REVISED DRAFT MEMORANDUM

Date:	August 8, 2007	**TG:**	07257.00
To:	Paul Gerola – Port of Walla Walla		
From:	Mike Swenson, PE, PTOE – The Transpo Group Stefanie Fishman, PE, PTOE – The Transpo Group		
cc:	Jim Kuntz – Port of Walla Walla		
Subject:	Gold Rush Wallula, Washington – Revised Draft Traffic Impact Analysis		

This memorandum documents the traffic impact analysis conducted for the Gold Rush project located in Wallula, Washington. First, the project description, analysis methodology, and existing conditions are described. Then, the project trip generation, distribution, and assignment are discussed. Finally, the future conditions and project impacts are evaluated.

Project Description

The proposed Gold Rush project would construct a manufacturing/warehousing distribution facility which would include approximately 500,000 square-feet of manufacturing area, 20,000 square-feet of administrative/office area, and 400,000 square-feet of warehousing area. Based on the information provided by the project team, the facility would operate with two 12-hour shifts from 6:00 a.m. to 6:00 p.m. and 6:00 p.m. to 6:00 a.m. with 150 employees per shift (i.e., a total of 300 employees). As shown in Figure 1, the site is generally located east of US Highway 12 and East Attalia Road, north of Worden Road, and south of the proposed Raindance Road. Access to the project site would be provided via the US Highway 12/East Attalia Road intersection.

Analysis Methodology

All study area intersections are located along Washington State Department of Transportation (WSDOT) facilities; therefore, the WSDOT service level standards and analysis methodology were used. WSDOT applies the level of service (LOS) C standard to the **overall** intersection performance.

Traffic operations were evaluated at all study area intersections using LOS methods outlined in the 2000 *Highway Capacity Manual* (HCM), a nationally recognized and locally accepted method of measuring traffic flow and congestion for roadways and intersections. LOS criteria range from LOS A, indicating free-flow conditions with minimal vehicle delays, to LOS F, indicating congestion with significant vehicle delays. The LOS analysis for study intersections was performed using the Synchro 6 software package developed by Trafficware.

Analysis was conducted for the following scenarios:

- **Existing Conditions** – representing 2007 traffic conditions based on current traffic counts.
- **Future (2010) Conditions** – forecasted traffic conditions representing build-out and full occupancy of the proposed project.
- **Future (2020) Conditions** – forecasted traffic conditions representing 10-years after build-out and full occupancy of the proposed project.

Existing Conditions

This section describes the existing roadway system in the vicinity of the project as well as intersection operations and safety.

Roadway System

Existing intersection channelization for the study area is illustrated in Figure 2. The analysis focuses on the following study intersections which are most likely to be impacted by the proposed project:

- US Highway 12/Dodd Road
- US Highway 12/Attalia Road (currently exists, but will be closed with US 12 improvements)
- US Highway 12/Depot Road/East Attalia Road
- US Highway 12/State Route 730
- US Highway 12/Raindance Road

Intersection analysis was conducted for the weekday AM and PM peak hours. All study intersections are side-street stop controlled. Below is a brief description of key roadways in the vicinity of the project site:

US Highway 12 runs from Aberdeen on the Washington coast to Lewiston Idaho and east. Throughout the Tri-Cities area most of the highway is combined with U.S. Highway 395 and has limited intersections or access. Within the study area, this highway is currently two-lanes with a limited number of intersections. Access to US Highway 12 in the study area is provided via Dodd Road, Raindance Road (under construction), Attalia Road, East Attalia Road, Worden Road, Columbia Way, and North Shore Road.

Attalia Road is a two-lane road which provides access to the Boise Cascade Corporation Mill, Ponderosa Fibers of Washington de-inking plant (closed down), and undeveloped land. The U.S. Highway 12/Attalia Road intersection includes a northbound left-turn lane and southbound acceleration and deceleration lanes. Access to this roadway via US Highway 12 will be closed as part of the planned

improvements along this corridor; however it would be accessed via East Attalia Road, upon completion of the US Highway 12 improvements.

Intersection Operations

Existing weekday AM and PM peak hour traffic volumes at the study area intersections are based on traffic counts conducted from 6:00 a.m. to 9:00 a.m. and 2:00 p.m. to 6:00 p.m. on Tuesday, May 1, 2007. Each intersection was evaluated based on its individual peak hour which ranged from 6:00 to 8:00 a.m. and 3:45 to 5:00 p.m. The peak hour represents the highest traffic volumes during the peak periods. Basing the analysis on this traffic volume presents a conservative estimate of traffic impacts. Traffic volumes were rounded to the nearest five vehicles due to the daily fluctuations in traffic volumes that can occur day to day. The resulting weekday AM and PM peak hour traffic volumes for the existing condition are illustrated in Figure 3. Traffic counts used in the analysis are included in Attachment 1.

Existing weekday AM and PM peak hour operations of the study intersections are shown in Table 1. Detailed levels of service calculation worksheets are included in Attachment 2. As shown in the table, all study intersections operate at an overall LOS A and the worst movement at any intersection is currently operating at LOS C or better during both the AM and PM peak hours. These intersections currently meet WSDOT standards.

Table 1. Existing Weekday AM and PM Peak Hour Intersection LOS Summary

	AM Peak Hour			PM Peak Hour		
Intersection	**LOS[2]**	**Delay[3]**	**WM[4]**	**LOS[2]**	**Delay[3]**	**WM[4]**
1. U.S. Highway 12/Dodd Road[1]	A	2.0	Overall	A	2.1	Overall
	C	16.5	WBLT	B	14.3	WBLT
2. U.S. Highway 12/Attalia Road	A	2.7	Overall	A	1.5	Overall
	B	12.3	EB	B	12.2	EB
3. U.S. Highway 12/Depot Road/East Attalia Road	A	2.5	Overall	A	1.0	Overall
	C	16.8	EB	B	13.0	EB
U.S. Highway 12/State Route 730 (Wallula Junction)						
4. North Intersection	A	2.3	Overall	A	1.4	Overall
	B	11.9	EB	B	13.6	EB
5. West Intersection	A	0.5	Overall	A	1.4	Overall
	A	9.4	SB	B	10.1	SB
6. East Intersection	A	4.9	Overall	A	6.2	Overall
	A	9.9	SB	B	10.8	SB
7. U.S. Highway 12/Raindance Road	*Future Intersection*					

1. The westbound right-turn was analyzed as free because no control is provided and an acceleration lane is present.
2. Level of service, based on 2000 Highway Capacity Manual methodology.
3. Average delay in seconds per vehicle.
4. Worst movement reported for unsignalized intersections. EB = eastbound approach; WBLT = westbound shared left/through lane; SB = southbound approach

Traffic Safety

Records of reported accidents at study intersections were reviewed to help identify traffic safety issues. The most recent summary of reported accident data from WSDOT for the period from January 1, 2002 through December 31, 2006 were obtained. Typically, intersections with collision rates greater than 1.0 accident per million entering vehicles (MEV), or an average of more than five accidents per year at unsignalized locations are earmarked for continued evaluation and potential safety improvements. A summary of the total, average annual, and accidents per MEV of reported accidents at each study intersection is provided in Table 2.

Table 2. Five-Year Collision Summary (2002 – 2006)

Study Intersections	Total Accidents per Year					Annual Average	Accidents per MEV[1]
	2002	2003	2004	2005	2006		
1. US Highway 12/Dodd Road	3	2	4	4	3	3.2	1.0
2. US Highway 12/Attalia Road	1	0	1	0	0	0.4	0.2
3. US Highway 12/Depot Road	0	0	0	0	0	0	0.0
US Highway 12/State Route 730 (Wallula Junction)	4	2	3	6	1	3.2	0.7

1. MEV = Million entering vehicles.

As the table shows, all of the intersections have an annual average of less than five accidents per year and an accident per MEV of 1.0 or less.

WSDOT defines hazardous accident locations (HALs) as locations "which have experienced a higher than average rate of severe accidents during the previous. two-year period" and defines high accident corridors (HACs) as corridors "which have a higher-than-average number of severe accidents over a continuous period of time." Based on information from the WSDOT, US Highway 12 from south of North Shore Road to east of State Route 730 is identified as a HAC. No HALs are identified within the study area. US Highway 12 planned improvements are intended to address the safety and operational aspects of the facility.

Project Trip Generation and Distribution

Project trip generation is based on employment and truck information provided by the Port of Walla Walla. This site-specific information is used rather than the Institute of Transportation Engineers' (ITE) *Trip Generation* (7th Edition) to determine a more reliable estimate of vehicle trips generated by the project. The following assumptions for employees and trucks were made:

- There would be two 12-hour shifts with times of 6:00 a.m. to 6:00 p.m. and 6:00 p.m. to 6:00 a.m.
- The facility would have 300 employees with 150 employees on each shift.

- The shifts would overlap by 30-minutes e.g. the first shift employees would arrive between 5:30 and 6:00 a.m. and the second shift employees would leave between 6:00 and 6:30 a.m.
- Employees are assumed to drive alone.
- Trip generation is calculated for the peak hour of the generator which would occur from 5:30 to 6:30 a.m. and 5:30 to 6:30 p.m. All shift changes are assumed to occur during these hours.
- A maximum of four courier trucks are expected during the day shift. It is likely these trips would occur outside the peak hours; however, as a conservative estimate 4 trips (2 inbound and 2 outbound) are assumed for each peak hour.
- A maximum of 30 trucks bringing raw goods are expected during the day shift. Truck trips are assumed to be distributed evenly throughout the 12-hour shift i.e., about 6 trips (3 inbound and 3 outbound) are assumed for each hour.
- A maximum of 175 trucks per day are expected to distribute the finished product. Truck trips are assumed to be distributed evenly through the 24-hour period i.e., about 14 trips (7 inbound and 7 outbound) are assumed for each hour.

Based on the assumptions noted above, the AM and PM peak our trip generation estimates were prepared. The forecasted trip generation for the facility is summarized in Table 3.

Table 3. Estimated Project Trip Generation

	Project Trips		
Land Use	**Total**	**In**	**Out**
Gold Rush Project			
Weekday AM Peak Hour (5:30 to 6:30 a.m.)			
Employees	300	150	150
Trucks	24	12	12
Total	**324**	**162**	**162**
Weekday PM Peak Hour (5:30 to 6:30 p.m.)			
Employees	300	150	150
Trucks	24	12	12
Total	**324**	**162**	**162**

As shown in the above table, the proposed project would generate about 324 (162 inbound and 162 outbound) trips during both the AM and PM peak hours. This presents a conservative estimate of project trip generation since truck traffic is likely to occur during off-peak hours.

Traffic to/from the proposed project are likely to come from the Tri-cities and City of Walla Walla area. Existing travel patterns were used to estimate the distribution of employees and truck traffic to/from the site. Based on this information, approximately 80 percent of the traffic would be to/from the north on US Highway 12 and 20 percent of the traffic would be to/from the south on US Highway 12. Figure 4 shows the project trip distribution and assignment.

Future Conditions

This section discusses the planned improvements in the vicinity of the project site as well as the future 2010 and 2020 operational and safety impacts.

Planned Improvements

WSDOT is upgrading US Highway 12 as part of the "US 12 – Widening from SR 124 to City of Walla Walla" project ("US 12 Project"). The US 12 Project is divided into eight phases with portions funded and/or under construction. Within the study area, the "US 12/Attalia Vicinity – Add Lanes Four-Laning US Highway 12" phase (Phase 3) of the US 12 Project is currently under construction. This phase of the US 12 Project adds one-lane per direction on US Highway 12 from north of Raindance Road to north of East Attalia Road (for a total of four-lanes). In addition, the US Highway 12/Attalia Road intersection will be closed and access is limited to the Raindance and East Attalia Road intersections. This phase of the US 12 Project is expected to be completed in late 2007. Attachment 3 contains the paving and channelization plans for these improvements. The Phase 3 improvements were considered in this analysis.

WSDOT is currently conducting an environmental assessment for phase 5 of the US 12 Project, "US 12 – Attalia Vicinity to U.S. 730 (Walla Walla River)." Phase 5 would redesign the US 12/US 730 Wallula junction. A study is funded and underway for phase 5 but no design and construction funding is secured; therefore, phase 5 improvements were not considered in this analysis. Because the Phase 5 improvements will mitigate future traffic impacts, the decision not to consider them in this analysis of the Gold Rush Project presents a conservative estimate of future impacts of the Gold Rush project. Figure 5 shows the intersection channelization assumed for the future analysis. All study intersections would be side street stop controlled.

Traffic Volumes

Future baseline 2010 and 2020 forecasts were developed by adding traffic related to the Wallula Ethanol pipeline project and applying a 3 percent annual growth rate to existing 2007 US Highway 12 traffic volumes. This growth rate was not applied to the minor street movements at the study intersections because future increases in traffic on these approaches would be attributed to additional development. The increases in traffic and associated impacts to the minor streets would be addressed through site-specific transportation studies for future developments.

The proposed Wallula Ethanol Project is located northwest of the project site immediately south of the existing RailEx LLC site. The following assumptions were made to determine Wallula Ethanol Project trip generation:

- The total plant staff would be 60 employees.
- There will be three shifts per day with 20 employees per shift. The shifts are assumed to overlap during the AM and PM peak hours.
- Employees would not carpool.

Based on the assumptions above, during both the weekday AM and PM peak hours the Ethanol Plant would generate 20 inbound and 20 outbound trips for a total of 40 peak hour trips. The Ethanol Plant trip distribution was assumed to be the same as the proposed project.

Figures 6 and 7 show the weekday AM and PM peak hour intersection turning movements for the future 2010 and 2020 horizon years. Traffic from the proposed project was added to the future baseline conditions to form the basis of the with-project analysis. Figures 8 and 9 show the weekday AM and PM peak hour future with-project intersection traffic volumes.

Future 2010 Intersection Operations

Tables 4 and 5 summarize the weekday AM and PM peak hour intersection operations for both the future 2010 without and with-project conditions. Detailed levels of service calculation worksheets are included in Attachment 2.

Note the US Highway 12/Depot Road/East Attalia Road intersection has an acceleration lane for the eastbound to northbound left-turn movement which is not accounted for with the Synchro software program. Therefore, a two-way left-turn lane (TWLT) was assumed and the analysis was broken into two steps: 1) the overall intersection was analyzed with a TWLT 2) the eastbound approach was evaluated with a TWLT and the northbound left-turn and right-turn traffic volumes were removed to because these movements would not conflict with the eastbound left-turn with an acceleration lane. This approach overestimates the overall intersection delay; however, the LOS would remain the same with the left-turn acceleration lane.

Table 4. 2010 AM Peak Hour Intersection LOS Summary

Intersection	Without Project			With Project		
	LOS[4]	Delay[5]	WM[6]	LOS[4]	Delay[5]	WM[6]
1. US Highway 12/Dodd Road[1]	A	1.8	Overall	A	1.6	Overall
	C	17.6	WBLT	C	21.2	WBLT
2. US Highway 12/Attalia Road	*Intersection Closed with US 12 Improvements*					
3. US Highway 12/Depot Road/East Attalia Road[2]	A	2.0	Overall	A	6.7	Overall
	B	12.7	EBLT	C	22.3	EBLT
US Highway 12/State Route 730 (Wallula Junction)						
4. North Intersection	A	2.4	Overall	A	2.4	Overall
	B	12.4	EB	B	13.3	EB
5. West Intersection	A	0.4	Overall	A	0.4	Overall
	A	9.5	SB	A	9.5	SB
6. East Intersection	A	5.2	Overall	A	5.8	Overall
	B	10.1	SB	B	10.3	SB
7. US Highway 12/Raindance Road[3]	A	2.7	Overall	A	2.2	Overall
	B	12.7	EBLT	C	15.4	EBLT

1. The westbound right-turn was analyzed as free because no control is provided and an acceleration lane is present.
2. The Synchro software program does not analyze left-turn acceleration lanes; therefore, a two-way left-turn lane was assumed. This evaluation overestimates the overall intersection delay but the level of service would be the same.
3. The eastbound right-turn was analyzed as free because no control is provided and an acceleration lane would be provided.
4. Level of service, based on 2000 Highway Capacity Manual methodology.
5. Average delay in seconds per vehicle.
6. Worst movement reported for unsignalized intersections. WBLT = westbound shared left/through lane; EBLT = eastbound shared left/through lane EB = eastbound approach; SB = southbound approach

As shown in Table 4, all of the intersections would operate at an overall LOS A for both 2010 without and with-project conditions during the AM peak hour. In addition, the worst movement for all intersections would operate at LOS C or better. These intersections are within the WSDOT LOS C standard. Note that at some locations the overall intersection delay decreases slightly with the addition of project traffic, this decrease is due to the weighted average intersection delay calculation used by the HCM methodology. The change in delay is minor and would likely not be noticeable to the driver.

Table 5. 2010 PM Peak Hour Intersection LOS Summary

Intersection	Without Project			With Project		
	LOS[4]	Delay[5]	WM[6]	LOS[4]	Delay[5]	WM[6]
1. US Highway 12/Dodd Road[1]	A	1.9	Overall	A	1.6	Overall
	B	14.3	WBLT	C	17.3	WBLT
2. US Highway 12/Attalia Road	*Intersection Closed with US 12 Improvements*					
3. US Highway 12/Depot Road/East Attalia Road[2]	A	0.9	Overall	A	4.8	Overall
	B	11.1	EBLT	C	17.1	EBLT
US Highway 12/State Route 730 (Wallula Junction)						
4. North Intersection	A	1.5	Overall	A	1.7	Overall
	B	14.5	EB	C	15.8	EB
5. West Intersection	A	1.3	Overall	A	1.3	Overall
	A	9.8	SB	A	9.8	SB
6. East Intersection	A	6.8	Overall	A	7.4	Overall
	B	11.7	SB	B	12.1	SB
7. US Highway 12/Raindance Road[3]	A	1.7	Overall	A	1.4	Overall
	B	12.7	EBLT	C	15.1	EBLT

1. The westbound right-turn was analyzed as free because no control is provided and an acceleration lane is present.
2. The Synchro software program does not analyze left-turn acceleration lanes; therefore, a two-way left-turn lane was assumed. This evaluation overestimates the overall intersection delay but the level of service would be the same.
3. The eastbound right-turn was analyzed as free because no control is provided and an acceleration lane would be provided.
4. Level of service, based on 2000 Highway Capacity Manual methodology.
5. Average delay in seconds per vehicle.
6. Worst movement reported for unsignalized intersections. WBLT = westbound shared left/through lane; EBLT = eastbound shared left/through lane EB = eastbound approach; SB = southbound approach

As shown in Table 5, all of the intersections would have an overall LOS A and the worse movement would be LOS C or better for both 2010 without and with-project conditions during the PM peak hour. These intersections are within the WSDOT LOS C standard. As in the case of the AM peak hour analysis, the overall intersection delay decreases slightly at some locations due to the weighted average intersection delay calculation used by the HCM methodology.

Future 2020 Intersection Operations

Tables 6 and 7 summarize the weekday AM and PM peak hour intersection operations for both the future 2010 without and with-project conditions. Detailed levels of service calculation worksheets are included in Attachment 2. Analysis of the US Highway 12/Depot Road/East Attalia Road intersection uses the same approach as the 2010 conditions.

Table 6. 2020 AM Peak Hour Intersection LOS Summary

Intersection	Without Project			With Project		
	LOS[4]	Delay[5]	WM[6]	LOS[4]	Delay[5]	WM[6]
1. US Highway 12/Dodd Road[1]	A	1.6	Overall	A	1.5	Overall
	C	20.8	WBLT	D	25.4	WBLT
2. US Highway 12/Attalia Road	*Intersection Closed with US 12 Improvements*					
3. US Highway 12/Depot Road/East Attalia Road[2]	A	2.0	Overall	A	7.9	Overall
	B	14.4	EBLT	D	27.5	EBLT
US Highway 12/State Route 730 (Wallula Junction)						
4. North Intersection	A	2.9	Overall	A	3.0	Overall
	B	14.5	EB	C	15.9	EB
5. West Intersection	A	0.3	Overall	A	0.3	Overall
	A	9.8	SB	A	9.8	SB
6. East Intersection	A	5.4	Overall	A	6.0	Overall
	B	10.8	SB	B	11.1	SB
7. US Highway 12/Raindance Road[3]	A	2.3	Overall	A	2.0	Overall
	B	14.7	EBLT	C	18.1	EBLT

1. The westbound right-turn was analyzed as free because no control is provided and an acceleration lane is present.
2. The Synchro software program does not analyze left-turn acceleration lanes; therefore, a two-way left-turn lane was assumed. This evaluation overestimates the overall intersection delay but the level of service would be the same.
3. The eastbound right-turn was analyzed as free because no control is provided and an acceleration lane would be provided.
4. Level of service, based on 2000 Highway Capacity Manual methodology.
5. Average delay in seconds per vehicle.
6. Worst movement reported for unsignalized intersections. WBLT = westbound shared left/through lane; EBLT = eastbound shared left/through lane EB = eastbound approach; SB = southbound approach

Table 6 shows that the US Highway 12/Depot Road/East Attalia Road intersection eastbound shared left/through movement would degrade to LOS D under 2020 with-project AM peak hour conditions. However, all of the intersections would have an overall LOS A for both 2020 without and with-project conditions during the AM peak hour. Therefore, these intersections are within the WSDOT LOS standard. As discussed previously, the overall intersection delay decreases slightly at some locations due to the weighted average intersection delay calculation used by the HCM methodology.

Table 7. 2020 PM Peak Hour Intersection LOS Summary

Intersection	Without Project			With Project		
	LOS[4]	Delay[5]	WM[6]	LOS[4]	Delay[5]	WM[6]
1. U.S. Highway 12/Dodd Road[1]	A	1.7	Overall	A	1.5	Overall
	C	16.5	WBLT	C	20.3	WBLT
2. U.S. Highway 12/Attalia Road	*Intersection Closed with US 12 Improvements*					
3. U.S. Highway 12/Depot Road/East Attalia Road	A	0.8	Overall	A	4.9	Overall
	B	14.4	EBLT	C	18.8	EBLT
U.S. Highway 12/State Route 730 (Wallula Junction)						
4. North Intersection	A	1.9	Overall	A	2.1	Overall
	C	18.7	EB	C	20.8	EB
5. West Intersection	A	1.5	Overall	A	1.5	Overall
	B	10.3	SB	A	10.3	SB
6. East Intersection	A	8.3	Overall	A	9.1	Overall
	B	14.3	SB	C	15.1	SB
7. U.S. Highway 12/Raindance Road[2]	A	1.4	Overall	A	1.3	Overall
	B	14.4	EBLT	C	17.3	EBLT

1. The westbound right-turn was analyzed as free because no control is provided and an acceleration lane is present.
2. The Synchro software program does not analyze left-turn acceleration lanes; therefore, a two-way left-turn lane was assumed. This evaluation overestimates the overall intersection delay but the level of service would be the same.
3. The eastbound right-turn was analyzed as free because no control is provided and an acceleration lane would be provided.
4. Level of service, based on 2000 Highway Capacity Manual methodology.
5. Average delay in seconds per vehicle.
6. Worst movement reported for unsignalized intersections. WBLT = westbound shared left/through lane; EBLT = eastbound shared left/through lane EB = eastbound approach; SB = southbound approach

Table 7 shows all of the intersections would have an overall LOS A and the worse movement would be LOS C or better for both 2020 without and with-project conditions during the PM peak hour. These intersections are within the WSDOT LOS C standard. As in the case of the AM peak hour, the overall intersection delay decreases slightly at some locations due to the weighted average intersection delay calculation used by the HCM methodology.

Traffic Safety

Although accidents were documented at the study intersections, based on a review of the historical accident records no single location exhibited a disproportionately high rate of collisions. It is not possible to forecast accidents in the same manner as traffic volumes or intersection operations. However, it is commonly understood that an increase in traffic volumes can result in a proportional increase in the potential for traffic accidents. Therefore, with the increase in traffic due to the proposed project a proportional increase in collisions may occur. However, based on the analysis of existing traffic safety, there do not appear to be any locations exhibiting accident rates suggestive of existing safety deficiencies. Therefore, the project is not expected to disproportionately degrade traffic safety in the area.

Conclusions

- The proposed project would generate approximately 324 AM and PM peak hour trips.
- All intersections currently operate within the WSDOT overall LOS C standard and would continue to operate at LOS C or better under both 2010 and 2020 conditions without and with the project during the AM and PM peak hours.
- There are no project impacts; therefore, no mitigation measures are required.

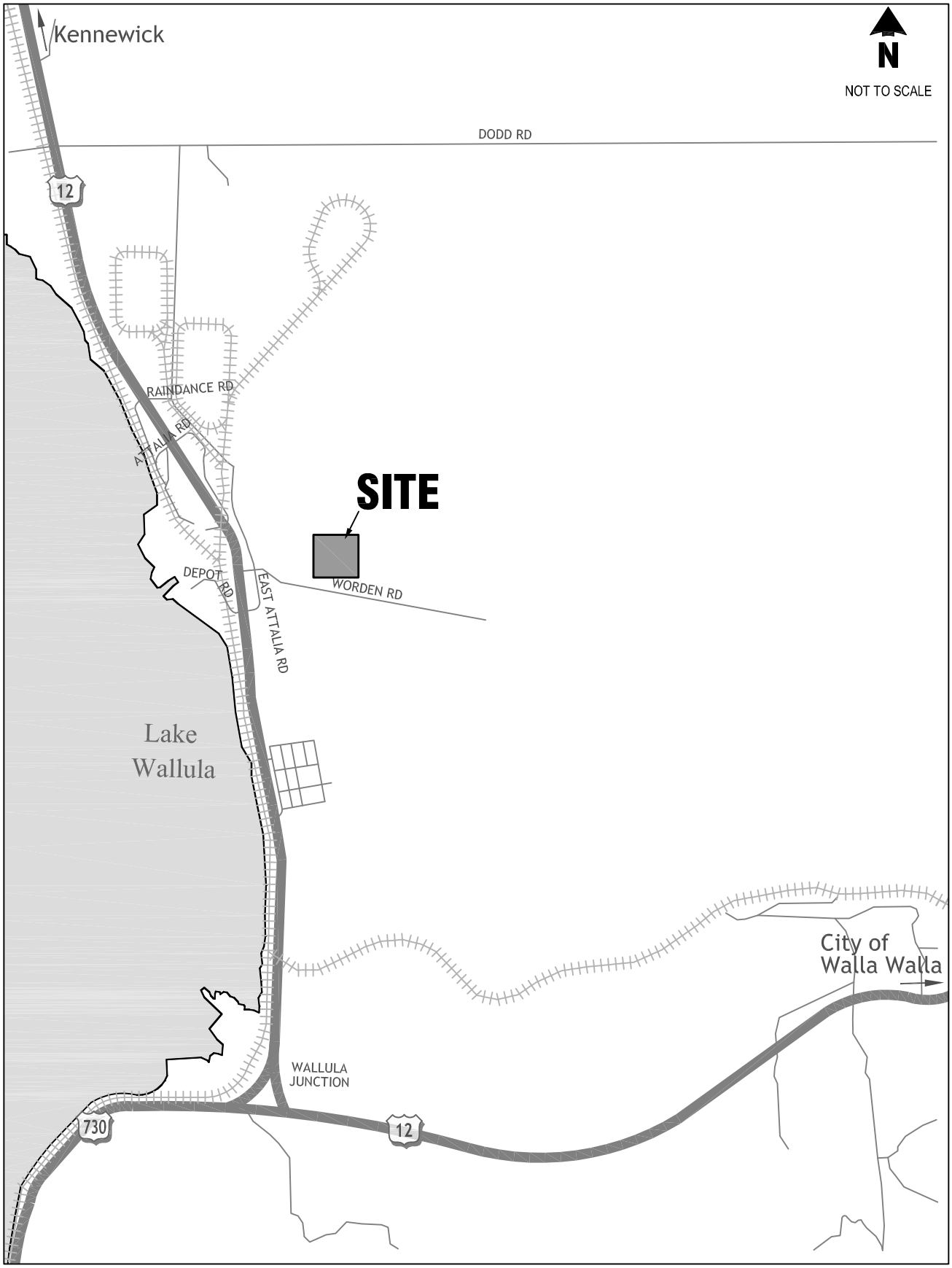

Figure 1
Site Vicinity
Gold Rush

The Transpo Group

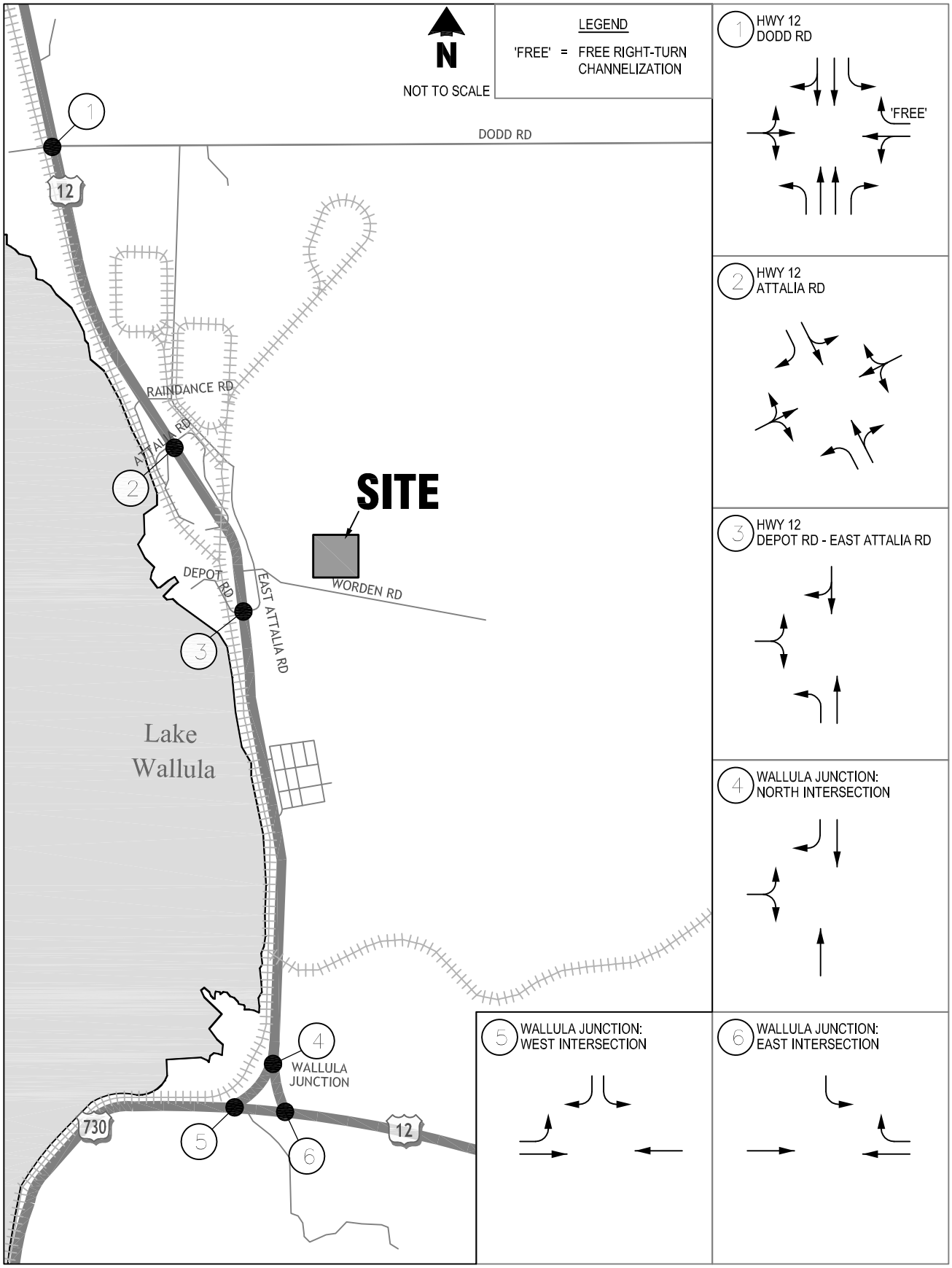

Figure 2
Existing Intersection Channelization
Gold Rush

The Transpo Group

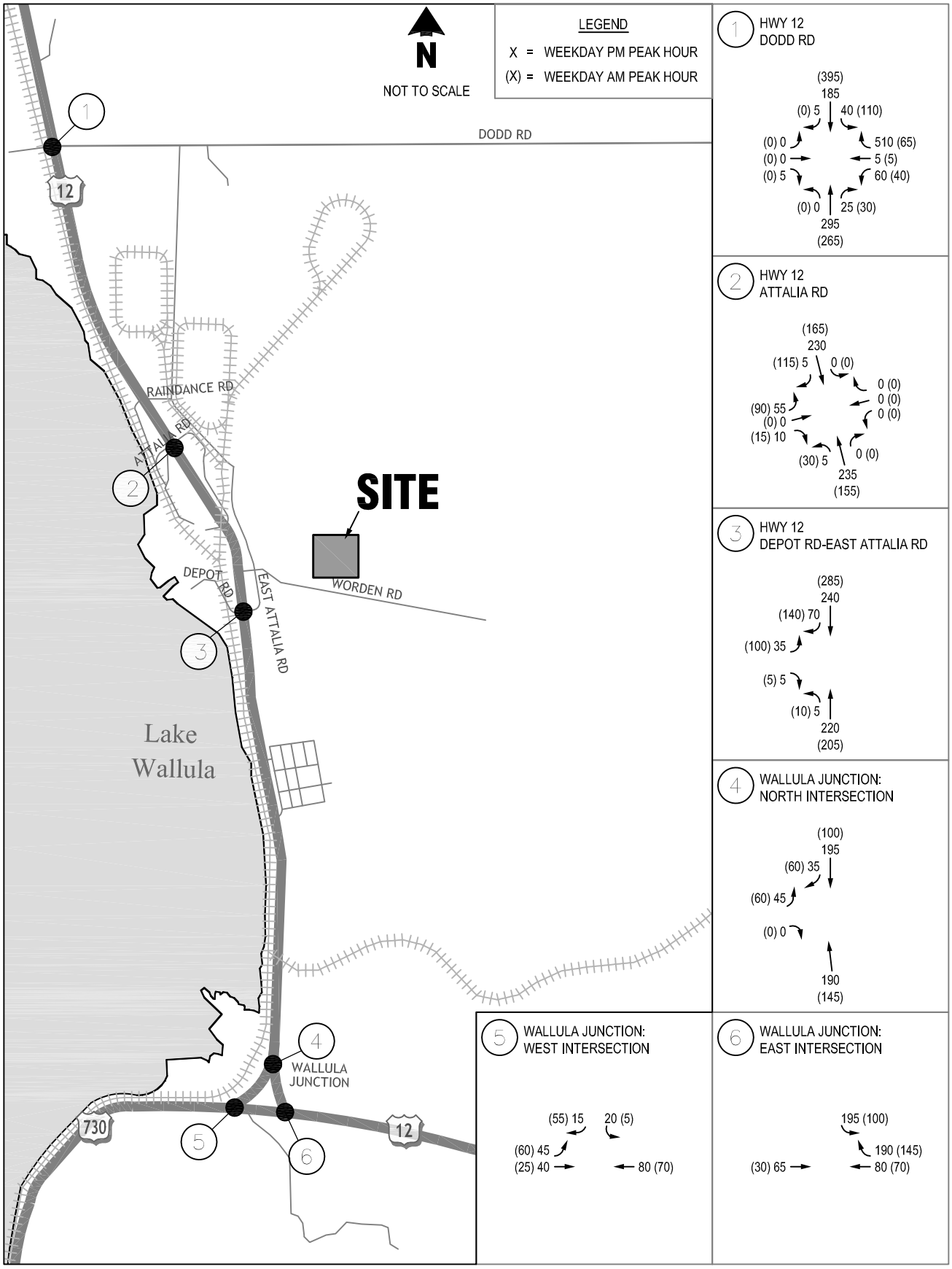

Figure 3

Existing (2007) AM and PM Peak Hour Weekday Traffic Volumes

Gold Rush

The Transpo Group

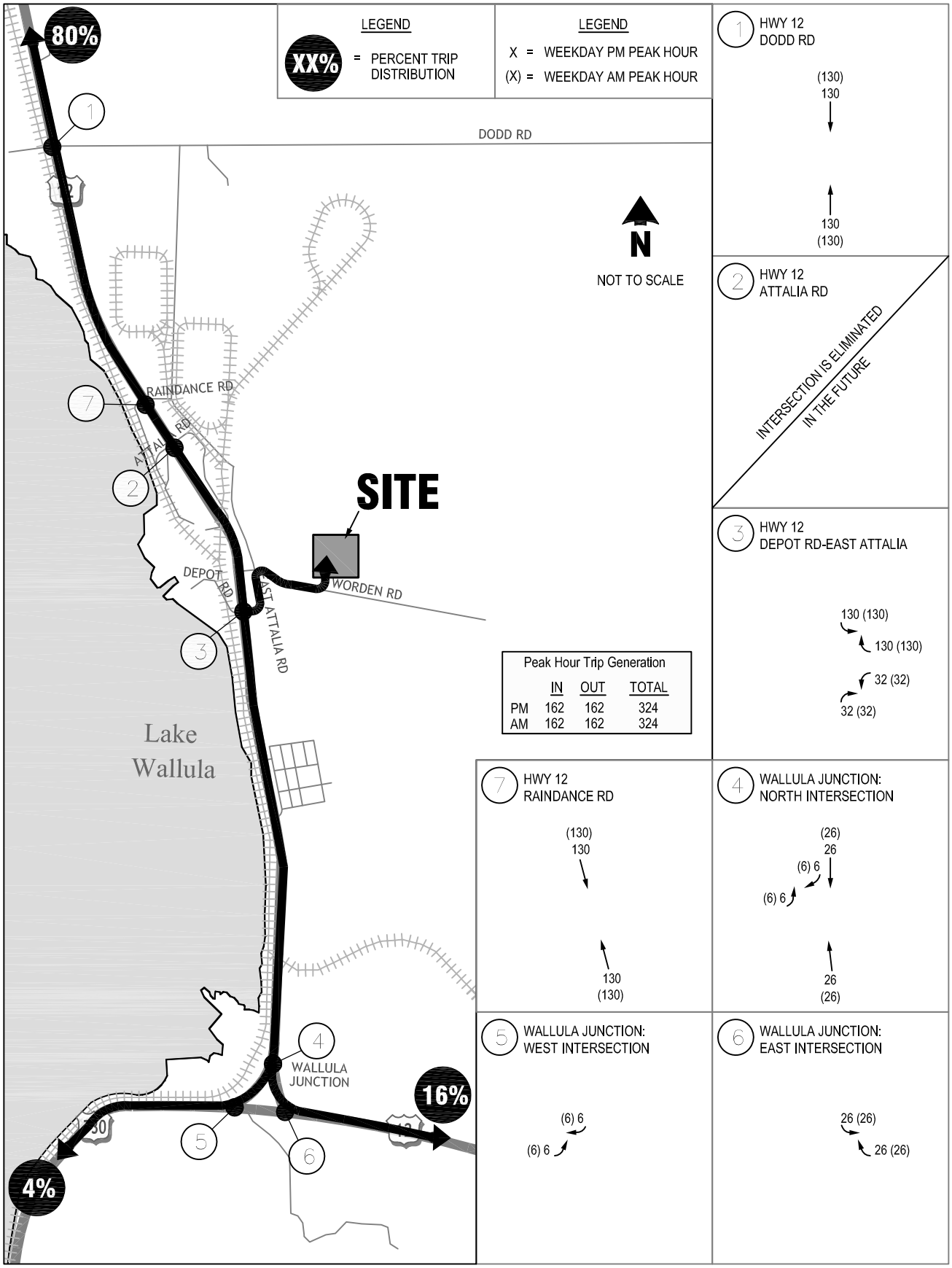

Figure 4
Trip Distribution and Assignment
Gold Rush

The Transpo Group

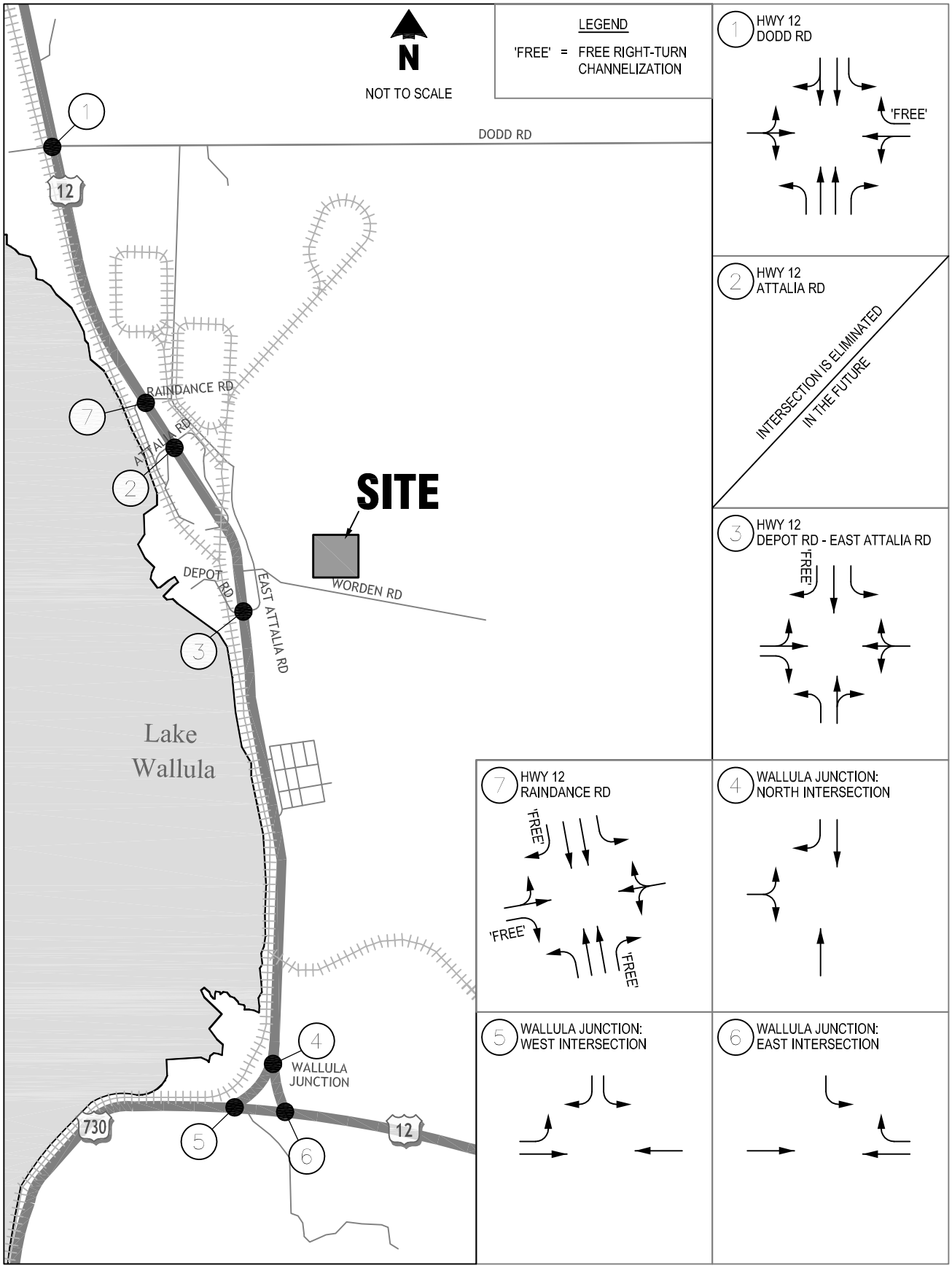

Figure 5
Future Intersection Channelization
Gold Rush

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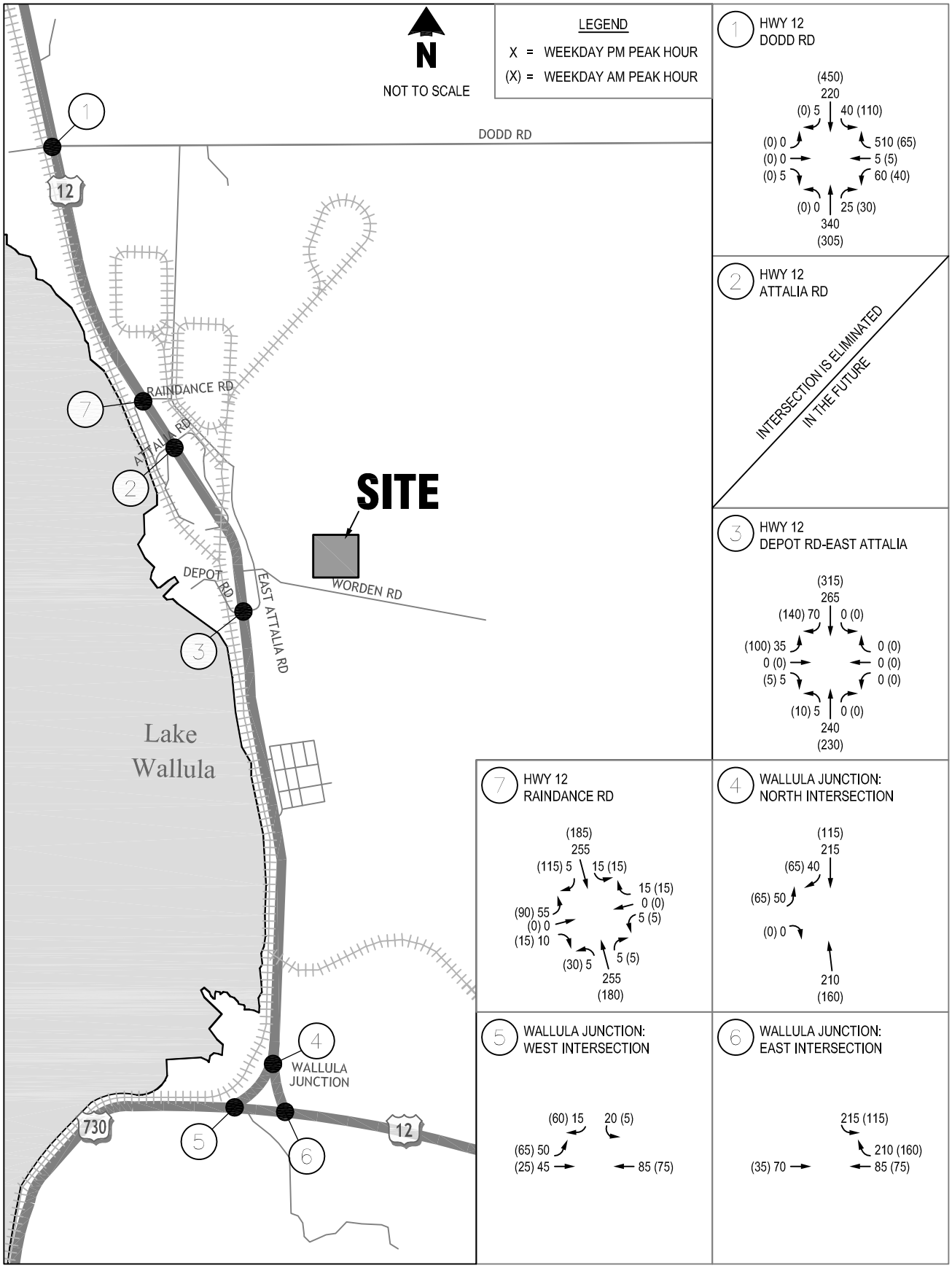

Figure 6

Future (2010) AM and PM Peak Hour Weekday Traffic Volumes

Gold Rush

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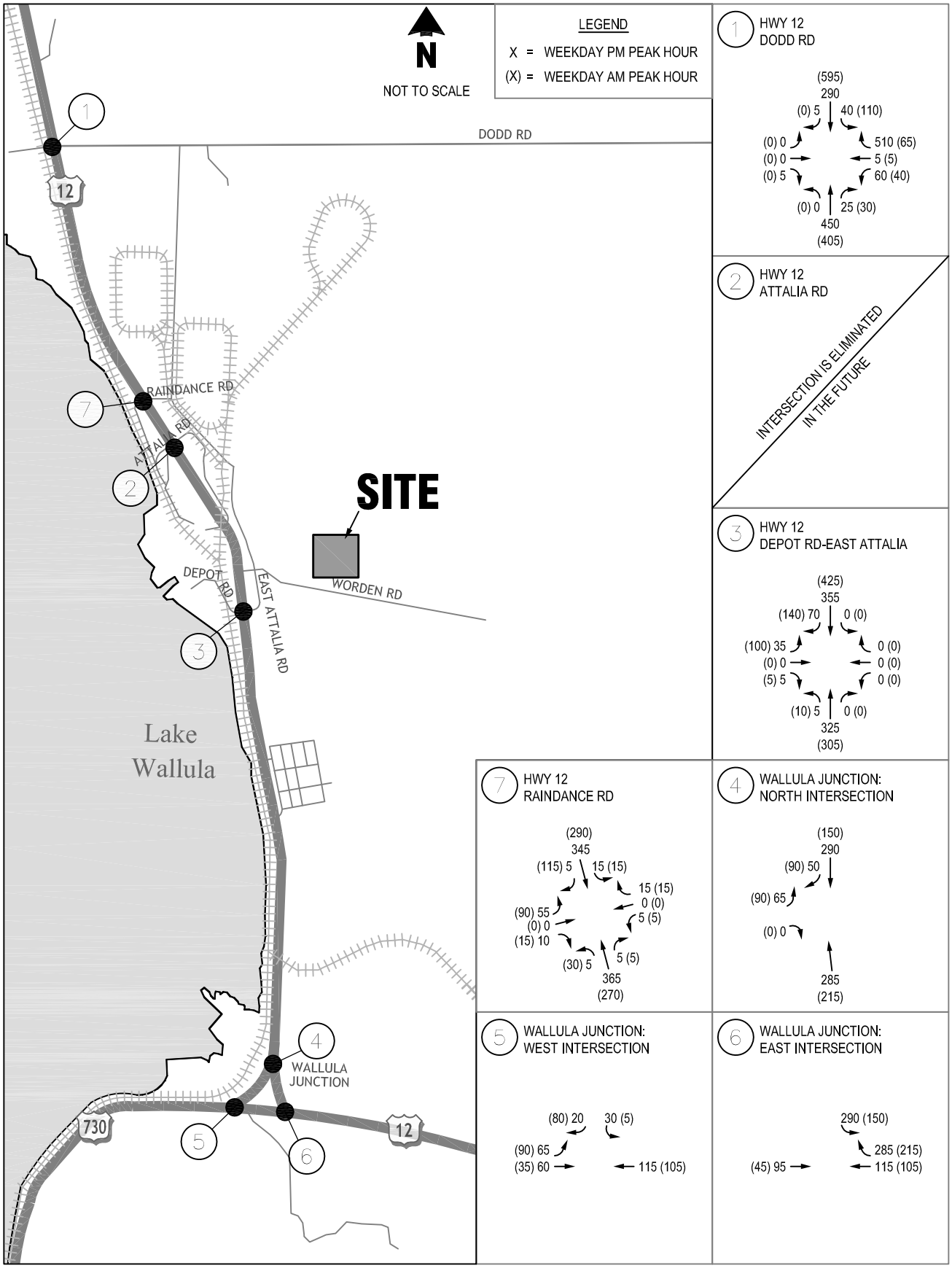

Figure 7

Future (2020) AM and PM Peak Hour Weekday Traffic Volumes

Gold Rush

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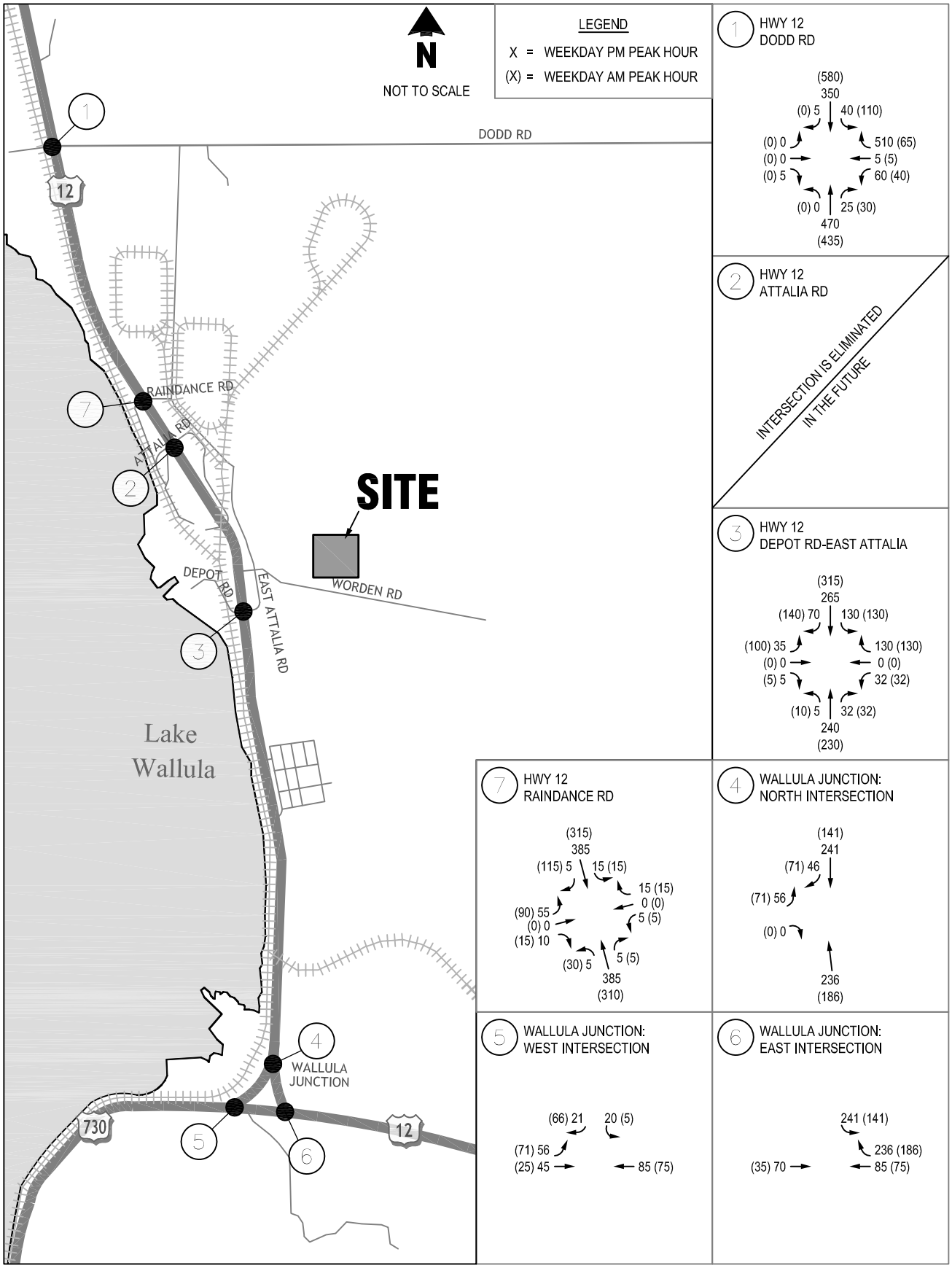

Figure 8

Future (2010) With Project AM and PM Peak Hour Weekday Traffic Volumes

Gold Rush

The Transpo Group

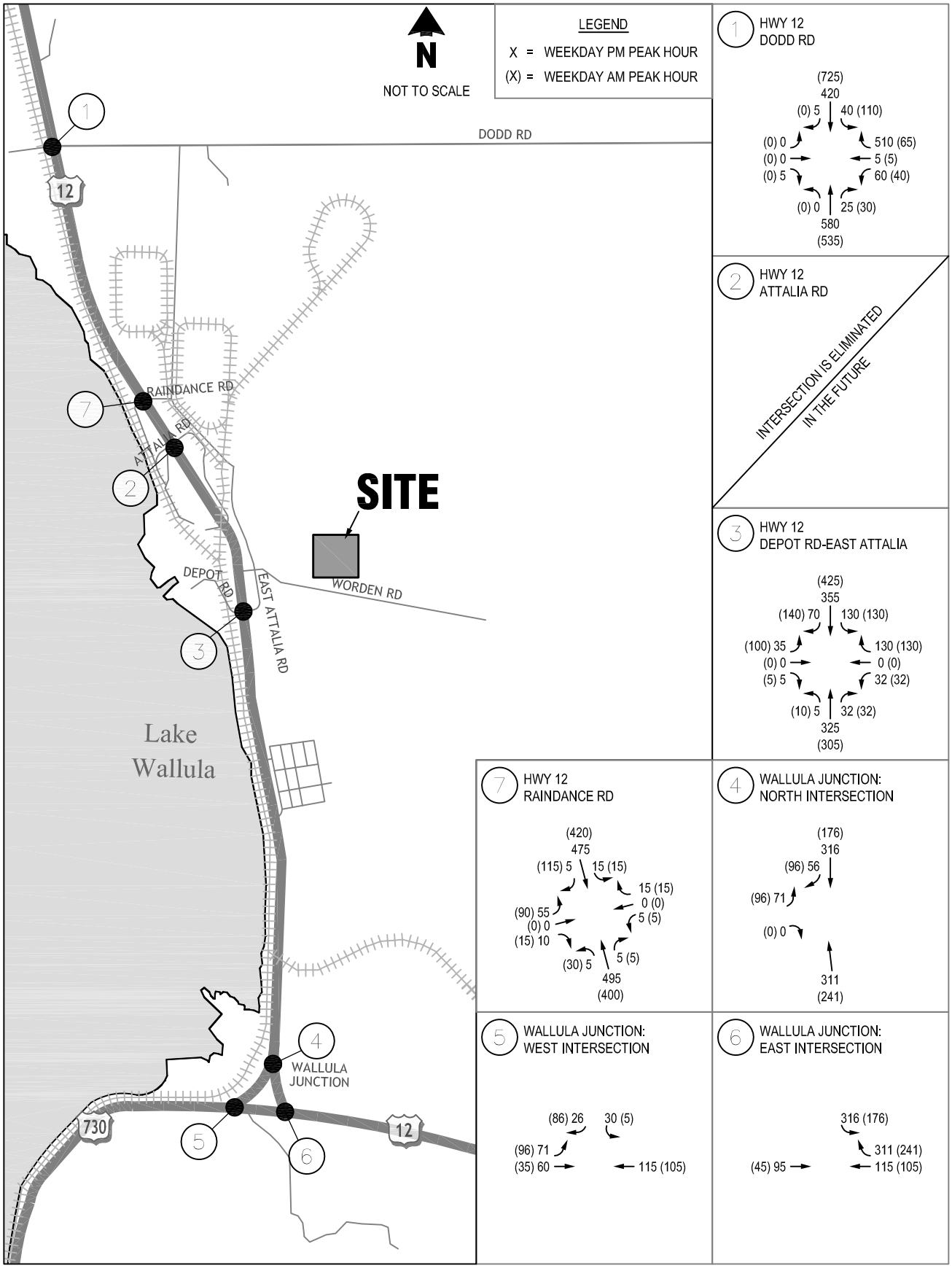

Figure 9

Future (2020) With Project AM and PM Peak Hour Weekday Traffic Volumes

Gold Rush

The Transpo Group