THE DALLES DOWNTOWN STREETSCAPE AND PARKING PLAN

PREFERRED PARKING PLAN

Prepared for:

The City of the Dalles

Prepared by:

David Evans and Associates, Inc.

June 10, 2005

Table of Contents

List of Tables

List of Figures

Follows Page

List of Appendices

INTRODUCTION

In recent years, the City of The Dalles has undertaken a concerted effort to maintain and improve the downtown central business district (CBD). As part of that effort, the City is currently implementing a Downtown Renaissance project to reconnect the CBD with the Columbia River via the existing Union Street and proposed Washington Street underpasses of Interstate 84 (I-84). In addition, the City is redesigning key downtown streetscapes and implementing major commercial and recreational developments in the CBD. To help guide the Downtown Renaissance project, the City is creating a parking plan for the CBD.

This report presents the Preferred Parking Plan for future on-street and off-street parking supplies within the CBD. The Preferred Parking Plan is based on input from the Urban Renewal Advisory Committee (URAC), the Project Management Team (PMT), and project stakeholders. The parking sites utilized for this plan were identified earlier in this project and are summarized in the site analysis memorandum contained in the appendix. This report is the culmination of a parking observation, forecasting, and site planning effort that is summarized within several memorandums that are contained within the appendix.

STUDY AREA

The study area for this project is located within the City of the Dalles CBD. The study area is bounded by Taylor Street, the Columbia River, 6th Street, and Pentland Street. The study area is shown in **Figure 1**. Land use within the study area consists of both residential and commercial uses.

Parking supply and utilization is tabulated for the study area as a whole and for two sub-areas. The downtown core sub-area consists almost exclusively of commercial businesses and the couplet sub-area, which consists of parking on or immediately adjacent to the one-way couplet (2nd and 3rd streets) between Union and Madison Street. The couplet sub-area represents the most desirable commercial on-street parking within the study area. The boundaries of the couplet sub-area are shown in **Figure 1**.

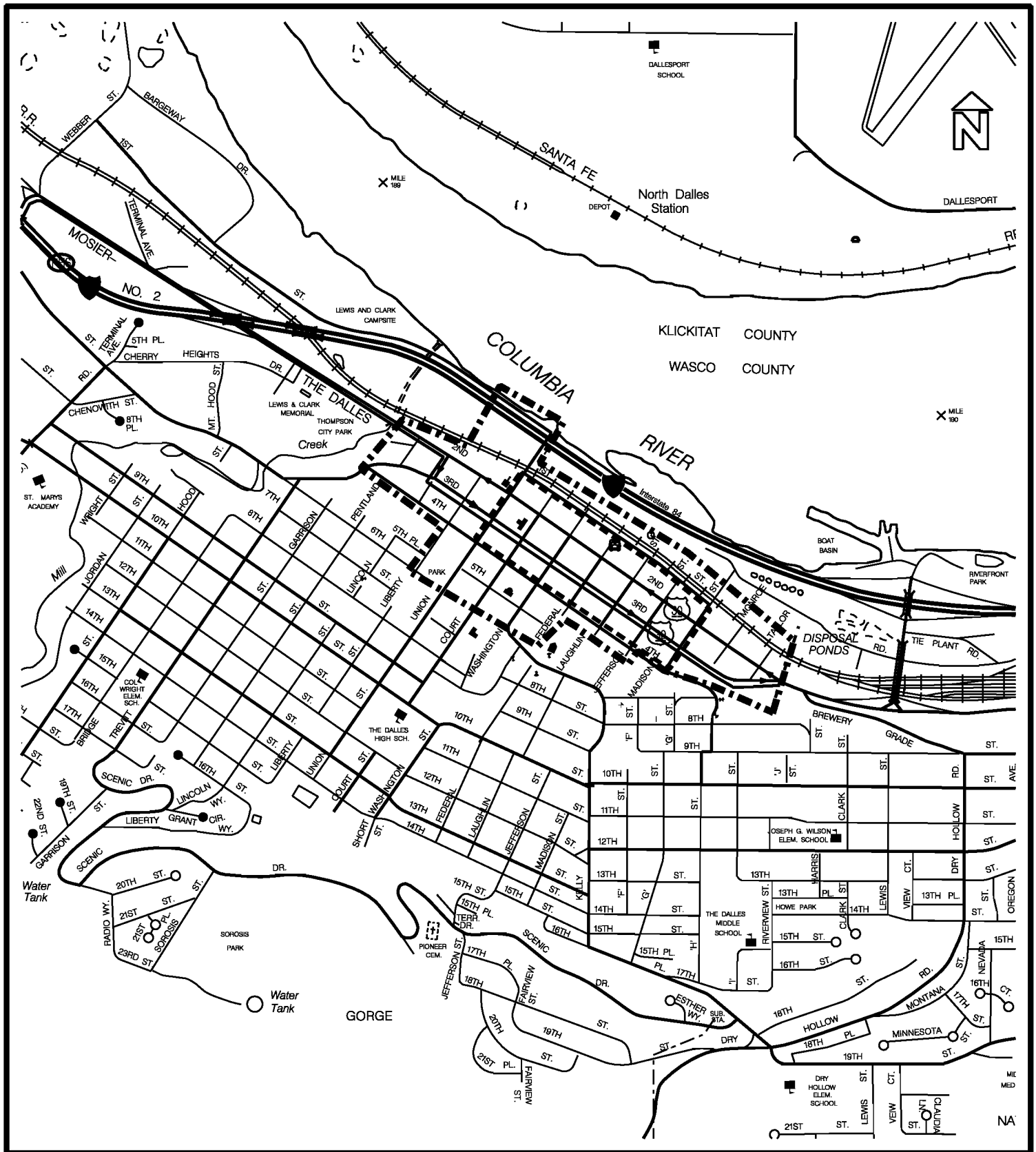
EXISTING PARKING SUPPLY AND DEMAND

The two major traffic generators that exist today within the CBD are local businesses such as restaurants, specialty stores and commercial office space, and transitory traffic from I-84.

Existing Parking Supply

A variety of on-street parking options are used within the study area to accommodate parking demands with the majority of streets utilizing parallel parking. Some streets within the study area allow angle parking; however, angle parking is primarily limited to the north-south streets. For the study area, the total number of on-street parking spaces (parking capacity) is 1,267. The on-street parking capacity in the couplet sub-area is 548 spaces.

The majority of off-street parking within the study area is privately owned by local businesses and serves as customer and/or employee parking. The City operates a public off-street parking lot that encompasses a block and a half along 1st Street between Washington Street and Laughlin Street. The off-street parking lot is free to the public for up to 48 hours with a capacity of 128 spaces. For the study area, the total



DAVID EVANS AND ASSOCIATES INC.

Legend

Study Area

Couplet Area

Figure 1

Study Area

The Dalles Downtown Streetscape and Parking Plan

number of off-street parking spaces (parking capacity) is 1,423. The off-street parking capacity in the couplet sub-areas is 695 spaces.

Existing Parking Utilization

On-street and off-street parking utilization (demand) observations were conducted during August and September 2004 within the study area by David Evans and Associates, Inc. (DEA) staff. Observations were conducted on a typical weekday (Thursday, September 15, 2004) and weekend day (Saturday, August 21, 2004) during four time periods to provide insight into day-of-week and time-of-day variations in parking utilization. The four time periods observed included 9:00-10:00 am, 12:00-1:00 pm, 5:00-6:00 pm, and 6:30-7:30 pm. Observation time periods were chosen with regard to key activity times and resulting parking needs.

In general, weekday on-street parking utilization is higher then weekend day utilization and weekday on-street parking varies throughout the day more so than weekend day parking utilization. **Table 1** presents aggregated on-street parking utilization results for the weekday and weekend day periods.

TABLE 1
OBSERVED WEEKDAY AND WEEKEND DAY ON-STREET PARKING UTILIZATION

	Weekday				Weekend Day			
	Couplet Sub-Area[1]		Total Study Area		Couplet Sub-Area[1]		Total Study Area	
Time of Day	**Count**	**Percent of Capacity**	**Count**	**Percent of Capacity**	**Count**	**Percent of Capacity**	**Count**	**Percent of Capacity**
9:00-10:00 am	289	53%	582	46%	150	27%	288	23%
12:00-1:00 pm	311	57%	592	47%	190	35%	322	25%
5:00-6:00 pm	235	43%	412	33%	133	24%	253	20%
6:30-7:30 pm	175	32%	320	25%	126	23%	254	20%
Capacity	548		1,267		548		1,267	

Source: Parking observations and capacity estimates compiled by DEA staff

[1] Couplet sub-area represents parking along and adjacent to 2nd and 3rd streets as shown in Figures 2 and 3.

The temporal change in typical weekday and weekend parking utilization suggests that peak parking demands occur within the time periods observed. As a result, it appears that typical on-street parking use within the study area (1,267 parking space capacity) does not exceed 50 percent of available capacity during peak parking levels. Therefore, under typical weekday operations, capacity appears to exist to accommodate over 750 more automobiles on-street than are currently parking in the study area.

Off-street parking utilization was observed to follow a pattern similar to on-street parking with utilization occurring on weekdays during typical business hours. The majority of off-street parking lots in the study area were less than fully utilized during typical weekday and weekend day periods. **Table 2** presents aggregated off-street parking utilization results for the weekday and weekend day periods.

TABLE 2 OBSERVED WEEKDAY AND WEEKEND DAY OFF-STREET PARKING UTILIZATION								
	Weekday				Weekend Day			
	Couplet Sub-Area[1]		Total Study Area		Couplet Sub-Area[1]		Total Study Area	
Time of Day	Count	Percent of Capacity	Count	Percent of Capacity	Count	Percent of Capacity	Count	Percent of Capacity
9:00-10:00 am	337	48%	678	48%	162	23%	279	20%
12:00-1:00 pm	328	47%	643	45%	154	22%	292	21%
5:00-6:00 pm	193	28%	408	29%	129	19%	262	18%
6:30-7:30 pm	107	15%	297	21%	78	11%	226	16%
Capacity[1]	695		1,423		695		1,423	

Source: Parking observations and capacity estimates compiled by DEA staff

[1]Couplet sub-area represents parking lots along and adjacent to 2nd and 3rd streets as shown in Figures 4 and 5.

[2]Capacity for off-street parking lots shown in Figures 5 and 6 only. Business parking lots with less than 10 spaces or access only via an alley not included in calculations. Capacity of unstriped parking lots assumed by DEA.

Observed weekday off-street parking utilization is representative of downtown business parking, with peak utilization occurring during typical working hours. Off-street parking peaks during mid-morning with up to 48 percent of available parking spaces utilized within the study area and 48 percent of the couplet sub-area being utilized. During the peak periods, a few lots reach capacity but the majority have unused parking spaces. The public parking lots on 1st Street between Washington Street and Laughlin Street are well-utilized with a combined parking utilization rate over 60 percent during business hours. The lot to the east of Federal Street is the most heavily used with parking utilization running at or near capacity during business hours. Off-street parking within the study area drops off significantly in the evening with only 21 percent of the parking spaces utilized in the study area. For a detailed accounting of existing parking supply and utilization see **Appendix A**, Technical Memorandum 1 – 2004 Parking Supply and Utilization.

SUMMARY OF FUTURE PARKING SUPPLY AND DEMAND

The estimate of future parking demand uses city Geographic Information System (GIS) land use based activity and zoning data to develop a maximum demand scenario for comparison with available parking supply. Given all the variables to forecasting future parking demand, this methodology takes a simplified full build out and occupancy approach.

Utilizing GIS based land use data from the City of The Dalles, the floor area on each parcel within the study area was categorized as one of four land use types: residential, office, retail, and industrial. An initial total demand by land use was then determined using parking generation rates from the Institute of Transportation Engineers Parking Generation Handbook, 3rd Edition. The parking demand for each land use was then adjusted by a time of day factor to calculate the peak hour parking demand within the study area. With the peak hour parking demand determined, the parking generation rates were adjusted downward to account for the captive market effect of the study area. As the downtown core of a relatively isolated city, users within the study area tend to conduct multiple tasks while utilizing only one parking spot. For example, an office worker within the downtown study area may drive to work, park in the office

parking lot, and then walk to a nearby restaurant for lunch. That person has completed two tasks, while utilizing only one parking space.

To provide a better comparison of supply and demand, the residential parking demand was removed, since residential parking supply was not observed. In addition, the land use parking demand assumes full build out of all land and 100 percent occupancy of all buildings. Full build out of all land is probable, however, 100 percent occupancy is unrealistic. To provide a more realistic calculation of parking demand, a peak occupancy rate of 90 percent is used. The final adjusted parking demand for the full build out and occupancy of all the land within the study area and couplet sub-area are shown in **Table 3**.

TABLE 3
STUDY AREA: LAND USE BASED PARKING DEMAND

	Study Area				Couplet Sub-Area			
Land Use	**Raw Demand[1]**	**Time of Day Factor[2]**	**Captive Market Factor[3]**	**Adjusted Demand**	**Raw Demand[1]**	**Time of Day Factor[2]**	**Captive Market Factor[3]**	**Adjusted Demand**
Residential	351	85%	71%	212	22	85%	71%	13
Office	1,950	90%	71%	1,246	877	90%	71%	561
Retail	1,664	100%	71%	1,182	1,142	100%	71%	810
Food Service	390	70%	71%	194	130	70%	71%	65
Total	4,355			2,833	2,171			1,449
			Non-Residential	2,622			Non-Residential	1,436
			90% Occupancy Rate	**2,359**			90% Occupancy Rate	**1,292**
			Existing Supply	**2,690**			Existing Supply	**1,243**
			Ideal Supply at 80% Utilization	2,950			Ideal Supply at 80% Utilization	1,555
			Additional Parking	260			Additional Parking	312

Source: Calculation conducted by DEA staff

[1]Institute of Transportation Engineers Parking Generation Handbook, 3rd Edition

[2]Exhibit 28, The Urban Land Institute Shared Parking

[3]Exhibit 23, The Urban Land Institute Shared Parking

With an adjustment, the peak parking demand for the Study area is 2,359 spaces, which is lower than the existing supply of 2,690 spaces. However, the efficiency and attractiveness of parking begins to deteriorate as parking utilization begins to exceed 80 percent utilization. Therefore, the parking supply within the study area actually needs to increase by 260 spaces to keep parking utilization in the study area below 80 percent. Without the creation of additional parking spaces, parking in ideal locations may be difficult during peak times as parking utilization will be around 88 percent of capacity.

Within the couplet sub-area, the peak parking demand is 1,292 spaces, which is slightly higher then the existing parking supply of 1,243 spaces. To meet the long-term parking demand within the couplet sub-area, approximately 50 additional parking spaces will be needed. Ideally, 310 additional parking spaces are needed in the long-term for the couplet sub-area in order to maintain an efficient utilization rate of 80 percent. For a detailed accounting of future parking supply and utilization please see **Appendix B**, Technical Memorandum 2 – Projected Parking Supply and Utilization.

PREFERRED PARKING PLAN

A total of 14 sites were identified as potential locations for additional parking supply within the study area. Based on input from the URAC, PMT and stakeholders all 14 sites are utilized in the Preferred Parking Plan. The sites consist of on-street re-striping, development of off-street surface lots and construction of off-street parking structures as shown below and in **Figure 2**. The goal of the Preferred Parking Plan is to prioritize the implementation of the 14 sites to accommodate future parking increases within the CBD. The 14 sites are broken into near-term sites (1-5 years), medium-term sites (5-20 years) and long-term sites (20+ years). **Appendix C**, Site Analysis and Alternative Parking Plans, summarizes the selection process for the 14 sites utilized in the Preferred Parking Plan.

NEAR-TERM SITES (1-5 YEARS)

Five of the 14 sites are considered near-term sites as their construction and cost are low enough to facilitate their implementation within the next five years. The five near-term sites are listed below by their site number as shown in **Figure 2**.

On-Street Parking

1. Re-stripe exiting parallel parking to angled parking along south side of 1st Street between Union Street and Washington Street. This would add 4 on-street parking spaces.
2. Re-stripe exiting parallel parking to angled parking along Jefferson Street between 3rd and 4th Streets. This would add 14 on-street parking spaces.
3. Re-stripe exiting parallel parking to angled parking along Federal Street between 2nd and 3rd streets. This would add 15 on-street parking spaces.
4. Re-stripe exiting parallel parking to angled parking along one side of Washington Street between 2nd and 6th Streets. This would add 23 on-street parking spaces.

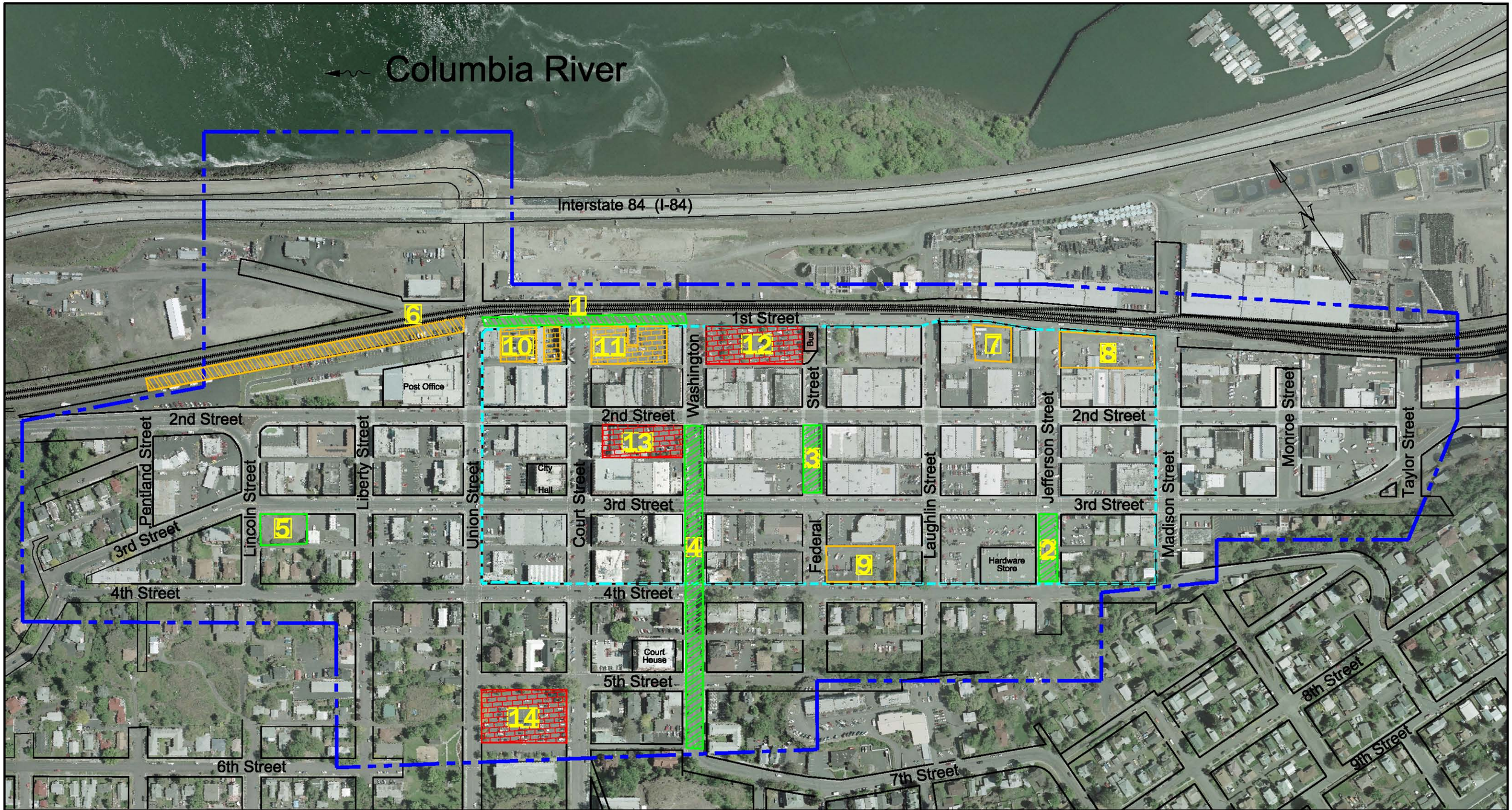
Off-Street Surface Parking

5. Develop the vacant lot on the southeast corner of Lincoln Street and 3rd Street. This would add 25 off-street parking spaces.

Sites 1 through 4 require the simple re-striping of existing parallel on-street parking to angled parking and can be completed in the immediate future for less than $400 a space. Site 5 will require the City of The Dalles to purchase the vacant lot. After the land is purchased, the land could be converted to a surface parking lot for approximately $4,100 a space.

Site 1: On-Street Parking, 1st Street between Union Street and Washington Street

Site 1 is part of the downtown streetscape improvements along 1st Street. From a parking stand point the site would require only a simple re-striping of exiting on-street parallel parking along the north side of the street to angled parking along the south side of the street between Union Street and Washington Street. The full streetscape improvements on 1st Street would be much more involved including rebuilding the street and sidewalk to create a curbless cross section designed for public use during special events. There are 22 parallel on-street parking spaces at this site today. Re-striping to angle parking would provide 26 spaces for a net gain of 4 parking spaces.



DAVID EVANS AND ASSOCIATES INC.
2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

Legend

- Study Area
- Couplet Area
- Building

- Near Term Sites (1 - 5 Years)
- Medium Term Sites (5 - 20 Years)
- Long Term Sites (20 Plus Years)
- Off-Street Surface Parking Lot
- Off-Street Structured Parking Lot
- On-Street Re-Striping

FIGURE 2

Preferred Parking Plan

Site Opportunities

- Part of the downtown streetscape improvements for 1st Street
- Can be completed with simple re-striping
- Close to Post Office and future City Park
- Moves parking away from train tracks and closer to area businesses
- Increased parking supply should improve activity levels on 1st Street

Site Constraints

- Not centrally located
- Perceived safety concerns along 1st Street
- Angled parking limited to vehicles less than 19 feet in length

Site Cost

- Cost $5,550
- Cost per Space $213

The parking for Site 1 is laid out in plan view in **Figure 3**.

Site 2: On-Street Parking, Jefferson Street

Site 2 consists of a simple re-striping of existing on-street parallel parking to angled parking along both sides of Jefferson Street between 3rd and 4th streets. There are 9 parallel on-street parking spaces at this site. Re-striping to angle parking would provide 23 spaces for a net gain of 14 parking spaces.

Site Opportunities

- Can be completed with simple re-striping
- Located within the couplet sub-area
- Increases parking supply within the downtown core

Site Constraints

- Angled parking limited to vehicles less than 19 feet in length

Site Cost

- Cost $5,400
- Cost per Space $235

The parking for Site 2 is laid out in plan view in **Figure 4**.

Site 3: On-Street Parking, Federal Street

Site 3 consists of re-striping the existing on-street parallel parking to angled parking along both sides of Federal Street between 2nd and 3rd streets. To accommodate the angled parking, the existing southbound left-turn lane on Federal Street at 3rd Street would have to be removed. The site has 12 parallel on-street parking spaces. Re-striping to angled parking would provide 27 spaces for a net gain of 15 parking spaces.

Site Opportunities

* Part of 1st Street Improvements
* Increases Activity on 1st Street
* Close to Proposed City Park
* Increases Parking by 4 Spaces

Site Constraints

* Not Centrally Located
* Perceived Safety Concerns
* Parking Limited to Vehicles Less Than 19 Feet in Length

Site Costs

* Cost $5,550
* Cost per Space $213
* Re-striping Cost Only

DAVID EVANS AND ASSOCIATES INC.
2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

FIGURE 3

SITE 1: On-Street Parking
1st Street Between Union Street and Washington Street

DAVID EVANS
AND ASSOCIATES INC.
2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

Site Opportunities

* Simple Re-Striping
* Located in Couplet Sub-Area
* Increases Parking by 14 Spaces

Site Constraints

* Parking Limited to Vehicles Less Than 19 Feet in Length

Site Costs

* Cost $5,400
* Cost per Space $235
* Re-striping Cost Only

FIGURE 4

SITE 2: On-Street Parking
Jefferson Street Between
3rd and 4th Streets

Site Opportunities

- Can be completed with simple re-striping
- Located within the couplet sub-area near Columbia River Bank Building
- Increases parking supply within the downtown core

Site Constraints

- Southbound left-turn lane at 3rd Street removed to accommodated angled parking
- Angled parking limited to vehicles less than 19 feet in length

Site Cost

- Cost $5,650
- Cost per Space $209

The parking for Site 3 is laid out in plan view in **Figure 5**.

Site 4: On-Street Parking, Washington Street

Site 4 consists of a re-striping of existing on-street parallel parking to angled parking along one side of Washington Street between 2nd and 6th streets. To accommodate the angled parking, the existing southbound left-turn lane on Federal Street at 3rd Street would have to be removed. The east side of the street at this site has 28 parallel on-street parking spaces. Assuming the parking would be placed on the east side, re-striping to angled parking would provide 51 spaces for a net gain of 23 parking spaces.

Site Opportunities

- Can be completed with simple re-striping
- Located within the couplet sub-area
- Increases parking supply within the downtown core

Site Constraints

- Angled parking limited to one side of the street
- Travel lanes reduced to 11 feet
- Southbound left-turn lane at 3rd Street removed to accommodated angled parking
- Angled parking limited to vehicles less than 19 feet in length

Site Cost

- Cost $18,600
- Cost per Space $365

The parking for Site 4 is laid out in plan view in **Figure 6**.

Site 5: Off-Street Surface Parking, Southeast Corner of Lincoln Street and 3rd Street

Site 5 is a vacant lot on the southeast corner of Lincoln Street and 3rd Street. The City is in discussions with the owner to purchase the lot and build a surface parking lot. The parking lot would provide the study area with an additional 25 public off-street parking spaces.

DAVID EVANS
AND ASSOCIATES INC.
2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

Site Opportunities

* Simple Re-Striping
* Located in Couplet Sub-area
* Increases Parking by 15 Spaces

Site Constraints

* Removes Left-Trun Lane
* No Employee Parking
* Parking Limited to Vehicles Less Than 19 Feet in Length

Site Costs

* Total Cost $5,650
* Cost per Space $209
* Re-striping Cost Only

FIGURE 5

SITE 3: On-Street Parking
Federal Street Between
2nd and 3rd Streets

DAVID EVANS AND ASSOCIATES INC.
2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

Site Opportunities

* Simple Re-Striping
* Located in Couplet Sub-Area
* Increases Parking by 23 Spaces

Site Constraints

* Travel Lanes reduced to 11 ft.
* Removes Left-Turn Lane
* Limited Employee Parking
* Parking Limited to Vehicles Less Than 19 Feet in Length

Site Costs

* Total Cost $18,600
* Cost per Space $365
* Re-striping Cost Only

FIGURE 6

SITE 4: On-Street Parking
Washington Street Between
2nd and 6th Streets

Site Opportunities

- Relatively easy to convert to a parking lot as it is vacant
- Provides additional public off-street parking
- Highly visible to through traffic on 3rd Street
- Additional public off-street parking
- Close to historic Old St. Peter's Landmark

Site Constraints

- Not centrally located
- Access may be problematic due to street configuration

Site Cost

- Cost $104,000
- Cost per Space $4,160

The parking for Site 5 is laid out in plan view in **Figure 7**.

Near-Term Parking Demand and Supply

Parking supply within the study area is sufficient to meet existing demand as parking utilizing is currently less than 60 percent of the available parking spaces. However, parking shortages do exist on a block by block basis during certain times of the day and implementation of the 5 near-term parking sites would increase the parking supply within the study area by 81 parking spaces. More importantly the majority of the new parking spaces would be within the couplet sub-area and should help elevate local parking shortages. Implementation of the five sites will help maintain current parking expectations by both employees and patrons of downtown businesses.

MEDIUM-TERM SITES (5-20 YEARS)

Six of the 14 sites are considered medium-term sites, as they involve privately owned land, potential right-of-way acquisition, and construction of new retail space along 1st Street. These factors make implementation of the six sites significantly more costly. Economically it is unlikely that these six sites will be feasible in the next five years and may not be required for another 20 years. The six medium-term sites are listed below by their site number as shown in **Figure 2**.

On-Street Parking

6. Extension of 1st Street parallel to the railroad tracks from Pentland Street east to Union Street. The extension would be one-way eastbound with 86 angled on-street parking spaces along the south side of the street.

Off-Street Surface Parking

7. Develop the underutilized lot south of 1st Street between Laughlin and Jefferson Streets: This lot has a large area of open space that could be redeveloped into a surface parking lot. Redevelopment would add approximately 34 off-street parking spaces.

Site Opportunities

* Vacant Lot
* New Public Parking
* Highly Visible to 3rd Street
* Increases Parking by 25 Spaces

Site Constraints

* Not Centrally Located
* Limited Access

Site Costs

* Total Cost $104,000
* Cost per Space $4,160

DAVID EVANS AND ASSOCIATES INC.
2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

FIGURE 7

SITE 5: Off-Street Parking
Southeast Corner of
Lincoln and 3rd Streets

8. Develop the underutilized lot south of 1st Street between Jefferson and Madison Streets: This lot has a large area of open space that could be redeveloped into a surface parking lot. Redevelopment would add approximately 67 off-street parking spaces.
9. Develop the former The Dalles Chronicle building and parking lot north of 4th Street between Federal and Laughlin Streets: This existing building and parking lot are underutilized and could be redeveloped into a surface parking lot. Redevelopment would add approximately 18 off-street parking spaces.

Off-Street Parking Structure

10. Re-develop the lots south of 1st Street between Union and Court Streets. Given the grade difference between these lots and 1st Street, they are ideal for redevelopment into structure parking with retail development at street level. One level of parking would create no new parking but could provide secured parking. A second level of parking behind the retail would provide a net gain of approximately 6 off-street parking spaces.
11. Re-develop the lots south of 1st Street between Court and Washington streets. Given the grade difference between these lots and 1st Street, they are ideal for redevelopment into structure parking with retail development at street level. One level of parking would create no new parking but could provide secured parking. A second level of parking behind the retail would provide a net gain of approximately 43 off-street parking spaces.

Site 6 requires a detailed field survey and right-of-way review to determine its feasibility, but may be implemented for approximately $3,000 a space. Sites 7 through 11 are on private land and would require an agreement be reached with the landowners to implement. Not including any leasing or acquisition costs, the three sites could be constructed for less than $3,000 a space. Sites 10 and 11 would create structured parking below new retail space along 1st Street. Not including development of the retail spaces, the two sites could be developed for less than $6,200 a space.

Site 6: On-Street Parking, 1st Street between Pentland Street and Union Street

Site 6 would involve the extension of 1st Street from Union Street west to Pentland Street. Angled parking would be provided along the south side of the street with traffic limited to one-way eastbound only. Layout of this site is based on GIS right-of-way data. A detailed survey and confirmation of available right-of-way will be required to confirm the feasibility of this site. As a new roadway, this site has no existing parking. However, people do park in the gravel area next to the train tracks, which indicates an existing demand for parking within this area. The capacity of this unofficial lot is estimated at 20 spaces. Extending 1st Street to Pentland would provide 86 spaces for an official gain of 86 spaces and an unofficial net gain of 66 parking spaces. If a detailed field survey shows insufficient right-of-way to extend 1st Street to Pentland a two-way street with head in parking and a turnaround could be constructed to provide some additional parking.

Site Opportunities

- Provides additional connectivity between 1st Street and 2nd Street
- Improves liability concerns of unofficial nonstandard gravel parking area
- Close to Post Office and future City Park
- Increased parking supply and connectivity may improve activity levels on 1st Street
- Outside of downtown parking zone making it eligible for on-street employee parking

Site Constraints

- Not centrally located
- Perceived safety concerns along 1st Street
- Angled parking limited to vehicles less than 19 feet in length

Site Cost

- Cost $262,850
- Cost per Space $3,056

The parking for Site 6 is laid out in plan view in **Figure 8**.

Site 7: Off-Street Surface Parking, South of 1st Street between Laughlin and Jefferson Streets

Site 7 contains multi-story buildings at the east and west end with a large open area between the buildings that is being used primarily for storage. This site is privately owned, making any changes to the site pursuant to an agreement with the property owner(s). The site is within the downtown parking zone so additional off-street parking is not required even if the buildings are redeveloped or expanded. The City is encouraged to promote development of off-street parking on the site. Economic forces are also likely to mandate the creation of off-street parking on the site when the building are redeveloped or added to the site. Assuming the footprint of the existing buildings remains the same redevelopment of the open area would yield a surface parking lot with 34 parking spaces. This would increase the parking supply within the study area by 34 spaces.

Site Opportunities

- Large open area that would be relatively easy to convert to a surface parking lot
- Located within the couplet sub-area
- Increases parking supply within the downtown core
- Increased parking supply should improve activity levels on 1st Street

Site Constraints

- Privately owned
- Not visible from 2nd or 3rd Streets
- Perceived safety concerns along 1st Street
- Creation of parking not required as part of property redevelopment

Site Cost

- Cost $77,400
- Cost per Space $2,276

The parking for Site 7 is laid out in plan view in **Figure 9**.

Site 8: Off-Street Surface Parking, South of 1st Street between Jefferson and Madison Streets

Site 8 contains one small building with remainder of the site being a large open area that is being used primarily for storage. This site is privately owned, making any changes to the site pursuant to an agreement with the property owner(s). The site is within the downtown parking zone so additional off-street parking is not required even if the building are redeveloped or expanded. The City is encouraged to

DAVID EVANS
AND ASSOCIATES INC.
2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

Site Opportunities

* Improved Connectivity
* Increases Activity on 1st Street
* Improves Parking Liability
* Close to Proposed City Park
* Increases Parking by 86 Spaces

Site Constraints

* Not Centrally Located
* Perceived Safety Concerns
* ROW and Grade Issues
* Parking Limited to Vehicles Less Than 19 Feet in Length

Site Costs

* Total Cost $262,850
* Cost per Space $3,056
* ROW Review Needed
* Survey Needed

FIGURE 8

SITE 6: On-Street Parking
1st Street Between
Pentland and Union Streets

DAVID EVANS
AND ASSOCIATES INC.
2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

Site Opportunities

* **Relatively Low Development Cost**
* **Increases Activity on 1st Street**
* **Increases Parking by 34 Spaces**

Site Constraints

* **Privately Owned Land**
* **Not Centrally Located**
* **Perceived Safety Concerns**

Site Costs

* **Total Cost $77,400**
* **Cost per Space $2,276**

FIGURE 9

SITE 7: Off-Street Parking South of 1st Street Between Laughlin and Jefferson Streets

promote development of off-street parking on the site. Economic forces are also likely to mandate the creation of off-street parking on the site when the building are redeveloped or added to the site. Assuming the footprint of the existing buildings remains the same redevelopment of the open area would yield a surface parking lot with 67 parking spaces. This would increase the parking supply within the study area by 67 spaces. Adjacent to this site, the north side of 1st Street would be an excellent location for designated public RV parking.

Site Opportunities

- Large open area that would be relatively easy to convert to a surface parking lot
- Located within the couplet sub-area
- Close to the cherry processing plant
- Increases parking supply within the downtown core
- Increased parking supply should improve activity levels on 1st Street

Site Constraints

- Privately owned
- Not visible from 3rd Street
- Perceived safety concerns along 1st Street
- Would require significant investment in redevelopment of the site.
- Creation of parking not required as part of property redevelopment

Site Cost

- Cost $142,600
- Cost per Space $2,128

The parking for Site 8 is laid out in plan view in **Figure 10**.

Site 9: Off-Street Surface Parking, North of 4th Street between Federal and Laughlin Streets

Site 9 contains The Dalles Chronicle's former headquarters and off-street parking lot. This site is privately-owned, making any changes to the site pursuant to an agreement with the property owner(s). The site is within the downtown parking zone so additional off-street parking is not required even if the building is redeveloped or expanded. The central location of this site is ideal for redevelopment into a large public off-street parking lot. The existing site has a total of 33 private off-street parking spaces. Assuming the existing building is removed, redevelopment of the site would yield a surface parking lot with 52 parking spaces. To provide access to the parking lot from 4th Street, the on-street parking would have to be re-striped with the loss of 1 parking space. The parking lot would provide a net gain of 18 parking spaces within the study area. As future parking demand warrants the site could be converted into a structured parking garage.

Site Opportunities

- Central Location
- Located within the couplet sub-area
- Potential for structured parking garage
- Increases parking supply within the downtown core

Site Opportunities

* Relatively Low Development Cost
* Increases Activity on 1st Street
* Increases Parking by 67 Spaces

Site Constraints

* Privately Owned Land
* Not Centrally Located
* Perceived Safety Concerns

Site Costs

* Total Cost $142,600
* Cost per Space $2,128

DAVID EVANS AND ASSOCIATES INC.
2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

FIGURE 10

SITE 8: Off-Street Parking South of 1st Street Between Jefferson and Madison Streets

Site Constraints

- Privately owned
- Would require removal of existing building.

Site Cost

- Cost $154,650
- Cost per Space $2,974

The parking for Site 9 is laid out in plan view in **Figure 11**.

Site 10: Off-Street Structured Parking, South of 1st Street between Union and Court Streets

Site 10 contains large areas of open space that are currently used as private surface parking lots. This site is privately owned, making any changes to the site pursuant to an agreement with the property owner(s). The site is within the downtown parking zone so additional off-street parking is not required even if the buildings are redeveloped or expanded. Given the grade difference between this site and 1st Street, it is ideal for redevelopment into structure parking with retail development on 1st Street with at grade access to secured parking from Union Street and Court Street. Assuming the existing buildings would remain in place, one level of below-grade parking would have 4 fewer parking spaces than today but would provide secured parking for employees and residences. A second level of parking behind 60-foot deep retail buildings fronting 1st Street would provide 10 additional off-street parking spaces for a net gain of 6 parking spaces within the study area.

Site Opportunities

- Excellent site for secured below grade parking
- Located within the couplet sub-area
- Close to Post Office and proposed City Park
- Increases parking supply within the downtown core
- Increased parking supply and redevelopment should improve activity levels on 1st Street

Site Constraints

- Privately Owned
- Perceived safety concerns along 1st Street
- Would require significant investment in redevelopment of the site
- Creation of parking not required as part of property redevelopment

Site Cost

- Cost $235,800
- Does not include cost for retail building
- Retail building costs would increase the cost to over $500,000

Both levels of parking for Site 10 are laid out in plan view in **Figure 12**. The proposed second level, which is at Grade with 1st Street, is shown in Yellow. The fist level, which is below 1st Street, is shown in gray.

Site Opportunities

* Central Location
* Potential for Structured Parking
* Increases Parking by 18 Spaces

Site Constraints

* Privately Owned Land
* Requires Removal of Building
* Loss 1 On-street Space

Site Costs

* Total Cost $154.650
* Cost per Space $2,974

DAVID EVANS AND ASSOCIATES INC.
2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

FIGURE 11

SITE 9: Off-Street Parking
North of 4th Street Between
Federal and Laughlin Streets

DAVID EVANS
AND ASSOCIATES INC.
2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

Site Opportunities

* Secured Below Grade Parking
* Commercial Property Above
* Close to Proposed City Park
* Increases Parking by 6 Spaces

Site Constraints

* Privately Owned
* Perceived Safety Concerns
* Lower Level Loses 4 Spaces
* Requires Significant Redevelopment

Site Costs

* Two Levels of Parking $235,800
* Not Including Retail Development Cost

FIGURE 12

SITE 10: Structured Parking South of 1st Street Between Union and Court Streets

Site 11: Off-Street Structured Parking, South of 1st Street between Court and Washington Streets

Site 11 contains large areas of open space that are currently used as private surface parking lots. The east half of this site is owned by the City and has been identified as an economic development site. Tenants of the Commodore Building are currently using the west half of the site. This east half of the site is privately owned, making any changes to the site pursuant to an agreement with the property owner(s). The site is within the downtown parking zone so additional off-street parking is not required even if the buildings are redeveloped or expanded. Given the grade difference between this site and 1st Street, the open areas are ideal for redevelopment into structure parking with retail development on 1st Street with at grade access to secured parking from Union Street and Court Street. Assuming the existing buildings would remain in place, one level of below grade parking would have 4 fewer parking spaces than today but would provide secured parking for employees and residences. To provide access from Court Street to the second level of parking, three On-Street parking spaces would be lost. A second level of parking behind 60-foot deep retail buildings fronting 1st Street would provide 50 additional off-street parking spaces for a net gain of 43 parking spaces within the study area.

Site Opportunities

- Excellent site for secured below grade parking
- Identified as an economic redevelopment site
- Located within the couplet sub-area
- Close to the proposed City Park
- Increases parking supply within the downtown core
- Increased parking supply and redevelopment should improve activity levels on 1st Street

Site Constraints

- Part of site is privately Owned
- Not visible from 2nd or 3rd Streets
- Perceived safety concerns along 1st Street
- Would require significant investment in redevelopment of the site.
- Creation of parking not required as part of property redevelopment

Site Cost

- Cost $707,650
- Does not include cost for retail building
- Retail building costs would increase the cost to approximately $1,000,000

Both levels of parking for Site 11 are laid out in plan view in **Figure 13**. The proposed second level, which is at Grade with 1st Street, is shown in Yellow. The fist level, which is below 1st Street, is shown in gray.

Medium-term Parking Demand and Supply

As parking demand increases over the next 20 years, localized parking shortages will increase within the study area. Within the next 20 years it is probable that parking expectations within the couplet sub-area will not be met without the creation of additional parking supply. Implementation of the six medium-term parking sites would increase the parking supply within the study area by 256 parking spaces. Combined with the five near-term sites, an additional 335 parking spaces will be available within the study area.

DAVID EVANS AND ASSOCIATES INC.
2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

Site Opportunities

* Secured Below Grade Parking
* Commercial Property Above
* Economic Redevelopment Site
* Increases Parking by 43 Spaces

Site Constraints

* Privately Owned
* Perceived Safety Concerns
* Lose 3 On-Street Spaces
* Requires Significant Redevelopment

Site Costs

* Two Levels of Parking $707,650
* Not Including Retail Development Cost

FIGURE 13

SITE 11: Structured Parking South of 1st Street Between Court and Washington Streets

That exceeds the projected long-term need for an additional 312 parking spaces within the study area. The majority of the new parking spaces would be within the couplet sub-area and should help elevate local parking shortages that could occur over the next 20 years. Implementation of the six medium-term sites will help maintain current parking expectations by both employees and patrons of downtown businesses and would meet projected long-term parking demand within the study area. Of course, implementation of these medium-term sites will require significant effort from both public and private interest within the downtown area. Some sites may never become economically or politically feasible.

LONG-TERM SITES (20+ YEARS)

The three long-term sites are all parking structures. They have the potential to significantly increase the parking supply within the study area. Each site will be extremely costly to construct compared to the near-term and medium-term sites. Due to existing driver expectations for free parking and the existing parking supplies, it is unlikely that the construction costs for these sites can be recouped through parking fees within the foreseeable future. The three long-term sites are listed below by their site number as shown in **Figure 2**.

Off-Street Parking Structure

12. Redevelop the existing parking lot south of 1st Street between Washington Street and Federal Street. Redevelopment would add approximately 104 off-street parking spaces assuming three floors of parking with ground floor retail fronting 1st Street.
13. Redevelop the JCPenney property south of 2nd Street between Court and Washington Streets. Redevelopment would add approximately 76 off-street parking spaces assuming two floors of parking.
14. Redevelop the existing parking lot south of 5th Street between Union Street and Court Street. Redevelopment would add approximately 229 off-street parking spaces assuming three floors of parking.

All three sites would cost approximately $15,000 per space to construct. Site 13 necessitates JCPenney redevelop their existing store.

Site 12: Off-Street Structured Parking, South of 1st Street between Washington and Federal Streets

Site 12 is the public parking lot on 1st Street between Washington Street and the Bus Depot. The site is owned and managed by the City but was paid for by area businesses. Building a structured parking lot on the site would likely require significant investment by area businesses and/or the public. Converting the existing surface lot to structured parking with ground floor retail development along 1st Street would yield approximately 89 parking spaces per floor. The existing surface parking lot has 95 parking spaces. Assuming the new parking structure has three floors with two levels of parking, it would provide a net gain of 104 parking spaces.

Site Opportunities

- Located within the couplet sub-area
- Established parking area
- Increases parking supply within the downtown core

- Potential for secured parking within the downtown core
- Increased retail development should improve activity levels on 1st Street

Site Constraints
- Located on the north edge of the study area
- Perceived safety concerns along 1st Street
- Would require significant investment in redevelopment of the site

Site Cost
- Cost $3,000,000
- Does not include cost for retail building
- Retail building costs would increase the cost to approximately $3,750,000

Both levels of parking for Site 12 are laid out in plan view in **Figure 14**. The proposed second and third levels are shown in yellow. The fist level, which is at-grade with 1st Street, is shown in gray.

Site 13: Off-Street Structured Parking, South of 2nd Street between Court and Washington Streets

Site 13 is the location of JCPenney. The west half of the site contains the JCPenney building with their parking lot taking up the other half of the site. JCPenney is considering expanding the store through redevelopment of the entire site. The site is within the downtown parking zone so additional off-street parking is not required even if the buildings are redeveloped or expanded. The City is encouraged to work with JCPenney to see if a joint use parking structure on top of the JCPenney would be a feasible option as part of their redevelopment of the site. Assuming a shared use parking structure is feasible, it would provide approximately 59 parking spaces per floor. The existing surface parking lot has 33 parking spaces. Assuming the new parking structure has two floors it would provide a net gain of 76 parking spaces.

Site Opportunities
- Centrally located within the downtown core
- Located within the couplet sub-area
- Close to the proposed City Hall and the Commodore Building
- Increases parking supply within the downtown core
- Potential for secured parking within the downtown core

Site Constraints
- Site is privately Owned
- Would require significant investment in redevelopment of the site
- Creation of parking not required as part of property redevelopment

Site Cost
- Cost $2,010,000
- Does not include cost for retail building

The parking for Site 13 is laid out in plan view in **Figure 15**.

DAVID EVANS
AND ASSOCIATES INC.
2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

Site Opportunities

* Established Parking Site
* Potential for Secured Parking
* Increases Parking by 104 Spaces Assuming 3 Level Structure

Site Constraints

* Perceived Safety Concerns
* Requires Significant Redevelopment

Site Costs

* Total Cost $3,000,000
* Cost per Space $15,000
* Not Including Retail Development Cost

FIGURE 14

SITE 12: Structured Parking South of 1st Street Between Washington and Federal Streets

DAVID EVANS AND ASSOCIATES INC.
2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

Site Opportunities

* Central Location
* Potential for Secured Parking
* Close to City Hall and Commodore
* Increases Parking by 76 Spaces Assuming 2 Levels of Parking

Site Constraints

* Privately Owned
* Requires Significant Redevelopment

Site Costs

* Total Cost $2,010,000
* Cost per Space $15,000
* Assumes 2 Levels
* 59 Spaces per Floor

FIGURE 15

SITE 13: Structured Parking South of 2nd Street Between Court and Washington Streets

Site 14: Off-Street Structured Parking, South of 5th Street between Union and Court Streets

Site 14 is the largest off-street parking lot within the study area. The site provides parking for state employees and is owned by the state. Building a shared use structured parking lot on the site would likely require an agreement between the City and the State with significant investment by both. Converting the existing surface lot to structured parking would yield approximately 127 parking spaces per floor. The existing surface parking lot has 132 parking spaces. Assuming the new parking structure has three floors it would provide a net gain of 229 parking spaces.

Site Opportunities

- Large lot site could provide a significant increase in parking spaces
- Located close to the County Court House and State buildings
- Established parking area
- Increases parking supply within the downtown core
- Potential for secured parking within the study area

Site Constraints

- Not centrally located
- Would require significant investment in redevelopment of the site

Site Cost

- Cost $5,550,000
- Cost per Space $15,000

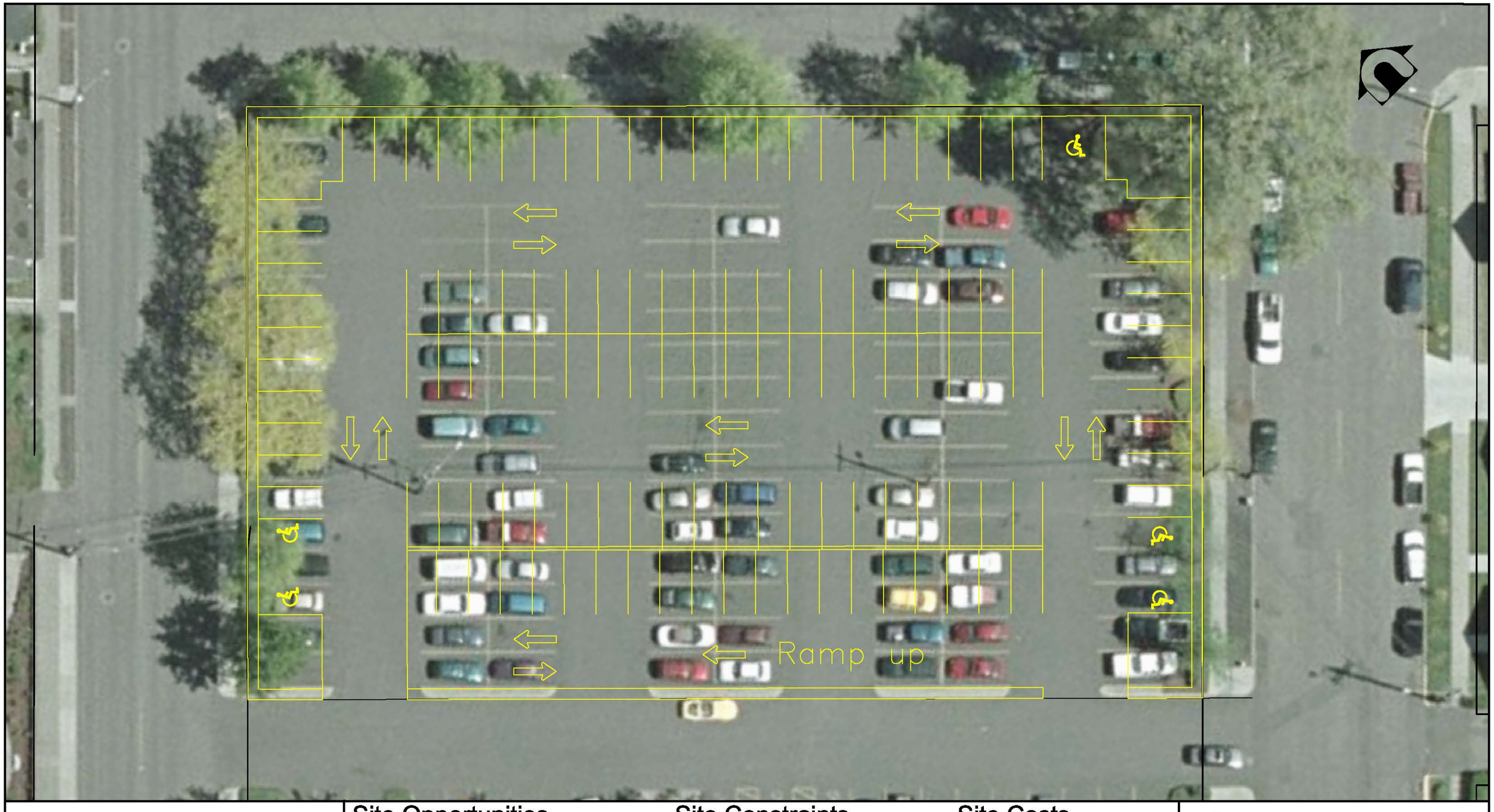
The parking for Site 14 is laid out in plan view in **Figure 16**.

Long-term Parking Demand and Supply

As parking demand increases over the next 20 years, localized parking shortages will increase within the study area. Due to the large number of variables involved in forecasting parking demand, it is difficult to predict with any reliability parking demands within the study area beyond a 20-year time frame. Implementation of the 11 near-term and medium-term parking sites would increase the parking supply within the study area by 335 parking spaces. That exceeds the projected long-term need for an additional 312 parking spaces within the study area. The forecasted need for an additional 312 parking spaces is relatively conservative in nature. It assumes 90 percent occupancy of all exiting building and 80 percent utilization of parking spaces. These three long-term sites will likely not be required without significant increases in population growth and changes in land use in and around the study area. However, if some of the near-term and medium-term site can not be implemented these long-term sites provide additional sites for new parking.

PLAN IMPLEMENTATION

Successful implementation of this parking plan will require close involvement by the community to assure their expectations are met. Careful attention to the aesthetics of each site is also important to assure they fit into the existing downtown—especially the retail developments and parking structures on 1st Street. Care should be taken in the implantation of the retail site along 1st Street to assure they add to the downtown experience by projecting a pedestrian-friendly feel with pedestrian-scaled store fronts that will



DAVID EVANS
AND ASSOCIATES INC.
2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

Site Opportunities

* Established Parking Site
* Potential for Secured Parking
* Close to Court House
* Increases Parking by 229 Spaces Assuming 3 Levels of Parking

Site Constraints

* Not Centrally Located
* Requires Significant Redevelopment

Site Costs

* Total Cost $5,550,000
* Cost per Space $15,000
* Assumes 3 Levels
* 127 Spaces per Floor

FIGURE 16

SITE 14: Structured Parking South of 5th Street Between Union and Court Streets

attract drivers on I-84 into the downtown area. Construction of any parking structures especially within the couplet sub-area at Sites 12 and 13 should strive to camouflage their utilitarian parking function with architectural features and ground floor retail.

This report has outlined a parking plan for the study area and given a general time line for the implementation of 14 parking sites. The exact timing of when each of these sites should be constructed will depend on several factors, including, economic conditions, local development or redevelopment, and driver parking expectations. Political will power and community involvement will also be critical to implement some of the more challenging sites, such as, Sites 10 and 11.

To help determine the exact timing for implementation of the 14 parking sites, the City of The Dalles is encouraged to implement a parking inventory and monitoring plan. This report provides a snapshot of the existing parking supply and demand and a forecast of future parking demands. By observing parking utilization and supply every two to five years, the City of The Dalles can monitor their parking utilization and identify any local areas needing additional parking supplies. By comparing future observations with the observations in this report, the City can determine if parking demand is increasing, the rate of increase, and shifts in high demand areas. This information can then be used to refine the parking demand forecast and determine the need, if any, for construction of one or more of the 14 parking sites. Findings of a monitoring program could also be shared with the community to help match up community parking concerns with actual utilization, as they typically differ.

o:\project\o\odot0000-0466\910 preferred plan with cost estimates (task 3.4)\deliverables\final preferred parking plan report.doc

THE DALLES DOWNTOWN STREETSCAPE AND PARKING PLAN

PREFERRED PARKING PLAN

Appendix A: Technical Memo 1 – 2004 Parking Supply and Utilization
Appendix B: Technical Memo 2 – Projected Parking Supply and Utilization
Appendix C: Site Analysis and Alternative Parking Plans

Prepared for

The City of the Dalles

Prepared by

David Evans and Associates, Inc.

June 10, 2005

THE DALLES DOWNTOWN STREETSCAPE AND PARKING PLAN

PREFERRED PARKING PLAN

Appendix A: Technical Memo 1 – 2004 Parking Supply and Utilization

DAVID EVANS
AND ASSOCIATES INC.

THE DALLES DOWNTOWN STREETSCAPE AND PARKING PLAN
TECHNICAL MEMORANDUM 1 – 2004 PARKING SUPPLY AND UTILIZATION
JANUARY 3, 2005
PREPARED BY DAVID EVANS AND ASSOCIATES, INC.

INTRODUCTION

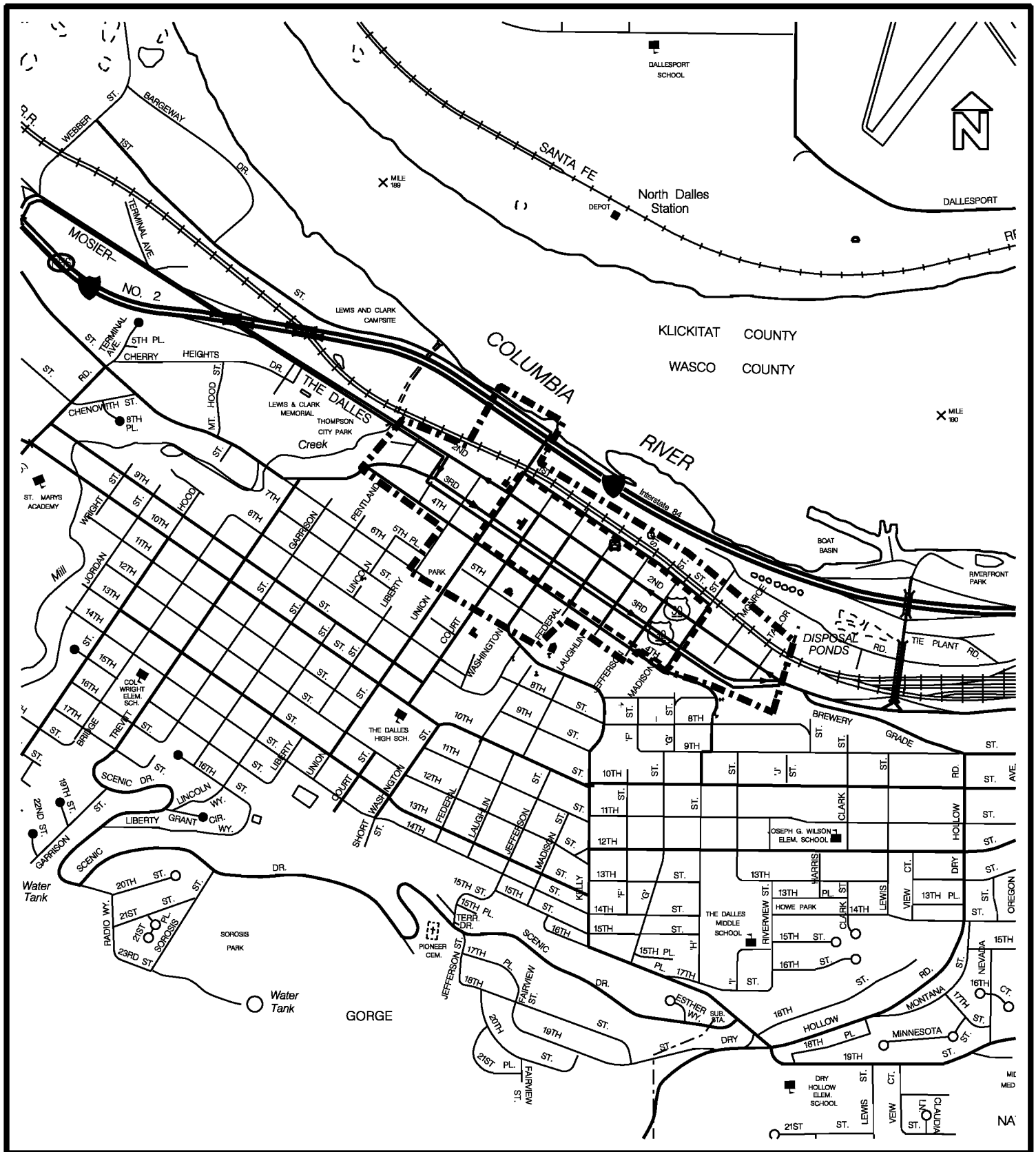
The City of The Dalles, Oregon has a vibrant and historically significant downtown that has seen both good and bad days in its long history. In recent years, the City has undertaken a concerted effort to maintain and improve the downtown central business district (CBD). As part of that effort, the City is currently implementing a Downtown Renaissance project to reconnect the CBD with the Columbia River via the existing Union Street and proposed Washington Street underpasses of Interstate 84 (I-84). In addition, the City is redesigning key downtown streetscapes and implementing major commercial and recreational developments in the CBD. To help guide the Downtown Renaissance project, the City is creating a parking plan for the CBD.

As a first step toward developing a parking plan, the City needs to better understand current on-street and off-street parking supply and utilization within the CBD. This memorandum is the first of a series of memoranda to be prepared during this project and it presents a summary of existing on-street and off-street parking supply and utilization observed during a typical weekday and weekend day in late summer (August/September), 2004.

STUDY AREA

The study area for this project is located within the City of the Dalles CBD. The study area is bounded by Taylor Street, the Columbia River, 6th Street, and Pentland Street. The study area is shown in **Figure 1**. Land use within the study area consists of both residential and commercial uses.

Parking supply and utilization is tabulated for the study area as a whole and for two sub-areas. The downtown core sub-area consists almost exclusively of commercial businesses and the couplet sub-area, which consists of parking on or immediately adjacent to the one-way couplet (2nd and 3rd Street) between Union and Madison Street. The couplet sub-area represents the most desirable commercial on-street parking within the study area. The boundaries of the couplet sub-area are shown in **Figure 1**.



DAVID EVANS AND ASSOCIATES INC.

Legend

Study Area

Couplet Area

Figure 1

Study Area

The Dalles Downtown Streetscape and Parking Plan

OVERVIEW OF EXISTING PARKING SUPPLY AND UTILIZATION

The two major traffic generators that exist today within the CBD are local businesses such as restaurants, specialty stores and commercial office space, and transitory traffic from I-84.

PARKING SUPPLY

Existing On-Street Parking Supply

A variety of on-street parking options are used within the study area to accommodate parking demands with the majority of streets utilizing parallel parking. Some streets within the study area allow angle parking; however, angle parking is primarily limited to the north-south streets.

On-street parking in The Dalles is free with no time limits posted within the study area. The City has an ordinance that prohibits employee parking within designated areas downtown. However, signage of such employee restriction was not evident, and on minor streets, especially at the east end of the study area, some local businesses were observed utilizing on-street parking to conduct business operations or storage of equipment.

On-street parking capacity for each block face in the study area is illustrated in **Figure 2** and **Figure 3**. For the study area, the total number of on-street parking spaces (parking capacity) is 1,267. The on-street parking capacity in the couplet sub-area is 548 spaces.

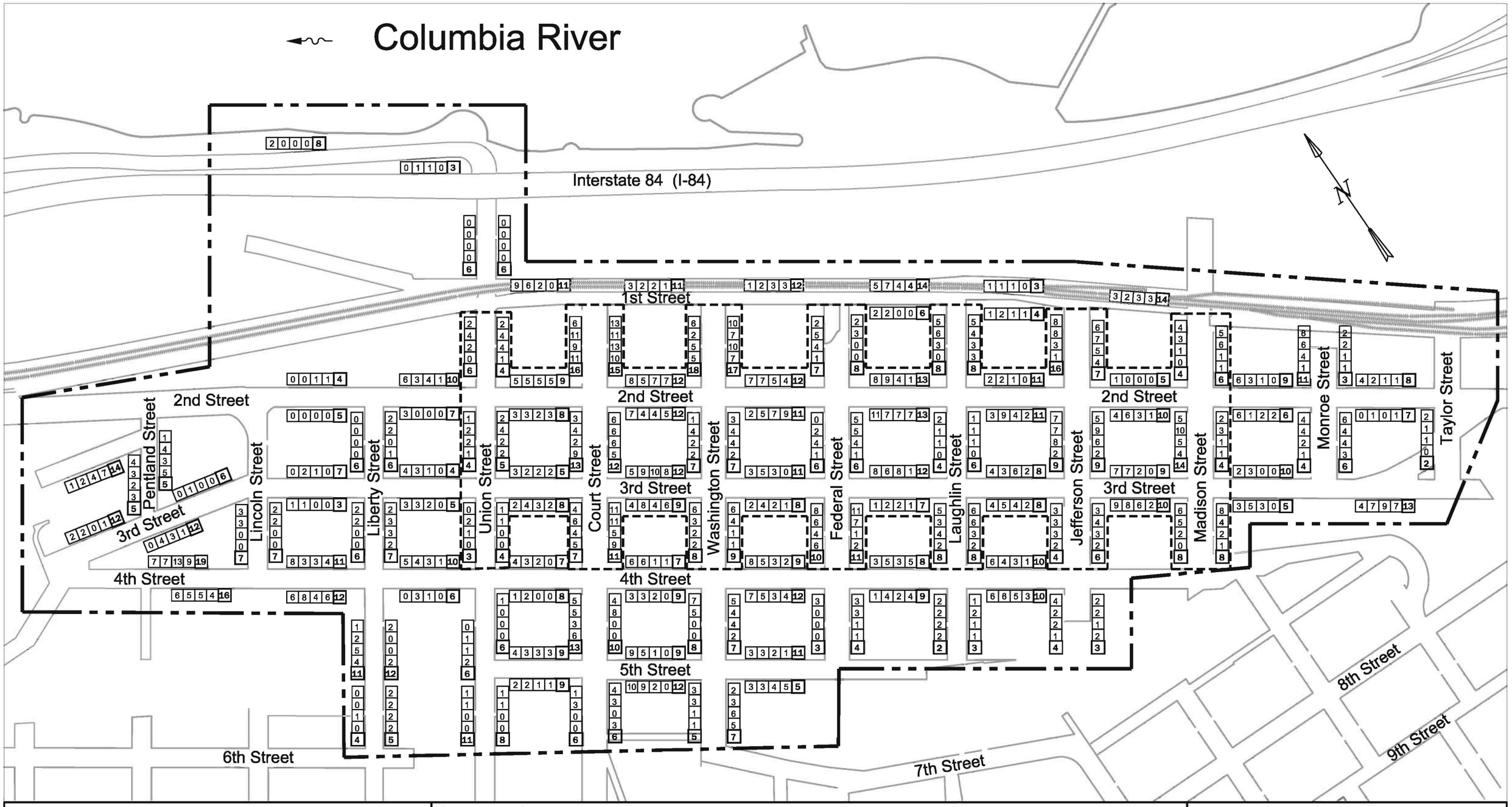
Existing Off-Street Parking Supply

The majority of off-street parking within the study area is privately owned by local businesses and serves as customer and/or employee parking. The City operates a public off-street parking lot that encompasses a block and a half along 1st Street between Washington Street and Laughlin Street. The off-street parking lot is free to the public for up to 48 hours with a capacity of 128 spaces. Both Wasco County and the State of Oregon have off-street parking lots that are used by employees and public patrons of their buildings for free up to 48 hours. The State Office Building (SOB) lot is the largest off-street parking lot in the study area with a capacity of 132 vehicles. Observed off-street parking lot locations and capacities are shown in **Figure 4** and **Figure 5**. For the study area, the total number of off-street parking spaces (parking capacity) is 1,423. The off-street parking capacity in the couplet sub-areas is 695 spaces.

PARKING UTILIZATION

On-street and off-street parking utilization (demand) observations were conducted during August and September 2004 within the study area by David Evans and Associates, Inc. (DEA) staff. The following paragraphs present the utilization rates observed during the study.

Observations were conducted on a typical weekday (Thursday, September 15, 2004) and weekend day (Saturday, August 21, 2004) during four time periods to provide insight into day-of-week and time-of-day variations in parking utilization. The four time periods observed included 9:00-10:00 am, 12:00-1:00 pm, 5:00-6:00 pm, and 6:30-7:30 pm. Observation time periods were chosen with regard to key activity times and resulting parking needs.



DAVID EVANS AND ASSOCIATES INC.
2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

Legend

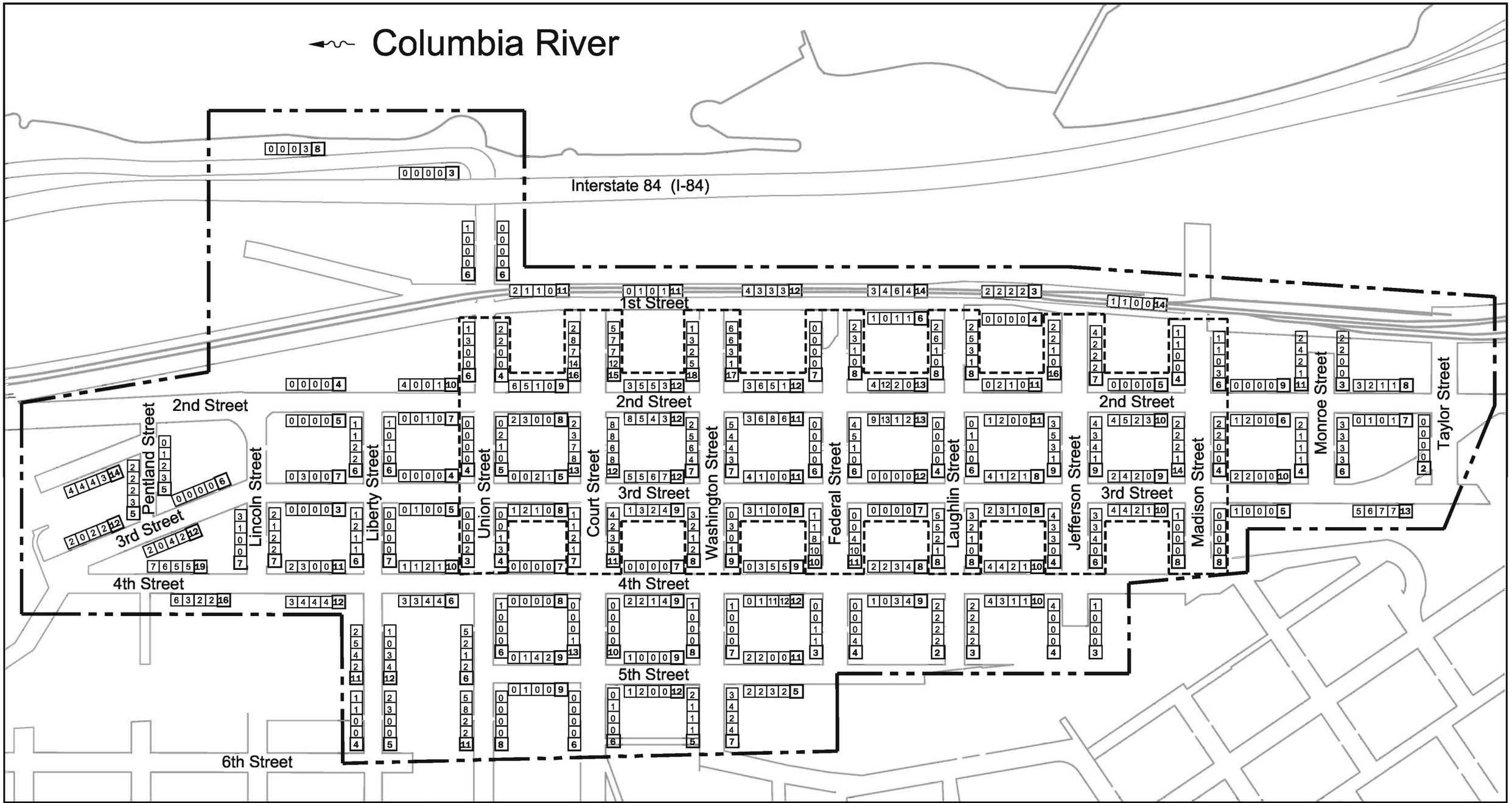
- Study Area
- Couplet Area

3	Occupied Parking Spaces 9:00 - 10:00 AM
5	Occupied Parking Spaces 12:00 - 1:00 PM
7	Occupied Parking Spaces 5:00 - 6:00 PM
9	Occupied Parking Spaces 6:30 - 7:30 PM
11	**Estimated Parking Capacity**

FIGURE 2

Weekday On-Street Parking Utilization

The Dalles Downtown Streetscape and Parking Plan



DAVID EVANS AND ASSOCIATES INC.
2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

Legend

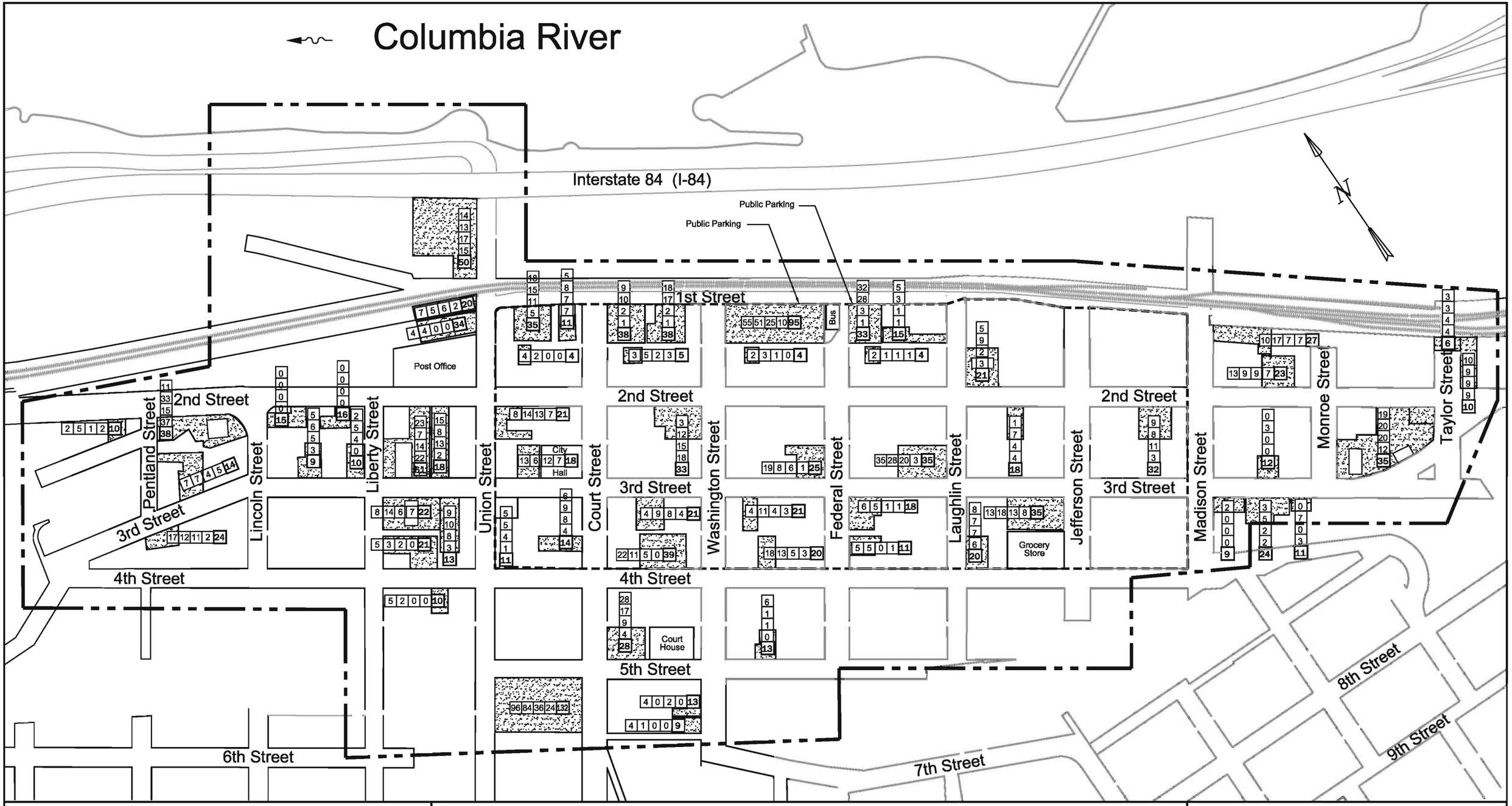
- Study Area
- Couplet Area

3	Occupied Parking Spaces 9:00 - 10:00 AM
5	Occupied Parking Spaces 12:00 - 1:00 PM
7	Occupied Parking Spaces 5:00 - 6:00 PM
9	Occupied Parking Spaces 6:30 - 7:30 PM
11	**Estimated Parking Capacity**

FIGURE 3

Weekend Day On-Street Parking Utilization

The Dalles Downtown Streetscape and Parking Plan



DAVID EVANS AND ASSOCIATES INC.
2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

Legend

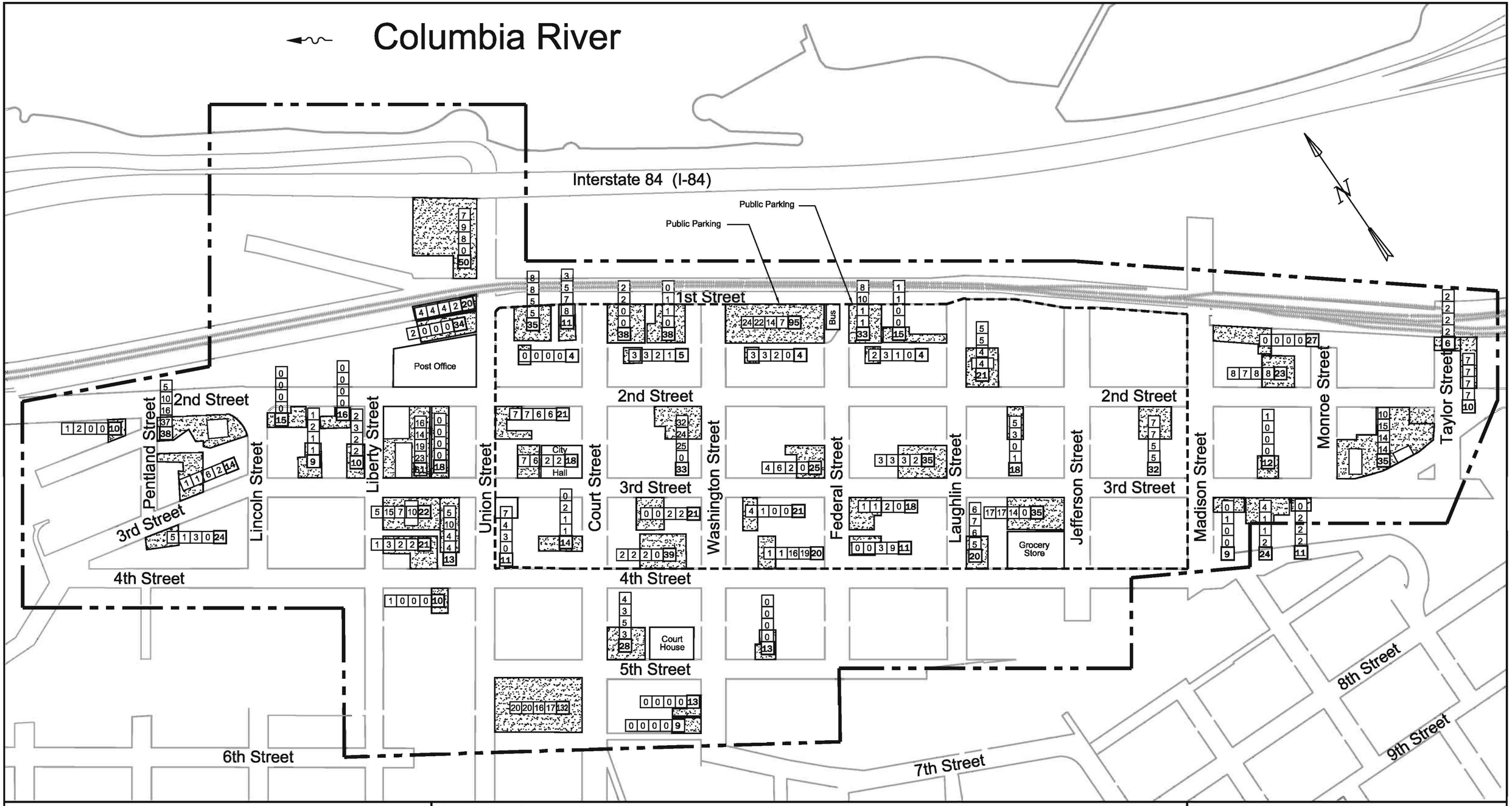
- Study Area
- Couplet Area
- Off-Street Parking Lot
- Building

3	Occupied Parking Spaces 9:00 - 10:00 AM
5	Occupied Parking Spaces 12:00 - 1:00 PM
7	Occupied Parking Spaces 5:00 - 6:00 PM
9	Occupied Parking Spaces 6:30 - 7:30 PM
11	**Estimated Parking Capacity**

FIGURE 4

Weekday Off-Street Parking Utilization

The Dalles Downtown Streetscape and Parking Plan



DAVID EVANS AND ASSOCIATES INC.
2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

Legend

- Study Area
- Couplet Area
- Off-Street Parking Lot
- Building

3	Occupied Parking Spaces 9:00 - 10:00 AM
5	Occupied Parking Spaces 12:00 - 1:00 PM
7	Occupied Parking Spaces 5:00 - 6:00 PM
9	Occupied Parking Spaces 6:30 - 7:30 PM
11	**Estimated Parking Capacity**

FIGURE 5

Weekend Day Off-Street Parking Utilization

The Dalles Downtown Streetscape and Parking Plan

Existing On-Street Parking Utilization

In general, weekday on-street parking utilization is higher then weekend day utilization and weekday on-street parking varies throughout the day more so than weekend day parking utilization. For detailed on-street parking results see **Figures 2** and **3**. **Table 1** presents aggregated on-street parking utilization results for the weekday and weekend day periods.

TABLE 1
OBSERVED WEEKDAY AND WEEKEND DAY ON-STREET PARKING UTILIZATION

	Weekday				Weekend Day			
	Couplet Sub-Area[1]		Total Study Area		Couplet Sub-Area[1]		Total Study Area	
Time of Day	**Count**	**Percent of Capacity**	**Count**	**Percent of Capacity**	**Count**	**Percent of Capacity**	**Count**	**Percent of Capacity**
9:00-10:00 am	289	53%	582	46%	150	27%	288	23%
12:00-1:00 pm	311	57%	592	47%	190	35%	322	25%
5:00-6:00 pm	235	43%	412	33%	133	24%	253	20%
6:30-7:30 pm	175	32%	320	25%	126	23%	254	20%
Capacity	548		1,267		548		1,267	

Source: Parking observations and capacity estimates compiled by DEA staff.

[1] Couplet Sub-area represents parking along and adjacent to 2nd and 3rd Street as shown in Figures 2 and 3.

Observed weekday on-street parking utilization is representative of downtown business parking, with peak utilization occurring during typical working hours. On-street parking peaks during the noon hour with up to 47 percent of available parking spaces utilized within the study area and 57 percent of the couplet sub-area being utilized. During the peak periods, parking is limited on some blocks but available parking spaces were always observed on the adjacent blocks. On-street parking drops off significantly in the evening with only 25 percent of the parking spaces utilized in the study area.

Weekend on-street parking utilization is significantly lower than observed weekday parking utilization with the peak study area and Couplet Sub-area parking utilization rates at just 25 percent and 35 percent, respectively. The peak weekend parking period is also during the noon hour.

The temporal change in typical weekday and weekend parking utilization suggests that peak parking demands occur within the time periods observed. As a result, it appears that typical on-street parking use within the study area (1,267 parking space capacity) does not exceed 50 percent of available capacity during peak parking levels. Therefore, under typical weekday operations, capacity appears to exist to accommodate over 750 more automobiles on-street than are currently parking in the study area. On weekends, capacity appears to exist to accommodate over 900 more automobiles on street. The annual fluctuation in weekday on-street parking utilization is expected to be minor, given the local employee based traffic composition that is utilizing the on-street parking.

Analysis of the available on-street parking within the couplet sub-area (548 parking space capacity) was found to be similar to the overall study area, with the weekday on-street parking utilization not exceeding 60 percent of available capacity. Therefore, under typical weekday operations, capacity appears to exist to accommodate over 215 more automobiles on-street than are currently parking within the couplet sub-area.

The annual fluctuation in weekend day on-street parking utilization is expected to increase slightly during the summer months as recreational traffic peaks on I-84 and US 197.

Existing Off-Street Parking Utilization

Off-street parking utilization was observed to follow a pattern similar to on-street parking with utilization occurring on weekdays during typical business hours. The majority of off-street parking lots in the study area were less than fully utilized during typical weekday and weekend day periods. For detailed results of the weekday and weekend day off-street parking observations, see **Figures 4** and **5**. **Table 2** presents aggregated off-street parking utilization results for the weekday and weekend day periods.

TABLE 2
OBSERVED WEEKDAY AND WEEKEND DAY OFF-STREET PARKING UTILIZATION

	Weekday				Weekend Day			
	Couplet Sub-Area[1]		Total Study Area		Couplet Sub-Area[1]		Total Study Area	
Time of Day	Count	Percent of Capacity	Count	Percent of Capacity	Count	Percent of Capacity	Count	Percent of Capacity
9:00-10:00 am	337	48%	678	48%	162	23%	279	20%
12:00-1:00 pm	328	47%	643	45%	154	22%	292	21%
5:00-6:00 pm	193	28%	408	29%	129	19%	262	18%
6:30-7:30 pm	107	15%	297	21%	78	11%	226	16%
Capacity[1]	695		1,423		695		1,423	

Source: Parking observations and capacity estimates compiled by DEA staff.

Note: 1. Couplet Sub-area represents parking lots along and adjacent to 2nd and 3rd Street as shown in Figures 4 & 5.

2. Capacity for off-street parking lots shown in Figures 5&6 only. Business parking lots with less than 10 spaces or access only via an alley not included in calculations. Capacity of unstriped parking lots assumed by DEA.

Observed weekday off-street parking utilization is representative of downtown business parking, with peak utilization occurring during typical working hours. Off-street parking peaks during mid-morning with up to 48 percent of available parking spaces utilized within the study area and 48 percent of the couplet sub-area being utilized. During the peak periods, a few lots reach capacity but the majority have unused parking spaces. The public parking lots on 1st Street between Washington Street and Laughlin Street are well utilized with a combined parking utilization rate over 60 percent during business hours. The lot to the east of Federal Street is the most heavily used with parking utilization running at or near capacity during business hours. Off-street parking within the study area drops off significantly in the evening with only 21 percent of the parking spaces utilized in the study area. The annual fluctuation in weekday off-street parking utilization is expected to be minor, given the local employee based traffic composition that is utilizing the off-street parking.

Weekend off-street parking utilization is significantly lower than observed weekday parking utilization with a peak study area utilization rate of 21 percent. Utilization of the 1st Street public parking lots is also significantly lower on weekend days. The peak weekend parking period is during the noon hour. The annual fluctuation in weekend day off-street parking utilization is expected to be minor, given the local employee based traffic composition that is utilizing the off-street parking.

THE DALLES DOWNTOWN STREETSCAPE AND PARKING PLAN

PREFERRED PARKING PLAN

Appendix B: Technical Memo 2 – Projected Parking Supply and Utilization

DAVID EVANS
AND ASSOCIATES INC.

THE DALLES DOWNTOWN STREETSCAPE AND PARKING PLAN
TECHNICAL MEMORANDUM 2 – PROJECTED PARKING SUPPLY AND DEMAND
JUNE 10, 2005
PREPARED BY DAVID EVANS AND ASSOCIATES, INC.

INTRODUCTION

In recent years, the City of The Dalles has undertaken a concerted effort to maintain and improve the downtown central business district (CBD). As part of that effort, the City is currently implementing a Downtown Renaissance project to reconnect the CBD with the Columbia River via the existing Union Street and proposed Washington Street underpasses of Interstate 84 (I-84). In addition, the City is redesigning key downtown streetscapes and implementing major commercial and recreational developments in the CBD. To help guide the Downtown Renaissance project, the City is creating a parking plan for the CBD.

As a first step toward developing a parking plan, the City needs to better understand current and future on-street and off-street parking supply and utilization within the CBD. This memorandum is the second of a series of memoranda to be prepared during this project and it presents a summary of existing and future on-street and off-street parking supply and demand during a typical weekday and weekend day.

STUDY AREA

The study area for this project is located within the City of The Dalles CBD. The study area is bounded by Taylor Street, the Columbia River, 6th Street, and Pentland Street. The study area is shown in **Figure 1**. Land use within the study area consists of both residential and commercial uses.

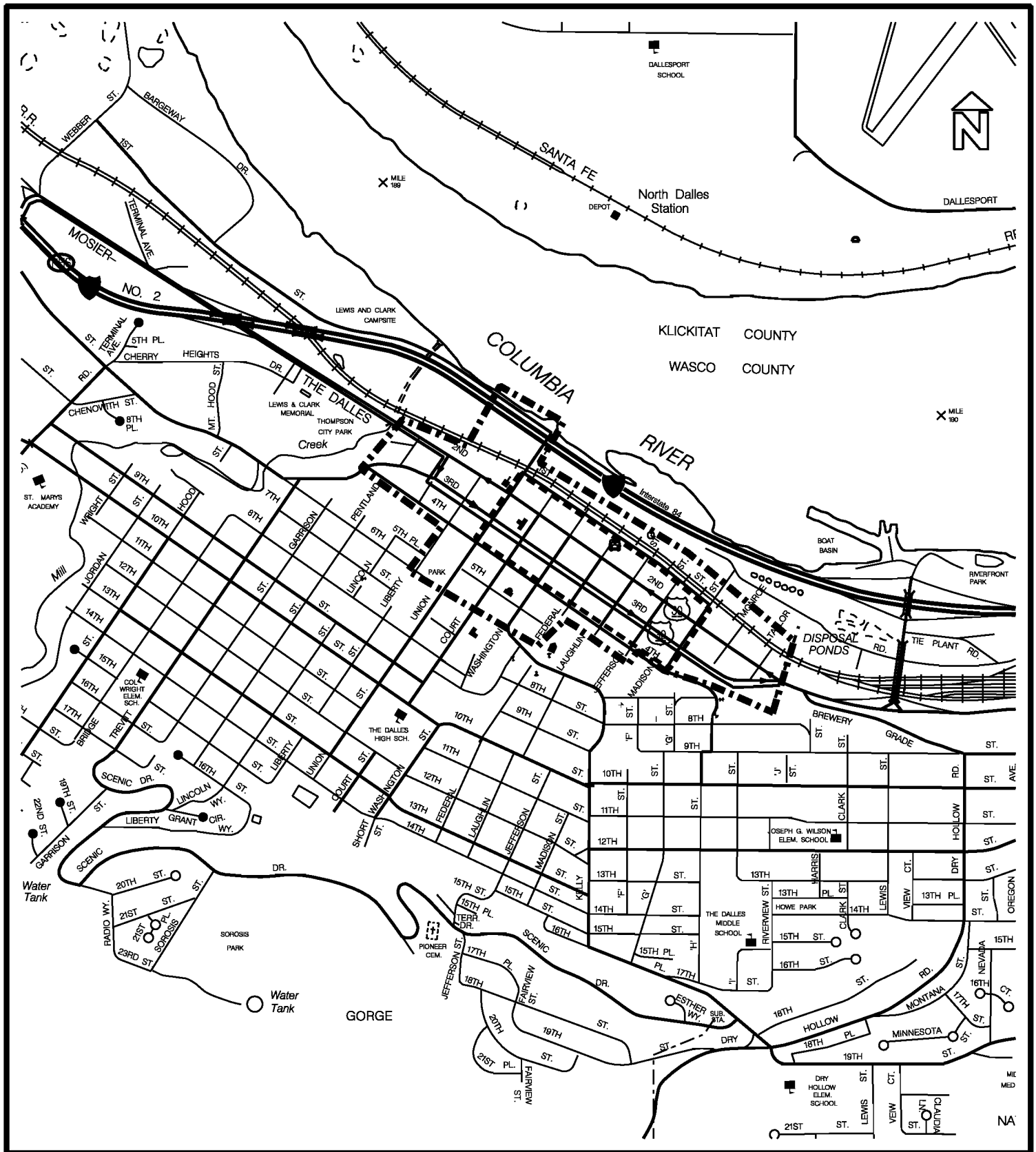
Parking supply and utilization is tabulated for the study area as a whole and for two sub-areas. The downtown core sub-area consists almost exclusively of commercial businesses and the couplet sub-area, which consists of parking on or immediately adjacent to the one-way couplet (2nd and 3rd Street) between Union and Madison Street. The couplet sub-area represents the most desirable commercial on-street parking within the study area. The boundaries of the couplet sub-area are shown in **Figure 1**.

SUMMARY OF EXISTING PARKING SUPPLY AND UTILIZATION

The two major traffic generators that exist today within the CBD are local businesses such as restaurants, specialty stores and commercial office space, and transitory traffic from I-84.

Existing Parking Supply

A variety of on-street parking options are used within the study area to accommodate parking demands with the majority of streets utilizing parallel parking. Some streets within the study area allow angle



DAVID EVANS AND ASSOCIATES INC.

Legend

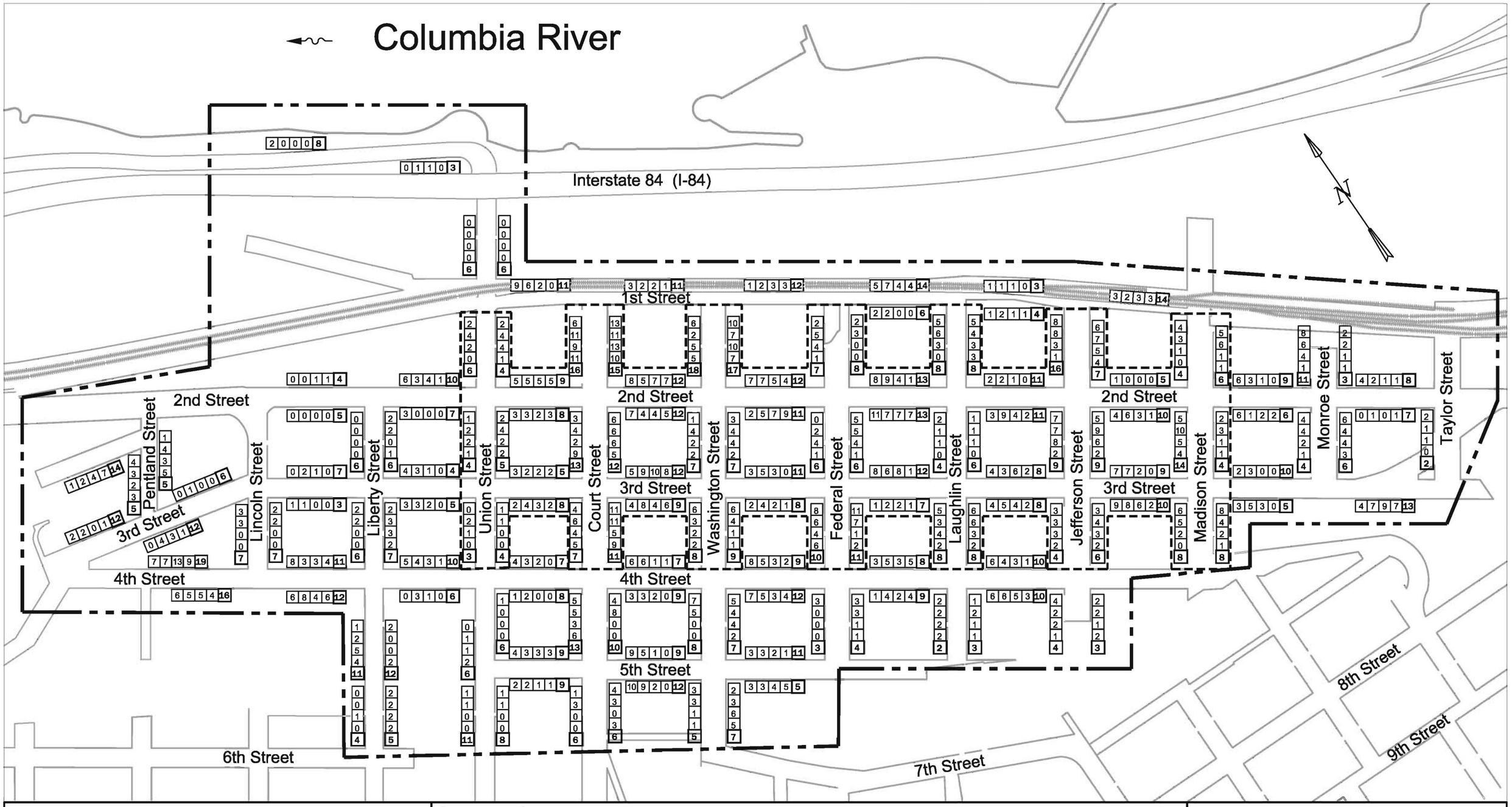
Study Area

Couplet Area

Figure 1

Study Area

The Dalles Downtown Streetscape and Parking Plan



DAVID EVANS AND ASSOCIATES INC.
2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

Legend

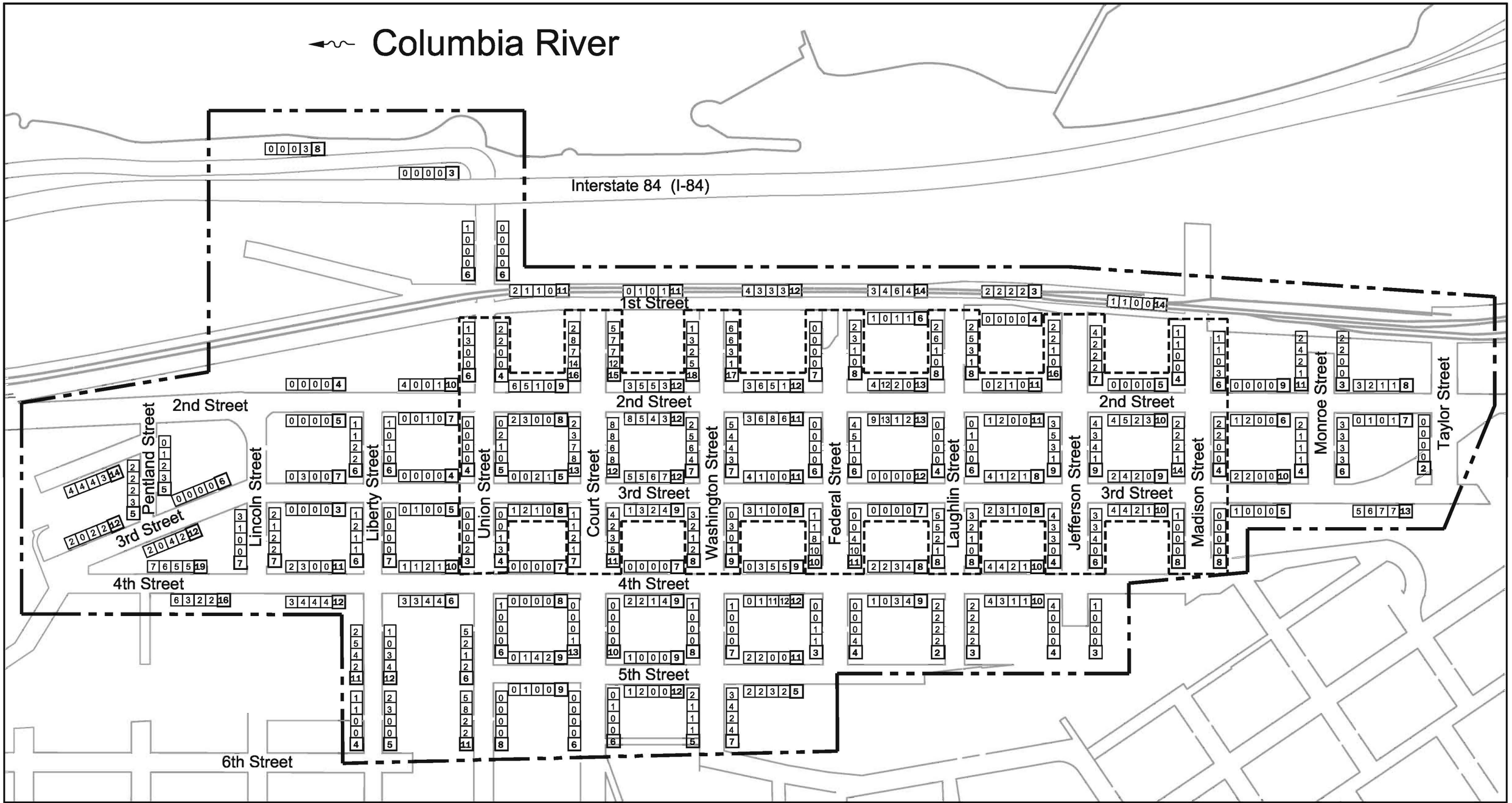
- Study Area
- Couplet Area

3	Occupied Parking Spaces 9:00 - 10:00 AM
5	Occupied Parking Spaces 12:00 - 1:00 PM
7	Occupied Parking Spaces 5:00 - 6:00 PM
9	Occupied Parking Spaces 6:30 - 7:30 PM
11	**Estimated Parking Capacity**

FIGURE 2

Weekday On-Street Parking Utilization

The Dalles Downtown Streetscape and Parking Plan



DAVID EVANS AND ASSOCIATES INC.
2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

Legend

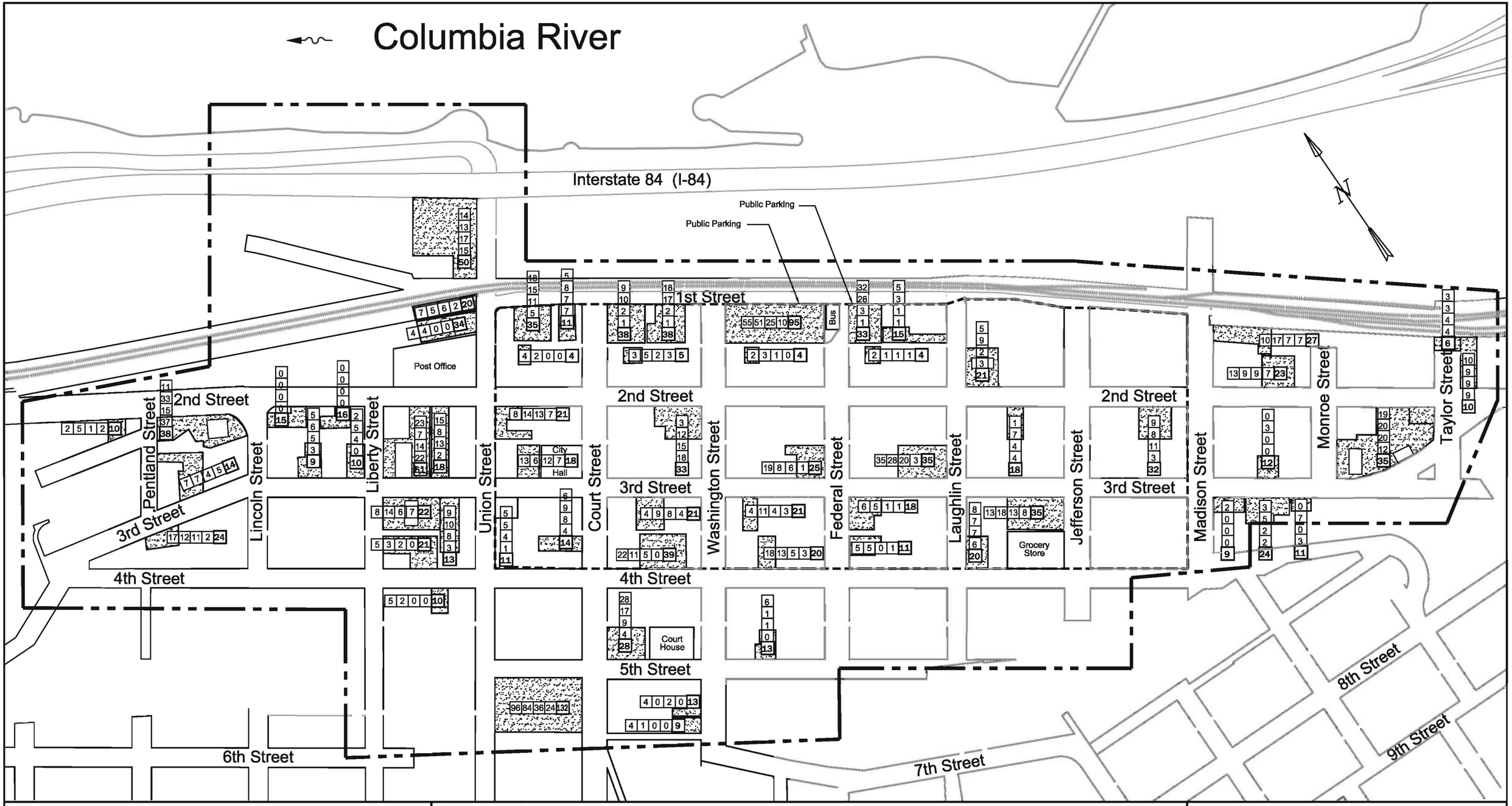
- Study Area
- Couplet Area

3	Occupied Parking Spaces 9:00 - 10:00 AM
5	Occupied Parking Spaces 12:00 - 1:00 PM
7	Occupied Parking Spaces 5:00 - 6:00 PM
9	Occupied Parking Spaces 6:30 - 7:30 PM
11	**Estimated Parking Capacity**

FIGURE 3

Weekend Day On-Street Parking Utilization

The Dalles Downtown Streetscape and Parking Plan



DAVID EVANS AND ASSOCIATES INC.
2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

Legend

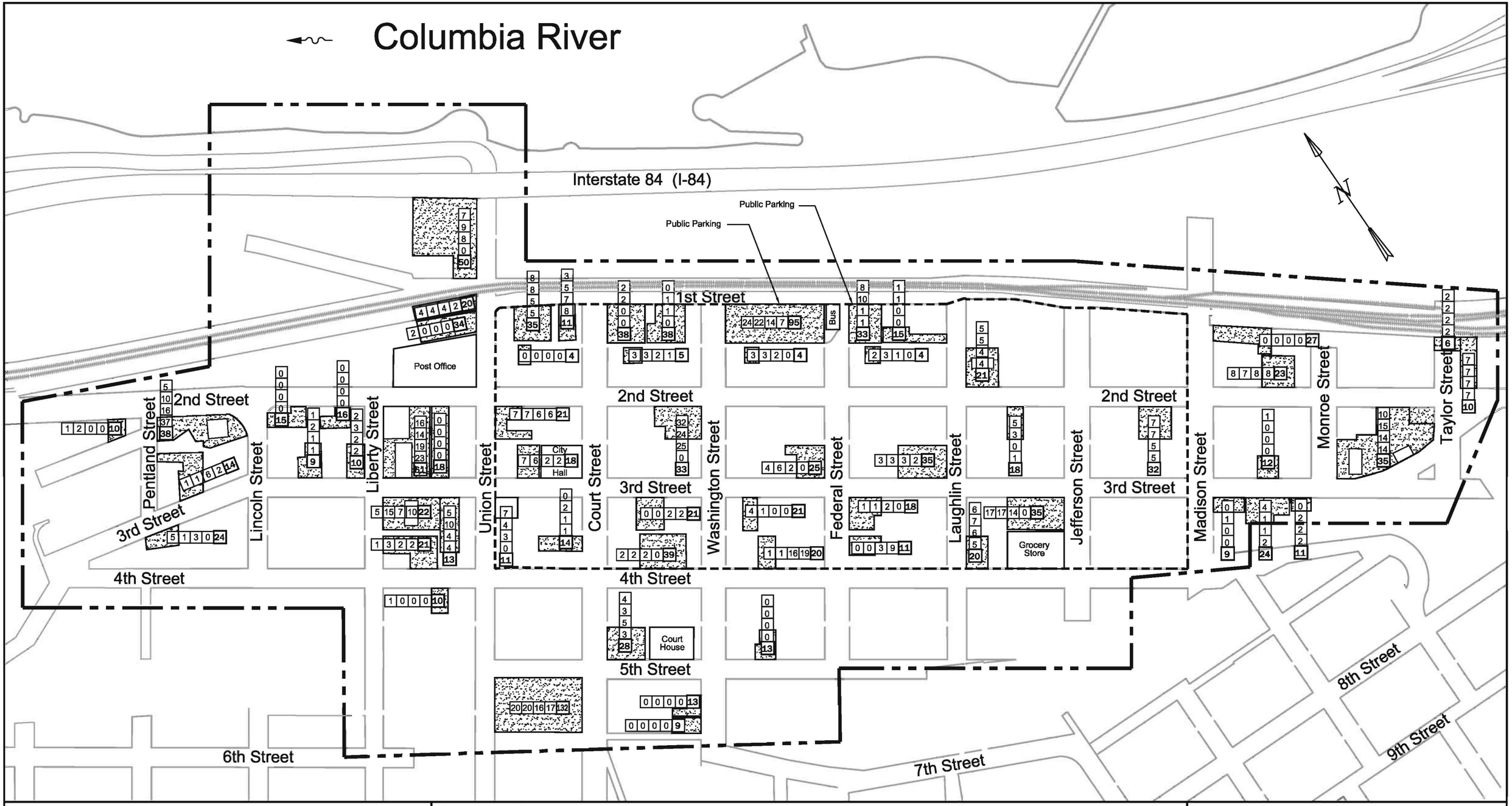
- Study Area
- Couplet Area
- Off-Street Parking Lot
- Building

3	Occupied Parking Spaces 9:00 - 10:00 AM
5	Occupied Parking Spaces 12:00 - 1:00 PM
7	Occupied Parking Spaces 5:00 - 6:00 PM
9	Occupied Parking Spaces 6:30 - 7:30 PM
11	**Estimated Parking Capacity**

FIGURE 4

Weekday Off-Street Parking Utilization

The Dalles Downtown Streetscape and Parking Plan



DAVID EVANS AND ASSOCIATES INC.
2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

Legend

- Study Area
- Couplet Area
- Off-Street Parking Lot
- Building

3	Occupied Parking Spaces 9:00 - 10:00 AM
5	Occupied Parking Spaces 12:00 - 1:00 PM
7	Occupied Parking Spaces 5:00 - 6:00 PM
9	Occupied Parking Spaces 6:30 - 7:30 PM
11	**Estimated Parking Capacity**

FIGURE 5

Weekend Day Off-Street Parking Utilization

The Dalles Downtown Streetscape and Parking Plan

parking; however, angle parking is primarily limited to the north-south streets. On-street parking capacity for each block face in the study area is illustrated in **Figure 2** and **Figure 3**. For the study area, the total number of on-street parking spaces (parking capacity) is 1,267. The on-street parking capacity in the couplet sub-area is 548 spaces.

The majority of off-street parking within the study area is privately owned by local businesses and serves as customer and/or employee parking. The City operates a public off-street parking lot that encompasses a block and a half along 1st Street between Washington Street and Laughlin Street. The off-street parking lot is free to the public for up to 48 hours with a capacity of 128 spaces. Observed off-street parking lot locations and capacities are shown in **Figure 4** and **Figure 5**. For the study area, the total number of off-street parking spaces (parking capacity) is 1,423. The off-street parking capacity in the couplet sub-areas is 695 spaces.

Existing Parking Utilization

On-street and off-street parking utilization (demand) observations were conducted during August and September 2004 within the study area by David Evans and Associates, Inc. (DEA) staff. Observations were conducted on a typical weekday (Thursday, September 15, 2004) and weekend day (Saturday, August 21, 2004) during four time periods to provide insight into day-of-week and time-of-day variations in parking utilization. The four time periods observed included 9:00-10:00 am, 12:00-1:00 pm, 5:00-6:00 pm, and 6:30-7:30 pm. Observation time periods were chosen with regard to key activity times and resulting parking needs.

In general, weekday on-street parking utilization is higher then weekend day utilization and weekday on-street parking varies throughout the day more so than weekend day parking utilization. For detailed on-street parking results see **Figures 2** and **3**. **Table 1** presents aggregated on-street parking utilization results for the weekday and weekend day periods.

TABLE 1
OBSERVED WEEKDAY AND WEEKEND DAY ON-STREET PARKING UTILIZATION

	Weekday				Weekend Day			
	Couplet Sub-Area[1]		Total Study Area		Couplet Sub-Area[1]		Total Study Area	
Time of Day	**Count**	**Percent of Capacity**	**Count**	**Percent of Capacity**	**Count**	**Percent of Capacity**	**Count**	**Percent of Capacity**
9:00-10:00 am	289	53%	582	46%	150	27%	288	23%
12:00-1:00 pm	311	57%	592	47%	190	35%	322	25%
5:00-6:00 pm	235	43%	412	33%	133	24%	253	20%
6:30-7:30 pm	175	32%	320	25%	126	23%	254	20%
Capacity	548		1,267		548		1,267	

Source: Parking observations and capacity estimates compiled by DEA staff

[1] Couplet Sub-area represents parking along and adjacent to 2nd and 3rd Street as shown in Figures 2 and 3.

The temporal change in typical weekday and weekend parking utilization suggests that peak parking demands occur within the time periods observed. As a result, it appears that typical on-street parking use within the study area (1,267 parking space capacity) does not exceed 50 percent of available capacity during peak parking levels. Therefore, under typical weekday operations, capacity appears to exist to

accommodate over 750 more automobiles on-street than are currently parking in the study area. On weekends, capacity appears to exist to accommodate over 900 more automobiles on street. The annual fluctuation in weekday on-street parking utilization is expected to be minor, given the local employee based traffic composition that is utilizing the on-street parking. Analysis of the available on-street parking within the couplet sub-area (548 parking space capacity) was found to be similar to the overall study area, with the weekday on-street parking utilization not exceeding 60 percent of available capacity. Therefore, under typical weekday operations, capacity appears to exist to accommodate over 215 more automobiles on-street than are currently parking within the couplet sub-area. The annual fluctuation in weekend day on-street parking utilization is expected to increase slightly during the summer months as recreational traffic peaks on I-84 and US 197.

Off-street parking utilization was observed to follow a pattern similar to on-street parking with utilization occurring on weekdays during typical business hours. The majority of off-street parking lots in the study area were less than fully utilized during typical weekday and weekend day periods. For detailed results of the weekday and weekend day off-street parking observations, see **Figures 4** and **5**. **Table 2** presents aggregated off-street parking utilization results for the weekday and weekend day periods.

TABLE 2
OBSERVED WEEKDAY AND WEEKEND DAY OFF-STREET PARKING UTILIZATION

	Weekday				Weekend Day			
	Couplet Sub-Area[1]		Total Study Area		Couplet Sub-Area[1]		Total Study Area	
Time of Day	**Count**	**Percent of Capacity**	**Count**	**Percent of Capacity**	**Count**	**Percent of Capacity**	**Count**	**Percent of Capacity**
9:00-10:00 am	337	48%	678	48%	162	23%	279	20%
12:00-1:00 pm	328	47%	643	45%	154	22%	292	21%
5:00-6:00 pm	193	28%	408	29%	129	19%	262	18%
6:30-7:30 pm	107	15%	297	21%	78	11%	226	16%
Capacity[1]	695		1,423		695		1,423	

Source: Parking observations and capacity estimates compiled by DEA staff

[1]Couplet Sub-area represents parking lots along and adjacent to 2nd and 3rd Street as shown in Figures 4 & 5.

[2]Capacity for off-street parking lots shown in Figures 5&6 only. Business parking lots with less than 10 spaces or access only via an alley not included in calculations. Capacity of unstriped parking lots assumed by DEA.

Observed weekday off-street parking utilization is representative of downtown business parking, with peak utilization occurring during typical working hours. Off-street parking peaks during mid-morning with up to 48 percent of available parking spaces utilized within the study area and 48 percent of the couplet sub-area being utilized. During the peak periods, a few lots reach capacity but the majority have unused parking spaces. The public parking lots on 1st Street between Washington Street and Laughlin Street are well utilized with a combined parking utilization rate over 60 percent during business hours. The lot to the east of Federal Street is the most heavily used with parking utilization running at or near capacity during business hours. Off-street parking within the study area drops off significantly in the evening with only 21 percent of the parking spaces utilized in the study area. The annual fluctuation in weekday off-street parking utilization is expected to be minor, given the local employee based traffic composition that is utilizing the off-street parking. Weekend off-street parking utilization is significantly lower than observed weekday parking utilization with a peak study area utilization rate of 21 percent. Utilization of the 1st Street public parking lots is also significantly lower on weekend days. The peak

weekend parking period is during the noon hour. The annual fluctuation in weekend day off-street parking utilization is expected to be minor, given the local employee based traffic composition that is utilizing the off-street parking.

SUMMARY OF FUTURE PARKING SUPPLY AND DEMAND

Future parking analysis will consider short-term (1-5 years) and long-term (20+ years) or maximum scenarios. Short-term parking demand is based on traffic volume growth and planned redevelopment in the study area. The estimate of long-term parking demand uses city Geographic Information System (GIS) land use based activity and zoning data to develop a maximum demand scenario for comparison with available parking supply.

Future Development

The existing downtown study area is well established and a vibrant CBD. There is only a handful of large undeveloped lots within the study area and the City of The Dalles has identified development projects for all but one of the vacant lots. The largest area of undeveloped land is north of 1st Street between Federal Street and Union Street. The City of The Dalles is in the process of expanding the wastewater treatment plant onto part of this land. The remainder of vacant land will be used for a new community park. Parking impacts from this development should be minor, as the wastewater treatment plant will not generate new parking. The remaining plot of vacant land is located on the southeast corner of 3rd Street and Lincoln Street. The city is currently exploring development ideas for the land, with the preferred option being a surface parking lot.

Future Redevelopment

In the long term, redevelopment, especially along 1st Street, has the potential to significantly impact parking within the study area. The city has two near-term redevelopment plans that will help further revitalize the downtown core. Just outside the east end of the study area the brewery grade redevelopment involves refurbishment of the existing mill building and the addition of new residential and office space. The Brewery Grade redevelopment will include new off-street parking. The City is also in the planning phase for redevelopment of 1st Street to improve pedestrian access and safety. The 1st Street improvements should increase utilization of existing parking along 1st Street and may include the addition of more on-street parking.

Parking Demand

Two scenarios were developed to forecast parking demand in downtown The Dalles. One scenario uses historic growth in traffic volumes to forecast future growth in parking demand. The other scenario is based on land uses downtown and forecasts future parking demand assuming full build-out and occupancy.

Traffic-Based Parking Demand

With the downtown core almost fully built out, any significant increase in parking demand will likely come through redevelopment or growth in background (transitory through traffic) traffic from outside the study area. In the near term, background traffic growth and the few known redevelopments are going to

dictate parking demand. A large increase in traffic volumes on 2nd and 3rd Avenue would likely result in a significant increase in on-street parking demand.

Analysis of traffic volumes on 2nd and 3rd Streets indicates an average linear growth rate of approximately 0.7 percent. Assuming on-street parking demand grows at the same rate as background traffic volumes, the existing on-street parking supply would meet on-street parking demand in the study area for the next 50 years. This assumption is based on existing traffic observations and a maximum 80 percent parking utilization rate. With the new Union Street connection to the riverfront development on Port of The Dalles property to the west of the study area, the rate of parking demand could increase beyond historical growth rates.

A traffic-based forecast of near-term off-street parking demand is more difficult than on-street demand as off-street parking demand is generally not as directly tied to traffic volumes. Off-street parking demand will vary significantly depending on building occupancy and changes in building usage that may occur. The majority of the study area is zoned Central Business Commercial District (CBC). The CBC zoning allows for a wide range of development from residential, to commercial office space, through grocery stores—all of which have distinctly different parking generation characteristics. With the study area almost fully built out and building occupancy relatively good, significant near-term growth in off-street parking is anticipated to be similar to on-street parking growth. Significant changes, including parking shortages, could occur in localized areas as individual businesses change tenants or occupancy levels. Identified near term areas of parking concern include:

- Around the Columbia River Bank (CRB) building;
- Between the Court House and City Hall;
- Between Laughlin and Court Streets on 2nd Street;
- Court Street north of 2nd Street; and
- Washington Street north of 2nd Street.

The CRB parking lot is generally full during business hours, especially during the summer months, as the lot has shaded parking, which is desirable during the summer. Mid-Columbia Medical Center and the Social Security office will soon be moving into the building, increasing parking demand by 19 employees and approximately 40 customers. The additional customer parking can be accommodated through on-street parking, but the additional employee demand will have to be shifted to the public lot on 1st Street or some other off-street parking lot as downtown employees are not allowed to use on-street parking in the downtown core. The other noted areas have high utilization rates today and future growth will likely make parking in the ideal locations difficult during peak times.

Land Use-Based Parking Demand

Analysis of existing land use within the study area provides a more long-term forecast of parking demand. Given all the variables to forecasting future parking demand, this methodology takes a simplified full build out and occupancy approach.

Utilizing GIS based land use data from the City of The Dalles, the floor area on each parcel within the study area was categorized as one of four land use types: residential, office, retail, and industrial. An

initial total demand by land use was then determined using parking generation rates from the Institute of Transportation Engineers Parking Generation Handbook, 3rd Edition.

The parking demand for each land use was then adjusted by a time of day factor to calculate the peak hour parking demand within the study area. The time of day factor reduces the parking demand to account for the fact that the parking demand for each land use peaks during different times of the day. For example, residential parking demand peaks in the evening, while office parking demand peaks in the late morning. The peak parking hour for the study area was determined to be between 1:00 p.m. and 2:00 p.m.

With the peak hour parking demand determined, the parking generation rates were adjusted downward to account for the captive market effect of the study area. As the downtown core of a relatively isolated city, users within the study area tend to conduct multiple tasks while utilizing only one parking spot. For example, an office worker within the downtown study area may drive to work, park in the office parking lot, and then walk to a nearby restaurant for lunch. That person has completed two tasks, while utilizing only one parking space. The parking capacity is based on field observations, which did not include single family residential parking capacity calculations. To provide a better comparison of supply and demand, the residential parking demand was removed, since residential parking supply was not observed. In addition, the land use parking demand assumes full build out of all land and 100 percent occupancy of all buildings. Full build out of all land is probable, however, 100 percent occupancy is unrealistic. To provide a more realistic calculation of parking demand, a peak occupancy rate of 90 percent is used.

The final adjusted parking demand for the full build out and occupancy of all the land within the study area and couplet sub-area are shown in **Table 3**.

TABLE 3
STUDY AREA: LAND USE BASED PARKING DEMAND

	Study Area				Couplet Sub-Area			
Land Use	**Raw Demand[1]**	**Time of Day Factor[2]**	**Captive Market Factor[3]**	**Adjusted Demand**	**Raw Demand[1]**	**Time of Day Factor[2]**	**Captive Market Factor[3]**	**Adjusted Demand**
Residential	351	85%	71%	212	22	85%	71%	13
Office	1,950	90%	71%	1,246	877	90%	71%	561
Retail	1,664	100%	71%	1,182	1,142	100%	71%	810
Food Service	390	70%	71%	194	130	70%	71%	65
Total	4,355			2,833	2,171			1,449
			Non-Residential	2,622			Non-Residential	1,436
			90% Occupancy Rate	**2,359**			90% Occupancy Rate	**1,292**
			Existing Supply	**2,690**			Existing Supply	**1,243**
			Ideal Supply at 80% Utilization	2,950			Ideal Supply at 80% Utilization	1,555
			Additional Parking	260			Additional Parking	312

Source: Calculation conducted by DEA staff

[1]Institute of Transportation Engineers Parking Generation Handbook, 3rd Edition

[2]Exhibit 28, The Urban Land Institute Shared Parking

[3]Exhibit 23, The Urban Land Institute Shared Parking

With an adjustment, the peak parking demand for the Study area is 2,359 spaces, which is lower than the existing supply of 2,690 spaces. However, the efficiency and attractiveness of parking begins to deteriorate as parking utilization begins to exceed 80 percent utilization. Therefore, the parking supply within the study area actually needs to increase by 260 spaces to keep parking utilization in the study area below 80 percent. Without the creation of additional parking spaces, parking in ideal locations may be difficult during peak times as parking utilization will be around 88 percent of capacity.

Within the couplet sub-area, the peak parking demand is 1,292 spaces, which is slightly higher then the existing parking supply of 1,243 spaces. To meet the long-term parking demand within the couplet sub-area, approximately 50 additional parking spaces will be needed. Ideally, 310 additional parking spaces are needed in the long term for the couplet sub-area in order to maintain an efficient utilization rate of 80 percent.

Parking Supply

The parking supply analysis examines near-term and long-term options to increase the supply of parking downtown. The near-term option includes on-street improvements, City plans to provide an additional surface lot, and parking management methods. The long-term option considers surface and structured parking lot options.

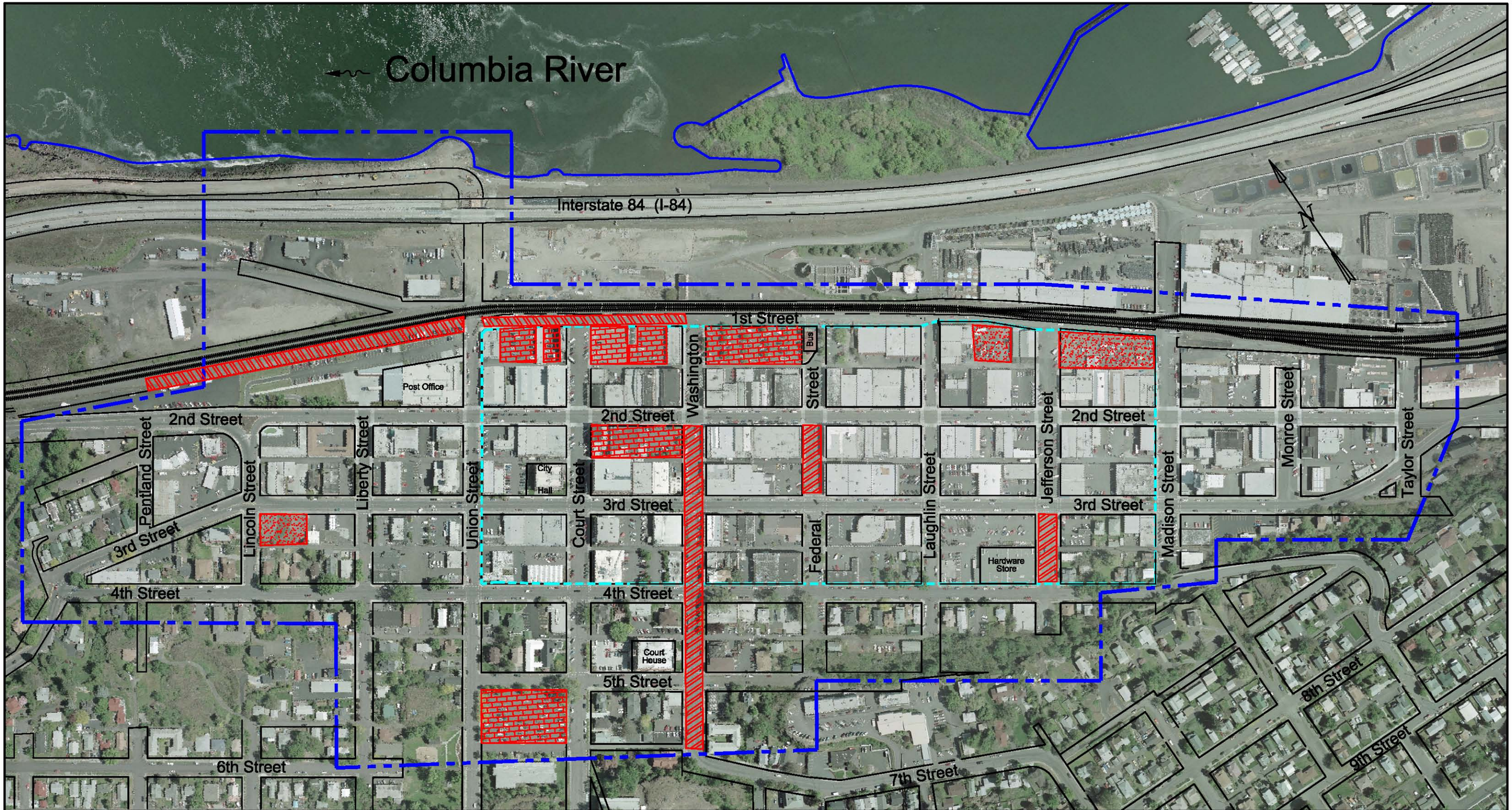
Near Term Parking Supply

As demand for parking increases in the future, there are several options for increasing the parking supply in the near term. Near-term options include: more efficient striping of on-street parking, development of off-street parking on vacant land, more efficient use of existing off-street parking through the creation of shared use agreements, and trip reduction measures such as carpooling and telecommuting.

Existing on-street parking is well developed with clear markings and relatively efficient use of available right-of-way. There is not a lot of potential for increasing on-street parking within the study area but there are some areas where re-striping could provide some additional parking spaces. Locations for potential re-striping are shown below and in **Figure 6**.

- Re-stripe exiting parallel parking to angled parking along south side of 1st Street between Union Street and Washington Street. This would add 4 on-street parking spaces.
- Re-stripe exiting parallel parking to angled parking along Jefferson Street between 3rd and 4th Streets. This would add 14 on-street parking spaces.
- Re-stripe exiting parallel parking to angled parking along Federal Street between 2nd and 3rd Streets. This would add 15 on-street parking spaces.
- Re-stripe exiting parallel parking to angled parking along one side of Washington Street between 2nd and 6th Streets. This would add 23 on-street parking spaces.

Re-striping has the potential to create an additional 52 spaces within the downtown core. Re-striping could be completed in a short period of time at a relatively low cost. However, the additional angled parking would impact traffic operations, as the angled parking will narrow the through lanes down to 11 feet in some locations and require the removal of existing left-turn lanes. Re-striping is not immediately needed as existing on-street parking is underutilized. As parking demand increases in the future, re-striping may become an effective way to increase the on-street parking supply in the near term.



DAVID EVANS AND ASSOCIATES INC.
2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

Legend

- Study Area
- Couplet Area
- Building
- Off-Street Surface Parking Lot
- Off-Street Structured Parking Lot
- On-Street Re-Striping

FIGURE 6

Potential New Parking Sites

The City has identified one vacant parcel within the study area that could be developed into an off-street parking lot. The parcel is located on the southeast corner of Lincoln Street and 3rd Street. A preliminary analysis indicates approximately 25 parking spaces could be created on the parcel. The lot is located just outside of the west end of the downtown core in a highly visible location for traffic entering the downtown core from the west. The only other vacant land within the study area is located north of 1st Street between Union Street and Federal Street and has already been identified for another use. Part of the land will be incorporated by an expansion of the wastewater treatment plant. The remainder will be developed into a community park. Just outside of the study area, north of the railroad tracks and west of Union Street, are some large plots of vacant land. These parcels are too far from the downtown core to be used on a daily basis. However they could function effectively as overflow lots during special events.

Another tool to meet future increases in parking demand is by more efficient use of existing off-street parking supplies through the use of shared parking agreements and trip reduction incentives. Existing observations indicate the majority of off-street parking lots are underutilized, while a few are operating near capacity. If businesses with unmet parking demand can form shared parking agreements with nearby businesses that have underutilized parking supplies; their parking shortage could be resolved without the creation of any new parking spaces. There are lots of factors that can be negotiated in a shared use agreement to assure that the donating party does not run out of parking spaces. Factors include time of day, day of week, time of year, and percentage of total spaces. Incentives for trip reduction include designating parking spaces for carpool and vanpool only. There are already several successful shared use agreements in the downtown core including A-boy Hardware sharing its unused parking spaces with the nearby Dave Griffith's Motors dealership and the Commodore Building tenants utilizing the unused surface lot on the southeast corner of Court and 1st Street.

Long Term Parking Supply

In the long term, redevelopment has the greatest potential to create additional off-street parking spaces. Both surface parking lots and structured parking lots could be created through redevelopment. Significant investment would be required to redevelop land within the downtown core. However, with underutilization of the existing parking supply it is unlikely that any investment in parking redevelopment could be recovered through parking fees until parking demand increases significantly. At such time that parking demand justifies the investment in redevelopment of existing land there are several relatively underdeveloped parcels, shown below and in **Figure 6**, that could be redeveloped to create additional off-street parking supply within the downtown core. Parking space estimates are cursory and will be refined in the Site Analysis Memorandum.

- Extension of 1st Street parallel to the railroad tracks from Pentland Street east to Union Street. The extension would be one-way eastbound with 86 angled on-street parking spaces along the south side of the street.
- South of 1st Street between Laughlin and Madison Streets: These lots have large areas of open space that could be redeveloped into surface parking lots. Redevelopment would add approximately 101 off-street parking spaces.
- South of 1st Street between Union and Washington Street: These lots have large areas of open space that are currently used as surface parking lots. Given the grade difference between these lots and 1st Street, they are ideal for redevelopment into structure parking with commercial and

residential development at street level. One level of parking would create no new parking but could provide secured parking. A second level that is at grade with 1st Street would add approximately 102 off-street parking spaces.

- The JCPenney property on the south of 2nd Street between Court Street and Washington Street is centrally located making it an ideal location for redevelopment into a ground floor JCPenney store with two levels of structured parking above. Redevelopment would add approximately 76 off-street parking spaces.
- The existing parking lot south of 1st Street between Washington Street and Federal Street is well located for conversion into three levels structured parking. Redevelopment would add approximately 149 off-street parking spaces.
- The existing parking lot south of 5th Street between Union Street and Court Street is not centrally located but is a large enough plot of land to be redeveloped into a large structured parking facility with three parking levels. Redevelopment would add approximately 229 off-street parking spaces.

Of course, redevelopment is not limited to these locations and could occur on any of the parcels within the study area. The City of The Dalles parking regulations do not always require the addition of adequate off-street parking for redevelopment within the downtown parking district[1]. As a result, redevelopment within the downtown core has the potential to significantly impact on-street parking supplies. However, significant on-street parking impacts are not anticipated, as economic factors will likely encourage developers to include off-street parking to adequately serve tenants and/or patrons.

FUTURE OPPORTUNITIES AND CONSTRAINTS

The following section qualitatively summarizes the opportunities and constraints by time of day in the overall study area and couplet sub-area.

Overall Parking Opportunities and Constraints

The different businesses that exist in the study area create varying degrees of parking demand, which creates the potential for parking conflicts as well as opportunities for shared parking. The two major traffic generators that exist today within the CBD are local businesses such as restaurants, specialty stores and commercial office space, and transitory traffic from I-84. Observed parking demand is representative of downtown business parking, with peak utilization occurring during typical working hours. During the peak periods, a few areas reach capacity but the majority of the study area has unused parking spaces.

The level of parking demand created by area businesses, both existing and future, is summarized by time of day in **Table 4**.

[1] City of The Dalles Land Use Development Ordinance (LUDO), Chapter 7: Parking Standards

TABLE 4 QUALITATIVE SUMMARY OF EXISTING AND ANTICIPATED PARKING DEMAND			
Time	**Land Use Activity**	**Weekday Demand[1]**	**Weekend Demand[1]**
Morning (8:00-10:00 am)	Residential Office Retail Food Service	Moderate High Low Medium-Low	High Low Low Moderate
Lunch Hour (12:00 -1:00 pm)	Residential Office Retail Food Service	Moderate Moderate High High	Medium-High Low Moderate High
Late Afternoon (4:00-6:00 pm)	Residential Office Retail Food Service	Medium-Low Medium-High Medium-High Medium-High	Medium-High Low Medium-High Medium-High
Evening (6:00-10:00 pm)	Residential Office Retail Food Service	Medium-High Low Low Medium-Low	Medium-High Low Low Moderate

[1]Demand Hierarchy (Highest-Lowest): High, Medium-High, Moderate, Medium-Low and Low.

Analysis conducted by David Evans and Associates, Inc.

Morning

The following opportunity exists in the morning (8:00-10:00 am):

- Residential users and food services catering to the evening hours have the opportunity to share their off-street parking with office users on weekdays. On weekends, offices have an opportunity to share their off-street parking with retail users.

During the morning hours (8:00-10:00 am) there is a limited opportunity for residential users within the study area to share their off-street parking with office users on weekdays. Food services catering to the dinner patrons have the same opportunity. Potential conflicts include office users overflowing from full off-street parking lots onto on-street parking.

On weekends, office users have an opportunity to share their off-street parking with retail users.

Lunch Hour

The following opportunities exist during the lunch hour (12:00-1:00 pm):

- On weekends, office users have the opportunity to share their off-street parking with retail and food service users.

- On weekdays, parking demand for all users is moderate to high, but the potential for shared use parking is high.

During the lunch hour (12:00-1:00 pm) on weekdays, parking demand is moderate to high for all users. Parking demand is very dynamic and the ideal "hot spot" locations shift as users go to lunch and complete errands within the study area. This creates a potential for parking conflicts. However, as a CBD, there is an opportunity to decrease conflict by increasing shared parking opportunities. Office users can walk or carpool to lunch. Retail and food services can provide incentives to employees of area businesses who keep their car parked at the office and walk to complete errands or get lunch.

On weekends, office users have an opportunity to share their off-street parking with retail and food service users.

Late Afternoon

The following opportunity exists in the late afternoon (4:00-6:00 pm).

- As the workday comes to an end, office users have an opportunity to share their off-street parking with retail and food service users.

Late afternoons (4:00-6:00 pm) on weekdays and weekends are expected to provide opportunities for the sharing of off-street parking resources. As the workday comes to an end, office users have an opportunity to share their off-street parking with retail and food service users.

Evening

The following opportunity exists in the evening (6:00-10:00 pm).

- Office and retail users have an opportunity to share their off-street parking with food service users catering to the dinner crowd.

On weekday and weekend evenings (6:00-10:00 pm) parking demand drops at office and retail locations. Residential parking demand and some food service parking demand increases. An opportunity exists for office and retail users to share their off-street parking with food service users catering to the dinner crowd.

Pedestrian and Bicycle Evaluation

Pedestrian facilities within the study area are extensive. Sidewalks are present on both side of every street in the study area with the exception of 1st Street. The majority of intersections have crosswalks with wheelchair-accessible ramps. A cursory evaluation of the sidewalks conducted during the parking observations found them to be in good condition on all streets except 1st Street. First Street has a sidewalk on the south side only from Union Street to Washington Street. East of Washington Street there are no sidewalks on 1st Street. The sidewalks that exist on 1st Street are in poor condition with cracking and deformation of the sidewalk noted at several locations. The bus station located at the north end of Federal Street has good pedestrian access and a small pedestrian waiting area that is partially covered.

Pedestrian circulation within the study area is generally excellent with sidewalks on all streets except 1st Street. Some pedestrian circulation concerns do exist within the study area. Access to the river is limited to the Union Street underpass. Additional river access would improve usage of the riverfront bicycle and pedestrian trail and should help increase activity on 1st Street. Pedestrian access to the large public parking lots on 1st Street are limited by the absence or poor condition of sidewalks on 1st Street and the closure of the midblock breezeway that directly connects the parking lot to 2nd Street between Washington Street and Federal Street. Poor lighting and lack of police presence especially in the adjacent alleyways creates a safety concern that significantly limits usage of the parking lots during evening hours. Reopening of the breezeway combined with improved lighting and increased police presence should significantly improve pedestrian circulation to and from the 1st Street public parking lots. Similar concerns exist for the private parking lots located on 1st Street between Union Street and Washington Street. These lots were constructed below 1st Street with access only from the midblock alleyways, which have poor lighting and no sidewalks for pedestrians. The addition of sidewalks along 1st Street with access to below-grade parking lots would improve pedestrian circulation to both the off-street and on-street parking along 1st Street. Reconstruction of existing sidewalks on 1st Street and extension to Federal Street should also help improve activity levels in the area.

Unlike the pedestrian facilities, the bicycle facilities within the study area are almost non-existent. There are no bike lanes within the study area and only a few areas designated for bike storage. There is a bike path along the Columbia River, however, access to the path is limited to the Union Street underpass and Riverfront Park Road, neither of which have bike lanes. To improve bicycle circulation within the study area, the City should make installation of secure bike lockers at designated areas a priority. At a minimum, the City should implement a signing program to identify and direct bicyclist to preferred bike routes.

O:\PROJECT\O\Odot0000-0466\907 Parking Plan TM #2 (Task 3.2)\Deliverables\Final TechMemo 2.doc

THE DALLES DOWNTOWN STREETSCAPE AND PARKING PLAN

PREFERRED PARKING PLAN

Appendix C: Site Analysis and Alternative Parking Plans

DAVID EVANS
AND ASSOCIATES INC.

THE DALLES DOWNTOWN STREETSCAPE AND PARKING PLAN
SITE ANALYSIS AND ALTERNATIVE PARKING PLANS
JUNE 10, 2005
PREPARED BY DAVID EVANS AND ASSOCIATES, INC.

INTRODUCTION

In recent years, the City of The Dalles has undertaken a concerted effort to maintain and improve the downtown central business district (CBD). As part of that effort, the City is currently implementing a Downtown Renaissance project to reconnect the CBD with the Columbia River via the existing Union Street and proposed Washington Street underpasses of Interstate 84 (I-84). In addition, the City is redesigning key downtown streetscapes and implementing major commercial and recreational developments in the CBD. To help guide the Downtown Renaissance project, the City is creating a parking plan for the CBD.

As a first step toward developing a parking plan, the City needs to better understand current and future on-street and off-street parking supply and utilization within the CBD. This memorandum is the third of a series of memoranda to be prepared during this project and it presents a summary of potential sites for additional parking within the downtown study area.

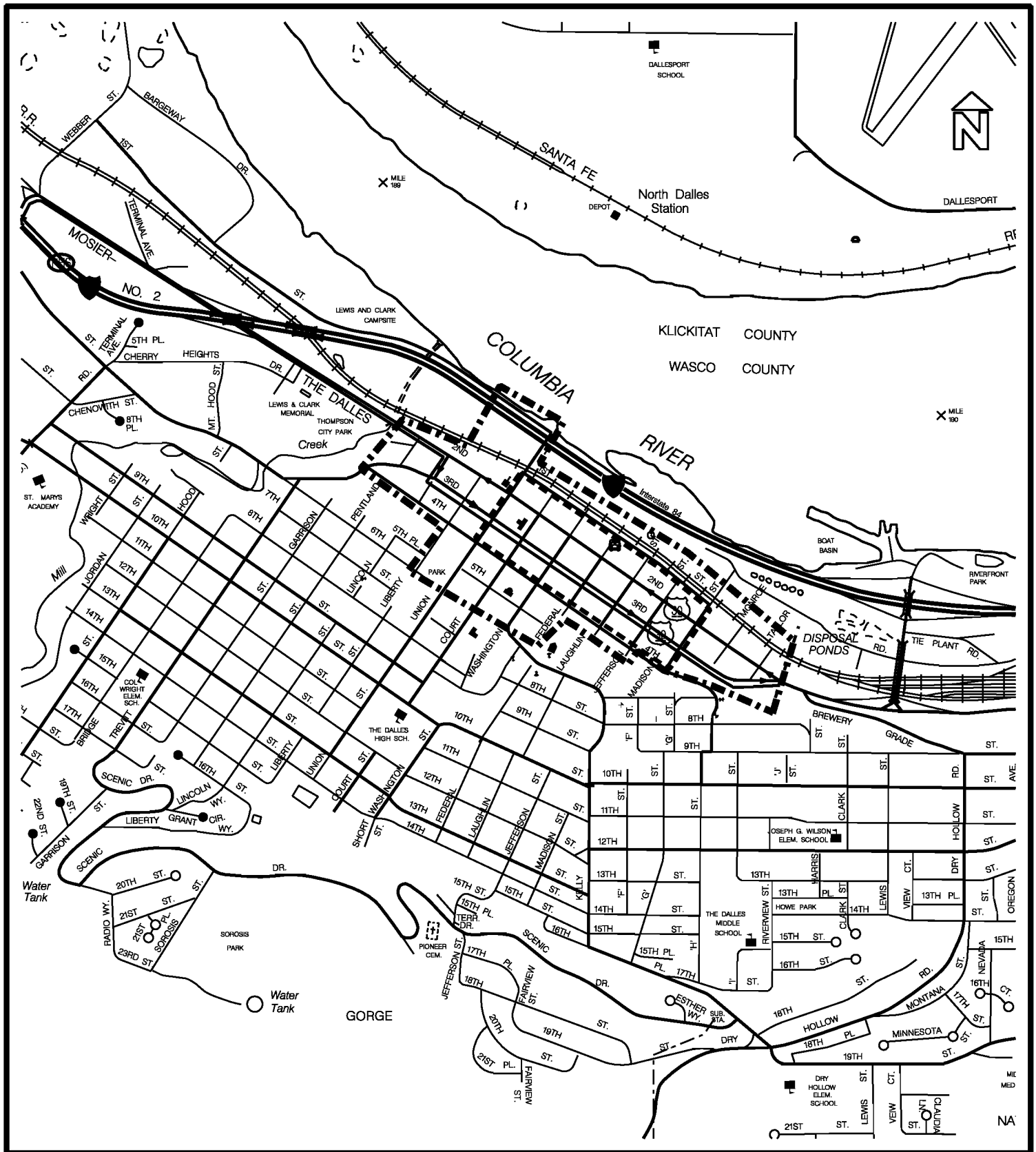
STUDY AREA

The study area for this project is located within the City of the Dalles CBD. The study area is bounded by Taylor Street, the Columbia River, 6th Street, and Pentland Street. The study area is shown in **Figure 1**. Land use within the study area consists of both residential and commercial uses.

Parking supply and utilization is tabulated for the study area as a whole and for two sub-areas. The downtown core sub-area consists almost exclusively of commercial businesses and the couplet sub-area, which consists of parking on or immediately adjacent to the one-way couplet (2nd and 3rd Street) between Union and Madison Street. The couplet sub-area represents the most desirable commercial on-street parking within the study area. The boundaries of the couplet sub-area are shown in **Figure 1**.

SITES ANALYSIS

A total of 14 sites were identified as potential locations for additional parking supply within the study area. The sites consist of on-street re-striping, development of off-street surface lots and construction of off-street parking structures as shown below and in **Figure 2**.



DAVID EVANS AND ASSOCIATES INC.

Legend

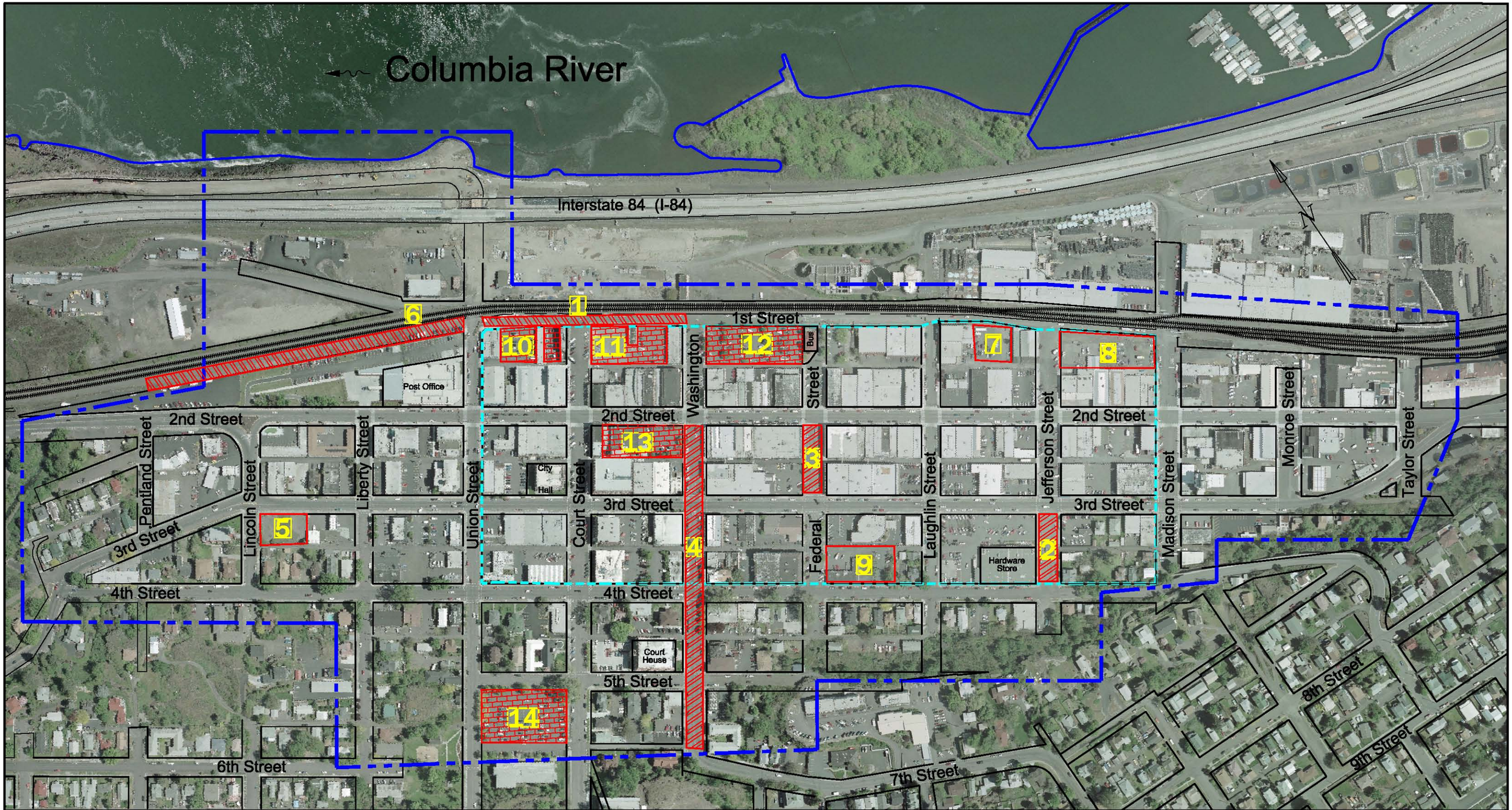
Study Area

Couplet Area

Figure 1

Study Area

The Dalles Downtown Streetscape and Parking Plan



DAVID EVANS AND ASSOCIATES INC.
2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

Legend

- Study Area
- Couplet Area
- Building
- Off-Street Surface Parking Lot
- Off-Street Structured Parking Lot
- On-Street Re-Striping

FIGURE 2

Parking Site Locations

The Dalles Downtown Streetscape and Parking Plan

On-Street Parking

1. Re-stripe exiting parallel parking to angled parking along south side of 1st Street between Union Street and Washington Street. This would add 4 on-street parking spaces.
2. Re-stripe exiting parallel parking to angled parking along Jefferson Street between 3rd and 4th Streets. This would add 14 on-street parking spaces.
3. Re-stripe exiting parallel parking to angled parking along Federal Street between 2nd and 3rd Streets. This would add 15 on-street parking spaces.
4. Re-stripe exiting parallel parking to angled parking along one side of Washington Street between 2nd and 6th Streets. This would add 23 on-street parking spaces.

Off-Street Surface Parking via Vacant Lot

5. Develop the vacant lot on the southeast corner of Lincoln Street and 3rd Street. This would add 25 off-street parking spaces.

On-Street Parking via Street Extension

6. Extension of 1st Street parallel to the railroad tracks from Pentland Street east to Union Street. The extension would be one-way eastbound with 86 angled on-street parking spaces along the south side of the street.

Off-Street Surface Parking

7. Develop the underutilized lot south of 1st Street between Laughlin and Jefferson Streets: This lot has a large area of open space that could be redeveloped into a surface parking lot. Redevelopment would add approximately 34 off-street parking spaces.
8. Develop the underutilized lot south of 1st Street between Jefferson and Madison Streets: This lot has a large area of open space that could be redeveloped into a surface parking lot. Redevelopment would add approximately 67 off-street parking spaces.
9. Develop the former The Dalles Chronicle building and parking lot north of 4th Street between Federal and Laughlin Streets: This existing building and parking lot are underutilized and could be redeveloped into a surface parking lot. Redevelopment would add approximately 18 off-street parking spaces.

Off-Street Parking Structure

10. Re-develop the lots south of 1st Street between Union and Court Streets. Given the grade difference between these lots and 1st Street, they are ideal for redevelopment into structure parking with retail development at street level. One level of parking would create no new parking but could provide secured parking. A second level of parking behind the retail would provide a net gain of approximately 6 off-street parking spaces.
11. Re-develop the lots south of 1st Street between Court and Washington Streets. Given the grade difference between these lots and 1st Street, they are ideal for redevelopment into structure parking with retail development at street level. One level of parking would create no new parking but could provide secured parking. A second level of parking behind the retail would provide a net gain of approximately 43 off-street parking spaces.

12. Redevelop the existing parking lot south of 1st Street between Washington Street and Federal Street. Redevelopment would add approximately 104 off-street parking spaces assuming three floors of parking with ground floor retail fronting 1st Street.
13. Redevelop the JCPenney property south of 2nd Street between Court and Washington Streets. Redevelopment would add approximately 76 off-street parking spaces assuming two floors of parking.
14. Redevelop the existing parking lot south of 5th Street between Union Street and Court Street. Redevelopment would add approximately 229 off-street parking spaces assuming three floors of parking.

A construction cost estimate is provided for each site. An itemized list of construction costs for each site is in the **Appendix**. Costs are limited to construction only. Costs such as land acquisition, permitting and retail development are not included.

Site 1: On-Street Parking, 1st Street between Union Street and Washington Street

Site 1 is part of the downtown streetscape improvements along 1st Street. From a parking stand point the site would require only a simple re-striping of exiting on-street parallel parking along the north side of the street to angled parking along the south side of the street between Union Street and Washington Street. The full streetscape improvements on 1st Street would be much more involved including rebuilding the street and sidewalk to create a curbless cross section designed for public use during special events. There are 22 parallel on-street parking spaces at this site today. Re-striping to angle parking would provide 26 spaces for a net gain of 4 parking spaces.

Site Opportunities

- Part of the downtown streetscape improvements for 1st Street
- Can be completed with simple re-striping
- Close to Post Office and future City Park
- Moves parking away from train tracks and closer to area businesses
- Increased parking supply should improve activity levels on 1st Street

Site Constraints

- Not centrally located
- Perceived safety concerns along 1st Street
- Angled parking limited to vehicles less than 19 feet in length

Site Cost

- Cost $5,550
- Cost per Space $213

The parking for Site 1 is laid out in plan view in **Figure 3**.

Site Opportunities

* Part of 1st Street Improvements
* Increases Activity on 1st Street
* Close to Proposed City Park
* Increases Parking by 4 Spaces

Site Constraints

* Not Centrally Located
* Perceived Safety Concerns
* Parking Limited to Vehicles Less Than 19 Feet in Length

Site Costs

* Cost $5,550
* Cost per Space $213
* Re-striping Cost Only

DAVID EVANS AND ASSOCIATES INC.
2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

FIGURE 3

SITE 1: On-Street Parking
1st Street Between Union Street and Washington Street

Site 2: On-Street Parking, Jefferson Street

Site 2 consists of a simple re-striping of exiting on-street parallel parking to angled parking along both sides of Jefferson Street between 3rd and 4th Streets. There are 9 parallel on-street parking spaces at this site. Re-striping to angle parking would provide 23 spaces for a net gain of 14 parking spaces.

Site Opportunities

- Can be completed with simple re-striping
- Located within the couplet sub-area
- Increases parking supply within the downtown core

Site Constraints

- Angled parking limited to vehicles less than 19 feet in length

Site Cost

- Cost $5,400
- Cost per Space $235

The parking for Site 2 is laid out in plan view in **Figure 4**.

Site 3: On-Street Parking, Federal Street

Site 3 consists of re-striping the exiting on-street parallel parking to angled parking along both sides of Federal Street between 2nd and 3rd Streets. To accommodate the angled parking, the existing southbound left-turn lane on Federal Street at 3rd Street would have to be removed. The site has 12 parallel on-street parking spaces. Re-striping to angled parking would provide 27 spaces for a net gain of 15 parking spaces.

Site Opportunities

- Can be completed with simple re-striping
- Located within the couplet sub-area near Columbia River Bank Building
- Increases parking supply within the downtown core

Site Constraints

- Southbound left-turn lane at 3rd Street removed to accommodated angled parking
- Angled parking limited to vehicles less than 19 feet in length

Site Cost

- Cost $5,650
- Cost per Space $209

The parking for Site 3 is laid out in plan view in **Figure 5**.

Site 4: On-Street Parking, Washington Street

Site 4 consists of a re-striping of exiting on-street parallel parking to angled parking along one side of Washington Street between 2nd and 6th Streets. To accommodate the angled parking, the existing

DAVID EVANS
AND ASSOCIATES INC.
2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

Site Opportunities

* Simple Re-Striping
* Located in Couplet Sub-Area
* Increases Parking by 14 Spaces

Site Constraints

* Parking Limited to Vehicles Less Than 19 Feet in Length

Site Costs

* Cost $5,400
* Cost per Space $235
* Re-striping Cost Only

FIGURE 4

SITE 2: On-Street Parking
Jefferson Street Between
3rd and 4th Streets

DAVID EVANS
AND ASSOCIATES INC.
2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

Site Opportunities

* Simple Re-Striping
* Located in Couplet Sub-area
* Increases Parking by 15 Spaces

Site Constraints

* Removes Left-Trun Lane
* No Employee Parking
* Parking Limited to Vehicles Less Than 19 Feet in Length

Site Costs

* Total Cost $5,650
* Cost per Space $209
* Re-striping Cost Only

FIGURE 5

SITE 3: On-Street Parking
Federal Street Between
2nd and 3rd Streets

southbound left-turn lane on Federal Street at 3rd Street would have to be removed. The eastside of the street at this site has 28 parallel on-street parking spaces. Assuming the parking would be placed on the eastside, re-striping to angled parking would provide 51 spaces for a net gain of 23 parking spaces.

Site Opportunities

- Can be completed with simple re-striping
- Located within the couplet sub-area
- Increases parking supply within the downtown core

Site Constraints

- Angled parking limited to one side of the street
- Travel lanes reduced to 11 feet
- Southbound left-turn lane at 3rd Street removed to accommodated angled parking
- Angled parking limited to vehicles less than 19 feet in length

Site Cost

- Cost $18,600
- Cost per Space $365

The parking for Site 4 is laid out in plan view in **Figure 6**.

Site 5: Off-Street Surface Parking, Southeast Corner of Lincoln Street and 3rd Street

Site 5 is a vacant lot on the southeast corner of Lincoln Street and 3rd Street. The city is in discussions with the owner to purchase the lot and build a surface parking lot. The parking lot would provide the study area with an additional 25 public off-street parking spaces.

Site Opportunities

- Relatively easy to convert to a parking lot as it is vacant
- Provides additional public off-street parking
- Highly visible to through traffic on 3rd Street
- Additional public off-street parking
- Close to historic Old St. Peter's Landmark

Site Constraints

- Not centrally located
- Access may be problematic due to street configuration

Site Cost

- Cost $104,000
- Cost per Space $4,160

The parking for Site 5 is laid out in plan view in **Figure 7**.

DAVID EVANS AND ASSOCIATES INC.
2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

Site Opportunities

* Simple Re-Striping
* Located in Couplet Sub-Area
* Increases Parking by 23 Spaces

Site Constraints

* Travel Lanes reduced to 11 ft.
* Removes Left-Turn Lane
* Limited Employee Parking
* Parking Limited to Vehicles Less Than 19 Feet in Length

Site Costs

* Total Cost $18,600
* Cost per Space $365
* Re-striping Cost Only

FIGURE 6

SITE 4: On-Street Parking
Washington Street Between
2nd and 6th Streets

Site Opportunities

* Vacant Lot
* New Public Parking
* Highly Visible to 3rd Street
* Increases Parking by 25 Spaces

Site Constraints

* Not Centrally Located
* Limited Access

Site Costs

* Total Cost $104,000
* Cost per Space $4,160

DAVID EVANS AND ASSOCIATES INC.
2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

FIGURE 7

SITE 5: Off-Street Parking
Southeast Corner of
Lincoln and 3rd Streets

Site 6: On-Street Parking, 1st Street between Pentland Street and Union Street

Site 6 is would involve the extension of 1st Street from Union Street west to Pentland Street. Angled parking would be provided along the south side of the street with traffic limited to one-way eastbound only. Layout of this site is based on Geographic Information System based right-of-way data. A detailed survey and confirmation of available right-of-way will be required to confirm the feasibility of this site. As a new roadway this site has no exiting parking. However, people do park in the gravel area next to the train tracks, which indicates an existing demand for parking within this area. The capacity of this unofficial lot is estimated at 20 spaces. Extending 1st Street to Pentland would provide 86 spaces for an official gain of 86 spaces and an unofficial net gain of 66 parking spaces. If a detailed field survey shows insufficient right-of-way to extend 1st Street to Pentland a two-way street with head in parking and a turnaround could be constructed to provide some additional parking.

Site Opportunities

- Provides additional connectivity between 1st Street and 2nd Street
- Improves liability concerns of unofficial nonstandard gravel parking area
- Close to Post Office and future City Park
- Increased parking supply and connectivity may improve activity levels on 1st Street
- Outside of downtown parking zone making it eligible for on-street employee parking

Site Constraints

- Not centrally located
- Perceived safety concerns along 1st Street
- Angled parking limited to vehicles less than 19 feet in length

Site Cost

- Cost $262,850
- Cost per Space $3,056

The parking for Site 6 is laid out in plan view in **Figure 8**.

Site 7: Off-Street Surface Parking, South of 1st Street between Laughlin and Jefferson Streets

Site 7 contains multi-story buildings at the east and west end with a large open area between the buildings that is being used primarily for storage. This site is privately owned, making any changes to the site pursuant to an agreement with the property owner(s). The site is within the downtown parking zone so additional off-street parking is not required even if the building are redeveloped or expanded. The city is encouraged to promote development of off-street parking on the site. Economic forces are also likely to mandate the creation of off-street parking on the site when the building are redeveloped or added to the site. Assuming the footprint of the existing buildings remains the same redevelopment of the open area would yield a surface parking lot with 34 parking spaces. This would increase the parking supply within the study area by 34 spaces.

Site Opportunities

- Large open area that would be relatively easy to convert to a surface parking lot
- Located within the couplet sub-area

DAVID EVANS
AND ASSOCIATES INC.
2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

Site Opportunities

* Improved Connectivity
* Increases Activity on 1st Street
* Improves Parking Liability
* Close to Proposed City Park
* Increases Parking by 86 Spaces

Site Constraints

* Not Centrally Located
* Perceived Safety Concerns
* ROW and Grade Issues
* Parking Limited to Vehicles Less Than 19 Feet in Length

Site Costs

* Total Cost $262,850
* Cost per Space $3,056
* ROW Review Needed
* Survey Needed

FIGURE 8

SITE 6: On-Street Parking
1st Street Between
Pentland and Union Streets

- Increases parking supply within the downtown core
- Increased parking supply should improve activity levels on 1st Street

Site Constraints

- Privately owned
- Not visible from 2nd or 3rd Streets
- Perceived safety concerns along 1st Street
- Creation of parking not required as part of property redevelopment

Site Cost

- Cost $77,400
- Cost per Space $2,276

The parking for Site 7 is laid out in plan view in **Figure 9**.

Site 8: Off-Street Surface Parking, South of 1st Street between Jefferson and Madison Streets

Site 8 contains one small building with remainder of the site being a large open area that is being used primarily for storage. This site is privately owned, making any changes to the site pursuant to an agreement with the property owner(s). The site is within the downtown parking zone so additional off-street parking is not required even if the building are redeveloped or expanded. The city is encouraged to promote development of off-street parking on the site. Economic forces are also likely to mandate the creation of off-street parking on the site when the building are redeveloped or added to the site. Assuming the footprint of the existing buildings remains the same redevelopment of the open area would yield a surface parking lot with 67 parking spaces. This would increase the parking supply within the study area by 67 spaces. Adjacent to this site, the north side of 1st Street would be an excellent location for designated public RV parking.

Site Opportunities

- Large open area that would be relatively easy to convert to a surface parking lot
- Located within the couplet sub-area
- Close to the cherry processing plant
- Increases parking supply within the downtown core
- Increased parking supply should improve activity levels on 1st Street

Site Constraints

- Privately owned
- Not visible from 3rd Street
- Perceived safety concerns along 1st Street
- Would require significant investment in redevelopment of the site.
- Creation of parking not required as part of property redevelopment

Site Cost

- Cost $142,600
- Cost per Space $2,128

DAVID EVANS
AND ASSOCIATES INC.
2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

Site Opportunities

* **Relatively Low Development Cost**
* **Increases Activity on 1st Street**
* **Increases Parking by 34 Spaces**

Site Constraints

* **Privately Owned Land**
* **Not Centrally Located**
* **Perceived Safety Concerns**

Site Costs

* **Total Cost $77,400**
* **Cost per Space $2,276**

FIGURE 9

SITE 7: Off-Street Parking South of 1st Street Between Laughlin and Jefferson Streets

The parking for Site 8 is laid out in plan view in **Figure 10**.

Site 9: Off-Street Surface Parking, North of 4th Street between Federal and Laughlin Streets

Site 9 contains The Dalles Chronicle's former headquarters and off-street parking lot. This site is privately owned, making any changes to the site pursuant to an agreement with the property owner(s). The site is within the downtown parking zone so additional off-street parking is not required even if the building is redeveloped or expanded. The central location of this site is ideal for redevelopment into a large public off-street parking lot. The existing site has a total of 33 private off-street parking spaces. Assuming the existing building is removed, redevelopment of the site would yield a surface parking lot with 52 parking spaces. To provide access to the parking lot from 4th Street the On-Street parking would have to be re-striped with the loss of one parking space. The parking lot would provide a net gain of 18 parking spaces within the study area. As future parking demand warrants the site could be converted into a structured parking garage.

Site Opportunities

- Central Location
- Located within the couplet sub-area
- Potential for structured parking garage
- Increases parking supply within the downtown core

Site Constraints

- Privately owned
- Would require removal of existing building.

Site Cost

- Cost $154,650
- Cost per Space $2,974

The parking for Site 9 is laid out in plan view in **Figure 11**.

Site 10: Off-Street Structured Parking, South of 1st Street between Union and Court Streets

Site 10 contains large areas of open space that are currently used as private surface parking lots. This site is privately owned, making any changes to the site pursuant to an agreement with the property owner(s). The site is within the downtown parking zone so additional off-street parking is not required even if the buildings are redeveloped or expanded. Given the grade difference between this site and 1st Street, it is ideal for redevelopment into structure parking with retail development on 1st Street with at grade access to secured parking from Union Street and Court Street. Assuming the existing buildings would remain in place, one level of below grade parking would have 4 fewer parking spaces than today but would provide secured parking for employees and residences. A second level of parking behind 60-foot deep retail buildings fronting 1st Street would provide 10 additional off-street parking spaces for a net gain of 6 parking spaces within the study area.

Site Opportunities

- Excellent site for secured below grade parking

Site Opportunities

* Relatively Low Development Cost
* Increases Activity on 1st Street
* Increases Parking by 67 Spaces

Site Constraints

* Privately Owned Land
* Not Centrally Located
* Perceived Safety Concerns

Site Costs

* Total Cost $142,600
* Cost per Space $2,128

DAVID EVANS AND ASSOCIATES INC.
2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

FIGURE 10

SITE 8: Off-Street Parking South of 1st Street Between Jefferson and Madison Streets

Site Opportunities

* Central Location
* Potential for Structured Parking
* Increases Parking by 18 Spaces

Site Constraints

* Privately Owned Land
* Requires Removal of Building
* Loss 1 On-street Space

Site Costs

* Total Cost $154.650
* Cost per Space $2,974

DAVID EVANS AND ASSOCIATES INC.
2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

FIGURE 11

SITE 9: Off-Street Parking
North of 4th Street Between
Federal and Laughlin Streets

- Located within the couplet sub-area
- Close to Post Office and proposed City Park
- Increases parking supply within the downtown core
- Increased parking supply and redevelopment should improve activity levels on 1st Street

Site Constraints

- Privately Owned
- Perceived safety concerns along 1st Street
- Would require significant investment in redevelopment of the site.
- Creation of parking not required as part of property redevelopment

Site Cost

- Cost $235,800
- Does not include cost for retail building
- Retail building costs would increase the cost to over $500,000

Both levels of parking for Site 10 are laid out in plan view in **Figure 12**. The proposed second level, which is at Grade with 1st Street, is shown in Yellow. The fist level, which is below 1st Street, is shown in gray.

Site 11: Off-Street Structured Parking, South of 1st Street between Court and Washington Streets

Site 11 contains large areas of open space that are currently used as private surface parking lots. The east half of this site is owned by the city and has been identified as an economic development site. Tenants of the Commodore Building are currently using the west half of the site. This east half of the site is privately owned, making any changes to the site pursuant to an agreement with the property owner(s). The site is within the downtown parking zone so additional off-street parking is not required even if the buildings are redeveloped or expanded. Given the grade difference between this site and 1st Street, the open areas are ideal for redevelopment into structure parking with retail development on 1st Street with at grade access to secured parking from Union Street and Court Street. Assuming the existing buildings would remain in place, one level of below grade parking would have 4 fewer parking spaces than today but would provide secured parking for employees and residences. To provide access from Court Street to the second level of parking, three On-Street parking spaces would be lost. A second level of parking behind 60-foot deep retail buildings fronting 1st Street would provide 50 additional off-street parking spaces for a net gain of 43 parking spaces within the study area.

Site Opportunities

- Excellent site for secured below grade parking
- Identified as an economic redevelopment site
- Located within the couplet sub-area
- Close to the proposed City Park
- Increases parking supply within the downtown core
- Increased parking supply and redevelopment should improve activity levels on 1st Street

Site Constraints

- Part of site is privately Owned

DAVID EVANS
AND ASSOCIATES INC.
2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

Site Opportunities

* Secured Below Grade Parking
* Commercial Property Above
* Close to Proposed City Park
* Increases Parking by 6 Spaces

Site Constraints

* Privately Owned
* Perceived Safety Concerns
* Lower Level Loses 4 Spaces
* Requires Significant Redevelopment

Site Costs

* Two Levels of Parking $235,800
* Not Including Retail Development Cost

FIGURE 12

SITE 10: Structured Parking South of 1st Street Between Union and Court Streets

- Not visible from 2nd or 3rd Streets
- Perceived safety concerns along 1st Street
- Would require significant investment in redevelopment of the site.
- Creation of parking not required as part of property redevelopment

Site Cost

- Cost $707,650
- Does not include cost for retail building
- Retail building costs would increase the cost to approximately $1,000,000

Both levels of parking for Site 11 are laid out in plan view in **Figure 13**. The proposed second level, which is at Grade with 1st Street, is shown in Yellow. The fist level, which is below 1st Street, is shown in gray.

Site 12: Off-Street Structured Parking, South of 1st Street between Washington and Federal Streets

Site 12 is the public parking lot on 1st Street between Washington Street and the Bus Depot. The site is owned and managed by the city but was paid for by area businesses. Building a structured parking lot on the site would likely require significant investment by area businesses and/or the public. Converting the existing surface lot to structured parking with ground floor retail development along 1st Street would yield approximately 89 parking spaces per floor. The existing surface parking lot has 95 parking spaces. Assuming the new parking structure has three floors with two levels of parking, it would provide a net gain of 104 parking spaces.

Site Opportunities

- Located within the couplet sub-area
- Established parking area
- Increases parking supply within the downtown core
- Potential for secured parking within the downtown core
- Increased retail development should improve activity levels on 1st Street

Site Constraints

- Located on the north edge of the study area
- Perceived safety concerns along 1st Street
- Would require significant investment in redevelopment of the site.

Site Cost

- Cost $3,000,000
- Does not include cost for retail building
- Retail building costs would increase the cost to approximately $3,750,000

Both levels of parking for Site 12 are laid out in plan view in **Figure 14**. The proposed second and third levels are shown in Yellow. The fist level, which is at grade with 1st Street, is shown in gray.

DAVID EVANS AND ASSOCIATES INC.
2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

Site Opportunities

* Secured Below Grade Parking
* Commercial Property Above
* Economic Redevelopment Site
* Increases Parking by 43 Spaces

Site Constraints

* Privately Owned
* Perceived Safety Concerns
* Lose 3 On-Street Spaces
* Requires Significant Redevelopment

Site Costs

* Two Levels of Parking $707,650
* Not Including Retail Development Cost

FIGURE 13

SITE 11: Structured Parking South of 1st Street Between Court and Washington Streets

DAVID EVANS
AND ASSOCIATES INC.
2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

Site Opportunities

* Established Parking Site
* Potential for Secured Parking
* Increases Parking by 104 Spaces Assuming 3 Level Structure

Site Constraints

* Perceived Safety Concerns
* Requires Significant Redevelopment

Site Costs

* Total Cost $3,000,000
* Cost per Space $15,000
* Not Including Retail Development Cost

FIGURE 14

SITE 12: Structured Parking South of 1st Street Between Washington and Federal Streets

Site 13: Off-Street Structured Parking, South of 2nd Street between Court and Washington Streets

Site 13 is the location of JCPenney. The west half of the site contains the JCPenney building with their parking lot taking up the other half of the site. JCPenney is considering expanding the store through redevelopment of the entire site. The site is within the downtown parking zone so additional off-street parking is not required even if the buildings are redeveloped or expanded. The City is encouraged to work with JCPenney to see if a joint use parking structure on top of the JCPenney would be a feasible option as part of their redevelopment of the site. Assuming a shared use parking structure is feasible it would provide approximately 59 parking spaces per floor. The existing surface parking lot has 33 parking spaces. Assuming the new parking structure has two floors it would provide a net gain of 76 parking spaces.

Site Opportunities

- Centrally located within the downtown core
- Located within the couplet sub-area
- Close to the proposed City Hall and the Commodore Building
- Increases parking supply within the downtown core
- Potential for secured parking within the downtown core

Site Constraints

- Site is privately Owned
- Would require significant investment in redevelopment of the site.
- Creation of parking not required as part of property redevelopment

Site Cost

- Cost $2,010,000
- Does not include cost for retail building

The parking for Site 13 is laid out in plan view in **Figure 15**.

Site 14: Off-Street Structured Parking, South of 5th Street between Union and Court Streets

Site 14 is the largest off-street parking lot within the study area. The site provides parking for state employees and is owned by the state. Building a shared use structured parking lot on the site would likely require an agreement between the City and the State with significant investment by both. Converting the existing surface lot to structured parking would yield approximately 127 parking spaces per floor. The existing surface parking lot has 132 parking spaces. Assuming the new parking structure has three floors it would provide a net gain of 229 parking spaces.

Site Opportunities

- Large lot site could provide a significant increase in parking spaces
- Located close to County Court House and State Buildings
- Established parking area
- Increases parking supply within the downtown core
- Potential for secured parking within the study area

DAVID EVANS AND ASSOCIATES INC.
2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

Site Opportunities

* Central Location
* Potential for Secured Parking
* Close to City Hall and Commodore
* Increases Parking by 76 Spaces Assuming 2 Levels of Parking

Site Constraints

* Privately Owned
* Requires Significant Redevelopment

Site Costs

* Total Cost $2,010,000
* Cost per Space $15,000
* Assumes 2 Levels
* 59 Spaces per Floor

FIGURE 15

SITE 13: Structured Parking South of 2nd Street Between Court and Washington Streets

Site Constraints

- Not centrally located
- Would require significant investment in redevelopment of the site.

Site Cost

- Cost $5,550,000
- Cost per Space $15,000

The parking for Site 14 is laid out in plan view in **Figure 16**.

ALTERNATIVE PARKING PLANS

A total of 14 sites were identified as potential locations for additional parking supply within the study area. The sites consist of on-street re-striping, development of off-street surface lots and construction of off-street parking structures as shown below and in **Figure 2**. The two parking alternatives utilize these sites to create a parking plan for the downtown core. Each parking plan takes into account the opportunities and constraints of each of the 14 sites. Alternative Parking Plan A focuses on improvements on public right-of-way with minimal reliance on redevelopment of private land. Alternative Parking Plan B will require a commitment from private property owners as it includes redevelopment of both public and private lands.

Alternative Parking Plan A

Alternative Parking Plan A focuses on improvements on public right-of-way with minimal reliance on redevelopment of private land. Plan A includes on-street re-striping, development of new off-street parking lots, and redevelopment of existing public off-street parking lots into structured parking garages. Plan A utilizes 8 of the 14 identified parking sites. The eight sites for Plan A are listed below by their site number as shown in **Figure 2**.

On-Street Parking

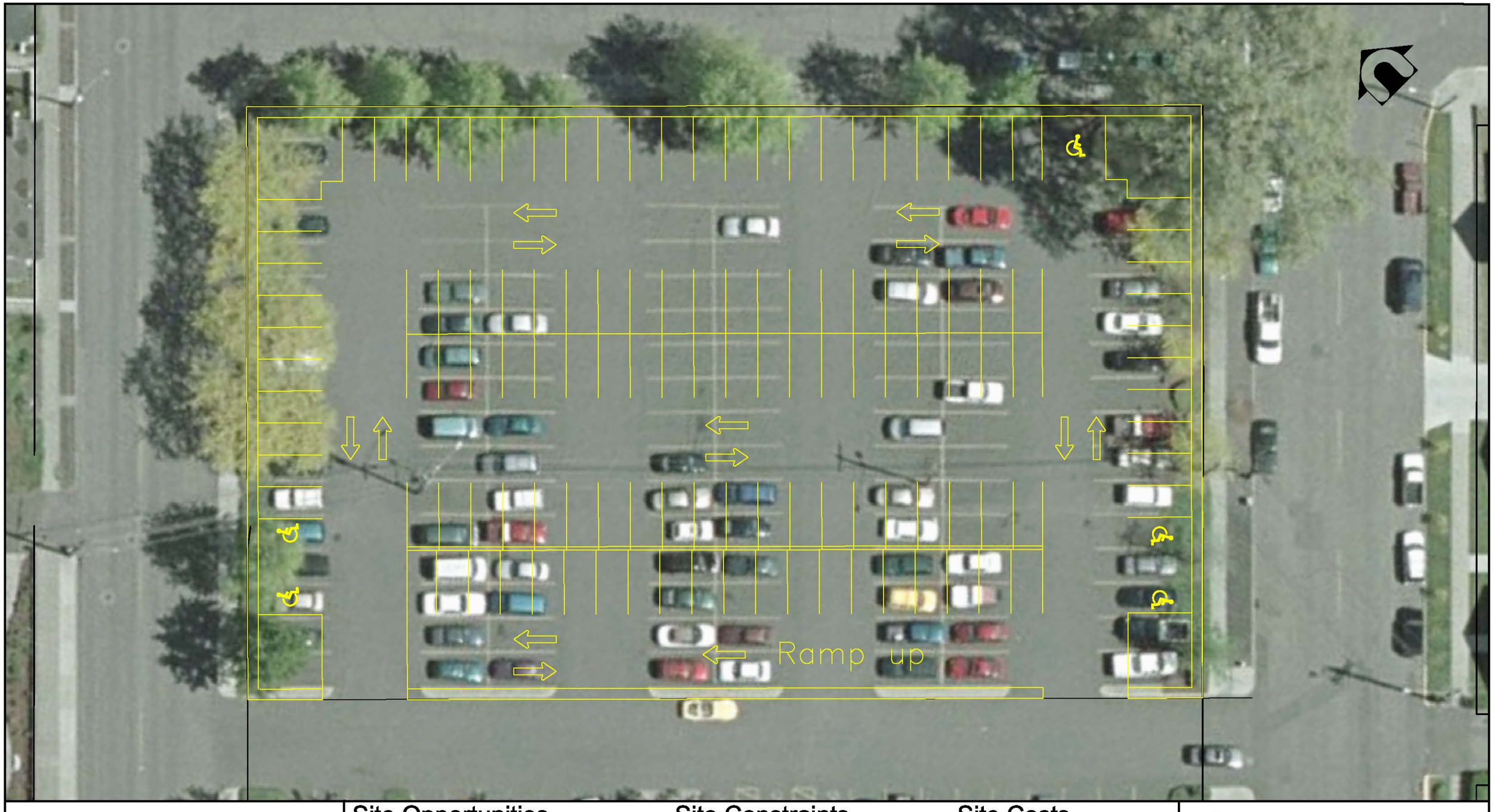
1. Re-stripe exiting parallel parking to angled parking along south side of 1st Street between Union Street and Washington Street. This would add 4 on-street parking spaces.
2. Re-stripe exiting parallel parking to angled parking along Jefferson Street between 3rd and 4th Streets. This would add 14 on-street parking spaces.
3. Re-stripe exiting parallel parking to angled parking along Federal Street between 2nd and 3rd Streets. This would add 15 on-street parking spaces.
4. Re-stripe exiting parallel parking to angled parking along one side of Washington Street between 2nd and 6th Streets. This would add 23 on-street parking spaces.

Off-Street Surface Parking via Vacant Lot

5. Develop the vacant lot on the southeast corner of Lincoln Street and 3rd Street. This would add 25 off-street parking spaces.

Off-Street Parking Structure

11. Re-develop the lots south of 1st Street between Court and Washington Streets. Given the grade difference between these lots and 1st Street, they are ideal for redevelopment into structure



DAVID EVANS
AND ASSOCIATES INC.
2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

Site Opportunities

* Established Parking Site
* Potential for Secured Parking
* Close to Court House
* Increases Parking by 229 Spaces Assuming 3 Levels of Parking

Site Constraints

* Not Centrally Located
* Requires Significant Redevelopment

Site Costs

* Total Cost $5,550,000
* Cost per Space $15,000
* Assumes 3 Levels
* 127 Spaces per Floor

FIGURE 16

SITE 14: Structured Parking South of 5th Street Between Union and Court Streets

parking with retail development at street level. One level of parking would create no new parking but could provide secured parking. A second level of parking behind the retail would provide a net gain of approximately 43 off-street parking spaces.

12. Redevelop the existing parking lot south of 1st Street between Washington Street and Federal Street. Redevelopment would add approximately 104 off-street parking spaces assuming three floors of parking with ground floor retail fronting 1st Street.
14. Redevelop the existing parking lot south of 5th Street between Union Street and Court Street. Redevelopment would add approximately 229 off-street parking spaces assuming three floors of parking.

Redevelopment of the eight sites included in Parking Plan A would create a net parking supply gain of 457 spaces. Of the 457 new parking spaces, 56 would be on-street parking spaces and 401 would be off-street parking spaces. This exceeds the projected full build out parking need for an additional 312 parking space by 145 spaces. Assuming Site 5 is purchased by the City of The Dalles, only the east half of Site 11 would require the use of private property. The estimated cost to implement the redevelopment of the eight sites in Parking Plan A is approximately $9,400,000. This cost does NOT include the cost for private property acquisition or the cost of developing the new retail spaces along 1st Street. The high cost of Parking Plan A is the result of minimizing the impact to private property through the reliance on parking structures to meet future parking demands.

Alternative Parking Plan B

Alternative Parking Plan B relies on redevelopment of private land to minimize the need for expensive parking structures. Alternative Parking Plan B will require a commitment from private property owners as it includes redevelopment of both public and private lands. Plan B includes on-street re-striping, the development of a new public off-street parking lot, redevelopment of existing public off-street parking lot into structured parking garage, and redevelopment of private lots along 1st Street into new retail space with public and private parking. Plan B utilizes 11 of the 14 identified parking sites. The 11 sites are listed below by their site number as shown in **Figure 2**.

On-Street Parking

1. Re-stripe exiting parallel parking to angled parking along south side of 1st Street between Union Street and Washington Street. This would add 4 on-street parking spaces.
2. Re-stripe exiting parallel parking to angled parking along Jefferson Street between 3rd and 4th Streets. This would add 14 on-street parking spaces.
3. Re-stripe exiting parallel parking to angled parking along Federal Street between 2nd and 3rd Streets. This would add 15 on-street parking spaces.
4. Re-stripe exiting parallel parking to angled parking along one side of Washington Street between 2nd and 6th Streets. This would add 23 on-street parking spaces.

Off-Street Surface Parking via Vacant Lot

5. Develop the vacant lot on the southeast corner of Lincoln Street and 3rd Street. This would add 25 off-street parking spaces.

Off-Street Surface Parking

7. Develop the underutilized lot south of 1st Street between Laughlin and Jefferson Streets: This lot has a large area of open space that could be redeveloped into a surface parking lot. Redevelopment would add approximately 34 off-street parking spaces.
8. Develop the underutilized lot south of 1st Street between Jefferson and Madison Streets: This lot has a large area of open space that could be redeveloped into a surface parking lot. Redevelopment would add approximately 67 off-street parking spaces.
9. Develop the former The Dalles Chronicle building and parking lot north of 4th Street between Federal and Laughlin Streets: This existing building and parking lot are underutilized and could be redeveloped into a surface parking lot. Redevelopment would add approximately 18 off-street parking spaces.

Off-Street Parking Structure

10. Re-develop the lots south of 1st Street between Union and Court Streets. Given the grade difference between these lots and 1st Street, they are ideal for redevelopment into structure parking with retail development at street level. One level of parking would create no new parking but could provide secured parking. A second level of parking behind the retail would provide a net gain of approximately 6 off-street parking spaces.
11. Re-develop the lots south of 1st Street between Court and Washington Streets. Given the grade difference between these lots and 1st Street, they are ideal for redevelopment into structure parking with retail development at street level. One level of parking would create no new parking but could provide secured parking. A second level of parking behind the retail would provide a net gain of approximately 43 off-street parking spaces.
12. Redevelop the existing parking lot south of 1st Street between Washington Street and Federal Street. Redevelopment would add approximately 104 off-street parking spaces assuming three floors of parking with ground floor retail fronting 1st Street.

Redevelopment of the 11 sites included in Parking Plan B would create a net parking supply gain of 353 spaces. Of the 353 new parking spaces, 56 would be on-street parking spaces and 297 would be off-street parking spaces. This exceeds the projected full build out parking need for an additional 312 parking space by 41 spaces. Assuming the City of The Dalles purchases Site 5, Sites 7 through 11 would require the use of private property. The estimated cost to implement the redevelopment of the 11 sites in Parking Plan B is approximately $4,500,000. This cost does NOT include the cost for private property acquisition or the cost of developing the new retail spaces along 1st Street.

O:\PROJECT\O\Odot0000-0466\908 Site Analysis (Task 3.3.1)\Deliverables\Final Site Analysis and Parking Alt.doc

DAVID EVANS
AND ASSOCIATES INC.

THE DALLES DOWNTOWN STREETSCAPE AND PARKING PLAN
SITE ANALYSIS AND ALTERNATIVE PARKING PLANS
JUNE 10, 2005
PREPARED BY DAVID EVANS AND ASSOCIATES, INC.

APPENDIX

Parking Site Cost Analysis

Site 1: Surface Parking Construction Cost
1st Street between Union and Washington Streets - 26 spaces
March 29, 2005 BXK

Item#	Description	Quantity	Unit	Unit Cost	Cost
	Mobilization (5%)	1	LS	$362.18	$362.18
	Traffic Control	1	LS	$500.00	$500.00
	Pavement Striping	837	LF	$2.00	$1,674.00
	Signing	1	LS	$2,500.00	$2,500.00
	Grind Existing Striping	1	LS	$500.00	$500.00
		TOTAL			**$5,536.18**
				ROUND TO =	**$5,550.00**
				UNIT COST =	**$213 per Space**

Site 2: Surface Parking Construction Cost
Jefferson St. Re-striping between 3rd and 4th Streets - 23 spaces
March 29, 2005 BXK

Item#	Description	Quantity	Unit	Unit Cost	Cost
	Mobilization (5%)	1	LS	$352.24	$352.24
	Traffic Control	1	LS	$500.00	$500.00
	Pavement Striping	766	LF	$2.00	$1,532.00
	Signing	1	LS	$2,500.00	$2,500.00
	Grind Existing Striping	1	LS	$500.00	$500.00
		TOTAL			**$5,384.24**
				ROUND TO =	**$5,400.00**
				UNIT COST =	**$235 per Space**

Site 3: Surface Parking Construction Cost
Federal St. Re-striping between 2nd and 3rd Streets - 27 spaces
March 29, 2005 BXK

Item#	Description	Quantity	Unit	Unit Cost	Cost
	Mobilization (5%)	1	LS	$369.04	$369.04
	Traffic Control	1	LS	$500.00	$500.00
	Pavement Striping	886	LF	$2.00	$1,772.00
	Signing	1	LS	$2,500.00	$2,500.00
	Grind Existing Striping	1	LS	$500.00	$500.00
		TOTAL			**$5,641.04**
				ROUND TO =	**$5,650.00**
				UNIT COST =	**$209 per Space**

Site 4: Surface Parking Construction Cost
Washington St. Re-striping between 2nd and 6th Streets - 51 spaces
March 29, 2005 BXK

Item#	Description	Quantity	Unit	Unit Cost	Cost
	Mobilization (5%)	1	LS	$1,215.48	$1,215.48
	Traffic Control	4	LS	$500.00	$2,000.00
	Pavement Striping	1682	LF	$2.00	$3,364.00
	Signing	4	LS	$2,500.00	$10,000.00
	Grind Existing Striping	4	LS	$500.00	$2,000.00
		TOTAL			**$18,579.48**
				ROUND TO =	**$18,600.00**
				UNIT COST =	**$365 per Space**

Site 5: Surface Off-Street Parking Construction Cost
Southeast Corner of Lincoln and 3rd Street - 25 space lot- *All New Pavement*
March 29, 2005 BXK

Item#	Description	Quantity	Unit	Unit Cost	Cost
	Mobilization (5%)	1	LS	$5,822.04	$5,822.04
	Erosion Control Silt Fence	100	LF	$4.00	$400.00
	Erosion Control Const.Ent.	1	LS	$2,000.00	$2,000.00
	Erosion Control Inlet Protect	5	EA	$150.00	$750.00
	Traffic Control	1	LS	$1,500.00	$1,500.00
	Clearing and Grubbing	1	LS	$200.00	$200.00
	Earthwork (grade to drain)	450	CY	$8.00	$3,600.00
	Subgrade Geotextile	0	SY	$1.00	$0.00
	Base Rock (8")	270	CY	$18.00	$4,860.00
	A.C. Type C (4")	270	TON	$55.00	$14,850.00
	Driveway Apron	3	EA	$3,000.00	$9,000.00
	Concrete Walk	0	SY	$27.00	$0.00
	Standard Curb	800	LF	$9.00	$7,200.00
	Concrete Curb and Gutter	0	LF	$16.00	$0.00
	Wheel Stops	0	EA	$60.00	$0.00
	Pavement Legend Arrow	7	EA	$250.00	$1,750.00
	Pavement Striping	556	LF	$2.00	$1,112.00
	Signing	1	LS	$2,500.00	$2,500.00
	Signing and Striping for H/C Spaces	1	EA	$1,500.00	$1,500.00
	Storm Drain Pipe	250	LF	$40.00	$10,000.00
	Cleanouts	4	EA	$500.00	$2,000.00
	Public Catch Basins	0	EA	$1,750.00	$0.00
	Lynch Inlets	3	EA	$900.00	$2,700.00
	Connect to existing public storm drain	1	LS	$350.00	$350.00
	1" Water Service for irrigation	1	EA	$2,500.00	$2,500.00
	Water Quality (assume 4' wide swales)	0	LF	$24.00	$0.00
	Lighting (complete in place)	2	EA	$3,000.00	$6,000.00
	Landscape and Irrigation(per plan)	4200	SF	$2.00	$8,400.00
	Consulting Cost	1	LS		$15,000.00
		TOTAL			**$103,994.04**
				ROUND TO =	**$104,000.00**
				UNIT COST =	**$4,160 per Space**

Site 6: Surface Parking Construction Cost
Extension of 1st Street between Union and Pentland Streets - 86 spaces
March 29, 2005 BXK

Item#	Description	Quantity	Unit	Unit Cost	Cost
	Mobilization (5%)	1	LS	$15,887.76	$15,887.76
	Erosion Control Silt Fence	600	LF	$4.00	$2,400.00
	Erosion Control Const.Ent.	1	LS	$2,000.00	$2,000.00
	Erosion Control Inlet Protect	6	EA	$150.00	$900.00
	Traffic Control	1	LS	$1,500.00	$1,500.00
	Clearing and Grubbing	1	LS	$4,000.00	$4,000.00
	Earthwork (assume 2' avg.)	3000	CY	$8.00	$24,000.00
	Subgrade Geotextile	0	SY	$1.00	$0.00
	Base Rock (12")	1500	CY	$18.00	$27,000.00
	A.C. Type C (4")	270	TON	$55.00	$14,850.00
	Driveway Apron	2	EA	$3,000.00	$6,000.00
	Concrete Walk (6' wide)	750	SY	$27.00	$20,250.00
	Standard Curb	2200	LF	$9.00	$19,800.00
	Concrete Curb and Gutter	0	LF	$16.00	$0.00
	Wheel Stops	0	EA	$60.00	$0.00
	Pavement Legend (ONE WAY)	2	EA	$350.00	$700.00
	Pavement Striping	3734	LF	$2.00	$7,468.00
	Signing	1	LS	$2,500.00	$2,500.00
	Signing and Striping for H/C Spaces	0	EA	$1,500.00	$0.00
	Storm Drain Pipe	1200	LF	$40.00	$48,000.00
	SD Manholes	3	EA	$2,750.00	$8,250.00
	Public Catch Basins	6	EA	$1,750.00	$10,500.00
	Lynch Inlets	0	EA	$900.00	$0.00
	Connect to existing public storm drain	1	LS	$350.00	$350.00
	1" Water Service for irrigation	1	EA	$2,500.00	$2,500.00
	Water Quality (assume 4' wide swales)	0	LF	$24.00	$0.00
	Lighting @ 150 ft O/C (complete in place)	8	EA	$3,000.00	$24,000.00
	Landscape and Irrigation(per plan)	0	SF	$2.00	$0.00
	Consulting Cost	1	LS		$20,000.00
		TOTAL			**$262,855.76**
				ROUND TO =	**$262,850.00**
				UNIT COST =	**$3,056 per Space**

Site 7: Surface Off-Street Parking Construction Cost
1st Street Lot between Laughlin and Jefferson Streets - 34 space lot
April 14, 2005 BXK

Item#	Description	Quantity	Unit	Unit Cost	Cost
	Mobilization (5%)	1	LS	$4,406.71	$4,406.71
	Erosion Control Silt Fence	100	LF	$4.00	$400.00
	Erosion Control Const.Ent.	0	LS	$2,000.00	$0.00
	Erosion Control Inlet Protect	2	EA	$150.00	$300.00
	Traffic Control	1	LS	$1,500.00	$1,500.00
	Clearing and Grubbing	1	LS	$200.00	$200.00
	Earthwork (grade to drain)	0	CY	$8.00	$0.00
	Subgrade Geotextile	0	SY	$1.00	$0.00
	Base Rock (8")	0	CY	$18.00	$0.00
	A.C. Type C (2" overlay)	175	TON	$55.00	$9,625.00
	Driveway Apron	2	EA	$3,000.00	$6,000.00
	Concrete Walk (6' wide)	98	SY	$27.00	$2,646.00
	Standard Curb	696	LF	$9.00	$6,264.00
	Concrete Curb and Gutter	0	LF	$16.00	$0.00
	Wheel Stops	0	EA	$60.00	$0.00
	Pavement Legend Arrow	4	EA	$250.00	$1,000.00
	Pavement Striping	834	LF	$2.00	$1,668.00
	Signing	1	LS	$2,500.00	$2,500.00
	Signing and Striping for H/C Spaces	2	EA	$1,500.00	$3,000.00
	Storm Drain Pipe	150	LF	$40.00	$6,000.00
	Cleanouts	2	EA	$500.00	$1,000.00
	Public Catch Basins	0	EA	$1,750.00	$0.00
	Lynch Inlets	2	EA	$900.00	$1,800.00
	Connect to existing public storm drain	1	LS	$350.00	$350.00
	1" Water Service for irrigation	1	EA	$2,500.00	$2,500.00
	Water Quality (assume 4' wide swales)	0	LF	$24.00	$0.00
	Lighting (complete in place)	2	EA	$3,000.00	$6,000.00
	Landscape and Irrigation(per plan)	5100	SF	$2.00	$10,200.00
	Consulting Cost	1	LS		$10,000.00
		TOTAL			**$77,359.71**
				ROUND TO =	**$77,400.00**
				UNIT COST =	**$2,276 per Space**

Site 8: Surface Off-Street Parking Construction Cost
1st Street Lot between Jefferson and Madison Streets - 67 space lot
April 14, 2005 BXK

Item#	Description	Quantity	Unit	Unit Cost	Cost
	Mobilization (5%)	1	LS	$8,346.17	$8,346.17
	Erosion Control Silt Fence	200	LF	$4.00	$800.00
	Erosion Control Const.Ent.	1	LS	$2,000.00	$2,000.00
	Erosion Control Inlet Protect	4	EA	$150.00	$600.00
	Traffic Control	1	LS	$1,500.00	$1,500.00
	Clearing and Grubbing	1	LS	$3,000.00	$3,000.00
	Earthwork (new pavement area)	100	CY	$8.00	$800.00
	Subgrade Geotextile	450	SY	$1.00	$450.00
	Base Rock (8")	100	CY	$18.00	$1,800.00
	A.C. Type C (4")	100	TON	$55.00	$5,500.00
	A.C. Type C (2" overlay)	310	TON	$55.00	$17,050.00
	Driveway Apron	4	EA	$3,000.00	$12,000.00
	Concrete Walk (6' wide)	319	SY	$27.00	$8,613.00
	Standard Curb	1150	LF	$9.00	$10,350.00
	Concrete Curb and Gutter	0	LF	$16.00	$0.00
	Wheel Stops	0	EA	$60.00	$0.00
	Pavement Legend Arrow	16	EA	$250.00	$4,000.00
	Pavement Striping	1309	LF	$2.00	$2,618.00
	Signing	1	LS	$2,500.00	$2,500.00
	Signing and Striping for H/C Spaces	3	EA	$1,500.00	$4,500.00
	Storm Drain Pipe	250	LF	$40.00	$10,000.00
	Cleanouts	4	EA	$500.00	$2,000.00
	Public Catch Basins	0	EA	$1,750.00	$0.00
	Lynch Inlets	3	EA	$900.00	$2,700.00
	Connect to existing public storm drain	1	LS	$350.00	$350.00
	1" Water Service for irrigation	1	EA	$2,500.00	$2,500.00
	Water Quality (assume 4' wide swales)	0	LF	$24.00	$0.00
	Lighting (complete in place)	4	EA	$3,000.00	$12,000.00
	Landscape and Irrigation(per plan)	5800	SF	$2.00	$11,600.00
	Consulting Cost	1	LS		$15,000.00
		TOTAL			**$142,577.17**
				ROUND TO =	**$142,600.00**
				UNIT COST =	**$2,128 per Space**

Site 9: Surface Off-Street Parking Construction Cost
4th Street Lot between Federal and Laughlin Streets - 52 space lot
May 16, 2005 BXK

Item#	Description	Quantity	Unit	Unit Cost	Cost
	Mobilization (5%)	1	LS	$9,134.72	$9,134.72
	Erosion Control Silt Fence		LF	$4.00	$0.00
	Erosion Control Const.Ent.	1	LS	$2,000.00	$2,000.00
	Erosion Control Inlet Protect		EA	$150.00	$0.00
	Traffic Control	1	LS	$1,500.00	$1,500.00
	Clearing and Grubbing	1	LS	$3,000.00	$3,000.00
	Demolish Existing Building	1	LS	$25,000.00	$25,000.00
	Sawcut Existing Pavement	290	LF	$2.00	$580.00
	Remove Existing Pavement	170	CY	$12.50	$2,125.00
	Earthwork (new pavement area)	540	CY	$8.00	$4,320.00
	Subgrade Geotextile	0	SY	$1.00	$0.00
	Base Rock (8")	390	CY	$18.00	$7,020.00
	A.C. Type C (4")	390	TON	$55.00	$21,450.00
	A.C. Type C (2" overlay)	0	TON	$55.00	$0.00
	Driveway Apron	3	EA	$3,000.00	$9,000.00
	Concrete Walk (6' wide)	0	SY	$27.00	$0.00
	Standard Curb	905	LF	$9.00	$8,145.00
	Concrete Curb and Gutter	0	LF	$16.00	$0.00
	Wheel Stops	0	EA	$60.00	$0.00
	Pavement Legend Arrow	12	EA	$250.00	$3,000.00
	Pavement Striping	1053	LF	$2.00	$2,106.00
	Signing	1	LS	$2,500.00	$2,500.00
	Signing and Striping for H/C Spaces	3	EA	$1,500.00	$4,500.00
	Storm Drain Pipe	180	LF	$40.00	$7,200.00
	Cleanouts	3	EA	$500.00	$1,500.00
	Public Catch Basins	0	EA	$1,750.00	$0.00
	Lynch Inlets	3	EA	$900.00	$2,700.00
	Connect to existing public storm drain	1	LS	$350.00	$350.00
	1" Water Service for irrigation	1	EA	$2,500.00	$2,500.00
	Water Quality (assume 4' wide swales)	0	LF	$24.00	$0.00
	Lighting (complete in place)	3	EA	$3,000.00	$9,000.00
	Landscape and Irrigation(per plan)	5500	SF	$2.00	$11,000.00
	Consulting Cost	1	LS		$15,000.00
		TOTAL			**$154,630.72**
				ROUND TO =	**$154,650.00**
				UNIT COST =	**$2,974 per Space**

Site 10: Surface Off-Street Parking Construction Cost
1st Street North Lot between Union and Court Streets - 52 space lot
April 14, 2005 BXK

Item#	Description	Quantity	Unit	Unit Cost	Cost	
	Mobilization (5%)	1	LS	$15,097.95	$15,097.95	
	Erosion Control Silt Fence	0	LF	$4.00	$0.00	
	Erosion Control Const.Ent.	0	LS	$2,000.00	$0.00	
	Erosion Control Inlet Protect	4	EA	$150.00	$600.00	
	Traffic Control	1	LS	$3,700.00	$3,700.00	
	Clearing and Grubbing	1	LS	$400.00	$400.00	
	Earthwork (for wall construction)	100	CY	$8.00	$800.00	
	Subgrade Geotextile	0	SY	$1.00	$0.00	
	Retaining Wall at 1st Street back of walk	0	FF	$50.00	$0.00	8' high
	Base Rock (8")	0	CY	$18.00	$0.00	
	A.C. Type C (2") Overlay	195	TON	$55.00	$10,725.00	
	Driveway Apron	1	EA	$3,000.00	$3,000.00	
	Concrete Walk	0	SY	$27.00	$0.00	
	Standard Curb	0	LF	$9.00	$0.00	
	Concrete Curb and Gutter	0	LF	$16.00	$0.00	
	Wheel Stops	21	EA	$60.00	$1,260.00	
	Pavement Legend Arrow	8	EA	$250.00	$2,000.00	
	Pavement Striping	850	LF	$2.00	$1,700.00	
	Grind Existing Striping	0	LF	$1.50	$0.00	
	Signing	1	LS	$3,500.00	$3,500.00	
	Signing and Striping for H/C Spaces	4	EA	$1,500.00	$6,000.00	
	Storm Drain Pipe	0	LF	$40.00	$0.00	
	Cleanouts	0	EA	$500.00	$0.00	
	Public Catch Basins	0	EA	$1,750.00	$0.00	
	Lynch Inlets	0	EA	$900.00	$0.00	
	Connect to existing public storm drain	0	LS	$350.00	$0.00	
	1" Water Service for irrigation	0	EA	$2,500.00	$0.00	
	Water Quality (assume 4' wide swales)	0	LF	$24.00	$0.00	
	Lighting (complete in place)	4	EA	$3,000.00	$12,000.00	
	Second Story Structure (Bldg. Area exclude	1	LS	$170,000.00	$170,000.00	
	Landscape and Irrigation(per plan)	0	SF	$2.00	$0.00	
	Consulting Cost	1	LS		$5,000.00	
		TOTAL			**$235,782.95**	
				ROUND TO =	**$235,800.00**	
				UNIT COST =	**$4,535**	**per Space**

Site 11: Surface Off-Street Parking Construction Cost
1st Street North Lot between Court and Washington Streets - 121 space lot
April 14, 2005 BXK

Item#	Description	Quantity	Unit	Unit Cost	Cost
	Mobilization (5%)	1	LS	$45,804.64	$45,804.64
	Erosion Control Silt Fence	0	LF	$4.00	$0.00
	Erosion Control Const.Ent.	0	LS	$2,000.00	$0.00
	Erosion Control Inlet Protect	3	EA	$150.00	$450.00
	Traffic Control	1	LS	$2,000.00	$2,000.00
	Clearing and Grubbing	1	LS	$400.00	$400.00
	Earthwork (grade to drain)	0	CY	$8.00	$0.00
	Subgrade Geotextile	0	SY	$1.00	$0.00
	Base Rock (8")	0	CY	$18.00	$0.00
	A.C. Type C (2" overlay)	325	TON	$55.00	$17,875.00
	Driveway Apron	1	EA	$3,000.00	$3,000.00
	Concrete Walk	1	SY	$27.00	$27.00
	Standard Curb	0	LF	$9.00	$0.00
	Concrete Curb and Gutter	0	LF	$16.00	$0.00
	Wheel Stops	25	EA	$60.00	$1,500.00
	Pavement Legend Arrow	12	EA	$250.00	$3,000.00
	Pavement Striping	1550	LF	$2.00	$3,100.00
	Signing	1	LS	$3,500.00	$3,500.00
	Signing and Striping for H/C Spaces	5	EA	$1,500.00	$7,500.00
	Storm Drain Pipe	0	LF	$40.00	$0.00
	Cleanouts	0	EA	$500.00	$0.00
	Public Catch Basins	0	EA	$1,750.00	$0.00
	Lynch Inlets	0	EA	$900.00	$0.00
	Connect to existing public storm drain	0	LS	$350.00	$0.00
	1" Water Service for irrigation	0	EA	$2,500.00	$0.00
	Water Quality (assume 4' wide swales)	0	LF	$24.00	$0.00
	Lighting (complete in place)	4	EA	$3,000.00	$12,000.00
	Second Story Structure (Bldg. Area excluded	1	LS	$600,000.00	$600,000.00
	Landscape and Irrigation(per plan)	0	SF	$2.00	$0.00
	Consulting Cost	1	LS		$7,500.00
		TOTAL			**$707,656.64**
				ROUND TO =	**$707,650.00**
				UNIT COST =	**$5,848 per Space**

Site 12: Off-Street Structured Parking Construction Cost (Retail Cost Not Included)
1st Street between Washington and Federal Streets - 199 space lot
May 23, 2005 BXK/SWH

Item#	Description		Units	Unit Cost	Cost
	Structured Parking		199	$15,000.00	$2,985,000.00
		TOTAL			**$2,985,000.00**
				ROUND TO =	**$3,000,000.00**

Site 13: Off-Street Structured Parking Construction Cost (Retail Cost Not Included)
2nd Street between Court and Washington Streets - 134 space lot
May 23, 2005 BXK/SWH

Item#	Description		Units	Unit Cost	Cost
	Structured Parking		134	$15,000.00	$2,010,000.00
		TOTAL			**$2,010,000.00**
				ROUND TO =	**$2,010,000.00**

Site 14: Off-Street Structured Parking Construction Cost (Retail Cost Not Included)
5th Street between Union and Court Streets - 370 space lot
May 23, 2005 BXK/SWH

Item#	Description		Units	Unit Cost	Cost
	Structured Parking		370	$15,000.00	$5,550,000.00
		TOTAL			**$5,550,000.00**
				ROUND TO =	**$5,550,000.00**