUAL IF ABOUE PRACEDY CARGO. Description of the control of the co RETER TO SPECIFICATIONS FOR ADDITIONAL RECURSIONITS. ADDITIONAL NOTES FOR PRICING OF PRELIMINARY LANDSCAPE PLANE S NETALL 4" ACHTOLOTO SUB COLLEGE FOR PLANTING NOTES

I I

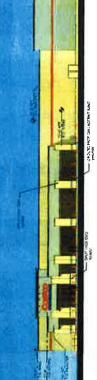
11











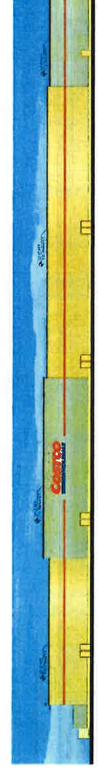
NORTH ELEVATION SCALE: 1/16" = 1'-0"



EAST ELEVATION SCALE: 1/16" = 1'-0"



ENTRY ELEVATION SCALE: 1/16" = 1'-0'



SOUTH ELEVATION SCALE: 1/16" = 1'-0"



WEST ELEVATION SCALE: 1/16" = 1'.0"





CONCEPT ELEVATIONS





15

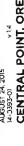






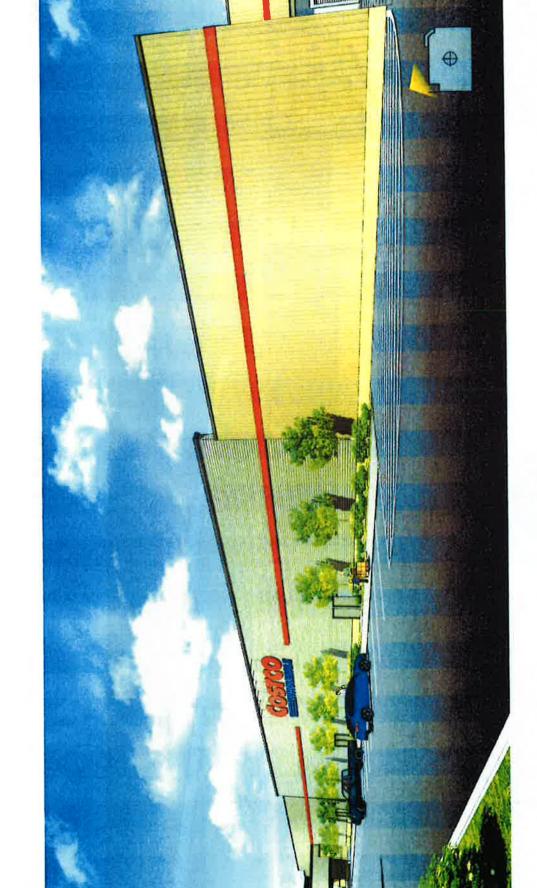














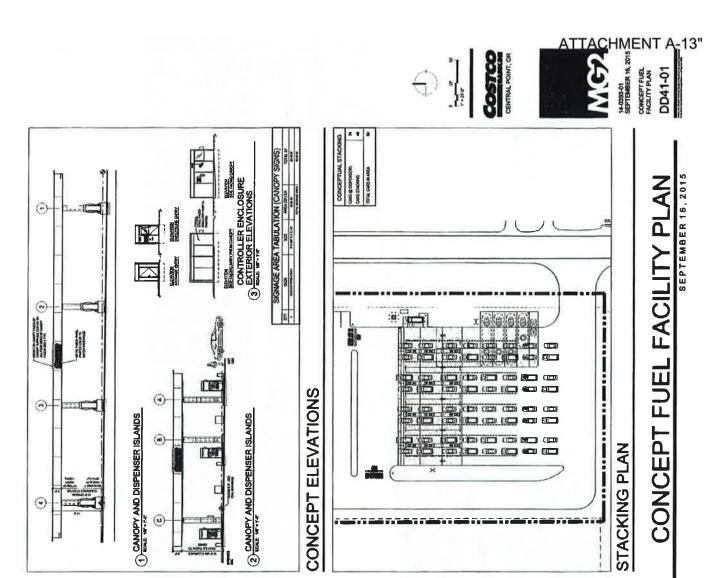




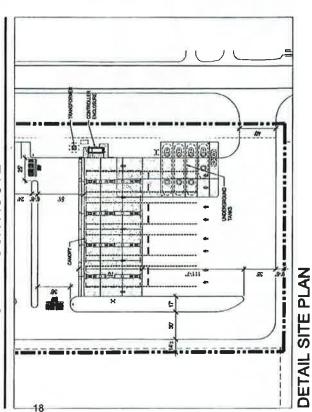






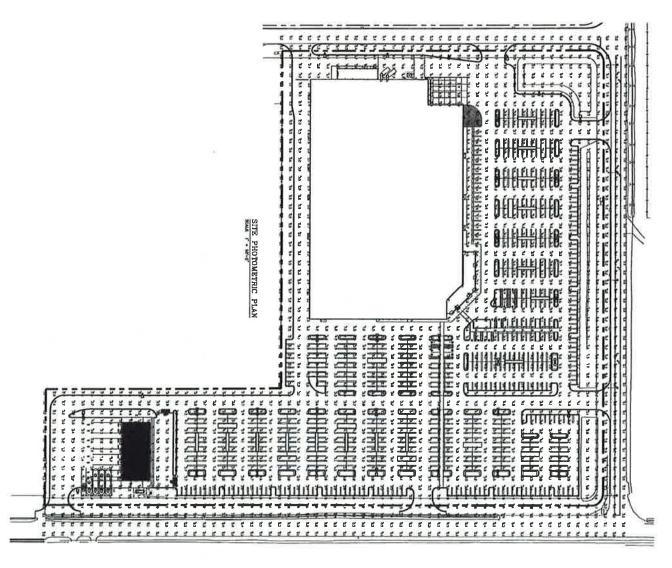


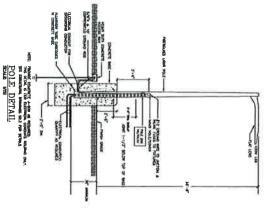
CONCEPT FUEL TRUCK ROUTE



COSTCO WHOLESALE

CENTRAL POINT, OREGON





MOUNT OF THE DOCUMENT MAY BE USED ON PART STREET WATER BRITISH CO.	ON COMES IN WHOLE AND MEDICAL BACKS.	MINCE OF INVESTIGATION	HOLE SHIT MANAGER 2015	ecrospy (unit)	CHECKED: ANY
SE DOSTOO	NEW WAREHOUSE TABLEROCK ROAD & HAMRICK ROAD CENTRAL POINT, OR	PRODUCE 422	100E 500YE 1000Y 170-3753		



MEMO
Page 1 of 15

TO Central Point Land Use Permits
Review Staff
FROM Steve Bullock, MG2 and Costco
CC

DATE 11.3.15
PROJECT New Costco Warehouse
Central Point
Table Rock & Hamrick
PROJECT NUMBER 14-0393-01

Land Use Applications for a new Costco Warehouse in Central Point OR

Project Description

Proposal: Costco is considering buying some property on the southwest corner of the Table Rock Rd and Hamrick Rd intersection that is 18.28 acres in size. Their desire and intent would be to build a new Costco Warehouse (with a footprint of approximately 161,992 sq. ft.) and a Fuel Facility (4 islands) together with all required parking and landscaping. In this case, the parking area will accommodate 783 parking stalls. Currently the subject property is undeveloped industrial land. Surrounding the property is a mix of developed and undeveloped industrial land with distribution and manufacturing facilities. T

Costco Bullding & Site Design: With over 30 years of building membership warehouses Costco has 686 warehouses worldwide. This experience has allowed Costco to develop a carefully thought out program for constructing new facilities. This program includes: the layout of the warehouse floor plan that most effectively allows for the stocking and merchandising of products; the use of materials that are sustainable, long-lasting and energy efficient; the layout of the site in a manner that provides for their parking and circulation needs; the improvements to adjacent public infrastructure to minimize and mitigate for any impacts they may create; the development of an attractive, functional facility that the entire community views as an asset. The final design solution for each of Costco's 600+ sites follows this program resulting in a unique solution that is tailored to the individual site, its environment and the community it is located in.

Costco Operations: Generally Costco's warehouses are open to the public from 10am-9pm. On the weekends they close a little earlier (5 or 6 pm). To avoid conflicts between their members and stocking the warehouse, deliveries are typically received between 3am and Noon. This minimizes potential conflicts between the large delivery trucks and Costco's members.

The gas station is typically open from 6am – 10pm. Fuel deliveries can happen multiple time per day depending upon the demand.

425.463.2000 425.463.2002 ITIO 112TH AVENUE NE I SUITE 500 | BELLEVUE, WA I 98004

MulvannyG2,com

PROJECT New Costco Warehouse Central Point

PROJECT NUMBER 14-0393-01

MEMO Page 2 of 15

DEVELOPMENT CODE COMPLIANCE

The following sections of this narrative identify the applicable sections of the Central Point code and provide a response and drawing reference that describes how our proposed site and building design complies with the City's Development Codes.

Chapter 17.48, M1, INDUSTRIAL DISTRICT

17.48.020 Permitted uses.

The following uses and their accessory uses are permitted in an M1 district, subject to the limitations imposed in Section 17.48.030:

- A. Warehousing:
- B. Storage and wholesaling of prepared or packaged merchandise;
- W. Other uses not listed in this or any other district, if the planning commission finds them to be similar to those listed above and compatible with other permitted uses and with the intent of the M1 district.

Response: Costco is a Wholesale Membership Club which has as their primary focus the sales of prepared or packaged merchandise to their members. City staff has further made us aware of a decision made by the City Council related to Wholesale Membership Clubs in the M-1 zone which allows them subject to a conditional use permit. This decision was appealed and confirmed in the Oregon Courts.

17.48.030 Standards for permitted uses.

All uses within the M1 district shall be subject to the following conditions and standards:

A. All raw materials, finished products, machinery and equipment, with the exception of automobiles and trucks normally used in the business, shall be stored within an entirely enclosed building or sight obscuring, non-pierced fence not less than six feet in height;

Response: With the exception of the Fuel Facility, Costco's normal operation happens entirely within their warehouse.

B. The facility shall be in compliance with all applicable state and federal environmental. health and safety regulations;

Response: Costco will obtain all required state and federal permits as well as comply with all health and safety regulations.

C. In any M1 district directly across a street from any residential (R) district, all outdoor parking, loading or display areas shall be set back at least ten feet from the public rightof-way and this setback area shall be planted with trees appropriate for the neighborhood. ground cover or other landscaping materials that are consistent with the general existing character of the area, or that will establish a landscape theme for other developments to follow. This setback and landscaping requirement shall also apply to M1 lots fronting on any street designated in the comprehensive plan as a major arterial.

PROJECT New Costco Warehouse Central Point

PROJECT NUMBER 14-0393-01

MEMO Page 3 of 15

Response: This section does not apply in that there are no residentially zoned properties adjacent to or across the street from the Costco property.

17.48.040 Conditional Uses.

The following uses and their accessory uses may be permitted in an M1 district when authorized in accordance with Chapter 17.76:

A. Business offices and commercial uses that are compatible with and closely related in their nature of business to permitted uses in the M1 district, or that would be established to serve primarily the uses, employees, or customers of the M1 district;

Response: As mentioned above, the City has determined that a Wholesale Membership Club requires a Conditional Use Permit to operate in an M-1 zone. The last section of this narrative will go over in detail how Costco's proposed project complies with the Conditional Use Permit approval criteria.

17.48.050 Height Regulations.

Maximum height of any building or structure in an M1 district shall be sixty feet.

Response: Costco's warehouse is roughly 38' from finished grade to the highest point on the building, this includes the parapet walls extending above the roof around the perimeter of the building. Light poles in the parking lot are roughly the same height, 35' tall pole on a 2.5' concrete base. See the included elevations and site lighting plan included in the drawing package.

17,48,060 Site Area Requirements.

There are no minimum site area requirements in the M1 district, except as necessary to provide for required parking, loading and yard spaces.

Response: Costco is proposing to build a warehouse having roughly 163,000 sq. ft. For a warehouse of this size Costco has discovered through their experience from building over 600 warehouses that 800 parking stalls (+/-) are needed to effectively handle the volume of members that use their facilities. The size of the property under consideration, about 18.28 acres, is large enough to accommodate these improvements.

17.48.070 Yard Requirements.

The following measurements indicate minimum yard requirements in an M1 district:

- A. Front Yard. The front yard shall be a minimum of twenty feet. (Also see Section 17.48.030(C)).
- B. Side Yard. The side yard shall be a minimum of ten feet except when the side lot line is abutting a lot in any residential (R) district and then the side yard shall be a minimum of twenty feet and shall be increased by one-half foot for each foot by which the building height exceeds twenty feet.

PROJECT New Costco Warehouse Central Point

MEMO Page 4 of 15

PROJECT NUMBER 14-0393-01

C. Rear Yard. The rear yard shall be a minimum of ten feet except when the rear lot line is abutting a lot in any residential (R) district and then the rear yard shall be a minimum of twenty feet and shall be increased by one-half foot for each foot by which the building height exceeds twenty feet.

D. Lot Coverage. No requirements.

Response: Costco's proposed site plan (see the drawing package) shows that the site fronts on three roads (Federal Way to the west, Hamrick Rd to the north and Table Rock Rd to the east). Of the three, only Table Rock Rd is a Major Arterial. Our assumption is that all three frontages will require 20' Front Yard Setback. Our internal lot lines, to the south of the warehouse and west of the fuel facility will be side or rear setbacks that are required to be 10'. The warehouse is at least 60' from all property lines and the fuel facility and its ancillary structure are at least 25' from all property lines. The proposed site plan complies with the City's required yards.

17.48.080 Signs.

Signs within the M1 district shall be limited to the following:

- Permitted signs shall contain not more than one hundred square feet of surface area on any one side, or an aggregate of two hundred square feet of surface on all sides which can be utilized for display purposes;
- 2. Lighted signs shall be indirectly illuminated and non-flashing;
- Identification signs shall be permitted within any required setback areas provided it does not extend into or overhang any parking area, sidewalk or other public right-ofway;
- Signs located within vision clearance areas at intersections of streets shall conform to Section 17.60.110.

Response: Costco is proposing wall mounted signage that is proportional to the size of their building. This results in signage that is larger than the standard identified above. Further discussion of this and rational for approval is included in the Conditional Use portion of this narrative.

All sign illumination will be indirectly illuminated and non-flashing.

No Freestanding Signage is proposed so no sight or other obstructions will be created.

C. Signs in the M1 district shall be permitted and designed according to provisions of Chapter 15.24.

Response: Costco will fully comply with all the requirements of Central Point Municipal Code Chapter 15.24.

PROJECT New Costco Warehouse Central Point

PROJECT NUMBER 14-0393-01

MEMO
Page 5 of 15

Chapter 17.64, OFF-STREET PARKING AND LOADING

17.64.030 Off-Street Loading.

A. In all districts for each use for which a building is to be erected or structurally altered to the extent of increasing the floor area to equal the minimum floor area required to provide loading space and which will require the receipt or distribution of materials or merchandise by truck or similar vehicle, there shall be provided off-street loading space in accordance with the standards set forth in Table 17.64.01, Off-street Loading Requirements.

TABLE 17.64.01 OFFSTREET LOADING REQUIREMENTS

Off-Street Loading Berth Requirement (fractions rounded up to the closest whole number)				
RETAIL, RESTAURANTS, HÖSPITALS, AND OTHER GOODS HANDLING				
No. of Loading Berths Required				
3 plus 1 for each additional 80,000 sq. ft.				

- B. A loading berth shall not be less than ten feet wide, thirty-five feet long and have a height clearance of twelve feet. Where the vehicles generally used for loading and unloading exceed these dimensions, the required length of these berths shall be increased.
- C. If loading space has been provided in connection with an existing use or is added to an existing use, the loading space shall not be eliminated if elimination would result in less space than is required to adequately meet the needs of the use.
- D. Off-street parking areas used to fulfill the requirements of this title shall not be counted as required loading spaces and shall not be used for loading and unloading operations, except during periods of the day when not required to meet parking needs.
- E. In no case shall any portion of a street or alley be counted as a part of the required parking or loading space, and such spaces shall be designed and located as to avoid undue interference with the public use of streets or alleys.

Response: Costco provides for all their loading needs on site and will not have any of their deliveries or delivery trucks impact the public use of streets or alleys during their loading or unloading of product. In addition to the 4 dedicated elevated truck docks there are 3 other on-site loading areas for tires and other smaller more local deliveries that can't use the elevated truck dock. This exceeds the 4 loading berths required in Table 17.64.01 (excerpt above).

17.64.040 Off-Street Parking Requirements

All uses shall comply with the number of off-street parking requirements identified in... Table 17.64.02B, Non-Residential Off-Street Parking Requirements. For non-residential uses the off-street parking requirements are presented in terms of both minimum and maximum off-street parking required. The number of off-street parking spaces in Table 17.64.02B, Non-Residential Off-Street Parking, may be reduced in accordance with subsection B of this section, Adjustments to Off-Street Vehicle Parking.

PROJECT NUMBER 11.3.15

PROJECT NUMBER 14-0393-01

MEMO Page 6 of 15

TABLE 17.64.02B NON-RESIDENTIAL OFF-STREET PARKING REQUIREMENTS

	Minimum and Maximum Vehicle Parking Requirement
Use Categories	(fractions rounded down to the closest whole number)
GENERAL COMMERCIAL	
Retail Stores, Personal Services	space per each 200 square feet of net floor area (excluding storage and other non-sales or non-display areas).

- A. Calculation of Required Off-street Parking off-street parking facility requirements set forth in ... Table 17.64.02B, Nonresidential Off-street Parking Requirements, shall be applied as follows:
 - Where the application of the schedule results in a fractional requirement it shall be rounded down to the lowest whole number.
 - 2. For purposes of this chapter, gross floor area shall not include enclosed or covered areas used for off-street parking or loading, or bicycle facilities.
 - 3. Where uses or activities subject to differing requirements are located in the same structure or on the same site, or are intended to be served by a common facility, the total parking requirement shall be the sum of the requirements for each use or activity computed separately, except as adjusted through the site plan and architectural review process under the provisions of subsection (B) of this section. The community development director, when issuing a permit(s) for multiple uses on a site, may restrict the hours of operation or place other conditions on the multiple uses so that parking needs do not overlap and may then modify the total parking requirement to be based on the most intense combination of uses at any one time.
 - Where requirements are established on the basis of seats or person capacity, the building regulations provisions applicable at the time of determination shall be used to define capacity.
 - Where residential use is conducted together with or accessory to other permitted uses, applicable residential requirements shall apply in addition to other nonresidential requirements.
 - The parking requirements outlined in ... Table 17.64.02B, Nonresidential Off-street Parking Requirements, include parking for handicapped persons shall be provided pursuant to the requirements of subsection C of this section, Accessible Parking Requirements.

Response: Per table 17.64.02B Costco will be required to provide not less than 670 parking stalls and not more than 670 parking stalls (134,064 sf / 200 sf/stall = 670 parking stalls). As mentioned earlier in this narrative, through Costco's extensive experience building these warehouses around the United States the proposed warehouse will need approximately 800 parking stalls to accommodate the demand. This request will be addressed in more detail both in our Parking Study and the Conditional Use Permit Discussion.

PROJECT Number 11.3.15 PROJECT Number 14-0393-01

MEMO Page 7 of 15

- B. Adjustments to Non-residential Off-street Vehicle Parking. The off-street parking requirements in Table 17.64.02B, Nonresidential Off-street Parking Requirements, may be reduced, or increased in any commercial (C) or industrial (M) district as follows:
 - Reductions. The maximum off-street parking requirements may be reduced by no more than twenty percent.
 - Increases. The off-street parking requirements may be increased based on a
 parking demand analysis prepared by the applicant as part of the site plan and
 architectural review process. The parking demand analysis shall demonstrate and
 document justification for the proposed increase.

Response: See our submitted Parking Demand Analysis which describes Costco's need for around 800 parking stalls.

C. Accessible Parking Requirements. Where parking is provided accessory to a building, accessible parking shall be provided, constructed, striped, signed and maintained as required by ORS 447.233, and Section 1104 of the latest Oregon Structural Specialty Code as set forth in this section.

Response: Costco will meet or exceed Central Points required Accessible Parking Requirements.

 Bicycle Parking. Bicycle parking shall be provided in accordance with Table 17.64.04, Bicycle Parking Requirements.

TABLE 17.64.04 BICYCLE PARKING REQUIREMENTS

Land Use	Minimum Requirement	Minimum Covered
Commercial		
Retail Sales	0.33 spaces per 1,000 sq. ft.	50%
Warehouse 0.1 space/1,000 sq. ft.		100%

Response: The .33 spaces/1,000 sq. ft. results in 57 bike spaces. Due to the nature of their business, Costco has found that bicycle traffic to their warehouses is rather limited. Some employees commute by bicycle, but very few customers do. For that reason, they believe the Central Point's Bicycle Parking for Warehouse standard, which results in 16 bike stalls, the most appropriate for a Costco warehouse. We will address this in the CUP criteria as well if it is determined that this is another deviation from a standard.

Chapter 17.72, SITE PLAN AND ARCHITECTURAL REVIEW

17.72.020 Applicability.

No permit required under Title 15, Buildings and Construction, shall be issued for a major or minor project, as defined in this section, unless an application for site plan and architectural review is submitted and approved, or approved with conditions, as set forth in this chapter.

- B. Major Projects. The following are "major projects" for the purposes of the site plan and architectural review process and are subject to Type 2 procedural requirements as set forth in Chapter 17.05, Applications and Types of Review Procedures:
 - 1. New construction, including private and public projects, that:

DATE 11.3.15 PROJECT New Costco Warehouse Central Point PROJECT NUMBER 14-0393-01

MEMO
Page 8 of 15

a. Includes a new building or building addition of five thousand square feet or more:

- b. Includes the construction of a parking lot of ten or more parking spaces; or
- Requires one or more variances or conditional use permits and, in the judgment
 of the director, will have a significant effect upon the aesthetic character of the
 city or the surrounding area;

Response: The proposed Costco warehouse will be a Major Project and will go through the Site Plan and Architectural Review process.

17.72.040 Site plan and architectural standards.

In approving, conditionally approving, or denying any site plan and architectural review application, the approving authority shall base its decision on compliance with the following standards:

- A. Applicable site plan, landscaping, and architectural design standards as set forth in Chapter 17.75. Design and Development Standards:
- B. City of Central Point Department of Public Works Department Standard Specifications and Uniform Standard Details for Public Works Construction;
- C. Accessibility and sufficiency of firefighting facilities to such a standard as to provide for the reasonable safety of life, limb and property, including, but not limited to, suitable gates, access roads and fire lanes so that all buildings on the premises are accessible to fire apparatus.

Response: Costco will demonstrate compliance with each of these criteria through the drawing package submitted with this application and subsequent construction permit applications.

Chapter 17.75, Design and Development Standards

17.75.031 General connectivity, circulation and access standards.

A. Streets and Utilities. The public street and utility standards set forth in the City of Central Point Department of Public Works Standard Specifications and Uniform Standard Details for Public Works Construction shall apply to all development within the city.

Response: Costco will comply with all the public street and utility standards required by the City of Central Point.

- B. Block Standards. The following block standards apply to all development:
 - Block perimeters shall not exceed two thousand feet measured along the public street right-of-way, or outside edges of access ways, or other acknowledged block boundary as described in subsection (B)(4) of this section.
 - Block lengths shall not exceed six hundred feet between through streets or
 pedestrian access ways, measured along street right-of-way, or the pedestrian
 access way. Block dimensions are measured from right-of-way to right-of-way along
 street frontages. A block's perimeter is the sum of all sides.
 - Access ways or private/retail streets may be used to meet the block length or perimeter standards of this section, provided they are designed in accordance with this section and are open to the public at all times.

PROJECT New Costco Warehouse Central Point PROJECT NUMBER 14-0393-01

MEMO Page 9 of 15

- 4. The standards for block perimeters and lengths may be modified to the minimum extent necessary based on written findings that compliance with the standards are not reasonably practicable or appropriate due to:
 - a. Topographic constraints:
 - Existing development patterns on abutting property which preclude the logical connection of streets or access ways;
 - c. Major public facilities abutting the property such as railroads and freeways;
 - d. Traffic safety concerns;
 - e. Functional and operational needs to create large commercial building(s); or
 - f. Protection of significant natural resources.

Response: The surrounding existing roads together with Costco's internal drives comply with these requirements.

C. Driveway and Property Access Standards. Vehicular access to properties shall be located and constructed in accordance with the standards set forth in the City of Central Point Department of Public Works Standard Specifications and Uniform Standard Details for Public Works Construction, Section 320.10.30, Driveway and Property Access.

Response: The submitted site plan demonstrates compliance with this requirement.

- D. Pedestrian Circulation. Attractive access routes for pedestrian travel shall be provided through the public sidewalk system, and where necessary supplemented through the use of pedestrian access ways as required to accomplish the following:
 - Reducing distances between destinations or activity areas such as public sidewalks and building entrances;
 - Bridging across barriers and obstacles such as fragmented pathway systems, wide streets, heavy vehicular traffic, and changes in level by connecting pedestrian pathways with clearly marked crossings and inviting sidewalk design;
 - Integrating signage and lighting system which offers interest and safety for pedestrians;
 - Connecting parking areas and destinations with retail streets or pedestrian access
 ways identified through use of distinctive paving materials, pavement striping, grade
 separation, or landscaping.

Response: The submitted site plan and landscape plan demonstrate compliance with this requirement.

17.75.039 Off-Street Parking Design And Development Standards.

- A. Connectivity. Parking lots for new development shall be designed to provide vehicular and pedestrian connections to adjacent sites unless as a result of any of the following such connections are not possible:
 - 1. Topographic constraints;
 - Existing development patterns on abutting property which preclude a logical connection;

PROJECT New Costco Warehouse Central Point
PROJECT NUMBER 14-0393-01

MEMO
Page 10 of 15

- 3. Traffic safety concerns; or
- 4. Protection of significant natural resources.

Response: This requirement does not apply to Costco's development in that roads ring the site on three sides and there is no need to provide connections to adjacent sites.

B. Parking Stall Minimum Dimensions. Standard parking spaces shall conform to the following standards and the dimensions in Figure 17.75.03 and Table 17.75.02.

Response: As demonstrated in the Site Plan, Costco's parking lot compiles with these standards.

C. Access. There shall be adequate provision for ingress and egress to all parking spaces.

Response: There is adequate provision for ingress and egress to all parking spaces and areas.

D. Driveways. Driveway width shall be measured at the driveway's narrowest point, including the curb cut. The design and construction of driveways shall be as set forth in the Standard Specifications and Public Works Department Standards and Specifications.

Response: Costco will comply or exceed the City's minimum standards.

- E. Improvement of Parking Spaces.
 - 1. When a concrete curb is used as a wheel stop, it may be placed within the parking space up to two feet from the front of a space. In such cases, the area between the wheel stop and landscaping need not be paved, provided it is maintained with appropriate ground cover, or walkway. In no event shall the placement of wheel stops reduce the minimum landscape or walkway width requirements.
 - 2. All areas utilized for off-street parking, access and maneuvering of vehicles shall be paved and striped to the standards of the city of Central Point for all-weather use and shall be adequately drained, including prevention of the flow of runoff water across sidewalks or other pedestrian areas. Required parking areas shall be designed with painted striping or other approved method of delineating the individual spaces, with the exception of lots containing single-family or two-family dwellings.
 - Parking spaces for uses other than one and two family dwellings shall be designed so that no backing movements or other maneuvering within a street or other public right-of-way shall be necessary.
 - Any lighting used to illuminate off-street parking or loading areas shall be so arranged as to reflect the light away from adjacent streets or properties.
 - Service drives shall have a minimum vision clearance area formed by the intersection of the driveway centerline, the street right-of-way line, and a straight line joining the lines through points twenty feet from their intersection.
 - Parking spaces located along the outer boundaries of a parking lot shall be contained by a curb or a bumper rail so placed to prevent a motor vehicle from extending over an adjacent property line, a public street, public sidewalk, or a required landscaping area.
 - Parking, loading, or vehicle maneuvering areas shall not be located within the front yard area or side yard area of a corner lot abutting a street in any residential (R)

PROJECT New Costco Warehouse Central Point

PROJECT NUMBER 14-0393-01

MEMO

district, nor within any portion of a street setback area that is required to be landscaped in any commercial (C) or industrial (M) district.

Response: Costco's site plan, site lighting plan and landscape plan all demonstrate compliance with these standards.

F. Limitation on Use of Parking Areas. Required parking areas shall be used exclusively for vehicle parking in conjunction with a permitted use and shall not be reduced or encroached upon in any manner. The parking facilities shall be so designed and maintained as not to constitute a nuisance at any time, and shall be used in such a manner that no hazard to persons or property, or unreasonable impediment to traffic, will result.

Response: Costco agrees with and will comply with this requirement.

- G. Parking/Loading Facility Landscaping and Screening. Parking lot landscaping shall be used to reinforce pedestrian and vehicular circulation, including parking lot entries, pedestrian access ways, and parking aisles. To achieve this objective the following minimum standards shall apply; However, additional landscaping may be recommended during the site plan and architectural review process (Chapter 17.72). All parking lots shall be landscaped in accordance with the following standards:
 - Perimeter and Street Frontage Landscaping Requirements. The perimeter and street frontage for all parking facilities shall be landscaped according to the standards set forth in Table 17.75.03.

Response: Costco's site plan and landscape plan demonstrate compliance with this requirement.

- 2. Terminal and Interior Islands. For parking lots in excess of ten spaces all rows of parking spaces must provide terminal a minimum of six feet in width to protect parked vehicles, provide visibility, confine traffic to aisles and driveways, and provide a minimum of five feet of space for landscaping. In addition, when ten or more vehicles would be parked side-by-side in an abutting configuration, interior landscaped Islands a minimum of eight feet wide must be located within the parking row. For parking lots greater than fifty parking spaces, the location of interior landscape island shall be allowed to be consolidated for planting of large stands of trees to break up the scale of the parking lot. The number of trees required in the interior landscape area shall be dependent upon the location of the parking lot in relation to the building and public right-of-way:
 - a. Where the parking lot is located between the building and the public right-of-way, one tree for every four spaces;
 - Where the parking lot is located to the side of the building and partially abuts the public right-of-way, one tree for every six spaces;
 - c. Where the parking lot is located behind the building and is not visible from the public right-of-way, one tree for every eight spaces.

Response: The provided landscape plan demonstrates compliance with these parking lot landscape design criteria.

Bio-swales. The use of bioswales within parking lots is encouraged and may be located within landscape areas subject to site plan and architectural review. The tree

PROJECT New Costco Warehouse Central Point

PROJECT NUMBER 14-0393-01

MEMO Page 12 of 15

planting standards may be reduced in areas dedicated to bioswales subject to site plan and architectural review.

Response: As shown in our site plan, landscape plan and civil plans large bio-swales are proposed along the northern edge of the site. Costco is not proposing to reduce the tree planting standards in these areas.

- H. Bicycle Parking. The amount of bicycle parking shall be provided in accordance with Section 17.64.040 and constructed in accordance with the following standards:
 - Location of Bicycle Parking. Required bicycle parking facilities shall be located
 onsite in well lighted, secure locations within fifty feet of well used entrances and not
 farther from the entrance than the closest automobile parking space. Bicycle parking
 shall have direct access to both the public right-of-way and to a main entrance of the
 principal use. Bicycle parking may also be provided inside a building in suitable,
 secure and accessible locations. Bicycle parking for multiple uses (such as in a
 commercial center) may be clustered in one or several locations.
 - 2. Bicycle Parking Design Standards. All bicycle parking and maneuvering areas shall be constructed to the following minimum design standards:
 - Surfacing. Outdoor bicycle parking facilities shall be surfaced in the same manner as a motor vehicle parking area or with a minimum of a three inch thickness of hard surfacing (i.e., asphalt, concrete, pavers or similar material).
 This surface will be maintained in a smooth, durable and well drained condition.
 - Parking Space Dimension Standard. Bicycle parking spaces shall be at least six feet long and two feet wide with minimum overhead clearance of seven feet.
 - c. Lighting. Lighting shall be provided in a bicycle parking area so that all facilities are thoroughly illuminated and visible from adjacent sidewalks or motor vehicle parking lots during all hours of use.
 - d. Aisles. A five-foot aisle for bicycle maneuvering shall be provided and maintained beside or between each row of bicycle parking.
 - Signs. Where bicycle parking facilities are not directly visible from the public rights-of-way, entry and directional signs shall be provided to direct bicycles from the public right-of-ways to the bicycle parking facility.

Response: Costco will comply with Central Point's Bicycle standards.

17.75.043 Industrial Building Design Standards.

Reserved. (Ord. 1946 (part), 2011).

Response: Although there are no specific Design Standards in the Industrial zones of Central Point, Costco believes the plans, elevations and perspective drawings submitted demonstrate Costco's commitment to developing a high quality building and site.

PROJECT

New Costco Warehouse Central Point

PROJECT NUMBER 14-0393-01

MEMO Page 13 of 15

17.76.040 Conditional Use Permit - Findings and Conditions.

The planning commission in granting a conditional use permit shall find as follows:

A. That the site for the proposed use is adequate in size and shape to accommodate the use and to meet all other development and lot requirements of the subject zoning district and all other provisions of this code;

Response: Costco believes they have demonstrated through the submitted plans and drawings that the proposed 18.25 acres site is adequate in size and shape to accommodate the proposed use and meet all the City's required standards.

B. That the site has adequate access to a public street or highway and that the street or highway is adequate in size and condition to effectively accommodate the traffic that is expected to be generated by the proposed use;

Response: The submitted Traffic Report indicates that adequate access to public streets will be provided. And the existing streets are or soon will be of adequate size and condition to effectively accommodate the traffic that is projected to be generated by Costco.

C. That the proposed use will have no significant adverse effect on abutting property or the permitted use thereof. In making this determination, the commission shall consider the proposed location of improvements on the site; Vehicular ingress, egress and internal circulation; setbacks; Height of buildings and structures; Walls and fences; landscaping; Outdoor lighting: And signs:

Response: The submitted plans, elevations, drawings and reports document that there will be no significant adverse effect on abutting properties.

D. That the establishment, maintenance or operation of the use applied for will comply with local, state and federal health and safety regulations and therefore will not be detrimental to the health, safety or general welfare of persons residing or working in the surrounding neighborhoods and will not be detrimental or injurious to the property and improvements in the neighborhood or to the general welfare of the community based on the review of those factors listed in subsection C of this section:

Response: Costco will with both the construction and operation of their proposed warehouse comply with all local, state and federal health and safety regulations. Therefore, the proposed development will not be detrimental to the health safety or general welfare of persons residing or working in the surrounding neighborhoods.

- E. That any conditions required for approval of the permit are deemed necessary to protect the public health, safety and general welfare and may include:
 - Adjustments to lot size or yard areas as needed to best accommodate the proposed use; provided the lots or yard areas conform to the stated minimum dimensions for the subject zoning district, unless a variance is also granted as provided for in Chapter 17.13,

PROJECT New Costco Warehouse Central Point

PROJECT NUMBER 14-0393-01

MEMO Page 14 of 15

Response: Costco does not believe any adjustments to required vards are needed.

2. Increasing street widths, modifications in street designs or addition of street signs or traffic signals to accommodate the traffic generated by the proposed use,

Response: Costco does not believe any modifications are needed to the surrounding roads or the required improvements to those roads.

3. Adjustments to off-street parking requirements in accordance with any unique characteristics of the proposed use,

Response: Central Point's parking requirement for a retail use, stated as a minimum and a maximum, is 1 parking stall for every 200 sf of net floor area. In Costco's case, the net floor area is 134,000 sq. ft. which requires 670 parking stalls. Our current proposal is to provide 783 parking stalls which our Parking Demand Study supports.

4. Regulation of points of vehicular ingress and egress,

Response: Costco believes ingress and egress points should be approved as submitted in the drawing package and no additional regulation should be required.

5. Requiring landscaping, irrigation systems, lighting and a property maintenance program,

Response: Costco believes landscape and irrigation plans should be approved as submitted in the drawing package and no additional regulation should be required.

6. Regulation of signs and their locations.

Response: Costco is proposing building mounted signage that is in excess of the standard permitted by code. For this reason Costco will be submitting a Class C Exception to the signage standard described in CPMC 17.48.080(A)(1).

For background and context, Costco and their design team have designed a sign package that is integrated into the design of the building and is proportioned to match the scale and size of the building. The signs are not too small or too large in comparison to the scale of the building but they are substantially larger than what is allowed as standard in the Industrial zone. The largest signs, which are proposed on three of the four sides, are 381 sf. However, this is in relationship with a wall façade that is over 16,000 sf on the long side and over 10,000 sf on the short side. In other words, the sign covers less than 3.8% of the smallest wall of the warehouse. In total, including the signage on the Fuel Facility which has a 21 sf sign on each side of the fuel canopy, the entire Costco site has 1,455 sf of mounted on their buildings. For additional information see the black and white elevation drawing, DD31-01, for the building

PROJECT New Costco Warehouse Central Point

PROJECT NUMBER 14-0393-01

MEMO Page 15 of 15

mounted signs and the specific Fuel Facility sheet, DD41-01, for the gas canopy signage.

7. Requiring fences, berms, walls, landscaping or other devices of organic or artificial composition to eliminate or reduce the effects of noise, vibrations, odors, visual incompatibility or other undesirable effects on surrounding properties,

Response: Costco does not believe any additional measures to control noise, vibrations, odors, visual incompatibility or other undesirable effects are necessary.

8. Regulation of time of operations for certain types of uses if their operations may adversely affect privacy of sleep of persons residing nearby or otherwise conflict with other community or neighborhood functions,

Response: None needed.

9. Establish a time period within which the subject land use must be developed,

Response: None needed.

10. Requirement of a bond or other adequate assurance within a specified period of

Response: None needed.

11. Such other conditions that are found to be necessary to protect the public health, safety and general welfare.

Response: None needed.

Conclusion

With the drawings and background information that has been submitted with this application we believe that the proposed Costco development is consistent with the required findings that need to be made to approve this Development Permit application. Please feel free to contact Costco or MulvannyG2 should you have any questions or need further clarification.

Thank you for your time, consideration and assistance in this matter.

Respectfully: Steve Bullock, MG2

Transportation Impact Analysis

Central Point Costco Development

Central Point, Oregon

October 2015

KITTELSON & ASSOCIATES, INC.

Transportation Impact Analysis

Central Point Costco Development

Central Point, Oregon

Prepared For: Costco Wholesale 999 Lake Drive Issaquah, Washington 98207 (425) 313-6052

Prepared By: IQttelson & Associates, Inc. 101 South Capitol Boulevard, Suite 301 Boise, Idaho 83702 (208) 338-2683

Project Manager: Sonia Daleiden, PE PTOE Project Principal: Julia Kuhn, PE Project Analyst: Brett Korporaal

Project No. 19046

October 2015

TABLE OF CONTENTS

Executive Summary	8
Introduction	14
Project Description	14
Scope of the Report	
Existing Conditions	19
ী Site Conditions and Adjacent Land USes	19
Transportation Facilities	19
Study Area Intersections	21
Intersection Operating Standards	23
Existing Peak Hour Traffic Conditions	
Safety History Analysis	28
Transportation Impact Analysis	30
Planned Roadway Improvements	30
Planned In-Process Developments	33
Build-Year (2016) Background Traffic Conditions	33
Costco Trip Generation Database	36
Costco Trip Generation Characteristics	36
Trip Distribution and Trip Assignment	37
Build-Year (2016) Total Traffic Conditions	41
Build-Year (2016) Mitigations	46
Table Rock Road Access Alternatives	47
Future Year (2030) Background Traffic Conditions	51
Future Year (2030) Total Traffic Conditions	54
Future Year (2030) Mitigations	
Parking Assessment	59
Conclusions & Findings	62
Potoroncos	68

LIST OF FIGURES

Figure 1. Central Point Costco Site Plan	15
Figure 2. Site Vicinity	16
Figure 3. Study Intersection and Lane Configurations	22
Figure 4. Existing PM and Midday Peak Hour Traffic Conditions	27
Figure 5. Build-Year (2016) Background Traffic Conditions	35
Figure 6. Trip Distribution	38
Figure 7. Site-Generated Trip Assignment	39
Figure 8. Site-Generated Trip Assignment at the Site Accesses	40
Figure 9. Build-Year (2016) Total Traffic Conditions	43
Figure 10. Build-Year (2016) Total Traffic Conditions at Site Accesses	45
Figure 11. Future Year (2030) Background Traffic Conditions	52
Figure 12. Future Year (2030) Total Traffic Conditions	55
Figure 13. Future Year (2030) Total Traffic Conditions at Site Accesses	57

LIST OF TABLES

Table 1. Existing Study Transportation Facilities and Roadways	19
Table 2. City of Central Point's Level of Service Standards	24
Table 3. Operational Standards for Existing Study Intersections	25
Table 4. Existing PM and Midday Peak Hour Traffic Operations	26
Table 5. Crash Type and Severity (2009 - 2013) at Study Intersections	28
Table 6. Build-Year (2016) Background Traffic Operation Results	34
Table 7. Central Point Costco Development Trip Generation Estimate	36
Table 8. Build-Year (2016) Total Traffic Conditions	42
Table 9. Build-Year (2016) Total Traffic Conditions at Site Accesses	44
Table 10. Table Rock Road Access Alternative Comparison	48
Table 11. Table Rock Access Operations in 2017	48
Table 12. Table Rock Road Access Predictive Safety Comparison	50
Table 13. Future Year (2030) Background Traffic Operations	53
Table 14. Future Year (2030) Total Traffic Operations	56
Table 15. Future Year (2030) Total Traffic Operations at Site Accesses	58
Table 16. Typical Peak Parking Demand at Other Costco Warehouses in Oregon	60
Table 17 Central Point Costco Recommended Parking Supply	60

APPENDICES

Appendix A – Existing Count Data

Appendix B – Level of Service Description

Appendix C – Existing Traffic Operation Worksheets

Appendix D -- Crash Data at Study Intersections

Appendix E – Build-Year (2016) Background Traffic Operation Worksheets

Appendix F – Base Year (2006) and Future Year (2038) Regional Travel Demand Model

Appendix G – Build-Year (2016) Total Traffic Operation Worksheets

Appendix H – Build-Year (2016) Mitigated Traffic Operation Worksheets

Appendix I – Future Year (2030) Background Traffic Operation Worksheets

Appendix J – Future Year (2030) Total Traffic Operation Worksheets

Appendix K – Future Year (2030) Mitigated Traffic Operation Worksheets

Section 1
Executive Summary

EXECUTIVE SUMMARY

Costco Wholesale is proposing to develop a new warehouse and fuel station located station located in the southwest quadrant of the Table Rock Road/Hamrick Road intersection in Central Point, Oregon. This report summarizes the evaluation of the transportation impacts of the proposed development and provides recommended mitigation measures to accommodate its development.

The analysis and evaluation completed for the Central Point Costco development resulted in the following findings:

Project Description

- Costco Wholesale is proposing to develop a new warehouse and fuel station located in the southwest quadrant of the Table Rock Road/Hamrick Road intersection in Central Point, Oregon.
 - o The development plan includes a 160,000 square-foot Costco warehouse and a 24 fueling position Costco Gasoline fuel station. This new Central Point Costco will replace the existing Medford Costco located at 3639 Crater Lake Hwy in Medford, Oregon.
- The parcels of land that in which the proposed Costco would occupy are zoned as M-1 (Industrial) which allows the development of the Costco warehouse and fuel station with a conditional use permit (no land use or zoning changes are required).
- In order to best evaluate the anticipated transportation characteristics of the proposed Central Point Costco development, it was agreed that the Costco-specific data be used to most accurately represent the anticipated traffic characteristics of the unique development type.
- The proposed Costco development is estimated to generate a total of approximately 10,670 net new trips on a daily basis, 900 net new trip ends during the weekday p.m. peak hour and approximately 1,365 net new trip ends during the weekend midday peak hour.
- The distribution pattern for site generated trips was developed using zip code data from current memberships at the existing Costco warehouse located on OR 62 (Crater Lake Highway) in Medford, Oregon, as well as from the existing traffic patterns and major trip origins and destinations within the study area and the regional travel demand model.

Existing Conditions

- The study evaluated 12 off site intersections in addition to site access points.
- The study evaluated two time periods for each evaluation scenario: weekday p.m. peak hour and weekend midday peak hour.

- Based on recent traffic counts collected in May and July 2015, all of the study intersections
 were found to operate at acceptable operating standards during the existing weekday p.m.
 and weekend midday peak hours except for the Table Rock Road/Airport Road intersection
 during weekday p.m. peak.
 - The Table Rock Road/Airport Road intersection is stop controlled in the westbound direction. Under existing conditions in the weekday p.m. peak hour, there is high delay for the critical movement (westbound left-turn) resulting in LOS F.
- Crash data the most recent five years (2009 2013) at all of the study intersections was reviewed to identify historical safety trends.
 - Turning movement and rear-end crashes were the most common crash type at the intersections, accounting for approximately 82% of all crashes.
 - o There were no fatality crashes.
 - o Four study intersections were found to be in the 90th percentile and in compliance ODOT's SPIS: I-5 SB Ramps/E Pine Street, Table Rock Road/W Vilas Road, OR 62 (Crater Lake Highway)/W Vilas Road, and Table Rock Road/OR 99.

Build Year 2016 Analysis

- The transportation impact analysis evaluated two different future year scenarios: year 2016, the assumed build out year of the development, and year 2030 a long-term planning year.
- The 2016 build-year background traffic analysis (without inclusion of the project traffic) found that all of the study intersections are forecast to operate at acceptable levels of service and volume-to-capacity ratios during the weekday p.m. and weekend midday peak hours except for the Table Rock Road/Airport Road intersection during weekday p.m. peak hour.
 - O As under existing conditions, during the weekday p.m. peak hour there is high delay for the critical movement (westbound left-turn) resulting in LOS F. In addition, the critical movement is also operating with a volume-to-capacity ratio of greater than 0.95 in the build year (2016) background conditions (with no traffic from the proposed Costco development).
- The build-year (2016) total traffic analysis (with inclusion of the project traffic) found that all study intersections will continue to operate at acceptable levels of service during the weekday p.m. and weekend midday peak hours with the exception of:
 - o I-5 NB Ramps & East Pine Street exceeds ODOT standards (lane group v/c ratio ≤ 0.85) with the northbound right-turn lane group's v/c ratio of 0.87 during the weekday p.m. peak hour. The need for additional capacity for this northbound right-turn movement has been previously identified in the Final Draft IAMP: Exit 33 study which calls for the widening of the I-5 northbound off-ramp to add a second right-turn lane at the northbound approach to East Pine Street. ODOT and the City of

Central Point are currently in discussions to determine Costco's appropriate proportional fair share contribution to this improvement as mitigation for the site generated trip impacts.

- O Table Rock Road & Airport Road, as under existing and 2016 background conditions, continues to operate at a LOS F during the weekend p.m. peak hour. Improvements to the Table Rock Road/Airport Road intersection are scheduled in year 2017 as part of Table Rock Road widening and a signal will be added to the intersection. This intersection is an existing deficiency; however, given that this improvement is not currently scheduled until 2017, Jackson County and the City of Central Point are currently in discussions to determine an appropriate contribution to this improvement as mitigation in the interim for the Costco project.
- o Biddle Road & Airport Road experiences a higher delay for the critical movement of the westbound approach, dropping from LOS C to E during the weekday p.m. peak period due to site-generated traffic. Even with the site generated traffic, the intersection is operating at a very low volume-to-capacity ratio of 0.45 in the weekday p.m. peak hour and 0.14 in the weekday midday peak hour.

Site Access Analysis

- In the build year 2016 scenario, all site access intersections are projected to operate at acceptable levels-of-service and volume-to-capacity ratios during both the weekday p.m. and weekend midday peak hours, with the exception of the Table Rock Road/Northeast access. Note this is assuming this access is a full movement access and no improvements to Table Rock Road are completed. Under this scenario, the critical eastbound left-turn movements at the Table Rock Road/Northeast access is projected to operate at LOS F during the weekday p.m. peak hour, however, it is still projected to operate well under capacity and meet the County's operational standard.
- Even though the build year (2016) analysis showed that all of the site accesses will be able to operate as proposed upon site opening before the Table Rock Road improvements are constructed, an evaluation of access alternatives for Table Rock Road was also completed to compare how temporary improvements would impact the access operations in the interim.
- The access scenarios compared were:
 - o Build Year (2016) Total Traffic Conditions (i.e., Full Access to Table Rock Road) with No Table Rock Road Improvements (as summarized above)
 - Build-Year (2016) Total Traffic Conditions with Temporary Table Rock Road Improvements (i.e., temporary widening of Table Rock Road along the site frontage to provide a center left-turn lane until the ultimate widening project is constructed)

 Build-Year (2016) Total Traffic Conditions with Restricted Right-In/Right-Out Site Accesses (restrict Table Rock Road access to right-in/right-out only until the ultimate widening project is constructed)

The access alternatives evaluation found that:

- O Assuming full movement access and no improvements to Table Rock Road, the eastbound left-turns at the northeast access to Table Rock will experience relatively long delay (resulting in LOS F) but the access will still operate well under capacity and meet the County's operational standard during the critical time period.
- Providing temporary widening along the site frontage to provide a temporary center turn lane will allow all Table Rock Road accesses to operate acceptably as full movements until the ultimate Table Rock Road widening improvements are constructed in 2017.
- o Restricting the site's Table Rock Road accesses to right-in/right-out only will allow those accesses to operate at acceptable levels of service and volume-to-capacity ratios. However, it will add additional left-turn movements at the Table Rock Road/Hamrick Road intersection thus resulting in over-capacity and LOS F conditions at that location. This impact could be reduced by adding temporary widening around the intersection to provide a northbound left-turn lane as well as a center refuge area north of Hamrick to allow vehicles turning left from Hamrick to make a two stage gap acceptance maneuver for the left-turn.
- Once the ultimate Table Rock Road widening improvement is constructed in 2017, all site accesses to Table Rock Road will operate a good levels of service (LOS C or better) and volume-to-capacity ratios (v/c=0.21 or better) during the peak hour periods assuming they are full access movements.
- From a safety perspective, a predictive safety analysis found that:
 - Providing full movement accesses to Table Rock Road in the near-term with its current two lane configuration shows the probability for 1.2 crashes per year to occur combined at the two access points.
 - o If these were restricted to right-in/right-out only driveways, the safety prediction lowers to a probability of 0.83 crashes per year (about a 30% decrease in probability).
 - o If temporary widening was provided in the interim for a two-way left-turn lane along the site's frontage, the probability would lower to 0.76 crashes per year (about a 30% decrease in probability).
 - o The safety predictive analysis also shows that once the ultimate Table Rock Road widening improvements are in place the safety prediction lowers as well to 0.77 crashes per year even with maintaining full movement accesses at both locations.

Future Year 2030 Analysis

- The future year (2030) background conditions analysis (without the project traffic) found that all study intersections will continue to operate at acceptable levels of service and volume-to-capacity ratios during the weekday p.m. and weekend midday peak hours with the following exceptions:
 - o Hamrick Road & East Pine Street operates with a v/c ratio of >1.0 during the weekday p.m. peak hour
 - o Biddle Road & Airport Road (as under the build year conditions) has a critical movement which operates at LOS F during the weekday p.m. peak hour although the movement is still operating under capacity with a v/c ratio of 0.55
- The future year (2030) total traffic analysis (with the project traffic) found that the sitegenerated trips did not impact any study intersections not previously identified in the 2030 background scenario.
- All of the proposed site accesses operate at acceptable levels of service during the weekday p.m. and weekend midday peak hours under the future year 2030 total traffic scenario. Because of the planned roadway improvements along Table Rock Road, there is a significant benefit to the traffic operations at the site accesses along Table Rock Road when compared to the build-year (2016) total traffic scenario.

Parking Assessment

- City of Central Point Municipal Code directs that a parking supply of 670 parking spaces be provided for the Costco development (assuming retail land use).
- The project is proposing to provide a total of 782 parking spaces on site.
- As part of this report, a parking demand analysis was completed to demonstrate and documents justification for the proposed increase in parking supply.
- Actual parking supply and demand data from other Costco sites in Oregon indicates that a minimum parking ratio of 4.71 spaces/1,000 sq-ft be provided in order to supply enough parking to meet Costco specific demands.
- Applying the demonstrated minimum parking supply of 4.71 spaces/1,000 sq-ft to the proposed Central Point Costco development equates to a minimum recommended parking supply of 753 spaces.
- This indicates that the proposed parking supply of 782 is slightly higher than this minimum
 amount but within a reasonable range and will provide an appropriate parking supply to
 accommodate typical peak periods as well as additional spaces for seasonal peaks as well.

Section 2 Introduction

INTRODUCTION

Kittelson & Associates, Inc. (KAI) has conducted a Transportation Impact Study (TIS) per requirements of City of Central Point's Zoning Code Section 17.05.900. The TIS examines the current transportation network and addresses the transportation impacts of the proposed Costco Wholesale development in Central Point, Oregon. The scope, methodology, and key assumptions within the TIS were reviewed and agreed upon by the City of Central Point, Jackson County, and the Oregon Department of Transportation. In addition, the City of Medford was given the opportunity to review and comment on these elements (although no comments were received).

PROJECT DESCRIPTION

Costco Wholesale is proposing to develop a new warehouse and fuel station located roughly one mile southeast of the Interstate 5 (I-5) & Pine Street interchange in Central Point, Oregon. The site is located in the south-west quadrant of the Table Rock Road/Hamrick Road intersection. The development plan for the 18-acre site includes a 160,000 square-foot Costco warehouse and a 24 fueling position Costco Gasoline fuel station. Currently, the site is undeveloped. The development is planned to be completed and operational by October 2016. This new Central Point Costco will replace the existing Medford Costco located at 3639 Crater Lake Hwy in Medford, Oregon. The project site plan with access driveways to each of the bordering roadways is illustrated in Figure 1.

Project Location

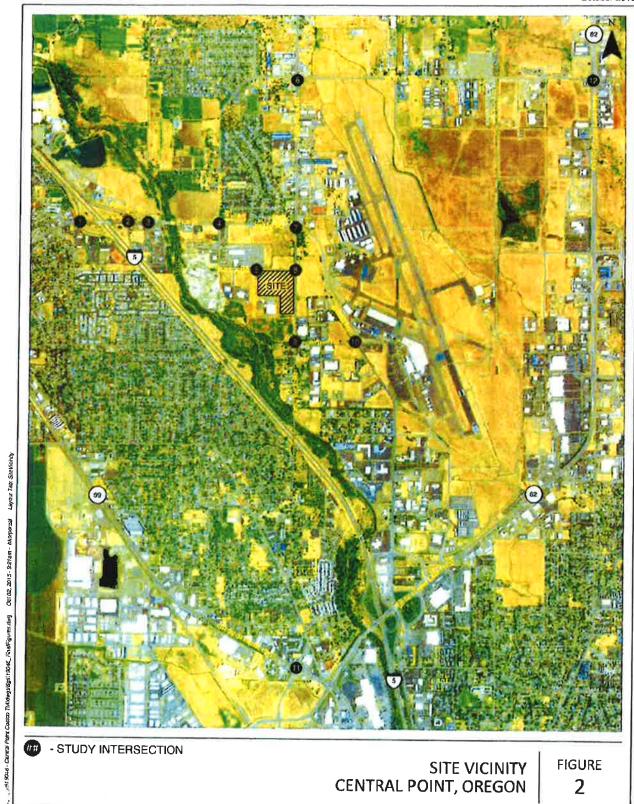
The proposed site is situated south of Hamrick Road between Table Rock Road and Federal Way as illustrated in Figure 2. Table Rock Road serves as the eastern boundary of the site. The property south of the site is currently owned and operated by FedEx Ground. The land use directly south, west and north of the site is designated as M-1 (Industrial) and M-2 (Industrial General) as referenced in *Central Point Comprehensive Land Use Plan 2008 – 2030* (Reference 1). The Costco development is an allowed use under the industrial zone designation with a conditions use permit.

Costco Trip Generation Characteristics

Before and after data from other comparable Costco sites was reviewed to determine a representative trip generation estimate for the development. Based on a 160,000 square foot warehouse and a 24-position gasoline facility, the proposed warehouse and fuel station is estimated to generate 10,670 net new daily trips. Of those trips, 900 net new (445 inbound, 455 outbound) trips and 1,365 net new (695 inbound, 670 outbound) trips are expected to occur during the weekday p.m. peak hour and weekend midday peak hour, respectively.

KITTELSON & ASSOCIATES, INC.

Hypotheristics Central Foun Cultor 18th to pright 18ths, Fruit Spirit and Colds, 2016 92thm thurson Lapariteb: Shirten



50

KITTELSON & ASSOCIATES, INC.

SCOPE OF THE REPORT

This report evaluates the following transportation issues:

- Existing roadway, land-use and transportation system conditions within the site vicinity during the weekday p.m. and weekend midday peak periods;
- Planned developments and transportation improvements for area surrounding Costco;
- Build-year 2016 background (existing traffic counts plus background growth) traffic conditions during the weekday p.m. and weekend midday peak periods;
- Costco trip generation, distribution and trip assignment estimates for the proposed development;
- Build-year 2016 total (build-year background plus site-generated trips) traffic conditions during the weekday p.m. and weekend midday peak periods;
- Build-year 2016 mitigations to study intersections impacted by site-generated trips during the weekday p.m. peak hour and weekend midday peak hour;
- Future year 2030 background (build-year 2016 background plus 14 years of regional growth)
 traffic conditions during the weekday p.m. and weekend midday peak periods;
- Future year 2030 total (future year background plus site-generated trips) traffic conditions during the weekday p.m. and weekend midday peak periods;
- Future year 2030 mitigations to study intersections impacted by site-generated trips during the weekday p.m. peak hour and weekend midday peak hour;
- Operational and safety assessment of the proposed site accesses (including the Table Rock Road/Hamrick Road intersection) during the weekday p.m. and weekend midday peak hours during build-year and future year total traffic conditions.
- Parking assessment for Costco site; and
- Conclusions and findings.

Section 3
Existing Conditions

EXISTING CONDITIONS

The existing conditions analysis identifies the current site conditions and operational and geometric characteristics of the roadways within the study area. These conditions will be compared with build-year (2016) and future year (2030) conditions later in this report.

KAI staff visited and inventoried the proposed Central Point Costco development site and surrounding study area in May 2015. At that time, KAI collected information regarding site conditions, adjacent land uses, and transportation facilities in the study area. In addition, existing traffic counts at the study intersections were collected in May and July 2015.

SITE CONDITIONS AND ADJACENT LAND USES

The proposed site is located roughly one mile southeast of the Interstate 5 (I-5) & Pine Street Interchange in Central Point, Oregon. The land uses in the vicinity of the site are light industrial to the immediately west and south of the site, general industrial immediately north of the site and tourist and office professional, as well as low and medium density residential, north of E Pine Street/Biddle Road. The parcels of land that in which the proposed Costco would occupy are zoned as M-1 (Industrial). The M-1 zoning designation allows the development of the Costco warehouse and fuel station with a conditional use permit. No land use or zoning changes are required for the Costco warehouse and gas station at the proposed site.

TRANSPORTATION FACILITIES

The transportation system inventory identifies the current characteristics of roadways within the study area. Major roadways within the study area were identified and catalogued. Table 1 provides a summary of the existing roadway facilities included in this study.

Table 1. Existing Study Transportation Facilities and Roadways

Roadway	Complete Street Type Description	Number of Lanes	Posted Speed (mph.)	Sidewalks	Bicycle Lanes	On Street Parking
I-5 Ramps	Rural Interstate	2	30-45	No	No	No
Pine St	Minor Arterial	4	35-45	Partial	Yes	No
Peninger Rd	Major Collector	2	25-30	Partial	Yes	No
Hamrick Rd	Local	2	30	Partial	No	No
Federal Way	Local	2	30	No	No	No
Table Rock Rd	Minor Arterial	2-4	30-45	Partial	No	Partial
Biddle Rd	Minor Arterial	4	45	Partial	Partial	No
Vilas Rd	Minor Arterial	2	45	Yes	No	No
Airport Rd	Local	2	35	Partial	No	Partial

Notes: 1 Per ODOT TransGIS; 2 mph represents miles per hour

Roadway Facilities

The roadway network in the study area is comprised of an extensive street system made up of arterial, collector, and local roads. The roadway facilities within the study area are described below:

- The I-5 Northbound and Southbound Ramps provide entry and exit accesses to/from the Interstate. Interstate 5 extends from Southern California to the Washington-Canada border.
 The ramps provide access to Pine Street in both directions on the west side of the study area.
- Pine Street-Biddle Road is a five lane roadway running east/west through the center of the study area. The roadway is named Pine Street west of Hamrick Road with a name change to Biddle Road east of Hamrick Road. Both segments are classified as minor arterials. The roadway is a five lane road, including two lanes in each direction and a center turn throughout the study area. There is no on-street parking on either side of the street. Bike lanes extend from the I-5 Southbound Ramp to Table Rock Road. The posted speed is 35 miles per hour between Hamrick Road and I-5 south ramp and 45 miles per hour between Hamrick Road and Airport Road.
- Peninger Road is a 2-lane, major collector, serving as a frontage road running parallel to and on the east side of I-5. The facility serves a variety of commercial and recreational businesses. There are blke lanes both north and south of the Peninger Road/Pine Street intersection and sidewalks south of the intersection. Northbound from the intersection the roadway has a posted speed of 30 miles per hour and 25 miles per hour in the southbound direction.
- Table Rock Road ranges from 2-5 lanes and runs north/south throughout the study area. The roadway has two lanes south of Biddle Road, and is a five lane road with a center turn lane north of Biddle Road. Both segments of Table Rock Road are minor arterials. The only on-street parking is provided on the east side of the roadway for a 0.15 mile segment north of Airport Road. The segment north of Biddle Road has sidewalks on both sides of the roadway until Vilas Road. The posted speed is 30 miles per hour between Airport Road and Hamrick Road, and 45 miles per hour north of Hamrick Road.
- Hamrick Road is a 2-lane roadway that will service two Costco access driveways. Hamrick Road is a local road providing access for industrial companies such as Reddaway and Knife River Materials. There is no on street parking or bike lanes, however there are segments of sidewalk on both the north/south and east/west sections of the road. The posted speed is 30 miles per hour throughout the study area section. Directly north of the site, between Table Rock Road and Federal Way, the roadway consists of a 3-lane cross section with a two-way median turn lane.
- Federal Way is a local road that currently serves FedEx Ground at the southern end of the roadway. There are two proposed access points along Federal Way. There is no posted speed sign on this segment, nor are there pedestrian or bicycle facilities.

Airport Road is a local 2-lane road, servicing both commercial and industrial businesses.
 Airport Road does not have on-street parking, or bike lanes, however there is a sidewalk on the north side of the roadway.

Transit Facilities

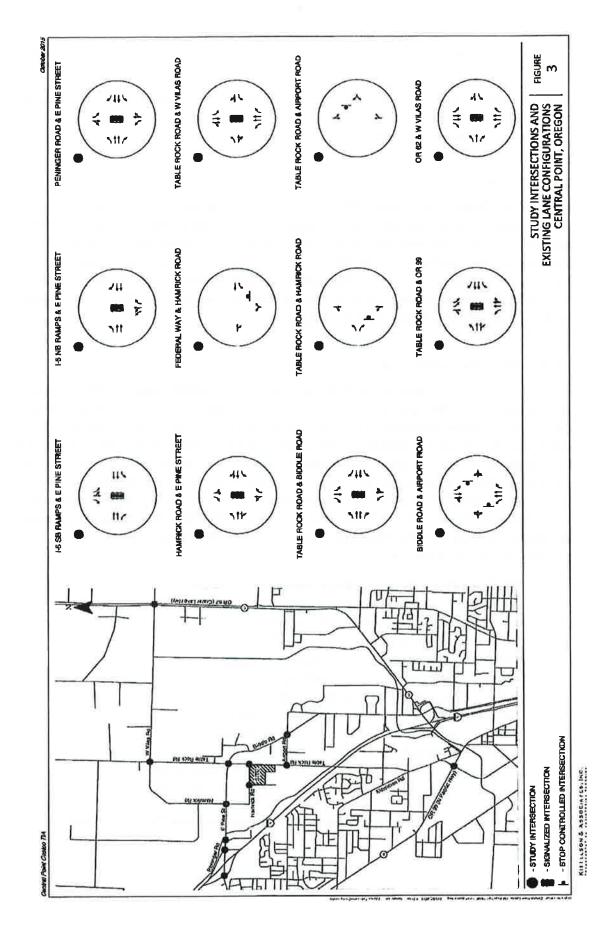
Rouge Valley Transportation District (RVTD) is a public transportation service provider, providing paratransit and fixed-route bus service within Jackson County. RVTD's central bus station is located in downtown Medford, providing eight fixed-route bus routes servicing the cities of Ashland, Central Point, Jacksonville, Medford, Phoenix, Talent, and White City. RVTD's Route 40 provides weekday service between Medford and Central Point with stops along East Pine Street west of I-5. However, Route 40 does not have any stops within the vicinity of the proposed Costco site. There are no fixed-bus routes or stops within the vicinity of the proposed site.

STUDY AREA INTERSECTIONS

The City of Central Point has completed several studies of transportation needs in partnership with Jackson County and ODOT. The City of Central Point's 2030 Transportation System Plan (Reference 2) offers a comprehensive assessment of long-term transportation needs within Central Point. In addition, ODOT recently completed an Interchange Area Management Plan (IAMP) for the I-5/East Pine Street Interchange (Reference 3). In addition, the Jackson County TSP is currently being updated (expected adoption in October or November 2015). Recognizing the long-term transportation needs, this TIA focuses on the analysis of study intersections within the site vicinity of the proposed Central Point Costco site. Based on knowledge of the transportation network within the site's vicinity and a previous coordination meeting with the City, County and ODOT, the following 12 study intersections were identified for inclusion in this report:

- 1. 1-5 SB Ramp & East Pine Street (traffic signal)
- 2. 1-5 NB Ramp & East Pine Street (traffic signal)
- 3. Peninger Road & East Pine Street (traffic signal)
- 4. Hamrick Road & East Pine Street (traffic signal)
- 5. Federal Way & Hamrick Road (unsignalized intersection)
- 6. Table Rock Road & East Vilas Road (traffic signal)
- 7. Table Rock Road & Biddle Road (traffic signal)
- 8. Table Rock Road & Hamrick Road (unsignalized intersection)
- 9. Table Rock Road & Airport Road (unsignalized intersection)
- 10. Biddle Road & Airport Road (unsignalized intersection)
- 11. Table Rock Road & OR 99 (North Pacific Coast Highway) (signalized intersection)
- 12. OR 62 (Crater Lake Highway) & E Vilas Road (signalized intersection)

The study intersections and their traffic control and lane configurations are Illustrated in Figure 3.



Data collection at these twelve intersections included turning movement counts collected during a typical weekday (Tuesday through Thursday) p.m. peak period (4:00 p.m. – 7:00 p.m.), and weekend midday (12:00 p.m. – 3:00 p.m.) peak period. In addition, existing lane geometry was documented, including turn pocket lengths, as well as pedestrian and bicycle facilities and the presence of transit and transit amenities. For signalized intersections, KAI obtained traffic signal timings from ODOT and the City of Central Point in order to correctly model and analyze each intersection. Appendix "A" includes the existing weekday p.m. peak period and weekend midday peak period counts at each of the study intersections.

In addition to analyzing the 12 study intersections, the proposed site plan includes six new driveways to access the site, each of which will be analyzed in accordance to the roadway jurisdiction it is located. As shown in Figure 1, the six proposed site access include:

- Northern full-access driveway located on Federal Way;
- Southern full-access driveway located on Federal Way;
- Eastern Hamrick Road driveway right-in/right-out access;
- Western Hamrick Road driveway full-access (full access);
- Northern full-access on Table Rock Road; and
- Southern full-access on Table Rock Road.

More information about the performance of these site accesses, as well as the assessment of access alternative scenarios, is provided later in this report.

INTERSECTION OPERATING STANDARDS

The operating standards of four jurisdictions were used to assess the operations of the 12 study intersections based on their respective location. The four jurisdictions are: City of Central Point, City of Medford, Jackson County, and Oregon Department of Transportation.

City of Central Point Operating Standards

Central Point uses performance standards based on level of service (LOS). All LOS analyses described in this report were performed in accordance with the procedures stated in the 2000 Highway Capacity Manual (HCM 2000) (Reference 4) as required by the City of Central Point's 2030 Transportation System Plan. HCM 2000 defines LOS as a quality measure describing operational conditions within a traffic stream, generally in terms such as speed and travel time, freedom to maneuver, traffic Interruptions, and comfort and convenience. When analyzing traffic conditions, LOS is used as a measure of performance (corresponding to delay) at an intersection with values ranging from LOS "A", Indicating good operations and low vehicle delay, to LOS "F", which indicates an intersection at, or over capacity with high vehicle delay. Table 2 provides the City of Central Point's LOS standards for signalized and unsignalized intersections. The City's policies require intersections to operate at LOS D or better. A description of level of service and its criteria is presented in Appendix "B".

Table 2. City of Central Point's Level of Service Standards

105	Signalized intersection	Unsignalized intersection
Α	≤10 seconds	≤10 seconds
В	10–20 seconds	10–15 seconds
С	20–35 seconds	15–25 seconds
D	35–55 seconds	25–35 seconds
Ε	55–80 seconds	35–50 seconds
F	≥80 sec	≥50 sec

Jackson County Operating Standards

The acceptable motor vehicle performance standard for signalized and unsignalized Intersections per *Jackson County Transportation System Plan* (Reference 5) is a volume-to-capacity ratio (V/C Ratio) no greater than 0.95 within the boundary of the Metropolitan Planning Organization and 0.85 outside of the MPO boundary. Each study intersection is within the Rogue Valley Metropolitan Planning Organization (RVMPO) boundary. Therefore, intersections falling within the County's jurisdiction will be assessed assuming a V/C ratio standard of 0.95.

ODOT Operating Standards

ODOT operates and maintains the study intersections for the ramp termini of I-5. ODOT's operating standard for interchange ramps is a maximum V/C ratio for the ramp terminal that is more restrictive than the V/C ratio for the crossroad, or 0.85 as identified in the ODOT OHP Policy 1F Revisions (Reference 6). For signalized intersections on arterial roads under ODOT jurisdiction, the V/C ratio must be no greater than 0.95. At intersections where one or more approaches is maintained by a city or ODOT, the more restrictive of the agency's performance standard will be applied as stated in the Jackson County Transportation System Plan.

Intersections within the City of Central Point and the City of Medford limits will be assessed assuming ODOT operating standards must be met. Study intersections which have governing agencies for more than one approach include OR 99/Table Rock Road and OR 62 (Crater Lake Hwy)/East Villas Road intersections. Based on the direction from the *Jackson County Transportation System Plan*, ODOT's operating standards will be applied when analyzing these locations.

Table 3 summarizes the intersection operational standards and jurisdiction administering associated with the existing study intersections. *Central Point Street Jurisdiction Map* (Reference 7) was used to determine the jurisdiction of each study intersection.

Table 3. Operational Standards for Existing Study Intersections

ID.	Study Intersection	Governing Agency Standard	Traffic Control	Operating Standard
1	1-5 SB Ramp & E Pine St	ODOT	Signalized	Lane group V/C ≤ 0.85
2	1-5 NB Ramp & E Pine St	ODOT	Signalized	Lane group V/C ≤ 0.85
3	Peninger Rd & E Pine St	ODOT, County	Signalized	V/C ≤ 0.95
4	Hamrick Rd & E Pine St	County, City of Central Point	Signalized	V/C ≤ 0.95 and LOS D or better
5	Federal Way & Hamrick Rd	County, City of Central Point	Stop Control on Federal Way	V/C ≤ 0.95 and LOS D or better
6	Table Rock Rd & E VIIas Rd	County	Signalized	V/C ≤ 0.95
7	Table Rock Rd & Biddle Rd	County	Signalized	V/C ≤ 0.95
8	Table Rock Rd & Hamrick Rd	County	Stop Control on Hamrick	V/C ≤ 0.95
9	Table Rock Rd & Airport Rd	County, City of Central Point	Stop Control on Airport	V/C ≤ 0.95 and LOS D or better
10	Biddle Rd & Alrport Rd	City of Medford	Two-way Stop	LOS D or better
11	Table Rock Rd & OR 99	ODOT, County	Signalized	V/C ≤ 0.95
12	OR 62 (Crater Lake Hwy) & E Vilas Rd	ODOT, County	Signalized	V/C ≤ 0.95

EXISTING PEAK HOUR TRAFFIC CONDITIONS

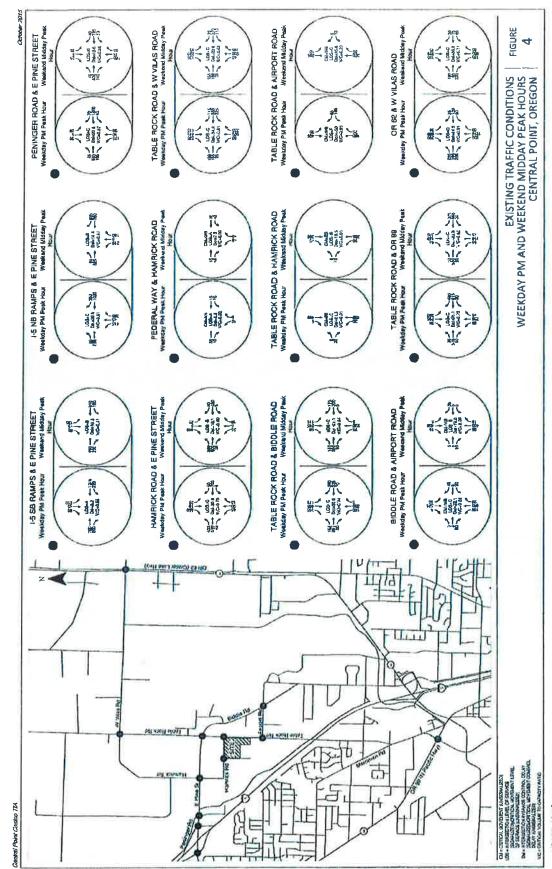
Existing peak hour traffic operations were analyzed for a typical weekday (Tuesday – Thursday) p.m. peak period (4:00 p.m. to 7:00 p.m.) and a weekend midday (12:00 p.m. to 3:00 p.m.) peak period. Existing turning movement counts collected in May and July 2015 were used in determining the existing operating conditions at each of the study intersections per jurisdictional standards.

Figure 4 provides the intersection turning movement counts and summarizes the intersection operational results for the existing weekday p.m. and weekend midday peak hour traffic conditions. As shown in Figure 4 and in Table 4, all of the study intersections operate at acceptable operating standards during the existing conditions weekday p.m. and weekend midday peak hours except for the Table Rock Road/Airport Road intersection during weekday p.m. peak. The Table Rock Road/Airport Road intersection is stop controlled in the westbound direction. Under existing conditions in the weekday p.m. peak hour, there is high delay for the critical movement (westbound left-turn) resulting in LOS F. Appendix "C" includes the traffic operation worksheets for the existing traffic conditions scenarios.

Table 4. Existing PM and Midday Peak Hour Traffic Operations

Study intersection	Governing			Existing Traffic Operations				
	Ajtency Standard	Peak Period	Movement	1.05	Delay	V/CRatio		
	anar.	PM Peak	4	A	9.2	0.58		
1. I-5 SB Ramp & East Pine Street	ODOT	MID Peak	300	В	10.3	0.41		
	apar	PM Peak		С	22.6	0.61		
2. I-5 NB Ramp & East Pine Street	TOOO	MID Peak	283	8	14.4	0.41		
	ODOT,	PM Peak	ak a	C	20.8	0.67		
3. Peninger Road & East Pine Street	County, City	MID Peak	- A	В	18.6	0.56		
		PM Peak	(1.0)	С	20.8	0.79		
4. Hamrick Road & East Pine Street	County, City	MID Peak		В	10.1	0.60		
5. Federal Way & Hamrick Road		PM Peak	Northbound	A	8.8	0.02		
	County, City	MID Peak	Westbound	A	7.5	0.01		
6. Table Rock Road & Vilas Road		PM Peak	20	С	34.4	0.81		
	County	MID Peak	200	С	20.6	0.62		
7 7-11-0-d-0d-0d		PM Peak		С	30.6	0.74		
7. Table Rock Road & Biddle Road	County	MID Peak		C	21.1	0.54		
		PM Peak	Eastbound	С	21.5	0.01		
8. Table Rock Road & Hamrick Road	County	MID Peak	Eastbound	В	13.5	0.01		
		PM Peak	Westbound	F	77.1	0.93		
9. Table Rock Road & Airport Road	County	MID Peak	Westbound	С	15.6	0.20		
	City of	PM Peak	Westbound	С	22.1	0.26		
10. Biddle Road & Airport Road	Medford	MID Peak	Westbound	В	10.9	0.11		
	ODOT,	PM Peak	F	С	25.1	0.73		
11. Table Rock Road & OR 99	County	MID Peak		С	23.0	0.62		
	ODOT,	PM Peak		D	44.5	0.91		
12. OR 62 & East Vilas Road	County	MID Peak		С	30.8	0.71		

Notes: The critical movement is reported for all unsignalized intersections based on the 2000 Highway Capacity Manual; LOS = Level of Service; Delay is reported in seconds per vehicle; V/C Ratio is defined as vehicle-to-capacity ratio which calculates the number of vehicles divided by the capacity of the roadway/intersection during the peak 15 minutes of the peak hour; and Bold and Italics indicates an intersection operating below its jurisdiction's standards.



KITTELSON & ASSOCIATES, INC.

SAFETY HISTORY ANALYSIS

Crash data available for the most recent five years (2009 – 2013) at all of the study intersections was provided by ODOT. Crash data was analyzed to document recent crash types and severity at study intersections and identify crash trends if applicable. In addition, study intersections were screened for compliance with ODOT's Safety Priority Index System (SPIS) and 90th percentile rates using the HCM prediction model. There were no reported crashes at the two of the study intersections:

- Federal Way & Hamrick Road
- Table Rock Road & Hamrick Road

In total, there were 192 crashes between all of the study intersections within the five year study period. Table 5 provides the reported crash type and severity at each of the study intersections. Appendix "D" includes the five year summary of crash data at each of the study intersections.

Table 5. Crash Type and Severity (2009 - 2013) at Study Intersections

	Collision Type							Crash Severely			
Study Intersection	Rear	Turning Movement	Angle	Sideswipe	Fixed Coyect	Ped/ Blke	Other	POO	per .	Estality	Fotai
1. I-5 SB Ramps/E Pine St	6	6	0	0	1	0	2	8	7	0	15
2. I-5 NB Ramps/E Pine St	7	11	0	1	1	0	1	6	15	0	21
3. Peninger Rd/E Pine St	3	6	0	1	0	0	0	4	6	0	10
4. Hamrick Rd/E Pine St	2	21	2	0	0	0	0	14	11	0	25
5. Federal Way & Hamrick Rd	0	0	0	0	0	0	0	0	0	0	0
6. Table Rock Rd & E Viles Rd	11	12	5	0	0	0	3	17	14	0	31
7. Table Rock Rd & Diddle Rd	7	3	0	0	0	0	0	5	5	0	10
8. Table Rock Rd/Hamrick Rd	0	0	0	0	0	0	0	0	0	0	0
9. Table Rock Rd/Airport Rd	3	2	0	0	0	0	0	3	2	0	5
10. Biddie Rd/Airport Rd	3	5	5	0	0	0	0	5	8	0	13
11. Table Rock Rd/OR 99	17	4	2	0	3	0	1	16	11	0	27
10. Table Rock Rd/OR 62	13	15	3	2	0	1	1	19	16	0	35
Total	72	85	17	4	5	1	8	97	95	0	192

Notes: * PDO = Property Damage Only; * Pl = Personal Injury

Turning movement and rear-end crashes were the most common crash type at the intersections, accounting for approximately 82% of all crashes. Roughly half of the reported crashes were injury crashes. There were no fatality crashes. Four study intersections were found to be in the 90th percentile and in compliance ODOT's SPIS. The four intersections include:

- I-5 SB Ramps/E Pine Street,
- Table Rock Road/W Vilas Road,
- OR 62 (Crater Lake Highway)/W Vilas Road, and
- Table Rock Road/OR 99.

Section 4
Transportation Impact Analysis

TRANSPORTATION IMPACT ANALYSIS

The transportation impact analysis identifies how the study area's transportation system will operate under build-year (2016) and future year (2030) conditions without and with the proposed Costco development in place. The impact of traffic generated by the proposed Costco development during the typical weekday p.m. and weekend midday peak hours was examined as follows:

- Other planned in-process developments and transportation improvements within the study area were documented;
- General background growth in the area was estimated;
- Project-generated trips were estimated for build-out of the project;
- Project trip-distribution patterns were derived from Costco membership data, existing traffic patterns, a region wide travel demand model and a select zone analysis within Central Point were evaluated;
- Build-year (2016) and future year (2030) conditions were analyzed with the addition of site-generated traffic at each of the study intersections and site-access points during the weekday p.m. and weekend midday peak hours;
- Operational and safety assessments were completed at each of the proposed site accesses and the intersection of Table Rock Road/Hamrick Road build-year plus project, and future year plus project scenarios; and
- On-site parking standards and proposed parking supply was evaluated.

PLANNED ROADWAY IMPROVEMENTS

This section provides a summary of transportation improvements that are planned and can be assumed to be completed under the two future year scenarios (per agency direction). These transportation improvements have been identified by the City of Central Point, Jackson County, as well as ODOT and documented in the City of Central Point's 2030 Transportation System Plan, Final Draft IAMP: I-5 Exit 33, and Rogue Valley Metropolitan Planning Organization's 2009 – 2034 Regional Transportation Plan (Reference 8).

Under the direction of the City of Central Point and ODOT, KAI has assumed the planned roadway improvements listed in the *Final Draft IAMP: I-5 Exit 33* based on the year of estimated completion, as well as all **Tier 1** improvements (within the site's vicinity) listed in the *City of Central Point's 2030 Transportation System Plan*. Tier 1 improvements have been defined as financially constrained projects that can be reasonably funded within the next twenty years. These improvements have been classified as either short (2008 – 2012), medium (2013 – 2017) or long-term (2018 – 2030) improvements.

Final Draft IAMP: I-5 Exit 33 Planned Improvements

The Oregon Department of Transportation and City of Central Point have identified and prioritized roadway improvements at and around the I-5/East Pine Street interchange. Based on the findings from the most recent *Final Draft IAMP: I-5 Exit 33* completed in May 2015 the following planned roadway improvements will be assumed.

- I-5 Southbound On-Ramp: The description of the planned project includes widening East Pine Street beginning at the west end of the freeway overpass to add a second westbound left-turn lane with up to 200 feet of additional storage. This project includes the widening of the southbound on-ramp to create two receiving lanes that merge to a single lane. The estimated cost of the project is \$1.7 million and has been designated as low to medium priority, therefore this project will be included the future year (2030) scenarios of this TIA.
- I-5 Northbound Ramp Terminal: The description of the planned project includes widening the I-5 northbound off-ramp to add a second right-turn lane at the northbound approach to East Pine Street. The second turn lane would provide an additional 350 feet of storage for to manage queuing on the off-ramp that cannot be managed with signal timing. The estimated cost of the project is \$1.3 million and has been designated as low to medium priority, therefore this project will be included the future year (2030) scenarios of this TIA.
- East Pine Street at Hamrick Road: The study verifies and calls for the implementation of Central Point TSP Tier I Project #216, which widens the west and north approaches to add a dual left-turn lane and second receiving lane.

Central Point Transportation System Plan Planned Improvements

The planned transportation improvement program prioritized roadway improvement projects between 2008 and 2030. There was no Tier I short term (2008 – 2012) projects that occurred on the study roadways within the site's vicinity. Listed below are the Tier I roadway improvement projects that will be included in future (year 2030) analyses.

- Tier I Project # 213 Table Rock Road & South Hamrick Road Intersection: Although the City's current TSP calls for a signal at the Table Rock Road/Hamrick Road, discussions with City of Central Point and Jackson County Staff have indicated this is no longer a planned or desired improvement. As such, no signal at the intersection of Table Rock Road/Hamrick Road has been assumed in the analysis.
- Tier I Project # 216 East Pine Street & Hamrick Road: The project description includes widening the west and north approaches in order to add a second eastbound left-turn lane and second receiving lane. The project also includes restriping the northbound approach to include dual left-turns and a single through-shared-right turn lane. In addition, the project includes restriping the southbound approach to include a left-turn, through and exclusive right-turn lanes. Identified as a medium priority, this project will be included in the future year (2030) scenarios.

- Tier I Project # 218 East Pine Street & Table Rock Road: The project description includes widening the west approach to add a second eastbound left-turn lane to help reduce queuing and minimize delay at the intersection. The project has been identified as a long-term project and will be included in the future year (2030) scenarios.
- Tier I Project # 219 Table Rock Road & West Vilas Road: The project description includes widening to increase capacity by adding an eastbound lane and shared through-right turn movement. The project has been identified as a long-term project and will be included in the future year (2030) scenarios.

RVMPO 2009 – 2034 Regional Transportation Plan Planned Improvements

- Table Rock Road Improvements: RVMPO, the City of Central Point, and Jackson County have identified significant capacity improvements to Table Rock Road between the I-5 overpass and Biddle Road. Under Project# 821, Table Rock Road is schedule to be widened from a two lane cross section to four lanes and a continuous center turn lane, with bike lanes and sidewalks on both sides of the roadway from Biddle Road to Airport Road. South of Airport Road, Table Rock Road will be widened to a three lane cross section with bike lanes and sidewalks on both sides of the roadway continuing to the I-5 overpass. Currently, this project is scheduled to be constructed in 2017. The project will also include the signalization of the Table Rock Road/Airport Road intersection.
- Federal Way Extension: Federal Way is currently only accessible via Hamrick Road and terminates just south of the FedEx Ground freight facility entrance. The City of Central Point Transportation System Plan shows the potential for a future connection of Federal Way to tie into the future signalized intersection at Table Rock Road/Airport Road. While the timing of the Federal Way connection has not been determined, the signalization the Table Rock Road/Airport Road intersection will occur in 2017 with completion of the Table Rock Road widening. The extension of Federal Way will be included in the future year (2030) scenarios.
- OR 62: I-5 to Dutton Road Planned Roadway Improvement: Currently, OR 62 (Crater Lake Highway) exceeds capacity standards. ODOT and the RVMPO has completed the necessary studies to begin the Oregon 62 Expressway project, which is a multimodal solution that will increase capacity and improve safety along the corridor, a critical business connection for freight, tourism and commuters (Reference 9). The 4.5 mile project will run on the east side of the Medford Airport, parallel to Crater Lake Highway, beginning at Whittle Avenue bypassing Commerce Drive, Coker Butte Road and Vilas Road before connecting back with OR 62 just north of Corey Road. The project is projected to begin construction in late fall 2016. For the purpose of this study, KAI has incorporated the change in travel patterns and growth based on the regional travel demand model for both future year (2030) background and total traffic scenarios. Based on the travel demand models, vehicular growth at the study intersection of OR 62/W Vilas Road will not experience growth in the northbound and southbound direction to and from OR 62 between the build-year (2016) and future year

(2030) background scenarios as northbound and southbound traffic shifts to the OR62 Expressway upon completion.

PLANNED IN-PROCESS DEVELOPMENTS

In-process development plans were obtained from the City of Central Point. The in-process developments to be assumed in this study include the approved residential development for White Hawk. This development includes apartments, duplexes, and a 5.5 acre city park at the intersection of Beebe Road and Gebhard Road. The project was granted approval in 2014 and has a design year of 2017. Site-generated trips and trip distribution information from this project was derived from the White Hawk Development Traffic Impact Analysis (Reference 10).

BUILD-YEAR (2016) BACKGROUND TRAFFIC CONDITIONS

The build-year (2016) background scenario analyzed how the study area's transportation system will operate without the site-generated traffic in year 2016. Build-year background traffic conditions were analyzed for both the weekday p.m. and weekend midday peak hours.

Background Growth Rates

Traffic growth within the study area is expected to follow the trends adopted in the Final Draft IAMP: I-5 Exit 33. The growth described in the IAMP used models prepared by ODOT's Transportation Planning Analysis Unit (TPAU). In conjunction with the forecasted growth of households, population and employment, a base year 2006 and future year 2038 travel demand model were provided by ODOT. After review of the study area's model and previous studies a 2.0% annual growth rate was determined and agreed upon to be applied to existing turning movement counts collected at the study intersections.

Traffic Volumes

The traffic volumes developed for the build-year (2016) background scenario reflect existing traffic counts plus one year of annual background growth and in-process development traffic.

Level of Service Analysis

As mentioned previously, all level of service analyses described in this section were performed in accordance with the procedures stated in the 2000 Highway Capacity Manual as required by the City of Central Point 2030 Transportation Systems Plan. Operating standards at the study intersections were assessed based on the jurisdiction in which the study intersection is located.

Intersection Operations

Figure 5 presents the build-year (2016) background traffic volumes and operations results at each of the study intersections. As under existing conditions, the results of the build-year background traffic analysis indicate that all of the study intersections are forecast to operate at acceptable levels of service and volume-to-capacity ratios during the weekday p.m. and weekend midday peak hours except for the Table Rock Road/Airport Road intersection during weekday p.m. peak hour.

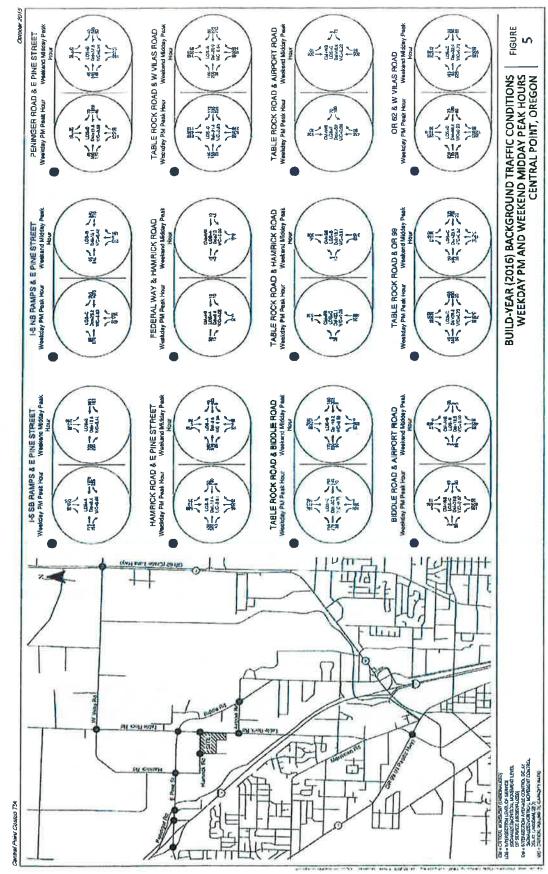
The Table Rock Road/Airport Road intersection is stop controlled in the westbound direction. As under existing conditions, during the weekday p.m. peak hour there is high delay for the critical movement (westbound left-turn) resulting in LOS F. In addition, the critical movement is also operating with a volume-to-capacity ratio of greater than 0.95 in the build year (2016) background conditions (with no traffic from the proposed Costco development).

Appendix "E" contains the build-year (2016) background traffic operation worksheets.

Table 3. Build-Year (2016) Background Traffic Operation Results

	Governing		Critical		Operation	
Study intersection	Agency Standard	Peak Period	Critical Movement ¹	1.08	Delay'	V/Cikatio
The state of the s		PM Peak	20	A	8.4	0.59
1. I-5 SB Ramp & East Pine Street	TOOO	MID Peak	•	В	10.6	0.44
		PM Peak		С	25.2	0.63
2. I-5 NB Ramp & East Pine Street	ODOT	MID Peak		В	15.1	0.42
	ODOT,	PM Peak	20	В	19.6	0.6B
3. Peninger Road & East Pine Street	County, City	MID Peak		В	17.8	0.54
		PM Peak		В	18.4	0.81
4. Hamrick Road & East Pine Street	County, City	MID Peak		A	8.6	0.56
5. Federal Way & Hamrick Road	0 1 00	PM Peak	Northbound	A	8.8	0.02
	County, City	MID Peak	Westbound	A	7.2	0.59 0.44 0.63 0.42 0.68 0.54 0.81 0.56 0.02 0.01 0.83 0.64 0.75 0.02 0.01 0.52 0.02 0.01 0.54 0.75 0.02
6. Table Rock Road & Vilas Road	0	PM Peak		C	31.4	0.83
	County	MID Peak		В	20.0	0.64
		PM Peak	8	С	30.5	0.75
7. Table Rock Road & Biddle Road	County	MID Peak		В	19.2	0.52
		PM Peak	Eastbound Left	С	22.1	0.02
8. Table Rock Road & Hamrick Road	County	MID Peak	Eastbound Left	В	13.7	0.01
		PM Peak	Westbound	F	90.0	0.98
9. Table Rock Road & Airport Road	County	MID Peak	Westbound	С	16.6	0.59 0.44 0.63 0.42 0.68 0.54 0.56 0.02 0.01 0.83 0.64 0.75 0.02 0.01 0.98 0.02 0.01 0.03 0.64 0.75 0.02 0.01 0.02 0.01 0.03 0.64 0.75 0.02 0.01 0.02 0.01 0.03 0.04 0.05
	City of	PM Peak	Westbound	С	22.8	0.27
10. Biddle Road & Airport Road	Medford	MID Peak	Westbound	В	12.5	0.10
44.5.1.5.1.5.1.5.5.5.5.5	ODOT,	PM Peak		С	26.8	0.73
11. Table Rock Road & OR 99	County	MID Peak		С	23.4	0.62
	ODOT,	PM Peak	×	D	48.4	0.92
12. OR 62 & East Vilas Road	County	MID Peak		С	32.4	0.73

Notes: ¹ The critical movement is reported for all unsignalized intersections based on the 2000 Highway Capacity Manual; ² LOS = Level of Service; ³ Delay is reported in seconds per vehicle; ⁴ V/C Ratio is defined as vehicle-to-capacity ratio which calculates the number of vehicles divided by the capacity of the roadway/intersection during the peak 15 minutes of the peak hour; and Bold and italics indicates an intersection operating below its jurisdiction's standards.



KIITELSON & ASSOCIATES INC

COSTCO TRIP GENERATION DATABASE

For the past 15 years, KAI has maintained a database of traffic data and travel characteristics for Costco Wholesale. The database contains transportation information such as trip rates, trip type percentages, and parking demand for Costco locations in the United States, as well as Canada and Mexico. A large portion of the data is from existing Costco sites in the Pacific Northwest. The data base is updated and refined each time new Costco traffic counts or information become available to KAI. In order to best evaluate the anticipated transportation characteristics of the proposed Central Point Costco development, it was agreed that the Costco database information be used in this TIS since it provides use-specific data that most accurately represents the anticipated traffic characteristics of the unique development type.

Costco has invested significant effort into developing this site-specific trip generation database for both their warehouses and their fuel stations because of the unique characteristics of Costco customer travel that exists due to membership requirements and the nature of Costco sales. These unique elements apply to the trip generation and distribution for Costco warehouses, Costco Gasoline fuel stations, and the interaction of trips between the two.

COSTCO TRIP GENERATION CHARACTERISTICS

The data collected at existing Costco developments in Oregon and Washington indicates the trip generation characteristics summarized in Table 7 including total trip ends as well as pass-by trips ends from the surrounding street systems. Generally, trip generation characteristics of Costco warehouses also include diverted trips, however, due to the location of the proposed site and its distance from I-5, OR 62 (Crater Lake Highway) and other major facilities, it was agreed with the agencies that diverted trips would essentially be considered new trips through the outlined study intersections. Therefore, a specific diverted trip reduction was not applied in this study. In addition, the pass-by trip rates used in this study are significantly lower than those found at most Costco locations. Surveys at existing Costco sites typically demonstrate pass-by rates in the range of 30-35% during the weekday and weekend peak hours. However, again due to the relatively low volumes currently on the adjacent streets to the site, pass-by trips were constrained to no more than 15% of the adjacent street volume thus resulting in pass-by rates of only 7-15%.

Table 7. Central Point Costco Development Trip Generation Estimate

12.00	Daviy			í	PM Poak Hour			Saturday Peak Hour		
	Total	lo:	Out	Total	to	Out	Total	lo-	Out	
Total Trip Ends (External Trip Ends)	12,140	6,070	6,070	1,055	520	535	1,465	745	720	
Pass-by Trip Ends (12% D, 15% PM, 7% MID)	-1,470	-735	-735	-155	-75	-80	-100	-50	-50	
Net New Trip Ends	10,670	5,335	5,335	900	445	455	1,365	695	670	

As shown in Table 7, the proposed Costco development is estimated to generate a total of approximately 10,670 net new trips on a daily basis, 900 net new trip ends during the weekday p.m. peak hour and approximately 1,365 net new trip ends during the weekend midday peak hour.

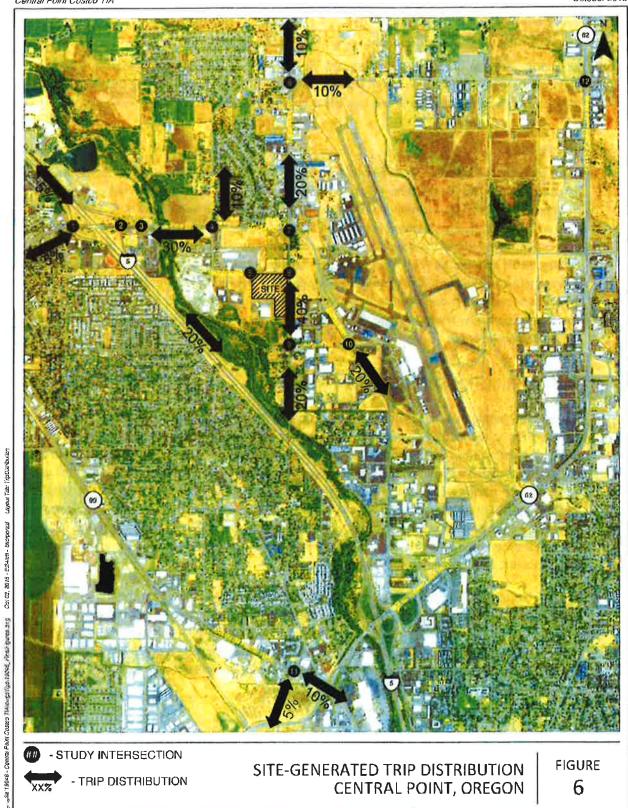
Pass-by Trips

A key trip characteristic considered was that of pass-by trip capture. Pass-by trips represent trips that are currently traveling on the surrounding street network for some other primary purpose (such as a trip from home to work) 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, typically, their only effect occurs at the site driveways where they become turning movements. Again, based on existing traffic volumes on Table Rock Road and Hamrick Road, the pass-by trip reduction has been reduced to a maximum of 15% of existing weekday p.m. and weekend midday peak hour volumes along these roadways. This is compared to the 30-35% pass-by rate documented from surveys at existing Costco developments. We believe this represents a very conservative but defensible approach to the trip generation analysis.

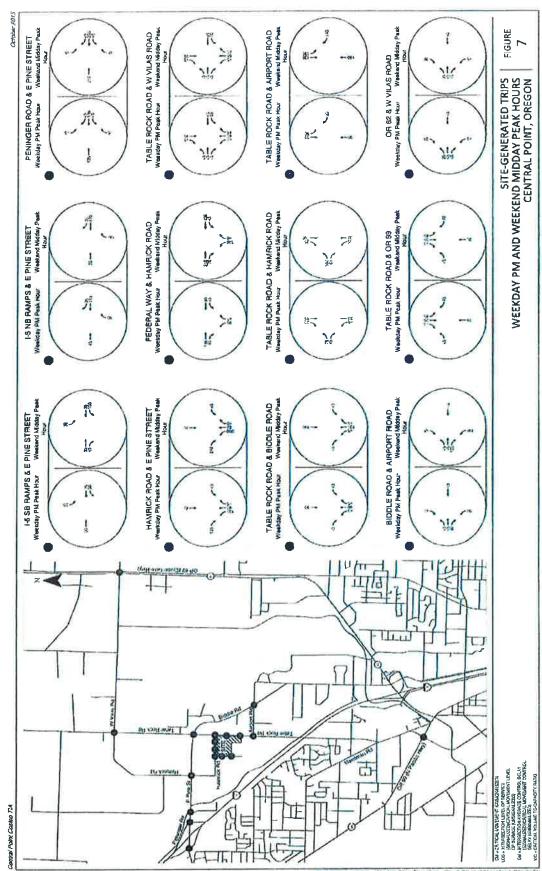
TRIP DISTRIBUTION AND TRIP ASSIGNMENT

The trip distribution pattern for site generated trips was developed using zip code data from current memberships at the existing Costco warehouse located on OR 62 (Crater Lake Highway) in Medford, Oregon, as well as from the existing traffic patterns and major trip origins and destinations within the study area. Localized trip routing through the study intersections was assessed based on the land use, traffic counts completed at the study intersections, and general patterns in the site vicinity. Additionally, ODOT provided KAI with a base year (2006) and future year (2038) regional travel demand model, as well as a select zone analysis for the traffic analysis zone that the site will occupy. The models and select zone analysis verified the trip distribution patterns and site-generated trip assignment for the proposed Costco warehouse and fueling station.

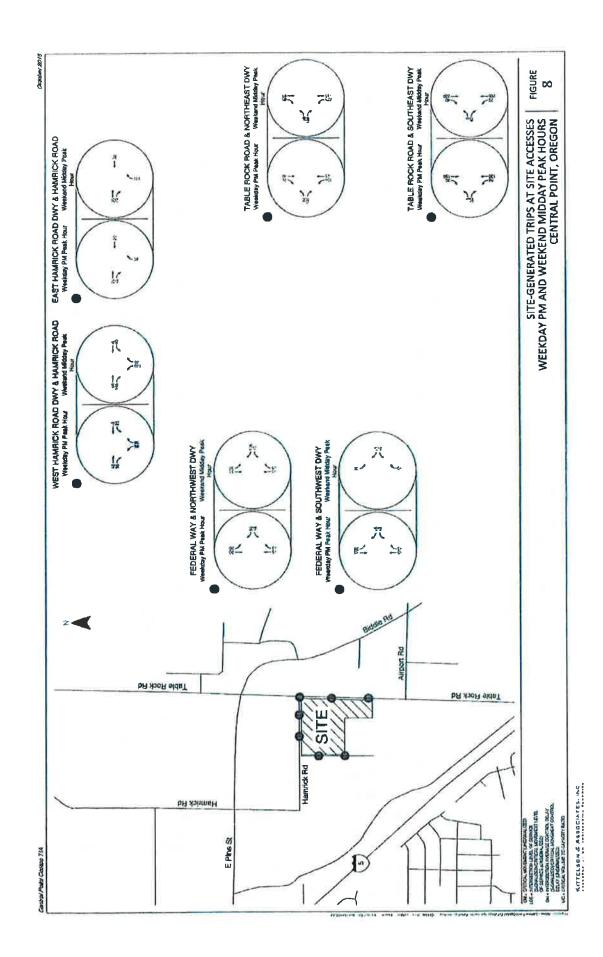
Figure 6 illustrates the trip distribution throughout the site's vicinity. Based on the trip distribution throughout the study area, Figure 7 and Figure 8 present the site-generated turning movement counts at each of the study intersections and site accesses for the weekday p.m. and weekend midday peak hours to and from the proposed Costco site. Appendix "F" includes the base year (2006) and future year (2038) regional travel demand models, as well as the select zone analysis provided by ODOT.



KH LELSON & ASSOCIALES, INC.



KITTELSON & ASSOCIATES, INC.



BUILD-YEAR (2016) TOTAL TRAFFIC CONDITIONS

The build-year (2016) total traffic scenario analyzed how the study area's transportation system will operate with the site-generated traffic of the proposed Costco development. Any impacts due to site-generated traffic will be documented and mitigations will be identified at the impacted study intersections.

Traffic Volumes

Site-generated traffic volumes (shown in Figure 7 and Figure 8) were added to the bulld-year (2016) background traffic volumes for the weekday p.m. and weekend midday peak hours (shown in Figure 5) to arrive at the build-year (2016) total traffic conditions shown in Figure 9.

Intersection Operations

Figure 9 also summarizes the intersection operations analysis for the build-year (2016) total traffic scenario. The build-year (2016) total traffic scenario identified two additional intersections as not meeting operational standards compared to those not previously identified in the build-year (2016) background scenario.

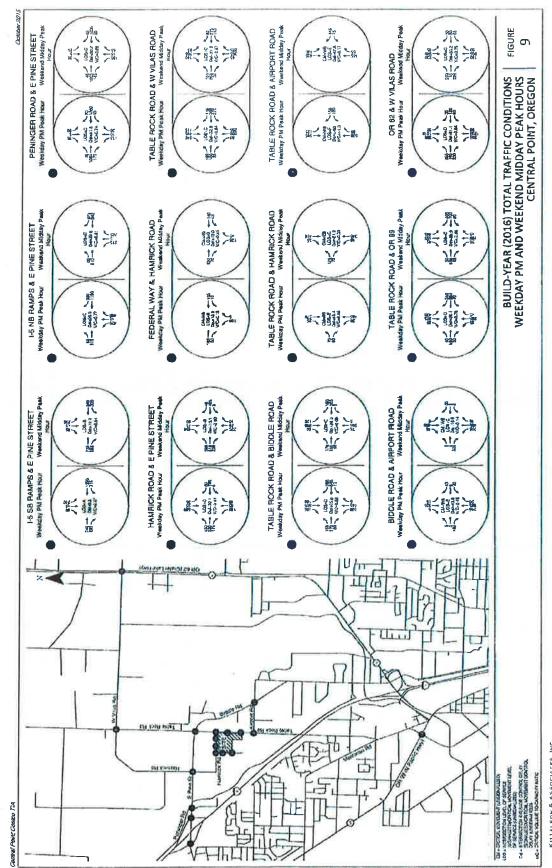
Table 6 also presents the build-year (2016) total traffic operation results at each of the study intersections. All of the study intersections operate at acceptable levels of service during the weekday p.m. and weekend midday peak hours with the exception of:

- I-5 NB Ramps & East Pine Street exceeds ODOT standards (lane group v/c ratio ≤ 0.85) with the northbound right-turn lane group's v/c ratio of 0.87 during the weekday p.m. peak hour.
- Table Rock Road & Airport Road, as under existing and 2016 background conditions, continues to operate at a LOS F during the weekend p.m. peak hour. However, delay at the intersection increases due to trips accessing Table Rock Road. During the weekend midday peak hour, site-generated traffic causes delay to increase by approximately 31 seconds, causing the level of service to drop from LOS C to LOS E.
- Biddle Road & Airport Road experiences a higher delay for the critical movement of the westbound approach, dropping from LOS C to E during the weekday p.m. peak period due to site-generated traffic. While no site-generated traffic is expected to be coming from the westbound approach, the delay increases because of the amount of vehicles making the northbound left at the unsignalized intersection. Even with the site generated traffic, the intersection is operating at a very low volume-to-capacity ratio of 0.45 in the weekday p.m. peak hour and 0.14 in the weekday midday peak hour.

Table 4. Build-Year (2016) Total Traffic Conditions

	Governing		Critical	Build Ye	Build Year (2016) Plus Project Traffi. Operations		
Study intersection	Agency standare	Place Period	Movement	1.05	Delay ²	J/C Racio	
		PM Peak	THE STANDARD CONTRACTOR	В	9.6	0.67	
1. I-5 SB Ramp & East Pine Street	ODOT	MID Peak		В	10.4	0.64	
		PM Peak	5.8	C	29.9	0.77	
2, I-5 NB Ramp & East Pine Street	ODOT	MID Peak		С	22.6	0.61	
	ODOT.	PM Peak	(F)	C	21.6	0.74	
3. Peninger Road & East Pine Street	County, City	MID Peak		С	20.2	0.66	
4. Hamrick Road & East Pine Street		PM Peak		C	20.1	0.81	
	County, City	MID Peak	790	В	13.1	0.60	
5. Federal Way & Hamrick Road		PM Peak	Northbound	В	10.9	0.18	
	County, City	MID Peak	Northbound	В	12.0	0.25	
6. Table Rock Road & Vilas Road		PM Peak		C	32.9	0.84	
	County	MID Peak	9.	С	21.0	0.84 0.67 0.82	
		PM Peak	(*)	C	35.9	0.82	
7. Table Rock Road & Biddle Road	County	MID Peak	10	С	24.3	0.67 0.64 0.64 0.77 0.61 0.77 0.61 0.74 0.66 0.81 0.60 0.18 0.025 0.84 0.0.67 0.82 0.0.65 0.0.84 0.0.65 0.0.85 0.0.46 0.0.35 0.0.46 0.0.77 0.0.66 0.0.77	
		PM Peak	Eastbound Left	E	43.4	0.46	
8. Table Rock Road & Hamrick Road	County	MID Peak	Eastbound Left	C	21.9	0.35	
		PM Peak	Westbound	F	>100.0	>1.00	
9. Table Rock Road & Airport Road	County	MID Peak	Westbound	E	47.8	0.77	
	City of	PM Peuk	Westbound	E	43.6	0.45	
10. Biddle Road & Airport Road	Medford	MID Peak	Westbound	С	16.5	0.14	
	ODOT,	PM Peak		С	28.1	0.75	
11. Table Rock Road & OR 99	County	MID Peak		С	25.0	0.66	
	ODOT,	PM Peak		D	51.1	0.94	
12. OR 62 & East Vilas Road	County	MID Peak		C	33.2	0.75	

Notes: ¹ The critical movement is reported for all unsignalized intersections based on the 2000 Highway Capacity Manual; ³ LOS = Level of Service; ⁴ V/C Ratio is defined as vehicle-to-capacity ratio which calculates the number of vehicles divided by the capacity of the roadway/intersection during the peak 15 minutes of the peak hour; and **Bold and Italics** indicates an intersection operating below its jurisdiction's standards.



KITTELSON & ASSOCIATES, INC.

Site Access Operations

There are six proposed driveways accessing the Central Point Costco site, two on each of the site's bordering frontage roads. On the west side of the site, two full accesses are proposed with movements accessible to northbound and southbound on Federal Way. A full access (closest to Federal Way) and right-in/right-out access (closest to Table Rock Road) are proposed on the north side of the site with access to and from Hamrick Road. Finally, there are two full accesses proposed on along Table Rock Road. The southern-most driveway on Table Rock Road would be the primary access for vehicles to access the Costco Gasoline fuel station.

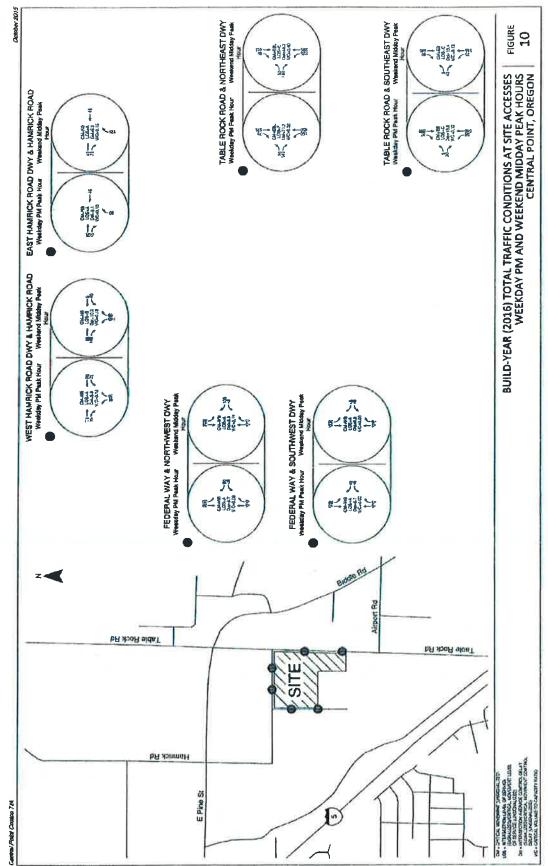
Table 9 presents the traffic operations at the proposed site accesses. The governing agency's standard is determined by the roadway in which the site access is located. Figure 10 also illustrates the build-year (2016) total traffic conditions at each of the proposed site access during the weekday p.m. and weekend midday peak hour. Appendix "G" contains the build-year (2016) total traffic operation worksheets.

Table 9. Build-Year (2016) Total Traffic Conditions at Site Accesses

	Governing Agency		Critical	Boild Year (2016) Pius Project Traffic Operations		
Site Access	Standard	Peak Period	Movement	108	Delay	VIII liat o
	City of	PM Peak	Westbound	A	8.7	0.09
13. Federal Way & Northwest Driveway	Central Point	MID Peak	Westbound	A	8.8	0.14
14. Federal Way & Southwest Driveway	City of	PM Peak	Westbound	A	8.7	0.01
	Central Point	MID Peak	Westbound	A	8.8	0.01
15. West Hamrick Road Driveway &	City of	PM Peak	Northbound Left	A	9.9	0.12
Hamrick Road	Central Point	MID Peak	Northbound Left	В	10.2	0.19
16. East Hamrick Road (Right-in/Right-	City of	PM Peak	Northbound Right	A	9.1	0.10
out) & Hamrick Road	Central Point	MID Peak	Northbound Right	A	9.3	0.15
17. Table Rock Road & Northeast	Jackson	PM Peak	Eastbound Left	F	71.2	0.52
Driveway	County	MID Peak	Eastbound Left	Ε	48.3	0.40
18. Table Rock Road & Southeast	Jackson	PM Peak	Eastbound	С	18.6	0.12
Driveway	County	MID Peak	Eastbound	C .	15.4	0.12

¹The critical movement is reported for all unsignalized intersections based on the 2000 Highway Capacity Manual; ²LOS = Level of Service; ³Delay is reported in seconds per vehicle; ⁴V/C Ratio is defined as vehicle-to-capacity ratio which calculates the number of vehicles divided by the capacity of the roadway/intersection during the peak 15 minutes of the peak hour; and Bold and Italics Indicates an intersection operating below its jurisdiction's standards.

As can be seen from the table and figure, all of the site access intersections are projected to operate at acceptable levels-of-service and volume-to-capacity ratios during both the weekday p.m. and weekend midday peak hours, with the exception of the Table Rock Road/Northeast access. Note this is assuming this access is a full movement access and no improvements to Table Rock Road are completed. Under this scenario, the critical eastbound left-turn movements at the Table Rock Road/Northeast access is projected to operate at LOS F during the weekday p.m. peak hour, however, it is still projected to operate well under capacity and meet the County's operational standard with a volume-to-capacity ratio of 0.52. This means that while drivers wishing to make a left-turn out of this location will experience delay, they will still be able to find sufficient gaps in the traffic flow along Table Rock Road to complete the turn. Again, this is a near-term scenario for the first year of opening of the Costco development before the Table Rock Road widening improvements are constructed in 2017.



KATELSON & ASSOCIATES INC

BUILD-YEAR (2016) MITIGATIONS

This section provides a discussion on mitigations for the impacted intersections under build year (2016) total traffic conditions. As outlined above, the build year (2016) scenario identified two additional intersections as not meeting operational standards compared to those not previously identified in the build-year (2016) background scenario: the I-5 NB Ramp/E Pine Street and Table Rock Road/Airport Road intersections. Mitigations for both these locations have already been identified through previous planning efforts by the City of Central Point, Jackson County, and ODOT. These are discussed below. Appendix "H" contains the build-year (2016) mitigated traffic operation worksheets for the intersections outlined below.

I-5 NB Ramp & East Pine Street Mitigation

Site-generated trips increase the northbound right-turn lane's v/c ratio by 2% during the weekday p.m. peak hour, resulting in a v/c ratio for the lane group of 0.87. This is greater than ODOT's standard of a maximum v/c of 0.85 for each lane groups at a ramp interchange. The need for additional capacity for this northbound right-turn movement has been previously identified in the *Final Draft IAMP: Exit 33* study which calls for the widening of the I-5 northbound off-ramp to add a second right-turn lane at the northbound approach to East Pine Street. The second turn lane would provide an additional 350 feet of storage to manage queuing on the off-ramp that cannot be managed with signal timing. Based on the assumed parameters of the project, this project would have the following benefit at the I-5 NB Off-Ramp intersection:

The northbound right-turn lane group would operate with a v/c ratio of 0.49 in the build-year (2016) total traffic scenario during the p.m. peak hour with the proposed improvements stated in the Final Draft IAMP: Exit 33.

ODOT and the City of Central Point are currently in discussions to determine Costco's appropriate proportional fair share contribution to this improvement as mitigation for the site generated trip impacts.

Table Rock Road & Airport Road Intersection

Improvements to the Table Rock Road/Airport Road intersection are scheduled in year 2017 as part of Table Rock Road widening. In addition to widening Table Rock Road at the intersection, a signal will be added to the intersection. The details of the signalized intersection have not yet been finalized; therefore, mitigated assumptions were based on the project description of Project# 821 in the RVMPO RTP. The signalized intersection has the following impact:

With the addition of a signal, the level of service and delay improves significantly during both the weekday p.m. and weekend midday peak hour. Based on a 60 second cycle length the intersection operates at LOS A with an average delay of 9.7 seconds per vehicle and a v/c ratio of 0.51 during the weekday p.m. peak hour. The westbound approach improves to a LOS B with an approach delay of 15.4 seconds per vehicle with the signal, compared to LOS F and an approach delay over 100 seconds without a signal during the weekday p.m. peak hour under build-year (2016) total traffic conditions.

This intersection is an existing deficiency; however, given that this improvement is not currently scheduled until 2017, Jackson County and the City of Central Point are currently in discussions to determine an appropriate contribution to this improvement as mitigation in the interim for the Costco project.

TABLE ROCK ROAD ACCESS ALTERNATIVES

Even though the build year (2016) analysis showed that all of the site accesses will be able to operate as proposed upon site opening before the Table Rock Road improvements are constructed, an evaluation of access alternatives for Table Rock Road was also completed to compare how temporary improvements would impact the access operations in the Interim until the Table Rock Road widening is completed in 2017. The access scenarios compared were:

- Bulld Year (2016) Total Traffic Conditions (i.e., Full Access to Table Rock Road) with No Table
 Rock Road Improvements (as summarized above)
- Build-Year (2016) Total Traffic Conditions with Temporary Table Rock Road Improvements (i.e., temporary widening of Table Rock Road along the site frontage to provide a center leftturn lane until the ultimate widening project is constructed)
- Build-Year (2016) Total Traffic Conditions with Restricted Right-In/Right-Out Site Accesses (restrict Table Rock Road access to right-in/right-out only until the ultimate widening project is constructed)

Operational Comparison

Table 10 compares the access operational results for these three scenarios. Also included for comparison are the operational results for the Table Rock Road/Hamrick Road intersection which does change depending on how the site's Table Rock Road accesses are configured.

Table 10. Table Rock Road Access Alternative Comparison

	Governing					
Study intersection/Site Access	Agency Standard	Penic Period	Critical Movement	LOS	Delay	V/C Ratio
			ort accesses/incomproven			
35 11-35 10 (125 105)	Jackson	PM Peak	Eastbound Left	E	43.4	0.46
8. Table Rock Road & Hamrick Road	County	MID Peak	Eastbound Left	C	21.9	0.35
17. Table Rock Road & Northeast	Jackson	PM Peak	Eastbound Left	F	71.2	0.52
Driveway	County	MID Peak	Eastbound Left	E	48.3	0.40
18. Table Rock Road & Southeast	Jackson	PM Peak	Eastbound	С	18.6	0.12
Driveway	County	MID Peak	Eastbound	C	15.4	0.12
	ai Traffic Conditir	nis with Temporal	y Table Rock Widening (a	dding a cente	r turn lane)	
	Jackson	PM Peak	Eastbound Left	С	15.7	0.19
8. Table Rock Road & Hamrick Road	County	MID Peak	Eastbound Left	В	13.4	0.21
17. Table Rock Road & Northeast	Jackson	PM Peak	Eastbound Left	С	20.3	0.19
Driveway	County	MID Peak	Eastbound Left	С	19.5	0.18
18. Table Rock Road & Southeast	Jackson	PM Peak	Eastbound	С	15.1	0.09
Driveway	County	MID Peak	Eastbound	8	13.4	0.10
Sold Pear (20	16) fotal fraffic (Conditions with Ta	ble Kock Road Accesses R	stricted to B	IZRO	
	Jackson	PM Peak	Eastbound Left	F	>85.0	>1.0
8. Table Rock Road & Hamrick Road ¹	County	MID Peak	Eastbound Left	F	>85.0	>1.0
17. Table Rock Road & Northeast	Jackson	PM Peak	Eastbound Left	С	16.6	0.33
Driveway	County	MID Peak	Eastbound Left	8	14.3	0.34
18. Table Rock Road & Southeast	Jackson	PM Peak	Eastbound	В	14.6	0.08
Driveway	County	MID Peak	Eastbound	В	13.0	0.09

Note: 1 Note: Adding temporary widening around the intersection to provide a northbound left-turn lane as well as a center refuge area north of Hamrick to allow vehicles turning left from Hamrick to make a two stage gap acceptance maneuver for the left-turn will improve operations to LOS E, 39.7 s/veh, and v/c=0.58 in the weekday p.m. peak hour and LOS F, 67.7 s/veh, and v/c=0.80 in the weekend midday peak hour.

The following conclusions can be drawn from the comparison in Table 10:

- Assuming full movement access and no improvements to Table Rock Road, the eastbound left-turns at the northeast access to Table Rock will experience relatively long delay (resulting in LOS F) but the access will still operate well under capacity and meet the County's operational standard with a volume-to-capacity ratio of 0.52 during the critical time period.
- Providing temporary widening along the site frontage to provide a temporary center turn lane will allow all Table Rock Road accesses to operate acceptably as full movements until the ultimate Table Rock Road widening improvements are constructed in 2017.
- Restricting the site's Table Rock Road accesses to right-in/right-out only will allow those accesses to operate at acceptable levels of service and volume-to-capacity ratios. However, it will add additional left-turn movements at the Table Rock Road/Hamrick Road intersection thus resulting in over-capacity and LOS F conditions at that location. This impact could be reduced by adding temporary widening around the intersection to provide a northbound left-turn lane as well as a center refuge area north of Hamrick to allow vehicles turning left from Hamrick to make a two stage gap acceptance maneuver for the left-turn (will improve operations to LOS E and v/c=0.58 in the weekday p.m. peak hour and LOS F and v/c=0.80 in the weekend midday peak hour.

As requested by the City of Central Point, the operations of the site accesses to Table Rock Road in the year 2017 once the Table Rock Road widening improvements are constructed were also evaluated. These were evaluated to compare operations with the accesses as full movement accesses and as right-in/right-out only accesses. Table 11 summarizes the operations of the Table Rock Road site accesses in the year 2017 once the Table Rock Road improvements are in place.

Table 11. Table Rock Road Access Operations in 2017

	Governing Agency					
Study intersection/Site Access	Standard	Peak Period	Critical Movement	1.05	Delay	V/Creatic
Full Ac	cesses Along Tab	e Nock Anad (2017	- Full Build Out of Table i	lock Roud)		
8. Table Rock Road & Hamrick Road	Jackson	PM Peak	Eastbound Left	С	15.0	0.18
	County	MID Peak	Eastbound Left	В	13.3	0.21
17. Table Rock Road & Northeast	Jackson	PM Peak	Eastbound Left	C	18.8	0.17
Driveway	County	MID Peak	Eastbound Left	С	18.7	0.17
18. Table Rock Road & Southeast	Jackson	PM Peak	Eastbound	В	12.1	0.07
Driveway	County	MID Peak	Eastbound	В	11.2	0.08
Right in/Right	our Accesses Alc	ng Fabie Hork Roa	d (2017 - Full Build Out at	Table Rock A	nad	
	Jackson	PM Peak	Eastbound Left	D	35.0	0.54
8. Table Rock Road & Hamrick Road	County	MID Peak	Eastbound Left	F	56.6	0.75
17. Table Rock Road & Northeast	Jackson	PM Peak	Eastbound Left	8	12.4	0.24
Dríveway	County	MID Peak	Eastbound Left	8	11.8	0.27
18. Table Rock Road & Southeast	Jackson	PM Peak	Eastbound	8	11.3	0.05
Driveway	County	MID Peak	Eastbound	В	10.7	0.06

The following conclusions can be drawn from the comparison in Table 11:

- Once the ultimate Table Rock Road widening improvement is constructed in 2017, all site accesses to Table Rock Road will operate a good levels of service (LOS C or better) and volume-to-capacity ratios (v/c=0.21 or better) during the peak hour periods assuming they are full access movements.
- The accesses will also operate acceptably as right-in/right-out only accesses once the ultimate Table Rock Road improvements are constructed, however, restricting those access will add additional left-turn movements at the Table Rock Road/Hamrick Road intersection. The additional left-turn demand will cause the critical eastbound left-turn movement to go from LOS C and v/c = 0.18 to LOS D and v/s = 0.54 in the weekday p.m. peak hour and LOS B and v/c = 0.21 to LOS F and v/c = 0.75 in the weekend midday peak hour.

Safety Comparison

In addition to the access operations comparison outlined above, the predicted safety performance of the accesses under the various alternatives was reviewed. A safety analysis was performed for the Table Rock Road accesses using the predictive crash methodology from Chapter 12 of the Highway Safety Manual, with adjusted crash calibration factors from ODOT's, Calibrating the Highway Safety Manual Predictive Methods for Oregon Highways. The accesses were evaluated as unsignalized intersections (since no specific safety predictive functions are provided for accesses). The analysis looked at five scenarios:

- Table Rock Road as Two Lanes with Full Movement Access
- Table Rock Road as Two Lanes with RI/RO Only Access
- Table Rock Road as Three Lanes with Full Movement Access
- Table Rock Road as Five Lanes with Full Movement Access
- Table Rock Road as Five Lanes with RI/RO Only Access

In order to predict crashes at right-in/right-out intersections, head-on collisions and angle crashes were omitted from the prediction methodology to represent a RIRO driveway.

Table 12 summarizes the results of this evaluation and safety comparison.

Table 12. Table Rock Road Access Predictive Safety Comparison

	Predicted Annual A	zeragi Crash	тевие по
Site Access	Fatal and Injury	PDO	Total
Foll Access Site Driveways Alc	ong Table Rock Road (2	Cano Cross S	ection
Table Rock Road/Northeast Dwy	0.23	0.48	0.71
Table Rock Road/Southeast Dwy	0.16	0.33	0.49
Total Annual Predicted Crashes	0.39	0.81	1.20
Right-in/Right-nut Access Only	Along Tobic Rock Road	(2 Cane Crns	s Section)
Table Rock Road/Northeast Dwy	0.16	0.37	0.53
Table Rock Road/Southeast Dwy	0.10	0.20	0.30
Total Annual Predicted Crashes	0.26	0.57	68.0
Fail Across Site Drive witys Ald	ing Table Rock Road (Line Cross S	ections
Table Rock Road/Northeast Dwy	0.16	0.32	0.48
Table Rock Road/Southeast Dwy	0.10	0.18	0.28
Total Annual Predicted Crashes	0,26	0.50	0.76
Fari Access Site Driveways Ale	ong labic Rock Road (.	Line Crise	ection)
Table Rock Road/Northeast Dwy	0.16	0.33	0.49
Table Rock Road/Southeast Dwy	0.11	0.17	0.28
Total Annual Predicted Crashes	0.27	0.50	0.77
Right in/Right out Access Only	Along Table Rock Road	i Li tane l'es	s Section)
Table Rock Road/Northeast Dwy	0.11	0.25	0.36
Table Rock Road/Southeast Dwy	0.07	0.13	0.20
Total Annual Predicted Crashes	0.18	0.38	0.56

Interpretation of the predictive safety results is complex. These are not absolute numbers and instead represent more of the probability for crashes to occur. In addition, the agencies must weigh the results of the safety predictive results with those of the traffic operational results as there are tradeoffs to each.

Providing full movement accesses to Table Rock Road in the near-term with its current two lane configuration shows the probability for 1.2 crashes per year to occur combined at the two access points. If these were restricted to right-in/right-out only driveways, the safety prediction lowers to a probability of 0.83 crashes per year (about a 30% decrease in probability). If temporary widening was provided in the interim for a two-way left-turn lane along the site's frontage, the probability would lower to 0.76 crashes per year (about a 30% decrease in probability).

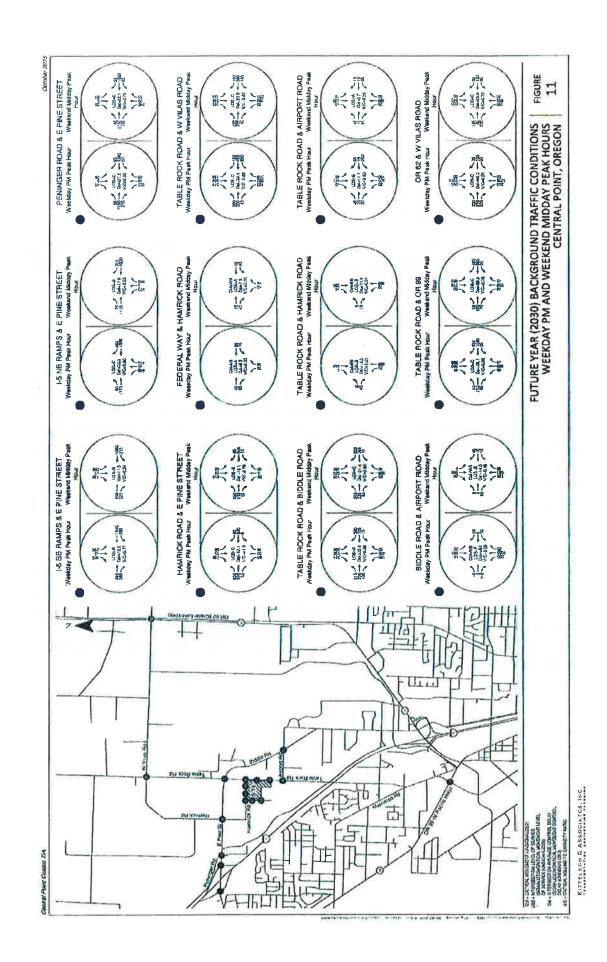
The safety predictive analysis also shows that once the ultimate Table Rock Road widening improvements are in place the safety prediction lowers as well to 0.77 crashes per year even with maintaining full movement accesses at both locations.

FUTURE YEAR (2030) BACKGROUND TRAFFIC CONDITIONS

The future year (2030) background scenario analyzed how the study area's transportation system will operate without the site-generated traffic in year 2030, representing a 15 year long-term future condition at the study intersections. Future year traffic conditions were analyzed for both the weekday p.m. and weekend midday peak hours. The future year (2030) background scenario includes the planned roadway improvements and land use developments previously mentioned for the build year as well as other planned improvements that are expected to be in place by the year 2030 such as the Table Rock Road widening and the Table Rock Road/Airport Road intersection signal. Appendix "I" contains the future year (2030) background traffic operation worksheets for the intersections outlined below.

Traffic Volumes

The 2030 background traffic volumes reflect existing traffic counts plus 15 years of annual background growth and in-process development traffic. Volumes along and accessing to and from OR 62 (Crater Lake Highway) were not grown by the annual growth rate due to the expected completion of the OR 62 Expressway project. The future year (2038) model provided by ODOT shows that daily volumes along OR 62 do not increase when compared to the base year (2008) volumes. The 2030 background conditions traffic volumes are summarized in Figure 11.



Intersection Operations

Figure 11 and Table 13 present the future year (2030) background conditions operational results at each study intersection. All of study intersections operate at acceptable levels of service and volume-to-capacity ratios during the weekday p.m. and weekend midday peak hours with the following exceptions:

- Hamrick Road & East Pine Street operates with a v/c ratio of >1.0 during the weekday p.m. peak hour
- Biddle Road & Airport Road (as under the build year conditions) has a critical movement which operates at LOS F during the weekday p.m. peak hour although the movement is still operating under capacity with a v/c ratio of 0.55

Table 13. Future Year (2030) Background Traffic Operations

	Governing			Fature Ye	ън (<mark>2030) В</mark> асі	
	Agency		Critical	Öperations		
Study intersection	Standars	Peak Period	Movement	1.05	Delay*	WCA me
4 4 5 60 0 0 5 01 544	00.00	PM Peak	(4)	В	10.5	0.77
1. I-5 SB Ramp & East Pine Street	ODOT	MID Peak		В	11.5	0.54
2. I-5 NB Ramp & East Pine Street	ОООТ	PM Peak	8.5	С	30.2	0.80
	ODOT	MID Peak	•	В	17.9	0.55
	ODOT,	PM Peak		С	27.2	0.90
3. Peninger Road & East Pine Street	County, City	MID Peak		С	22.1	0.75
4. Hamrick Road & East Pine Street	5	PM Peak		D	53.I	1.04
	County, City	MID Peak		В	15.1	0.79
5. Federal Way & Hamrick Road	C C - C	PM Peak	Northbound	A	8.9	E0.0
	County, City	MID Peak	Northbound	A	7.5	0.01
6. Table Rock Road & Vilas Road	C	PM Peak	9	С	34.4	0.85
	County	MID Peak	- 4	С	20.3	0.65
		PM Peak		D	35.2	0.86
7. Table Rock Road & Biddle Road	County	MID Peak	100	C	21.4	0.60
		PM Peak	Eastbound Left	В	14.0	0.01
8. Table Rock Road & Hamrick Road	County	MID Peak	Eastbound Left	В	11.4	0.01
		PM Peak		В	17.7	0.80
9. Table Rock Road & Airport Road	County	MID Peak		A	8.7	0.55
	City of	PM Peak	Westbound	F	54.3	0.59
10. Biddle Road & Airport Road	Medford	MID Peak	Westbound	В	14.5	0.15
44 = 11 = 1 = 10 0000	ODOT,	PM Peak		D	38.1	0.89
11. Table Rock Road & OR 99	County	MID Peak		С	30.5	0.76
	ODOT,	PM Peak		D	40.5	0.91
12. OR 62 & East Vilas Road	County	MID Peak		С	29.9	0.72

Notes: ¹ The critical movement is reported for all unsignalized intersections based on the 2000 Highway Capacity Manual; ² LOS = Level of Service; ³ Delay is reported in seconds per vehicle; ⁴ V/C Ratio is defined as vehicle-to-capacity ratio which calculates the number of vehicles divided by the capacity of the roadway/intersection during the peak 15 minutes of the peak hour; and **Bold and Italics** indicates an intersection operating below its jurisdiction's standards.

FUTURE YEAR (2030) TOTAL TRAFFIC CONDITIONS

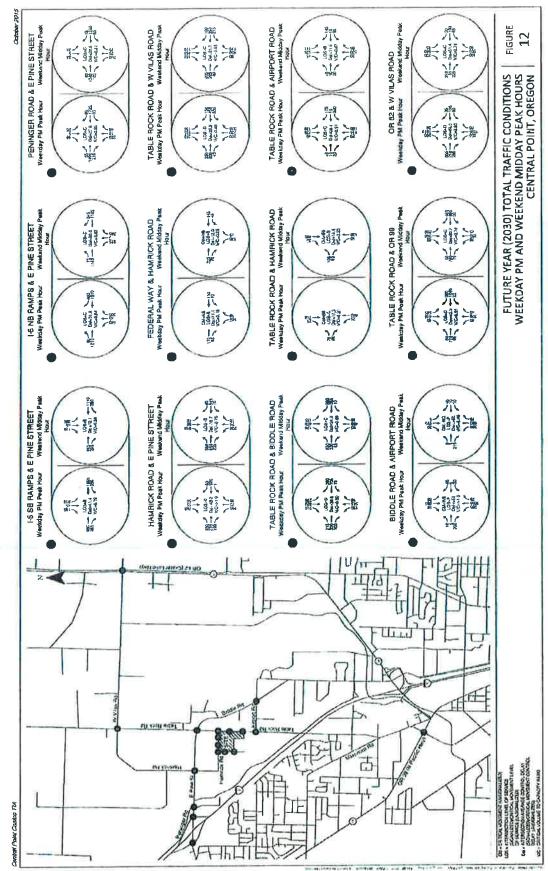
The future year (2030) total traffic scenario analyzed how the study area's transportation system will operate with Costco's site-generated trips in year 2030, representing a 15 year future condition with the addition of site-generated traffic at each of the study intersections. Future year traffic conditions were analyzed for both the weekday p.m. and weekend midday peak hours. The future year (2030) total scenario also includes the planned roadway improvements and land use developments previously mentioned. Appendix "J" contains the future year (2030) total traffic operation worksheets for the intersections outlined below.

Traffic Volumes

Traffic volumes for the future year (2030) total traffic scenario reflect the 2030 background scenario volumes plus the addition of site generated traffic. The future year 2030 total traffic volumes are summarized in Figure 12 for the off site study intersections.

Intersection Operations

The intersection operations for the 2030 total traffic scenario are also summarized in Figure 12 and in Table 14. As can be seen from the figure and table, the future year (2030) total scenario determined that site-generated trips did not impact any study intersections not previously identified in the future year (2030) background scenario. As in the 2030 background scenario, the Hamrick Road/East Pine Street intersection operates with a v/c ratio of >1.0 during the weekday p.m. peak hour and the critical movement at the Biddle Road/Airport Road operates at LOS F during the weekday p.m. peak hour.



KITTELSON & ASSOCIATES, INC.

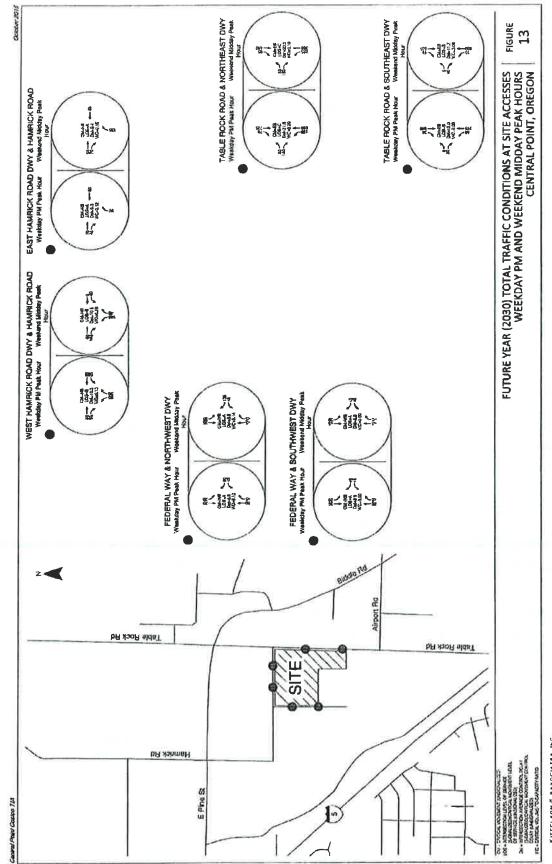
Table 14. Future Year (2030) Total Traffic Operations

	Governier		Critical	Future Year (2030) Background Traffi Operations		
Study intersection	Agency Standard	Peak Period	Unite as Movement	105	Delay	12-042-050-00-0
A DOMESTIC OF THE PARTY OF THE	0007	PM Peak		В	11.4	0.79
, I-5 SB Ramp & East Pine Street	ODOT	MID Peak		В	12.1	0.58
2. I-5 NB Ramp & East Pine Street		PM Peak		С	31.8	0.84
	ODOT	MID Peak	L.	С	20.6	0.63
	ODOT,	PM Peak		С	27.8	0.95
3. Peninger Road & East Pine Street	County, City	MID Peak		С	22.5	0.84
4. Hamrick Road & East Pine Street		PM Peak	347	D	46.2	1.03
	County, City	MID Peak		В	18.7	0.79 0.58 0.84 0.63 0.95 0.84
5. Federal Way & Hamrick Road		PM Peak	Northbound	В	11.1	0.19
	County, City	MID Peak	Northbound	В	12.0	0.79 0.58 0.84 0.63 0.95 0.84 1.03 0.78 0.19 0.25 0.88 0.68 0.90 0.69 0.21 0.23 0.91 0.67 >1.00
6. Table Rock Road & Vilas Road		PM Peak		D	35.9	0.88
	County	MID Peak		C	21.7	0.68
		PM Peak		D	38.0	0.90
7. Table Rock Road & Biddle Road	County	MID Peak		C	24.0	0.79 0.58 0.84 0.63 0.95 0.84 1.03 0.78 0.19 0.25 0.88 0.68 0.90 0.69 0.21 0.23 0.91 0.67
		PM Peak	Eastbound Left	C	17.3	0.21
8. Table Rock Road & Hamrick Road	County	MID Peak	Eastbound Left	В	14.4	0.23
	1	PM Peak		C	28,4	0.91
9. Table Rock Road & Airport Road	County	MID Peak		В	11.5	0.67
	City of	PM Peak	Westbound	F	>100.0	>1.00
10. Biddle Road & Airport Road	Medford	MID Peak	Westbound	F	51.9	0.79 0.58 0.84 0.63 0.95 0.84 1.03 0.78 0.19 0.25 0.88 0.68 0.90 0.69 0.21 0.23 0.91 0.67 >1.00 0.48 0.91 0.79
	ODOT,	PM Peak		D	40.9	0.91
11. Table Rock Road & OR 99	County	MID Peak		С	33.7	0.79
	ODOT,	PM Peak	*	D	43.0	0,93
12. OR 62 & East Vilas Road	County	MID Peak		С	31.4	0.74

Notes: ¹ The critical movement is reported for all unsignalized intersections based on the 2000 Highway Capacity Manual; ² LOS = Level of Service; ³ Delay is reported in seconds per vehicle; ⁴ V/C Ratio is defined as vehicle-to-capacity ratio which calculates the number of vehicles divided by the capacity of the roadway/intersection during the peak 15 minutes of the peak hour; and Bold and Italics indicates an intersection operating below its jurisdiction's standards.

Year 2030 Site Access Operations

Figure 13 and Table 15 presents the year 2030 traffic conditions at each of the site accesses. All of the proposed site accesses operate at acceptable levels of service during the weekday p.m. and weekend midday peak hours. Because of the planned roadway improvements along Table Rock Road, there is a significant benefit to the traffic operations at the site accesses along Table Rock Road when compared to the build-year (2016) total traffic scenario.



KITTELSON & ANSOCIATES INC.

Table 15. Future Year (2030) Total Traffic Operations at Site Accesses

	Governing		Critical	Soile Year (2016) Psos Project Traffic Operations		
Site Access	Agenry Standard	Peak Period	Movement	1.05	Delay	V/C Ratio
13. Federal Way & Northwest Driveway	City of	PM Peak	Westbound	A	8.8	0.10
	Central Point	MID Peak	Westbound	Α	8.8	0.14
14. Federal Way & Southwest Driveway	City of	PM Peak	Westbound	A	8.9	0.01
	Central Point	MID Peak	Westbound	A	8.8	0.01
15. West Hamrick Road Driveway &	City of	PM Peak	Northbound Left	В	10.3	0.15
Hamrick Road	Central Point	MID Peak	Northbound Left	В	10.5	0.19
16. East Hamrick Road (Right-In/Right-	City of	PM Peak	Northbound Right	A	9.3	0.12
out) & Hamrick Road	Central Point	MID Peak	Northbound Right	A	9.4	0.15
17. Table Rock Road & Northeast	Jackson	PM Peak	Eastbound Left	С	21.8	0.20
Driveway	County	MID Peak	Eastbound Left	С	20.3	0.19
18. Table Rock Road & Southeast	Jackson	PM Peak	Eastbound	В	13.0	0.08
Driveway	County	MID Peak	Eastbound	В	11.7	0.08

Notes: ¹ The critical movement is reported for all unsignalized intersections based on the 2000 Highway Capacity Manual; ² LOS = Level of Service; ³ Delay is reported in seconds per vehicle; ⁴ V/C Ratio is defined as vehicle-to-capacity ratio which calculates the number of vehicles divided by the capacity of the roadway/intersection during the peak 15 minutes of the peak hour; and Bold and italics indicates an intersection operating below its jurisdiction's standards.

FUTURE YEAR (2030) MITIGATIONS

This section includes the mitigations to the intersections identified as not meeting operational standards in the year 2030. As outlined previously, there are two locations found to not meet standards in the year 2030 background conditions. The additional of site generated traffic did not trigger any additional locations to not meet standards in the year 2030 scenarios. The two locations found to not meet standards in the year 2030 background conditions are:

- Hamrick Road & East Pine
- Biddle Road & Airport Road

The mitigated result for each impacted intersection is outlined below. Appendix "K" contains the future year (2030) mitigated traffic operation worksheets for the intersections outlined below.

Hamrick Road & East Pine Street Mitigations

The Intersection of Hamrick Road/East Pine Street experiences a heavy volume of vehicles making a southbound right-turn at the intersection, with a v/c ratio for that movement of above 1.0 during the p.m. peak hour of the future year (2030) background traffic conditions. There have no improvements identified beyond Project #216 stated in the City Central Point's transportation system plan. In order to mitigate the intersection, there are several options:

The addition of a southbound right-turn lane would improve intersection operations to LOS C with an overall v/c ratio of 0.76 and average delay of 25.2 seconds per vehicle. The v/c ratio of the southbound right-turn movement would decrease from 1.27 to 0.70 with the addition of an additional turn lane.

- The addition of a second eastbound left-turn lane would also mitigate the intersection to a volume-to-capacity ratio of <0.95 (currently under review as one option in the Jackson County TSP)
- The conversion of the intersection to a roundabout would also mitigate the intersection to a volume-to-capacity ratio of <0.95 (currently under review as one option in the Jackson County TSP)

Biddle Road & Airport Road Mitigations

This intersection operates at LOS F during both the 2030 background and 2030 total traffic conditions. The project is not adding any traffic to the critical westbound approach. There are no knows plans for improvements at this location by the City of Medford but the need for mitigation is not triggered by the project.

PARKING ASSESSMENT

City of Central Point Municipal Code 17.64.040 states that all land uses shall comply with the number off-street parking requirements. These requirements for non-residential land uses are stated in Table 17.64.02B. Retail store was assumed as the general commercial use for the proposed Costco development. This use states that no more and no less than 1 parking space per 200 square-feet of net floor area (excluding storage and other non-sales or non-display areas) be provided.

Based on the proposed 160,000 square-foot warehouse, of which 134,000 is usable sales space, this would equate to a minimum and maximum requirement of 670 parking spaces for the Costco development. Municipal Code 17.64.040.B.2 states that the off-street requirements may be increased based on a parking demand analysis prepared by the applicant as part of the site plan and architectural review. The parking demand analysis shall demonstrate and documents justification for the proposed increase.

Parking Demand Analysis

The proposed site plan as illustrated in Figure 1 provides a total of 782 parking spaces which is 30% more spaces than the maximum allowed based on Central Point's Municipal Code. Based on the nature of Costco sales and operations, the proposed parking has been carefully considered and is proposed given known parking demand characteristics for Costco sites. Costco is a unique use that demonstrates the need for a particular amount of parking to accommodate typical and peak demands. In fact, one of the reasons for relocating the existing Medford Costco to Central Point is to build on a site that can provide sufficient parking supply.

Table 16 provides a summary of the documented parking supply and demand at existing Costco warehouses in Oregon (including the current Medford location).

Table 16. Typical Peak Parking Demand at Other Costco Warehouses in Oregon

Coster Site Location	Warehouse Size (sq-ft)	Parking Supply	Peak Period Pariong Demand	Parking Demand per 1,000 sg-ft	Parking Supply to (Vlaintain 30% Uhlization at Peak	Violenum Recommend Parking Ratio
Clackamas, Oregon	137,000	693	670	4.89	744	5.43
Medford, Oregon	136,297	654	579	4.25	644	4.72
Aloha (Beaverton), Oregon	148,030	682	528	3.57	587	3.96
Average	140,442	676	592	4.24	658	4.71

As shown in Table 16, these three other Costco locations demonstrate a typical peak parking demand of 4.24 spaces/1,000 sq-ft. Guidelines from the Institute of Transportation Engineer's Parking Generation, 4th Edition (Reference 11) recommend that users perceive a parking lot to be "full" once utilization reaches 90% of capacity, noting that increases in illegal parking and repeating circulation occur beyond this level. Given this guidance, our recommendation is to provide sufficient parking to maintain a utilization of below 90% during the typical peak periods. Table 16 shows that, based on data from other Costco developments, the parking ratio required to maintain 90% utilization during the peak or less is a minimum of 4.71 spaces/1,000 sq-ft.

Applying the demonstrated minimum parking supply of 4.71 spaces/1,000 sq-ft to the proposed Central Point Costco development equates to a minimum recommended parking supply as summarized in Table 17.

Table 17. Central Point Costco Recommended Parking Supply

Central Point, Oregon	160,000	782	753
Costea Sate Lucation	Warehouse Size (sq-ft)	Parking Supply Proposed	Minimum Recommend Parting Spaces to Minimum 90% Chilization Ouring Peak Hour

The table shows that a minimum of 753 parking spaces should be supplied in order to provide sufficient capacity for the likely parking demand on site. This indicates that the proposed parking supply of 782 is slightly higher than this minimum amount but within a reasonable range and will provide an appropriate parking supply to accommodate typical peak periods as well as additional spaces for seasonal peaks as well.

In addition to parking space totals, accessible parking requirements are presented in Table 17.64.03 of the City's Municipal Code. For land uses providing a total number of parking spaces between 501 and 1,000, which applies the proposed Central Point Costco site, 2% of total parking provided is required to be accessible. Costco has planned to include approximately 2.2% or 17 of its total parking spaces to be accessible parking, based on total parking spaces equaling 782. The site plan shows that this requirement is being met.

Section 5
Conclusions & Findings

CONCLUSIONS & FINDINGS

The analysis and evaluation completed for the Central Point Costco development resulted in the following conclusions and findings:

Project Description

- Costco Wholesale is proposing to develop a new warehouse and fuel station located in the southwest quadrant of the Table Rock Road/Hamrick Road intersection in Central Point, Oregon.
 - o The development plan includes a 160,000 square-foot Costco warehouse and a 24 fueling position Costco Gasoline fuel station. This new Central Point Costco will replace the existing Medford Costco located at 3639 Crater Lake Hwy in Medford, Oregon.
- The parcels of land that in which the proposed Costco would occupy are zoned as M-1 (Industrial) which allows the development of the Costco warehouse and fuel station with a conditional use permit (no land use or zoning changes are required).
- In order to best evaluate the anticipated transportation characteristics of the proposed Central Point Costco development, it was agreed that the Costco-specific data be used to most accurately represent the anticipated traffic characteristics of the unique development type.
- The proposed Costco development is estimated to generate a total of approximately 10,670 net new trips on a daily basis, 900 net new trip ends during the weekday p.m. peak hour and approximately 1,365 net new trip ends during the weekend midday peak hour.
- The distribution pattern for site generated trips was developed using zip code data from current memberships at the existing Costco warehouse located on OR 62 (Crater Lake Highway) in Medford, Oregon, as well as from the existing traffic patterns and major trip origins and destinations within the study area and the regional travel demand model.

Existing Conditions

- The study evaluated 12 off site intersections in addition to site access points.
- The study evaluated two time periods for each evaluation scenario: weekday p.m. peak hour and weekend midday peak hour.
- Based on recent traffic counts collected in May and July 2015, all of the study intersections were found to operate at acceptable operating standards during the existing weekday p.m. and weekend midday peak hours except for the Table Rock Road/Airport Road intersection during weekday p.m. peak.

- The Table Rock Road/Airport Road intersection is stop controlled in the westbound direction. Under existing conditions in the weekday p.m. peak hour, there is high delay for the critical movement (westbound left-turn) resulting in LOS F.
- Crash data the most recent five years (2009 2013) at all of the study intersections was reviewed to identify historical safety trends.
 - o Turning movement and rear-end crashes were the most common crash type at the intersections, accounting for approximately 82% of all crashes.
 - o There were no fatality crashes.
 - Four study intersections were found to be in the 90th percentile and in compliance
 ODOT's SPIS: I-5 SB Ramps/E Pine Street, Table Rock Road/W Vilas Road, OR 62
 (Crater Lake Highway)/W Vilas Road, and Table Rock Road/OR 99.

Build Year 2016 Analysis

- The transportation impact analysis evaluated two different future year scenarios: year 2016,
 the assumed build out year of the development, and year 2030 a long-term planning year.
- The 2016 build-year background traffic analysis (without inclusion of the project traffic) found that all of the study intersections are forecast to operate at acceptable levels of service and volume-to-capacity ratios during the weekday p.m. and weekend midday peak hours except for the Table Rock Road/Airport Road intersection during weekday p.m. peak hour.
 - O As under existing conditions, during the weekday p.m. peak hour there is high delay for the critical movement (westbound left-turn) resulting in LOS F. In addition, the critical movement is also operating with a volume-to-capacity ratio of greater than 0.95 in the build year (2016) background conditions (with no traffic from the proposed Costco development).
- The build-year (2016) total traffic analysis (with inclusion of the project traffic) found that all study intersections will continue to operate at acceptable levels of service during the weekday p.m. and weekend midday peak hours with the exception of:
 - O I-5 NB Ramps & East Pine Street exceeds ODOT standards (lane group v/c ratio ≤ 0.85) with the northbound right-turn lane group's v/c ratio of 0.87 during the weekday p.m. peak hour. The need for additional capacity for this northbound right-turn movement has been previously identified in the Final Draft IAMP: Exit 33 study which calls for the widening of the I-5 northbound off-ramp to add a second right-turn lane at the northbound approach to East Pine Street. ODOT and the City of Central Point are currently in discussions to determine Costco's appropriate proportional fair share contribution to this improvement as mitigation for the site generated trip impacts.

- Table Rock Road & Airport Road, as under existing and 2016 background conditions, continues to operate at a LOS F during the weekend p.m. peak hour. Improvements to the Table Rock Road/Airport Road intersection are scheduled in year 2017 as part of Table Rock Road widening and a signal will be added to the intersection. This intersection is an existing deficiency; however, given that this improvement is not currently scheduled until 2017, Jackson County and the City of Central Point are currently in discussions to determine an appropriate contribution to this improvement as mitigation in the interim for the Costco project.
- o Biddle Road & Airport Road experiences a higher delay for the critical movement of the westbound approach, dropping from LOS C to E during the weekday p.m. peak period due to site-generated traffic. Even with the site generated traffic, the intersection is operating at a very low volume-to-capacity ratio of 0.45 in the weekday p.m. peak hour and 0.14 in the weekday midday peak hour.

Site Access Analysis

- In the build year 2016 scenario, all site access intersections are projected to operate at acceptable levels-of-service and volume-to-capacity ratios during both the weekday p.m. and weekend midday peak hours, with the exception of the Table Rock Road/Northeast access. Note this is assuming this access is a full movement access and no improvements to Table Rock Road are completed. Under this scenario, the critical eastbound left-turn movements at the Table Rock Road/Northeast access is projected to operate at LOS F during the weekday p.m. peak hour, however, it is still projected to operate well under capacity and meet the County's operational standard.
- Even though the build year (2016) analysis showed that all of the site accesses will be able to operate as proposed upon site opening before the Table Rock Road improvements are constructed, an evaluation of access alternatives for Table Rock Road was also completed to compare how temporary improvements would impact the access operations in the interim.
- The access scenarios compared were:
 - o Build Year (2016) Total Traffic Conditions (i.e., Full Access to Table Rock Road) with No Table Rock Road Improvements (as summarized above)
 - o Build-Year (2016) Total Traffic Conditions with Temporary Table Rock Road Improvements (i.e., temporary widening of Table Rock Road along the site frontage to provide a center left-turn lane until the ultimate widening project is constructed)
 - Build-Year (2016) Total Traffic Conditions with Restricted Right-In/Right-Out Site Accesses (restrict Table Rock Road access to right-in/right-out only until the ultimate widening project is constructed)
- The access alternatives evaluation found that:

- o Assuming full movement access and no improvements to Table Rock Road, the eastbound left-turns at the northeast access to Table Rock will experience relatively long delay (resulting in LOS F) but the access will still operate well under capacity and meet the County's operational standard during the critical time period.
- o Providing temporary widening along the site frontage to provide a temporary center turn lane will allow all Table Rock Road accesses to operate acceptably as full movements until the ultimate Table Rock Road widening improvements are constructed in 2017.
- o Restricting the site's Table Rock Road accesses to right-in/right-out only will allow those accesses to operate at acceptable levels of service and volume-to-capacity ratios. However, it will add additional left-turn movements at the Table Rock Road/Hamrick Road intersection thus resulting in over-capacity and LOS F conditions at that location. This impact could be reduced by adding temporary widening around the intersection to provide a northbound left-turn lane as well as a center refuge area north of Hamrick to allow vehicles turning left from Hamrick to make a two stage gap acceptance maneuver for the left-turn.
- Once the ultimate Table Rock Road widening improvement is constructed in 2017, all site accesses to Table Rock Road will operate a good levels of service (LOS C or better) and volume-to-capacity ratios (v/c=0.21 or better) during the peak hour periods assuming they are full access movements.
- From a safety perspective, a predictive safety analysis found that:
 - o Providing full movement accesses to Table Rock Road in the near-term with its current two lane configuration shows the probability for 1.2 crashes per year to occur combined at the two access points.
 - o If these were restricted to right-in/right-out only driveways, the safety prediction lowers to a probability of 0.83 crashes per year (about a 30% decrease in probability).
 - o If temporary widening was provided in the interim for a two-way left-turn lane along the site's frontage, the probability would lower to 0.76 crashes per year (about a 30% decrease in probability).
 - o The safety predictive analysis also shows that once the ultimate Table Rock Road widening improvements are in place the safety prediction lowers as well to 0.77 crashes per year even with maintaining full movement accesses at both locations.

Future Year 2030 Analysis

- The future year (2030) background conditions analysis (without the project traffic) found that all study intersections will continue to operate at acceptable levels of service and volume-to-capacity ratios during the weekday p.m. and weekend midday peak hours with the following exceptions:
 - o Hamrick Road & East Pine Street operates with a v/c ratio of >1.0 during the weekday p.m. peak hour
 - o Biddle Road & Airport Road (as under the build year conditions) has a critical movement which operates at LOS F during the weekday p.m. peak hour although the movement is still operating under capacity with a v/c ratio of 0.55
- The future year (2030) total traffic analysis (with the project traffic) found that the sitegenerated trips did not impact any study intersections not previously identified in the 2030 background scenario.
- All of the proposed site accesses operate at acceptable levels of service during the weekday p.m. and weekend midday peak hours under the future year 2030 total traffic scenario. Because of the planned roadway improvements along Table Rock Road, there is a significant benefit to the traffic operations at the site accesses along Table Rock Road when compared to the build-year (2016) total traffic scenario.

Parking Assessment

- City of Central Point Municipal Code directs that a parking supply of 670 parking spaces be provided for the Costco development (assuming retail land use).
- The project is proposing to provide a total of 782 parking spaces on site.
- As part of this report, a parking demand analysis was completed to demonstrate and documents justification for the proposed increase in parking supply.
- Actual parking supply and demand data from other Costco sites in Oregon indicates that a minimum parking ratio of 4.71 spaces/1,000 sq-ft be provided in order to supply enough parking to meet Costco specific demands.
- Applying the demonstrated minimum parking supply of 4.71 spaces/1,000 sq-ft to the proposed Central Point Costco development equates to a minimum recommended parking supply of 753 spaces.
- This indicates that the proposed parking supply of 782 is slightly higher than this minimum amount but within a reasonable range and will provide an appropriate parking supply to accommodate typical peak periods as well as additional spaces for seasonal peaks as well.

Section 6
References

REFERENCES

- 1. City of Central Point. Central Point Comprehensive Land Use Plan 2008-2030, Central Point, Oregon, May 2013.
- 2. City of Central Point. City of Central Point Transportation System Plan 2030, Implemented by Ordinance #1922, Central Point, Oregon, December 18, 2008.
- 3. David Evans and Associates, Inc. Final Draft IAMP: i-5 Exit 33 (Central Point), Oregon Department of Transportation, Salem, Oregon, May 2015.
- 4. Transportation Research Board. *Highway Capacity Manual 2000*, Transportation Research Board of the National Academies of Science, Washington, D.C., 2000.
- 5. Kittelson & Associates, Inc. *Jackson County Transportation System Plan*, Ordinance No. 2005-3, White City, Oregon, March 16, 2005.
- 6. Oregon Transportation Commission. *OHP Policy 1F Revisions*, 1999 Oregon Highway Plan, Salem, Oregon, December 21, 2011.
- 7. City of Central Point GIS. Street Jurisdiction Map, Jackson County Smartmap, Central Point, Oregon, January 2014.
- 8. Rogue Valley Metropolitan Planning Organization. 2009-2034 Rogue Valley Regional Transportation Plan, Central Point, Oregon, April 27, 2009.
- Oregon Department of Transportation. OR 62: I-5 to Dutton Road, Oregon department of Transportation, http://www.oregon.gov/ODOT/HWY/REGION3/pages/hwy62_index.aspx, April 2013.
- 10. Southern Oregon Transportation Engineering. White Hawk Development Traffic Impact Analysis, Medford, Oregon, July 20, 2014.
- 11. Institute of Transportation Engineers. *Parking Generation*, 4th *Edition*, Institute of Transportation Engineers, Washington, D.C., 2010.



MEMORANDUM

Date: November 10, 2015

Project #: 19046.0

To:

Mr. Matt Samitore City of Central Point 140 South Third Street Central Point, Oregon 97502

From:

Brett Korporaal, Julia Kuhn and Sonia Daleiden

Project:

Central Point Costco TIA

Subject:

Response to Comments - Central Point Costco TIA

This memorandum responds to comments submitted by staff from the City of Central Point (via Southern Oregon Transportation Engineering, LLC), related to the Central Point Costco Transportation Impact Analysis (TIA). Each comment is summarized below followed by our response.

COMMENT 1 – SUBMITTED BY CITY OF CENTRAL POINT

"Page 30 of the study in the last paragraph, KAI assumes that planned roadways in the IAMP as well as Tier 1 improvements listed in the City's TSP have been financially constrained and can be reasonably funded within the next twenty years. Many of the projects and/or improvements identified are not funded and there is no current mechanism for funding at this time. These include:

- Widening East Pine Street to add a second WBL and widening the I-5 SB on-ramp for two receiving lanes (\$1.7 million)
- Widening the I-5 NB off ramp at East Pine Street to include an additional NBR (\$1.3 million)
- Widening west and north approaches at Hamrick/Pine Street intersection
- Widening to include a dual eastbound left at Table Rock/Biddle Road intersection"

KAI RESPONSE

As part of the scoping process, KAI received confirmation from each of the jurisdictions that the Tier 1 projects identified in the IAMP and RVMPO's RTP should be included in the TIA analyses. As communicated in an email from Wei Wang, ODOT, on Thursday, July 2, 2015, "Page 8 of TIA, Planned Transportation Improvements — This should reference the RVMPO RTP Tier 1 projects and also

FILENAME: H:\PROJFILE\19046 - CENTRAL POINT COSTCO TIA\REPORT\FINAL\RESPONSE TO COMMENTS\19046_CENTRAL POINT COSTCO TIA RESPONSE TO COMMENTS_FINAL.DOCX

consider improvements/mitigations identified in IAMP 33. It is possible that some of them could be triggered earlier or may by mitigation for this development. Please review the Interchange Area Management Plan I-5 Exit 33 (IAMP 33). The proposed Costco TIA should be consistent with IAMP 33."

Based on this email, we submitted a "Scoping Memo Response to Comment" memorandum to the City of Central Point, Jackson County and ODOT that stated, "We will include any planned transportation improvements referenced in RVMPO RTP Tier 1 and IAMP 33 that will be completed during or prior to the proposed build out of the site."

Additionally, on Tuesday, September 29, 2015 KAI held a telephone conference with representing members from each agency to review and discuss the initial findings from the TIA. During this call, we verified with agency staff the funded Tier 1 projects from the RTP and IAMP to include in our analyses.

Our TIA is consistent with all of our previous correspondences from staff. We are unclear as to the change in direction about those projects to include in the analyses and would appreciate additional insights from agency staff.

COMMENT 2 – SUBMITTED BY CITY OF CENTRAL POINT

"The TIS doesn't include a queuing analysis, which is a requirement in the scoping letter. A queuing analysis should be performed in SimTraffic and follow the methodology outlined in ODOT's Analysis Procedures Manual (APM)."

KAI RESPONSE 2

KAI analyzed queuing for all site access points, the I-5 NB Ramps/E Pine Street and Table Rock Road/Hamrick Road intersections based on scoping direction from the City, County, and ODOT. Queuing was reviewed for the impact of the site-generated trips on 95th percentile queue lengths. Per the TIA, queues were calculated for the 2016 and 2030 scenarios during the weekday p.m. and weekend mid-day peak hours. For comparison purposes, the build-year (2016) total scenario also identifies queues lengths assuming an interim three lane configuration along Table Rock Road. The 2030 scenario provides the queuing assuming the planned and programed improvements to Table Rock Road are in place.

The queuing analysis was completed using SimTraffic within Synchro 8 software, which implements the 2000 Highway Capacity Manual methodology and is in compliance with ODOT's APM. In order to provide a conservative analysis and reflect the worst-case conditions, queues were reported for a peak 15-minute analysis. Vehicle queue lengths were rounded to the next 25th foot (assuming 25-feet of storage per vehicle).

Boise, Idaho

Build-Year (2016) Total Traffic Condition Queue Lengths

Table 1 presents the queue lengths for the build-year (2016) total traffic scenario. As documented in the TIA, the northbound right-turn at the I-5 NB Ramps/E Pine Street intersection exceeds capacity with the inclusion of site-generated trips. With the inclusion of site-generated trips, the queue lengths increase from approximately 125 feet under background conditions to 350 feet under total conditions. However, with site-generated trips the queue is still maintained within the right-turn lane storage and does not spillback into deceleration area of the northbound off-ramp during the weekday p.m. peak hour.

No queueing impacts were identified at the other intersections analyzed. In addition, a three-lane roadway along Table Rock Road does not change the estimated queue lengths northbound and southbound. However, it is important to note that the absence of a left-turn lane can cause delays to through travelers along Table Rock Road. Further, the absence of a left-turn lane also increases queue lengths and delay for vehicles making left-turns out of the site. The Table Rock Road widening is completed in year 2017 and will provide benefits to the overall transportation system.

Table 1. 95th Percentile Queuing - 2016 Conditions

					Queue Le	engths (ft) ¹		74.5
Site Accesses	Peak Period	EBL	EBR	WBL	WBR	NBL	NBR	SBL	SBR
	Build-Year (2016) T	otal Tr	affic Sci	enario					
	Storage Length ²	150	128	12.	265	335	380		
2. I-5 NB Ramps/E Pine St	PM Peak	25	-	100	200	200	350	14	
	MID Peak	50			150	125	225	19.	
	Storage Length ²	160	158	- 30		- 2		1985	
8. Table Rock Rd/Hamrick Rd	PM Peak	75	25			25		100	0
	MID Peak	50	25	- %	- 21	25	- 2	1,23	0
	PM Peak	— ,		0	25		0	25	-
13. Federal Way/Northwest Dwy	MID Peak	-		0	25		0	25	0
	PM Peak			0	0		0	25	
14. Federal Way/Southwest Dwy	MID Peak			0	0		0	25	0
	PM Peak	-	0	25		25	25	021	72
15. West Hamrick Rd Dwy/Hamrick Rd	MID Peak		0	25		25	25	0.00	14.
45 See the state of the state of the state of	PM Peak		0	- 300			25	79:	
16. East Hamrick Rd (RIRO) Dwy/Hamrick Rd	MID Peak	-	0			•	25		
45 5 4 5 4 5 4 5 4 5 5 5 5 5 5 5 5 5 5	PM Peak	75	50	- 200	*	25	(#)	5.0	0
17. Table Rock Rd/Northeast Dwy	MID Peak	50	50	1.00	- 3	50			0
40. Table Darle Del/Courth and Darr	PM Peak	25	0	2.5	*:	25	357	2.5	0
18. Table Rock Rd/Southeast Dwy	MID Peak	25	0	7.6		25	•		0
Build-Year (2016) Total Traff	ic Scenario with Te	mpora	ry Impr	oveme	nts Alon	g Table	Rock Ro	ad^3	
	Storage Length ²	160	V.	244	1 65		•	(#)	100
8. Table Rock Rd/Hamrick Rd	PM Peak	25	25			25		-	0
	MID Peak	25	25		-	25		*	0
47 Table Back Bridge Aband Brian	PM Peak	25	50	- 30	14:	25			0
17. Table Rock Rd/Northeast Dwy	MID Peak	25	50			25	120	UEV.	0
40. Table Bard Dd/Carabbarat Drove	PM Peak	25	0		(4)	25		. :-:	0
18. Table Rock Rd/Southeast Dwy	MID Peak	25	0			25			0

Notes: \$95th percentile queue lengths have been rounded to the next 25th-foot, one vehicle represent 25 feet of storage; \$Storage lengths were reported where applicable at the respective intersection. Storage lanes for left and right turns into the site are not included in the build-year (2016) total scenario with the exception of the West Hamrick Rd Dwy/Hamrick Rd site access where there is presently a two-way left-turn lane would be provided along Table Rock Road for access into and of the site driveways; **Bold** Indicates 95th percentile queues exceeding storage length.

Kittelson & Associates, Inc.

Future Year (2030) Total Traffic Condition Queue Lengths

Table presents queue lengths for the future (2030) total traffic scenario. As shown, all estimated queues can be accommodated within the storage provided during both peak hours analyzed.

Table 2. 95th Percentile Queuing - 2030 Conditions

				Q	lueue Le	ngths (ft)¹		
Site Accesses	Peak Period	EBL	EBR	WBL	WBR	NBL	NBR	SBL	SBR
Fi	iture-Year (2030) T	otal Tr	affic Sc	enario					
	Storage Length ²								
2. I-5 NB Ramps/E Pine St	PM Peak	50		5.5	125	325	200		
	MID Peak	25	100		200	150	150		
	Storage Length ²								
8. Table Rock Rd/Hamrick Rd	PM Peak	25	25	0,00		25	V.		0
	MID Peak	25	25	16		25	161		0
40.0 1 144 /61 41 41 41	PM Peak		:.e:	0	25		0	25	0.00
13. Federal Way/Northwest Dwy	MID Peak		74:	0	25	(4)	0	25	0
	PM Peak	-		0	0	-	0	25	
14. Federal Way/Southwest Dwy	MID Peak	39	1.00	25	0		0	25	0
	PM Peak	- 12	0	25	-	25	25		300
15. West Hamrick Rd Dwy/Hamrick Rd	MID Peak	-	0	25		25	25		
as a substitution of the state	PM Peak)#10	0			1901	25	· ·	
16. East Hamrick Rd (RIRO) Dwy/Hamrick Rd	MID Peak	2/	0	1.2	2	(2)	25		
4= = 11	PM Peak	25	50	18		50			0
17. Table Rock Rd/Northeast Dwy	MID Peak	25	50			50			0
40 T 11 D - 1 D 1/0 - 1 D	PM Peak	25	0			25			0
18. Table Rock Rd/Southeast Dwy	MID Peak	25	0	-	,	25			0

Notes: \$\frac{1}{25}^\text{in-foot}, one vehicle represent 25 feet of storage; \$\frac{2}{25}^\text{torage lengths were reported where applicable at the respective intersection. Storage lanes along Table Rock Road will be includes within the two-way left-turn lane when the Table Rock Road improvements are completed in year 2017. At the West Hamrick Rd Dwy/Hamrick Rd site access there is presently a two-way left-turn lane. Future year scenario does not include storage lanes to accesses the site on Federal Way because of low volume of traffic and turning movements into and out of the site; **Bold** indicates 95th percentile queues exceeding storage length.

COMMENT 3 – SUBMITTED BY CITY OF CENTRAL POINT

"If multiple access points are being proposed on Table Rock Road and S Hamrick Road then City and County access spacing standards should be taken into consideration and shown to be in compliance or otherwise justified."

KAI RESPONSE

The City's Transportation System Plan (TSP) identifies Table Rock Road as a major arterial. Based on Table 5.2 in *Central Point's TSP* a minimum spacing standard of 500 feet applies given the 45 mph posted speed. The Table Rock Road/Northeast Driveway is approximately 420 feet south of the Table Rock Road/S Hamrick Road unsignalized intersection. This driveway serves as the site's main driveway. The Table Rock Road/Southeast Driveway is located at the very southern edge of the site boundary. The spacing between the two site driveways is 500 feet, meeting City access management standards.

Although distance between the main driveway and the S Hamrick Road intersection does not meet the City's standards, there are no queue conflicts or operational issues associated with the spacing.

Kittelson & Associates, Inc. Boise, Idaho

Further, we have worked with the project team to maximize the spacing of access points and to optimize internal circulation for both the warehouse and fuel station.

We can work with the City to seek a design exception to the 500 feet standard between the main driveway and S Hamrick Road intersection with Table Rock Road.

Per Table 5.2 of the TSP, the applicable access spacing standard along S Hamrick Road is 300 feet. The East Hamrick Road Driveway/S Hamrick Road site access meets the spacing requirement between the driveway and the unsignalized intersection of Table Rock Road/S Hamrick Road intersection. The distance between the west and east driveways along S Hamrick Road is roughly 520 feet, also meeting the City's access spacing standards. The West Hamrick Road Driveway/S Hamrick Road site access is located approximately 200 feet west of the Hamrick Road/Federal Way unsignalized intersection, not meeting the City's spacing guidelines. While the spacing does not meet City guidelines, our analyses demonstrated that no operational or queuing conflicts are anticipated between this driveway and the S Hamrick Road/Federal Way unsignalized intersection.

We will also work with City staff to seek a design exception for the spacing between the west driveway and the S Hamrick Road/Federal Way intersection.

COMMENT 4 – SUBMITTED BY CITY OF CENTRAL POINT

"The proportional share for impacts to facilities such as the I-5 NB off ramp can be determined by a volume comparison. The 2016 no-build right turn volume is 310 PM trips. Proposed development in 2016 adds 90 PM trips. Adding 90 trips is approximately a 23% impact. The same methodology can be used for other facilities."

KAI RESPONSE

Thank you for clarifying the applicable methodology for proportionate share impacts. We will work with Costco and the agencies in determining the proportional share for projects which Costco will be responsible based on feedback from the agencies.

	•	•	1	†	1	4	
Movement	EBL	EBR	MBL	NBT	SBT	SBR	Œ
Lane Configurations	7	7	7	4	4		
Volume (veh/h)	71	79	19	484	569	26	
Sign Control	Stop			Free	Free		
Grade	0%			0%	0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	77	86	21	526	618	28	
Pedestrians	1						
Lane Width (ft)	12.0						
Walking Speed (ft/s)	3.5						
Percent Blockage	0						
Right turn flare (veh)							
Median type		W 1977		TWLTL	TWLTL		
Median storage veh)				2	2		
Upstream signal (ft)					1076		
pX, platoon unblocked	0.70	0.70	0.70				
vC, conflicting volume	1201	634	648				
vC1, stage 1 conf vol	634						
vC2, stage 2 conf vol	567	1100	7.00	10			77.0
vCu, unblocked vol	1075	268	288				
tC, single (s)	6.4	6.2	4.3				
tC, 2 stage (s)	5.4						
tF (s)	3.5	3.3	2.4				
p0 queue free %	81	84	97				
cM capacity (veh/h)	415	545	824		des -	-	12.0
Direction, Lane #	EB 1	E8 2	NB 1	NB 2	SB 1		T. J
Volume Total	77	86	21	526	647		-
Volume Left	77	0	21	0	-		
Volume Right	0	86	0	0	28		
cSH	415	545	824	1700	1700		
Volume to Capacity	0.19	0.16	0.03	0.31	0.38		
Queue Length 95th (ft)	17	14	2	0	0		
Control Delay (s)	15.7	12.8	9.5	0.0	0.0		
Lane LOS	C	В	A	O,O	0,0		
Approach Delay (s)	14.2		0.4		0.0		
Approach LOS	В						
Intersection Summary		11.5	1	المهما		ÇÜLVE,	ALC: N
Average Delay			1.8				
Intersection Capacity Utiliza	ation		46.2%		CU Level o	of Service	
Analysis Period (min)			15				
Analysis Period (min)			15				

	١	•	•	†	↓	4	
Movement	EBL	EBR	NBL	NBT	SBT	SBR	ľ
Lane Configurations	7	7	M	1	1		
Volume (veh/h)	50	141	161	453	576	72	
Sign Control	Stop			Free	Free		
Grade	0%			0%	0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	54	153	175	492	626	78	
Pedestrians	1						
Lane Width (ft)	12.0						
Walking Speed (ft/s)	3.5						
Percent Blockage	0						
Right turn flare (veh)	- I						
Median type				TWLTL '	TWLTL		
Median storage veh)				2	2		
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume	1509	666	705				
vC1, stage 1 conf vol	666	000	100				
vC2, stage 2 conf vol	842						
vCu, unblocked vol	1509	666	705				
tC, single (s)	6.4	6.2	4.3				
tC, 2 stage (s)	5.4	0.2	4.0				
tF(s)	3.5	3.3	2.4	-	_	_	
p0 queue free %	81	67	78				
	289	462	810				
cM capacity (veh/h)							
Direction, Lane#	EB 1	E8 2	NB 1	NB 2	SB 1	W. DET	
Volume Total	54	153	175	492	704		
Volume Left	54	0	175	0	0		
Volume Right	0	153	0	0	78		
cSH	289	462	810	1700	1700		
Volume to Capacity	0.19	0.33	0.22	0.29	0.41		
Queue Length 95th (ft)	17	36	20	0	0		
Control Delay (s)	20.3	16.6	10.7	0.0	0.0		
Lane LOS	C	C	В				
Approach Delay (s)	17.6		2.8		0.0		
Approach LOS	С						
Intersection Summary	19 23	0.0	5,00		101		
Average Delay			3.5				
Intersection Capacity Utiliz	ation		60.7%	IC	CU Level of	Service	
Analysis Period (min)			15				

	•	>	4	†	1	4	
Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations	Y		14	1	P		
Volume (veh/h)	5	29	50	609	688	29	
Sign Control	Stop			Free	Free		
Grade	0%			0%	0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	5	32	54	662	748	32	
Pedestrians	1						
Lane Width (ft)	12.0						
Walking Speed (ft/s)	3.5						
Percent Blockage	0						The second secon
Right turn flare (veh)							
Median type				TWLTL	TWLTL		
Median storage veh)				2	2		
Upstream signal (ft)				726			
pX, platoon unblocked	0.80						
vC, conflicting volume	1535	765	780				
vC1, stage 1 conf vol	765						
vC2, stage 2 conf vol	771						
vCu, unblocked vol	1544	765	780				
tC, single (s)	6.4	6.2	4.3				فالكا الكاريب ويوال
tC, 2 stage (s)	5.4						
tF (s)	3.5	3.3	2.4				Name of Street, or other Designation of the last of th
p0 queue free %	98	92	93				
cM capacity (veh/h)	315	406	758				
Direction, Lane #	E81	NB 1	NB 2	SB 1	/ACM	ST.	
Volume Total	37	54	662	779			
Volume Left	5	54	0	0			
Volume Right	32	0	0	32			
cSH	390	758	1700	1700			
Volume to Capacity	0.09	0.07	0.39	0.46	عا ساعا		The second second
Queue Length 95th (ft)	8	6	0	0			
Control Delay (s)	15.2	10.1	0.0	0.0			
Lane LOS	С	В					
Approach Delay (s)	15.2	0.8		0.0			The second second second
Approach LOS	С						
Intersection Summary	To Table	Jan. C	bje"		W. Tal		
Average Delay			0.7	*(
Intersection Capacity Utiliza	ation		55.1%		CU Level o	of Service	В
Analysis Period (min)			15				

Intersection: 8: Table Rock Rd & Hamrick Rd

Movement	EB	E8	NB
Directions Served	L	R	L
Maximum Queue (ft)	180	77	65
Average Queue (ft)	43	34	9
95th Queue (ft)	93	57	37
Link Distance (ft)		248	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	160		150
Storage Blk Time (%)	0		
Queuing Penalty (veh)	0		

Intersection: 17: Table Rock Rd & Northeast Dwy

Movement	EB	EB	NB	NB	SB	× 100		
Directions Served	L	R	L	T	TR			
Maximum Queue (ft)	74	92	216	173	50			
Average Queue (ft)	33	44	67	6	8			
95th Queue (ft)	58	70	142	57	31			
Link Distance (ft)	191	191		671	364			
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			150					
Storage Blk Time (%)			1	0				
Queuing Penalty (veh)			3	0				

Intersection: 18: Table Rock Rd & Southeast Dwy

Movement	EB	NB	SB
Directions Served	LR	L	TR
Maximum Queue (ft)	53	53	19
Average Queue (ft)	26	13	1
95th Queue (ft)	44	.40	6
Link Distance (ft)	141		671
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		150	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Zone Summary

Zone wide Queuing Penalty: 3

Central Point Costco TIA Kittelson & Associates, Inc. SimTraffic Report Page 1

	•	~	4	†	ţ	4	
Movement	EBL	EBR	NBL	NBT	SBT	SBR	M
Lane Configurations	N N	To a	M	*	fa.		
Volume (veh/h)	104	77	8	344	410	36	
Sign Control	Stop			Free	Free		
Grade	0%			0%	0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	113	84	9	374	446	39	
Pedestrians	1						
Lane Width (ft)	12.0						
Walking Speed (ft/s)	3.5						
Percent Blockage	0						
Right turn flare (veh)							
Median type				TWLTL	TWLTL		
Median storage veh)				2	2		
Upstream signal (ft)				_	1076		
pX, platoon unblocked	0.81	0.81	0.81		10,0		
vC, conflicting volume	858	466	486				
vC1, stage 1 conf vol	466	100	100				
vC2, stage 2 conf vol	391						
vCu, unblocked vol	705	222	246				
tC, single (s)	6.4	6.2	4.3				
tC, 2 stage (s)	5.4	U.E.	7.0				
tF (s)	3.5	3.3	2.4				
p0 queue free %	79	87	99				
cM capacity (veh/h)	543	665	983				
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1		400
Volume Total	113	84	9	374	485		100
Volume Left	113	0	9	0	0		
Volume Right	0	84	0	0	39		
cSH	543	665	983	1700	1700		
Volume to Capacity	0.21	0.13	0.01	0.22	0.29		
Queue Length 95th (ft)	19	11	1	0	0		
Control Delay (s)	13.4	11.2	8.7	0.0	0.0		
Lane LOS	В	В	Α				
Approach Delay (s)	12.4		0.2		0.0		
Approach LOS	В						
Intersection Summary	1 304 1	March.	Ship!	-	AV. 31	N N	
Average Delay			2.4				
Intersection Capacity Utiliza	ation		38.7%		CU Level o	f Service	
Analysis Period (min)			15				

	•	-	1	†	↓	4		
Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations	7	7	7	न	74			
/olume (veh/h)	49	183	224	295	403	85		
Sign Control	Stop			Free	Free			
Grade	0%			0%	0%			
eak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
lourly flow rate (vph)	53	199	243	321	438	92		
Pedestrians	1	100	2.0	-				
ane Width (ft)	12.0							
Valking Speed (ft/s)	3.5							
ercent Blockage	0.0							
Right turn flare (veh)	U							
				TWLTL	TIMI TI			
Median type				2	2			
Median storage veh)								
Jpstream signal (ft)								
X, platoon unblocked	4000	485	531					
C, conflicting volume	1293	480	551					
C1, stage 1 conf vol	485			-	_			
C2, stage 2 conf vol	808	405	504					
Cu, unblocked vol	1293	485	531					
C, singl e (s)	6.4	6.2	4.3					
C, 2 stage (s)	5.4							
F (s)	3.5	3.3	2.4					
0 queue free %	82	66	74					
M capacity (veh/h)	301	585	946					
irection, Lane #	E81	EB 2	NB 1	NB 2	SB 1		44.6	
olume Total	53	199	162	402	530			
/olume Left	53	0	162	81	0			
/olume Right	0	199	0	0	92			
SH	301	585	946	946	1700			
olume to Capacity	0.18	0.34	0.26	0.26	0.31			
Queue Length 95th (ft)	16	37	26	26	0			
Control Delay (s)	19.5	14.3	10.1	4.6	0.0			
ane LOS	C	В	В	A				
Approach Delay (s)	15.4	THE RES	6.2	أنس	0.0			
Approach LOS	C		0.2		0.0			
ntersection Summary	1019	1,203	301 (5)	fuje	* H. F.	SHE DIE		SET
verage Delay			5.5					
ntersection Capacity Utiliza	ation		58.8%		CU Level	of Service		В
Analysis Period (min)			15					

Peak Hour Factor 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92		•	*	4	†	↓	1
Anne Configurations	Movement	EBL	EBR	NBL	NBT	SBT	SBR
Colume (veh/h) 5 39 75 514 545 41 Sign Control Stop Free Free Grade 0% 0% 0% 0% Ow 0% 0% 0% Ow 0% 0% 0% Ow 0% 0%			No. of Concession, Name of Street, or other party of the Concession, Name of Street, or other pa				
Sign Control Stop Free Free Grade 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0%			39				41
Control Cont							
Peak Hour Factor 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92	Grade					0%	
Second			0.92	0.92			0.92
Pedestrians							
Anne Width (ft)		_					
Valking Speed (ft/s) 3.5 2 2 3.5							
Percent Blockage 0 Right turn flare (veh) Median type							
Right turn flare (veh) Median type Median storage veh) Jpstream signal (ft) OX, platoon unblocked CC, conflicting volume CC1, stage 1 conf vol CC2, stage 2 conf vol CC3, stage 2 conf vol CC4, unblocked vol CC5, stage (s) CC5, stage (s) CC6, stage (s) CC7, stage (s) CC7, stage (s) CC8, stage (s) CC9, s							
Median type TWLTL TWLTL Median storage veh) 2 2 Jpstream signal (ft) bX, platoon unblocked CC, conflicting volume 1337 616 638 CC1, stage 1 conf vol 616 CC2, stage 2 conf vol 722 CC, unblocked vol 1337 616 638 C, single (s) 6.4 6.2 4.3 C. 2 stage (s) 5.4 F (s) 3.5 3.3 2.4 5.0 <td></td> <td>•</td> <td></td> <td></td> <td></td> <td></td> <td></td>		•					
### Aledian storage veh ### Al					TW/I TI	TM/LTL	
Jpstream signal (ft)							
OX, platoon unblocked CC, conflicting volume CC1, stage 1 conf vol CC2, stage 2 conf vol CC2, stage 2 conf vol CC3, stage 2 conf vol CC4, single (s) CC5, single (s) CC6, single (s) CC7, stage (s) CC7,							
C, conflicting volume CC1, stage 1 conf vol CC2, stage 2 conf vol CC3, stage 2 conf vol CC4, unblocked vol CC5, single (s) CC5, single (s) CC6, single (s) CC7, stage (s) C	Opstream signat (it)						
C1, stage 1 conf vol 722 C2, stage 2 conf vol 722 C3, single (s) 6.4 6.2 4.3 C, single (s) 5.4 F (s) 3.5 3.3 2.4 00 queue free % 99 91 91 M capacity (veh/h) 363 494 860 C1, single (s) 5.4 C2, stage (s) 5.4 C3, stage (s) 5.4 C4, single (s) 6.4 6.2 4.3 C5, single (s) 6.4 6.2 4.3 C6, single (s) 6.4 6.2 4.3 C7, single (s) 8.4 860 C8, single (s) 6.4 6.2 4.3 C7, single (s) 6.4 6.2 cite (s) 6.8 C8, single (s) 6.4 6.2 cite (s) 6.8 C8, single (s) 6.4 6.2 cite (single single singl		4007	040	620			
## C2, stage 2 conf vol 722 722 723 724 724 725			010	030			
Cu, unblocked vol 1337 616 638 C, single (s) 6.4 6.2 4.3 C, 2 stage (s) 5.4 F (s) 3.5 3.3 2.4 00 queue free % 99 91 91 M capacity (veh/h) 363 494 860 Direction, Lane # E81 N81 N82 SB1 /olume Total 48 82 559 637 /olume Left 5 82 0 0 /olume Right 42 0 0 45 SSH 474 860 1700 1700 /olume to Capacity 0.10 0.09 0.33 0.37 Queue Length 95th (ft) 8 8 0 0 Control Delay (s) 13.4 9.6 0.0 0.0 Lane LOS B A Approach Delay (s) 13.4 1.2 0.0 Approach LOS B Intersection Summery Average Delay Intersection Capacity Utilization 51.7% ICU Level of Service							
C, single (s) 6.4 6.2 4.3 C, 2 stage (s) 5.4 F (s) 3.5 3.3 2.4 00 queue free % 99 91 91 M capacity (veh/h) 363 494 860 Direction Lane # E81 N81 N82 SB1 /olume Total 48 82 559 637 /olume Left 5 82 0 0 /olume Right 42 0 0 45 SSH 474 860 1700 1700 /olume to Capacity 0.10 0.09 0.33 0.37 Queue Length 95th (ft) 8 8 0 0 Control Delay (s) 13.4 9.6 0.0 0.0 Lane LOS B A Approach Delay (s) 13.4 1.2 0.0 Approach LOS B Intersection Summery Average Delay Intersection Capacity Utilization 51.7% ICU Level of Service			040	200			
C, 2 stage (s) 5.4 F (s) 3.5 3.3 2.4 00 queue free % 99 91 91 M capacity (veh/h) 363 494 860 Direction Lane # E81 N81 N82 SB1 /olume Total 48 82 559 637 /olume Left 5 82 0 0 /olume Right 42 0 0 45 SSH 474 860 1700 1700 /olume to Capacity 0.10 0.09 0.33 0.37 Queue Length 95th (ft) 8 8 0 0 Control Delay (s) 13.4 9.6 0.0 0.0 .ane LOS B A Approach Delay (s) 13.4 1.2 0.0 Approach LOS B Intersection Summery Average Delay Intersection Capacity Utilization 51.7% ICU Level of Service							
F (s) 3.5 3.3 2.4 00 queue free % 99 91 91 M capacity (veh/h) 363 494 860 Direction Lane # E81 N81 N82 SB1 /olume Total 48 82 559 637 /olume Left 5 82 0 0 /olume Right 42 0 0 45 SSH 474 860 1700 1700 /olume to Capacity 0.10 0.09 0.33 0.37 Queue Length 95th (ft) 8 8 0 0 Control Delay (s) 13.4 9.6 0.0 0.0 .ane LOS B A Approach Delay (s) 13.4 1.2 0.0 Approach LOS B Intersection Summery Average Delay ntersection Capacity Utilization 51.7% ICU Level of Service			6.2	4.3			
99 91 91 M capacity (veh/h) 363 494 860 Direction Lane # E84 N8 1 N8 2 SB 1 /olume Total 48 82 559 637 /olume Left 5 82 0 0 /olume Right 42 0 0 45 SSH 474 860 1700 1700 /olume to Capacity 0.10 0.09 0.33 0.37 Queue Length 95th (ft) 8 8 0 0 Control Delay (s) 13.4 9.6 0.0 0.0 .ane LOS B A Approach Delay (s) 13.4 1.2 0.0 Approach LOS B Intersection Summer/ Average Delay ntersection Capacity Utilization 1.1 ICU Level of Service							
Micapacity (veh/h) 363 494 860 Direction Lane # E84 N8 1 N8 2 SB 1	tF (s)						
Control Delay (s) 13.4 1.2 1.2 1.2 1.2 1.2 1.2 1.3 1.2 1.3 1.2 1.3 1.2 1.3 1.3 1.2 1.3 1.3 1.2 1.3 1							
Volume Total 48 82 559 637 Volume Left 5 82 0 0 Volume Right 42 0 0 45 SSH 474 860 1700 1700 Volume to Capacity 0.10 0.09 0.33 0.37 Queue Length 95th (ft) 8 8 0 0 Control Delay (s) 13.4 9.6 0.0 0.0 Lane LOS B A Approach Delay (s) 13.4 1.2 0.0 Approach LOS B Approach LOS B Average Delay 1.1 Intersection Summary Average Delay 1.1 Intersection Capacity Utilization 51.7% ICU Level of Service	cM capacity (veh/h)	363	494	860			
/olume Left 5 82 0 0 /olume Right 42 0 0 45 SSH 474 860 1700 1700 /olume to Capacity 0.10 0.09 0.33 0.37 Queue Length 95th (ft) 8 8 0 0 Control Delay (s) 13.4 9.6 0.0 0.0 .ane LOS B A Approach Delay (s) 13.4 1.2 0.0 Approach LOS B Intersection Summary Average Delay 1.1 Intersection Capacity Utilization 51.7% ICU Level of Service	Direction, Lane #	E8 1	NB 1			ball in	
/olume Right 42 0 0 45 //SH 474 860 1700 1700 //olume to Capacity 0.10 0.09 0.33 0.37 Queue Length 95th (ft) 8 8 0 0 Control Delay (s) 13.4 9.6 0.0 0.0 Approach Delay (s) 13.4 1.2 0.0 Approach LOS B Intersection Summary Average Delay 1.1 Intersection Capacity Utilization 51.7% ICU Level of Service	Volume Total						
SH	Volume Left	5	82	0	0		
### APPROVED TO PROVIDE TO PROVID	Volume Right	42	0	0	45		
/olume to Capacity	cSH	474	860	1700	1700		
Queue Length 95th (ft) 8 8 0 0 Control Delay (s) 13.4 9.6 0.0 0.0 Lane LOS B A Approach Delay (s) 13.4 1.2 0.0 Approach LOS B Intersection Summery 1.1 Average Delay 1.1 Intersection Capacity Utilization 51.7% ICU Level of Service	Volume to Capacity	0.10	0.09	0.33	0.37		
Control Delay (s) 13.4 9.6 0.0 0.0 Lane LOS B A Approach Delay (s) 13.4 1.2 0.0 Approach LOS B Intersection Summery Average Delay 1.1 Intersection Capacity Utilization 51.7% ICU Level of Service		8	8	0	0		
Anne LOS B A Approach Delay (s) 13.4 1.2 0.0 Approach LOS B Intersection Summery Average Delay 1.1 Intersection Capacity Utilization 51.7% ICU Level of Service		13.4	9.6	0.0	0.0		
Approach Delay (s) 13.4 1.2 0.0 Approach LOS B Intersection Summary Average Delay 1.1 Intersection Capacity Utilization 51.7% ICU Level of Service							
Approach LOS B Intersection Summery Average Delay 1.1 Intersection Capacity Utilization 51.7% ICU Level of Service		_			0.0		
Average Delay 1.1 ntersection Capacity Utilization 51.7% ICU Level of Service	Approach LOS		,,		0.0		
Average Delay 1.1 ntersection Capacity Utilization 51.7% ICU Level of Service	Intersection Summery	1000	S 800	TE IN	" ₋ M	Sec. 1	E 142.
ntersection Capacity Utilization 51.7% ICU Level of Service				1.1			
		ation				CU Level o	f Service
	Analysis Period (min)	##411		15			
and your ched (min)	Analysis i onou (mill)						-

Intersection: 8: Table Rock Rd & Hamrick Rd

Movement	E8	EB	NB
Directions Served	L	R	L
Maximum Queue (ft)	93	74	51
Average Queue (ft)	40	37	9
95th Queue (ft)	70	55	36
Link Distance (ft)		248	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	160		150
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 17: Table Rock Rd & Northeast Dwy

Movement	EB	EB	NB	NB	SB	
Directions Served	L	R	L	LT	TR	
Maximum Queue (ft)	74	119	93	312	22	
Average Queue (ft)	36	55	17	93	3	
95th Queue (ft)	70	89	51	187	15	
Link Distance (ft)	191	191		671	352	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			150			
Storage Blk Time (%)				1		
Queuing Penalty (veh)				2		

Intersection: 18: Table Rock Rd & Southeast Dwy

Movement	E8	NB	SB
Directions Served	LR	L	TR
Maximum Queue (ft)	52	77	22
Average Queue (ft)	25	29	1
95th Queue (ft)	48	65	7
Link Distance (ft)	156		671
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		150	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Zone Summary

Zone wide Queuing Penalty: 2

	۶	-	—	•	1	†	-
Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NER
Lane Group Flow (vph)	66	996	1292	413	229	231	433
v/c Ratio	0.32	0.49	0.71	0.42	0.54	0.54	0.90
Control Delay	9.7	11.4	28.2	9.9	33.7	33.8	46.1
Queue Delay	0.0	0.0	0.5	0.0	0.0	0.0	0.0
Total Delay	9.7	11.4	28.7	9.9	33.7	33.8	46.1
Queue Length 50th (ft)	20	202	444	103	117	118	179
Queue Length 95th (ft)	22	258	513	194	191	193	#340
Internal Link Dist (ft)		1110	494			650	
Turn Bay Length (ft)	150			265	335		380
Base Capacity (vph)	211	2030	1808	978	489	490	537
Starvation Cap Reductn	0	0	169	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.49	0.79	0.42	0.47	0.47	0.81

Intersection Summary
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

	•	*	1	†	Ţ	4
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	7	74		ন	7.	
Volume (veh/h)	71	79	19	484	569	26
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	77	86	21	526	618	28
Pedestrians	1					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)					1076	
pX, platoon unblocked	0.70	0.70	0.70			
vC, conflicting volume	1201	634	648			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1075	268	288			
tC, single (s)	6.4	6.2	4.3			
tC, 2 stage (s)	-					
tF (s)	3.5	3.3	2.4			
p0 queue free %	54	84	97			
cM capacity (veh/h)	168	545	824			
				-		
Direction, Lane #	EB 1	EB 2	NB 1	SB 1		
Volume Total	77	86	547	647		
Volume Left	77	0	21	0		
Volume Right	0	86	0	28		
cSH	168	545	824	1700		
Volume to Capacity	0.46	0.16	0.03	0.38		
Queue Length 95th (ft)	54	14	2	0		
Control Delay (s)	43.4	12.8	0.7	0.0		
Lane LOS	E	В	Α			
Approach Delay (s)	27.3		0.7	0.0		
Approach LOS	D					
Intersection Summary		1.0	(VIII.)	111	T. C.	
Average Delay			3.6			
Intersection Capacity Utiliz	ation		55.3%	K	CU Level	of Service
Analysis Perlod (min)			15			
Andrew Control						

10. I edelal Way d		A					Balla Foal (Fotal) Wookday File	
	•	•	†	-	-	+		
Vovement	WBL	WBR	NBT	NBR	SBL	SBT	Y \$1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Lane Configurations	A.		4			ની		
Volume (veh/h)	2	91	0	0	22	22		
Sign Control	Stop		Free			Free		
Grade	0%		0%			0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Hourly flow rate (vph)	2	99	0	0	24	24		
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type			None			None		
Median storage veh)								
Upstream signal (ft)								
X, platoon unblocked								
vC, conflicting volume	72	0			0		Contract of the last of the la	-
vC1, stage 1 conf vol					-			
vC2, stage 2 conf vol							Annual Control of the Control of the Land	
vCu, unblocked vol	72	0			0			
C, single (s)	6.7	6.2			4.1		No. of Street, Square, and Street,	
C, 2 stage (s)								
F (s)	3.8	3.3			2.2			
00 queue free %	100	91			99			
cM capacity (veh/h)	848	1091			1636			
Direction, Lane #	WB 1	NB 1	SB1	- 474		THE REST		
/olume Total	101	0	48	_			The second residence is not the second	-
Volume Left	2	0	24					
Volume Right	99	0	0		-		The second second second second	
SH	1084	1700	1636					
Volume to Capacity	0.09	0.00	0.01					
Queue Length 95th (ft)	8	0.00	1					
Control Delay (s)	8.7	0.0	3.7					
Lane LOS	Α	0.0	Α.		-			
Approach Delay (s)	8.7	0.0	3.7			- N		
Approach LOS	Α	0.0	Ų.I					
		Trimber.	4-21-24	0145	-			
Intersection Summary		وريال	7.1			WILL THE		
Average Delay	ation		16.2%	10	ill ered	of Condes	A	
ntersection Capacity Utiliza	audii		15.2%	IU	O Level (of Service	Α	
Analysis Period (min)			15					

	1		†	-	-	\downarrow
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		Po			ब
Volume (veh/h)	2	2	0	2	22	2
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	2	0	2	24	2
Pedestrians		_				
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	51	1	-		2	
vC1, stage 1 conf vol	- 01				-	
vC2, stage 2 conf vol						
vCu, unblocked vol	51	1			2	
tC, single (s)	6.7	6.2			4.1	
	0,7	0.2			7.1	
tC, 2 stage (s)	3.8	3.3			2.2	
tF (s)	100	100			99	
p0 queue free %	872	1089			1633	
cM capacity (veh/h)					1000	
Direction, Lane #	WB 1	NB 1	SB 1	10 N		
Volume Total	4	2	26			
Volume Left	2	0	24			
Volume Right	2	2	0			
cSH	969	1700	1633			
Volume to Capacity	0.00	0.00	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	8.7	0.0	6.6			
Lane LOS	Α		Α			
Approach Delay (s)	8.7	0.0	6.6			
Approach LOS	Α					
Intersection Summary			WEN.	PER S	Wayes	
Average Delay			6.5			
Intersection Capacity Utiliz	ation		18.1%	10	CU Level	of Service
Analysis Period (min)			15			
			انس			

	→	•	1	—		-
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	4		ሻ	4	7	7
Volume (veh/h)	76	94	27	18	96	28
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	83	102	29	20	104	30
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL			TWLTL		
Median storage veh)	2			2		
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			185		212	134
vC1, stage 1 conf vol					134	
vC2, stage 2 conf vol			400		78	
vCu, unblocked vol			185		212	134
tC, single (s)			4.4		6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)			2.5		3.5	3.3
p0 queue free %			98		88	97
cM capacity (veh/h)			1224		841	921
						021
Direction, Lane #	EB 1	WB 1	WB 2	NB.1	NB 2	1000
Volume Total	185	29	20	104	30	
Volume Left	0	29	0	104	0	
Volume Right	102	0	0	0	30	
cSH	1700	1224	1700	841	921	
Volume to Capacity	0.11	0.02	0.01	0.12	0.03	
Queue Length 95th (ft)	0	2	0	11	3	
Control Delay (s)	0.0	8.0	0.0	9.9	9.0	
Lane LOS		Α		Α	Α	
Approach Delay (s)	0.0	4.8		9.7		
Approach LOS				Α		
Intersection Summary		1000			P12 191	11/4 2 14
Average Delay			4.2			
Intersection Capacity Utiliz	zation		29.7%	IC	U Level o	of Service
Analysis Period (min)			15			

	-	>	1	←	1		
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	f)			1		7	
Volume (veh/h)	59	45	0	46	0	91	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	64	49	0	50	0	99	
Pedestrians	VI						
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)	TWLTL			TWLTL			
Median type				2			
Median storage veh)	2						
Upstream signal (ft)							
pX, platoon unblocked			440		400	00	
vC, conflicting volume			113		139	89	
vC1, stage 1 conf vol					89		
vC2, stage 2 conf vol					50		
vCu, unblocked vol			113		139	89	
tC, single (s)			4.4		6.4	6.2	
tC, 2 stage (s)					5.4		
tF(s)			2.5		3.5	3.3	
p0 queue free %			100		100	90	
cM capacity (veh/h)			1304		901	975	
Direction, Lane #	E8 1	WB 1	NB 1	XX	4 44 1	AND THE	
Volume Total	113	50	99				
Volume Left	0	0	0				
Volume Right	49	0	99				
cSH	1700	1700	975				
Volume to Capacity	0.07	0.03	0.10				
Queue Length 95th (ft)	0	0	8				
Control Delay (s)	0.0	0.0	9.1				
Lane LOS			Α				
Approach Delay (s)	0.0	0.0	9.1				
Approach LOS	0.0	0,0	Α				
Intersection Summary	To Obs.	E TEN	17.156	ELIN	100	No. of the	
Average Delay			3.4				
Intersection Capacity Utiliz	zation		19.1%	16	CI I evel	of Service	A THE RESERVE AND A STREET AND A STREET AS
Analysis Period (min)	eauvi i		15.170	- 10	- LUTUI	J. 001 1100	**
Analysis Fellou (IIIII)			13				

	•	•		†	1	4	
Movement	EBL	EBR	NOL	NBT	SBT	SBR	Made of the
Lane Configurations	M	To a		ન	f-		
Volume (veh/h)	50	141	161	453	576	72	
Sign Control	Stop			Free	Free		
Grade	0%			0%	0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	54	153	175	492	626	78	
Pedestrians	1						
Lane Width (ft)	12.0						
Walking Speed (ft/s)	3.5						
Percent Blockage	0						
Right turn flare (veh)							
Median type				None	None		
Median storage veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume	1509	666	705				
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1509	666	705				
tC, single (s)	6.4	6.2	4.3				
tC, 2 stage (s)							
tF(s)	3.5	3.3	2.4				
p0 queue free %	48	67	78				
cM capacity (veh/h)	105	462	810				
				(00.4)		NAME OF TAXABLE PARTY.	
Direction, Lane #	EB 1	EB.2	NB 1	SB 1		THE PERSONS	Trees of the
Volume Total	54	153	667	704			
Volume Left	54	0	175	0			
Volume Right	0	153	0	78			
cSH	105	462	810	1700		_	
Volume to Capacity	0.52	0.33	0.22	0.41			
Queue Length 95th (ft)	59	36	20	0			
Control Delay (s)	71.2	16.6	5.2	0.0			
Lane LOS	F	C	Α				
Approach Delay (s)	30.9		5.2	0.0			
Approach LOS	D						
Intersection Summary	JE 165	14.34	u iyi b			i de la	1871
Average Delay			6.3				
Intersection Capacity Utiliz	ation		86.6%	IC	CU Level o	f Service	
Analysis Period (min)			15				
I SHARE THE REAL PROPERTY.							

	۶	*	1	†		4
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W	10000		र्न	74	The state of the s
Volume (veh/h)	5	29	50	609	688	29
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	32	54	662	748	32
Pedestrians	1			-		0_
Lane Width (ft)	12.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	0.0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)				140110	TTOTIO	
Upstream signal (ft)						
pX, platoon unblocked						
	1535	765	780			
vC, conflicting volume	1000	700	700			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol	4525	705	780			
vCu, unblocked vol	1535	765	4.3			
tC, single (s)	6.4	6.2	4.3			
tC, 2 stage (s)			0.4			
tF (s)	3.5	3.3	2.4			
p0 queue free %	95	92	93			
cM capacity (veh/h)	120	406	758			
Direction, Lane #	E8 1	NB 1	SB 1	Pit N	9 42 43	
Volume Total	37	716	779			
Volume Left	5	54	0			
Volume Right	32	0	32			
cSH	301	758	1700			
Volume to Capacity	0.12	0.07	0.46			
Queue Length 95th (ft)	10	6	0			
Control Delay (s)	18.6	1.9	0.0			
Lane LOS	C	Α				
Approach Delay (s)	18.6	1.9	0.0			
Approach LOS	C					
Intersection Summary	TREEST!	Seletivis	17 (1)		E5.	
Average Delay			1.3			
Intersection Capacity Utiliz	zation		89.6%	10	CU Level o	f Service
Analysis Period (min)			15			
mayou ronou (mm)						

Intersection: 2: I-5 NB Ramps & E Pine St

Movement	EB	E8	E8	WB	WB	WB	NB	NB	NB	CHARLET IV
Directions Served	L	Т	T	T	Ţ	R	L	LT	R	
Maximum Queue (ft)	99	288	200	350	406	340	208	228	208	
Average Queue (ft)	32	96	82	199	202	81	125	166	38	
95th Queue (ft)	70	186	157	331	347	220	190	231	140	
Link Distance (ft)		1153	1153	503	503			682	682	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	150					265	335			
Storage Blk Time (%)		2			3					
Queuing Penalty (veh)		1			11					

Intersection: 8: Table Rock Rd & Hamrick Rd

Movement	E8	EB	NB	SB
Directions Served	L	R	LT	TR
Maximum Queue (ft)	91	72	115	22
Average Queue (ft)	45	38	27	1
95th Queue (ft)	80	64	91	7
Link Distance (ft)		249	364	985
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	160			
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 13: Federal Way & Northwest Dwy

vlovement	W8		A MADIO SER
Directions Served	LR		
Maximum Queue (ft)	57		
Average Queue (ft)	32		
95th Queue (ft)	51		
Link Distance (ft)	150		
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 14: Federal Way & Southwest Dwy

Movement	WB	50 KE 1/2 TO	THE WAY	The last the second	1	W SI	
Directions Served	LR						
Maximum Queue (ft)	30						
Average Queue (ft)	2						
95th Queue (ft)	14						
Link Distance (ft)	163						
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)							
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 15: West Hamrick Dwy & Hamrick Rd

Movement	WB	NB	NB		
Directions Served	L	L	R		
Maximum Queue (ft)	50	56	56		
Average Queue (ft)	4	30	21		
95th Queue (ft)	26	44	48		
Link Distance (ft)		154	154		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	150				
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 16: East Hamrick Dwy (RIRO) & Hamrick Rd

Movement	NB	3 50 60	45, 20	LEAD IN	S.M.H.		
Directions Served	R						
Maximum Queue (ft)	80						
Average Queue (ft)	35						
95th Queue (ft)	58						
Link Distance (ft)	112						
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)							
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 17: Table Rock Rd & Northeast Dwy

Viovement	EB	E8	NB	SB
Directions Served	L	R	LT	TR
Maximum Queue (ft)	162	76	285	41
Average Queue (ft)	54	41	127	6
95th Queue (ft)	118	63	242	25
Link Distance (ft)	197	197	671	364
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 18: Table Rock Rd & Southeast Dwy

Movement	EB	NB	SB			77	
Directions Served	LR	LT	TR				
Maximum Queue (ft)	56	179	21				
Average Queue (ft)	20	44	1				
95th Queue (ft)	47	135	7				
Link Distance (ft)	162	682	671				
Upstream Bik Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)							
Storage Blk Time (%)							
Queuing Penalty (veh)							

Zone Summary

Zone wide Queuing Penalty: 12

	۶	-	-	4	4	†	-
Lane Group	EBL	EST	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	65	990	1027	297	118	117	351
v/c Ratio	0.20	0.45	0.52	0.30	0.34	0.34	0.84
Control Delay	6.2	9.2	22.1	10.0	31.8	31.7	40.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.2	9.2	22.1	10.0	31.8	31.7	40.2
Queue Length 50th (ft)	17	176	298	65	63	62	134
Queue Length 95th (ft)	27	257	387	m134	102	102	219
Internal Link Dist (ft)		1110	494			650	
Turn Bay Length (ft)	150			265	335		380
Base Capacity (vph)	321	2190	1964	980	489	491	539
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.45	0.52	0.30	0.24	0.24	0.65
Management and a state of the		THE RESERVE	-	CEL ST			

m Volume for 95th percentile queue is metered by upstream signal.

HCM Unsignalized Intersection Capacity Analysis 8: Table Rock Rd & Hamrick Rd

	۶	>	1	†	↓	4	
Movement	EBL	EBR	NBL	NBT	SBT	SBR	
ane Configurations	7	7		ની	4		
Volume (veh/h)	104	77	8	344	410	36	
Sign Control	Stop			Free	Free		
Grade	0%			0%	0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	113	84	9	374	446	39	
Pedestrians	1						
Lane Width (ft)	12.0						
Walking Speed (ft/s)	3.5						
Percent Blockage	0						
Right turn flare (veh)							
Median type				None	None		
Median storage veh)							
Upstream signal (ft)					1076		
pX, platoon unblocked	0.81	0.81	0.81				
vC, conflicting volume	858	466	486				
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	705	222	246				
tC, single (s)	6.4	6.2	4.3				
tC, 2 stage (s)							
tF(s)	3.5	3.3	2.4				
p0 queue free %	65	87	99				
cM capacity (veh/h)	325	665	983				
				NH2	-	-	
Direction, Lane #	EB 1	EB 2	NB 1	SB 1			
Volume Total	113	84	383	485			
Volume Left	113	0	9	0			
Volume Right	0	84	0	39			
cSH	325	665	983	1700			
Volume to Capacity	0.35	0.13	0.01	0.29			
Queue Length 95th (ft)	38	11	1	0			
Control Delay (s)	21.9	11.2	0.3	0.0			
Lane LOS	C	В	Α				
Approach Delay (s)	17.3		0.3	0.0			
Approach LOS	С						
Intersection Summary		11 11 15	DIE.	mpil	Yat		100
Average Delay			3.3				
Intersection Capacity Utiliza	ation		39.6%		CU Level	of Service	
Analysis Period (min)			15				

Kittelson & Associates, Inc. 11/12/2015

	•	•	†	-	>	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		B			ન
Volume (veh/h)	2	134	0	2	35	36
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	146	0	2	38	39
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		N	Vone
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	116	1			2	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	116	1			2	
tC, single (s)	6.7	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.8	3.3			2,2	
p0 queue free %	100	87			98	
cM capacity (veh/h)	792	1089			1633	
Direction, Lane#	WB 1	NB 1	SB 1	TOE .	ALLWAN	S 1911
Volume Total	148	2	77			
Volume Left	2	0	38			
Volume Right	146	2	0			
cSH	1083	1700	1633			
Volume to Capacity	0.14	0.00	0.02			
Queue Length 95th (ft)	12	0.00	2			
Control Delay (s)	8.8	0.0	3.7			
Lane LOS	Α.	0.0	A			
Approach Delay (s)	8.8	0.0	3.7			
Approach LOS	Α	0.0	0.1			
	eleccion pro-		AVE TO THE	1000		Sill ye
Intersection Summary		No.	7.0	Called S	CATO IN	200
Average Delay	ation		26.6%	10	U Level of S	Condos
Intersection Capacity Utiliza	auon		15	10	O LEVEL OF	SOL AICO
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 14: Federal Way & Southwest Dwy

	•	4	†	~	-	ļ		
Movement	WBL	WBR	NBT	NBR	SBL	SBT	A SHOW	8,5153
Lane Configurations	W		P			4		
Volume (veh/h)	2	2	0	2	35	- 11		
Sign Control	Stop		Free			Free		
Grade	0%		0%			0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Hourly flow rate (vph)	2	2	0	2	38	1		
Pedestrians	_							
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type			None			None		
Median storage veh)								
Upstream signal (ft)								
pX, platoon unblocked								
vC, conflicting volume	78	1			2			
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	78	1			2			
tC, single (s)	6.7	6.2			4.1			
tC, 2 stage (s)								
tF (s)	3.8	3.3			2.2			
p0 queue free %	100	100			98			
cM capacity (veh/h)	833	1089			1633			
			004	-			-	-2016
Direction, Lane #	WB 1	NB 1	SB 1	_				
Volume Total	4		39					
Volume Left	2	0						
Volume Right	2	4700	0 1633					
cSH	944	1700	0.02					
Volume to Capacity	0.00	0.00						
Queue Length 95th (ft)	0	0.0	7.1					
Control Delay (s)	8.8	0.0						
Lane LOS	A	0.0	7.1					
Approach Delay (s)	8.8	0.0	7,1					
Approach LOS	Α							
Intersection Summary	LKIW!	AF A			A Sam			
Average Delay			6.9	1/	3111 most	of Consins		
Intersection Capacity Utiliza	ation		18.8%	10	O Level	of Service		A
Analysis Period (min)			15					

Kittelson & Associates, Inc. 11/12/2015

	-	•	1	—	4	-		
Movement	EBT	EBR	WBL	WBT	NBL	NBR	e instructions in	
Lane Configurations	4		4	4	4	7		
Volume (veh/h)	78	144	40	4	139	39		
Sign Control	Free			Free	Stop			
Grade	0%			0%	0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Hourly flow rate (vph)	85	157	43	4	151	42		
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type	TWLTL			TWLTL				
Median storage veh)	2			2				
Upstream signal (ft)								
X, platoon unblocked								
vC, conflicting volume			241		254	163		
vC1, stage 1 conf vol					163			
C2, stage 2 conf vol					91			
Cu, unblocked vol			241		254	163		
C, single (s)			4.4		6.4	6.2		
C, 2 stage (s)					5.4			
F (s)			2.5		3.5	3.3		
O queue free %			96		81	95		
M capacity (veh/h)			1163		807	887		
Direction, Lane #	EB1	WB1	WB 2	NB 1	NB 2	22 SIGN		a little
/olume Total	241	43	4	151	42			
/olume Left	0	43	0	151	0			
/olume Right	157	0	0	0	42			
SH	1700	1163	1700	807	887			
olume to Capacity	0.14	0.04	0.00	0.19	0.05			
Queue Length 95th (ft)	0	3	0	17	4			
Control Delay (s)	0.0	8.2	0.0	10.5	9.3			
ane LOS		A		В	Α			
pproach Delay (s)	0.0	7.5		10.2				
Approach LOS				В				
ntersection Summary	CPANALY.	W. C.	XX		8 A A	argenia i	Walter House Indian	LYNN.
verage Delay			4.8					
ntersection Capacity Utiliz	ration		35.7%	IC	U Level o	f Service	A	
Analysis Period (min)			15					

HCM Unsignalized Intersection Capacity Analysis 16: East Hamrick Rd (RIRO) & Hamrick Rd

	-	*	-	-	1	
Vovernent	EBT	EBR	WaL	WBT	NBL	NBR
ane Configurations	7-			+		7
/olume (veh/h)	47	70	- 0	44	0	134
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	51	76	0	48	0	146
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL			TWLTL		
Median storage veh)	2			2		
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			127		137	89
vC1, stage 1 conf vol					89	
vC2, stage 2 conf vol					48	
vCu, unblocked vol			127		137	89
tC, single (s)			4.4		6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)			2.5		3.5	3.3
p0 queue free %			100		100	85
cM capacity (veh/h)			1288		901	974
Direction, Lane #	E8 1	WB 1	NB 1	4/15	9	Fred Sec
Volume Total	127	48	146			
Volume Left	0	0	0			
Volume Right	76	0	146			
cSH	1700	1700	974			
Volume to Capacity	0.07	0.03	0.15			
Queue Length 95th (ft)	0	0	13			
Control Delay (s)	0.0	0.0	9.3			
Lane LOS			Α			
Approach Delay (s)	0.0	0.0	9.3			
Approach LOS			Α			
Intersection Summary	Hip has			MIDT:	115	
Average Delay			4.2			
Intersection Capacity Util	ization		23.0%		CU Level	of Service
Analysis Period (min)			15			

Kittelson & Associates, Inc. 11/12/2015

	•	*	1	†	†	4		
Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations	۲	ř		4	70			
Volume (veh/h)	49	183	224	295	403	85		
Sign Control	Stop			Free	Free			
Grade	0%			0%	0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Hourly flow rate (vph)	53	199	243	321	438	92		
Pedestrians	1							
Lane Width (ft)	12.0							
Walking Speed (ft/s)	3.5							
Percent Blockage	0							
Right turn flare (veh)								
Median type				None	None			
Median storage veh)								
Jpstream signal (ft)								
X, platoon unblocked								
C, conflicting volume	1293	485	531					
C1, stage 1 conf vol	1200	100	001					
/C2, stage 2 conf vol								
Cu, unblocked vol	1293	485	531					
C, single (s)	6.4	6.2	4.3					
C, 2 stage (s)	9,1	VII.	1,0					
F (s)	3.5	3.3	2.4					
00 queue free %	60	66	74					
M capacity (veh/h)	135	585	946					
							-	
Direction, Lane #	E8 1	EB 2	NB 1	SB 1				
/olume Total	53	199	564	530				
/olume Left	53	0	243	0				
/olume Right	0	199	0	92				
SH	135	585	916	1700				
/olume to Capacity	0.40	0.34	0.26	0.31				
Queue Length 95th (ft)	42	37	26	0				
Control Delay (s)	48.3	14.3	6.2	0.0				
ane LOS	Е	В	Α					
Approach Delay (s)	21.5		6.2	0.0				
Approach LOS	C							
ntersection Summary			1 100	ette 17 %	-	14 73 14	性 を	
verage Delay			6.6					
ntersection Capacity Utiliza	tion		72.3%	IC	U Level o	f Service	C	
Analysis Period (min)			15					

	•	*	4	†	ļ	4				
dovernent	EBL	EBR	NBL	NBT	SBT	SBR		J. F. C. Co.	4	
ane Configurations	A			भ	F					
/olume (veh/h)	5	39	75	514	545	41				
Sign Control	Stop			Free	Free					
Grade	0%			0%	0%					
Peak Hour Factor	0.92	0.92	0,92	0.92	0.92	0.92				
Hourly flow rate (vph)	5	42	82	559	592	45				
Pedestrians	1									
ane Width (ft)	12.0									
Walking Speed (ft/s)	3.5									
Percent Blockage	0									
Right turn flare (veh)										
Median type				None	None					
Median storage veh)										
Upstream signal (ft)										
X, platoon unblocked										
C, conflicting volume	1337	616	638							
vC1, stage 1 conf vol										
vC2, stage 2 conf vol										
vCu, unblocked vot	1337	616	638							
tC, single (s)	6.4	6.2	4.3							
tC, 2 stage (s)										
tF (s)	3.5	3.3	2.4							
p0 queue free %	96	91	91							
cM capacity (veh/h)	154	494	860							
Direction, Lane #	EB 1	NB 1	SB1	48.8		Jul Hill		UE III	in Valid	TOTAL VIEW
Volume Total	48	640	637							
Volume Left	5	82	0							
Volume Right	42	0	45							
cSH	395	860	1700							
Volume to Capacity	0.12	0.09	0.37							
Queue Length 95th (ft)	10	8	0							
Control Delay (s)	15.4	2.4	0.0							
Lane LOS	C	Α								
Approach Delay (s)	15.4	2.4	0.0							
Approach LOS	С									an contract
Intersection Summary	With It				TO N	Trans.	NYS AS	A 34 AT		1 40 100
Average Delay			1.7						-	
Intersection Capacity Utiliz	ation		81.1%		CU Level	of Service		D		
Analysis Period (min)			15							

Intersection: 2: I-5 NB Ramps & E Pine St

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	AUG TO	W.
Directions Served	L	Т	T	T	T	R	L	LT	R		
Maximum Queue (ft)	73	244	180	221	200	61	148	184	235	100	
Average Queue (ft)	31	73	56	114	105	30	53	76	39		
95th Queue (ft)	64	188	147	205	197	61	114	134	151		
Link Distance (ft)		1153	1153	503	503			682	682		
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	150					265	335				
Storage Blk Time (%)		2									
Queuing Penalty (veh)		1									

Intersection: 8: Table Rock Rd & Hamrick Rd

Movement	EB	EB	NB	
Directions Served	L	R	LT	
Maximum Queue (ft)	69	55	135	
Average Queue (ft)	40	34	5	
95th Queue (ft)	63	56	46	
Link Distance (ft)		249	364	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	160			
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 13: Federal Way & Northwest Dwy

Movement	WB	SB		16 915	115	YEY'- Ji	
Directions Served	LR	LT					
Maximum Queue (ft)	82	31					
Average Queue (ft)	36	1					
95th Queue (ft)	57	10					
Link Distance (ft)	150	177					
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)							
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 14: Federal Way & Southwest Dwy

Movement	WB		AND DAMPING THE RES
Directions Served	LR		
Maximum Queue (ft)	67		
Average Queue (ft)	5		
95th Queue (ft)	29		
Link Distance (ft)	163		
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 15: West Hamrick Rd & Hamrick Rd

Movement	E8	WB	NB	NB	
Directions Served	TR	L	L	R	
Maximum Queue (ft)	46	55	56	55	
Average Queue (ft)	2	17	42	26	
95th Queue (ft)	15	49	62	48	
Link Distance (ft)	222		154	154	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		150			
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 16: East Hamrick Rd (RIRO) & Hamrick Rd

Movement	Na	
Directions Served	R	
Maximum Queue (ft)	107	
Average Queue (ft)	38	
95th Queue (ft)	69	
Link Distance (ft)	112	
Upstream Blk Time (%)	0	
Queuing Penalty (veh)	0	
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 17: Table Rock Rd & Northeast Dwy

Movement	E8	EB	NB	SB
Directions Served	L	R	LT	TR
Maximum Queue (ft)	96	95	208	50
Average Queue (ft)	43	51	98	4
95th Queue (ft)	81	72	198	23
Link Distance (ft)	197	197	671	364
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 18: Table Rock Rd & Southeast Dwy

Movement	E8	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	31	166	22
Average Queue (ft)	26	39	1
95th Queue (ft)	43	112	10
Link Distance (ft)	162	682	671
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Zone Summary

Zone wide Queuing Penalty: 1

Intersection Summary

	•	-	-	•	4	†	-
Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	84	1289	1289	377	151	150	416
v/c Ratio	0.30	0.54	0.60	0.35	0.59	0.59	0.76
Control Delay	4.3	6.7	20.2	7.4	45.7	45.4	31.9
Queue Delay	0.0	0.0	0.7	0.0	0.0	0.0	0.5
Total Delay	4.3	6.7	20.8	7.4	45.7	45.4	32.4
Queue Length 50th (ft)	11	223	373	83	89	88	84
Queue Length 95th (ft)	m11	257	m462	m159	147	146	134
Internal Link Dist (ft)		1110	494			650	
Turn Bay Length (ft)	150			265	335		380
Base Capacity (vph)	290	2376	2146	1071	340	341	678
Starvation Cap Reductn	0	0	466	0	0	0	0
Spillback Cap Reductn	0	7	0	0	0	0	58
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.54	0.77	0.35	0.44	0.44	0.67

m Volume for 95th percentile queue is metered by upstream signal.

	1	4	†	~	\	↓			
Movement	WBL	WBR	NBT	NBR	SBL	SBT	May pri		St. of the state
Lane Configurations	A		fà.			र्भ			
Volume (veh/h)	2	134	0	2	35	36			
Sign Control	Stop		Free			Free			
Grade	0%		0%			0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92			
Hourly flow rate (vph)	2	146	0	2	38	39			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type			None			None		7	
Median storage veh)									
Upstream signal (ft)									
oX, platoon unblocked									
vC, conflicting volume	116	1			2				
vC1, stage 1 conf vol									
vC2, stage 2 conf vol									
vCu, unblocked vol	116	1			2				
tC, single (s)	6.7	6.2			4.1				
tC, 2 stage (s)	0.1	V.II.							
iF (s)	3.8	3.3			2.2				
p0 queue free %	100	87			98				
cM capacity (veh/h)	792	1089			1633				
			OD 4	_	1000	-		Marine State	
Direction, Lane#	WB 1	NB 1	SB 1		TO YOUR		- Average		
Volume Total	148	2	77						
Volume Left	2	0	38						
Volume Right	146	2	0						
SH	1083	1700	1633						
Volume to Capacity	0.14	0.00	0.02						
Queue Length 95th (ft)	12	0	2						
Control Delay (s)	8.8	0.0	3.7						
Lane LOS	A		A						
Approach Delay (s)	8.8	0.0	3.7						
Approach LOS	Α								
Intersection Summary			FIRM	1	V 11 1		10.5		
Average Delay			7.0						
Intersection Capacity Utiliza	ation		26.6%	IC	U Level	of Service		Α	
Analysis Period (min)			15						

14. Federal Way of	South	vest D	wy				rutule real (Total) weekellu Miluuay rea	IK I IU
	1	•	†	~	\	↓		
Movement	WEL	WBR	NBT	NBR	SBL	SBT		No.
Lane Configurations	A		10			ન		
Volume (veh/h)	2	2	0	2	35	1		
Sign Control	Stop		Free			Free		
Grade	0%		0%			0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Hourly flow rate (vph)	2	2	0	2	38	1		
Pedestrians								
ane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type			None			None	and the second second second second	-
Median storage veh)			HOIG			NOTIO		
Jpstream signal (ft)								
X, platoon unblocked								
C, conflicting volume	78	1			2		The second secon	
C1, stage 1 conf vol	10							
C2, stage 2 conf vol								
Cu, unblocked vol	78	1			2			
	6.7	6.2			4.1			
C, single (s)	0.7	0.2			4.1			
C, 2 stage (s)	0.0	2.0			0.0			
F (s)	3.8	3.3			2.2			
00 queue free %	100	100			98			
cM capacity (veh/h)	833	1089			1633			
Direction, Lane#	WB 1	NB 1	SB 1		100			4
olume Total	4	2	39					
/olume Left	2	0	38					
/olume Right	2	2	0					
SH	944	1700	1633					
olume to Capacity	0.00	0.00	0.02					
Queue Length 95th (ft)	0	0	2					
Control Delay (s)	8.8	0.0	7.1					
ane LOS	Α		Α					
pproach Delay (s)	8.8	0.0	7.1					
Approach LOS	Α							
ntersection Summary	245 904			SAY	1	SHALLS	unt but Of believe Strick	100
verage Delay			6.9					
ntersection Capacity Utiliza	ation		18.8%	IC	U Level	of Service	A	
Analysis Period (min)			15					

	-	•	•	-	1	~
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	A		Y	4	"	1
Volume (veh/h)	81	144	40	7	139	39
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	88	157	43	-8	151	42
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL			TWLTL		
Median storage veh)	2			2		
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			245		261	166
vC1, stage 1 conf vol					166	
vC2, stage 2 conf vol					95	
vCu, unblocked vol			245		261	166
tC, single (s)			4.4		6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)			2.5		3.5	3.3
p0 queue free %			96		81	95
cM capacity (veh/h)			1160		803	883
	CD 4	18/0 4	WB 2	AID: 4	NB 2	DESCRIPTION OF THE PARTY OF THE
Direction, Lane #	245	WB 1	8	NB 1	42	-
Volume Total				151	0	
Volume Left	0	43	0	0	42	
Volume Right	157	0	1700	803	883	
cSH	1700	1160			0.05	
Volume to Capacity	0.14	0.04	0.00	0.19	0.05	
Queue Length 95th (ft)	0	3	0	17	-	
Control Delay (s)	0.0	8.2	0.0	10.5	9.3	
Lane LOS	0.0	A		B	A	
Approach Delay (s)	0.0	7.0		10.2		
Approach LOS				В		
Intersection Summary			14 20	0.5	11 11	- 11 B
Average Delay			4.8			
Intersection Capacity Utili:	zation		35.9%	IC	CU Level	of Service
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 16: East Hamrick Rd (RIRO) & Hamrick Rd

	-	•	1	←		
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	1.		- Children	4		7
Volume (veh/h)	50	70	0	46	0	134
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	54	76	0	50	0	146
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL			TWLTL		
Median storage veh)	2			2		
Upstream signal (ft)				-		
pX, platoon unblocked						
vC, conflicting volume			130		142	92
vC1, stage 1 conf vol			100		92	O.E.
vC2, stage 2 conf vol					50	
vCu, unblocked vol			130		142	92
tC, single (s)			4.4		6.4	6.2
tC, 2 stage (s)			7.7		5.4	Ų.Z
tF (8)			2.5		3.5	3.3
p0 queue free %			100		100	85
cM capacity (veh/h)			1284		897	970
					091	310
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	130	50	146			
Volume Left	0	0	0			
Volume Right	76	0	146			
cSH	1700	1700	970			
Volume to Capacity	0.08	0.03	0.15			
Queue Length 95th (ft)	0	0	13			
Control Delay (s)	0.0	0.0	9.4			
Lane LOS			Α			
Approach Delay (s)	0.0	0.0	9.4			
Approach LOS			Α			
Intersection Summary	a principli			100		W P I P
Average Delay			4.2			
Intersection Capacity Utiliz	ation		23.2%	IC	U Level	of Service
Analysis Period (min)			15			

Kittelson & Associates, Inc. 11/12/2015

	*	•	1	†	↓	4		
Movement	EBL	EBR	NBL	NBT	SBT	SBR	Z., 720	
Lane Configurations	F	T.	7	44	17			
Volume (veh/h)	49	183	224	383	492	85		
Sign Control	Stop			Free	Free			
Grade	0%			0%	0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Hourly flow rate (vph)	53	199	243	416	535	92		
Pedestrians	1							
Lane Width (ft)	12.0							
Walking Speed (ft/s)	3.5							
Percent Blockage	0							
Right turn flare (veh)								
Median type				TWLTL	TWLTL			
Median storage veh)				2	2			
Upstream signal (ft)								
pX, platoon unblocked								
vC, conflicting volume	1277	315	628					
vC1, stage 1 conf vol	582							
vC2, stage 2 conf vol	695							
vCu, unblocked vol	1277	315	628					
tC, single (s)	6.8	6.9	4.5					
tC, 2 stage (s)	5.8							
tF (s)	3.5	3.3	2.4					
p0 queue free %	81	71	71					
cM capacity (veh/h)	288	686	831					
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2	
Volume Total	53	199	243	208	208	357	271	
		0	243	0	0	0	0	
Volume Left	53 0	199	243	0	0	0	92	
Volume Right	288	686	831	1700	1700	1700	1700	
cSH				0.12	0.12	0.21	0.16	
Volume to Capacity	0.19	0.29	0.29	0.12	0.12	0.21	0.16	
Queue Length 95th (ft)	17	30	31		_		0.0	
Control Delay (s)	20.3	12.4	11.1	0.0	0.0	0.0	0.0	
Lane LOS	C	В	В			0.0		
Approach Delay (s)	14.1		4.1			0.0		
Approach LOS	В							
Intersection Summary								
Average Delay			4.1					
Intersection Capacity Utiliza	ition		44.5%	IC	U Level	of Service		
Analysis Period (min)			15					

	۶	•	1	†	1	4
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W		4	44	44	
Volume (veh/h)	5	39	75	601	634	41
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	42	82	653	689	45
Pedestrians	1					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	0.0					
Right turn flare (veh)						
Median type				TWLTL	TWLTL.	
Median storage veh)				2	2	
Upstream signal (ft)				726	شسه	
pX, platoon unblocked				120		
vC, conflicting volume	1202	368	735			
vC1, stage 1 conf vol	712	000	700			
vC1, stage 1 conf vol	490					
vCu, unblocked vol	1202	368	735			
tC, single (s)	6.8	6.9	4.5			
	5.8	0.8	4.0			
tC, 2 stage (s)	3.5	3.3	2.4			
tF (s)	3.5 99	93	89			
p0 queue free %						
cM capacity (veh/h)	366	634	751			
Direction, Lane#	EB 1	NB 1	NB 2	NB.3	S8 1	SB 2
Volume Total	48	82	327	327	459	274
Volume Left	5	82	0	0	0	0
Volume Right	42	0	0	0	0	45
cSH	586	751	1700	1700	1700	1700
Volume to Capacity	0.08	0.11	0.19	0.19	0.27	0.16
Queue Length 95th (ft)	7	9	0	0	0	0
Control Delay (s)	11.7	10.4	0.0	0.0	0.0	0.0
Lane LOS	В	В				
Approach Delay (s)	11.7	1.2			0.0	
Approach LOS	В					
Intersection Summary	CONTRACT.		48-2		Like (C	19. Yes 1
Average Delay			0.9			
Intersection Capacity Utiliz	ation		38.3%		CU Level	of Service
Analysis Period (min)			15			
and joint office (tilling						

Intersection: 2: I-5 NB Ramps & E Pine St

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	
Directions Served	L	Т	Т	T	T	R	L	LT	R	R	
Maximum Queue (ft)	73	203	198	300	292	145	214	270	231	202	
Average Queue (ft)	35	71	101	190	174	73	84	124	100	23	
95th Queue (ft)	57	153	185	303	288	131	176	219	235	120	
Link Distance (ft)		1152	1152	486	486			676	676		
Jpstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	150					265	335			380	
Storage Blk Time (%)		0			1						
Queuing Penalty (veh)		0			2						

Intersection: 13: Federal Way & Northwest Dwy

Movement	WB		100	IIIAA B		XCVII CIT
Directions Served	LR					
Maximum Queue (ft)	80					
Average Queue (ft)	40					
95th Queue (ft)	63					
Link Distance (ft)	150					
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 14: Federal Way & Southwest Dwy

Movement	WB	N. 216	911 411 44	NO.	4	W. 18, 8	11/2 1/1	17.0
Directions Served	LR							
Maximum Queue (ft)	66							
Average Queue (ft)	6							
95th Queue (ft)	32							
Link Distance (ft)	162							
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 15: West Hamrick Rd & Hamrick Rd

Movement	EB	WB	NB	NB
Directions Served	TR	L	L	R
Maximum Queue (ft)	40	70	120	30
Average Queue (ft)	1	12	43	24
95th Queue (ft)	13	43	83	42
Link Distance (ft)	222		154	154
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		150		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 16: East Hamrick Rd (RIRO) & Hamrick Rd

Movement	NB		ZO SO STORY	State And
Directions Served	R			
Maximum Queue (ft)	77			
Average Queue (ft)	36			
95th Queue (ft)	55			
Link Distance (ft)	112			
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 17: Table Rock Rd & Northeast Dwy

Movement	EB	EB	NB	SB
Directions Served	L	R	L	TR
Maximum Queue (ft)	99	75	196	104
Average Queue (ft)	45	41	98	14
95th Queue (ft)	88	65	176	55
Link Distance (ft)	179	179		364
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			250	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 18: Table Rock Rd & Southeast Dwy

Movement	EB	NB	SB
Directions Served	LR	L	TR
Maximum Queue (ft)	54	102	51
Average Queue (ft)	24	30	2
95th Queue (ft)	47	72	17
Link Distance (ft)	144		672
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		250	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Zone Summary

Zone wide Queuing Penalty: 2

	•	-	←	•		†	
Lane Group	EBL	EBT	WET	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	85	1317	1639	529	294	295	546
v/c Ratio	0.54	0.60	0.82	0.49	0.84	0.84	0.80
Control Delay	20.8	10.2	30.1	7.5	56.5	56.3	35.6
Queue Delay	0.0	0.0	28.0	0.2	0.0	0.0	2.3
Total Delay	20.8	10.2	58.2	7.7	56.5	56.3	37.9
Queue Length 50th (ft)	19	265	567	101	175	175	131
Queue Length 95th (ft)	m30	328	m624	m121	#310	#311	200
Internal Link Dist (ft)		1110	494			650	
Turn Bay Length (ft)	150			265	335		380
Base Capacity (vph)	157	2179	1987	1079	374	376	715
Starvation Cap Reductn	0	0	430	104	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	77
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.54	0.60	1.05	0.54	0.79	0.78	0.86

Intersection Summary

Queue shown is maximum after two cycles.

^{# 95}th percentile volume exceeds capacity, queue may be longer.

m Volume for 95th percentile queue is metered by upstream signal.

	•	•	•	†	↓	4			
Movement	EBL	EBR	NEL	NBT	SBT	SBR	1111		
Lane Configurations	7	7	7	44	44				
Volume (veh/h)	72	89	25	615	709	27			
Sign Control	Stop			Free	Free				
Grade	0%			0%	0%				
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92			
Hourly flow rate (vph)	78	97	27	668	771	29			
Pedestrians	1								
Lane Width (ft)	12.0								
Walking Speed (ft/s)	3.5								
Percent Blockage	0								
Right turn flare (veh)									
Median type			- 11	TWLTL	TWLTL				
Median storage veh)				2	2				
Upstream signal (ft)				ترس	1076	- 25			
pX, platoon unblocked					10,0				
vC, conflicting volume	1175	401	801			-	_		
vC1, stage 1 conf vol	786	401	001						
vC2, stage 2 conf vol	389								= 1/1
Cu, unblocked vol	1175	401	801						
tC, single (s)	6.8	6.9	4.5						
tC, 2 stage (s)	5.8	0.5	7.0						
tF (s)	3.5	3.3	2.4						
pO queue free %	79	84	96						
cM capacity (veh/h)	370	604	705						_
avi capacity (ven/n)	310								
Direction, Lane #	681	E8 2	NB 1	NB 2	NB 3	SB 1	SB 2		
Volume Total	78	97	27	334	334	514	286		
Volume Left	78	0	27	0	0	0	0		
Volume Right	0	97	0	0	0	0	29		
cSH	370	604	705	1700	1700	1700	1700		
Volume to Capacity	0.21	0.16	0.04	0.20	0.20	0.30	0.17		
Queue Length 95th (ft)	20	14	3	0	0	0	0		
Control Delay (s)	17.3	12.1	10.3	0.0	0.0	0.0	0.0		
Lane LOS	C	В	В						
Approach Delay (s)	14.4		0.4			0.0			
Approach LOS	В								
Intersection Summary		Wall-	S 578			44.8	81212	S SUEN	11100家
			1.7						
Average Delay									
Average Delay Intersection Capacity Utiliza	ation		34.9%	l l	CU Level	of Service		A	

	•	•	†	-	-	1	
Movement	WBL	WBR	NBT	NBR	SBL	SBT	PORT SANSANCE SANSANCE
ane Configurations	A		1			न	
Volume (veh/h)	2	91	21	2	22	22	
Sign Control	Stop		Free			Free	
Grade	0%		0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
lourly flow rate (vph)	2	99	23	2	24	24	
Pedestrians							
ane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			None			None	The second secon
Median storage veh)			110110				
Jpstream signal (ft)							the second secon
X, platoon unblocked							
C, conflicting volume	96	24			25		The second second second second second
C1, stage 1 conf vol	00				LV		
/C2, stage 2 conf vol							
Cu, unblocked vol	96	24			25		
C, single (s)	6.7	6.2			4.1		THE RESERVE AND ADDRESS OF THE PARTY.
C, 2 stage (s)	0.1	0.12			***		
F (s)	3.8	3.3			2.2		The second secon
00 queue free %	100	91			99		
M capacity (veh/h)	821	1058			1603		
					1000		
Direction, Lane #	WB 1	NB 1	SB 1			COT ALL	
/olume Total	101	25	48				
/olume Left	2	0	24				
/olume Right	99	2	0				
SH	1052	1700	1603				
/olume to Capacity	0.10	0.01	0.01				The second second second
Queue Length 95th (ft)	8	0	1				
Control Delay (s)	8.8	0.0	3.7				THE RESERVE TO SERVE THE PERSON NAMED IN
ane LOS	Α		Α				
Approach Delay (s)	8.8	0.0	3.7				
Approach LOS	Α						
ntersection Summary	1024	STANIC	XXIIE		A COURS		
Verage Delay			6.1				
ntersection Capacity Utiliza	ation		22.1%	IC	U Level	of Service	A
Analysis Period (min)			15				

,	•	•	†	-	-	1
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		7	10/11/20		व
Volume (veh/h)	2	2	21	2	22	33
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	2	23	2	24	36
Pedestrians				_		
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)			140110			110110
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	108	24			25	
vC1, stage 1 conf vol	100	24			20	
vC2, stage 2 conf vol						
vCu, unblocked vol	108	24			25	
tC, single (s)	6.7	6.2	-		4.1	
	0.7	0.2			7.1	
tC, 2 stage (s)	3.8	3.3			2.2	
tF (s)	100	100			99	
p0 queue free %	808	1058	_		1603	-
cM capacity (veh/h)	000				1003	
Direction, Lane #	WB 1	NB-1	S8 1	V PAR	300	
Volume Total	4	25	60			
Volume Left	2	0	24			
Volume Right	2	2	0			
cSH	916	1700	1603			
Volume to Capacity	0.00	0.01	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	8.9	0.0	3.0			
Lane LOS	Α		Α			
Approach Delay (s)	8.9	0.0	3.0			
Approach LOS	Α					
ntersection Summary		144			Sev.	
Average Delay			2.4			
Intersection Capacity Utiliz	zation		19.9%	IC	CU Level	of Service
Analysis Period (min)			15			

Movement EBT EBR WBL WBT NBL NBR
Volume (veh/h) 87 94 27 25 96 28 Sign Control Free Free Stop Grade 0% 0% 0% 0% 0.80 0.8
Volume (veh/h) 87 94 27 25 96 28 Sign Control Free Free Stop Grade 0% 0% 0% Peak Hour Factor 0.80 0.80 0.80 0.80 Hourly flow rate (vph) 109 118 34 31 120 35 Pedestrians Lane Width (ft) Walking Speed (ft/s) Percent Blockage Right turn flare (veh) Median type TWLTL TWLTL TWLTL WLTL WLTL WLTL WLTL WLTL TWLTL WLTL TWLTL TWLTL TWLTL TWLTL WLTL WLTL TWLTL
Sign Control Free Stop Grade 0% 0% 0% 0% Peak Hour Factor 0.80 0.80 0.80 0.80 0.80 0.80 Hourly flow rate (vph) 109 118 34 31 120 35 Pedestrians Lane Width (ft) Walking Speed (ft/s) Percent Blockage Right turn flare (veh) Median type TWLTL TWLTL Median storage veh) 2 2 Upstream signal (ft) pX, platoon unblocked vC, conflicting volume vC1, stage 1 conf vol vC2, stage 2 conf vol vC3, stage 2 conf vol vC4, unblocked vol tC5, single (s) 4.4 6.4 6.2 tC6, 2 stage (s) tF (s) 2.5 3.5 3.3 p0 queue free % 97 85 96 cM capacity (veh/h) 1179 804 882
Grade 0% 0% 0% Peak Hour Factor 0.80 0.80 0.80 0.80 Hourly flow rate (vph) 109 118 34 31 120 35 Pedestrians Lane Width (ft) Walking Speed (ft/s) Percent Blockage Right turn flare (veh) Median type TWLTL TWLTL TWLTL METAL Median storage veh) 2 2 Upstream signal (ft) pX, platoon unblocked vC, conflicting volume 226 266 168 vC1, stage 1 conf vol 99 vCu, unblocked vol 226 266 168 tC, single (s) 4.4 6.4 6.2 tC, 2 stage (s) 5.4 tF (s) 2.5 3.5 3.3 p0 queue free % 97 85 96 cM capacity (veh/h) 1179 804 882
Peak Hour Factor 0.80 0.80 0.80 0.80 0.80 0.80 Hourly flow rate (vph) 109 118 34 31 120 35 Pedestrians Lane Width (ft) Walking Speed (ft/s) Percent Blockage Right turn flare (veh) Median type TWLTL TWLTL Median storage veh) 2 2 Upstream signal (ft) pX, platoon unblocked vC, conflicting volume 226 266 168 vC1, stage 1 conf vol 168 vC2, stage 2 conf vol 99 vCu, unblocked vol 226 266 168 tC, single (s) 4.4 6.4 6.2 tC, 2 stage (s) 5.4 tF (s) 2.5 3.5 3.3 p0 queue free % 97 85 96 cM capacity (veh/h) 1179 804 882
Hourly flow rate (vph) 109 118 34 31 120 35 Pedestrians Lane Width (ft) Walking Speed (ft/s) Percent Blockage Right turn flare (veh) Median type TWLTL TWLTL Median storage veh) 2 2 Upstream signal (ft) pX, platoon unblocked vC, conflicting volume 228 26 168 vC1, stage 1 conf vol 168 vC2, stage 2 conf vol 99 vCu, unblocked vol 226 266 168 tC, single (s) 4.4 6.4 6.2 tC, 2 stage (s) 5.4 tF (s) 2.5 3.5 3.3 p0 queue free % 97 85 96 cM capacity (veh/h) 1179 804 882
Pedestrians Lane Width (ft) Walking Speed (ft/s) Percent Blockage Right turn flare (veh) Median type TWLTL Median storage veh) 2 Upstream signal (ft) pX, platoon unblocked vC, conflicting volume vC1, stage 1 conf vol vC2, stage 2 conf vol vC4, unblocked vol tC, single (s) tC, 2 stage (s) tF (s) p0 queue free % p1 48 p2 48 p3 85 p6 cM capacity (veh/h)
Lane Width (ft) Walking Speed (ft/s) Percent Blockage Right turn flare (veh) Median type TWLTL TWLTL Median storage veh) 2 2 Upstream signal (ft) pX, platoon unblocked vC, conflicting volume 228 266 168 vC1, stage 1 conf vol 168 vC2, stage 2 conf vol 99 vCu, unblocked vol 226 266 168 tC, single (s) 4.4 6.4 6.2 tC, 2 stage (s) 5.4 tF (s) 2.5 3.5 3.3 p0 queue free % 97 85 96 cM capacity (veh/h) 1179 804 882
Walking Speed (ft/s) Percent Blockage Right turn flare (veh) Median type TWLTL Median storage veh) 2 2 2 Upstream signal (ft) 2 pX, platoon unblocked 26 vC, conflicting volume 226 vC1, stage 1 conf vol 168 vC2, stage 2 conf vol 99 vCu, unblocked vol 226 266 168 tC, single (s) 4.4 6.4 6.2 tC, 2 stage (s) 5.4 16.2 16.2 tF (s) 2.5 3.5 3.3 3.3 16.2 p0 queue free % 97 85 96 96 96 17.9 804 882
Percent Blockage Right turn flare (veh) Median type TWLTL TWLTL Median storage veh) 2 2 Upstream signal (ft) pX, platoon unblocked vC, conflicting volume 228 266 168 vC1, stage 1 conf vol 168 vC2, stage 2 conf vol 99 vCu, unblocked vol 226 266 168 tC, single (s) 4.4 6.4 6.2 tC, 2 stage (s) 5.4 tF (s) 2.5 3.5 3.3 p0 queue free % 97 85 96 cM capacity (veh/h) 1179 804 882
Right turn flare (veh) Median type TWLTL TWLTL Median storage veh) 2 2 Upstream signal (ft) pX, platoon unblocked vC, conflicting volume 228 266 168 vC1, stage 1 conf vol 99 vC2, stage 2 conf vol 99 vCu, unblocked vol 226 266 168 cC, single (s) 4.4 6.4 6.2 cC, 2 stage (s) 5.4 UF (s) 2.5 3.5 3.3 p0 queue free % 97 85 96 pM capacity (veh/h) 1179 804 882
Median type TWLTL TWLTL Median storage veh) 2 2 Upstream signal (ft) 2 2 pX, platoon unblocked 26 168 vC, conflicting volume 226 266 168 vC1, stage 1 conf vol 99 99 vCu, unblocked vol 226 266 168 tC, single (s) 4.4 6.4 6.2 tC, 2 stage (s) 5.4 6.4 6.2 tF (s) 2.5 3.5 3.3 p0 queue free % 97 85 96 cM capacity (veh/h) 1179 804 882
Median storage veh) 2 2 Upstream signal (ft) pX, platoon unblocked vC, conflicting volume 228 266 168 vC1, stage 1 conf vol 168 99 99 90 <
Upstream signal (ft) pX, platoon unblocked vC, conflicting volume vC1, stage 1 conf vol vC2, stage 2 conf vol vC3, stage 2 conf vol vC4, unblocked vol vC5, stage 2 conf vol vC5, stage 2 conf vol vC6, single (s) vC7, stage (s) vC8, stage (s) vC9,
pX, platoon unblocked vC, conflicting volume 226 266 168 vC1, stage 1 conf vol 168 vC2, stage 2 conf vol 99 vCu, unblocked vol 226 266 168 tC, single (s) 4.4 6.4 6.2 tC, 2 stage (s) 5.4 tF (s) 2.5 3.5 3.3 p0 queue free % 97 85 96 cM capacity (veh/h) 1179 804 882
vC, conflicting volume 228 266 168 vC1, stage 1 conf vol 168 vC2, stage 2 conf vol 99 vCu, unblocked vol 226 266 168 tC, single (s) 4.4 6.4 6.2 tC, 2 stage (s) 5.4 tF (s) 2.5 3.5 3.3 p0 queue free % 97 85 96 cM capacity (veh/h) 1179 804 882
vC1, stage 1 conf vol 168 vC2, stage 2 conf vol 99 vCu, unblocked vol 226 266 168 tC, single (s) 4.4 6.4 6.2 tC, 2 stage (s) 5.4 tF (s) 2.5 3.5 3.3 p0 queue free % 97 85 96 cM capacity (veh/h) 1179 804 882
vC2, stage 2 conf vol 99 vCu, unblocked vol 226 266 168 tC, single (s) 4.4 6.4 6.2 tC, 2 stage (s) 5.4 tF (s) 2.5 3.5 3.3 p0 queue free % 97 85 96 cM capacity (veh/h) 1179 804 882
vCu, unblocked vol 226 266 168 tC, single (s) 4.4 6.4 6.2 tC, 2 stage (s) 5.4 tF (s) 2.5 3.5 3.3 p0 queue free % 97 85 96 cM capacity (veh/h) 1179 804 882
tC, single (s) 4.4 6.4 6.2 tC, 2 stage (s) 5.4 tF (s) 2.5 3.5 3.3 p0 queue free % 97 85 96 cM capacity (veh/h) 1179 804 882
tC, 2 stage (s) 5.4 tF (s) 2.5 3.5 3.3 p0 queue free % 97 85 96 cM capacity (veh/h) 1179 804 882
tF (s) 2.5 3.5 3.3 p0 queue free % 97 85 96 cM capacity (veh/h) 1179 804 882
p0 queue free % 97 85 96 cM capacity (veh/h) 1179 804 882
cM capacity (veh/h) 1179 804 882
Direction, Lane # E8.1 W8.1 W8.2 N8.1 N8.2
Volume Total 226 34 31 120 35
Volume Left 0 34 0 120 0
Volume Right 118 0 0 0 35
cSH 1700 1179 1700 804 882
Volume to Capacity 0.13 0.03 0.02 0.15 0.04
Queue Length 95th (ft) 0 2 0 13 3
Control Delay (s) 0.0 8.1 0.0 10.3 9.3
Lane LOS A B A
Approach Delay (s) 0.0 4.2 10.0
Approach LOS B
Intersection Summary
Average Delay 4.1
Intersection Capacity Utilization 30.3% ICU Level of Service
Analysis Period (min) 15

	-	*	1	-	1	~
Movement	EST	EBR	WBL	WBT	NBL	NBR
Lane Configurations	\$		- Salada	1	-34-6	-
Volume (veh/h)	70	45	0	52	0	91
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Hourly flow rate (vph)	88	56	0	65	0	114
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL			TWLTL		
Median storage veh)	2			2		
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			144		181	116
vC1, stage 1 conf vol					116	
vC2, stage 2 conf vol					65	_
vCu, unblocked vol			144		181	116
tC, single (s)			4.4		6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)			2.5		3.5	3.3
p0 queue free %			100		100	88
cM capacity (veh/h)			1269		872	942
		THE OWNER WHEN			0,2	0.12
Direction, Lane #	EB 1	WB1	NB 1	MIEN E		
Volume Total	144	65	114			
Volume Left	0	0	0			
Volume Right	56	0	114			
cSH	1700	1700	942			
Volume to Capacity	0.08	0.04	0.12			
Queue Length 95th (ft)	0	0	10			
Control Delay (s)	0.0	0.0	9.3			
Lane LOS			Α			
Approach Delay (s)	0.0	0.0	9.3			
Approach LOS			Α			
Intersection Summary				31.31		
Average Delay			3.3			
Intersection Capacity Utiliz	zation		19.8%	IC	U Level o	of Service
Analysis Period (min)			15			
						_

	•	•		1	†	4		
Movement	EBL	EBR	NBL	NBT	SBT	SBR		ì
Lane Configurations	Ŋ	14	7	44	↑ P	_		
Volume (veh/h)	50	141	161	590	726	72		
Sign Control	Stop			Free	Free			
Grade	0%			0%	0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Hourly flow rate (vph)	54	153	175	641	789	78		
Pedestrians	1							
Lane Width (ft)	12.0							
Walking Speed (ft/s)	3.5							
Percent Blockage	0							
Right turn flare (veh)								
Median type				TWLTL	TWLTL			
Median storage veh)				2	2			
Upstream signal (ft)								
pX, platoon unblocked								
vC, conflicting volume	1500	435	868					
vC1, stage 1 conf vol	829							
vC2, stage 2 conf vol	671							
vCu, unblocked vol	1500	435	868					
tC, single (s)	6.8	6.9	4.5					
tC, 2 stage (s)	5.8							
tF (s)	3.5	3.3	2.4					
pO queue free %	80	73	74					
cM capacity (veh/h)	268	574	661					
				NIN W		on t	08.6	
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2	
Volume Total	54	153	175	321	321	526	341	
Volume Left	54	0	175	0	0	0	0	
Volume Right	0	153	0	0	0	0	78	
cSH	268	574	661	1700	1700	1700	1700	
Volume to Capacity	0.20	0.27	0.26	0.19	0.19	0.31	0.20	
Queue Length 95th (ft)	19	27	27	0	0	0	0	
Control Delay (s)	21.8	13.5	12.4	0.0	0.0	0.0	0.0	
Lane LOS	C	В	В					
Approach Delay (s)	15.7		2.7			0.0		
Approach LOS	С							
Intersection Summary			148 A		k Tu	12 19 18		
Average Delay			2.9					
Intersection Capacity Utiliza	ation		47.3%		CU Level	ot Service		
Analysis Period (min)			15					

	•	~	4	†	ţ	4
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W		٦	44	410	
Volume (veh/h)	5	29	50	745	838	29
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	32	54	810	911	32
Pedestrians	1					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	0					
Right turn flare (veh)						
Median type				TWLTL	TWLTL	1375 TO
Median storage veh)				2	2	
Upstream signal (ft)				726		
pX, platoon unblocked				, =0		
vC, conflicting volume	1441	472	943			
vC1, stage 1 conf vol	928	7,2	3.0			
vC2, stage 2 conf vol	514					_
vCu, unblocked vol	1441	472	943			
tC, single (s)	6.8	6.9	4.5			
tC, 2 stage (s)	5.8	0.0	1.0			
tF(s)	3.5	3.3	2.4			
p0 queue free %	98	94	91			
cM capacity (veh/h)	301	543	616			
						_
Direction, Lane #	E81	NB 1	NB 2	NB 3	SB 1	S8 2
Volume Total	37	54	405	405	607	335
Volume Left	5	54	0	0	0	0
Volume Right	32	0	0	0	0	32
cSH	486	616	1700	1700	1700	1700
Volume to Capacity	0.08	0.09	0.24	0.24	0.36	0.20
Queue Length 95th (ft)	6	7	0	0	0	0
Control Delay (s)	13.0	11.4	0.0	0.0	0.0	0.0
Lane LOS	В	В				
Approach Delay (s)	13.0	0.7			0.0	
Approach LOS	В					
Intersection Summary					والإقالية	
Average Delay			0.6			
Intersection Capacity Utili	ization		42.8%	[(CU Level	of Service
Analysis Period (min)			15			

Intersection: 2: I-5 NB Ramps & E Pine St

Mavement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	TROUBLE !
Directions Served	L	T	T	T	T	R	L	LT	R	R	
Maximum Queue (ft)	96	191	239	377	376	340	410	536	582	230	
Average Queue (ft)	47	108	126	245	235	123	239	293	179	81	
95th Queue (ft)	90	190	213	396	386	290	422	508	344	236	
ink Distance (ft)		1152	1152	486	486			676	676		
Jpstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	150					265	335			380	
Storage Blk Time (%)		2			5	0	7	15			
Queuing Penalty (veh)		2			24	0	18	40			

Intersection: 8: Table Rock Rd & Hamrick Rd

Movement	EB	EB	NB	SB	
Directions Served	L	R	L	TR	
Maximum Queue (ft)	92	69	53	22	
Average Queue (ft)	47	39	10	1	
95th Queue (ft)	86	58	38	10	
Link Distance (ft)		236		976	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	160		150		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 13: Federal Way & Northwest Dwy

Movement	WB	distribution of the second				2011111	
Directions Served	LR						
Maximum Queue (ft)	55						
Average Queue (ft)	32						
95th Queue (ft)	41						
Link Distance (ft)	150						
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)							
Storage Blk Time (%)							
Queuing Penalty (veh)				- 10			

Central Point Costco TIA Kittelson & Associates, Inc. SimTraffic Report Page 1

Intersection: 14: Federal Way & Southwest Dwy

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	30	31
Average Queue (ft)	4	1
95th Queue (ft)	20	10
Link Distance (ft)	162	514
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 15: West Hamrick Dwy & Hamrick Rd

Movement	WB	NB	NB
Directions Served	L	L	R
Maximum Queue (ft)	68	70	51
Average Queue (ft)	8	32	19
95th Queue (ft)	36	48	44
Link Distance (ft)		154	154
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	150		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 16: East Hamrick Dwy (RIRO) & Hamrick Rd

Movement	NB		
Directions Served	R		
Maximum Queue (ft)	54		
Average Queue (ft)	33		
95th Queue (ft)	44		
Link Distance (ft)	112		
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 17: Table Rock Rd & Northeast Dwy

Movement.	EB	EB	NB	SB	SB	
Directions Served	L	R	L	T	TR	
Maximum Queue (ft)	74	97	154	22	22	
Average Queue (ft)	35	44	62	1	5	
95th Queue (ft)	70	73	109	10	20	
Link Distance (ft)	179	179		364	364	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			250			
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 18: Table Rock Rd & Southeast Dwy

Movement	EB	NB	推下 巴州 "五八十		Service Control
Directions Served	LR	L			
Maximum Queue (ft)	52	79			
Average Queue (ft)	19	27			
95th Queue (ft)	47	65			
Link Distance (ft)	144				
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		250			
Storage Blk Time (%)					
Queuing Penalty (veh)					

Zone Summary

Zone wide Queuing Penalty: 83

Public Works Department

ATTACHMENT "D"

Matt Samitore, Director

PUBLIC WORKS STAFF REPORT

December 15, 2015

AGENDA ITEM(S):

Costco Membership Warehouse and Four (4) Island Fuel Facility Applicant: Costco Wholesale; Agent: Steve Bullock, MG2

BACKGROUND:

The applicant is requesting a Conditional Use Permit (File No. 15022) and Site Plan & Architectural Review (File No. 15028) approval for the construction of a Costco Wholesale membership warehouse, including a four (4) island fuel facility, with a scheduled opening date Fall 2016. The 18.28 acre project site is located on four (4) undeveloped lots within the Federal Way Business Park Subdivision. As a previously platted subdivision all utilities, with the exception of transportation infrastructure, are available and adequate to service the project.

The applicant has prepared a Transportation Impact Analysis (TIA) ¹ identifying and addressing transportation impacts and mitigation measures. The TIA was prepared in accordance with input from the City of Central Point, City of Medford, Jackson County and the Oregon Department of Transportation. The TIA took into account the County's Table Rock widening project (four travel lanes, a center turn lane, bike lanes and sidewalks, and signalization of Table Rock Road and Airport Road) scheduled to begin construction one year (2017) after the opening of the Costco project.

EXISTING INFRASTRUCTURE:

Water: There are 8-inch waterlines that exist in Hamrick Road and Federal Way.

Streets: Hamrick Road is a City Collector Street. The right-of-way in front of the subject property

varies from 72-76 feet, which is adequate to serve the proposed project.

Stormwater: There is a 36-inch storm line in Hamrick Road.

TRAFFIC IMPACTS & MITIGATION:

The TIA evaluated twelve (12) intersections deemed to be affected by the project. Four of the intersections have issues at the opening of Costco (Build Year Fall 2016). Those intersections are:

Table Rock Road & Airport Road (Jackson County). Currently, this intersection operates at an
unacceptable Level of Service (LOS F). This status persists at Build Year and will be resolved upon
completion of the Table Rock Road Improvement project in 2017. Because of the timing between
Build Year and completion of the Table Rock Road project no mitigation has been proposed or
required by the County.

140 South 3rd Street • Central Point, OR 97502 • 541.664.3321 • Fax 541.664.6384

¹ Transportation Impact Analysis Central Point Costco Development, Kittelson & Associates, Inc., October 2015

- 2. <u>Table Rock Road & Hamrick Road (Jackson County/City of Central Point)</u>. The applicant has requested full access movements on the two access driveways on Table Rock Road. Per the County, access on Table Rock Road will be limited as follows:
 - a. Prior to completion of the Table Rock Road project, both access drives will be limited to right-in/right-out movements. Median islands will need to be installed by the applicant to restrict access movements.
 - b. Prior to the completion of the Table Rock Road project, for the Table Rock Road/Hamrick Road intersection the applicant will be required to construct a center turn lane and refuge lane within the existing Table Rock Road right-of-way.
 - c. Upon completion of the Table Rock Road Improvement project, access movements will be limited to right-in/right-out, and left-in movements (no signalization) for the two access driveways on Table Rock Road.
- 3. Northbound I-5 Off-Ramp (ODOT). On the opening date for Costco, the NB I-5 off-ramp will exceed the allowable volume to capacity (v/c) ratio, triggering the need for dual right turn lanes (IAMP 33 Project No. 9). The estimated project cost is \$1.3M. Per ODOT, the applicant's proportional cost share of the project is 38% of total project cost, or \$500K. The remainder of the project will be funded by ODOT with construction commencing at the earliest possible date. The applicant's proportional cost share will be payable to the City of Central Point prior to building permit issuance and is not an SDC eligible expense.
- 4. <u>Airport Road & Biddle Road (City of Medford)</u>. The TIA indicates that the westbound approach of Airport and Biddle Road exceeds the level of service standard for the City of Medford. Mitigation measures were not addressed in the TIA.

It should be noted that the TIA indicates that by 2020 additional lane configurations will be needed for the intersection of East Pine Street/Hamrick Road. The City of Central Point is tentatively scheduled to complete these improvements by 2018, including improvements to the North-South Traffic to include a receiving lane, a thru lane, and designated right and left turn lanes on Hamrick Road North and South of the intersection. No additional improvements will be made on E. Pine Street/Biddle Road as part of this improvement project.

CONDITIONS OF APPROVAL:

1. Oregon Department of Transportation

Prior to issuance of a building permit Costco shall enter into a Cooperative Improvement Agreement with the Oregon Department of Transportation (ODOT) to fund development and construction of a dual right turn lane at the I-5 Exit 33 northbound off-ramp. Costco's share of the estimated \$1.3 million improvement shall be limited to \$500,000, with ODOT funding the remaining cost of the improvement.

2. Transportation Conditions, Jackson County Roads. The following addresses Jackson County Roads

conditions of development only. See Jackson County Roads memo for general comments not imposed as conditions of development.

- A. Jackson County Roads, Condition 1 Prior to issuance of a Certificate of Occupancy, the applicant shall construct a left turn and left receiving lane on Table Rock at Hamrick Road. The turn and receiving lanes shall have adequate queuing to ensure safe and efficient operation of the intersection during the first year of opening. Applicants Engineers shall prepare plans identifying the length of improvements. Plans shall be approved by Jackson County Roads and City of Central Point prior to issuance of a building permit. This improvement is not System Development Charges (SDC) eligible as it is in exchange for the required frontage improvements. This work will require a Minor Road Improvement Permit from Jackson County.
- B. Jackson County Roads, Condition 2 Prior to issuance of a Certificate of Occupancy the applicant shall construct median islands in Table Rock Road in front of the two Table Rock Road approaches. Until completion of the County's Table Rock Road project these two Table Rock Road approaches will be limited to right-in/right-out. This work may be included in either the Minor Road Improvement Permit or the Commercial Approach Permit.
- C. Jackson County Roads, Condition 3 As part of the Table Rock Road Project, the Table Rock Road approaches, including Hamrick Road, will be constructed as right-in/left-in/right-out movements. The Table Rock Road Project will install the medians as part of the Table Rock Road Project's expenses.
- D. Jackson County Roads, Condition 4 At the County's Table Rock Road Project's expense the County will install a new signal at Airport Road and Table Rock Road.
- E. Jackson County Roads, Condition 9 The applicant shall submit construction drawings to Jackson County Roads and obtain county permits as required.
- F. Jackson County Roads, Condition 10 Prior to the issuance of a Building Permit the applicant shall obtain Commercial Approach permits from Jackson County Roads for any new approaches or improved approaches to Hamrick Road and Table Rock Road. The paved approaches shall have a 30' radii and a 40' width. Jackson County Roads requires the removal of any existing driveways not being used on Hamrick Road and Table Rock Road.
- G. Jackson County Roads, Condition 13 Utility permits are required from Jackson County Roads for any utility work within the county road right-of-way.
- H. Jackson County Roads, Condition 16 Prior to issuance of a Building Permit if drainage is directed to Hamrick Road and/or Table Rock Road, plans shall be submitted to Jackson County Roads for review and comment on the hydraulic report including the calculations and drainage plan. Capacity improvements or on-site detention shall be installed at the expense of

140 South 3rd Street • Central Point, OR 97502 • 541.664.3321 • Fax 541.664.6384

the applicant. Upon completion of the project the developer's engineer shall certify that construction of the drainage system was constructed per plan and a copy of the certification shall be sent to Jackson County Roads.

3. City of Central Point

- A. Hamrick Road and Federal Way Improvements Prior to Public Works Final Inspection, the applicant shall install sidewalks and street trees per the Public Works Department Standards and Specifications.
- B. Public Works Standard Specifications The applicant shall use the 2014 revised Public Works Standards and Specifications for all new construction drawings.



December 10, 2015

Roads ATTACHMENT "E" Engineering

Mike Kuntz, P.E. County Engineer

200 Antelape Rd. White City, OR 97503 Phone: (541)774-6228 Fax: (541)774-6295 kuntzm@jacksoncounty.org

www.jacksoncounty.org

Attention: Stephanie Holtey City of Central Point Planning 140 South Third Street Central Point, OR 97502

RE: Conditional Use Permit and Site Plan & Architectural Review for construction of a 161,992 square foot membership warehouse and four island fuel facility, including 783 parking spaces and site landscaping off Hamrick Road and Table Rock Road – county-maintained roads.

Planning File: 15022 and 15028; 37-2W-12B Tax Lots 213, 214, 215, and 216.

Dear Stephanie:

Thank you for the opportunity to comment on this Conditional Use Permit and Site Plan & Architectural Review for construction of a 161,992 square foot membership warehouse and four island fuel facility, including 783 parking spaces and site landscaping on a 18.28 acre site in the Industrial M-1 –zoning district. The project site is adjacent to Hamrick Road and Table Rock Road. Jackson County Roads has the following comments:

- Prior to opening, Jackson County requests construction of a left turn and left receiving lane on Table Rock Road at Hamrick Road. The turn and receiving lanes shall have adequate queuing to ensure safe and efficient operation of the intersection during the first year of opening. This work will require a Minor Road Improvement Permit from Jackson County.
- 2. Prior to opening, Jackson County requests construction of median islands in Table Rock Road in front of the two Table Rock Road approaches. Until the County's Table Rock Road improvement project is complete, the Table Rock Road approaches will be limited to right-in/right-out. This work may be included in either the Minor Road Improvement Permit or the Commercial Approach Permit.
- 3. As part of the County's Table Rock Road Improvement Project, the Table Rock Road approaches will be constructed as right-in/left-in/right-out movements. The County's project will install these medians at the project's expense.
- 4. The County's Table Rock Road Improvement Project will install a new traffic signal at Airport Road at the project's expense.

- 5. The East Pine/Hamrick intersection will likely fail approximately one year after opening. Central Point should construct improvements to this intersection prior to failure.
- Construction of the fourth leg of the Table Rock/Airport Road intersection, with Airport Road Connecting to Federal Way, will significantly improve traffic circulation in the project area. Jackson County would support any efforts which facilitate this improvement.
- 7. Once the fourth leg of the Airport intersection is complete and connected to Federal Way, the Federal Way access point will become a significant access for the project. The current site plan utilizes Table Rock and Hamrick Roads as the front of the project and for primary public access. Federal Way is primarily utilized for delivery access and as a minor public access. The site plan should perhaps be modified to make Hamrick Road and Federal Way the front of the project to recognize the long term circulation. Regardless of the final "front" of the project, the public access to Federal Way should receive a major upgrade to encourage public use of this access and improve long term circulation.
- 8. Jackson County estimates the value of the frontage improvements on Table Rock Road that will not be constructed by the applicant at \$480,000.
- 9. The applicant shall submit construction drawings to Jackson County Roads and obtain county permits if required.
- 10. The applicant shall obtain Commercial Approach permits from Roads for any new or improved approaches to Hamrick Road and Table Rock Road. The paved approaches shall have 30' radii and a 40' width. Roads requests the removal of any existing driveways not being used on Hamrick Road and Table Rock Road.
- 11. The posted speed zone for Table Rock Road is 45 mph, requiring an approach sight distance minimum of 325'.
- 12. Hamrick Road is a Basic Speed Rule road. The required approach sight distance is 450'.
- 13. Utility Permits are required from Roads for any utility work within the county road right-of-way.
- 14. Please note Hamrick Road is a local road but the soon to be revised County TSP will designate it as a Minor Collector and is county-maintained with an Average Daily Traffic count of 799 as of 8/2014, 150' west of Table Rock Road.

- 15. Please note Table Rock Road Is an Arterial Road with an Average Daily Traffic count of approximately 13,000 in the project area.
- 16. If drainage is directed to Hamrick Road and/or Table Rock Road, Jackson County Roads would like to review and comment on the hydraulic report including the calculations and drainage plan. Capacity improvements or on site detention, if necessary, shall be installed at the expense of the applicant. Upon completion of the project, the developer's engineer shall certify that construction of the drainage system was constructed per plan and a copy of the certification shall be sent to Jackson County Roads.
- 17. We would like to be notified of future development proposals, as county permits may be required.
- 18. We concur with any right-of-way dedicated.

Sincerely,

Mike Kuntz, P.E. County Engineer

ATTACHMENT "F"
Oregon Department of Transportation
Region 3, District 8
100 Antelope Road
White City, OR 97503
(541) 774-6316
FAX (541 774-6397



December 14, 2015

STEPHANIE HOLTEY, PLANNER CITY OF CENTRAL POINT PLANNING DEPARTMENT 140 SOUTH THIRD STREET CENTRAL POINT, OR 97502

Re: Costco Wholesale Conditional Use Permit: 15022 and Site Plan/Architectural Review: 15028.

Thank you for the opportunity to review the Conditional Use Permit (CUP) application, Site Plan/Architectural Review application and associated traffic impact analysis (TIA) for the construction of a 161,992 square foot membership warehouse and four (4) island fuel facility, including 783 parking spaces and site landscaping. The 18,028 acre property is located at the southwest corner of the Table Rock Road and Hamrick Road intersection. 37-2W-12B Tax Lots 213, 214, 215, and 216.

ODOT is requesting that the City of Central Point include the following condition for CUP 15022:

 Costco shall enter into a Cooperative Improvement Agreement with the Oregon Department of Transportation (ODOT) to fund development and construction of a dual right turn lane at the I-5 Exit 33 northbound off-ramp. Costco's share of the estimated \$1.3 million improvement shall be limited to \$500,000, with ODOT funding the remaining cost of the improvement.

You may contact me at 541-774-6399 if you have any further questions or require additional information.

Thank you,

Don Morehouse

Senior Transportation Planner, Development Review

Cc: Ron Hughes, Michael Wang, Cathy Harshman, Jeremiah Griffin

Stephanie Holtey

From:

Kelly A. Akin <Kelly.Akin@cityofmedford.org>

Sent:

Thursday, December 03, 2015 12:11 PM

To:

Stephanie Holtey

Subject:

RE: Action Needed: Request for Agency Comments on Land Use Applications

Stephanie -

Thank you for the opportunity to comment on the Costco applications. The City of Medford Planning Department has no comments.

Kelly Akin Principal Planner City of Medford Planning Department 411 W 8th Street Medford OR 97501

From: Stephanle Holtey [mailto:Stephanle.Holtey@centralpointoregon.gov]

Sent: Monday, November 16, 2015 3:51 PM

To: Kelly A. Akin

Subject: Action Needed: Request for Agency Comments on Land Use Applications

Importance: High

Kelly,

The City has received the following applications for Costco Wholesale:

- Conditional Use Permit (File No. 15022)
- Site Plan & Architectural Review (File No. 15028)

This request for agency comments (attached) was also sent to Alex Georgevitch in Public Works. Due to the size of the application, the site exhibits, findings and traffic information analysis have been posted on the City's website at the following location: http://www.centralpointoregon.gov/cd/project/costco-conditional-use-permitsite-plan-architectural-review.

If you have any questions, please feel free to contact me.

Sincerely,

Stephanie Holtey, CFM
Community Planner II
City of Central Point
140 South 3rd Street
Central Point, OR 97502
Desk: (541) 664-7602, Ext. 244
Fax: (541) 664-6384
www.centralpointoregon.gov

1



ROGUE VALLEY SEWER SERVICES

Location: 138 West Vilas Road, Central Point, OR - Mailing Address: P.O. Box 3130, Central Point, OR 7502-0005 Tel. (541) 664-6300, Fax (541) 664-7171 www.RVSS.us

November 16, 2015

Stephanie Holtey City of Central Point Planning Department 155 South Second Street Central Point, Oregon 97502

Re: File 15022 CUP and 15028 SPR - Costco Wholesale, Tax Lots 213, 214, 215, and 216, Map 372W12B

Sanitary sewer service to the proposed development can be had by connecting to the existing 8 inch sewer main on Federal Way. The connection can be done either as a private service lateral or a public main line extension. There is an 8 inch pipe extended to the property at the Northwest corner that would facilitate this connection.

A private service lateral connection will require a permit from RVSS, which will be issued upon payment of related development fees.

A public sewer extension must be designed by a licensed engineer and constructed in accordance with RVSS standards.

The project is within the Phase 2 stormwater quality area and must comply with stormwater quality requirements outlined in the Regional Stormwater Design Manual. The proposed development does not involve any sewer construction.

The project does have stormwater quality impacts and must comply with the standards established in the regional Stormwater Quality Design Manual.

Rogue Valley Sewer Services requests that approval of this development be subject to the following conditions:

- Applicant must submit sanitary sewer plans to RVSS for review and approval demonstrating compliance with RVSS standards prior to the start of construction.
- Applicant must submit a stormwater management plan demonstrating compliance with the regional Stormwater Design Manual for review and approval by RVSS prior to the start of construction.
- 3. Applicant must obtain a construction site erosion and sediment control permit from RVSS prior to any ground disturbing activities.

Feel free to call me if you have any questions.

Carl Tappert
Carl Tappert, PE

Manager

K:\DATA\AGENCIES\CENTPT\PLANNG\SITEPLANREVIEW\2015\15028_COSTCO WHOLESALE.DOC



Continuous Improvement Customer Service CITY OF MEDFORD

PUBLIC WORKS DEPARTMENT ENGINEERING & DEVELOPMENT DIVISION 200 SOUTH IVY STREET MEDFORD, OREGON 97501 www.ci.medford.or.us

TELEPHONE (541) 774-2100 FAX (541) 774-2552

December 24, 2015

Stephanie Holtey City of Central Point Planning Department 140 So. Third St. Central Point, OR. 97502

Dear Ms. Holtey:

We have reviewed the Traffic Impact Analysis, dated October 2015, for the proposed Costco Conditional Use Permit and have the following comments:

- Mitigation is required at the intersection of Biddle Rd and Airport Rd due to
 project traffic degrading the level of service on the westbound approach below
 acceptable standards. The increase in traffic volume will increase competition for
 gaps in traffic for permissive movements resulting in the acceptance of smaller
 gaps and increase collision potential at the intersection.
- 2. The intersection of Table Rock Rd. and Morningside St. needs to be studied to mitigate safety effects of project trips on a decrease in safety at the intersection. The proposed increase in traffic will increase rear end pressure on northbound left turning motorists and decrease available gaps in southbound traffic. This will induce them to choose smaller gaps and increase collision potential at the intersection. The 90 P.M. peak hour project trips each way north and southbound represent a 20% increase over the 450 peak hour through trips each way counted on Table Rock in 2015. The development should contribute to a project to construct a northbound left turn lane at Morningside St and Table Rock Rd.

If you have questions, please contact me at (541) 774-2121.

Sincerely,

Peter Mackprang Associate Traffic Engineer

CC: Kim Parducci Don Burt Dan O'Connor

FINDINGS OF FACT & CONCLUSIONS OF LAW Costco Wholesale Conditional Use Permit File No. 15022

January 5, 2016

Applicant:) Findings of Fact
Costco Wholesale) and
999 Lake Drive) Conclusion of Law
Issaquah, WA 98027)

PART 1 - INTRODUCTION

Costco Wholesale is requesting a Conditional Use Permit to develop 18.28 acres of vacant industrial land (M-1) zone with a membership warehouse and associated four (4) island fuel facility. The 161,992 square foot membership warehouse will be located on the southwest property boundary and the fuel facility on the southeast property boundary. It is the applicant's intent to relocate its existing facility to the proposed site with a scheduled opening date Fall 2016.

The project site is located on the eastern edge of the Central Point city limits at the southeast corner of Hamrick and Table Rock Road (Figure 1). The site also has frontage on Federal Way, a local street. Surrounding properties include developed and undeveloped industrial lands, including the M-1 and M-2 zoning districts.

In accordance with Table 17.05.01, the Costco Conditional Use Permit application has been processed using Type III procedures as set forth in Section 17.05.400 of the Central Point Municipal Code.

Including this introduction, these findings will be presented in three (3) parts as follows:

- 1. Introduction
- 2. Section 17.76.040, Conditional Use Findings & Conclusions
- 3. Summary Conclusion



0 375 750 1.500 Fee

PART 2 – CONDITIONAL USE FINDINGS & CONCLUSIONS

17.48.040 Conditional Uses.

The following uses and their accessory uses may be permitted in an M-1 district when authorized in accordance with Chapter 17.76:

- A. Business offices and commercial uses that are compatible with and closely related in their nature of business to permitted uses in the M-1 district, or that would be established to serve primarily the uses, employees, or customers of the M-1 district; Explain how it is a CU.
- B. Rail and trucking distribution facilities.

Finding 17.48.040: The City, by Planning Commission Resolution 764 and City Council Resolution 1217¹, determined that membership warehouses are a commercial use compatible with and closely related to permitted uses in the M-1 zone.

Conclusion 17.48.040: Costco Wholesale, a membership warehouse that includes wholesale automobile fuel sales, is a Conditional Use.

17.76.040 Findings and Conditions

The planning commission in granting a conditional use permit shall find as follows:

A. That the site for the proposed use is adequate in size and shape to accommodate the use and to meet all other development and lot requirements of the subject zoning district and all other provisions of this code.

Finding 17.76.040(A): As evidenced in the applicant's site plan, the 18.28 acre project site is adequately sized to accommodate the proposed structures and off-street parking as follows:

1) <u>Setback Requirements (CPMC 17.48.060)</u>. The proposed structures meet the setback requirements of the M-1 zoning district as set forth in Table 1 below:

Yard	Minimum Setback	Warehouse	Fuel Canopy
Front (North)	20-ft	275-ft	950-ft
Side (West)	10-ft	60-ft, 3-in	51-ft
Side (East)	10-ft	395-ft	35-ft
Rear (South)	10-ft	60-ft, 10-in.	160-ft 1-in.

2) Off-Street Parking Requirements (CPMC 17.64.040). The applicant's parking plan proposes 783 parking spaces, which is 85 spaces in excess of the maximum 698 spaces allowed (Table 2).

¹ File No. 09022 – M-1 Code Amendment

Table 2. Costco Parking Requirement										
Proposed Costco Floor Area by Use	Building Area (Sq. Ft.)	Min./Max. Parking Standard	Parking Supply Ratio	Required Parking (No. Spaces)	Proposed Parking	Surplus/Deficit				
Retail	134,064	1/200 s.f.	5.00	670	783	113				
Warehouse	27,928	1/1,000 s.f.	1.00	28		(28)				
TOTAL	161,992	1/232 s.f.	4.31	698	783	85				
Proposed Adjustment	161,992	1/207 s.f.	4.83	783	783	-				

In accordance with Section 17.64.040(B)(2), the applicant is requesting an increase to the maximum parking standard for the proposed use. Table 3 summarizes the data provided in the applicant's parking demand analysis, which is based upon the following:

- Documented parking supply and demand at existing Costco Wholesale warehouses in Oregon; and,
- The Institute of Transportation Engineers (ITE) Parking Generation, 4th Edition recommendation to maintain a maximum parking utilization of 90% during the typical peak periods to avoid illegal parking and repeating circulation.²

Costoo Site Location	Warehou se Size (Sq. Ft.)	Parking supply	Peak Period Parking Demand	Parking Demand per 1,000 Sq. Ft.	Parking Supply to Maintain 90% utilization at Peak	Minimum Recommend ed Parking Ratio
Clackamas	137,000	693	670	4.89	744	5.43
Medford	136,297	654	579	4.25	644	4.72
Aloha	148,030	682	528	3.57	587	3.96
Average	140,442	676	592	4.24	658	4.71
Central Point, Proposed	161,992	782			753	4.83

The applicant's parking proposal for the Central Point location is slightly higher than the average minimum recommended parking ratio (Table 3) at 4.83 parking spaces per 1,000 s.f. GFA. Since the difference between the minimum recommendation and the proposed adjustment is within the range of acceptable statistical error (less than 5%) and is consistent with the ITE recommendation to stay below 90% utilization for typical and seasonal peaks, the request to increase the parking standard is warranted and can be accommodated as demonstrated by the applicant's site plan.

² ITE Parking Generation, 4th Edition, 2010.

3) Loading Requirements (Section 17.64,040). Loading required for retail buildings greater than 100,000 s.f. GFA includes 3 bays plus 1 bay for each additional 80,000 s.f.. On this basis the proposed 161,992 s.f. warehouse requires four (4) loading bays, which are provided on applicant's site plan and architectural elevations (north and west elevations). Additionally, the plans show three (3) loading areas for smaller truck/van deliveries.

Conclusion 17.76.040(A): The site is sufficient in size and shape to accommodate the use and meet the development and lot requirements of the M-1 zone.

B. That the site has adequate access to a public street or highway and that the street or highway is adequate in size and condition to effectively accommodate the traffic that is expected to be generated by the proposed use.

Finding 17.76.040(B): The project site has frontage on Hamrick Road, Table Rock Road and Federal Way having two (2) access driveways on each of the frontage roads. The Applicant's Traffic Impact Analysis (TIA)³ evaluated each site access and twelve (12) intersections per input from affected agencies (i.e. City of Central Point, Jackson County, and Oregon Department of Transportation (ODOT)).

It should be noted that although the City of Medford was invited to participate in the TIA scoping process on June 2, 2015 and August 13, 2015, no comments were received. Following acceptance of the application as complete, agency comments were requested on November 12, 2015 to which the City of Medford responded on December 24, 2015. Based on information provided by the City of Medford in the letter dated December 24, 2015, relating to the proposed intersection improvements of Table Rock Road and Morningside Street, there is an insufficient nexus between the proposed development and the requested project contribution ⁴. Therefore, no further discussion of this intersection will be included in these findings.

Based on the TIA, there are traffic impacts to five (5) roadways that can be resolved to accommodate site generated traffic as set forth below:

- a. Northbound I-5 Off-Ramp. On the date of opening, the TIA indicates that the volume to capacity (v/c) ratio on the NB I-5 Off Ramp will be exceeded trigging the need for implementation of IAMP 33 Project No. 9 (dual right turn lanes from the off-ramp to East Pine Street). The following condition is recommended to address the identified traffic impact:
 - i. Prior to building permit issuance, the applicant shall enter into a Cooperative Improvement Agreement with the Oregon Department of Transportation (ODOT) to fund development and construction of a dual right turn lane at the I-5 Exit 33 northbound off-ramp. Costco's share of the estimated \$1.3 million improvement shall be limited to \$500,000 with ODOT funding the remaining cost

³ Kittleson & Associates, Inc., "Traffic Impact Analysis: Central Point Costco Development." October 2015.

⁴ See Brown v. City of Medford, 251 Or App 42 (2012).

of improvement.

- b. Table Rock Road and Hamrick Road Intersection. Per the County, site access on Table Rock Road will be limited to right-in/right-out prior to completion of the County's Table Rock Road widening project (four travel lanes, bicycle lanes, sidewalks and signalization of the Airport/Table Rock Road intersection). As a result of the access restrictions, left turn delays at Hamrick Road and Table Rock cause unacceptable levels of service (LOS F). It should be noted that the TIA demonstrates that the identified impacts interim right-in/right-out access restrictions on the Hamrick/Table Rock Road intersection (non-signalized) are resolved upon completion of the Table Rock Widening project. To limit access and resolve the identified interim impact to Hamrick/Table Rock Road, the County is requiring the following conditions:
 - i. Prior to certificate of occupancy, Jackson County shall require construction of median islands in Table Rock Road in front of the two Table Rock Road approaches. Until the County's Table Rock Road project is complete, the Table Rock Road approaches will be limited to right-in/right-out. This work may be included in the Minor Road Improvement Permit or the Commercial Approach Permit.
 - ii. Prior to certificate of occupancy, Jackson County shall require construction of a left turn and left receiving lane on Table Rock Road at Hamrick Road. The turn and receiving lanes shall have adequate queuing to ensure safe and efficient operation of the intersection during the first year of opening. This work will require a Minor Road Improvement Permit from Jackson County.
 - iii. As part of the County's Table Rock Improvement Project, the Table Rock Road approaches will be constructed as right-in/left-in/right-out movements. The County's project will install these medians at the project's expense.
 - iv. Prior to issuance of a Building Permit the applicant shall obtain Commercial Approach permits from Jackson County Roads for any new approaches or improved approaches to Hamrick and Table Rock Road. The paved approaches shall have a 30' radii and a 40' width. Jackson County Roads requires the removal of any existing driveways not being used on Hamrick Road and Table Rock Road.
- c. Table Rock and Airport Road Intersection. This intersection currently operates at a LOS F. The build year (2016) conditions are aggravated by the proposed use; however, most of the impact is due to the critical movement (i.e. left turn from Airport Road onto Table Rock Road), which is not associated with the proposed development. The County's Table Rock Road widening project, which includes four (4) travel lanes, bicycle lanes, sidewalks and signalization of Airport/Table Rock Road will resolve the impact and is expected to start construction in 2017. Per the County, the following condition addresses identified impacts at the Table Rock Road/Airport Road intersection:
 - i. At the County's Table Rock Road Project's expense, the County will install a new signal at Airport Road and Table Rock Road. The Table Rock Road Project is scheduled to begin in 2017.

- d. <u>Airport Road and Biddle Road</u>. This intersection currently operates at a LOS C. At build year, the intersection will operate at a LOS E. Although the TIA acknowledged the need for mitigation at this intersection, no mitigation measures were recommended. This was reinforced by the City of Medford, in a letter dated December 24, 2015, that indicated mitigation would be required but did not specify mitigation improvements necessary. The City of Central Point's Traffic Engineer evaluated the intersection impacts and determined that they can be mitigated per the following condition:
 - i. Prior to issuance of a building permit, the applicant shall provide to the City of Medford Public Works Department engineered improvement drawings for the construction of a limited median along Biddle Road that allows right-in, right-out, left-in movements on Airport Road ("Improvements") accompanied by a written agreement including a bond/cash deposit/letter of credit ("Surety") in the amount of the Improvement assuring the City of Medford that the Improvements will be completed prior to issuance of a certificate of occupancy by the City of Central Point. The applicant shall provide the City of Central Point Public Works Department one copy of the engineered plans and surety agreement within five (5) days of submittal to the City of Medford.
- e. <u>Hamrick and East Pine Street</u>. The TIA indicates that by 2020 additional lane configurations will be needed for the intersection of Hamrick Road and East Pine Street/Biddle Road. The city of Central Point is tentatively scheduled to complete the necessary improvements as a Capital Improvement Project by 2018, including north-south traffic receiving lanes, a thru lane, and designated right and left turn lanes on Hamrick Road north and south of the intersection. No additional improvements will be made on East Pine Street Biddle Road as part of this project. The City is not requiring interim mitigation, since the identified impacts do not occur at the build year.

Conclusion 17.76.040(B): Per the Applicant's TIA, traffic impacts of the proposed use on public streets and highways have been identified and can be mitigated, such that the public streets and highway will be sufficient in size and condition to accommodate site generated traffic.

C. That the proposed use will have no significant adverse effect on abutting property or the permitted use thereof. In making this determination, the commission shall consider the proposed location of improvements on the site; vehicular ingress, egress and internal circulation; setbacks; height of buildings and structures; walls and fences; landscaping; outdoor lighting; and signs.

Finding 17.76.040(C): The following characteristics were evaluated in consideration of the proposal's impacts to abutting properties:

- 1. <u>Proposed Location of Site Improvements</u>. The Site Plan illustrates the location of the proposed warehouse and fuel facility consistent with the setback requirements of the M-1 zoning district (See Finding 17.76.040(A)).
- 2. <u>Vehicular Ingress, Egress and Internal Circulation.</u> The project site proposes two access drives on each of the frontage roads (i.e. Federal Way, Hamrick Road and Table Rock Road). The applicant's TIA evaluated site access evaluated site access and identified mitigation

associated with access restrictions (i.e. right-in/right-out) on Table Rock Road as follows:

- a. Interim Table Rock Road Access See Finding 17,76.040(B)(b)(i).
- b. Interim Hamrick/Table Rock LOS Mitigation See Finding 17.76.040(B)(b)(ii).
- c. Final Table Rock Road Access See Finding 17.76.040(B)(b)(iii).
- 3. <u>Setbacks</u>. The applicant's site plan identifies the location of structures and off-street parking areas consistent with the setback requirements in the M-1 zoning district (See Finding 17.76.040(A).
- 4. <u>Building Height</u>. The applicant proposes a varied roofline on the warehouse with 34-ft at the top of the highest parapet. The proposed building height is typical of surrounding warehouse development and within the maximum 60-ft building height allowed in the M-1 zone. The top of the fuel canopy is 17-ft 6-inches within the maximum height requirements of the M-1 zone.
- 5. Walls and Fences: Due to the nature of the proposed use as bulk retail sales, the applicant's proposal does not include site obscuring walls or fences. This proposal is typical of other commercial/retail development in the city, and is consistent with other permitted uses in the M-1 zone. As such, the no adverse impacts to adjacent properties or their permitted uses will result from the absence of fences and walls.
- 6. <u>Landscaping</u>. The applicant's Landscape Plan illustrates proposed street frontage and offstreet parking area landscape improvements typical of site development requirements in the M-1 zone. This is considered to be adequate and effective in avoiding adverse visual impacts to adjoining properties.
- 7. <u>Outdoor Lighting</u>. The applicant submitted a Site Photometric Plan that shows perimeter and interior lighting throughout the site. Lighting is oriented toward the interior site and is not deemed to cause an adverse impact to adjoining properties.
- 8. <u>Signs</u>. The Applicant has submitted a Class "C" Variance (File No. 15032) from the sign area standard of CPMC 17.48.080(A)(1). The signage variance request would allow wall signs that are proportional to the building scale and dimension consistent with signage permitted in other commercial (C) districts in the City. Based upon the applicant's proportionality rationale for the proposal, the variance request is deemed reasonable. However, if the variance is not approved, the applicant will be required to demonstrate compliance with the M-1 sign area standards prior to building permit issuance.

Conclusion 17.76.040(C): The applicant's project is typical of site development within the M-1 zone. As such, the site development standards for permitted uses in combination with the conditions of approval relative to vehicle ingress and egress (Item 2) are deemed sufficient to avoid adverse impacts to abutting properties or permitted uses thereof.

D. That the establishment, maintenance or operation of the use applied for will comply with local, state and federal health and safety regulations and therefore will not be detrimental to the health, safety or general welfare of persons residing or working in the surrounding neighborhoods and will not be detrimental or injurious to the property and improvements in the neighborhood or to the general welfare of the community based on the review of those factors listed in subsection C of this section.

Finding 17.76.040(D): The issue of safety is regulated through the building code and in conjunction with the fire district. The proposed fueling station must be constructed and operated in compliance with all Federal, State and local regulation and shall be reviewed during the building permit process and prior to issuance of a building permit. The Applicant's findings affirm their commitment to complying with all Federal, State and local regulations.

Conclusion 17.76.040(D): The proposed Costco Wholesale is consistent with this criterion,

- E. That any conditions required for approval of the permit are deemed necessary to protect the public health, safety and general welfare and may include:
 - 1. Adjustments to lot size or yard areas as needed to best accommodate the proposed use; provided the lots or yard areas conform to the stated minimum dimensions for the subject zoning district, unless a variance is also granted as provided for in Chapter 17.13,

Finding 17.76.040(E)(1): The site is adequate to accommodate the proposed development as demonstrated in Finding 17.76.040(A). However, as a condition of approval, legal lot consolidation of the four (4) lots comprising the site will be required prior to building permit issuance to eliminate property boundary conflicts with the proposed structures.

Conclusion 17.76.040(E)(1): As conditioned, the required lot consolidation is sufficient to resolve the identified property boundary conflicts with proposed structures.

2. Increasing street widths, modifications in street designs or addition of street signs or traffic signals to accommodate the traffic generated by the proposed use,

Finding 17.76.040(E)(2): Per the applicant's TIA, mitigation is necessary to address traffic impacts identified in Finding 17.76.040(B) and as conditioned below:

a. Northbound I-5 Off-Ramp.

i. Prior to building permit issuance, the applicant shall enter into a Cooperative Improvement Agreement with the Oregon Department of Transportation (ODOT) to fund development and construction of a dual right turn lane at the I-5 Exit 33 northbound off-ramp. Costco's share of the estimated \$1.3 million improvement shall be limited to \$500,000 with ODOT funding the remaining cost of

improvement.

b. Table Rock Road and Hamrick Road Intersection.

- i. Prior to certificate of occupancy, Jackson County shall require construction of median islands in Table Rock Road in front of the two Table Rock Road approaches. Until the County's Table Rock Road project is complete, the Table Rock Road approaches will be limited to right-in/right-out. This work may be included in the Minor Road Improvement Permit or the Commercial Approach Permit.
- ii. Prior to certificate of occupancy, Jackson County shall require construction of a left turn and left receiving lane on Table Rock Road at Hamrick Road. The turn and receiving lanes shall have adequate queuing to ensure safe and efficient operation of the intersection during the first year of opening. This work will require a Minor Road Improvement Permit from Jackson County.
- iii. As part of the County's Table Rock Improvement Project, the Table Rock Road approaches will be constructed as right-in/left-in/right-out movements. The County's project will install these medians at the project's expense.
- iv. Prior to issuance of a Building Permit the applicant shall obtain Commercial Approach permits from Jackson County Roads for any new approaches or improved approaches to Hamrick and Table Rock Road. The paved approaches shall have a 30' radii and a 40' width. Jackson County Roads requires the removal of any existing driveways not being used on Hamrick Road and Table Rock Road.

c. Table Rock and Airport Road Intersection.

i. At the County's Table Rock Road Project's expense, the County will install a new signal at Airport Road and Table Rock Road. The Table Rock Road Project is scheduled to begin in 2017.

d. Airport Road and Biddle Road.

i. Prior to issuance of a building permit, the applicant shall provide to the City of Medford Public Works Department engineered improvement drawings for the construction of a limited median along Biddle Road that allows right-in, right-out, left-in movements on Airport Road ("Improvements") accompanied by a written agreement including a bond/cash deposit/letter of credit ("Surety") in the amount of the Improvement assuring the City of Medford that the Improvements will be completed prior to issuance of a certificate of occupancy by the City of Central Point. The applicant shall

provide the City of Central Point Public Works Department one copy of the engineered plans and surety agreement within five (5) days of submittal to the City of Medford.

e. <u>Hamrick and East Pine Street</u>. The TIA indicates that by 2020 additional lane configurations will be needed for the intersection of Hamrick Road and East Pine Street/Biddle Road. The city of Central Point is tentatively scheduled to complete the necessary improvements as a Capital Improvement Project by 2018, including north-south traffic receiving lanes, a thru lane, and designated right and left turn lanes on Hamrick Road north and south of the intersection. No additional improvements will be made on East Pine Street Biddle Road as part of this project. The City is not requiring interim mitigation, since the identified impacts do not occur at the build year.

Conclusion 17.76.040(E)(2): As conditioned, the required modifications to street infrastructure are sufficient to accommodate traffic generated by the proposed use.

3. Adjustments to off-street parking requirements in accordance with any unique characteristics of the proposed use,

Finding 17.76.040(E)(3): Per the Parking Demand Assessment included in the Applicant's TIA, the proposed use has parking demands, unique to Costco, that necessitate an increase in allowable parking The applicant has proposed an increase to the City's off-street parking standard to allow 783 parking spaces, which is consistent with the minimum recommended parking for Costco and maintains a utilization rate less 90% utilization per the ITE's recommendation for off-street parking areas.

Conclusion 17.76.040(E)(3): Per Finding 17.76.040(A), the requested parking increase for the proposed use is justified.

4. Regulation of points of vehicular ingress and egress,

Finding 17.76.040(E)(4): The Applicant's TIA evaluated ingress and egress scenarios from Hamrick and Table Rock Road based on input from the City of Central Point and Jackson County Roads. As conditioned, ingress and egress on Table Rock Road will be limited to right-in/right-out movements from opening day until completion of the Table Rock widening project scheduled for construction in 2017. Under this scenario, the Applicant's TIA found that vehicle stacking on Hamrick Road results in the Hamrick/Table Rock Road intersection to operate at a LOS F. As mitigation, the Applicant will be required to limit access and construction mitigation as required per Finding 17.76.040(E)(2)(b).

Conclusion 17.76.040(E)(4): As conditioned, vehicle ingress and egress to the site will be restricted per the County's requirements (See Finding 17.76.040(E)(2)(b)).

5. Requiring landscaping, irrigation systems, lighting and a property maintenance program,

Finding 17.76.040(E)(5): The applicant's project is typical of other uses/structures permitted in the M-1 district and as such the site development standards for permitted uses in the M-1 zoning district adequately and effectively integrate the applicant's project into the surrounding neighborhood. Based upon evaluation of other Costco Wholesale locations being in good condition, no additional conditions are deemed necessary relative to maintenance.

Conclusion 17.76.040(E)(5): Not applicable.

6. Regulation of signs and their locations,

Finding 17.76.040(E)(6): The applicant's proposal for signs includes wall signage that exceeds the maximum area allowable in the M-1 zone.

Conclusion 17.76.040(E)(6): As a condition of approval, the applicant's Class "C" Variance request (File No. 15032) shall be approved prior to issuance of a building permit. If the variance is not approved, the applicant will be required to demonstrate compliance with the M-1 sign area standards prior to building permit issuance.

7. Requiring fences, berms, walls, landscaping or other devices of organic or artificial composition to eliminate or reduce the effects of noise, vibrations, odors, visual incompatibility or other undesirable effects on surrounding properties,

Finding 17.76.040(E)(7): The project proposal is for bulk retail sales. With the exception of the automobile fuel sales, an outright permitted use per CPMC 17.48.020(G), all business operations (i.e. retail sales, food preparation, tire installation) will occur within an entirely enclosed structure. Given the characteristics of the proposed use and the compatibility of the site development (See Finding 17.76.040(A)), there are no noises, odors, or other adverse impacts from the proposed structures or use that would necessitate fences, berms, walls or additional landscaping.

Conclusion 17.76.040(E)(7): Not applicable.

8. Regulation of time of operations for certain types of uses if their operations may adversely affect privacy of sleep of persons residing nearby or otherwise conflict with other community or neighborhood functions,

Finding 17.76.040(E)(8): The project site is within the M-1 industrial zone. Surrounding properties are zoned M-1 Industrial and M-2 Industrial General. Costco uses standard business hours, normally between 10am and 9pm Monday through Friday and 10am to 5pm or 6pm on weekends, and its fuel station from 6am to 10pm daily.

Conclusion 17.76.040(E)(8): Based on the proposed operating hours and the zoning of surrounding properties no further regulation of operating hours is deemed necessary.

9. Establish a time period within which the subject land use must be developed,

Finding 17.76.040(E)(9): Per Section 17.76.060 the applicant has one year to obtain a building permit and diligently pursue construction to completion. The scheduled opening date for the proposed Costco Wholesale is Fall 2016 per the Applicant's findings.

Conclusion 17.76.040(E)(9): Aside from the building permit requirement per Section 17.76.060, there are no issues with the proposed development timing.

10. Requirement of a bond or other adequate assurance within a specified period of time,

Finding 17.76.040(E)(10): Based on comments received from ODOT and the City of Medford, there are two transportation improvements that require adequate assurances, which are addressed below:

- a. Northbound I-5 Off-ramp (ODOT). Based on the evaluation of proposed development, ODOT is requiring a Cooperative Improvement Agreement with the Applicant prior to building permit issuance to fund development and construction of improvements on the Northbound I-5 Off-Ramp. Completion of this project is necessary to ODOT's operational standard for the Off-Ramp. See Finding No. 17.76.040(E)(2)(a).
- b. <u>Airport Road and Biddle Road (City of Medford)</u>. To assure timely completion of mitigation measures identified in Finding 17.76.040(E)(2)(d), assurance in the form of a written agreement including a bond/cash deposit/letter of credit in the amount of the identified Improvements will be required prior to building permit issuance.

Conclusion 17.76.040(E)(10): Completion of the required written agreements for ODOT and the City of Medford as provided in items (a) and (b) above adequately assure timely completion of required traffic improvements.

11. Such other conditions that are found to be necessary to protect the public health, safety and general welfare,

Finding 17.76.040(E)(11): Aside from the previously discussed conditions related to the development of a membership warehouse, there are no additional conditions.

Conclusion 17.76.040(E)(11): Not applicable.

12. In considering an appeal of an application for a conditional use permit for a home occupation, the planning commission shall review the criteria listed in Section 17.60.190.

Finding 17.76.040(E)(12): There is no home occupation associated with the proposed Costco Wholesale.

Conclusion 17.76.040(E)(12): Not applicable.

PART 3 – SUMMARY CONCLUSION

As conditioned, the proposed Costco Wholesale has been found to comply with the criteria set forth in Section 17.76.040 for Conditional Use Permits.



Continuous Improvement Customer Service CITY OF MEDFORD 200 SOUTH IVY STREET

PUBLIC WORKS DEPARTMENT ENGINEERING & DEVELOPMENT DIVISION CITY OF MEDFORD 200 SOUTH IVY STREET MEDFORD, OREGON 97501 www.ci,medford.or.us

TELEPHONE (541) 774-2100 FAX (541) 774-2552

December 24, 2015

Stephanie Holtey
City of Central Point
Planning Department
140 So. Third St.
Central Point, OR. 97502

Dear Ms. Holtey:

We have reviewed the Traffic Impact Analysis, dated October 2015, for the proposed Costco Conditional Use Permit and have the following comments:

- 1. Mitigation is required at the intersection of Biddle Rd and Airport Rd due to project traffic degrading the level of service on the westbound approach below acceptable standards. The increase in traffic volume will increase competition for gaps in traffic for permissive movements resulting in the acceptance of smaller gaps and increase collision potential at the intersection.
- 2. The intersection of Table Rock Rd. and Morningside St. needs to be studied to mitigate safety effects of project trips on a decrease in safety at the intersection. The proposed increase in traffic will increase rear end pressure on northbound left turning motorists and decrease available gaps in southbound traffic. This will induce them to choose smaller gaps and increase collision potential at the intersection. The 90 P.M. peak hour project trips each way north and southbound represent a 20% increase over the 450 peak hour through trips each way counted on Table Rock in 2015. The development should contribute to a project to construct a northbound left turn lane at Morningside St and Table Rock Rd.

If you have questions, please contact me at (541) 774-2121.

Sincerely,

Peter Mackprang
Associate Traffic Engineer

CC: Kim Parducci Don Burt Dan O'Connor

PLANNING COMMISSION RESOLUTION NO. 827

A RESOLUTION APPROVING A CONDITIONAL USE PERMIT FOR A COSTCO WHOLESALE ON LANDS WITHIN THE M-1, INDUSTRIAL ZONE

(FILE NO. 15022)

WHEREAS, the City, by Planning Commission Resolution No. 764 and City Council Resolution No. 1217, determined that membership warehouses are a commercial use compatible with and closely related to permitted uses in the M-1 zone and therefore authorized them as a conditional use.

WHEREAS, the applicant has submitted an application for approval a Conditional Use Permit to develop an 18.28 acre site within the M-1, Industrial zone with a 161,992 square foot Costco Wholesale membership warehouse and four (4) island fuel facility; and

WHEREAS, on January 5, 2016, the City of Central Point Planning Commission conducted a dulynoticed public hearing on the application, at which time it reviewed the Staff Report and heard testimony and comments on the application; and

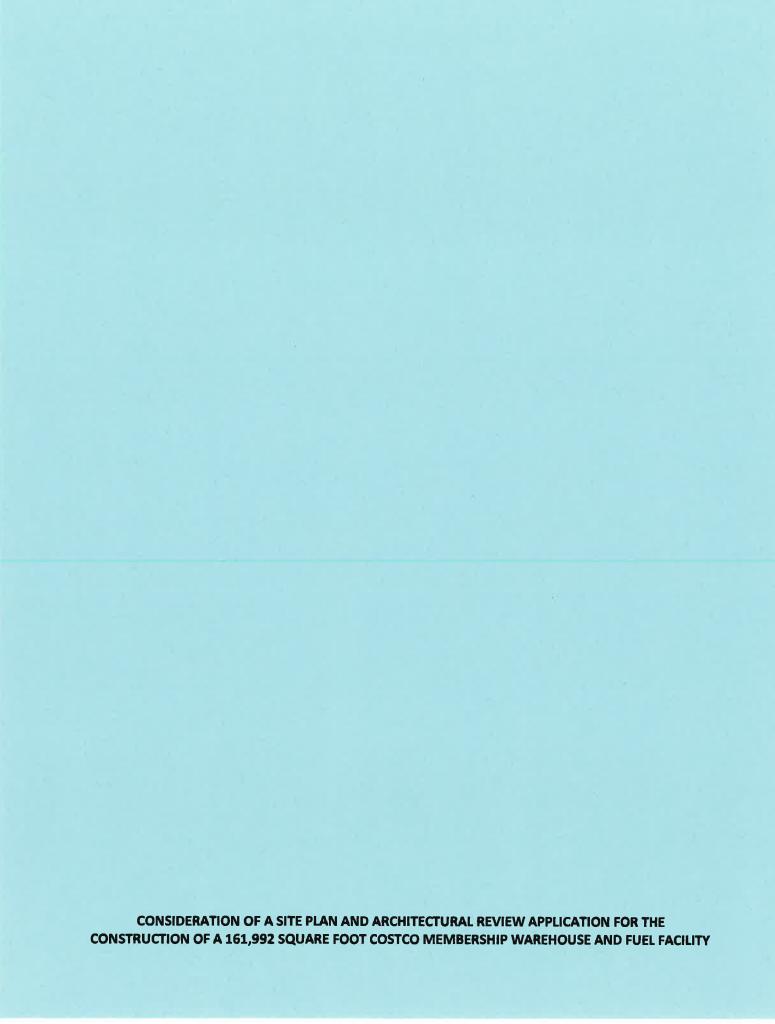
WHEREAS, the Planning Commission's consideration of the application is based on the standards and criteria applicable to Conditional Use Permits in accordance with Section 17.76 of the Central Point Municipal Code; and

WHEREAS, after duly considering the proposed use, it is the Planning Commission's determination that, subject to compliance with conditions as set forth in the Staff Report (Exhibit "A") dated January 5, 2016, the application does comply with applicable standards and criteria for approval of a conditional use permit.

NOW, THEREFORE, BE IT RESOLVED, that the City of Central Point Planning Commission, by this Resolution No. 827, does hereby approve the Conditional Use Permit application for Costco Wholesale. This approval is based on the findings and conditions of approval as set forth on Exhibit "A", the Planning Department Staff Report dated January 5, 2016 and the Findings of Fact and Conclusions of Law as set forth in Exhibit "B," including attachments incorporated herein by reference.

PASSED by the Planning Commission and signed by me in authentication of its passage this 5th day of January, 2016.

	Planning Commission Chair
ATTEST:	
City Representative	



STAFF REPORT

January 5, 2016

AGENDA ITEM (File No. 15028)

Consideration of a Site Plan and Architectural Review application for the construction of a 161,992 square foot Costco membership warehouse and fuel facility. The 18.28 acre site is located within the Federal Way Business Park in the Industrial (M-1) zoning district, and is identified on the Jackson County Assessor's map as 37S 2W 12B, Tax Lots 213, 214, 215 and 216. **Applicant**: Costco Wholesale; **Agent**: Steve Bullock, MG2.

SOURCE

Stephanie Holtey, Community Planner II

BACKGROUND

A Site Plan and Architectural Review application has been submitted for the construction of a new 161,992 square foot Costco membership warehouse and four (4) island fuel facility at the southwest corner of Hamrick and Table Rock Road (Attachment "A-3"). It is the applicant's intent to relocate its existing operation on Crater Lake Highway in north Medford to the 18.28 acre project site in Central Point with a scheduled opening date Fall 2016.

The project site consists of four (4) lots with street frontage on Federal Way, Hamrick Road, and Table Rock Road. The primary façade (North Elevation) faces Hamrick Road; however, the Tire Center entrance (East Elevation) faces Table Rock Road. Architecturally, the proposed structure is an enhanced metal warehouse that consists of horizontal and vertical metal siding and split face CMU (Attachment A-8" and "A-9"). The primary building entrance is articulated with a canopy supported by split face and ground face CMU columns (Attachment "A-10"). The building color will be earth tones (browns, beiges) with Costco Red and Blue signage.

Access, circulation and off-street parking area standards have been evaluated and meet the minimum site design standards set forth in CPMC 17.75.

ISSUES

There are three (3) issues as follows:

- 1. **Parking.** The off-street and bicycle parking plans proposed were evaluated for compliance with the non-residential parking standards. Due to unique circumstances associated with the use, the applicant is requesting parking adjustments as follows:
 - a. **Off-Street Parking.** The parking plan proposes 783 parking spaces, which exceeds the maximum 698 spaces allowed per CPMC 17.64.040. The applicant is requesting an increase to the parking allowance per Section 17.64.040(B)(2).

Resolution: A parking demand analysis demonstrates the requested increase to off-street parking is warranted (See File No. 15022).

b. **Bicycle Parking.** The applicant is requesting that bicycle parking requirements be based on the warehouse land use classification in Table 17.64.04. Application of this standard would require 16 spaces as compared to 54 spaces for retail land use classifications. The applicant's findings state that bicycle traffic to the warehouse is typically generated by employees due to the impracticality of carrying bulk goods by bicycle.

Resolution: Section 17.75.039(H)(3) provides for an exception for uses that do not generate the need for bicycle parking. Staff recommends application of the warehouse standard is warranted based upon the applicant's findings. As a condition of approval, the applicant shall provide an updated site plan showing the location of 16 covered bicycle parking spaces.

2. **Signage.** The applicant's signage proposal includes wall signs that are proportional to the scale and size of the building but that exceed the maximum sign area allowed in the M-1 zone.

Resolution: Approval of the signage proposal is subject to approval of a Class "C" Variance, which will be presented to the Planning Commission for consideration as a subsequent agenda item (File No. 15032, Agenda Item VI-C). Based on the applicant's findings, the variance request is deemed reasonable.

3. **Lot Consolidation.** The proposal occupies four (4) legal lots within the Federal Way Business Park Subdivision. It will be necessary to legally consolidate the lots to avoid conflicts between proposed structures and property lines.

Resolution: As required per the Conditional Use Permit (File No. 15022), the applicant shall legally consolidate the lots as a subdivision re-plat prior to building permit issuance.

FINDINGS

The Site Plan and Architectural Review application for the proposed Costco Membership Warehouse has been evaluated for compliance with the Site Plan and Architectural Review criteria set forth in Chapter 17.72 of the Central Point Municipal Code and found to comply, as evidenced by the Planning Department's Supplemental Findings (Attachment "H").

CONDITIONS OF APPROVAL

- 1. Prior to building permit issuance for the warehouse and fuel facility construction, the applicant shall:
 - a. Submit a revised site plan showing the location of 16 covered bicycle parking spaces. The bicycle parking spaces shall be designed in accordance with CPMC 17.75.039(H).
 - b. Submit a final landscaping plan.
 - c. Legally consolidate the four (4) lots comprising the project site per the Conditional Use Permit approval (File No. 15022).
 - d. Satisfy the conditions of approval per the Rogue Valley Sewer Services staff report dated November 16, 2015 (Attachment "G").

- 2. Prior to building permit issuance for warehouse signage, the applicant shall either:
 - a. Receive approval a Class "C" Variance granting relief from the sign area standard per CPMC 17.48.080(A)(1); or,
 - b. Submit plans demonstrating compliance with the sign area standard per CPMC 17.48.080(A)(1).

ATTACHMENTS

Attachment "A-1" - Site Comparison

Attachment "A-2" - Site Circulation

Attachment "A-3" - Concept Site Plan

Attachment "A-4" - Central Point Costco Grading & Drainage

Attachment "A-5" - Central Point Costco Utilities

Attachment "A-6" - Preliminary Landscape Plan

Attachment "A-7" – Concept Floor Plan

Attachment "A-8" – Concept Exterior Elevations

Attachment "A-9" - Concept Elevations

Attachment "A-10" - Entry View

Attachment "A-11" - NW Corner View

Attachment "A-12" - East View

Attachment "A-13" - Concept Fuel Facility Plan

Attachment "A-14" – Concept Lighting Plan

Attachment "B" - Applicant's Findings

Attachment "C" - Public Works Staff Report dated December 11, 2015

Attachment "D" - Jackson County Roads Staff Report dated December 10, 2015

Attachment "E" - Oregon Department of Transportation Staff Report dated December 14, 2015

Attachment "F" - City of Medford Planning Department Comments dated December 3, 2015

Attachment "G" - Rogue Valley Sewer Services Staff Report dated November 16, 2015

Attachment "H" - Planning Department Supplemental Findings

Attachment "I" - Resolution No. 828

ACTION

Consider the proposed Site Plan & Architectural Review application and 1) approve; 2) approve with revisions; or 3) deny the application.

RECOMMENDATION

Approve the Site Plan & Architectural Review application for the Costco Wholesale per the Staff Report dated January 5, 2016

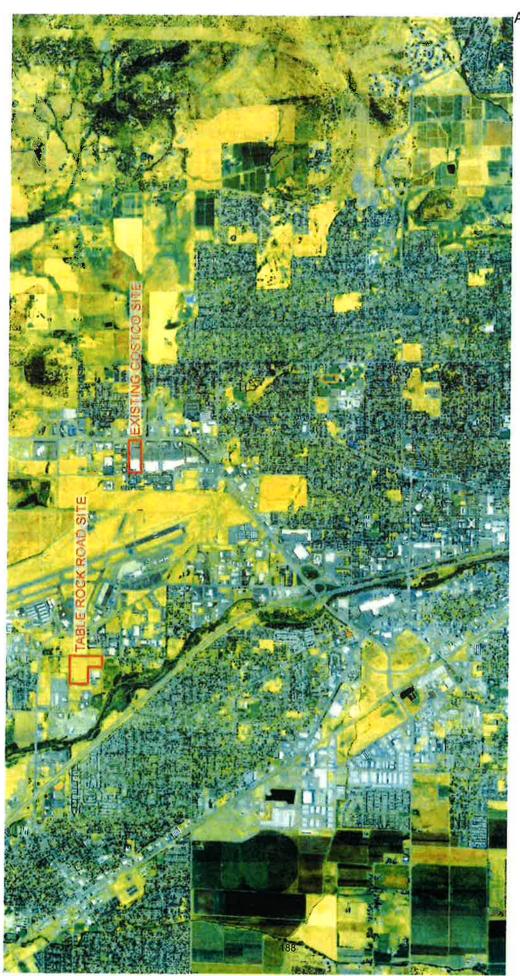




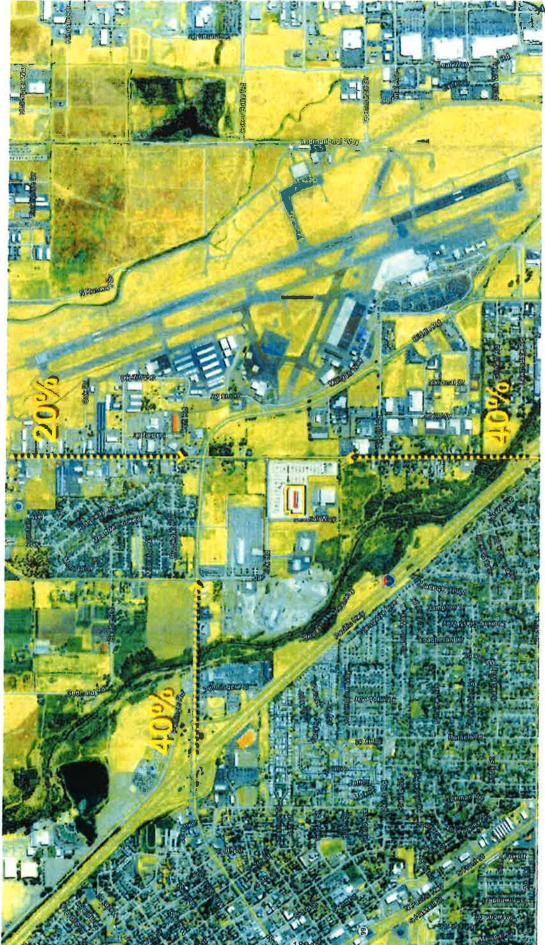


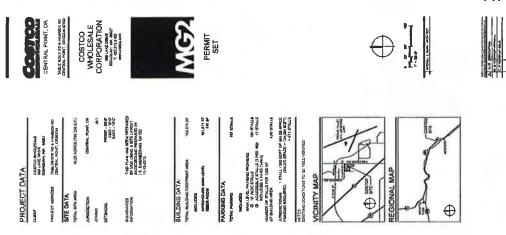


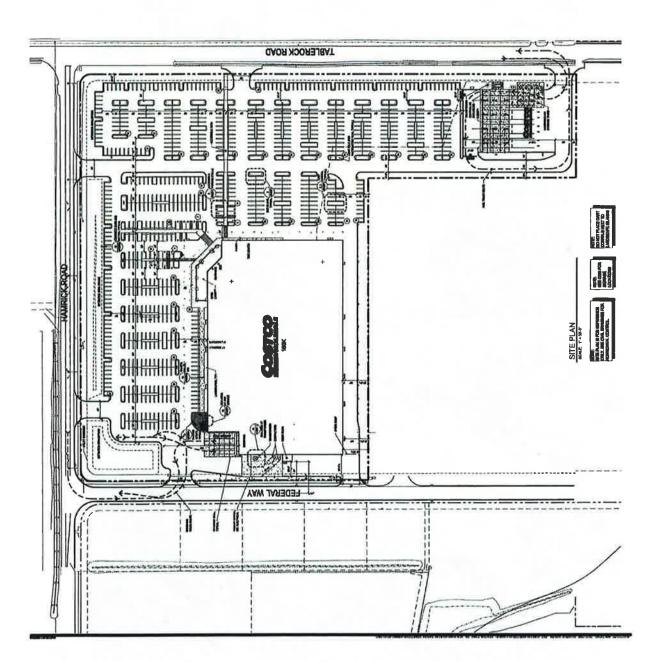


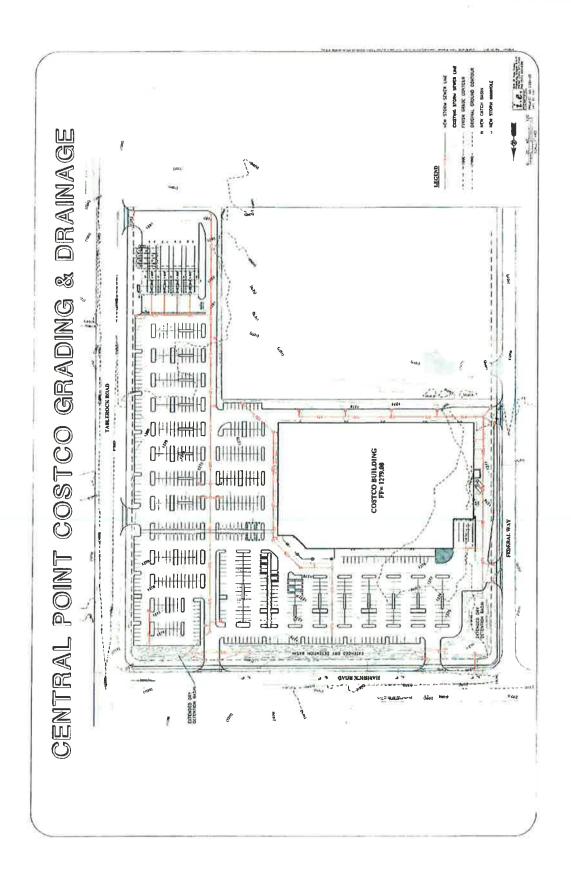


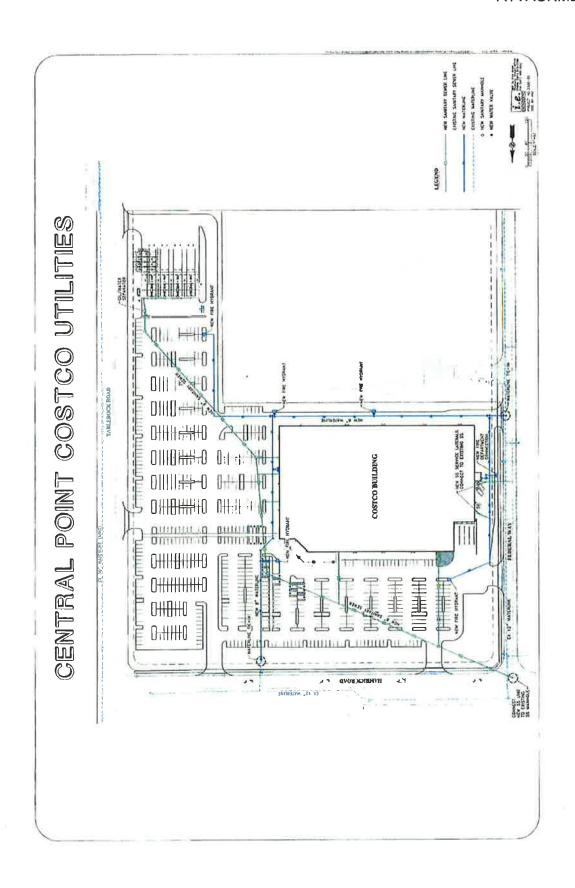












MINARY LANDSCAPE LEGEND (STRUGGE SHOWN AT 17-20)

COMMON HACKBERRY

GNKGO BILGBA 'AUTUM GOLD" AUTUMN GOLD GANKGO (MALE ONLY) GEOITSIA 7 MCRUTE SHADEMASTER SHADEMASTER POWERLOCUST ACER PLATANCOES PARKWAY PARKWAY MAPLE DECEDUQUS ACCENT TREES LAGERSTROEMIA 1 "NATCHEZ" CELTIS OCCUBBITALUS DUEPCUS RUBRA

1-1/2" CAL, 8-10 HT, WELL-38ANCHED PR

HATOACE CRUPE WRITE

WESTERN REDBUD

5-7 III FULL AND BUSHY TO BASE BEES

NCENSE CEDAP

HOSM COM

DOUGLAS 184

PRIMUS SEPRULATA KWANZAN KWAKZAN PLOMENING DICKRY 2" CAL 13-12" HT, SULL WEII-BRANCHED CONFEROUS EVERGREEN TREES CALOCEDRUS OUCURRENS CERCIS OCCIDENTALIS THULL P TASTICIATA"

PERSON SUCA MORPINSA

4—5' HT FOLL & BUSH', B&B ON CONT. SPACHES & SHOWN 24—30" H1, FULL & BUSH', B&B OR CONT. SPACHS AS SHOWN

Day - medining of the design PANET CHORESTO

PURPLE RCCKROS+

OREGON GRAPE

SKYROCKET JUNIPUR

RBUTUS UNEDO COMPACIA' Chooping 2 Dispose COTOMALASTER PARNET DISTUS PURPUREUS

MENTALLA T. SPRING BOUDUET SPRING HONORET MEURNIAM EUCHTMUS A COMPACTA MEX CRENA"A 'CONVEYA AAHONA ARXHUULI MEDIUM SHRUBS 8

COMPACT JAPANESE HOLLY COMPACT MAHDWA RUGOSA ROSE PEACE & COLDIANS RUSA RUCOSA

MIN 18-21" HT & SPREAD FULL & BUSHL BASE OF CONT., SPACING AS SHORN

ZI-24" HEIGHT AUS SPREAD, FULL AND BUSHY, CON! JADIER OR BASE

CONFACT REPORTS BLSS

JAPANESE BARBERRY COLDFLAKE SFIRAEA HERBERIS T CRIDSON PYGLY SMALL SHRUBS

3

MAN 12"-15" HT, & SPREAD, FULL & BUSHY, BASE OR CONT., SPACING AS SHOWN OFTO LUTKENS LAUREL DAVID VIBURALLY UNDER PRINCE PRUNUS L'OTTO LUYKEN ABLIFINUL DAYOR COOM N STINE

CANAMACOCITÉ A NAR FOCASION NTARGO METO COACE HEIGTOTRICION SEMPERWRONS BLUE OAT STASS ORNAMENTAL GRASSES / ACCENTS

I GAL, CONT., SPACING AS SHORN

PENNS HA ALONGORS WANTED FOUNTAIN CRASS PINK MUMLY CRASS SUTTING SCHOOLSEN POLYSTICHUM MUNITUM

SHOWD FEELS IAPHYLOS UVA-URS GROUNDCOVERS

COSTCO CENTRAL POMIT, OR

I GAL CONT. AT 18" D.C. TRANG. SHADNG START PRST ROW 12" FHOM EDGE WILD STRAWBERRY FRAGARIA CHI DENSIS PERSONAL ACCOUR MAHONIA REPENS

1 GAL CONT. AT 18" ON CENTER TRIANS SPACING SOD LAWN

SOR 5 GAL CONT. SHRUBS AT 5' O.C. SOR I GAL CONT. GRASES AT 18" C.C. SE SECONDOS ST SECTION DETENTION SWALE PLANTING MIX SEEDLAMN

WEISMANDESIGNGROUP

SEPTEMBER 25, 2015

PRELIMINARY LANDSCAPE PLAN

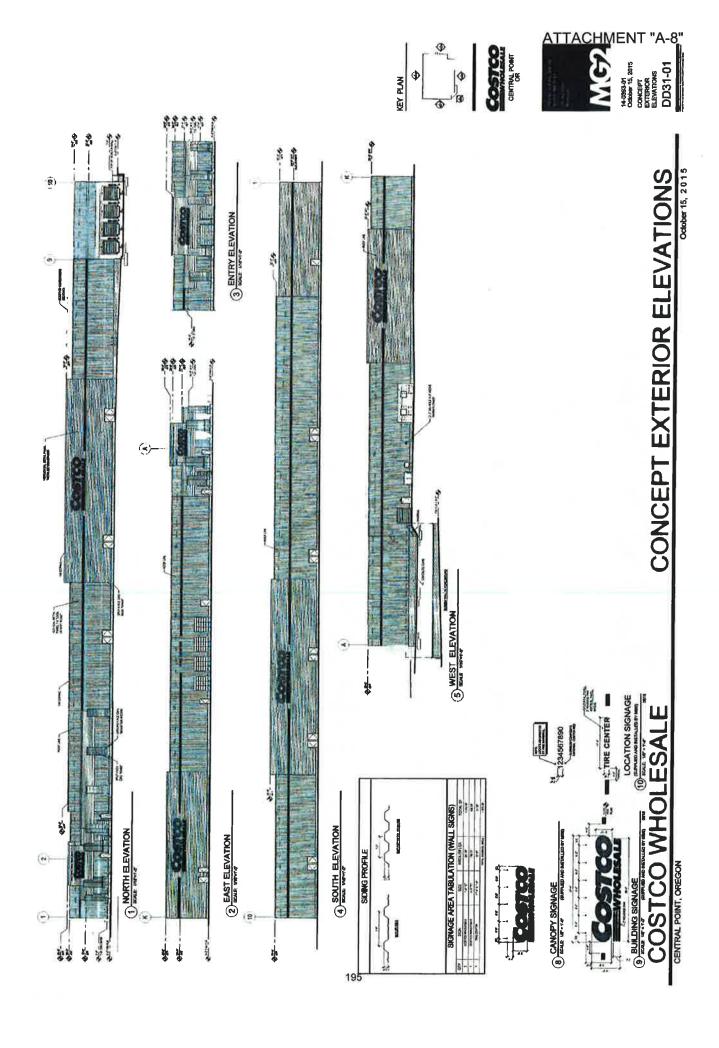
200

PRELIMI				— []—	-050
-	(See Care)	TABLEROCK ROAD ****			
CONSTRUCT O HOUSE					COS STALLS OF THE STALLS OF TH
		25 FE	ALCULATIONS ALCUL	Services Productio — 400+ CONCITE LEGITIES LANGUAGE TO SERVICE TO	CARRAGLOTIX. WAXMALU TO STALLS BETWEEN WIERDOR K.AMD WITH TREE WAXMALU TO STALLS BETWEEN WIERDOR FOR LANGS-LEPHO TOTAL MITHOR THEES PROJECTO (T) THE PETS 4 STALLS) = 166 TOTAL MITHOR THEES PROJECTO (T) THE PETS 4 STALLS) = 166 TOTAL WITHOUT THEES PROJECTO (T) THE PETS 4 STALLS) = 167 TOTAL WITHOUT THEES PROJECTO (T) THE PETS 4 STALLS) = 167 TOTAL WITHOUT THEES PROJECTO (T) THE PETS 4 STALLS) = 167 TOTAL WITHOUT THEES PROJECTO (T) THE PETS 4 STALLS) = 167 TOTAL WITHOUT THE PETS 4 STALLS THE PETS 4 STALLS (T) THE PE
* * * * * * * * * * * * * * * * * * * *		FEDERAL WAY	PLANTING NOTES 1.11, NRV LANGEN AREA ARE TO BE WITHOUT WITH ALL NRV LANGEN AREA AREA TO BE WITHOUT WITH A NATIONAL AND A NATI		

COSTCO WHOLESALE

METAL 4" PROFIBATIO SIR DRING FOR ALL MITTERS LANDSCARE SLAND.

CENTRAL POINT, OREGON









NORTH ELEVATION SCALE: 1/16" = 1'-0"



EAST ELEVATION SCALE: 1/16" = 1'-0"



ENTRY ELEVATION SCALE: 1/16" = 1'-0"



SOUTH ELEVATION SCALE: 1/16" = 1'-0"



WEST ELEVATION SCALE: 1/16" = 1'-0"





CONCEPT ELEVATIONS





ENTRY VIEW

AUGUST 24, 2015
14-0393-01
CENTRAL POINT, OREGON



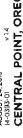






NW. CORNER VIEW

AUGUST 24, 2015
14-0393-01
CENTRAL POINT, OREGON

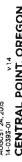








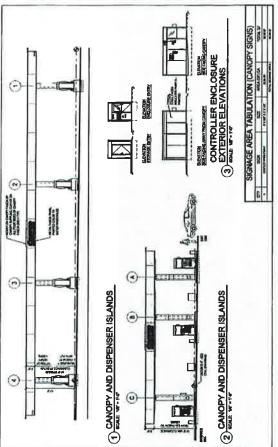










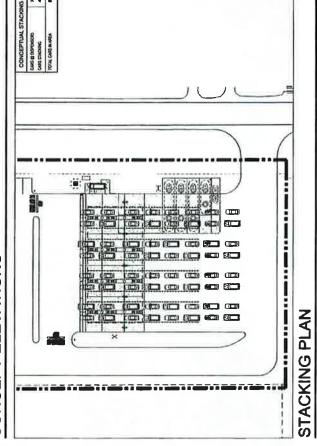


OHHHHHHIO

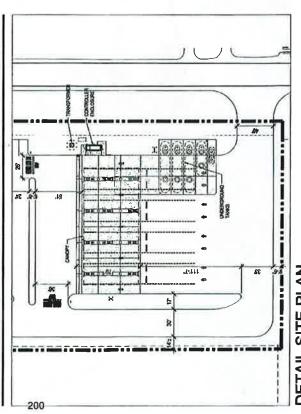
OHI**OHHI**IHO CHIHHHIII 01111:10110 0111111110

Ollthiito

CONCEPT ELEVATIONS



TRUCK ROUTE FUEL. CONCEPT

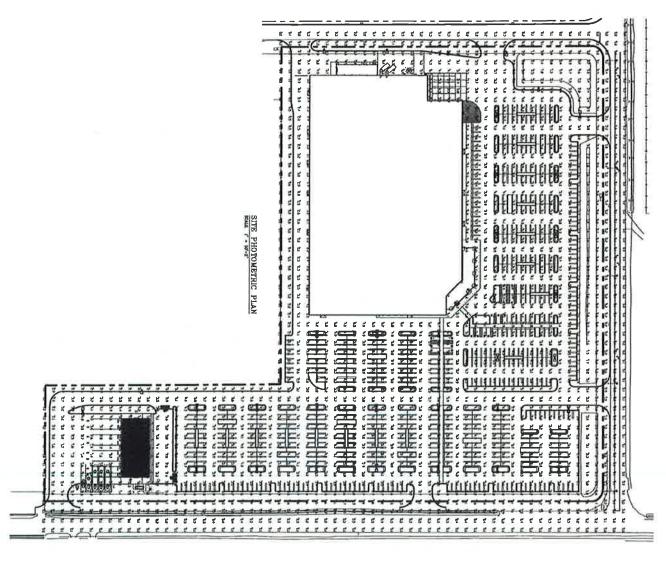


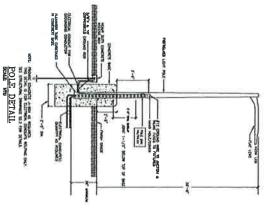
DETAIL SITE PLAN

COSTCO WHOLESALE

SEPTEMBER 16, 2015

CONCEPT FUEL FACILITY PLAN









MEMO Page 1 of 15

TO Central Point Land Use Permits
Review Staff
FROM Steve Bullock, MG2 and Costco
CC

PROJECT New Costco Warehouse
Central Point
Table Rock & Hamrick
PROJECT NUMBER 14-0393-01

Land Use Applications for a new Costco Warehouse in Central Point OR

Project Description

Proposal: Costco is considering buying some property on the southwest corner of the Table Rock Rd and Hamrick Rd intersection that is 18.28 acres in size. Their desire and intent would be to build a new Costco Warehouse (with a footprint of approximately 161,992 sq. ft.) and a Fuel Facility (4 islands) together with all required parking and landscaping. In this case, the parking area will accommodate 783 parking stalls. Currently the subject property is undeveloped industrial land. Surrounding the property is a mix of developed and undeveloped industrial land with distribution and manufacturing facilities. T

Costco Building & Site Design: With over 30 years of building membership warehouses Costco has 686 warehouses worldwide. This experience has allowed Costco to develop a carefully thought out program for constructing new facilities. This program includes: the layout of the warehouse floor plan that most effectively allows for the stocking and merchandising of products; the use of materials that are sustainable, long-lasting and energy efficient; the layout of the site in a manner that provides for their parking and circulation needs; the improvements to adjacent public infrastructure to minimize and mitigate for any impacts they may create; the development of an attractive, functional facility that the entire community views as an asset. The final design solution for each of Costco's 600+ sites follows this program resulting in a unique solution that is tailored to the individual site, its environment and the community it is located in.

Costco Operations: Generally Costco's warehouses are open to the public from 10am-9pm. On the weekends they close a little earlier (5 or 6 pm). To avoid conflicts between their members and stocking the warehouse, deliveries are typically received between 3am and Noon. This minimizes potential conflicts between the large delivery trucks and Costco's members.

The gas station is typically open from 6am – 10pm. Fuel deliveries can happen multiple time per day depending upon the demand.

425.463.2000 425.463.2002 1110 112TH AVENUE NE / SUITE 500 | BELLEVUE, WA / 98004

PROJECT New Costco Warehouse Central Point

PROJECT NUMBER 14-0393-01

MEMO Page 2 of 15

DEVELOPMENT CODE COMPLIANCE

The following sections of this narrative identify the applicable sections of the Central Point code and provide a response and drawing reference that describes how our proposed site and building design complies with the City's Development Codes.

Chapter 17.48, M1, INDUSTRIAL DISTRICT

17.48.020 Permitted uses.

The following uses and their accessory uses are permitted in an M1 district, subject to the limitations imposed in Section 17.48.030:

- A. Warehousing;
- B. Storage and wholesaling of prepared or packaged merchandise;
- W. Other uses not listed in this or any other district, if the planning commission finds them to be similar to those listed above and compatible with other permitted uses and with the intent of the M1 district.

Response: Costco is a Wholesale Membership Club which has as their primary focus the sales of prepared or packaged merchandise to their members. City staff has further made us aware of a decision made by the City Council related to Wholesale Membership Clubs in the M-1 zone which allows them subject to a conditional use permit. This decision was appealed and confirmed in the Oregon Courts.

17.48.030 Standards for permitted uses.

All uses within the M1 district shall be subject to the following conditions and standards:

A. All raw materials, finished products, machinery and equipment, with the exception of automobiles and trucks normally used in the business, shall be stored within an entirely enclosed building or sight obscuring, non-pierced fence not less than six feet in height;

Response: With the exception of the Fuel Facility, Costco's normal operation happens entirely within their warehouse.

B. The facility shall be in compliance with all applicable state and federal environmental, health and safety regulations;

Response: Costco will obtain all required state and federal permits as well as comply with all health and safety regulations.

C. In any M1 district directly across a street from any residential (R) district, all outdoor parking, loading or display areas shall be set back at least ten feet from the public rightof-way and this setback area shall be planted with trees appropriate for the neighborhood, ground cover or other landscaping materials that are consistent with the general existing character of the area, or that will establish a landscape theme for other developments to follow. This setback and landscaping requirement shall also apply to M1 lots fronting on any street designated in the comprehensive plan as a major arterial.

PROJECT New Costco Warehouse Central Point

PROJECT NUMBER 14-0393-01

MEMO Page 3 of 15

Response: This section does not apply in that there are no residentially zoned properties adjacent to or across the street from the Costco property.

17.48.040 Conditional Uses.

The following uses and their accessory uses may be permitted in an M1 district when authorized in accordance with Chapter 17.76:

A. Business offices and commercial uses that are compatible with and closely related in their nature of business to permitted uses in the M1 district, or that would be established to serve primarily the uses, employees, or customers of the M1 district;

Response: As mentioned above, the City has determined that a Wholesale Membership Club requires a Conditional Use Permit to operate in an M-1 zone. The last section of this narrative will go over in detail how Costco's proposed project complies with the Conditional Use Permit approval criteria.

17.48.050 Height Regulations.

Maximum height of any building or structure in an M1 district shall be sixty feet.

Response: Costco's warehouse is roughly 38' from finished grade to the highest point on the building, this includes the parapet walls extending above the roof around the perimeter of the building. Light poles in the parking lot are roughly the same height, 35' tall pole on a 2.5' concrete base. See the included elevations and site lighting plan included in the drawing package.

17.48.060 Site Area Requirements.

There are no minimum site area requirements in the M1 district, except as necessary to provide for required parking, loading and yard spaces.

Response: Costco is proposing to build a warehouse having roughly 163,000 sq. ft. For a warehouse of this size Costco has discovered through their experience from building over 600 warehouses that 800 parking stalls (+/-) are needed to effectively handle the volume of members that use their facilities. The size of the property under consideration, about 18.28 acres, is large enough to accommodate these improvements.

17.48.070 Yard Requirements.

The following measurements indicate minimum yard requirements in an M1 district:

- A. Front Yard. The front yard shall be a minimum of twenty feet. (Also see Section 17.48.030(C)).
- Side Yard. The side yard shall be a minimum of ten feet except when the side lot line is abutting a lot in any residential (R) district and then the side yard shall be a minimum of twenty feet and shall be increased by one-half foot for each foot by which the building height exceeds twenty feet.

PROJECT New Costco Warehouse Central Point

PROJECT NUMBER 14-0393-01

MEMO Page 4 of 15

C. Rear Yard. The rear yard shall be a minimum of ten feet except when the rear lot line is abutting a lot in any residential (R) district and then the rear yard shall be a minimum of twenty feet and shall be increased by one-half foot for each foot by which the building height exceeds twenty feet.

D. Lot Coverage. No requirements.

Response: Costco's proposed site plan (see the drawing package) shows that the site fronts on three roads (Federal Way to the west, Hamrick Rd to the north and Table Rock Rd to the east). Of the three, only Table Rock Rd is a Major Arterial. Our assumption is that all three frontages will require 20' Front Yard Setback. Our internal lot lines, to the south of the warehouse and west of the fuel facility will be side or rear setbacks that are required to be 10'. The warehouse is at least 60' from all property lines and the fuel facility and its ancillary structure are at least 25' from all property lines. The proposed site plan complies with the City's required yards.

17.48.080 Signs.

Signs within the M1 district shall be limited to the following:

- 1. Permitted signs shall contain not more than one hundred square feet of surface area on any one side, or an aggregate of two hundred square feet of surface on all sides which can be utilized for display purposes;
- 2. Lighted signs shall be indirectly illuminated and non-flashing;
- Identification signs shall be permitted within any required setback areas provided it does not extend into or overhang any parking area, sidewalk or other public right-of-
- 4. Signs located within vision clearance areas at intersections of streets shall conform to Section 17.60.110.

Response: Costco is proposing wall mounted signage that is proportional to the size of their building. This results in signage that is larger than the standard identified above. Further discussion of this and rational for approval is included in the Conditional Use portion of this narrative.

All sign illumination will be indirectly illuminated and non-flashing.

No Freestanding Signage is proposed so no sight or other obstructions will be created.

C. Signs in the M1 district shall be permitted and designed according to provisions of Chapter 15.24.

Response: Costco will fully comply with all the requirements of Central Point Municipal Code Chapter 15.24.

PROJECT New Costco Warehouse Central Point

PROJECT NUMBER 14-0393-01



Chapter 17.64, OFF-STREET PARKING AND LOADING

17,64,030 Off-Street Loading.

A. In all districts for each use for which a building is to be erected or structurally altered to the extent of increasing the floor area to equal the minimum floor area required to provide loading space and which will require the receipt or distribution of materials or merchandise by truck or similar vehicle, there shall be provided off-street loading space in accordance with the standards set forth in Table 17.64.01, Off-street Loading Requirements.

TABLE 17.64.01 OFFSTREET LOADING REQUIREMENTS

Use Categories	Off-Street Loading Berth Requirement (fractions rounded up to the closest whole number)			
RETAIL, RESTAURANTS	ETAIL, RESTAURANTS, HOSPITALS, AND OTHER GOODS HANDLING			
Sq. Ft. of Floor Area	No. of Loading Berths Required			

- B. A loading berth shall not be less than ten feet wide, thirty-five feet long and have a height clearance of twelve feet. Where the vehicles generally used for loading and unloading exceed these dimensions, the required length of these berths shall be increased.
- C. If loading space has been provided in connection with an existing use or is added to an existing use, the loading space shall not be eliminated if elimination would result in less space than is required to adequately meet the needs of the use.
- D. Off-street parking areas used to fulfill the requirements of this title shall not be counted as required loading spaces and shall not be used for loading and unloading operations, except during periods of the day when not required to meet parking needs.
- E. In no case shall any portion of a street or alley be counted as a part of the required parking or loading space, and such spaces shall be designed and located as to avoid undue interference with the public use of streets or alleys.

Response: Costco provides for all their loading needs on site and will not have any of their deliveries or delivery trucks impact the public use of streets or alleys during their loading or unloading of product. In addition to the 4 dedicated elevated truck docks there are 3 other on-site loading areas for tires and other smaller more local deliveries that can't use the elevated truck dock. This exceeds the 4 loading berths required in Table 17.64.01 (excerpt above).

17.64.040 Off-Street Parking Requirements

All uses shall comply with the number of off-street parking requirements identified in... Table 17.64.02B, Non-Residential Off-Street Parking Requirements. For non-residential uses the off-street parking requirements are presented in terms of both minimum and maximum offstreet parking required. The number of off-street parking spaces in Table 17.64.02B, Non-Residential Off-Street Parking, may be reduced in accordance with subsection B of this section, Adjustments to Off-Street Vehicle Parking.

PROJECT New Costco Warehouse Central Point

PROJECT NUMBER 14-0393-01

MEMO Page 6 of 15

TABLE 17.64.02B NON-RESIDENTIAL OFF-STREET PARKING REQUIREMENTS

Use Categories	Minimum and Maximum Vehicle Parking Requirement (fractions rounded down to the closest whole number)	
GENERAL COMMERCIAL		
Retail Stores, Personal Services	space per each 200 square feet of net floor area (excluding storage and other non-sales or non-display areas).	

- Calculation of Required Off-street Parking, off-street parking facility requirements set forth in ... Table 17.64.02B, Nonresidential Off-street Parking Requirements, shall be applied as follows:
 - 1. Where the application of the schedule results in a fractional requirement it shall be rounded down to the lowest whole number.
 - For purposes of this chapter, gross floor area shall not include enclosed or covered areas used for off-street parking or loading, or bicycle facilities.
 - 3. Where uses or activities subject to differing requirements are located in the same structure or on the same site, or are intended to be served by a common facility, the total parking requirement shall be the sum of the requirements for each use or activity computed separately, except as adjusted through the site plan and architectural review process under the provisions of subsection (B) of this section. The community development director, when issuing a permit(s) for multiple uses on a site, may restrict the hours of operation or place other conditions on the multiple uses so that parking needs do not overlap and may then modify the total parking requirement to be based on the most intense combination of uses at any one time.
 - Where requirements are established on the basis of seats or person capacity, the building regulations provisions applicable at the time of determination shall be used to define capacity.
 - 5. Where residential use is conducted together with or accessory to other permitted uses, applicable residential requirements shall apply in addition to other nonresidential requirements.
 - 6. The parking requirements outlined in ... Table 17.64.02B, Nonresidential Off-street Parking Requirements, include parking for handicapped persons shall be provided pursuant to the requirements of subsection C of this section, Accessible Parking Requirements.

Response: Per table 17.64.02B Costco will be required to provide not less than 670 parking stalls and not more than 670 parking stalls (134,064 sf / 200 sf/stall = 670 parking stalls). As mentioned earlier in this narrative, through Costco's extensive experience building these warehouses around the United States the proposed warehouse will need approximately 800 parking stalls to accommodate the demand. This request will be addressed in more detail both in our Parking Study and the Conditional Use Permit Discussion.

- B. Adjustments to Non-residential Off-street Vehicle Parking. The off-street parking requirements in Table 17.64.02B, Nonresidential Off-street Parking Requirements, may be reduced, or increased in any commercial (C) or industrial (M) district as follows:
 - Reductions. The maximum off-street parking requirements may be reduced by no more than twenty percent.
 - Increases. The off-street parking requirements may be increased based on a parking demand analysis prepared by the applicant as part of the site plan and architectural review process. The parking demand analysis shall demonstrate and document justification for the proposed increase.

Response: See our submitted Parking Demand Analysis which describes Costco's need for around 800 parking stalls.

C. Accessible Parking Requirements. Where parking is provided accessory to a building, accessible parking shall be provided, constructed, striped, signed and maintained as required by ORS 447.233, and Section 1104 of the latest Oregon Structural Specialty Code as set forth in this section.

Response: Costco will meet or exceed Central Points required Accessible Parking Requirements.

 Bicycle Parking. Bicycle parking shall be provided in accordance with Table 17.64.04, Bicycle Parking Requirements.

TABLE 17.64.04 BICYCLE PARKING REQUIREMENTS

Land Use	Minimum Requirement	Minimum Covered		
Commercial				
Retail Sales	0.33 spaces per 1,000 sq. ft.	50%		
Warehouse	0.1 space/1,000 sq. ft.	100%		

Response: The .33 spaces/1,000 sq. ft. results in 57 bike spaces. Due to the nature of their business, Costco has found that bicycle traffic to their warehouses is rather limited. Some employees commute by bicycle, but very few customers do. For that reason, they believe the Central Point's Bicycle Parking for Warehouse standard, which results in 16 bike stalls, the most appropriate for a Costco warehouse. We will address this in the CUP criteria as well if it is determined that this is another deviation from a standard.

Chapter 17.72, SITE PLAN AND ARCHITECTURAL REVIEW

17.72.020 Applicability.

No permit required under Title 15, Buildings and Construction, shall be issued for a major or minor project, as defined in this section, unless an application for site plan and architectural review is submitted and approved, or approved with conditions, as set forth in this chapter.

- B. Major Projects. The following are "major projects" for the purposes of the site plan and architectural review process and are subject to Type 2 procedural requirements as set forth in Chapter 17.05, Applications and Types of Review Procedures:
 - 1. New construction, including private and public projects, that:

DATE 11.3.15
PROJECT New Cos

PROJECT New Costco Warehouse Central Point

PROJECT NUMBER 14-0393-01



- a. Includes a new building or building addition of five thousand square feet or more;
- b. Includes the construction of a parking lot of ten or more parking spaces; or
- Requires one or more variances or conditional use permits and, in the judgment
 of the director, will have a significant effect upon the aesthetic character of the
 city or the surrounding area;

Response: The proposed Costco warehouse will be a Major Project and will go through the Site Plan and Architectural Review process.

17.72.040 Site plan and architectural standards.

In approving, conditionally approving, or denying any site plan and architectural review application, the approving authority shall base its decision on compliance with the following standards:

- A. Applicable site plan, landscaping, and architectural design standards as set forth in Chapter 17.75, Design and Development Standards;
- B. City of Central Point Department of Public Works Department Standard Specifications and Uniform Standard Details for Public Works Construction;
- C. Accessibility and sufficiency of firefighting facilities to such a standard as to provide for the reasonable safety of life, limb and property, including, but not limited to, suitable gates, access roads and fire lanes so that all buildings on the premises are accessible to fire apparatus.

Response: Costco will demonstrate compliance with each of these criteria through the drawing package submitted with this application and subsequent construction permit applications.

Chapter 17.75, Design and Development Standards

17.75.031 General connectivity, circulation and access standards.

A. Streets and Utilities. The public street and utility standards set forth in the City of Central Point Department of Public Works Standard Specifications and Uniform Standard Details for Public Works Construction shall apply to all development within the city.

Response: Costco will comply with all the public street and utility standards required by the City of Central Point.

- B. Block Standards. The following block standards apply to all development:
 - Block perimeters shall not exceed two thousand feet measured along the public street right-of-way, or outside edges of access ways, or other acknowledged block boundary as described in subsection (B)(4) of this section.
 - Block lengths shall not exceed six hundred feet between through streets or pedestrian access ways, measured along street right-of-way, or the pedestrian access way. Block dimensions are measured from right-of-way to right-of-way along street frontages. A block's perimeter is the sum of all sides.
 - Access ways or private/retail streets may be used to meet the block length or perimeter standards of this section, provided they are designed in accordance with this section and are open to the public at all times.

- The standards for block perimeters and lengths may be modified to the minimum extent necessary based on written findings that compliance with the standards are not reasonably practicable or appropriate due to:
 - Topographic constraints:
 - Existing development patterns on abutting property which preclude the logical connection of streets or access ways;
 - Major public facilities abutting the property such as railroads and freeways:
 - Traffic safety concerns;
 - Functional and operational needs to create large commercial building(s); or
 - Protection of significant natural resources.

Response: The surrounding existing roads together with Costco's internal drives comply with these requirements.

C. Driveway and Property Access Standards. Vehicular access to properties shall be located and constructed in accordance with the standards set forth in the City of Central Point Department of Public Works Standard Specifications and Uniform Standard Details for Public Works Construction, Section 320.10.30, Driveway and Property Access.

Response: The submitted site plan demonstrates compliance with this requirement.

- D. Pedestrian Circulation. Attractive access routes for pedestrian travel shall be provided through the public sidewalk system, and where necessary supplemented through the use of pedestrian access ways as required to accomplish the following:
 - Reducing distances between destinations or activity areas such as public sidewalks and building entrances:
 - Bridging across barriers and obstacles such as fragmented pathway systems, wide streets, heavy vehicular traffic, and changes in level by connecting pedestrian pathways with clearly marked crossings and inviting sidewalk design;
 - Integrating signage and lighting system which offers interest and safety for pedestrians:
 - Connecting parking areas and destinations with retail streets or pedestrian access ways identified through use of distinctive paving materials, pavement striping, grade separation, or landscaping.

Response: The submitted site plan and landscape plan demonstrate compliance with this requirement.

17.75.039 Off-Street Parking Design And Development Standards.

- Connectivity. Parking lots for new development shall be designed to provide vehicular and pedestrian connections to adjacent sites unless as a result of any of the following such connections are not possible:
 - Topographic constraints;
 - Existing development patterns on abutting property which preclude a logical connection:

PROJECT Number 14-0393-01 DATE 11.3.15 New Costco Warehouse Central Point 14-0393-01

MEMO Page 10 of 15

- 3. Traffic safety concerns; or
- 4. Protection of significant natural resources.

Response: This requirement does not apply to Costco's development in that roads ring the site on three sides and there is no need to provide connections to adjacent sites.

B. Parking Stall Minimum Dimensions. Standard parking spaces shall conform to the following standards and the dimensions in Figure 17.75.03 and Table 17.75.02.

Response: As demonstrated in the Site Plan, Costco's parking lot compiles with these standards.

C. Access. There shall be adequate provision for ingress and egress to all parking spaces.

Response: There is adequate provision for ingress and egress to all parking spaces and areas.

D. Driveways. Driveway width shall be measured at the driveway's narrowest point, including the curb cut. The design and construction of driveways shall be as set forth in the Standard Specifications and Public Works Department Standards and Specifications.

Response: Costco will comply or exceed the City's minimum standards.

- E. Improvement of Parking Spaces.
 - 1. When a concrete curb is used as a wheel stop, it may be placed within the parking space up to two feet from the front of a space. In such cases, the area between the wheel stop and landscaping need not be paved, provided it is maintained with appropriate ground cover, or walkway. In no event shall the placement of wheel stops reduce the minimum landscape or walkway width requirements.
 - 2. All areas utilized for off-street parking, access and maneuvering of vehicles shall be paved and striped to the standards of the city of Central Point for all-weather use and shall be adequately drained, including prevention of the flow of runoff water across sidewalks or other pedestrian areas. Required parking areas shall be designed with painted striping or other approved method of delineating the individual spaces, with the exception of lots containing single-family or two-family dwellings.
 - Parking spaces for uses other than one and two family dwellings shall be designed so that no backing movements or other maneuvering within a street or other public right-of-way shall be necessary.
 - Any lighting used to illuminate off-street parking or loading areas shall be so arranged as to reflect the light away from adjacent streets or properties.
 - 5. Service drives shall have a minimum vision clearance area formed by the intersection of the driveway centerline, the street right-of-way line, and a straight line joining the lines through points twenty feet from their intersection.
 - 6. Parking spaces located along the outer boundaries of a parking lot shall be contained by a curb or a bumper rail so placed to prevent a motor vehicle from extending over an adjacent property line, a public street, public sidewalk, or a required landscaping area.
 - Parking, loading, or vehicle maneuvering areas shall not be located within the front yard area or side yard area of a corner lot abutting a street in any residential (R)

PROJECT New Costco Warehouse Central Point

PROJECT NUMBER 14-0393-01

MEMO Page 11 of 15

district, nor within any portion of a street setback area that is required to be landscaped in any commercial (C) or industrial (M) district.

Response: Costco's site plan, site lighting plan and landscape plan all demonstrate compliance with these standards.

F. Limitation on Use of Parking Areas. Required parking areas shall be used exclusively for vehicle parking in conjunction with a permitted use and shall not be reduced or encroached upon in any manner. The parking facilities shall be so designed and maintained as not to constitute a nuisance at any time, and shall be used in such a manner that no hazard to persons or property, or unreasonable impediment to traffic, will result.

Response: Costco agrees with and will comply with this requirement.

- G. Parking/Loading Facility Landscaping and Screening. Parking lot landscaping shall be used to reinforce pedestrian and vehicular circulation, including parking lot entries, pedestrian access ways, and parking aisles. To achieve this objective the following minimum standards shall apply; However, additional landscaping may be recommended during the site plan and architectural review process (Chapter 17.72). All parking lots shall be landscaped in accordance with the following standards:
 - Perimeter and Street Frontage Landscaping Requirements. The perimeter and street frontage for all parking facilities shall be landscaped according to the standards set forth in Table 17.75.03.

Response: Costco's site plan and landscape plan demonstrate compliance with this requirement.

- 2. Terminal and Interior Islands. For parking lots in excess of ten spaces all rows of parking spaces must provide terminal a minimum of six feet in width to protect parked vehicles, provide visibility, confine traffic to aisles and driveways, and provide a minimum of five feet of space for landscaping. In addition, when ten or more vehicles would be parked side-by-side in an abutting configuration, interior landscaped islands a minimum of eight feet wide must be located within the parking row. For parking lots greater than fifty parking spaces, the location of interior landscape island shall be allowed to be consolidated for planting of large stands of trees to break up the scale of the parking lot. The number of trees required in the interior landscape area shall be dependent upon the location of the parking lot in relation to the building and public right-of-way:
 - a. Where the parking lot is located between the building and the public right-of-way, one tree for every four spaces;
 - Where the parking lot is located to the side of the building and partially abuts the public right-of-way, one tree for every six spaces;
 - c. Where the parking lot is located behind the building and is not visible from the public right-of-way, one tree for every eight spaces.

Response: The provided landscape plan demonstrates compliance with these parking lot landscape design criteria.

Bio-swales. The use of bioswales within parking lots is encouraged and may be located within landscape areas subject to site plan and architectural review. The tree PROJECT Number 14-0393-01

DATE 11.3.15

New Costco Warehouse Central Point 14-0393-01

MEMO Page 12 of 15

planting standards may be reduced in areas dedicated to bioswales subject to site plan and architectural review.

Response: As shown in our site plan, landscape plan and civil plans large bio-swales are proposed along the northern edge of the site. Costco is not proposing to reduce the tree planting standards in these areas.

- H. Bicycle Parking. The amount of bicycle parking shall be provided in accordance with Section 17.64.040 and constructed in accordance with the following standards:
 - Location of Bicycle Parking. Required bicycle parking facilities shall be located
 onsite in well lighted, secure locations within fifty feet of well used entrances and not
 farther from the entrance than the closest automobile parking space. Bicycle parking
 shall have direct access to both the public right-of-way and to a main entrance of the
 principal use. Bicycle parking may also be provided inside a building in suitable,
 secure and accessible locations. Bicycle parking for multiple uses (such as in a
 commercial center) may be clustered in one or several locations.
 - Bicycle Parking Design Standards. All bicycle parking and maneuvering areas shall be constructed to the following minimum design standards:
 - a. Surfacing. Outdoor bicycle parking facilities shall be surfaced in the same manner as a motor vehicle parking area or with a minimum of a three inch thickness of hard surfacing (i.e., asphalt, concrete, pavers or similar material).
 This surface will be maintained in a smooth, durable and well drained condition.
 - Parking Space Dimension Standard. Bicycle parking spaces shall be at least six feet long and two feet wide with minimum overhead clearance of seven feet.
 - c. Lighting. Lighting shall be provided in a bicycle parking area so that all facilities are thoroughly illuminated and visible from adjacent sidewalks or motor vehicle parking lots during all hours of use.
 - d. Aisles. A five-foot aisle for bicycle maneuvering shall be provided and maintained beside or between each row of bicycle parking.
 - Signs. Where bicycle parking facilities are not directly visible from the public rights-of-way, entry and directional signs shall be provided to direct bicycles from the public right-of-ways to the bicycle parking facility.

Response: Costco will comply with Central Point's Bicycle standards.

17.75.043 Industrial Building Design Standards.

Reserved. (Ord. 1946 (part), 2011).

Response: Although there are no specific Design Standards in the Industrial zones of Central Point, Costco believes the plans, elevations and perspective drawings submitted demonstrate Costco's commitment to developing a high quality building and site.

DATE 11.3.15
PROJECT New Cos

New Costco Warehouse Central Point

PROJECT NUMBER 14-0393-01

MEMO Page 13 of 15

17.76.040 Conditional Use Permit - Findings and Conditions.

The planning commission in granting a conditional use permit shall find as follows:

A. That the site for the proposed use is adequate in size and shape to accommodate the use and to meet all other development and lot requirements of the subject zoning district and all other provisions of this code;

Response: Costco believes they have demonstrated through the submitted plans and drawings that the proposed 18.25 acres site is adequate in size and shape to accommodate the proposed use and meet all the City's required standards.

B. That the site has adequate access to a public street or highway and that the street or highway is adequate in size and condition to effectively accommodate the traffic that is expected to be generated by the proposed use;

Response: The submitted Traffic Report indicates that adequate access to public streets will be provided. And the existing streets are or soon will be of adequate size and condition to effectively accommodate the traffic that is projected to be generated by Costco.

C. That the proposed use will have no significant adverse effect on abutting property or the permitted use thereof. In making this determination, the commission shall consider the proposed location of improvements on the site; Vehicular ingress, egress and internal circulation; setbacks; Height of buildings and structures; Walls and fences; landscaping; Outdoor lighting; And signs;

Response: The submitted plans, elevations, drawings and reports document that there will be no significant adverse effect on abutting properties.

D. That the establishment, maintenance or operation of the use applied for will comply with local, state and federal health and safety regulations and therefore will not be detrimental to the health, safety or general welfare of persons residing or working in the surrounding neighborhoods and will not be detrimental or injurious to the property and improvements in the neighborhood or to the general welfare of the community based on the review of those factors listed in subsection C of this section;

Response: Costco will with both the construction and operation of their proposed warehouse comply with all local, state and federal health and safety regulations. Therefore, the proposed development will not be detrimental to the health safety or general welfare of persons residing or working in the surrounding neighborhoods.

- E. That any conditions required for approval of the permit are deemed necessary to protect the public health, safety and general welfare and may include:
 - Adjustments to lot size or yard areas as needed to best accommodate the proposed use; provided the lots or yard areas conform to the stated minimum dimensions for the subject zoning district, unless a variance is also granted as provided for in Chapter 17.13,

PROJECT NUMBER 11.3.15

PROJECT NUMBER 14-0393-01

MEMO Page 14 of 15

Response: Costco does not believe any adjustments to required yards are needed.

Increasing street widths, modifications in street designs or addition of street signs or traffic signals to accommodate the traffic generated by the proposed use,

Response: Costco does not believe any modifications are needed to the surrounding roads or the required improvements to those roads.

Adjustments to off-street parking requirements in accordance with any unique characteristics of the proposed use.

Response: Central Point's parking requirement for a retail use, stated as a minimum and a maximum, is 1 parking stall for every 200 sf of net floor area. In Costco's case, the net floor area is 134,000 sq. ft. which requires 670 parking stalls. Our current proposal is to provide 783 parking stalls which our Parking Demand Study supports.

4. Regulation of points of vehicular Ingress and egress,

Response: Costco believes ingress and egress points should be approved as submitted in the drawing package and no additional regulation should be required.

 Requiring landscaping, irrigation systems, lighting and a property maintenance program.

Response: Costco believes landscape and irrigation plans should be approved as submitted in the drawing package and no additional regulation should be required.

6. Regulation of signs and their locations,

Response: Costco is proposing building mounted signage that is in excess of the standard permitted by code. For this reason Costco will be submitting a Class C Exception to the signage standard described in CPMC 17.48.080(A)(1).

For background and context, Costco and their design team have designed a sign package that is integrated into the design of the building and is proportioned to match the scale and size of the building. The signs are not too small or too large in comparison to the scale of the building but they are substantially larger than what is allowed as standard in the Industrial zone. The largest signs, which are proposed on three of the four sides, are 381 sf. However, this is in relationship with a wall façade that is over 16,000 sf on the long side and over 10,000 sf on the short side. In other words, the sign covers less than 3.8% of the smallest wall of the warehouse. In total, including the signage on the Fuel Facility which has a 21 sf sign on each side of the fuel canopy, the entire Costco site has 1,455 sf of mounted on their buildings. For additional information see the black and white elevation drawing, DD31-01, for the building

DATE 11.3.15

PROJECT New Costco Warehouse Central Point

PROJECT NUMBER 14-0393-01

MEMO Page 15 of 15

mounted signs and the specific Fuel Facility sheet, DD41-01, for the gas canopy signage.

 Requiring fences, berms, walls, landscaping or other devices of organic or artificial composition to eliminate or reduce the effects of noise, vibrations, odors, visual incompatibility or other undesirable effects on surrounding properties,

Response: Costco does not believe any additional measures to control noise, vibrations, odors, visual incompatibility or other undesirable effects are necessary.

 Regulation of time of operations for certain types of uses if their operations may adversely affect privacy of sleep of persons residing nearby or otherwise conflict with other community or neighborhood functions,

Response: None needed.

9. Establish a time period within which the subject land use must be developed,

Response: None needed.

 Requirement of a bond or other adequate assurance within a specified period of time,

Response: None needed.

 Such other conditions that are found to be necessary to protect the public health, safety and general welfare,

Response: None needed.

Conclusion

With the drawings and background information that has been submitted with this application we believe that the proposed Costco development is consistent with the required findings that need to be made to approve this Development Permit application. Please feel free to contact Costco or MulvannyG2 should you have any questions or need further clarification.

Thank you for your time, consideration and assistance in this matter.

Respectfully: Steve Bullock, MG2

h:\retail\costco\12\12-0125-01_st albert, ab\02_corraspondence\204_jurisdiction\dp submittal package 2012-08-15\st albert dp narretive 12-08-15.docx

Public Works Department

ATTACHMENT "C"

Matt Samitore, Director

PUBLIC WORKS STAFF REPORT

December 15, 2015

AGENDA ITEM(S):

Costco Membership Warehouse and Four (4) Island Fuel Facility Applicant: Costco Wholesale; Agent: Steve Bullock, MG2

BACKGROUND:

The applicant is requesting a Conditional Use Permit (File No. 15022) and Site Plan & Architectural Review (File No. 15028) approval for the construction of a Costco Wholesale membership warehouse, including a four (4) island fuel facility, with a scheduled opening date Fall 2016. The 18.28 acre project site is located on four (4) undeveloped lots within the Federal Way Business Park Subdivision. As a previously platted subdivision all utilities, with the exception of transportation infrastructure, are available and adequate to service the project.

The applicant has prepared a Transportation Impact Analysis (TIA) ¹ identifying and addressing transportation impacts and mitigation measures. The TIA was prepared in accordance with input from the City of Central Point, City of Medford, Jackson County and the Oregon Department of Transportation. The TIA took into account the County's Table Rock widening project (four travel lanes, a center turn lane, bike lanes and sidewalks, and signalization of Table Rock Road and Airport Road) scheduled to begin construction one year (2017) after the opening of the Costco project.

EXISTING INFRASTRUCTURE:

Water: There are 8-inch waterlines that exist in Hamrick Road and Federal Way.

Streets: Hamrick Road is a City Collector Street. The right-of-way in front of the subject property

varies from 72-76 feet, which is adequate to serve the proposed project.

Stormwater: There is a 36-inch storm line in Hamrick Road.

TRAFFIC IMPACTS & MITIGATION:

The TIA evaluated twelve (12) intersections deemed to be affected by the project. Four of the intersections have issues at the opening of Costco (Build Year Fall 2016). Those intersections are:

Table Rock Road & Airport Road (Jackson County). Currently, this intersection operates at an
unacceptable Level of Service (LOS F). This status persists at Build Year and will be resolved upon
completion of the Table Rock Road Improvement project in 2017. Because of the timing between
Build Year and completion of the Table Rock Road project no mitigation has been proposed or
required by the County.

¹ Transportation Impact Analysis Central Point Costco Development, Kittelson & Associates, Inc., October 2015

¹⁴⁰ South 3rd Street • Central Point, OR 97502 • 541.664.3321 • Fax 541.664.6384

- 2. <u>Table Rock Road & Hamrick Road (Jackson County/City of Central Point)</u>. The applicant has requested full access movements on the two access driveways on Table Rock Road. Per the County, access on Table Rock Road will be limited as follows:
 - a. Prior to completion of the Table Rock Road project, both access drives will be limited to right-in/right-out movements. Median islands will need to be installed by the applicant to restrict access movements.
 - b. Prior to the completion of the Table Rock Road project, for the Table Rock Road/Hamrick Road intersection the applicant will be required to construct a center turn lane and refuge lane within the existing Table Rock Road right-of-way.
 - c. Upon completion of the Table Rock Road Improvement project, access movements will be limited to right-in/right-out, and left-in movements (no signalization) for the two access driveways on Table Rock Road.
- 3. Northbound I-5 Off-Ramp (ODOT). On the opening date for Costco, the NB I-5 off-ramp will exceed the allowable volume to capacity (v/c) ratio, triggering the need for dual right turn lanes (IAMP 33 Project No. 9). The estimated project cost is \$1.3M. Per ODOT, the applicant's proportional cost share of the project is 38% of total project cost, or \$500K. The remainder of the project will be funded by ODOT with construction commencing at the earliest possible date. The applicant's proportional cost share will be payable to the City of Central Point prior to building permit issuance and is not an SDC eligible expense.
- 4. <u>Airport Road & Biddle Road (City of Medford)</u>. The TIA indicates that the westbound approach of Airport and Biddle Road exceeds the level of service standard for the City of Medford. Mitigation measures were not addressed in the TIA.

It should be noted that the TIA indicates that by 2020 additional lane configurations will be needed for the intersection of East Pine Street/Hamrick Road. The City of Central Point is tentatively scheduled to complete these improvements by 2018, including improvements to the North-South Traffic to include a receiving lane, a thru lane, and designated right and left turn lanes on Hamrick Road North and South of the intersection. No additional improvements will be made on E. Pine Street/Biddle Road as part of this improvement project.

CONDITIONS OF APPROVAL:

1. Oregon Department of Transportation

Prior to issuance of a building permit Costco shall enter into a Cooperative Improvement Agreement with the Oregon Department of Transportation (ODOT) to fund development and construction of a dual right turn lane at the I-5 Exit 33 northbound off-ramp. Costco's share of the estimated \$1.3 million improvement shall be limited to \$500,000, with ODOT funding the remaining cost of the improvement.

2. Transportation Conditions, Jackson County Roads. The following addresses Jackson County Roads

conditions of development only. See Jackson County Roads memo for general comments not imposed as conditions of development.

- A. Jackson County Roads, Condition 1 Prior to issuance of a Certificate of Occupancy, the applicant shall construct a left turn and left receiving lane on Table Rock at Hamrick Road. The turn and receiving lanes shall have adequate queuing to ensure safe and efficient operation of the intersection during the first year of opening. Applicants Engineers shall prepare plans identifying the length of improvements. Plans shall be approved by Jackson County Roads and City of Central Point prior to issuance of a building permit. This improvement is not System Development Charges (SDC) eligible as it is in exchange for the required frontage improvements. This work will require a Minor Road Improvement Permit from Jackson County.
- B. Jackson County Roads, Condition 2 Prior to issuance of a Certificate of Occupancy the applicant shall construct median islands in Table Rock Road in front of the two Table Rock Road approaches. Until completion of the County's Table Rock Road project these two Table Rock Road approaches will be limited to right-in/right-out. This work may be included in either the Minor Road Improvement Permit or the Commercial Approach Permit.
- C. Jackson County Roads, Condition 3 As part of the Table Rock Road Project, the Table Rock Road approaches, including Hamrick Road, will be constructed as right-in/left-in/right-out movements. The Table Rock Road Project will install the medians as part of the Table Rock Road Project's expenses.
- D. Jackson County Roads, Condition 4 At the County's Table Rock Road Project's expense the County will install a new signal at Airport Road and Table Rock Road.
- E. Jackson County Roads, Condition 9 The applicant shall submit construction drawings to Jackson County Roads and obtain county permits as required.
- F. Jackson County Roads, Condition 10 Prior to the issuance of a Building Permit the applicant shall obtain Commercial Approach permits from Jackson County Roads for any new approaches or improved approaches to Hamrick Road and Table Rock Road. The paved approaches shall have a 30' radii and a 40' width. Jackson County Roads requires the removal of any existing driveways not being used on Hamrick Road and Table Rock Road.
- G. Jackson County Roads, Condition 13 Utility permits are required from Jackson County Roads for any utility work within the county road right-of-way.
- H. Jackson County Roads, Condition 16 Prior to issuance of a Building Permit if drainage is directed to Hamrick Road and/or Table Rock Road, plans shall be submitted to Jackson County Roads for review and comment on the hydraulic report including the calculations and drainage plan. Capacity improvements or on-site detention shall be installed at the expense of

140 South 3rd Street • Central Point, OR 97502 • 541.664.3321 • Fax 541.664.6384

the applicant. Upon completion of the project the developer's engineer shall certify that construction of the drainage system was constructed per plan and a copy of the certification shall be sent to Jackson County Roads.

3. City of Central Point

- A. Hamrick Road and Federal Way Improvements Prior to Public Works Final Inspection, the applicant shall install sidewalks and street trees per the Public Works Department Standards and Specifications.
- B. Public Works Standard Specifications The applicant shall use the 2014 revised Public Works Standards and Specifications for all new construction drawings.



December 10, 2015

ATTACHMENT "D Roads
Engineering

Mike Kuntz, P.E. County Engineer

200 Antelope Rd. White City, OR 97503 Phone: (541)774-6228 Fax: (541)774-6295 kuntzm@jacksoncounty.org

www.lacksoncounty.org

Attention: Stephanie Holtey City of Central Point Planning 140 South Third Street Central Point, OR 97502

RE: Conditional Use Permit and Site Plan & Architectural Review for construction of a 161,992 square foot membership warehouse and four island fuel facility, including 783 parking spaces and site landscaping off Hamrick Road and Table Rock Road – county-maintained roads.

Planning File: 15022 and 15028; 37-2W-12B Tax Lots 213, 214, 215, and 216.

Dear Stephanie:

Thank you for the opportunity to comment on this Conditional Use Permit and Site Plan & Architectural Review for construction of a 161,992 square foot membership warehouse and four island fuel facility, including 783 parking spaces and site landscaping on a 18.28 acre site in the Industrial M-1 –zoning district. The project site is adjacent to Hamrick Road and Table Rock Road. Jackson County Roads has the following comments:

- Prior to opening, Jackson County requests construction of a left turn and left receiving lane on Table Rock Road at Hamrick Road. The turn and receiving lanes shall have adequate queuing to ensure safe and efficient operation of the intersection during the first year of opening. This work will require a Minor Road Improvement Permit from Jackson County.
- 2. Prior to opening, Jackson County requests construction of median islands in Table Rock Road in front of the two Table Rock Road approaches. Until the County's Table Rock Road improvement project is complete, the Table Rock Road approaches will be limited to right-in/right-out. This work may be included in either the Minor Road Improvement Permit or the Commercial Approach Permit.
- 3. As part of the County's Table Rock Road Improvement Project, the Table Rock Road approaches will be constructed as right-in/left-in/right-out movements. The County's project will install these medians at the project's expense.
- 4. The County's Table Rock Road Improvement Project will install a new traffic signal at Airport Road at the project's expense.

- 5. The East Pine/Hamrick intersection will likely fail approximately one year after opening. Central Point should construct improvements to this intersection prior to failure.
- 6. Construction of the fourth leg of the Table Rock/Airport Road intersection, with Airport Road Connecting to Federal Way, will significantly improve traffic circulation in the project area. Jackson County would support any efforts which facilitate this improvement.
- 7. Once the fourth leg of the Airport intersection is complete and connected to Federal Way, the Federal Way access point will become a significant access for the project. The current site plan utilizes Table Rock and Hamrick Roads as the front of the project and for primary public access. Federal Way is primarily utilized for delivery access and as a minor public access. The site plan should perhaps be modified to make Hamrick Road and Federal Way the front of the project to recognize the long term circulation. Regardless of the final "front" of the project, the public access to Federal Way should receive a major upgrade to encourage public use of this access and improve long term circulation.
- 8. Jackson County estimates the value of the frontage improvements on Table Rock Road that will not be constructed by the applicant at \$480,000.
- 9. The applicant shall submit construction drawings to Jackson County Roads and obtain county permits if required.
- 10. The applicant shall obtain Commercial Approach permits from Roads for any new or improved approaches to Hamrick Road and Table Rock Road. The paved approaches shall have 30' radii and a 40' width. Roads requests the removal of any existing driveways not being used on Hamrick Road and Table Rock Road.
- 11. The posted speed zone for Table Rock Road is 45 mph, requiring an approach sight distance minimum of 325'.
- 12. Hamrick Road is a Basic Speed Rule road. The required approach sight distance is 450'.
- 13. Utility Permits are required from Roads for any utility work within the county road right-of-way.
- 14. Please note Hamrick Road is a local road but the soon to be revised County TSP will designate it as a Minor Collector and is county-maintained with an Average Daily Traffic count of 799 as of 8/2014, 150' west of Table Rock Road.

- 15. Please note Table Rock Road is an Arterial Road with an Average Daily Traffic count of approximately 13,000 in the project area.
- 16.If drainage is directed to Hamrick Road and/or Table Rock Road, Jackson County Roads would like to review and comment on the hydraulic report including the calculations and drainage plan. Capacity improvements or on site detention, if necessary, shall be installed at the expense of the applicant. Upon completion of the project, the developer's engineer shall certify that construction of the drainage system was constructed per plan and a copy of the certification shall be sent to Jackson County Roads.
- 17. We would like to be notified of future development proposals, as county permits may be required.
- 18. We concur with any right-of-way dedicated.

Sincerely,

Mike Kuntz, P.E. County Engineer

ATTACHMENT "E"



Oregon Department of Transportation Region 3, District 8 100 Antelope Road White City, OR 97503 (541) 774-6316 FAX (541 774-6397

December 14, 2015

STEPHANIE HOLTEY, PLANNER CITY OF CENTRAL POINT PLANNING DEPARTMENT 140 SOUTH THIRD STREET CENTRAL POINT, OR 97502

Re: Costco Wholesale Conditional Use Permit: 15022 and Site Plan/Architectural Review: 15028.

Thank you for the opportunity to review the Conditional Use Permit (CUP) application, Site Plan/Architectural Review application and associated traffic impact analysis (TIA) for the construction of a 161,992 square foot membership warehouse and four (4) island fuel facility, including 783 parking spaces and site landscaping. The 18,028 acre property is located at the southwest corner of the Table Rock Road and Hamrick Road intersection. 37-2W-12B Tax Lots 213, 214, 215, and 216.

ODOT is requesting that the City of Central Point include the following condition for CUP 15022:

• Costco shall enter into a Cooperative Improvement Agreement with the Oregon Department of Transportation (ODOT) to fund development and construction of a dual right turn lane at the I-5 Exit 33 northbound off-ramp. Costco's share of the estimated \$1.3 million improvement shall be limited to \$500,000, with ODOT funding the remaining cost of the improvement.

You may contact me at 541-774-6399 if you have any further questions or require additional information.

Thank you,

Don Morehouse

Senior Transportation Planner, Development Review

Cc: Ron Hughes, Michael Wang, Cathy Harshman, Jeremiah Griffin

Stephanie Holtey

From:

Kelly A. Akin < Kelly. Akin@cityofmedford.org>

Sent:

Thursday, December 03, 2015 12:11 PM

To:

Stephanie Holtey

Subject:

RE: Action Needed: Request for Agency Comments on Land Use Applications

Stephanie -

Thank you for the opportunity to comment on the Costco applications. The City of Medford Planning Department has no comments.

Kelly Akin Principal Planner City of Medford Planning Department 411 W 8th Street Medford OR 97501

From: Stephanle Holtey [mailto:Stephanle.Holtey@centralpointoregon.gov]

Sent: Monday, November 16, 2015 3:51 PM

To: Kelly A. Akin

Subject: Action Needed: Request for Agency Comments on Land Use Applications

Importance: High

Kelly,

The City has received the following applications for Costco Wholesale:

- Conditional Use Permit (File No. 15022)
- Site Plan & Architectural Review (File No. 15028)

This request for agency comments (attached) was also sent to Alex Georgevitch in Public Works. Due to the size of the application, the site exhibits, findings and traffic information analysis have been posted on the City's website at the following location: http://www.centralpointoregon.gov/cd/project/costco-conditional-use-permitsite-plan-architectural-review.

If you have any questions, please feel free to contact me.

Sincerely,

Stephanie Holtey, CFM
Community Planner II
City of Central Point
140 South 3rd Street
Central Point, OR 97502
Desk: (541) 664-7602, Ext. 244
Fax: (541) 664-6384
www.centralpointoregon.gov



ROGUE VALLEY SEWER SERVICES

Location: 138 West Vilas Road, Central Point, OR - Mailing Address: P.O. Box 3130, Central Point, OR 7502-0005 Tel. (541) 664-6300, Fax (541) 664-7171 www.RVSS.us

November 16, 2015

Stephanie Holtey
City of Central Point Planning Department
155 South Second Street
Central Point, Oregon 97502

Re: File 15022 CUP and 15028 SPR - Costco Wholesale, Tax Lots 213, 214, 215, and 216, Map 372W12B

Sanitary sewer service to the proposed development can be had by connecting to the existing 8 inch sewer main on Federal Way. The connection can be done either as a private service lateral or a public main line extension. There is an 8 inch pipe extended to the property at the Northwest corner that would facilitate this connection.

A private service lateral connection will require a permit from RVSS, which will be issued upon payment of related development fees.

A public sewer extension must be designed by a licensed engineer and constructed in accordance with RVSS standards.

The project is within the Phase 2 stormwater quality area and must comply with stormwater quality requirements outlined in the Regional Stormwater Design Manual. The proposed development does not involve any sewer construction.

The project does have stormwater quality impacts and must comply with the standards established in the regional Stormwater Quality Design Manual.

Rogue Valley Sewer Services requests that approval of this development be subject to the following conditions:

- Applicant must submit sanitary sewer plans to RVSS for review and approval demonstrating compliance with RVSS standards prior to the start of construction.
- 2. Applicant must submit a stormwater management plan demonstrating compliance with the regional Stormwater Design Manual for review and approval by RVSS prior to the start of construction.
- 3. Applicant must obtain a construction site erosion and sediment control permit from RVSS prior to any ground disturbing activities.

Feel free to call me if you have any questions.

Carl Tappert
Carl Tappert, PE

Manager

K:\DATA\AGENCIES\CENTPT\PLANNG\SITEPLANREVIEW\2015\15028_COSTCO WHOLESALE.DOC

FINDINGS OF FACT AND CONCLUSIONS OF LAW File No.: 15028

Consideration of a Site Plan & Architectural Review to construct a new Costco Wholesale and Fuel Facility

Applicant:) Findings of Fact
Costco Wholesale) and
999 Lake Drive) Conclusion of Law
Issaquah, WA 98027)

PART 1 INTRODUCTION

The applicant proposes to construct a 161,992 square foot Costco Wholesale and four (4) island fuel facility. Other improvements associated with the proposal include:

- Parking lot with 782 spaces and interior parking lot landscaping;
- Perimeter landscape improvements, including stormwater detention ponds; and,
- Street frontage improvements on Federal Way and Hamrick Road.

The site plan and architectural review request is a Major Project that has been referred to the Planning Commission concurrent with a Conditional Use Permit application (File No. 15022) and Class C Variance application (File No. 15032). The application is being processed using Type III procedures per Section 17.05.400, which provides the basis for decisions upon standards and criteria in the development code and the comprehensive plan, when appropriate.

The project site is located in the M-1, Industrial zoning district and is subject to the standards and criteria set forth in CPMC 17.72, Site Plan and Architectural Review, CPMC 17.75, Design and Development Standards, and CPMC 17.64 Off Street Parking and Loading requirements.

The following findings address each of the standards and criteria as applies to the proposed application for the Costco Wholesale facility.

PART 2 ZONING ORDINANCE

CPMC 17.72 - Site Plan & Architectural Review

The applicant submitted an application for site plan and architectural review on October 19, 2015. The application package was reviewed for completeness in accordance with Section 17.05.400 and 17.72.030, and accepted as complete on November 12, 2015. The approval criteria for site plan and architectural review are set forth in CPMC 17.72.040.

CPMC 17.72.040 - Site Plan & Architectural Standards

In approving, conditionally approving, or denying any site plan and architectural review application, the approving authority shall base its decision on compliance with the following standards:

A. Applicable site plan, landscaping and architectural design standards as set forth in Chapter 17.75, Design and Development Standards.

Finding 17.72.040(A): As evidenced in Findings 17.75.031 through 17.75.043 herein, the proposed site development and architecture for Costco Wholesale complies with the applicable site plan, landscaping and architectural design standards set forth in Chapter 17.75.

Conclusion 17.72.040(A): Consistent.

B. City of Central Point Department of Public Works Standard Specifications and Uniform Standard Details for Public Works Construction.

Finding 17.72.040(B): The Public Works Department evaluated the proposed site development and, as evidenced in the Public Works Department Staff Report dated December 15, 2015, found that the proposal complies with the Standard Specifications and Uniform Standard Details for Public Works Construction.

Conclusion 17.72.040(B):Consistent.

C. Accessibility and sufficiency of firefighting facilities to such a standard as to provide for the reasonable safety of life, limb and property, including but not limited to, suitable gates, access roads and fire lanes so that all buildings on the premises are accessible to fire apparatus.

Finding 17.72.040(C): Fire District #3 reviewed the site development and, per correspondence dated November 16, 2015 stated that all fire accessibility and facilities were adequately addressed.

Conclusion 17.72.040(C): Consistent.

CPMC 17.75—Design and Development Standards

17.75.031 General Connectivity, Circulation and Access Standards

The purpose of this section is to assure that the connectivity and transportation policies of the city's Transportation System Plan are implemented. In achieving the objective of maintaining and enhancing the city's small town environment it is the city's goal to base its development pattern on a general circulation grid using a walkable block system. Blocks may be comprised of public/private street right-of-way, or accessways.

A. Streets and Utilities. The public street and utility standards set forth in the City of Central Point Department of Public Works Standard Specifications and Uniform Standard Details for Public Works Construction shall apply to all development within the city.

Finding 17.75.031(A): The proposed site development fronts Federal Way (City of Central Point) Hamrick Road (Jackson County) and Table Rock Road (Jackson County). Affected agencies for streets and utilities adjacent to the site include the City of Central Point Public Works Department and Jackson County Roads. Per the Public Works Staff Report dated December 15, 2015, all utilities have been constructed in accordance with the Public Works Standard Specifications as part of the land division process. Proposed frontage improvements on Federal Way and Hamrick Road, as illustrated on the applicant's site plan are consistent with the Public Works Standards.

Jackson County Roads per the staff report dated December 10, 2015 is requiring temporary improvements along Table Rock Road and at the Hamrick Road intersection to mitigate traffic impacts per the applicant's TIA (See File No. 15022). These improvements are in lieu of frontage improvements because the County will begin construction of the Table Rock Road widening (four travel lanes, bicycle lanes, sidewalks, and signalization at Table Rock and Airport Road) in 2017.

Conclusion 17.75.031(A): Consistent.

- B. Block Standards. The following block standards apply to all development:
 - 1. Block perimeters shall not exceed two thousand feet measured along the public street right-of-way, or outside edges of accessways, or other acknowledged block boundary as described in subsection (B)(4) of this section.
 - Block lengths shall not exceed six hundred feet between through streets or pedestrian
 accessways, measured along street right-of-way, or the pedestrian accessway. Block
 dimensions are measured from right-of-way to right-of-way along street frontages. A
 block's perimeter is the sum of all sides.
 - 3. Accessways or private/retail streets may be used to meet the block length or perimeter standards of this section, provided they are designed in accordance with this section and are open to the public at all times.
 - 4. The standards for block perimeters and lengths may be modified to the minimum extent necessary based on written findings that compliance with the standards are not reasonably practicable or appropriate due to:
 - a. Topographic constraints;
 - b. Existing development patterns on abutting property which preclude the logical connection of streets or accessways;
 - c. Major public facilities abutting the property such as railroads and freeways;
 - d. Traffic safety concerns;
 - e. Functional and operational needs to create large commercial building(s); or
 - f. Protection of significant natural resources.

Finding 17.75.031(B): The proposed site development occupies four (4) parcels within the Federal Way Business Park Subdivision. The existing street network was established in accordance with block standards in effect at that time.

Conclusion 17.75.031(B): Not applicable.

C. Driveway and Property Access Standards. Vehicular access to properties shall be located and constructed in accordance with the standards set forth in the City of Central Point Department of Public Works Standard Specifications and Uniform Standard Details for Public Works Construction, Section 320.10.30, Driveway and Property Access.

Finding 17.75.031(C): The project has direct access from Federal Way, Hamrick Road and Table Rock Road. The proposed access has been evaluated by the Public works Department and determined to comply with the applicable location and dimensional standards for driveways and property access per the Staff Report dated December 17, 2015.

Conclusion 17.75.031(C): Consistent.

- D. Pedestrian Circulation. Attractive access routes for pedestrian travel shall be provided through the public sidewalk system, and where necessary supplemented through the use of pedestrian accessways as required to accomplish the following:
 - 1. Reducing distances between destinations or activity areas such as public sidewalks and building entrances;
 - Bridging across barriers and obstacles such as fragmented pathway systems, wide streets, heavy vehicular traffic, and changes in level by connecting pedestrian pathways with clearly marked crossings and inviting sidewalk design;
 - 3. Integrating signage and lighting system which offers interest and safety for pedestrians;
 - Connecting parking areas and destinations with retail streets or pedestrian accessways
 identified through use of distinctive paving materials, pavement striping, grade
 separation, or landscaping.

Finding 17.75.031(D): The applicant's site plan identifies proposed pedestrian circulation for the Costco Wholesale, which includes the public sidewalk system along all street frontages (Federal Way, Hamrick Road and Table Rock Road). Where provided, interior pedestrian pathways connect parking areas to the main entrance (northeast building corner) and are denoted by a combination of landscaping, paving materials, striping, and/or grading separation.

Conclusion 17.75.031(D): Consistent.

E. Accessways, Pedestrian. Pedestrian accessways may be used to meet the block requirements of subsection B of this section. When used pedestrian accessways shall be developed as illustrated in Figure 17.75.01. All landscaped areas next to pedestrian accessways shall be maintained, or plant materials chosen, to maintain a clear sight zone between three and eight feet from the ground level.

Finding 17.75.031: The project proposal does not involve the creation of pedestrian accessways as defined in this Chapter.

Conclusion 17.75.031: Not applicable.

17.75.039 Off-street Parking Design and Development Standards

All off-street vehicular parking spaces shall be improved to the following standards:

- A. Connectivity. Parking lots for new development shall be designed to provide vehicular and pedestrian connections to adjacent site unless as a result of any of the following such connections are not possible:
 - 1. Topographic constraints
 - 2. Existing development patterns on abutting property which preclude a logical connection;
 - 3. Traffic safety concerns; or
 - 4. Protection of significant natural resources.

Finding 17.75.039(A): The proposed parking lot for Costco Wholesale does not provide connectivity with the adjoining Fed Ex Distribution Center to the south. Given the secure nature

of the adjoining use (Fed Ex Distribution Center), vehicular and pedestrian connectivity with the adjoining property is not deemed appropriate for the proposed use (Costco Wholesale) and associated site development. Sufficient pedestrian circulation is provided along the street frontage and within the site.

Conclusion 17.75.039(A): Consistent.

B. Parking Stall Minimum Dimensions. Standard parking spaces shall conform to the following standards and the dimensions in Figure 17.75.03 and Table 17.75.02.

Finding 17.75.039(B): The applicant's site plan illustrates parking stall dimensions 10 x 20' and 10' by 17', which is within minimum parking stall dimension per Table 17.75.03 and Figure 17.75.03.

Conclusion 17.75.039(B): Consistent.

C. Access. There shall be adequate provision for ingress and egress to all parking spaces.

Finding 17.75.039(C): The proposed parking has been evaluated for adequate access. As illustrated in the applicant's site plan, the parking aisles proposed are no less than 24-ft wide, and as such are adequate to provide ingress and egress to all parking spaces.

Conclusion 17.75.039(C): Consistent.

D. Driveways. Driveway width shall be measured at the driveway's narrowest point, including the curb cut. The design and construction of driveways shall be as set forth in the Standard Specifications and Public Works Department Standards and Specifications.

Finding 17.75.039(D): The project site is served six (6) two-way driveways with two (2) on each street frontage (Federal Way, Hamrick Road and Table Rock Road). The proposed driveways have been evaluated by the City of Central Point Public Works Department and found to comply with the applicable standards set forth in the Public Works Department Standards and Specifications.

Conclusion 17.75.039(D): Consistent.

- E. Improvement of Parking Spaces.
 - 1. When a concrete curb is used as a wheel stop, it may be placed within the parking space up to two feet from the front of a space. In such cases, the area between the wheel stop and landscaping need not be paved, provided it is maintained with appropriate ground cover, or walkway. In no event shall the placement of wheel stops reduce the minimum landscape or walkway width requirements.

Finding 17.75.039(E)(1): The applicant's site plan provides for 62 spaces with a concrete curb as a wheel stop. Where utilized, the concrete curb is 2-feet from the front of the parking space. All parking areas are paved (See Finding 17.75.039(E)(2)).

Conclusion 17.75.039(E)(1): Consistent.

2. All areas utilized for off-street parking, access and maneuvering of vehicles shall be paved and striped to the standards of the city of Central Point for all-weather use and shall be adequately drained, including prevention of the flow of runoff water across sidewalks or other pedestrian areas. Required parking areas shall be designed with painted striping or other approved method of delineating the individual spaces, with the exception of lots containing single-family or two-family dwellings.

Finding 17.75.039(E)(2): Per the applicant's findings and the site plan, the proposed off-street parking areas, including areas used for access and maneuvering of vehicles will be paved and striped per the City's standards.

Conclusion 17.75.039(E)(2): Consistent.

Parking spaces for uses other than one- and two-family dwellings shall be designed so
that no backing movements or other maneuvering within a street or other public right-ofway shall be necessary.

Finding 17.75.039(E)(3): The off-street parking dimension schedule (Table 17.75.02) sets forth the parking stall and aisle dimensions necessary for ingress and egress and establishes a minimum aisle width of 24-feet per for 90 degree parking spaces. As illustrated in the applicant's site plan, off-street parking areas and loading areas are designed to prevent backing movements or other maneuvering within the public right-of-way by maintaining a minimum aisle width of 24-feet.

Conclusion 17.75.039(E)(3): Consistent.

4. Any lighting used to illuminate off-street parking or loading areas shall be so arranged as to reflect the light away from adjacent streets or properties.

Finding 17.75.039(E)(4): The applicant submitted a Site Photometric Plan that shows site lighting, including lighting location and levels. As evidenced in the Site Photometric Plan, lighting is arranged to reflect lighting away from adjacent streets or properties.

Conclusion 17.75.039(E)(4): Consistent.

5. Service drives shall have a minimum vision clearance area formed by the intersection of the driveway centerline, the street right-of-way line, and a straight line joining the lines through points twenty feet from their intersection.

Finding 17.75.039(E)(5): The proposed driveways have been evaluated for vision clearance as required in this section and found to comply.

Conclusion 17.75.039(E)(5): Consistent.

6. Parking spaces located along the outer boundaries of a parking lot shall be contained by a curb or a bumper rail so placed to prevent a motor vehicle from extending over an adjacent property line, a public street, public sidewalk, or a required landscaping area.

Finding 17.75.039(E)(6): Proposed parking spaces along the outer boundaries of the off-street parking area are contained by a curb as evidenced by the applicant's site plan.

Conclusion 17.75.039(E)(6): Consistent.

7. Parking, loading, or vehicle maneuvering areas shall not be located within the front yard area or side yard area of a corner lot abutting a street in any residential (R) district, nor within any portion of a street setback area that is required to be landscaped in any commercial (C) or industrial (M) district.

Finding 17.75.039(E)(7): As evidenced in the applicant's site plan, the off-street parking areas loading and vehicle maneuvering areas are located outside required setback areas as follows:

- Federal Way The minimum side yard setback required is 10-feet. The applicant provides a 10 to 86-foot setback from the property line to the vehicle maneuvering and parking areas.
- Hamrick Road The minimum front yard setback required is 20-feet. The site plan shows a 60-foot setback from the property line to the off-street parking areas.
- Table Rock Road The minimum side yard setback required is 10-feet. The site plan shows a 20-foot setback from the property line to off-street parking and vehicle maneuvering areas.

Conclusion 17.75.039(E): Consistent,

F. Limitation on Use of Parking Areas. Required parking areas shall be used exclusively for vehicle parking in conjunction with a permitted use and shall not be reduced or encroached upon in any manner. The parking facilities shall be so designed and maintained as not to constitute a nuisance at any time, and shall be used in such a manner that no hazard to persons or property, or unreasonable impediment to traffic, will result.

Finding 17.75.039(F): Per the applicant's findings, the proposed parking areas are for the exclusive use of the Costco Membership warehouse facility employees and customers.

Conclusion 17.75.039(F): Consistent.

- G. Parking/Loading Facility Landscaping and Screening. Parking lot landscaping shall be used to reinforce pedestrian and vehicular circulation, including parking lot entries, pedestrian accessways, and parking aisles. To achieve this objective the following minimum standards shall apply; however, additional landscaping may be recommended during the site plan and architectural review process (Chapter 17.72). All parking lots shall be landscaped in accordance with the following standards:
 - 1. Perimeter and Street Frontage Landscaping Requirements. The perimeter and street frontage for all parking facilities shall be landscaped according to the standards set forth in Table 17.75.03.

Finding 17.75.039(G)(1): The proposed landscaping plan provides street frontage and perimeter landscape improvements as shown in Table 1. The landscaping meets the minimum tree planting requirements and exceeds requirements for shrubs along parking the parking lot perimeter and street frontage.

Street Frontage	Frontage Length	Required No. Trees	Proposed No. Trees	Surplus/ Deficit	Required No. Shrubs	Proposed No. Shrubs	Surplus /Deficit
Federal Way (West Elevation) - Local	565.5	17	23	6	85	100	
Hamrick Road (North Elevation) - Local	802.42	24	30	6	120	150	
Table Rock Road (East Elevation) - Arterial	1048.5	42	42	0	210	300	
Interior Property Boundary - Industrial	1408.64	28	40	12	141	150	
TOTALS:	3825.06	111	135	24	556	700	144

Conclusion 17.75.039(G)(1): Consistent.

2. Terminal and Interior Islands. For parking lots in excess of ten spaces all rows of parking spaces must provide terminal a minimum of six feet in width to protect parked vehicles, provide visibility, confine traffic to aisles and driveways, and provide a minimum of five feet of space for landscaping. In addition, when ten or more vehicles would be parked side-by-side in an abutting configuration, interior landscaped islands a minimum of eight feet wide must be located within the parking row. For parking lots greater than fifty parking spaces, the location of interior landscape island shall be allowed to be consolidated for planting of large stands of trees to break up the scale of the parking lot.

The number of trees required in the interior landscape area shall be dependent upon the location of the parking lot in relation to the building and public right-of-way:

- a. Where the parking lot is located between the building and the public right-ofway, one tree for every four spaces;
- b. Where the parking lot is located to the side of the building and partially abuts the public right-of-way, one tree for every six spaces;
- c. Where the parking lot is located behind the building and is not visible from the public right-of-way, one tree for every eight spaces.

Finding 17.75.039(G)(2): The applicant's parking plan provides 783 spaces and as such provides for landscaped and terminals throughout the parking area. Since the parking lot is greater than 50 spaces, some of the required landscaping has been consolidated as large landscape medians and terminal areas to provide large stands of trees that break up the parking area. Interior islands are also provided as set forth below:

With the exception of perimeter parking stalls, interior islands are oriented perpendicular to the parking stalls. This layout is atypical but was used in conjunction with compact parking spaces to avoid loss of parking. Typical island dimensions are 8-ft by 38-ft (304 s.f.). The proposed dimensions are 6-ft by 40-ft (240 s.f.), which are substandard. Due to the unique parking needs

for Costco, a reduction in the island width is deemed acceptable provided that the island dimensions accommodate a total landscape area commensurate with typical islands (i.e. 8-ft x 38-ft). There is sufficient room to provide the required landscape area (6-ft by 50-ft (304 s.f.) islands) while remaining within the allowable compact parking adjustment per Section 17.64.040(G).

- Interior islands are required where ten (10) or more vehicles would be parked side-by-side in an abutting configuration. Shopping cart stalls and walkways are deemed acceptable in terms of breaking up parking spaces provided that interior tree planting requirements are met. As such, there are four (4) parking groups that include vehicle parking in excess of ten (10) spaces without interior islands. There is sufficient room to relocate and/or add the additional islands while remaining within the allowable compact parking adjustment per Section 17.64.040(G).
- The Interior landscaping includes 200 trees, which meets minimum interior tree planting requirement (196 trees) per Section 17.75.039(G)(2)(a).

Conclusion 17.75.039(G)(2): As illustrated in the applicant's site plan and landscape plan, the proposed off-street parking areas can comply with the interior parking lot landscape provisions of this section. Prior to building permit issuance, the applicant will be required to submit a final site plan and landscaping plan confirming the standards of this section are met.

 Bioswales. The use of bioswales within parking lots is encouraged and may be located within landscape areas subject to site plan and architectural review. The tree planting standards may be reduced in areas dedicated to bioswales subject to site plan and architectural review.

Finding 17.75.039(G)(3): Stormwater swales/ponds are provided along the northwest and north property boundary perimeter adjacent to Hamrick Road and a portion of Federal Way. Although the bioswale areas are located on the site and off-street parking area perimeter, no reduction to the tree planting requirements is necessary.

Conclusion 17.75.039(G)(3): Not applicable. .

- H. Bicycle Parking. The amount of bicycle parking shall be provided in accordance with Section 17.64.040 and constructed in accordance with the following standards:
 - Location of Bicycle Parking. Required bicycle parking facilities shall be located on-site
 in well lighted, secure locations within fifty feet of well-used entrances and not farther
 from the entrance than the closest automobile parking space. Bicycle parking shall have
 direct access to both the public right-of-way and to a main entrance of the principal use.
 Bicycle parking may also be provided inside a building in suitable, secure and accessible
 locations. Bicycle parking for multiple uses (such as in a commercial center) may be
 clustered in one or several locations.
 - 2. Bicycle Parking Design Standards. All bicycle parking and maneuvering areas shall be constructed to the following minimum design standards:

- a. Surfacing. Outdoor bicycle parking facilities shall be surfaced in the same manner as a motor vehicle parking area or with a minimum of a three-inch thickness of hard surfacing (i.e., asphalt, concrete, pavers or similar material). This surface will be maintained in a smooth, durable and well-drained condition.
- b. Parking Space Dimension Standard. Bicycle parking spaces shall be at least six feet long and two feet wide with minimum overhead clearance of seven feet.
- c. Lighting. Lighting shall be provided in a bicycle parking area so that all facilities are thoroughly illuminated and visible from adjacent sidewalks or motor vehicle parking lots during all hours of use.
- d. Aisles. A five-foot aisle for bicycle maneuvering shall be provided and maintained beside or between each row of bicycle parking.
- e. Where bicycle parking facilities are not directly visible from the public rights-ofway, entry and directional signs shall be provided to direct bicycles from the public rights-of-way to the bicycle parking facility.
- 3. Exceptions to Bicycle Parking. The community development director may allow exceptions to the bicycle parking standards in connection with temporary uses or uses that do not generate the need for bicyclists parking such as Christmas tree sales and ministorage units. (Ord. 1946 (part), 2011).

Finding 17.75.039(H): Due to the nature of the proposed use as bulk retail sales, the applicant has requested a reduction in the bicycle parking standard consistent with Warehouse land use classification (16 spaces) instead of a retail land use classification (57 spaces). The applicant's findings base the request on bicycle parking demand for Costco, for which employees typically generate the need for bicycle parking. Member trips are very limited due to the impracticality of carrying bulk goods on a bicycle.

Conclusion 17.75.039(H): Based on the applicant's rationale, the use of the warehouse bicycle parking standard for the membership warehouse is warranted. Sufficient area is available within the building and outdoors near the main entrance to accommodate covered bicycle parking spaces designed in accordance with this section. Prior to building permit issuance, the applicant will be required to submit a final site plan showing the location of 16 covered parking spaces.

17.75.043 Industrial Building Design Standards

Reserved.

Finding 17.75.039(G)(3): Design standards for industrial building design have not been established. Although the not required by this section, the applicant has enhanced the proposed structure with elements that articulate the building faces and roofline, particularly on the main entrance canopy. These features include variation in roof lines, building materials and colors, parapet walls, columns and cornice.

Conclusion 17.75.039(G)(3): Not applicable.

CPMC 17.64 - Off-Street Parking and Loading

17.64.030 Off-Street Loading.

A. In all districts for each use for which a building is to be erected or structurally altered to the extent of increasing the floor area to equal the minimum floor area required to provide loading space and which will require the receipt or distribution of materials or merchandise by truck or similar vehicle, there shall be provided off-street loading space in accordance with the standards set forth in Table 17.64.01, Off-Street Loading Requirements.

Finding 17.64.030(A): The Site Plan and Architectural Elevations illustrate four (4) truck loading bays on the North Elevation of the proposed Costco Wholesale warehouse, which totals 161,992 square feet. Per Table 17.64.01, retail buildings of this size require three (3) bays plus one bay for each additional 80,000 square feet of building area, which equates to four (4) loading bays. In addition to four (4) required loading bays, the applicant's findings state that three (3) additional on-site loading areas are provided for tires and other smaller, more local deliveries that can't use the elevated truck dock. These are in excess of the requirements provided in Table 17.64.01.

Conclusion 17.64.030(A): Consistent.

B. A loading berth shall not be less than ten feet wide, thirty-five feet long and have a height clearance of twelve feet. Where the vehicles generally used for loading and unloading exceed these dimensions, the required length of these berths shall be increased.

Finding 17.64.030(B): Per the Site Plan and Architectural Elevations. each loading bay is 80-feet long, 10-feet wide and 46-feet of clearance from the top of the pavement to the bottom of the canopy overhang.

Conclusion 17.64.040(B): The required loading berths meet the dimensional requirements of this section.

C. If loading space has been provided in connection with an existing use or is added to an existing use, the loading space shall not be eliminated if elimination would result in less space than is required to adequately meet the needs of the use.

Finding 17.64.030(C): The proposed use will occupy undeveloped land.

Conclusion 17.64.040(C): Not applicable.

D. Off-street parking areas used to fulfill the requirements of this title shall not be counted as required loading spaces and shall not be used for loading and unloading operations, except during periods of the day when not required to meet parking needs.

Finding 17.64.030(D): Per the Site Plan, off-street parking areas are not utilized as

loading spaces and will not be used for loading and unloading operations.

Conclusion 17.64.040(D): Consistent.

E. In no case shall any portion of a street or alley be counted as a part of the required parking or loading space, and such spaces shall be designed and located as to avoid undue interference with the public use of streets or alleys.

Finding 17.64.030(E): The Applicant's Findings state that on-site loading and parking will not have any impact to the public use of streets or alleys.

Conclusion 17.64.040(E): Consistent.

17.64.040 Off-Street Parking Requirements.

All uses shall comply with the number of off-street parking requirements identified in Table 17.64.02A, Residential Off-Street Parking Requirements, and Table 17.64.02B, Non-Residential Off-Street Parking Requirements. For residential uses the off-street parking requirements are stated in terms of the minimum off-street parking required. For non-residential uses the off-street parking requirements are presented in terms of both minimum and maximum off-street parking required. The number of off-street parking spaces in Table 17.64.02B, Non-Residential Off-Street Parking, may be reduced in accordance with subsection B of this section, Adjustments to Off-Street Vehicle Parking.

The requirement for any use not specifically listed shall be determined by the community development director on the basis of requirements for similar uses, and on the basis of evidence of actual demand created by similar uses in the city and elsewhere, and such other traffic engineering or planning data as may be available and appropriate to the establishment of a minimum requirement.

- A. Calculation of Required Off-Street Parking. Off-street parking facility requirements set forth in Table 17.64.02A, Residential Off-Street Parking Requirements, and Table 17.64.020B, Non-Residential Off-Street Parking Requirements, shall be applied as follows:
 - 1. Where the application of the schedule results in a fractional requirement it shall be rounded down to the lowest whole number.
 - 2. For purposes of this chapter, gross floor area shall not include enclosed or covered areas used for off-street parking or loading, or bicycle facilities.
 - 3. Where uses or activities subject to differing requirements are located in the same structure or on the same site, or are intended to be served by a common facility, the total parking requirement shall be the sum of the requirements for each use or activity computed separately, except as adjusted through the site plan and architectural review process under the provisions of subsection (B) of this section. The community development director, when issuing a permit(s) for multiple uses on a site, may

restrict the hours of operation or place other conditions on the multiple uses so that parking needs do not overlap and may then modify the total parking requirement to be based on the most intense combination of uses at any one time.

- 4. Where requirements are established on the basis of seats or person capacity, the building regulations provisions applicable at the time of determination shall be used to define capacity.
- 5. Where residential use is conducted together with or accessory to other permitted uses, applicable residential requirements shall apply in addition to other nonresidential requirements.
- 6. The parking requirements outlined in Table 17.64.02A, Residential Off-Street Parking Standards, and Table 17.64.020B, Non-Residential Off-Street Parking Requirements, include parking for handicapped persons shall be provided pursuant to the requirements of subsection C of this section, Accessible Parking Requirements.

Finding 17.64.040(A): Costco Wholesale is a Membership Warehouse, a unique use that includes retail and warehousing. On this basis parking requirements have been determined based upon the floor area dedicated to each use. Per Table 17.64.02B, as illustrated in Table 2 below, Costco is required to provide a maximum of 698 parking spaces. Costco is proposing parking 85 in excess of the maximum 698 spaces allowed.

Proposed Costco Floor Area by Use	Building Area (\$q. Ft.)	Min./Max. Parking Standard	Parking Supply Ratio	Required Parking (No. Spaces)	Proposed Parking	Surplus/Deficit
Retail	134,064	1/200 s.f.	5.00	670	783	113
Warehouse	27,928	1/1,000 s.f.	1.00	28		(28)
TOTAL	161,992	1/232 s.f.	4.31	698	783	85
Proposed Adjustment	161,992	1/207 s.f.	4.83	783	783	-

Conclusion 17.64.040(A): The parking requirement for Costco has been correctly calculated per the requirements of this section.

- B. Adjustments to Non-Residential Off-Street Vehicle Parking. The off-street parking requirements in Table 17.64.02B, Non-Residential Off-Street Parking Requirements, may be reduced, or increased in any commercial (C) or industrial (M) district as follows:
 - 1. Reductions. The maximum off-street parking requirements may be reduced by no more than twenty percent.

Finding 17.64.040(B)(1): The Applicant is not requesting a reduction to the off-street

parking requirement.

Conclusion 17.64.040(B)(1): Not applicable.

 Increases. The off-street parking requirements may be increased based on a parking demand analysis prepared by the applicant as part of the site plan and architectural review process. The parking demand analysis shall demonstrate and documents justification for the proposed increase.

Finding 17.64.040(B)(2): In accordance with CPMC 17.64.040(B)(2), the applicant is requesting an increase to the maximum parking standard for the proposed use. Table 3 summarizes the data provided in the applicant's parking demand analysis, which is based upon an evaluation of documented parking supply and demand at existing Costco Warehouses in Oregon. The analysis also references the Institute of Traffic Engineers (ITE) Parking Generation, 4th Edition recommendation that parking utilization be less than 90% during the typical peak periods to avoid illegal parking and repeating circulation. ¹

Costco Site Location	Warehouse Size (Sq. Ft.)	Parking supply	Peak Period Parking Demand	Parking Demand per 1,000 Sq. Ft.	Parking Supply to Maintain 90% utilization at Peak	Minimum Recommended Parking Ratio
Clackamas	137,000	693	670	4.89	744	5.43
Medford	136,297	654	579	4.25	644	4.72
Aloha	148,030	682	528	3.57	587	3.96
Average	140,442	676	592	4.24	658	4.71
Central Point, Proposed	161,992	783			753	4.83

As illustrated in Table 3, the minimum recommended average parking ratio to maintain 90% utilization at the peak period is 4.71 spaces per 1,000 GFA. The Applicant's parking proposal for the Central Point location is slightly higher at 4.89 parking spaces per 1,000 GFA. On the basis that the difference between the minimum recommended and proposed parking ratio is less than 5%, within the range of acceptable statistical error, and is consistent with the ITE recommendation to stay below 90% utilization, the proposed parking adjustment is warranted.

Conclusion 17.64.040(B)(2): The Applicant's Parking Demand Analysis demonstrates and documents sufficient justification for the requested parking increase.

¹ ITE Parking Generation 4th Edition, 2010.

- C. Accessible Parking Requirements. Where parking is provided accessory to a building, accessible parking shall be provided, constructed, striped, signed and maintained as required by ORS <u>447.233</u>, and Section 1104 of the latest Oregon Structural Specialty Code as set forth in this section.
 - 1. The minimum number of accessible parking spaces shall be provided for all uses in accordance with the standards in Table 17.64.03, Minimum Number of Accessible Parking Spaces. Parking spaces used to meet the standards in Table 17.64.03, Minimum Number of Accessible Parking Spaces, shall be counted toward meeting off-street parking requirements in Tables 17.64.02A and 17.64.02B, Residential and Non-Residential Off-Street Parking Requirements. The accessible parking requirements set forth in Table 17.64.03, Minimum Number of Accessible Parking Spaces, are minimum requirements and are not subject to reductions per subsection (B)(1) of this section;

Finding 17.64.040(C)(1): The site plan illustrates Costco's proposal to provide 783 off-street parking spaces. Per Table 17.64.03, 2% of the total parking spaces shall be accessible and 1/8 of these spaces shall be van accessible with a 96-inch aisle. Costco proposes 15 accessible spaces (2%+) and 2 of these spaces are van accessible. The remainder has a 60-inch aisle.

Conclusion 17.64.040(C)(1): The accessible parking spaces comply with the minimum requirements provided in Table 17.64.03.

2. Accessible parking shall be located in close proximity to building entrances and shall be designed to permit occupants of vehicles to reach the entrance on an unobstructed path or walkway; and

Finding 17.64.040(C)(2): The site plan illustrates the location of accessible parking spaces in three (3) groups near the main entrance. Unobstructed pathways to the main entrance are provided for all three groups.

Conclusion 17.64.040(C)(2): Consistent.

3. Accessible spaces shall be grouped in pairs where possible.

Finding 17.64.040(C)(3): The site plan illustrates the location of accessible parking spaces in three (3) groups near the main entrance.

Conclusion 17.64.040(C)(3): Consistent.

D. Shared Parking. Required parking facilities for two or more uses, structures, or parcels of land in any commercial (C) or industrial (M) district may be satisfied by the same parking facilities used jointly, to the extent that the owners or operators show that the need for parking facilities does not materially overlap (e.g., uses primarily of a daytime versus nighttime nature; weekday uses versus weekend uses); and provided, that prior to

the issuance of any building permit for the property that the right of joint use is evidenced by a recorded deed, lease, contract, or similar written instrument establishing the joint use. The city may approve owner requests for shared parking through the site plan and architectural review process.

Finding 17.64.040(D): The proposal is for one use and does not include shared parking for adjoining uses.

Conclusion 17.64.040(D): Not applicable.

E. Off-Site Parking. Except for single-family dwellings, the vehicle parking spaces required by this chapter may be located on another parcel of land, provided the parcel is within three hundred feet of the use it serves and the city has approved the off-site parking through the site plan and architectural review process. The distance from the parking area to the use shall be measured from the nearest parking space to a building entrance, following a sidewalk or other pedestrian route. The right to use the off-site parking must be evidenced by a recorded deed, lease, easement, or similar written instrument in the same manner as set forth in subsection (A)(3) of this section.

Finding 17.64.040(E): The proposal provides on-site parking only.

Conclusion 17.64.040(E): Not applicable.

F. Mixed Uses. If more than one type of land use occupies a single structure or parcel of land, the total requirements for off-street automobile parking shall be the sum of the requirements for all uses, unless it can be shown that the peak parking demands are actually less (see subsection D of this section, Shared Parking).

Finding 17.64.040(F): The proposal is for a membership warehouse that includes wholesale fuel sales. The proposal is for one land use.

Conclusion 17.64.040(F): Not applicable.

- G. Compact Car Adjustment.
 - 1. Any parking lot or otherwise required public parking area containing ten or more parking spaces shall be eligible for a compact car adjustment, provided all requirements of this chapter are adequately met.
 - 2. Up to, but not exceeding, twenty-five percent of the total number of required parking spaces may be designed and provided for the parking of compact cars.
 - 3. All compact parking spaces must be identified for compact parking only. Compact parking spaces shall be designed in accordance with the minimum standards set forth in Section 17.75.039(B), Parking Stall Minimum Dimensions.

Finding 17.64.040(G): The site plan includes 112 compact parking spaces with a dimension of 10-ft x 17-ft). The total compact car spaces account for 14.3% of the total parking spaces vs. 25% allowed by CPMC.

Conclusion 17.64.040(G): Consistent.

H. Change of Use. Prior to the change of use of a building or structure the applicant shall demonstrate that adequate parking spaces are available to accommodate the new use(s) as required in this chapter.

Finding 17.64.040(H): The project site is undeveloped.

Conclusion 17.64.040(H): Not applicable.

I. Bicycle Parking. Bicycle parking shall be provided in accordance with Table 17.64.04, Bicycle Parking Requirements.

Finding 17.64.040(I): Per the applicant's findings, Costco is providing 16 parking spaces consistent with the warehouse designation as compared to the 57 parking spaces required for retail sales. The rationale for this is that, as a bulk retailer, Costco has found that bicycle traffic amongst members is limited. Most bicycle traffic is generated by employees. In accordance with CPMC 17.75.039(H)(3), which is addressed in the Site Plan & Architectural Review application (File No. 15028), the provision of 16 bicycle parking stalls is found to be consistent with the proposed use and the requirements of this code.

Conclusion 17.64.040(I): The proposed bicycle parking is consistent with the warehouse designation as warranted by CPMC 17.75.039(H)(3).

PART 3 SUMMARY CONCLUSION

As evidenced in findings and conclusions, the proposed Costco Wholesale site plan and architectural plan is consistent with applicable standards and criteria set forth in CPMC 17.72, 17.75 and 17.64 in the Central Point Municipal Code.

PLANNING COMMISSION RESOLUTION NO. 828

A RESOLUTION APPROVING A SITE PLAN AND ARCHITECTURAL REVIEW APPLICATION FOR A COSTCO WHOLESALE ON LANDS WITHIN THE M-1, INDUSTRIAL ZONE

(FILE NO. 15028)

WHEREAS, the applicant has submitted a site plan and architectural review application for to develop an 18.28 acre site within the M-1, Industrial zone with a 161,992 square foot Costco Wholesale membership warehouse and four (4) island fuel facility; and

WHEREAS, on January 5, 2016, the City of Central Point Planning Commission conducted a dulynoticed public hearing on the application, at which time it reviewed the Staff Report and heard testimony and comments on the application; and

WHEREAS, the Planning Commission's consideration of the application is based on the standards and criteria applicable to Site Plan and Architectural Review in accordance with Section 17.72, Design and Development Standards in accordance with Section 17.75, and Off-Street Parking and Loading in accordance with Section 17.64 of the Central Point Municipal Code; and

WHEREAS, after duly considering the proposed use, it is the Planning Commission's determination that, subject to compliance with conditions as set forth in the Staff Report (Exhibit "A") dated January 5, 2016, the application does comply with applicable standards and criteria for approval of the site plan and architecture.

NOW, THEREFORE, BE IT RESOLVED, that the City of Central Point Planning Commission, by this Resolution No. 828, does hereby approve the Site Plan and Architectural Review application for Costco Wholesale. This approval is based on the findings and conditions of approval as set forth on Exhibit "A", the Planning Department Staff Report dated January 5, 2016 and the Findings of Fact and Conclusions of Law as set forth in Exhibit "B," including attachments incorporated herein by reference.

PASSED by the Planning Commission and signed by me in authentication of its passage this 5th day of January, 2016.

	Planning Commission Chair
ATTEST:	
City Representative	•

CENTRAL POINT Oregon

Community Development

Tom Humphrey, AICP
Community Development Director

STAFF REPORT January 5, 2016

AGENDA ITEM (File No. 15032)

Consideration of a Class "C" Variance request to the M-1 sign area standard per CPMC 17.48.080(A)(1) for a membership warehouse in Industrial (M-1) zone. The project site is located within the Federal Way Business Park at the corner of Hamrick and Table Rock Road, and is identified on the Jackson County Assessor's map as 37S 2W 12B, Tax Lots 213, 214, 215 and 216. **Applicant**: Costco Wholesale; **Agent**: Steve Bullock, MG2.

SOURCE

STAFF REPORT

Don Burt, AICP, Planning Manager

BACKGROUND

Costco is proposing the development of a 160,000 sq. ft. membership warehouse on 18.28 acres in the M-1 district. The maximum signage permitted in the M-1 district is 200 sq. ft.

ISSUES

None

FINDINGS

The Class "C" Variance application for the proposed signage for the Costco Membership Warehouse has been evaluated for compliance with the Class "C" Variance criteria set forth in Chapter 17.13.500(C) of the Central Point Municipal Code and found to comply, as evidenced by the Applicant's Findings (Attachment "A") and the Planning Department's Supplemental Findings (Attachment "B").

CONDITIONS OF APPROVAL

ATTACHMENTS

Attachment "A" - Applicant's Findings

Attachment "B" - Planning Department Supplemental Findings

Attachment "C" - Resolution No. 829

ACTION

Consider as a Class C variance the applicant's signage request and 1) approve; 2) approve with revisions; or 3) deny the application.

RECOMMENDATION

Approve Resolution No. 829 granting a Class C variance for Costco Wholesale per the Staff Report dated January 5, 2016



DESIGN AT WORK



TO Central Point Sign Variance Req Review Staff FROM Steve Bullock, MG2 and Costco CC DATE 11.9.15
PROJECT New Costco Warehouse
Central Point
Table Rock & Hamrick
PROJECT NUMBER 14-0393-01

RE

Variance request for Costco Sign Area

Project Description

Proposal: Costco is proposing to develop an industrially zoned, 18.28 acre site in Central Point with a membership warehouse including associated fuel facility, parking and landscaping. As a membership warehouse, Costco does not use any freestanding signage or any internally illuminated signs. They do however desire to have a Costco sign mounted on each visible façade of their building that is simple, clear and integrated into the design of their building. This integration includes the sign's location, scale, lighting and color. For a typical Costco warehouse this results in a 380 sf sign mounted on each of the 4 main walls of the building with another 190 sf sign mounted over the entrance canopy. Additional signs are mounted on the building and fuel facility to identify the Tire Center, Fuel Facility and other applicable services (a rough total of 1850 sf of signage throughout the site).

For Costco's proposal in Central Point, signs are only proposed on 3 of the 4 main walls with one of those even being smaller than typical (280sf instead of 381 sf). Including the signage over the main canopy, the tire center and the fuel facility we are proposing 1,350 sf of signage on the warehouse and the fuel canopy (see Attachments 1-4).

The Central Point M-1 zone is a General Industrial zone that has some fairly restrictive development regulations related to signage. CPMC section 17.48.800.A.1 states the maximum sign area for an individual sign on any one side is 100 sf and the total maximum sign area for the entire building is 200 sf. For this reason, Costco is submitting the following Class C Variance request.

Included in our submittal package along with this narrative are: a site plan (Attachment 1), a colored elevation sheet of the warehouse with the proposed signage (Attachment 2), a black & white elevation sheet of the warehouse with the proposed signage & sign calculations (Attachment 3), a black & white elevation sheet of the fuel facility with the proposed signage & sign calculations (Attachment 4) and a black & white elevation sheet of the warehouse with signage that complies with code (Attachment 5). These items are provided to assist Costco and their design team in demonstrating that the proposed sign package is integrated into the design of the building and is proportioned to match the scale and size of the building.

The signs, as proposed, have been intentionally sized to match the scale of the building even though they are substantially larger than what is allowed in the M-1 zone. The

425.463.2000 425.463.2002 1110 112TH AVENUE NE | SUITE 500 | BELLEVUE, WA | 98004

DATE 11.9.15

PROJECT New Costco Warehouse Central Point

PROJECT NUMBER 14-0393-01



largest signs, which are proposed on the west and north sides of the building, are 381 sf (see Attachments 1 & 3). However, this is in relationship with a wall façade that is over 16,000 sf on the long side and over 10,000 sf on the short side. In other words, the largest proposed sign covers less than 3.8% of the smallest wall of the warehouse (2.3% on the long wall). In total, including the signage on the Fuel Facility which has a 21 sf sign on each side of the fuel canopy (see Attachment 4), the entire Costco site has 1,350 sf of signage mounted on their buildings (see Attachments 3 & 4).

To provide a little perspective and give some sense of scale, Costco's team has also prepared an elevation with signage that complies with CPMC in terms of having no wall with more than 100 sf of signage (see Attachment 5). In this case, the signage becomes lost on the façade. And once found, the signs seem out of scale with the implied volumes and forms of the architectural design of the building. Furthermore, the subject site is over 18 acres in area with a substantial amount of space between Costco's warehouse and the surrounding public roads (300'-400'). While Costco does not want to use freestanding signs or take other approaches that might be deemed garish or attention grabbing, they do want to clearly identify themselves for their members and potential members.

DEVELOPMENT CODE COMPLIANCE

The following sections of this narrative identify the applicable sections of the Central Point code and provide a response and drawing reference that describes how our proposal complies with the Variance criteria.

17.48.080 Signs.

Signs within the M1 district shall be limited to the following:

A.1. Permitted signs shall contain not more than one hundred square feet of surface area on any one side, or an aggregate of two hundred square feet of surface on all sides which can be utilized for display purposes;

Response: Costco is proposing wall mounted signage that is proportional to the size of their building. This results in signage that is larger than the standard identified above. Further discussion of this and rational for approval is included in the Variance Criteria portion of this narrative.

2. Lighted signs shall be indirectly illuminated and non-flashing;

Response: None of Costco's signs are internally illuminated. All sign illumination will be handled with separate fixtures directed at the signs. There will be no flashing lights of any kind.

3. Identification signs shall be permitted within any required setback areas provided it does not extend into or overhang any parking area, sidewalk or other public right-of-

Response: No Freestanding Signage is proposed so no sight or other obstructions will be created.

4. Signs located within vision clearance areas at intersections of streets shall conform to Section 17.60.110.

DATE 11.9.15

PROJECT New Costco Warehouse Central Point

PROJECT NUMBER 14-0393-01

MEMO Page 3 of 5

Response: No Freestanding Signage is proposed so no sight or other obstructions will be created.

17.13 Exceptions to Code Standards

17.13.500 Class C Variances

Response: At the direction of City staff, it was determined that a Class C variance was the appropriate process for Costco to request an Exception/Variance to Central Points sign standards in the M-1 zone.

- C. Approval Criteria. The city shall approve, approve with conditions, or deny an application for a variance based on all of the following criteria:
 - 1. The proposed variance will not be materially detrimental to the purposes of this code, to any other applicable policies and standards, and to other properties in the same zoning district or vicinity:

Response: Costco's situation is unique. They have: a site that is over 18 acres in area, a building that is over 160,000 sf in area, substantial setbacks, and no freestanding signs. Furthermore, the purposes of the M-1 zone state a desire for services "...having high standards of operation of such character to permit their location and operation in close proximity to non-industrial areas of the community." Assuming this project is approved, Costco is such a use. Allowing the proposed signage exception will not be materially detrimental to any other properties in the same zoning district or vicinity.

2. A hardship to development exists which is peculiar to the lot size or shape, topography, or other similar circumstances related to the property over which the applicant has no control, and which are not applicable to other properties in the vicinity (e.g., the same zoning district):

Response: Application of the sign standards to Costco and the particularities of their site, their warehouse and the proposed location creates a hardship for Costco and their intended business. For Costco to be willing to relocate their facility from its current location in Medford they must have the ability to reasonably identify their warehouse, directing potential customers to and around their site. This is critical both for Costco and the City. For Costco, because they want their customers to be able to find their new store and intuitively navigate the site for parking, fuel, the tire center or service area. For the City, because they want circulation to work smoothly around the site minimizing backups and congestion. Clear signage will allow this to happen. Inadequate signage can lead to on **DATE 11.9.15**

PROJECT New Costco Warehouse Central Point

PROJECT NUMBER 14-0393-01



and off-site congestion which would be a hardship for Costco and the community.

Furthermore, the signage standards for the Industrial zones are a max sign area of 100 sf for any one sign and a max total sign area of no more than 200 sf for the entire building. In comparison, all the commercial zones (C-N, C-2, C-4 & C-5), some of which are located on Biddle Road and Table Rock Road only one property away from Costco's proposed site, have no individual or aggregate signage size limitation. This creates a competitive hardship that makes it more difficult for Costco to compete with similar businesses that are located only a block away from the proposed new warehouse. These businesses, in many cases, have freestanding signs out close to the street together with wall mounted signs sized in proportion to their buildings/tenant spaces directing customers to where they want to go. Inadequate signage is a hardship for Costco in that they cannot compete on a level playing field with their competetors.

3. The use proposed will be the same as permitted under this title and city standards will be maintained to the greatest extent that is reasonably possible while permitting reasonable economic use of the land:

Response: There is no proposed change of use with this variance request. The membership warehouse use is a use that the City of Central Point has already established as an appropriate use in the M-1 zone. Approving a change to the signage standards will not affect the proposed use or allow a use that is not permitted under this title.

4. Existing physical and natural systems, such as but not limited to traffic, drainage, natural resources, and parks, will not be adversely affected any more than would occur if the development occurred as specified by the subject code standard:

Response: The proposed variance request if approved will not impact any existing physical and natural systems. Similarly, traffic. drainage or parks will not be adversely affected any more than would occur if the development occurred as allowed by code.

5. The hardship is not self-imposed; and

Response: Costco has not painted themselves into a corner and created a self-imposed hardship. They do not own the property as of now and this is an issue that they are trying to resolve prior to taking that step.

DATE 11.9.15
PROJECT New Costco Warehouse Central Point
PROJECT NUMBER 14-0393-01

MEMO
Page 5 of 5

6. The variance requested is the minimum variance that would alleviate the hardship.

Response: As mentioned in our project description, the proposed signage package has been intentionally designed to be in scale and compatible with the character of the proposed building. Furthermore, Costco has minimized their proposed sign package from what they typically would expect by eliminating one of their wall signs and reducing the size of another. All together they have reduced their sign package by 25% in an effort to minimize their variance request.

Conclusion

With the drawings and background information that has been submitted with this application, and the positions presented in the Approval Criteria, we believe that the proposed Costco development is consistent with the required findings that need to be made to approve this Sign Variance request. Please feel free to contact Costco or MG2 should you have any questions or need further clarification.

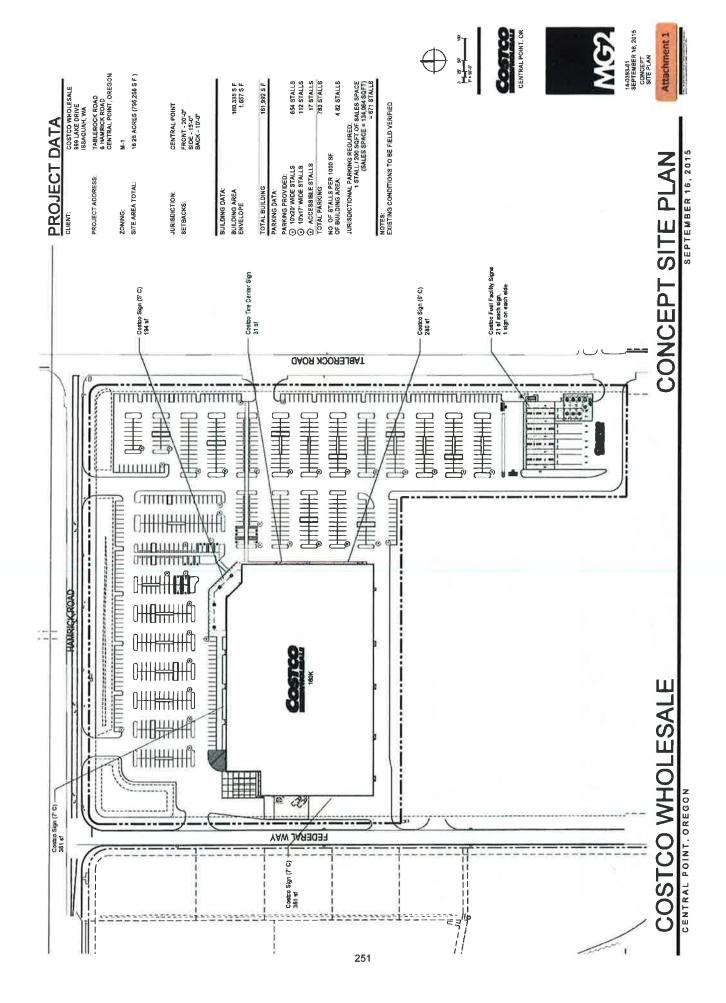
Thank you for your time, consideration and assistance in this matter.

Respectfully: Steve Bullock, MG2

Attachments

- 1. Site Plan
- 2. Colored Elevation of Proposed Signage
- 3. B/W Elevation of Warehouse with the Proposed Signage & Sign Calculations
- 4. B/W Elevation of Fuel Facility with the Proposed Signage & Sign Calculations
- 5. BW Elevation of Warehouse with signage the complies with CPMC

h:\retaii\costco\12\12-0125-01_at albert, ab\02_correspondence\204_jurisdiction\dp submittal package 2012-08-15\st albert dp narrative 12-08-15 docx







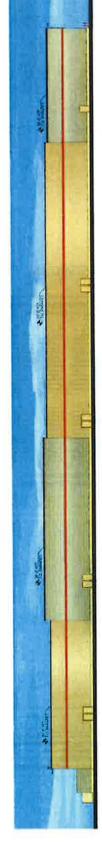
NORTH ELEVATION SCALE: 1/16" = 1'-0"



EAST ELEVATION SCALE: 1/16" = 1'-0"



ENTRY ELEVATION SCALE: 1/16" = 1'-0"



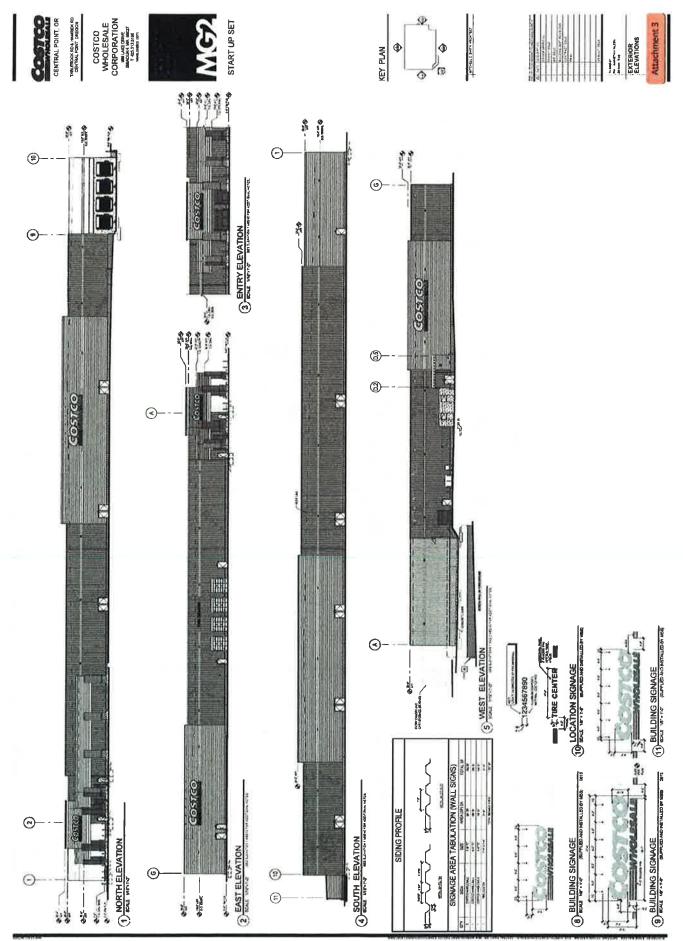
SOUTH ELEVATION SCALE: 1/16" = 1'-0"

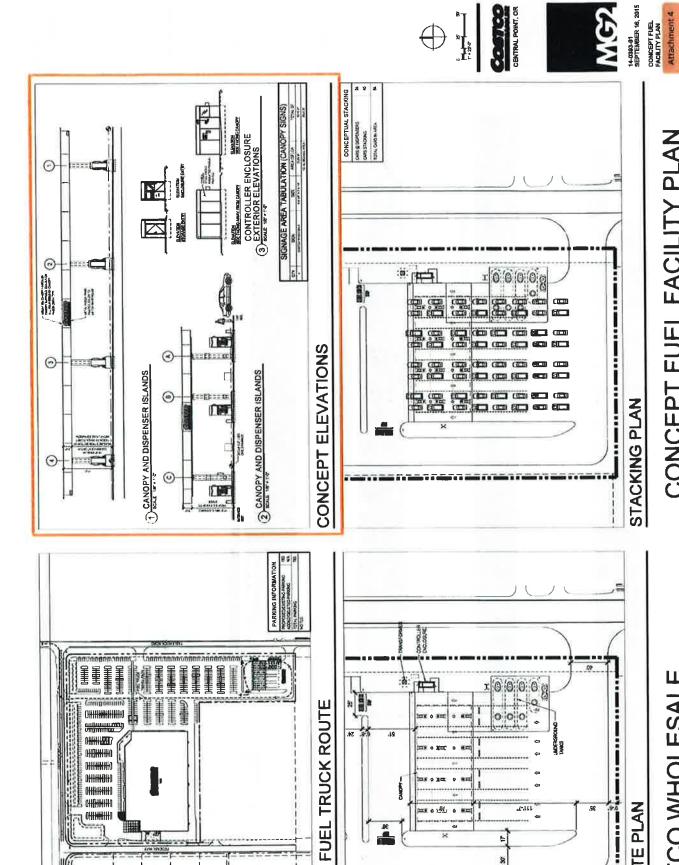


WEST ELEVATION SCALE: 1/16" = 1'-0"



CONCEPT ELEVATIONS





TRUCK ROUTE

FUEL

CONCEPT

38.

254

CHIHAMHIIII

OHIDININO DHHHHHIO OHIHHOU OHHHHHHO CHIDHIHITA

OHIHHHIII Q

CONCEPT FUEL FACILITY PLAN

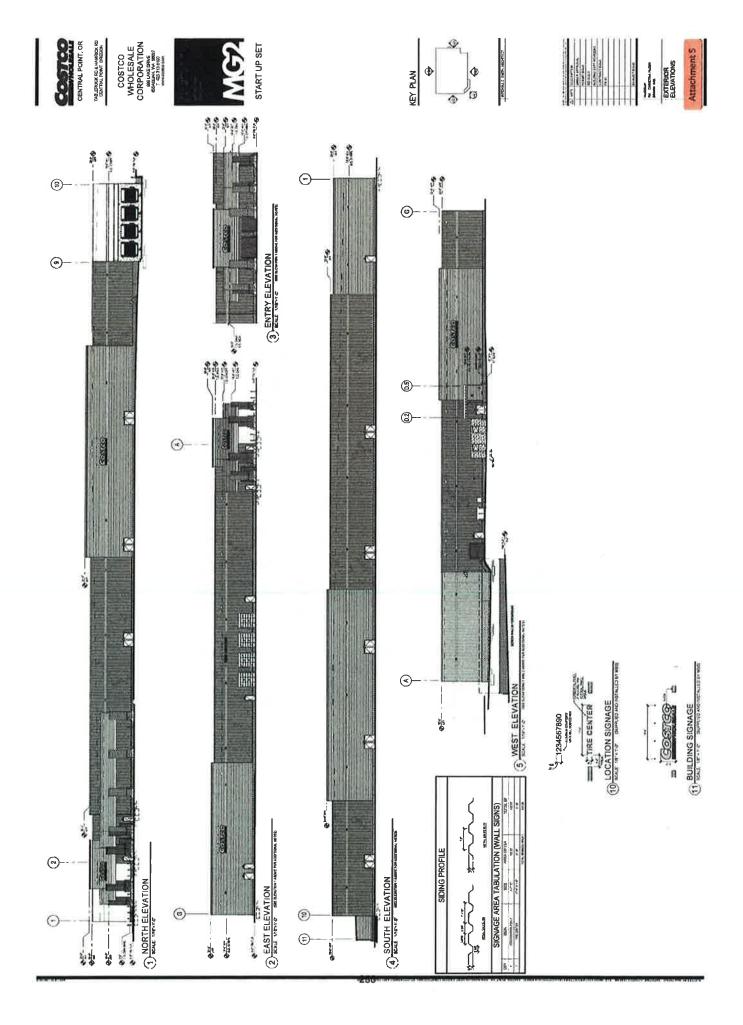
COSTCO WHOLESALE

DETAIL SITE PLAN

25144

F

1 0 1 0 m



FINDINGS OF FACT & CONCLUSIONS OF LAW Costco Wholesale Sign Variance File No. 15032

January 5, 2016

Applicant:) Findings of Fact
Costco Wholesale) and
999 Lake Drive) Conclusion of Lav
Issaguah, WA 98027)

PART 1 - INTRODUCTION

Costco Wholesale is requesting a Class C Variance per Section 17.13.500 of the City of Central Point Municipal Code (CPMC). The purpose of the variance is to allow wall signage in excess of the maximum sign area allowed in the M-1 District. The M-1 district, Section 17.48.080(A)(1), allows a total sign area of 200 sq. ft. per use. The applicant is requesting wall mounted signs with a combined area of 1,346 sq. ft. (see table below).

Sign Type	Qty.	Location	Area
Wall	1	North Wall (Figure 2)	381 sq. ft.
Wall	1	East Wall (Figure 2)	280 sq. ft.
Wall	1	West Wall (Figure 2)	
Wall	1	Entry Wall (Figure 2)	190 sq. ft.
37.51	1	Tire Center (Figure 2)	
Wall	4	Fuel Station Canopy (Figure 3)	83 sq. ft.
Wall	9		1,346 sq. ft.

The excess signage is deemed necessary to identify the 161,992 square foot membership warehouse located on the eastern edge of the Central Point city limits at the southwest corner of Hamrick Road and Table Rock Road (Figure 1). The site also has frontage on Federal Way, a local street. Surrounding properties include developed and undeveloped industrial lands within the M-1 and M-2 zoning districts.

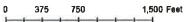
Including this introduction, these findings will be presented in three (3) parts as follows:

- 1. Introduction
- 2. Approval Criteria, Section 17.13.500(C)
- 3. Summary Conclusion

Figure 1

Location Map





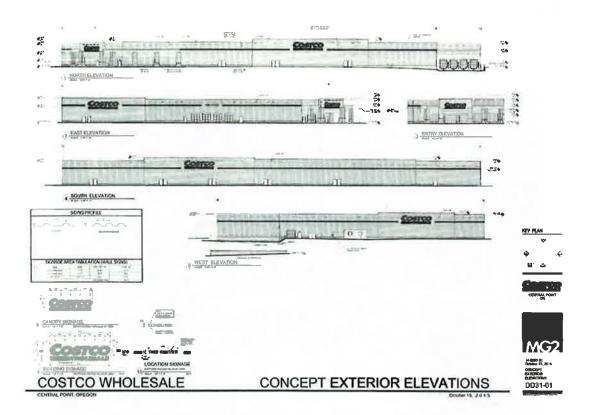


Figure 2

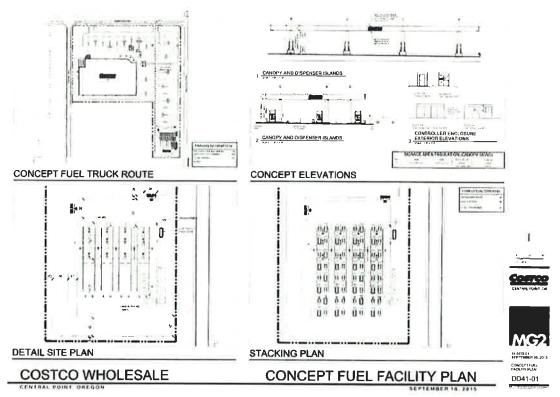


Figure 3

PART 2 - Class C Variances

CPMC 17.13.100 Variance Purpose

This chapter provides standards and procedures for variances, which are modifications to land use or development standards that are not otherwise permitted elsewhere in this title as exceptions to code standards. This chapter cannot provide standards to fit every potential development situation. The city's varied geography, and complexities of land development, require flexibility. This chapter provides that flexibility, while maintaining the purposes and intent of the code. The variance procedures provide relief from specific code provisions when they have the unintended effect of preventing reasonable development in conformance with all other codes. The variance procedures are intended to provide flexibility while ensuring that the purpose of each development standard is met.

Finding 17.13.100. The purpose of the City's variance section acknowledges the challenge in writing standards that cover all situations and that it is the intent of Section 17.13.100 to provide flexibility in the administration of zoning standards to avoid the unintended effect of preventing reasonable development to occur.

Conclusion 17.13.100. The requested signage variance represents an example of a unique situation where the strict application of standards will have the unintended consequence of prohibiting reasonable and allowed development.

CPMC 17.13.500(A), Applicability

Class C variance requests are those that do not conform to the provisions of Sections 17.13.300 and 17.13.400 (Class A and Class B), and that meet the criteria in subsections (A)(1) through (4) of this section.

1. The Class C variance standards apply to individual platted and recorded lots only.

Finding 17.13.500(A)(1). The property in question is a platted and recorded property.

Conclusion 17.13.500(A)(1). Consistent.

2. The Class C variance procedure may be used to modify a standard for three or fewer lots, including lots yet to be created through a partition process,

Finding 17.13.500(A)(2). The property in question is required to be consolidated into a single parcel prior to construction. Given this condition of development the variance request is proposed to be used on a single property.

Conclusion 17.13.500(A)(2). Consistent.

3. An applicant who proposes to vary a standard for lots yet to be created through the subdivision process may not utilize the Class C variance procedure. Approval of a planned unit development shall be required to vary a standard for lots yet to be created through a subdivision process where a specific code section does not otherwise permit exceptions.

Finding 17.13.500(A)(4). The proposed variance will not alter lot standards as required for M-I property.

Conclusion 17.13.500(A)(4). Not applicable.

- 4. A variance shall not be approved that would vary the "permitted uses" or "prohibited uses" of a zoning district.
- 5. Finding 17.13.500(A)(5). The proposed variance does not vary the "permitted" or "prohibited" uses in the M-1 district.

Conclusion 17.13.500(A)(5). Consistent.

CPMC 17.13.500(C), Approval Criteria

The city shall approve, approve with conditions, or deny an application for a variance based on all of the following criteria:

1. The proposed variance will not be materially detrimental to the purpose of this code, to any other applicable policies and standards, and to other properties in the same zoning district.

Finding 17.13.500(C)(1). The purpose statements for the M-1 district, the Zoning Code, or the Comprehensive Plan do not contain goals, policies, or criteria addressing the need to manage the size of signage. Consequently, the Zoning Code contains a wide variation in maximum signage area standards. As an example, within the City there are eight employment zones four of which (C-N, C-2(M), C-4, and C-5) have no restrictions on the maximum area allowed for signage, two (EC and GC) which regulate on the basis of building size (.25 sq. ft. of sign area/lineal feet of building perimeter), and two (M-1 and M-2) which have a maximum of 200 sq. ft. Under the circumstances the proposed variance cannot be found to be materially detrimental to the purpose of the Zoning Code, the purpose of the M-1 code, or any other land use policy.

Additionally, Section 17.13.100, the purpose statement for variances acknowledges the occurrence of unique, but acceptable, situations that warrant exceptions from standards. The Costco Membership Warehouse is an example of a use that was not anticipated years age, but does comply with the purpose of the M-1 district.

Conclusion 17.13.500(C)(1). The proposed variance does not present a detrimental impact on the health, safety, or general welfare of the surrounding neighbors, or the community at large, and does not establish an unacceptable precedent to the maximum area for a sign within the M-1 district.

2. A hardship to development exists which is peculiar to the lot size or shape, topography, or other similar circumstances related to the property over which the applicant has no control, and which are not applicable to other properties in the vicinity (e.g. the same zoning district).

Finding 17.13.500(C)(2). The applicant's findings address the unique character of Costco's site requirements, which are predicated on the type of business, membership warehouse, they operate and the large gross floor area needed to operate competitively. In addition to Costco's findings it is worth stressing the unique character of the Costco development vs. typical development in the M-1 district. The typical lot I the M-1 district is 1.5 acres in area and can accommodate a building of 15,000 sq. ft. This is a very small percentage of Costco's 28.28 acre site and over 160,000 sq. ft. of floor area. Costco's signage request (.008 sq. ft. per sq. ft. of gross floor area)¹, when compared to the average M-1 development (.013 sq. ft. per sq. ft. gross floor area)², represents a reasonable request and is not biased in favor of Costco.

¹ Based on Costco's 1,360 sq. ft. request

² Based on the 200 sq. ft. signage area maximum

Conclusion 17.13.500(C)(2). The Costco development proposal not only demonstrates uniqueness relative to typical development within the M-1 district it also demonstrates the justification for the variance process.

3. The use proposed will be the same as permitted under this title and city standards will be maintained to the greatest extent that is reasonably possible while permitting reasonable economic use of the land.

Finding 17.13.500(C)(3). As noted in the applicant's findings Costco, as a membership warehouse, is an allowed use within the M-1 district. The proposed sign variance does not alter or otherwise change the use of the property as proposed.

Conclusion 17.13.500(C)(3). Consistent.

4. Existing physical and natural systems, such as but not limited to traffic, drainage, natural resources, and parks, will not be adversely affected any more than would occur if the development occurred as specified by the subject code standard.

Finding 17.13.500(C)(4). As noted in the applicant's findings the proposed sign variance, being located on proposed structure will not impact any existing physical and natural systems, traffic, drainage, or parks.

Conclusion 17.13.500(C)(4). Not Applicable.

5. The hardship is not self-imposed.

Finding 17.13.500(C)(5). Costco's business model requires the use of a very large warehouse structure to house their business. To be competitive Costco does not have any discretion regarding the size of their building. The proper sizing of identification signage to complement the building is the concern. As noted in Finding 17.13.500(C)(2) the requested variance is not out of proportion with what would be allowed for a typical building in the M-1 district, it is actually a lot less.

Conclusion 17.13.500(C)(5). The requested variance is not self-imposed when considering the size of the building and the scale of the relationship between signage and building.

6. The variance request is the minimum variance that would alleviate the hardship.

Finding 17.13.500(C)(6). As noted in Finding 17.13.500(C)(2) the average ratio between building and the maximum 200 sq. ft. signage area is .013 sq. ft. per sq. ft. of gross floor area) vs. Costco's request of .008 sq. ft. per sq. ft. gross floor area),

Conclusion 17.13.500(C)(6). The requested variance is reasonable when the size of the building, sign location, and the ratio for typical development in the M-1 district are taken into consideration.

PART 3 – SUMMARY CONCLUSION

The requested variance has been evaluated against all six (6) of the criteria set forth in 17.13.500(C). Per the findings set forth herein the requested variance has been found to be compliant with said criteria and therefore justified as an exception to the maximum signage limitation set forth in Section 17.48.080.

Further, the requested variance represents an excellent example of the application of the purpose of variance process.

PLANNING COMMISSION RESOLUTION NO. 829

A RESOLUTION OF THE PLANNING COMMISSION APPROVING A CLASS "C" VARIANCE TO THE MAXIMUM SIGNAGE AREA REQUIREMENTS FOR THE M-1 DISTRICT PER CPMC 17.13.500(C).

Applicant: Costco (File No: 15032)

WHEREAS, the applicant has submitted an application for a Class "C" variance to increase the maximum allowable signage area on Costco's 18.28 acres located on the southwest corner of Table Rock Road and Hamrick Road in the City of Central Point, Oregon; and

WHEREAS, on January 5, 2016, at a duly noticed public hearing, the Central Point Planning Commission considered the Applicant's request for a Class "C" Variance to the maximum allowable signage area per Section 17.48.080; and

WHEREAS, the Planning Commission, as part of the Class "C" variance application has considered and finds that adequate findings have been made demonstrating that issuance of the variance is consistent with the criteria set forth in Section 17.13.500(C).

NOW, THEREFORE, BE IT RESOLVED that the City of Central Point Planning Commission by Resolution No. 829 hereby approves the Paul Williams Class "C" variance request based on the findings and conditions of approval as set forth in Exhibit "A," the Planning Department Staff Report dated January 5, 2016, including attachments incorporated by reference.

PASSED by the Planning Commission and signed by me in authentication of its passage this 5th day of January, 2016.

	Planning Commission Chair
ATTEST:	
City Representative	_