

Attachment 1

**RIVERBEND LANDFILL
ZONE CHANGE
TRAFFIC IMPACT STUDY**

YAMHILL COUNTY, OREGON

DATE:
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EXECUTIVE SUMMARY

1. The property adjacent to the Riverbend Landfill, located at 13469 Oregon 18 in McMinnville, Oregon, has been proposed for a change in zoning from Public Works/Safety to Exclusive Farm Use. Following the zone change, Riverbend Landfill is proposing a lateral expansion to the landfill as well as the construction of a green technology facility.
2. Due to the location of the subject property and the limited amount of permitted uses within the Exclusive Farm Use zoning, it is not expected that the property be developed with a more intensive use than what is currently being proposed.
3. The intersection of Oregon Highway 18 at the site access is projected to function well within the Oregon Department of Transportation's performance standards throughout the planning horizon regardless of the additional trips that result from the proposed zone change and subsequent lateral expansion and development of the green technology facility. Accordingly, no mitigation is recommended.
4. The proposed development under the new zoning will not significantly affect existing or planned transportation facilities as defined under Oregon's Transportation Planning Rule (TPR). Accordingly, no mitigation is recommended and the TPR is satisfied.
5. A detailed observation into the crashes occurring at the study intersection shows no excessive crash rates or trends that are indicative of issues that need to be addressed. The site access to Highway 18 already has left and right-turn lanes in place and no safety mitigations are recommended.

PROJECT DESCRIPTION

INTRODUCTION

This traffic study analyzes and addresses the potential traffic impacts of a proposed zone change and lateral expansion of the Riverbend Landfill in Yamhill County, Oregon.

The Riverbend Landfill, located at 13469 Oregon 18 in McMinnville, Oregon, is proposing a lateral expansion to the west as well as the construction of a new green technology facility. To receive approval for this expansion, a zone change from Public Works/Safety to Exclusive Farm Use is required. Detailed information on traffic counts, trip generation calculations, and intersection capacity calculations are included in the technical appendix of this report.

LOCATION DESCRIPTION

The Riverbend Landfill is located approximately two miles southwest of McMinnville, Oregon. The property is bounded by Oregon Highway 18 to the northwest, agricultural land to the north, and the Yamhill River to the east and south.

The landfill operation only has one access to Oregon Highway 18 located at milepost 41.56. There are two other accesses that currently serve other existing uses on the site. The first is a small driveway that serves a single-family home. The second is a driveway near the southern boundary of the site that serves the Mulkey RV Park. None of the activities associated with the operation of the landfill will add traffic to these two additional accesses.

Due to the largely rural location of the site, no major street intersections are present near the subject property that would require analysis of site impacts. Projected traffic impacts during the weekday morning and evening peak hours as well as the Saturday peak were analyzed for the intersection of the landfill access and Oregon Highway 18.

Oregon Highway 18, also designated as Salmon River Highway, is under the jurisdiction of the Oregon Department of Transportation (ODOT) and is classified as a Statewide Highway Route. The highway is on the National Highway System and is designated as a State Freight Route, a Truck Route, as well as an Expressway. It is generally a two-lane roadway with a statutory rural highway speed limit of 55 mph. The facility has wide paved shoulders in the vicinity of the subject property.

The intersection of Oregon Highway 18 at the site access is a three-legged intersection controlled by a STOP sign on the access approach. The southwest bound approach has a through lane and a dedicated left-turn lane, whereas the northbound approach has a through lane and a dedicated right-turn lane. The site access has a shared lane for all turning movements, but is wide enough to accommodate a right and left-turning vehicle simultaneously.

A vicinity map showing the project site, the study area intersection, and the traffic control device is shown in Figure 1 on page six.

TRAFFIC COUNTS

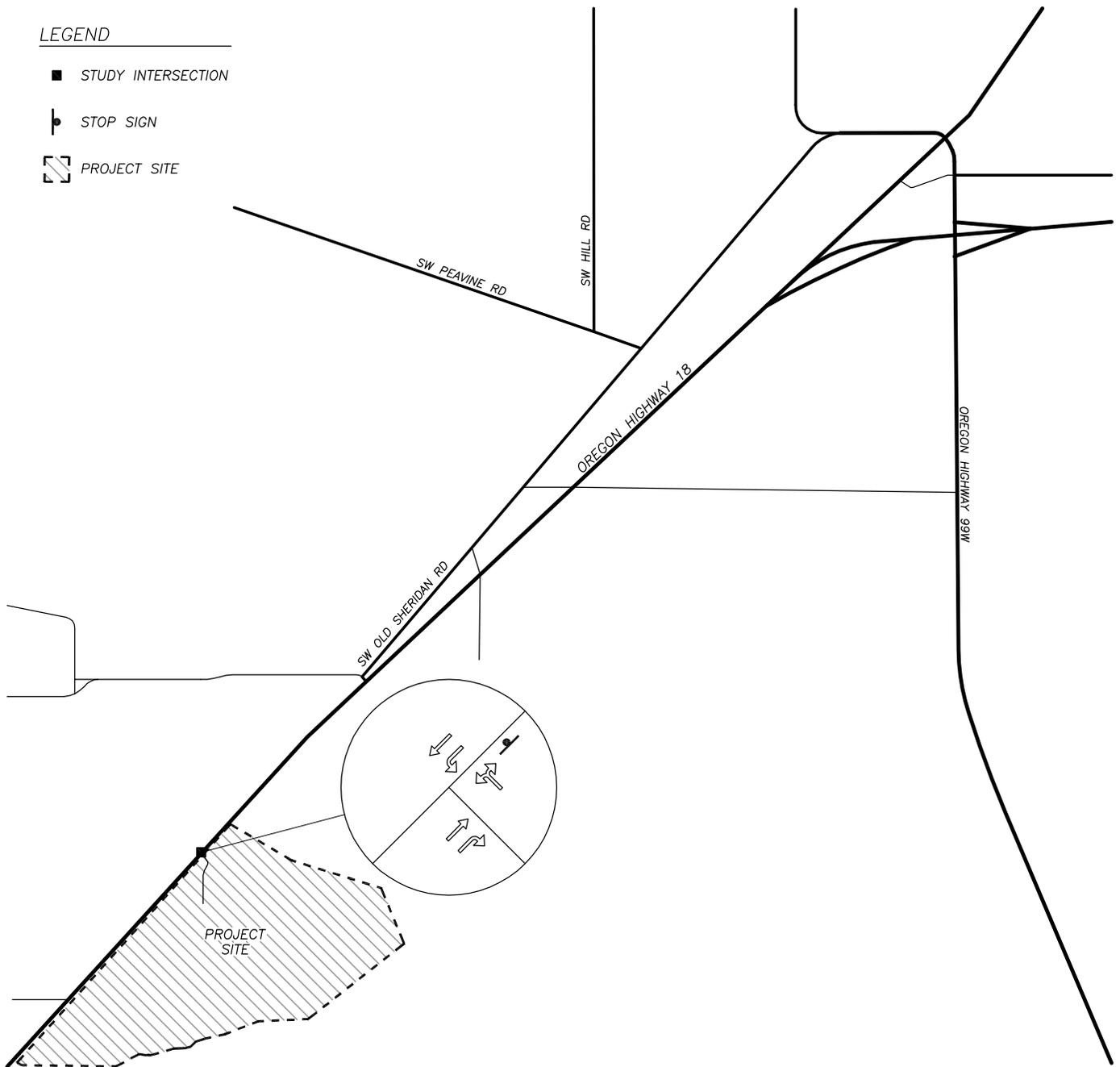
Traffic counts were conducted at the intersection of Oregon Highway 18 and the property access on Thursday, July 11th, 2013, from 5:00 AM to 5:00 PM and on Saturday, July 13th, 2013, from 6:00 AM to 4:00 PM. The times observed corresponded with the operating hours of the Riverbend Landfill. Using these counts, the morning peak hour was found to occur from 7:00 AM to 8:00 AM and the evening peak hour was found to occur from 4:00 PM to 5:00 PM.

Design volumes for ODOT facilities are based on the 30th highest hour conditions, which typically occur during the summer months. Following the procedure given by ODOT's Analysis Procedures Manual, a seasonal adjustment factor was calculated to apply to the counts. ODOT has an Automatic Traffic Recorder (ATR) located at milepost 41.0 along Oregon Highway 18. Using data from this recorder, a seasonal adjustment factor of 1.00 was derived for the weekday traffic count while a seasonal adjustment factor of 1.015 was derived for the Saturday traffic count.

Figure 2 on page seven shows the seasonally adjusted traffic volumes at the study area intersection.

LEGEND

- STUDY INTERSECTION
- ⊥ STOP SIGN
- ▨ PROJECT SITE



VICINITY MAP

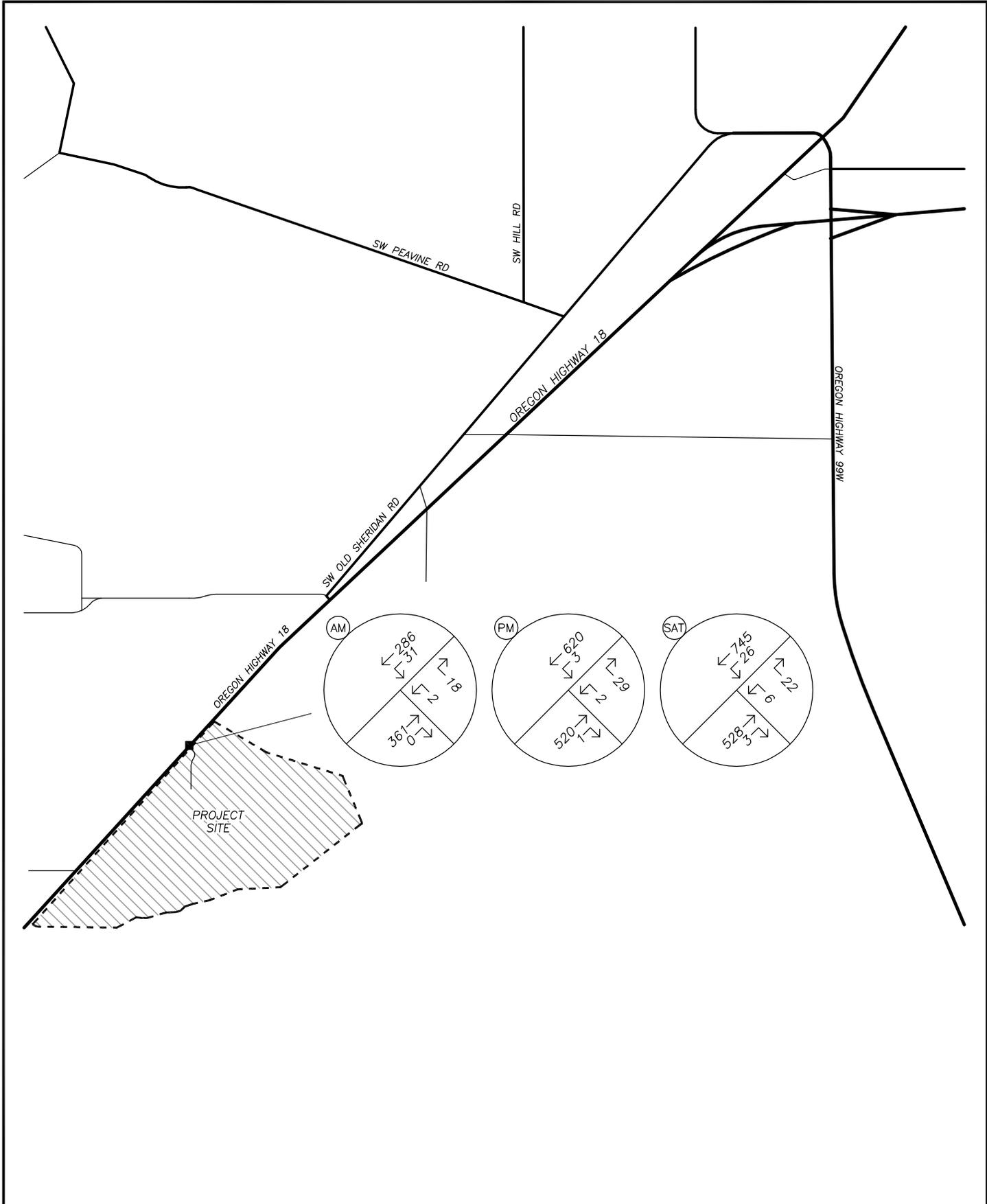
no scale

FIGURE 1

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TRAFFIC VOLUMES
 Existing Conditions – Seasonally Adjusted
 AM, PM, & Saturday Peak Hours



FIGURE
2

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TRIP GENERATION & DISTRIBUTION

TRIP GENERATION

The proposed zone change from Public Works/Safety to Exclusive Farm Use affects the 57.5 acre property between the existing location of the Riverbend Landfill and Oregon Highway 18. The property will accommodate the lateral expansion of the landfill directly west of the current location as well as a green technology facility to the southwest.

To observe the effects of the zone change, a reasonable worst-case assumption is made for what development could occupy the property. Due to the location of the subject property and the limited amount of permitted uses within an Exclusive Farm Use district, it is not expected that the property be developed with a more intensive use than what is currently proposed.

The traffic impacts of the landfill and new green technology facility were observed throughout the planning horizon. It should be noted that Waste Management is planning for a flat disposal rate throughout the life of the landfill and is not expecting any increase in traffic to the site. Additional trips beyond this disposal rate would be diverted to other sites. However, to maintain a conservative analysis, annual increases in traffic corresponding with population growth were accounted for in the trip generation calculations.

To account for the increase in traffic using the landfill over the planning horizon, a growth factor was applied to the number of current vehicles using the facility. Since the landfill's trip generation is based on population and the resulting waste stream to the landfill, the growth factor was derived using forecasted traffic volumes along Oregon Highway 18 in front of the site. Due to the landfill only having one access and being the only destination reachable through that access, the growth rate was applied to the traffic counts for vehicles entering and exiting the landfill.

To account for the new green technology facility, information regarding the expected operation of the facility was used to derive a trip generation. The green technology facility will divert a portion of the waste stream and convert that waste into a solid product that can be combusted and used as an alternative energy source. The new facility will be operated by approximately 35 employees split into two shifts per day, seven days a week. The facility will also utilize trucks delivering waste to the landfill to back-haul and transport products from the new facility to the next destination. To maintain a conservative, worst-case analysis, it is assumed that the green technology facility would change shifts during each of the peak hours and that 100 percent of the product produced would be shipped out as new truck loads, with no back-hauling by existing trucks.

As discussed in this report, the existing Mulkey RV Park will be closing. Removal of these trips from Highway 18 will result in a net increase in trips that is slightly lower than what is reported here. A summary of the trip generation calculations for each of the landfill facilities is shown in the tables on the following page. Detailed trip generation calculations are included in the appendix to this report.

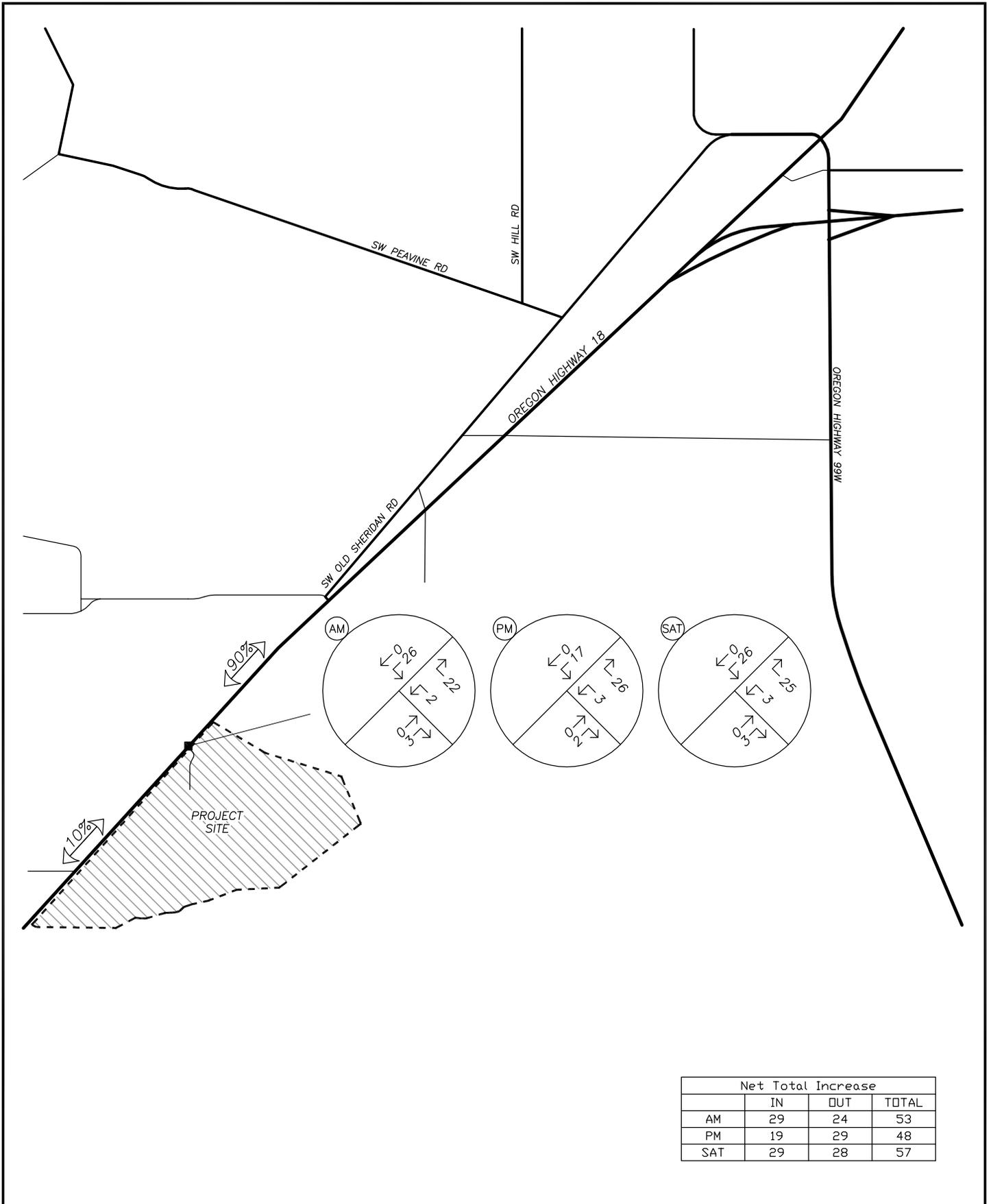
Weekday Trip Generation Summary							
	Morning Peak Hour			Evening Peak Hour			Weekday Total
	In	Out	Total	In	Out	Total	
Landfill							
Increase w/ Population	9	6	15	1	10	11	172
Green Technology Facility							
Employees	18	17	35	17	18	35	70
Product Shipment	2	1	3	1	1	2	56
Net Trip Increase	29	24	53	19	29	48	298

Saturday Trip Generation Summary				
	Saturday Peak Hour			Saturday Total
	In	Out	Total	
Landfill				
Increase w/ Population	9	9	18	124
Green Technology Facility				
Employees	18	17	35	70
Product Shipment	2	2	4	56
Net Trip Increase	29	28	57	250

TRIP DISTRIBUTION

The trips generated by the Riverbend Landfill expansion were assumed to be distributed proportionately to the traffic currently entering and exiting the facility. This resulted in approximately a 90-percent distribution of traffic originating and terminating from the northeast of the subject property. Traffic for the green technology facility was assumed to follow a similar distribution with the majority arriving and departing northeast along Oregon Highway 18.

The trip assignment for the projected lateral expansion and construction of the green technology facility is shown in Figure 3 on page 10.



SITE TRIP DISTRIBUTION & ASSIGNMENT
 Proposed Development Plan
 AM, PM, & Saturday Peak Hours



FIGURE 3

PAGE 10

Attachment 1

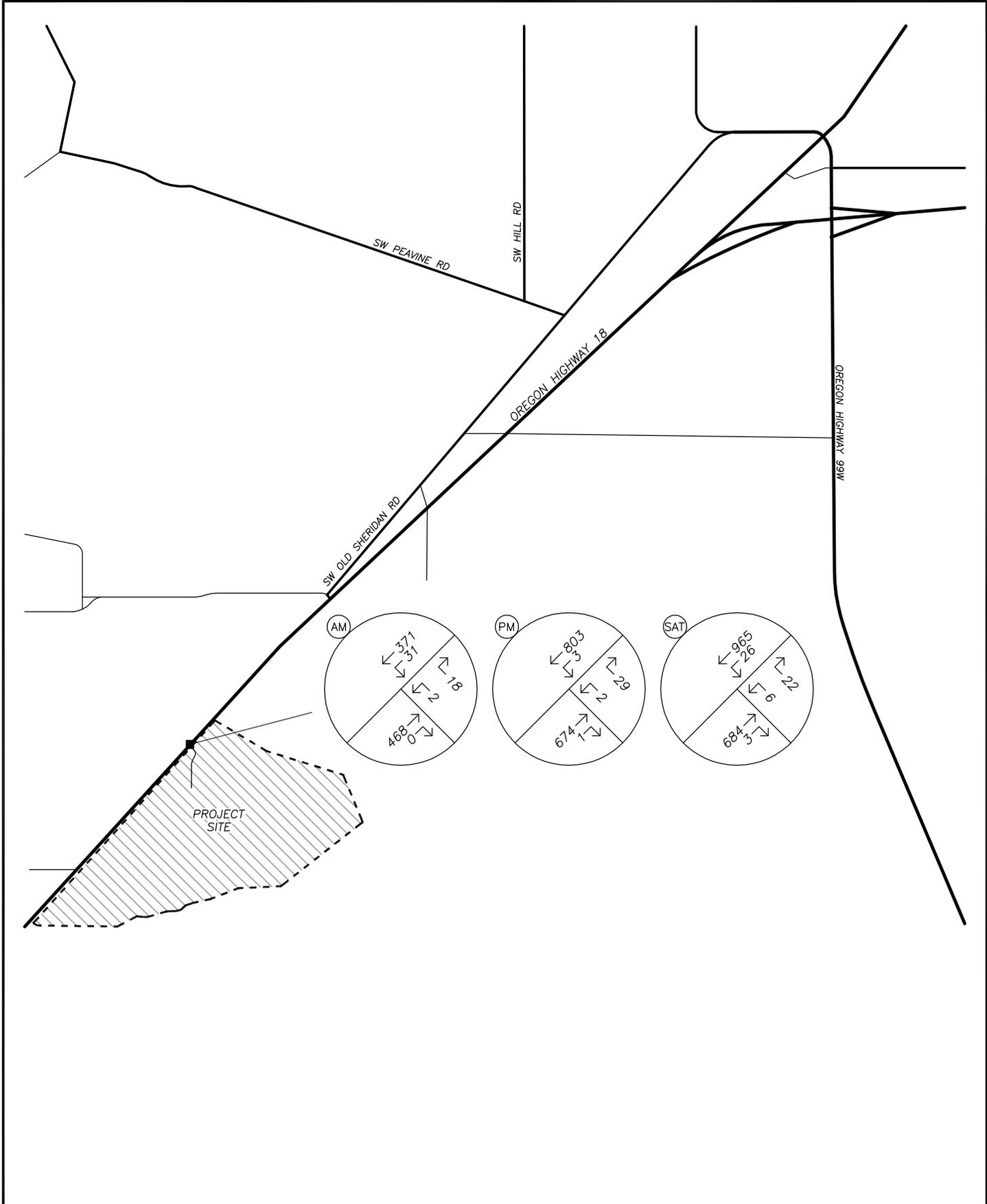
OPERATIONAL ANALYSIS

BACKGROUND TRAFFIC

To provide analysis of the impact of the proposed zone change on the nearby transportation facilities, an estimation of future traffic volumes is required. In order to calculate the future traffic volumes, a growth rate must be applied to existing traffic volumes.

Historical annual average daily traffic (ADT) on Oregon Highway 18 at milepost 41.0 peaked in 2006 with about 14,300 ADT but has decreased over the next years to about 13,100 ADT in 2011. The highway experience a seasonal fluctuation in traffic flow since it is a primary route to the Oregon coast. The peak traffic month is August with traffic volumes 18% higher than the average of all months.

Future traffic volumes were projected in conformance with the requirements established in ODOT's Analysis Procedures Manual. Based on data from ODOT's Future Volumes Table, a growth rate of 1.7 percent per year was derived for Oregon Highway 18 at the location of the ATR. This growth rate was applied to the traffic on Oregon Highway 18 over the 17-year period to observe traffic at the 2030 planning horizon. Figure 4 on page 12 shows the projected year 2030 traffic volumes. Figure 5 on page 13 shows the projected year 2030 traffic volumes plus traffic generated by the landfill's lateral expansion and the construction of the green technology facility.



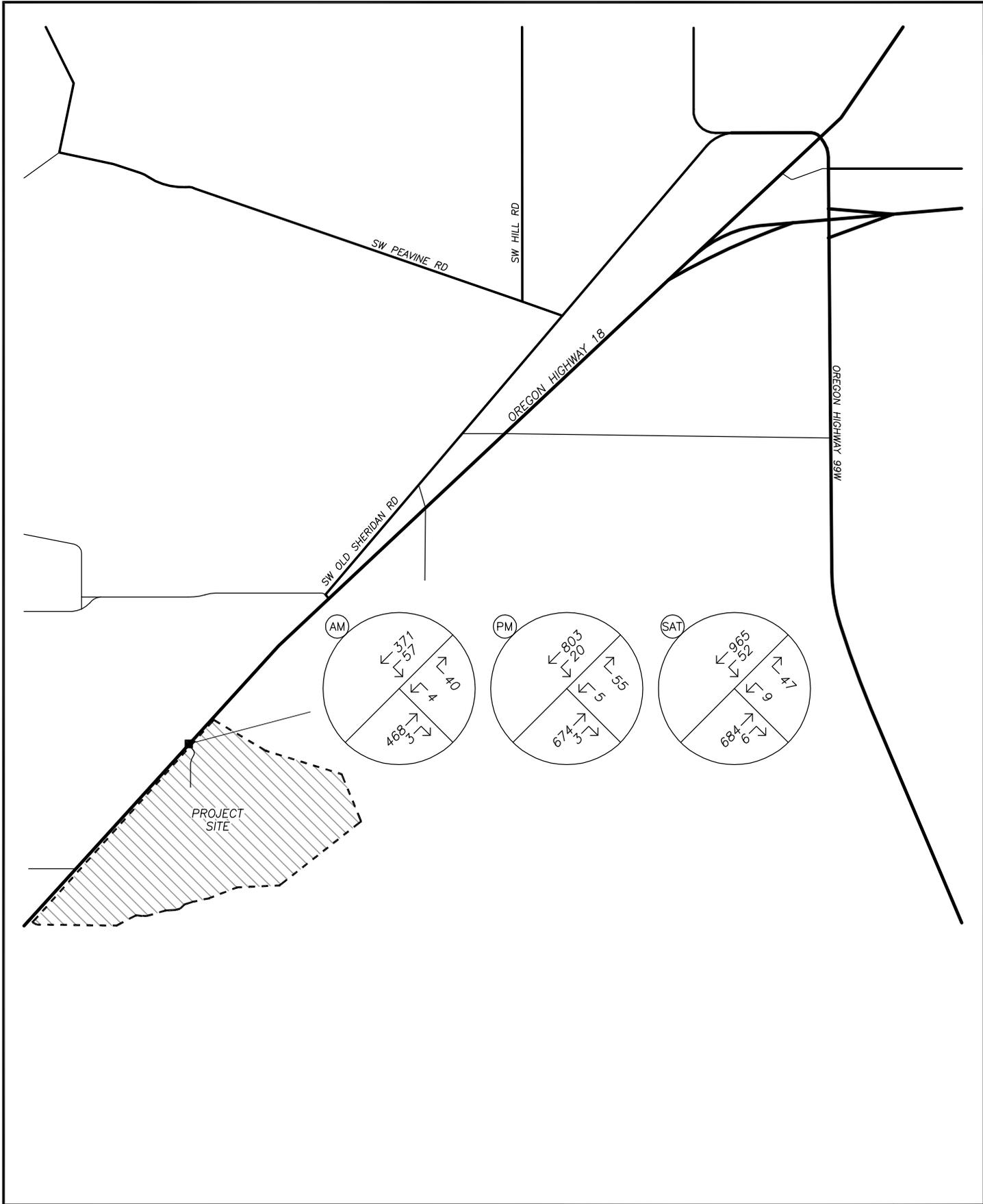
TRAFFIC VOLUMES
 Year 2030 Background Conditions
 AM, PM, & Saturday Peak Hours



FIGURE
4

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Attachment 1



TRAFFIC VOLUMES
 Year 2030 Background Plus Site Trips
 AM, PM, & Saturday Peak Hours



FIGURE
5
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 Attachment 1

CAPACITY ANALYSIS

To determine the level of service at the study intersection, a capacity analysis was conducted. Since Oregon Highway 18 is under ODOT jurisdiction, their performance standards based on a volume-to-capacity (v/c) ratio were used for evaluation. The v/c ratio is a measure that compares the traffic volume (demand) against the available capacity of an intersection. According to the Oregon Highway Plan Mobility Standard Guidelines, a v/c ratio of 0.70 or less is required for intersections outside of an Urban Growth Boundary in rural areas.

The study area intersection was analyzed using the unsignalized intersection analysis method in the *HIGHWAY CAPACITY MANUAL*, published by the Transportation Research Board. The analysis was made for the morning, evening, and Saturday peak hours for existing conditions, year 2030 background conditions, and year 2030 background plus site trips from the proposed development.

Currently, the intersection of Oregon Highway 18 at the site access operates at a v/c ratio of 0.04 during the morning peak hour and a v/c ratio of 0.07 during the evening peak hour. During the Saturday mid-day peak period, the intersection presently operates at a v/c ratio of 0.09. Under year 2030 conditions, the intersection is projected to operate at a v/c ratio of 0.05 during the morning peak hour, 0.09 during the evening peak hour, and 0.13 during the Saturday peak hour. With the lateral expansion of the Riverbend Landfill and the construction of the green technology building, the intersection is projected to operate at a v/c ratio of 0.12 during the morning peak hour, 0.19 during the evening peak hour, and 0.25 during the Saturday peak hour. It should be noted that it was assumed all product being shipped from the green technology building would do so on trucks that arrive and depart solely for that purpose, when in reality the facility is expected to ship product on trucks that have already delivered waste to the landfill.

The intersection of Oregon Highway 18 at the site access operates well within ODOT’s performance standards throughout the planning horizon. Accordingly, no mitigation is recommended.

The results of the capacity analysis, along with the levels of service, delay, and v/c ratios are shown in the following two tables. Detailed calculations, as well as tables showing the relationships between delay and level of service are included in the appendix to this report.

	WEEKDAY CAPACITY ANALYSIS SUMMARY					
	AM			PM		
	LOS	Delay (s)	v / c	LOS	Delay (s)	v / c
<i>Oregon Highway 18 at Site Access</i>						
Existing	B	13	0.04	B	13	0.07
2030 Background Conditions	B	15	0.05	C	16	0.09
2030 Background plus Site	C	15	0.12	C	19	0.19

SATURDAY CAPACITY ANALYSIS SUMMARY			
	Saturday		
	LOS	Delay (s)	v / c
<i>Oregon Highway 18 at Site Access</i>			
Existing	C	17	0.09
2030 Background Conditions	C	24	0.13
2030 Background plus Site	D	25	0.25

ROADWAY AND ROUTE IMPACTS

Traffic utilizing the Riverbend Landfill site is pulled from a greater area than just the nearby city of McMinnville or even Yamhill County. Truck traffic transports waste regularly from a Forest Grove transfer site to the Riverbend Landfill by way of Oregon Highway 47. Generally, between 17 and 20 trucks make this round trip per day. This traffic is spread out between the hours of 5:00 AM to 4:00 PM and is not projected to increase with the lateral expansion of the landfill or the construction of the green technology facility.

With the expansion of the Riverbend Landfill facility, the nearby Mulkey RV Park will be closed and the area will be used for operations pertaining to the landfill. The approximately 65-unit recreational vehicle park operates between 40% and 90% of capacity through the typical year. The park will be closed as part of activity on the site following the subject zone change. Based on the occupancy of the park, it currently generates between 5 and 12 AM peak hour trips and between 7 and 16 PM peak hour trips. These trips will be removed from Highway 18 upon closure of the park. Supporting trip generation calculations are included in the appendix to this report.

TRANSPORTATION PLANNING RULE

Oregon’s Transportation Planning Rule (TPR) is in place to ensure that the transportation system is capable of supporting possible increases in traffic intensity that could result from changes to adopted plans and land use regulations. The applicable elements of the TPR are each quoted directly in *italics* below, with a response directly following.

660-012-0060

- (1) If an amendment to a functional plan, an acknowledged comprehensive plan, or a land use regulation (including a zoning map) would significantly affect an existing or planned transportation facility, then the local government must put in place measures as provided in section (2) of this rule, unless the amendment is allowed under section (3), (9) or (10) of this rule. A plan or land use regulation amendment significantly affects a transportation facility if it would:*

- (a) *Change the functional classification of an existing or planned transportation facility (exclusive of correction of map errors in an adopted plan);*
- (b) *Change standards implementing a functional classification system; or*
- (c) *Result in any of the effects listed in paragraphs (A) through (C) of this subsection based on projected conditions measured at the end of the planning period identified in the adopted TSP. As part of evaluating projected conditions, the amount of traffic projected to be generated within the area of the amendment may be reduced if the amendment includes an enforceable, ongoing requirement that would demonstrably limit traffic generation, including, but not limited to, transportation demand management. This reduction may diminish or completely eliminate the significant effect of the amendment.*
 - (A) *Types or levels of travel or access that are inconsistent with the functional classification of an existing or planned transportation facility;*
 - (B) *Degrade the performance of an existing or planned transportation facility such that it would not meet the performance standards identified in the TSP or comprehensive plan; or*
 - (C) *Degrade the performance of an existing or planned transportation facility that is otherwise projected to not meet the performance standards identified in the TSP or comprehensive plan.*

In the case of this report, subsections (A) and (B) are not triggered, since the proposed zone change will not impact or alter the functional classification of any existing or planned facility and the proposal does not include a change to any functional classification standards.

Subsection (C) is also not triggered since the intersection of Oregon Highway 18 at the site access will meet performance standards throughout the planning horizon. The study intersection has sufficient capacity to serve more traffic than is generated under the reasonable worst-case scenario.

Based on the detailed analysis, the proposed zone change will not degrade the performance of any existing or planned transportation facility. Accordingly, the Transportation Planning Rule is satisfied.

TRANSPORTATION SYSTEM PLAN

Yamhill County's 1994 Transportation System Plan (TSP) provides goals, policies, and procedures for the development and improvement of transportation facilities as well as list future planned transportation projects. The TSP makes no specific mention of the Riverbend Landfill or planned transportation improvements that would affect the traffic near the subject property. The change in zoning followed by the expansion of the landfill and construction of a green technology facility is not projected to significantly impact the nearby transportation system's efficiency or safety. Accordingly, the proposed zone change and development is in conformance with Yamhill's TSP.

SAFETY ANALYSIS

CRASH DATA ANALYSIS

Using data obtained from ODOT's Crash Data System, a review was performed for the most recent available five years of crash data (2008 – 2012) for Oregon Highway 18 between milepost 41.00 and 42.00. A crash rate was calculated under the common assumption that traffic counted during the PM peak period represents 10% of the average daily traffic (ADT) at the intersection. Crash rates greater than 1.0 crashes per million entering vehicles (CMEV) are generally indicative of a need for further investigation and possible mitigation.

The one-mile segment of road along Oregon Highway 18 that contains the site access had a total of eight reported crashes during the analysis period. Of these crashes, only one appeared to be related to the intersection in which a vehicle followed too closely and failed to decrease their speed before rear-ending a slowed vehicle. The crash resulted in a possible injury or complaint of pain (*Injury-C*).

Even if all eight crashes are considered, the crash rate would be calculated at 0.37 CMEV, which is not typically indicative of significant crash patterns or design concerns. Accordingly, no safety mitigations are recommended.

CONCLUSIONS

The traffic resulting from the proposed zone change to the property adjacent to the Riverbend Landfill, located at 13469 Oregon 18 in McMinnville, Oregon, from Public Works/Safety to Exclusive Farm Use will not cause any significant impact to the transportation network in the surrounding area.

The expected development of the properties under the proposed zoning will not significantly affect existing or planned transportation facilities as defined under Oregon's Transportation Planning Rule. Accordingly, no mitigation is recommended.

The operational analysis of the intersection of Oregon Highway 18 at the site access shows adequate capacity throughout the planning horizon, regardless of the additional traffic resulting from the zone change and subsequent expansion of the landfill as well as the construction of the green technology facility. No operational mitigations are recommended.

A detailed observation of the crash history at the study intersection shows no trends that are indicative of safety issues that need to be addressed. No safety mitigations are recommended.

Based on the detailed analysis, no mitigations are required or recommended for the zone change from Public Works/Safety to Exclusive Farm Use or the landfill expansion and construction of a green technology facility.

APPENDIX



LEVEL OF SERVICE

Level of service is used to describe the quality of traffic flow. Levels of service A to C are considered good, and rural roads are usually designed for level of service C. Urban streets and signalized intersections are typically designed for level of service D. Level of service E is considered to be the limit of acceptable delay. For unsignalized intersections, level of service E is generally considered acceptable. Here is a more complete description of levels of service:

Level of service A: Very low delay at intersections, with all traffic signal cycles clearing and no vehicles waiting through more than one signal cycle. On highways, low volume and high speeds, with speeds not restricted by other vehicles.

Level of service B: Operating speeds beginning to be affected by other traffic; short traffic delays at intersections. Higher average intersection delay than for level of service A resulting from more vehicles stopping.

Level of service C: Operating speeds and maneuverability closely controlled by other traffic; higher delays at intersections than for level of service B due to a significant number of vehicles stopping. Not all signal cycles clear the waiting vehicles. This is the recommended design standard for rural highways.

Level of service D: Tolerable operating speeds; long traffic delays occur at intersections. The influence of congestion is noticeable. At traffic signals many vehicles stop, and the proportion of vehicles not stopping declines. The number of signal cycle failures, for which vehicles must wait through more than one signal cycle, are noticeable. This is typically the design level for urban signalized intersections.

Level of service E: Restricted speeds, very long traffic delays at traffic signals, and traffic volumes near capacity. Flow is unstable so that any interruption, no matter how minor, will cause queues to form and service to deteriorate to level of service F. Traffic signal cycle failures are frequent occurrences. For unsignalized intersections, level of service E or better is generally considered acceptable.

Level of service F: Extreme delays, resulting in long queues which may interfere with other traffic movements. There may be stoppages of long duration, and speeds may drop to zero. There may be frequent signal cycle failures. Level of service F will typically result when vehicle arrival rates are greater than capacity. It is considered unacceptable by most drivers.



*LEVEL OF SERVICE CRITERIA
FOR SIGNALIZED INTERSECTIONS*

LEVEL OF SERVICE	CONTROL DELAY PER VEHICLE (Seconds)
A	<10
B	10-20
C	20-35
D	35-55
E	55-80
F	>80

*LEVEL OF SERVICE CRITERIA
FOR UNSIGNALIZED INTERSECTIONS*

LEVEL OF SERVICE	CONTROL DELAY PER VEHICLE (Seconds)
A	<10
B	10-15
C	15-25
D	25-35
E	35-50
F	>50

File Name : Hwy18&Landfill THUR
 Site Code :
 Start Date : 7/11/2013
 Page No : 1

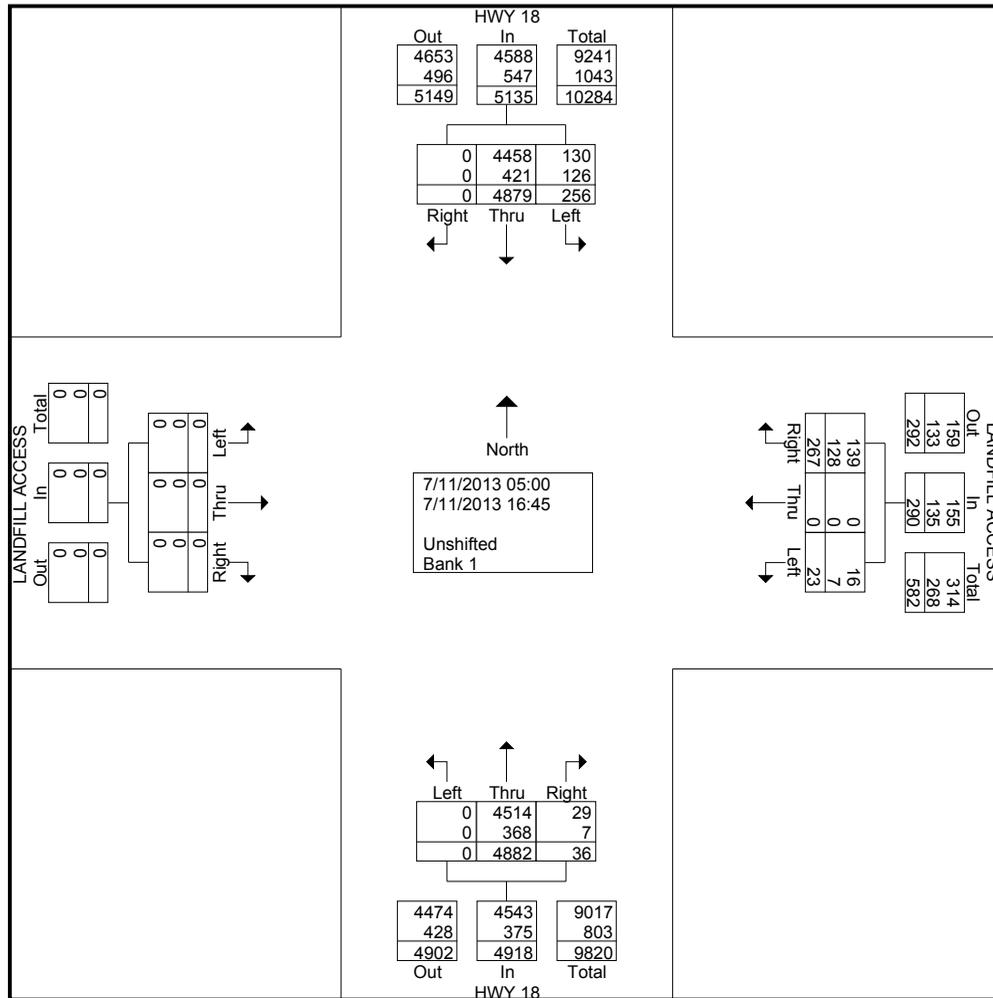
Groups Printed- Unshifted - Bank 1

Start Time	HWY 18 Southbound					LANDFILL ACCESS Westbound					HWY 18 Northbound					LANDFILL ACCESS Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total				
05:00	3	12	0	0	15	0	0	0	0	0	0	44	0	0	44	0	0	0	0	0	0	0	59	59
05:15	6	32	0	0	38	0	0	0	0	0	0	61	0	0	61	0	0	0	0	0	0	0	99	99
05:30	4	47	0	0	51	0	0	0	0	0	0	70	1	0	71	0	0	0	0	0	0	0	122	122
05:45	8	49	0	0	57	1	0	0	0	1	0	53	0	0	53	0	0	0	0	0	0	0	111	111
Total	21	140	0	0	161	1	0	0	0	1	0	228	1	0	229	0	0	0	0	0	0	0	391	391
06:00	7	41	0	0	48	0	0	0	0	0	0	46	0	0	46	0	0	0	0	0	0	0	94	94
06:15	3	56	0	0	59	0	0	6	0	6	0	63	1	0	64	0	0	0	0	0	0	0	129	129
06:30	8	63	0	0	71	0	0	3	0	3	0	75	2	0	77	0	0	0	0	0	0	0	151	151
06:45	8	69	0	0	77	0	0	5	0	5	0	62	0	0	62	0	0	0	0	0	0	0	144	144
Total	26	229	0	0	255	0	0	14	0	14	0	246	3	0	249	0	0	0	0	0	0	0	518	518
07:00	5	77	0	0	82	1	0	6	4	7	0	77	0	0	77	0	0	0	0	0	0	4	166	170
07:15	6	71	0	1	77	0	0	4	0	4	0	95	0	0	95	0	0	0	0	0	0	1	176	177
07:30	9	75	0	0	84	1	0	2	0	3	0	102	0	0	102	0	0	0	0	0	0	0	189	189
07:45	11	63	0	0	74	0	0	6	1	6	0	87	0	0	87	0	0	0	0	0	0	1	167	168
Total	31	286	0	1	317	2	0	18	5	20	0	361	0	0	361	0	0	0	0	0	0	6	698	704
08:00	6	69	0	0	75	0	0	6	0	6	0	72	1	0	73	0	0	0	0	0	0	0	154	154
08:15	6	56	0	0	62	0	0	8	0	8	0	88	0	0	88	0	0	0	0	0	0	0	158	158
08:30	5	73	0	0	78	0	0	5	0	5	0	90	0	0	90	0	0	0	0	0	0	0	173	173
08:45	2	61	0	0	63	1	0	8	0	9	0	93	1	0	94	0	0	0	0	0	0	0	166	166
Total	19	259	0	0	278	1	0	27	0	28	0	343	2	0	345	0	0	0	0	0	0	0	651	651
09:00	5	86	0	0	91	1	0	2	0	3	0	72	1	0	73	0	0	0	0	0	0	0	167	167
09:15	9	75	0	0	84	1	0	9	2	10	0	105	0	0	105	0	0	0	0	0	0	2	199	201
09:30	2	80	0	0	82	0	0	5	0	5	0	97	1	0	98	0	0	0	0	0	0	0	185	185
09:45	6	93	0	0	99	1	0	10	0	11	0	96	1	0	97	0	0	0	0	0	0	0	207	207
Total	22	334	0	0	356	3	0	26	2	29	0	370	3	0	373	0	0	0	0	0	0	2	758	760
10:00	9	93	0	0	102	0	0	5	0	5	0	100	1	0	101	0	0	0	0	0	0	0	208	208
10:15	4	105	0	0	109	2	0	7	0	9	0	102	1	0	103	0	0	0	0	0	0	0	221	221
10:30	2	119	0	0	121	1	0	4	2	5	0	107	2	0	109	0	0	0	0	0	0	2	235	237
10:45	3	110	0	0	113	0	0	1	0	1	0	115	1	0	116	0	0	0	0	0	0	0	230	230
Total	18	427	0	0	445	3	0	17	2	20	0	424	5	0	429	0	0	0	0	0	0	2	894	896
11:00	4	104	0	0	108	1	0	4	0	5	0	107	1	0	108	0	0	0	0	0	0	0	221	221
11:15	11	113	0	0	124	1	0	6	0	7	0	115	2	0	117	0	0	0	0	0	0	0	248	248
11:30	12	141	0	0	153	1	0	8	0	9	0	106	0	0	106	0	0	0	0	0	0	0	268	268
11:45	4	111	0	0	115	1	0	7	0	8	0	109	1	0	110	0	0	0	0	0	0	0	233	233
Total	31	469	0	0	500	4	0	25	0	29	0	437	4	0	441	0	0	0	0	0	0	0	970	970
12:00	6	111	0	0	117	0	0	10	0	10	0	130	1	0	131	0	0	0	0	0	0	0	258	258
12:15	3	121	0	0	124	0	0	12	0	12	0	135	2	0	137	0	0	0	0	0	0	0	273	273
12:30	6	112	0	0	118	0	0	8	0	8	0	125	1	0	126	0	0	0	0	0	0	0	252	252
12:45	5	118	0	0	123	1	0	7	0	8	0	127	0	0	127	0	0	0	0	0	0	0	258	258
Total	20	462	0	0	482	1	0	37	0	38	0	517	4	0	521	0	0	0	0	0	0	0	1041	1041
13:00	9	115	0	0	124	0	0	9	0	9	0	100	2	0	102	0	0	0	0	0	0	0	235	235
13:15	5	141	0	0	146	1	0	5	0	6	0	140	2	0	142	0	0	0	0	0	0	0	294	294
13:30	9	125	0	0	134	1	0	7	0	8	0	101	1	0	102	0	0	0	0	0	0	0	244	244
13:45	10	131	0	0	141	1	0	3	0	4	0	111	1	0	112	0	0	0	0	0	0	0	257	257
Total	33	512	0	0	545	3	0	24	0	27	0	452	6	0	458	0	0	0	0	0	0	0	1030	1030
14:00	2	134	0	0	136	1	0	8	0	9	0	124	1	0	125	0	0	0	0	0	0	0	270	270
14:15	6	146	0	0	152	1	0	7	0	8	0	127	0	0	127	0	0	0	0	0	0	0	287	287
14:30	2	137	0	0	139	0	0	7	0	7	0	128	0	0	128	0	0	0	0	0	0	0	274	274
14:45	4	128	0	0	132	0	0	5	0	5	0	116	2	0	118	0	0	0	0	0	0	0	255	255
Total	14	545	0	0	559	2	0	27	0	29	0	495	3	0	498	0	0	0	0	0	0	0	1086	1086
15:00	4	189	0	0	193	0	0	1	0	1	0	128	2	0	130	0	0	0	0	0	0	0	324	324
15:15	2	130	0	0	132	0	0	7	0	7	0	106	0	0	106	0	0	0	0	0	0	0	245	245
15:30	3	140	0	0	143	1	0	6	0	7	0	127	2	0	129	0	0	0	0	0	0	0	279	279
15:45	9	137	0	0	146	0	0	9	0	9	0	128	0	0	128	0	0	0	0	0	0	0	283	283
Total	18	596	0	0	614	1	0	23	0	24	0	489	4	0	493	0	0	0	0	0	0	0	1131	1131
16:00	1	135	0	0	136	0	0	7	0	7	0	116	1	0	117	0	0	0	0	0	0	0	260	260

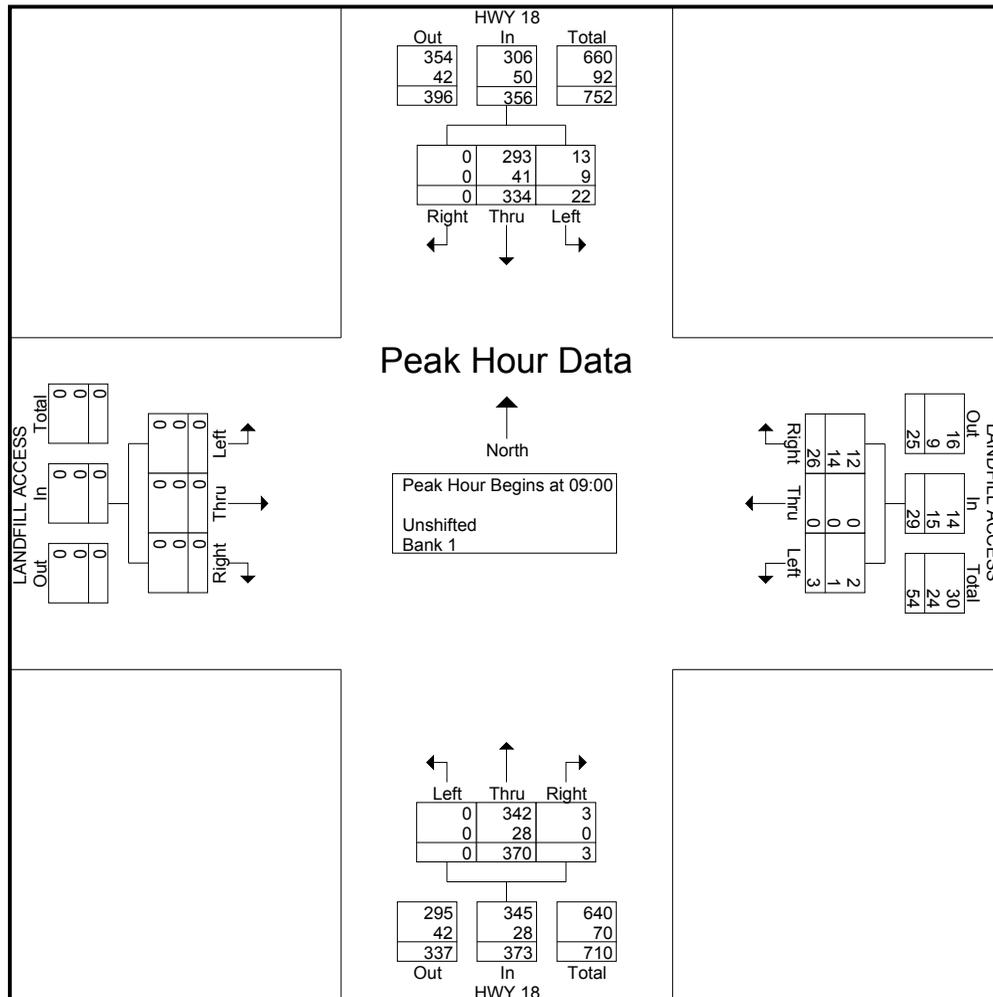
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Groups Printed- Unshifted - Bank 1

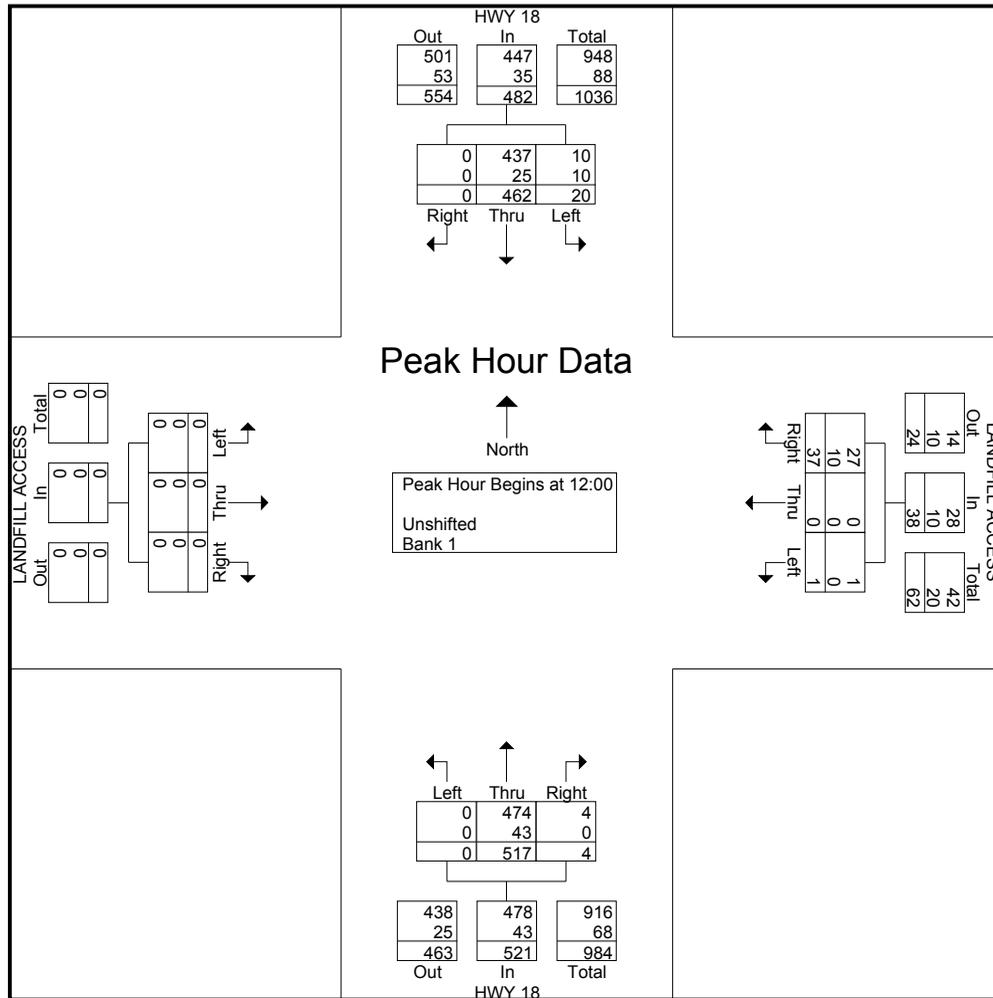
Start Time	HWY 18 Southbound					LANDFILL ACCESS Westbound					HWY 18 Northbound					LANDFILL ACCESS Eastbound					Exclu. Total	Inclu. Total	Int. Total		
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total					
16:15	2	160	0	0	162	2	0	4	0	6	0	139	0	0	139	0	0	0	0	0	0	0	0	307	307
16:30	0	152	0	0	152	0	0	6	0	6	0	133	0	0	133	0	0	0	0	0	0	0	0	291	291
16:45	0	173	0	0	173	0	0	12	0	12	0	132	0	0	132	0	0	0	0	0	0	0	0	317	317
Total	3	620	0	0	623	2	0	29	0	31	0	520	1	0	521	0	0	0	0	0	0	0	0	1175	1175
Grand Total	256	4879	0	1	5135	23	0	267	9	290	0	4882	36	0	4918	0	0	0	0	0	0	0	10	10343	10353
Apprch %	5	95	0			7.9	0	92.1			0	99.3	0.7			0	0	0					0.1	99.9	
Total %	2.5	47.2	0		49.6	0.2	0	2.6		2.8	0	47.2	0.3		47.5	0	0	0							
Unshifted	130	4458	0		4589	16	0	139		164	0	4514	29		4543	0	0	0				0	0	0	9296
% Unshifted	50.8	91.4	0	100	89.3	69.6	0	52.1	100	54.8	0	92.5	80.6	0	92.4	0	0	0	0	0	0	0	0	0	89.8
Bank 1	126	421	0		547	7	0	128		135	0	368	7		375	0	0	0				0	0	0	1057
% Bank 1	49.2	8.6	0	0	10.7	30.4	0	47.9	0	45.2	0	7.5	19.4	0	7.6	0	0	0	0	0	0	0	0	0	10.2



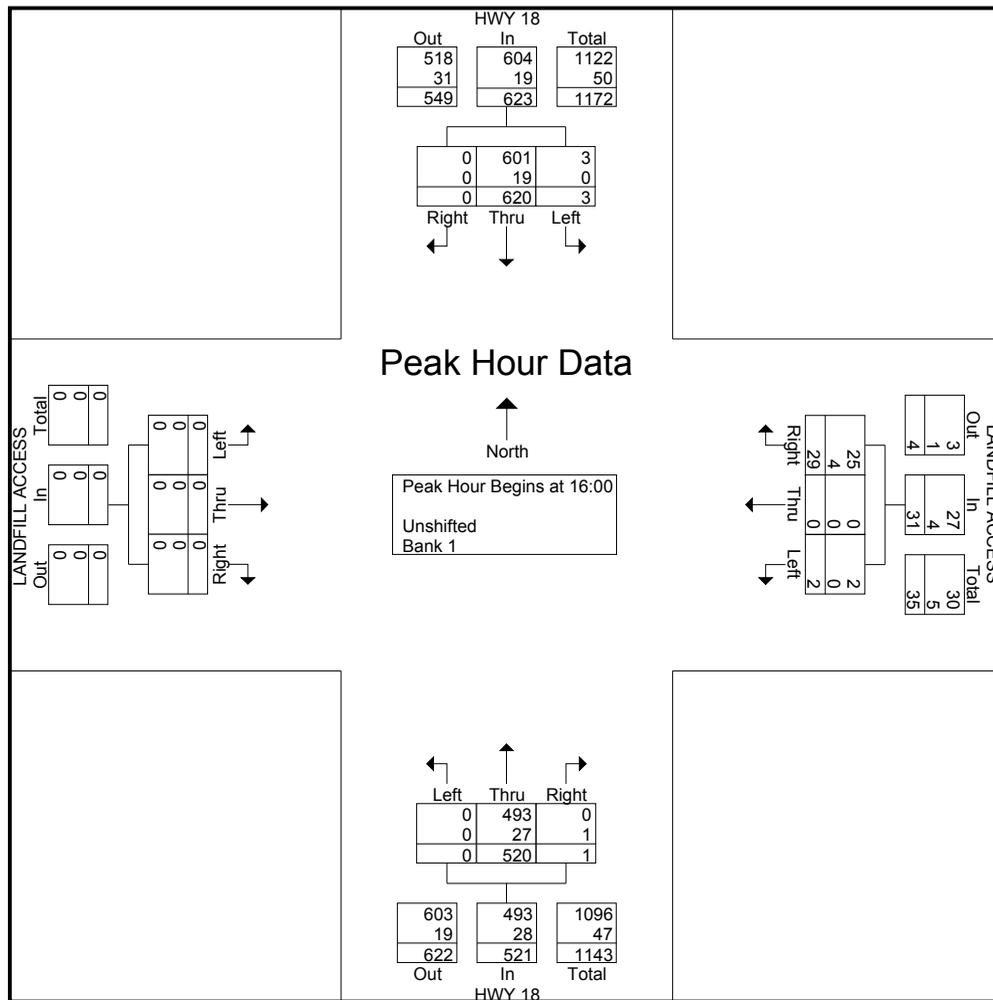
Start Time	HWY 18 Southbound				LANDFILL ACCESS Westbound				HWY 18 Northbound				LANDFILL ACCESS Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 to 09:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 09:00																	
09:00	5	86	0	91	1	0	2	3	0	72	1	73	0	0	0	0	167
09:15	9	75	0	84	1	0	9	10	0	105	0	105	0	0	0	0	199
09:30	2	80	0	82	0	0	5	5	0	97	1	98	0	0	0	0	185
09:45	6	93	0	99	1	0	10	11	0	96	1	97	0	0	0	0	207
Total Volume	22	334	0	356	3	0	26	29	0	370	3	373	0	0	0	0	758
% App. Total	6.2	93.8	0		10.3	0	89.7		0	99.2	0.8		0	0	0		
PHF	.611	.898	.000	.899	.750	.000	.650	.659	.000	.881	.750	.888	.000	.000	.000	.000	.915
Unshifted	13	293	0	306	2	0	12	14	0	342	3	345	0	0	0	0	665
% Unshifted	59.1	87.7	0	86.0	66.7	0	46.2	48.3	0	92.4	100	92.5	0	0	0	0	87.7
Bank 1	9	41	0	50	1	0	14	15	0	28	0	28	0	0	0	0	93
% Bank 1	40.9	12.3	0	14.0	33.3	0	53.8	51.7	0	7.6	0	7.5	0	0	0	0	12.3



Start Time	HWY 18 Southbound				LANDFILL ACCESS Westbound				HWY 18 Northbound				LANDFILL ACCESS Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:00																	
12:00	6	111	0	117	0	0	10	10	0	130	1	131	0	0	0	0	258
12:15	3	121	0	124	0	0	12	12	0	135	2	137	0	0	0	0	273
12:30	6	112	0	118	0	0	8	8	0	125	1	126	0	0	0	0	252
12:45	5	118	0	123	1	0	7	8	0	127	0	127	0	0	0	0	258
Total Volume	20	462	0	482	1	0	37	38	0	517	4	521	0	0	0	0	1041
% App. Total	4.1	95.9	0		2.6	0	97.4		0	99.2	0.8		0	0	0		
PHF	.833	.955	.000	.972	.250	.000	.771	.792	.000	.957	.500	.951	.000	.000	.000	.000	.953
Unshifted	10	437	0	447	1	0	27	28	0	474	4	478	0	0	0	0	953
% Unshifted	50.0	94.6	0	92.7	100	0	73.0	73.7	0	91.7	100	91.7	0	0	0	0	91.5
Bank 1	10	25	0	35	0	0	10	10	0	43	0	43	0	0	0	0	88
% Bank 1	50.0	5.4	0	7.3	0	0	27.0	26.3	0	8.3	0	8.3	0	0	0	0	8.5

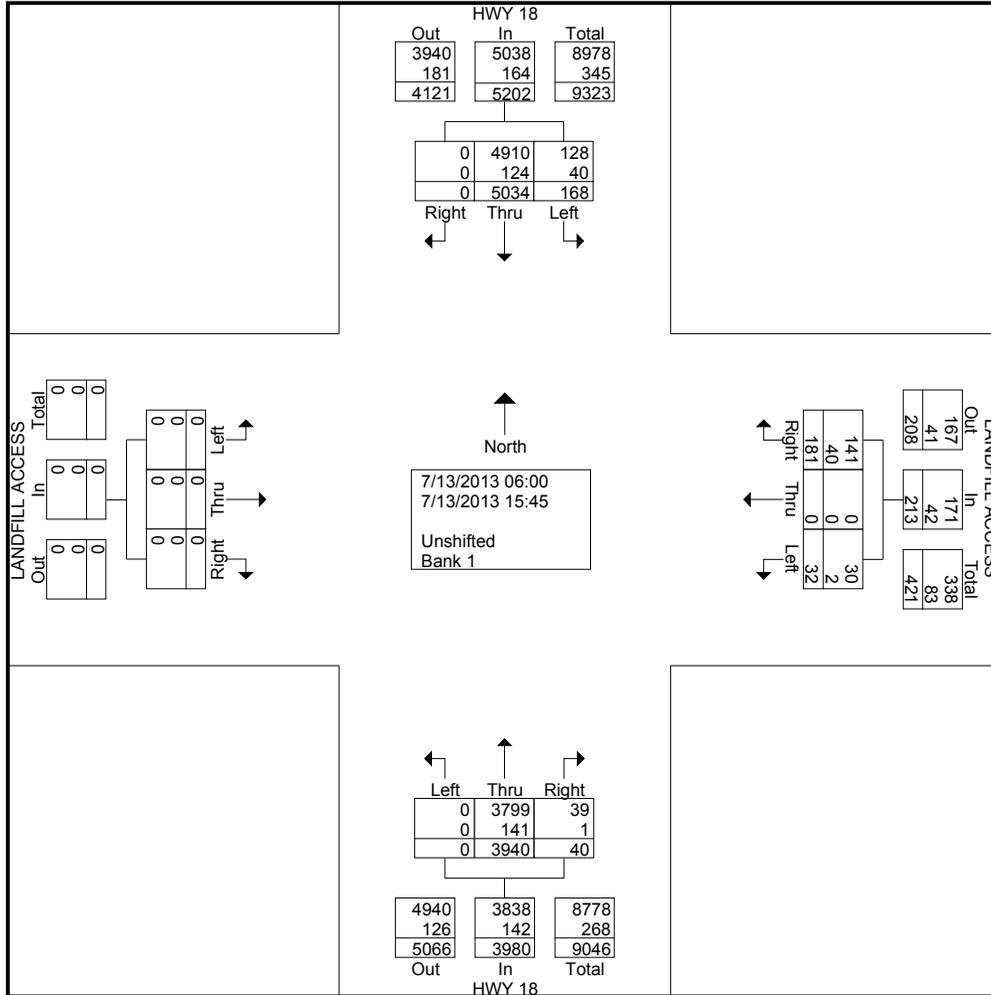


Start Time	HWY 18 Southbound				LANDFILL ACCESS Westbound				HWY 18 Northbound				LANDFILL ACCESS Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 14:00 to 16:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 16:00																	
16:00	1	135	0	136	0	0	7	7	0	116	1	117	0	0	0	0	260
16:15	2	160	0	162	2	0	4	6	0	139	0	139	0	0	0	0	307
16:30	0	152	0	152	0	0	6	6	0	133	0	133	0	0	0	0	291
16:45	0	173	0	173	0	0	12	12	0	132	0	132	0	0	0	0	317
Total Volume	3	620	0	623	2	0	29	31	0	520	1	521	0	0	0	0	1175
% App. Total	0.5	99.5	0		6.5	0	93.5		0	99.8	0.2		0	0	0		
PHF	.375	.896	.000	.900	.250	.000	.604	.646	.000	.935	.250	.937	.000	.000	.000	.000	.927
Unshifted	3	601	0	604	2	0	25	27	0	493	0	493	0	0	0	0	1124
% Unshifted	100	96.9	0	97.0	100	0	86.2	87.1	0	94.8	0	94.6	0	0	0	0	95.7
Bank 1	0	19	0	19	0	0	4	4	0	27	1	28	0	0	0	0	51
% Bank 1	0	3.1	0	3.0	0	0	13.8	12.9	0	5.2	100	5.4	0	0	0	0	4.3

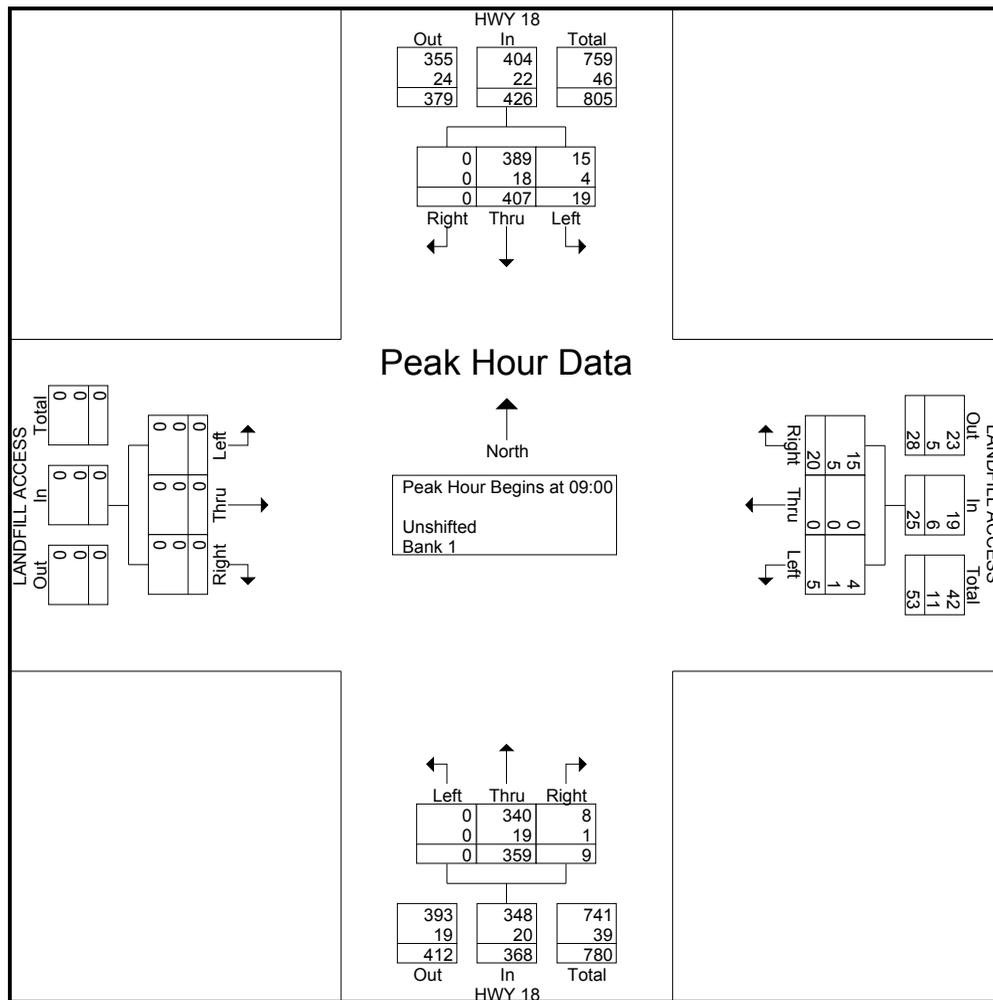


Groups Printed- Unshifted - Bank 1

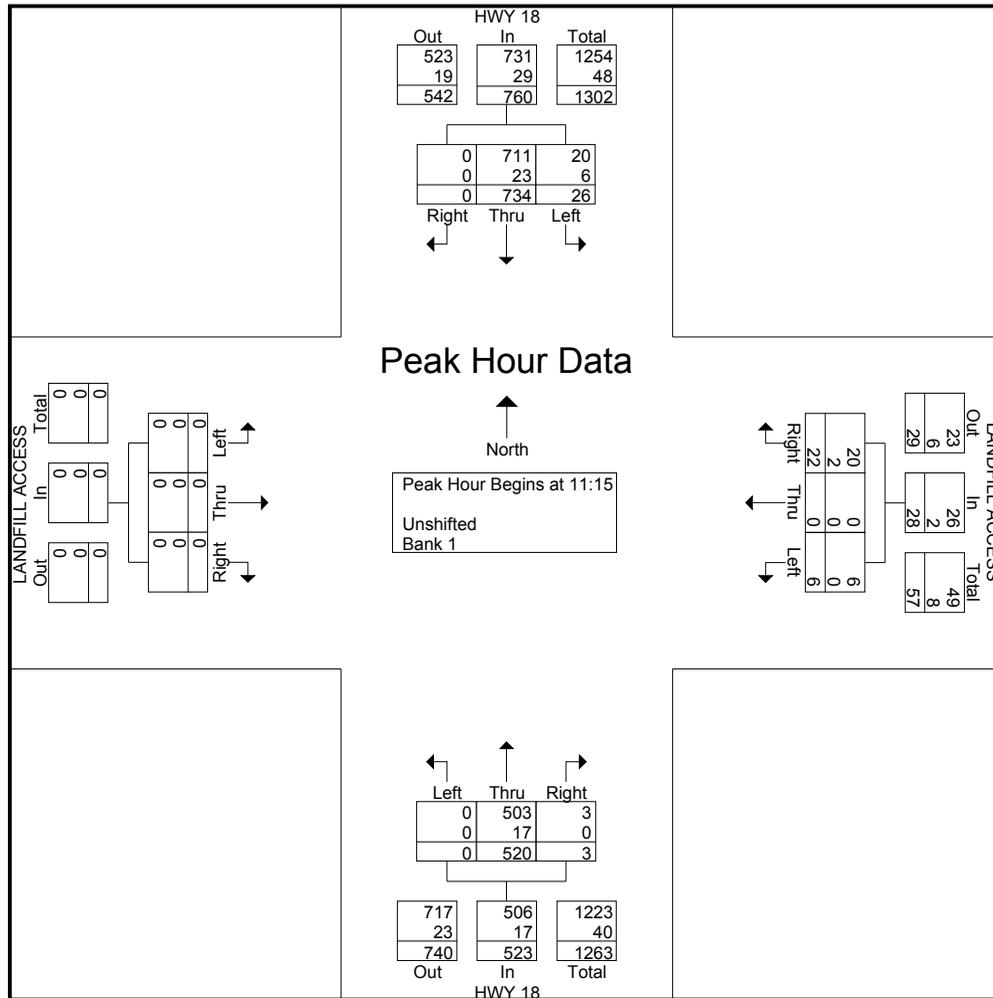
Start Time	HWY 18 Southbound					LANDFILL ACCESS Westbound					HWY 18 Northbound					LANDFILL ACCESS Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total				
06:00	1	38	0	0	39	0	0	1	0	1	0	21	0	0	21	0	0	0	0	0	0	0	61	61
06:15	6	27	0	0	33	1	0	0	0	1	0	25	1	0	26	0	0	0	0	0	0	0	60	60
06:30	2	30	0	0	32	1	0	0	0	1	0	42	0	0	42	0	0	0	0	0	0	0	75	75
06:45	11	37	0	0	48	0	0	0	0	0	0	48	0	0	48	0	0	0	0	0	0	0	96	96
Total	20	132	0	0	152	2	0	1	0	3	0	136	1	0	137	0	0	0	0	0	0	0	292	292
07:00	8	31	0	0	39	0	0	1	0	1	0	53	0	0	53	0	0	0	0	0	0	0	93	93
07:15	3	46	0	0	49	1	0	6	0	7	0	40	1	0	41	0	0	0	0	0	0	0	97	97
07:30	4	58	0	0	62	1	0	7	0	8	0	61	1	0	62	0	0	0	0	0	0	0	132	132
07:45	4	61	0	0	65	0	0	6	0	6	0	56	0	0	56	0	0	0	0	0	0	0	127	127
Total	19	196	0	0	215	2	0	20	0	22	0	210	2	0	212	0	0	0	0	0	0	0	449	449
08:00	3	55	0	0	58	0	0	3	0	3	0	61	1	0	62	0	0	0	0	0	0	0	123	123
08:15	2	74	0	0	76	0	0	4	0	4	0	64	1	0	65	0	0	0	0	0	0	0	145	145
08:30	3	79	0	0	82	1	0	4	0	5	0	89	0	0	89	0	0	0	0	0	0	0	176	176
08:45	4	101	0	0	105	0	0	2	0	2	0	91	0	0	91	0	0	0	0	0	0	0	198	198
Total	12	309	0	0	321	1	0	13	0	14	0	305	2	0	307	0	0	0	0	0	0	0	642	642
09:00	7	101	0	0	108	2	0	8	0	10	0	89	0	0	89	0	0	0	0	0	0	0	207	207
09:15	1	73	0	0	74	0	0	4	0	4	0	74	4	0	78	0	0	0	0	0	0	0	156	156
09:30	6	134	0	0	140	1	0	5	0	6	0	103	3	0	106	0	0	0	0	0	0	0	252	252
09:45	5	99	0	0	104	2	0	3	0	5	0	93	2	0	95	0	0	0	0	0	0	0	204	204
Total	19	407	0	0	426	5	0	20	0	25	0	359	9	0	368	0	0	0	0	0	0	0	819	819
10:00	4	136	0	0	140	2	0	10	0	12	0	90	0	0	90	0	0	0	0	0	0	0	242	242
10:15	6	162	0	0	168	1	0	6	0	7	0	119	2	0	121	0	0	0	0	0	0	0	296	296
10:30	4	172	0	0	176	3	0	5	0	8	0	115	1	0	116	0	0	0	0	0	0	0	300	300
10:45	7	161	0	0	168	0	0	3	0	3	0	111	0	0	111	0	0	0	0	0	0	0	282	282
Total	21	631	0	0	652	6	0	24	0	30	0	435	3	0	438	0	0	0	0	0	0	0	1120	1120
11:00	2	145	0	0	147	1	0	10	0	11	0	122	5	0	127	0	0	0	0	0	0	0	285	285
11:15	6	183	0	0	189	3	0	4	0	7	0	141	1	0	142	0	0	0	0	0	0	0	338	338
11:30	7	165	0	0	172	1	0	5	0	6	0	132	2	0	134	0	0	0	0	0	0	0	312	312
11:45	5	214	0	0	219	1	0	7	0	8	0	127	0	0	127	0	0	0	0	0	0	0	354	354
Total	20	707	0	0	727	6	0	26	0	32	0	522	8	0	530	0	0	0	0	0	0	0	1289	1289
12:00	8	172	0	0	180	1	0	6	0	7	0	120	0	0	120	0	0	0	0	0	0	0	307	307
12:15	6	154	0	0	160	0	0	5	0	5	0	123	1	0	124	0	0	0	0	0	0	0	289	289
12:30	4	190	0	0	194	1	0	7	0	8	0	121	1	0	122	0	0	0	0	0	0	0	324	324
12:45	5	154	0	0	159	0	0	8	0	8	0	141	0	0	141	0	0	0	0	0	0	0	308	308
Total	23	670	0	0	693	2	0	26	0	28	0	505	2	0	507	0	0	0	0	0	0	0	1228	1228
13:00	4	191	0	0	195	0	0	5	0	5	0	125	4	0	129	0	0	0	0	0	0	0	329	329
13:15	3	173	0	0	176	0	0	6	0	6	0	130	2	0	132	0	0	0	0	0	0	0	314	314
13:30	5	158	0	0	163	2	0	4	0	6	0	121	1	0	122	0	0	0	0	0	0	0	291	291
13:45	3	154	0	0	157	1	0	7	0	8	0	134	4	0	138	0	0	0	0	0	0	0	303	303
Total	15	676	0	0	691	3	0	22	0	25	0	510	11	0	521	0	0	0	0	0	0	0	1237	1237
14:00	3	176	0	0	179	0	0	4	0	4	0	117	0	0	117	0	0	0	0	0	0	0	300	300
14:15	4	181	0	0	185	3	0	4	0	7	0	90	0	0	90	0	0	0	0	0	0	0	282	282
14:30	6	142	0	0	148	1	0	4	0	5	0	83	2	0	85	0	0	0	0	0	0	0	238	238
14:45	3	152	0	0	155	1	0	6	0	7	0	143	0	0	143	0	0	0	0	0	0	0	305	305
Total	16	651	0	0	667	5	0	18	0	23	0	433	2	0	435	0	0	0	0	0	0	0	1125	1125
15:00	0	167	0	0	167	0	0	2	0	2	0	115	0	1	115	0	0	0	0	0	0	1	284	285
15:15	0	163	0	0	163	0	0	2	0	2	0	144	0	0	144	0	0	0	0	0	0	0	309	309
15:30	1	157	0	0	158	0	0	2	0	2	0	131	0	0	131	0	0	0	0	0	0	0	291	291
15:45	2	168	0	0	170	0	0	5	0	5	0	135	0	0	135	0	0	0	0	0	0	0	310	310
Total	3	655	0	0	658	0	0	11	0	11	0	525	0	1	525	0	0	0	0	0	0	1	1194	1195
Grand Total	168	5034	0	0	5202	32	0	181	0	213	0	3940	40	1	3980	0	0	0	0	0	0	1	9395	9396
Apprch %	3.2	96.8	0			15	0	85			0	99	1			0	0	0						
Total %	1.8	53.6	0		55.4	0.3	0	1.9		2.3	0	41.9	0.4		42.4	0	0	0			0	0	100	
Unshifted	128	4910	0		5038	30	0	141		171	0	3799	39		3839	0	0	0			0	0	0	9048
% Unshifted	76.2	97.5	0	0	96.8	93.8	0	77.9	0	80.3	0	96.4	97.5	100	96.4	0	0	0	0	0	0	0	0	96.3
Bank 1	40	124	0		164	2	0	40		42	0	141	1		142	0	0	0			0	0	0	348
% Bank 1	23.8	2.5	0	0	3.2	6.2	0	22.1	0	19.7	0	3.6	2.5	0	3.6	0	0	0			0	0	0	3.7



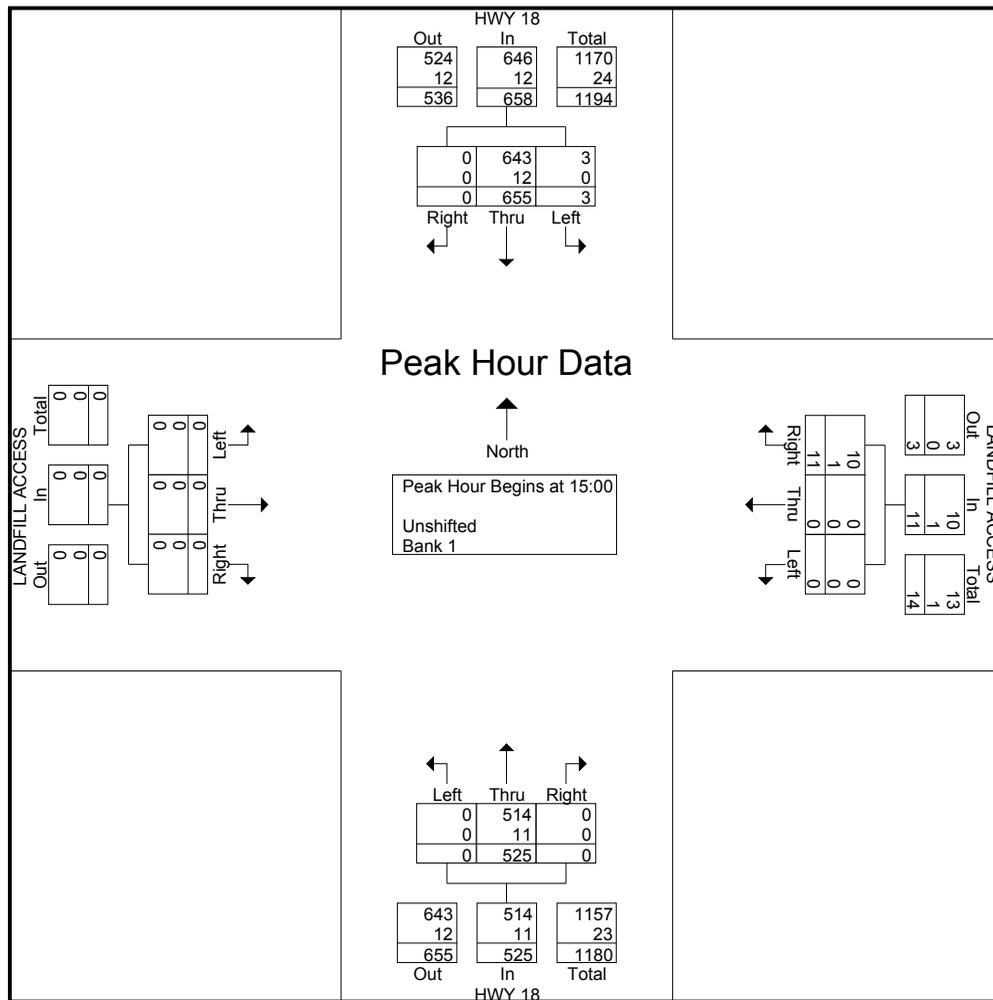
Start Time	HWY 18 Southbound				LANDFILL ACCESS Westbound				HWY 18 Northbound				LANDFILL ACCESS Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 06:00 to 09:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 09:00																	
09:00	7	101	0	108	2	0	8	10	0	89	0	89	0	0	0	0	207
09:15	1	73	0	74	0	0	4	4	0	74	4	78	0	0	0	0	156
09:30	6	134	0	140	1	0	5	6	0	103	3	106	0	0	0	0	252
09:45	5	99	0	104	2	0	3	5	0	93	2	95	0	0	0	0	204
Total Volume	19	407	0	426	5	0	20	25	0	359	9	368	0	0	0	0	819
% App. Total	4.5	95.5	0		20	0	80		0	97.6	2.4		0	0	0		
PHF	.679	.759	.000	.761	.625	.000	.625	.625	.000	.871	.563	.868	.000	.000	.000	.000	.813
Unshifted	15	389	0	404	4	0	15	19	0	340	8	348	0	0	0	0	771
% Unshifted	78.9	95.6	0	94.8	80.0	0	75.0	76.0	0	94.7	88.9	94.6	0	0	0	0	94.1
Bank 1	4	18	0	22	1	0	5	6	0	19	1	20	0	0	0	0	48
% Bank 1	21.1	4.4	0	5.2	20.0	0	25.0	24.0	0	5.3	11.1	5.4	0	0	0	0	5.9



Start Time	HWY 18 Southbound				LANDFILL ACCESS Westbound				HWY 18 Northbound				LANDFILL ACCESS Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:15																	
11:15	6	183	0	189	3	0	4	7	0	141	1	142	0	0	0	0	338
11:30	7	165	0	172	1	0	5	6	0	132	2	134	0	0	0	0	312
11:45	5	214	0	219	1	0	7	8	0	127	0	127	0	0	0	0	354
12:00	8	172	0	180	1	0	6	7	0	120	0	120	0	0	0	0	307
Total Volume	26	734	0	760	6	0	22	28	0	520	3	523	0	0	0	0	1311
% App. Total	3.4	96.6	0		21.4	0	78.6		0	99.4	0.6		0	0	0		
PHF	.813	.857	.000	.868	.500	.000	.786	.875	.000	.922	.375	.921	.000	.000	.000	.000	.926
Unshifted	20	711	0	731	6	0	20	26	0	503	3	506	0	0	0	0	1263
% Unshifted	76.9	96.9	0	96.2	100	0	90.9	92.9	0	96.7	100	96.7	0	0	0	0	96.3
Bank 1	6	23	0	29	0	0	2	2	0	17	0	17	0	0	0	0	48
% Bank 1	23.1	3.1	0	3.8	0	0	9.1	7.1	0	3.3	0	3.3	0	0	0	0	3.7

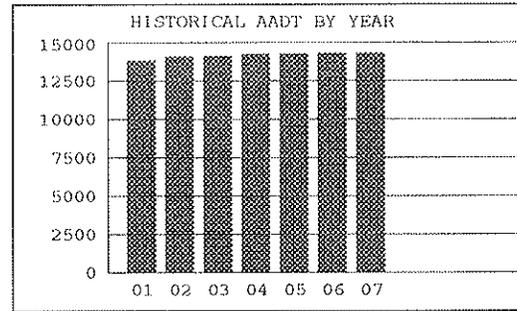


Start Time	HWY 18 Southbound				LANDFILL ACCESS Westbound				HWY 18 Northbound				LANDFILL ACCESS Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 14:00 to 15:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 15:00																	
15:00	0	167	0	167	0	0	2	2	0	115	0	115	0	0	0	0	284
15:15	0	163	0	163	0	0	2	2	0	144	0	144	0	0	0	0	309
15:30	1	157	0	158	0	0	2	2	0	131	0	131	0	0	0	0	291
15:45	2	168	0	170	0	0	5	5	0	135	0	135	0	0	0	0	310
Total Volume	3	655	0	658	0	0	11	11	0	525	0	525	0	0	0	0	1194
% App. Total	0.5	99.5	0	99.8	0	0	100	99.9	0	100	0	99.9	0	0	0	0	98.0
PHF	.375	.975	.000	.968	.000	.000	.550	.550	.000	.911	.000	.911	.000	.000	.000	.000	.963
Unshifted	3	643	0	646	0	0	10	10	0	514	0	514	0	0	0	0	1170
% Unshifted	100	98.2	0	98.2	0	0	90.9	90.9	0	97.9	0	97.9	0	0	0	0	98.0
Bank 1	0	12	0	12	0	0	1	1	0	11	0	11	0	0	0	0	24
% Bank 1	0	1.8	0	1.8	0	0	9.1	9.1	0	2.1	0	2.1	0	0	0	0	2.0



HISTORICAL TRAFFIC DATA

Year	Average Daily Traffic	Percent of ADT				
		Max Day	Max Hour	10TH Hour	20TH Hour	30TH Hour
2001	13844	137	11.4	10.4	10.2	10.0
2002	14083	135	10.7	10.3	10.1	10.0
2003	14113	134	10.9	10.3	10.1	9.9
2004	14237	141	10.8	10.3	10.1	10.0
2005	14230	135	10.6	10.0	9.9	9.7
2006	14298	***	****	****	****	****
2007	14283	137	10.7	10.2	9.9	9.8



2007 TRAFFIC DATA

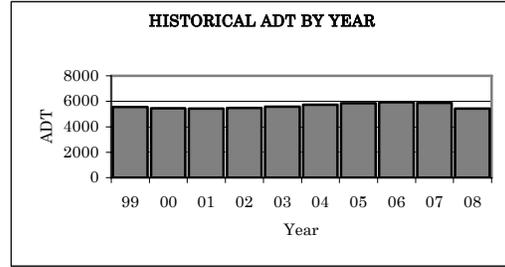
Month	Average Weekday Traffic	Percent of ADT	Average Daily Traffic	Percent of ADT	Classification Breakdown of ADT	
					Classification	Percent of ADT
January	11362	80	11931	84	Passenger Cars.....	60.5
February	12910	90	13675	96	Other 2 axle 4 tire vehicles.....	29.1
March	13837	97	14471	101	Single Unit 2 axle 6 tire.....	2.3
April	13566	95	14320	100	Single Unit 3 axle.....	1.8
May	13610	95	14454	101	Single Unit 4 axle or more.....	0.2
June	14399	101	15016	105	Single Trailer Truck 4 axle or less...	0.4
July	15648	110	16357	115	Single Trailer Truck 5 axle.....	2.4
August	15543	109	16458	115	Single Trailer Truck 6 axle or more...	1.3
September	14687	103	15418	108	Dbl-Trailer Truck 5 axle or less.....	0.0
October	13596	95	14242	100	Dbl-Trailer Truck 6 axle.....	0.1
November	12447	87	13010	91	Dbl-Trailer Truck 7 axle or more.....	0.6
December	11771	82	12040	84	Triple Trailer Trucks.....	0.0
					Buses.....	0.6
					Motorcycles & Scooters.....	0.8

Location: OR99W; MP 47.15; PACIFIC HIGHWAY WEST NO. 91; 0.37 mile north of Yamhill-Polk County Line

Site Name: Amity (36-005)
Installed: September, 1956

HISTORICAL TRAFFIC DATA

Year	Average Daily Traffic	Percent of AADT				
		Max Day	Max Hour	10TH Hour	20TH Hour	30TH Hour
1999	5566	***	***	***	***	***
2000	5451	140	12.1	11.2	11.0	10.9
2001	5425	131	13.1	11.2	10.7	10.5
2002	5483	137	14.1	12.1	11.3	11.1
2003	5571	140	13.2	11.5	11.0	10.9
2004	5731	132	13.3	11.4	11.1	10.9
2005	5858	***	***	***	***	***
2006	5940	137	13.2	11.5	11.1	10.7
2007	5874	132	13.2	11.3	10.9	10.7
2008	5433	131	12.9	11.8	11.2	11.0



2008 TRAFFIC DATA

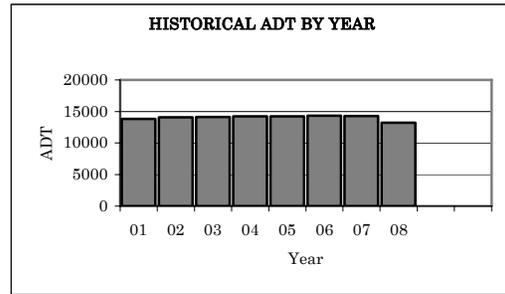
Month	Average Weekday Traffic	Percent of AADT	Average Daily Traffic	Percent of AADT	Classification Breakdown	
					Motorcycles	Percent of AADT
January	5000	92	4900	90	Motorcycles	1.0
February	5700	105	5500	101	Passenger cars	58.3
March	5900	109	5600	103	Light Trucks	29.5
April	5725	105	5634	104	Buses	0.3
May	5770	106	5712	105	Single unit trucks (2 axles)	2.6
June	5786	106	5642	104	Single unit trucks (3 axles)	2.2
July	5963	110	5631	104	Single unit trucks (4 or more axles)	0.0
August	5989	110	5759	106	Single trailer trucks (4 or less axles)	0.7
September	5749	106	5753	106	Single trailer trucks (5 axles)	4.8
October	5818	107	5726	105	Single trailer trucks (6 or more axles)	0.3
November	5505	101	5393	99	Multi trailer trucks (5 or less axles)	0.0
December	4139	76	3946	73	Multi trailer trucks (6 axles)	0.0
					Multi trailer trucks (7 or more axles)	0.4

Location: OR18; MP 41.00; SALMON RIVER HIGHWAY NO. 39; 3.36 miles south of Pacific Highway West No. 91 (OR99W)

Site Name: Salmon River (36-006)
Installed: July, 2000

HISTORICAL TRAFFIC DATA

Year	Average Daily Traffic	Percent of AADT				
		Max Day	Max Hour	10TH Hour	20TH Hour	30TH Hour
2001	13844	137	11.4	10.4	10.2	10.0
2002	14083	135	10.7	10.3	10.1	10.0
2003	14113	134	10.9	10.3	10.1	9.9
2004	14237	141	10.8	10.3	10.1	10.0
2005	14230	135	10.6	10.0	9.9	9.7
2006	14298	***	***	***	***	***
2007	14283	137	10.7	10.2	9.9	9.8
2008	13234	143	11.8	10.5	10.3	10.1



2008 TRAFFIC DATA

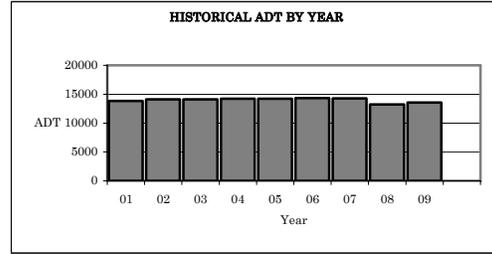
Month	Average Weekday Traffic	Percent of AADT	Average Daily Traffic	Percent of AADT	Classification Breakdown	
					Motorcycles	Percent of AADT
January	11423	86	11712	88	Motorcycles	0.8
February	12590	95	13298	100	Passenger cars	60.5
March	12900	97	13340	101	Light Trucks	29.1
April	12691	96	13344	101	Buses	0.6
May	13144	99	14046	106	Single unit trucks (2 axles)	2.3
June	13199	100	13981	106	Single unit trucks (3 axles)	1.8
July	14213	107	14789	112	Single unit trucks (4 or more axles)	0.2
August	14413	109	15298	116	Single trailer trucks (4 or less axles)	0.4
September	13520	102	14203	107	Single trailer trucks (5 axles)	2.4
October	12732	96	13341	101	Single trailer trucks (6 or more axles)	1.3
November	12093	91	12509	95	Multi trailer trucks (5 or less axles)	0.0
December	9314	70	8952	68	Multi trailer trucks (6 axles)	0.1
					Multi trailer trucks (7 or more axles)	0.6

Location: OR18; MP 41.00; SALMON RIVER HIGHWAY NO. 39; 3.36 miles south of Pacific Highway West No. 91 (OR99W)

Site Name: Salmon River (36-006)
Installed: July, 2000

HISTORICAL TRAFFIC DATA

Year	Average Daily Traffic	Percent of ADT				
		Max Day	Max Hour	10TH Hour	20TH Hour	30TH Hour
2001	13844	137	11.4	10.4	10.2	10.0
2002	14083	135	10.7	10.3	10.1	10.0
2003	14113	134	10.9	10.3	10.1	9.9
2004	14237	141	10.8	10.3	10.1	10.0
2005	14230	135	10.6	10.0	9.9	9.7
2006	14298	***	***	***	***	***
2007	14283	137	10.7	10.2	9.9	9.8
2008	13234	143	11.8	10.5	10.3	10.1
2009	13550	136	11.2	10.5	10.2	10.1



2009 TRAFFIC DATA

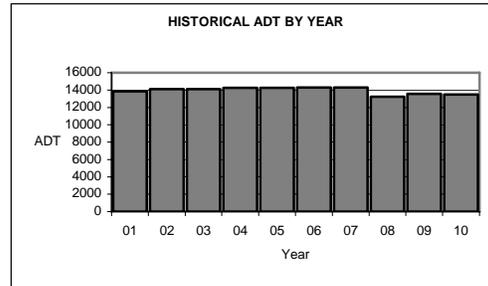
Month	Average Weekday Traffic	Percent of ADT	Average Daily Traffic	Percent of ADT	Classification Breakdown	
					Motorcycles	Percent of ADT
January	11482	85	11842	87	Motorcycles	0.04
February	12161	90	12917	95	Passenger cars	76.73
March	12630	93	13290	98	Light Trucks	17.22
April	12759	94	13580	100	Buses	0.56
May	13034	96	14054	104	Single unit trucks (2 axles)	1.20
June	13603	100	14348	106	Single unit trucks (3 axles)	0.83
July	14952	110	15605	115	Single unit trucks (4 or more axles)	0.01
August	14781	109	15562	115	Single trailer trucks (4 or less axles)	0.39
September	13715	101	14496	107	Single trailer trucks (5 axles)	2.23
October	12697	94	13241	98	Single trailer trucks (6 or more axles)	0.48
November	12034	89	12257	90	Multi trailer trucks (5 or less axles)	0.01
December	11592	86	11407	84	Multi trailer trucks (6 axles)	0.01
					Multi trailer trucks (7 or more axles)	0.29

Location: OR18; MP 41.00; SALMON RIVER HIGHWAY NO. 39; 3.36 miles south of Pacific Highway West No. 91 (OR99W)

Site Name: Salmon River (36-006)
Installed: July, 2000

HISTORICAL TRAFFIC DATA

Year	Percent of ADT					
	Average Daily Traffic	Max Day	Max Hour	10TH Hour	20TH Hour	30TH Hour
2001	13844	137	11.4	10.4	10.2	10.0
2002	14083	135	10.7	10.3	10.1	10.0
2003	14113	134	10.9	10.3	10.1	9.9
2004	14237	141	10.8	10.3	10.1	10.0
2005	14230	135	10.6	10.0	9.9	9.7
2006	14298	***	***	***	***	***
2007	14283	137	10.7	10.2	9.9	9.8
2008	13234	143	11.8	10.5	10.3	10.1
2009	13550	136	11.2	10.5	10.2	10.1
2010	13487	141	11.4	10.8	10.4	10.3



2010 TRAFFIC DATA

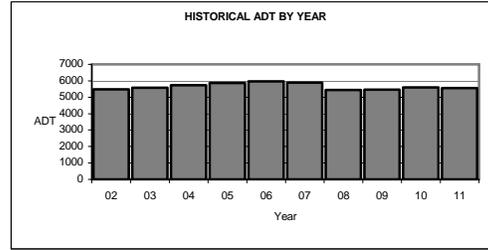
Month	Percent of ADT		Percent of ADT		Classification Breakdown	Percent of ADT
	Average Weekday Traffic	Percent of ADT	Average Daily Traffic	Percent of ADT		
January	11348	84	11690	87	Motorcycles	0.04
February	12127	90	13160	98	Passenger cars	76.73
March	12820	95	13676	101	Light Trucks	17.22
April	12377	92	13183	98	Buses	0.56
May	12725	94	13796	102	Single unit trucks (2 axles)	1.20
June	13421	100	14297	106	Single unit trucks (3 axles)	0.83
July	14749	109	15502	115	Single unit trucks (4 or more axles)	0.01
August	14626	108	15677	116	Single trailer trucks (4 or less axles)	0.39
September	13336	99	14224	105	Single trailer trucks (5 axles)	2.23
October	12585	93	13234	98	Single trailer trucks (6 or more axles)	0.48
November	11421	85	11893	88	Multi trailer trucks (5 or less axles)	0.01
December	11514	85	11515	85	Multi trailer trucks (6 axles)	0.01
					Multi trailer trucks (7 or more axles)	0.29

Location: OR99W; MP 47.45; PACIFIC HIGHWAY WEST NO. 91; 0.07 mile north of Yamhill-Polk County Line

Site Name: Amity (36-005)
Installed: September, 1956

HISTORICAL TRAFFIC DATA

Year	ADT	Percent of ADT				
		Max Day	Max Hour	10TH Hour	20TH Hour	30TH Hour
2002	5483	137	14.1	12.1	11.3	11.1
2003	5571	140	13.2	11.5	11.0	10.9
2004	5731	132	13.3	11.4	11.1	10.9
2005	5858	***	***	***	***	***
2006	5957	137	13.2	11.5	11.1	10.7
2007	5874	132	13.2	11.3	10.9	10.7
2008	5433	131	12.9	11.8	11.2	11.0
2009	5452	132	14.5	11.8	11.3	11.0
2010	5594	135	14.7	11.8	11.2	11.0
2011	5553	135	14.5	11.8	11.3	11.1



2011 TRAFFIC DATA

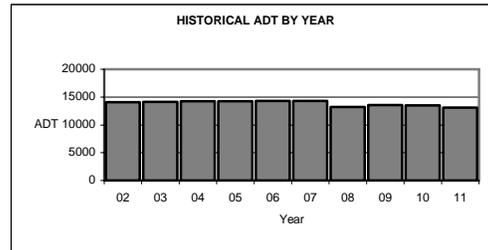
	Average Weekday Traffic	Percent of ADT	Average Daily Traffic	Percent of ADT	Classification Breakdown	
					Motorcycles	Percent of ADT
January	5305	96	5024	90	Motorcycles	0.67
February	5329	96	5179	93	Passenger cars	60.93
March	5502	99	5347	96	Light Trucks	31.34
April	5763	104	5647	102	Buses	0.29
May	5742	103	5672	102	Single unit trucks (2 axles)	2.81
June	5943	107	5888	106	Single unit trucks (3 axles)	0.74
July	5848	105	5702	103	Single unit trucks (4 or more axles)	0.10
August	6127	110	5919	107	Single trailer trucks (4 or less axles)	0.36
September	5866	106	5871	106	Single trailer trucks (5 axles)	1.38
October	5920	107	5838	105	Single trailer trucks (6 or more axles)	0.89
November	5757	104	5590	101	Multi trailer trucks (5 or less axles)	0.02
December	5173	93	4958	89	Multi trailer trucks (6 axles)	0.01
					Multi trailer trucks (7 or more axles)	0.46

Location: OR18; MP 41.00; SALMON RIVER HIGHWAY NO. 39; 3.36 miles south of Pacific Highway West No. 91 (OR99W)

Site Name: Salmon River (36-006)
Installed: July, 2000

HISTORICAL TRAFFIC DATA

Year	ADT	Percent of ADT				
		Max Day	Max Hour	10TH Hour	20TH Hour	30TH Hour
2002	14083	135	10.7	10.3	10.1	10.0
2003	14113	134	10.9	10.3	10.1	9.9
2004	14237	141	10.8	10.3	10.1	10.0
2005	14230	135	10.6	10.0	9.9	9.7
2006	14298	***	***	***	***	***
2007	14283	137	10.7	10.2	9.9	9.8
2008	13234	143	11.8	10.5	10.3	10.1
2009	13550	136	11.2	10.5	10.2	10.1
2010	13487	141	11.4	10.8	10.4	10.3
2011	13097	138	11.8	10.9	10.7	10.5



2011 TRAFFIC DATA

	Average Weekday Traffic	Percent of ADT	Average Daily Traffic	Percent of ADT	Classification Breakdown	
					Motorcycles	Percent of ADT
January	11157	85	11650	89	Motorcycles	0.04
February	11508	88	12194	93	Passenger cars	76.73
March	12118	93	12727	97	Light Trucks	17.23
April	12014	92	12780	98	Buses	0.56
May	12423	95	13290	101	Single unit trucks (2 axles)	1.20
June	12814	98	13747	105	Single unit trucks (3 axles)	0.83
July	14105	108	14931	114	Single unit trucks (4 or more axles)	0.01
August	14262	109	15415	118	Single trailer trucks (4 or less axles)	0.39
September	13300	102	14354	110	Single trailer trucks (5 axles)	2.23
October	12266	94	12893	98	Single trailer trucks (6 or more axles)	0.48
November	11352	87	11749	90	Multi trailer trucks (5 or less axles)	0.01
December	11222	86	11435	87	Multi trailer trucks (6 axles)	0.00
					Multi trailer trucks (7 or more axles)	0.29

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	Will Farley			Intersection				
Agency/Co.	Lancaster Engineering			Jurisdiction	ODOT			
Date Performed	8/5/2013			Analysis Year	2013			
Analysis Time Period								
Project Description <i>Riverbend Landfill</i>								
East/West Street: <i>Oregon Highway 18</i>				North/South Street: <i>Access</i>				
Intersection Orientation: <i>East-West</i>				Study Period (hrs): <i>0.25</i>				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)		361	0	31	286			
Peak-Hour Factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92		
Hourly Flow Rate, HFR (veh/h)	0	392	0	33	310	0		
Percent Heavy Vehicles	0	--	--	19	--	--		
Median Type	Undivided							
RT Channelized			0				0	
Lanes	0	1	1	1	1		0	
Configuration		T	R	L	T			
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	2		18					
Peak-Hour Factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92		
Hourly Flow Rate, HFR (veh/h)	2	0	19	0	0	0		
Percent Heavy Vehicles	75	0	75	0	0	0		
Percent Grade (%)		0			0			
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0				0	
Lanes	0	0	0	0	0		0	
Configuration		LR						
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		L		LR				
v (veh/h)		33		21				
C (m) (veh/h)		1080		481				
v/c		0.03		0.04				
95% queue length		0.09		0.14				
Control Delay (s/veh)		8.4		12.8				
LOS		A		B				
Approach Delay (s/veh)	--	--	12.8					
Approach LOS	--	--	B					

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	Will Farley			Intersection				
Agency/Co.	Lancaster Engineering			Jurisdiction	ODOT			
Date Performed	8/5/2013			Analysis Year	2013			
Analysis Time Period	Existing PM Peak Hour							
Project Description <i>Riverbend Landfill</i>								
East/West Street: <i>Oregon Highway 18</i>				North/South Street: <i>Access</i>				
Intersection Orientation: <i>East-West</i>				Study Period (hrs): <i>0.25</i>				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)		520	1	3	620			
Peak-Hour Factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93		
Hourly Flow Rate, HFR (veh/h)	0	559	1	3	666	0		
Percent Heavy Vehicles	0	--	--	3	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	1	1	1	0		
Configuration		T	R	L	T			
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	2		29					
Peak-Hour Factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93		
Hourly Flow Rate, HFR (veh/h)	2	0	31	0	0	0		
Percent Heavy Vehicles	13	0	13	0	0	0		
Percent Grade (%)		0			0			
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	0	0	0	0		
Configuration		LR						
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		L		LR				
v (veh/h)		3		33				
C (m) (veh/h)		1006		459				
v/c		0.00		0.07				
95% queue length		0.01		0.23				
Control Delay (s/veh)		8.6		13.4				
LOS		A		B				
Approach Delay (s/veh)	--	--	13.4					
Approach LOS	--	--	B					

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	Will Farley			Intersection				
Agency/Co.	Lancaster Engineering			Jurisdiction	ODOT			
Date Performed	8/5/2013			Analysis Year	2013			
Analysis Time Period	Existing Saturday Peak Hour							
Project Description <i>Riverbend Landfill</i>								
East/West Street: <i>Oregon Highway 18</i>				North/South Street: <i>Access</i>				
Intersection Orientation: <i>East-West</i>				Study Period (hrs): <i>0.25</i>				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)		520	3	26	734			
Peak-Hour Factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93		
Hourly Flow Rate, HFR (veh/h)	0	559	3	27	789	0		
Percent Heavy Vehicles	0	--	--	4	--	--		
Median Type	<i>Undivided</i>							
RT Channelized			0			0		
Lanes	0	1	1	1	1	0		
Configuration		T	R	L	T			
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	6		22					
Peak-Hour Factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93		
Hourly Flow Rate, HFR (veh/h)	6	0	23	0	0	0		
Percent Heavy Vehicles	7	0	7	0	0	0		
Percent Grade (%)		0			0			
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	0	0	0	0		
Configuration		LR						
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		L		LR				
v (veh/h)		27		29				
C (m) (veh/h)		999		340				
v/c		0.03		0.09				
95% queue length		0.08		0.28				
Control Delay (s/veh)		8.7		16.6				
LOS		A		C				
Approach Delay (s/veh)	--	--	16.6					
Approach LOS	--	--	C					

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	Will Farley			Intersection				
Agency/Co.	Lancaster Engineering			Jurisdiction	ODOT			
Date Performed				Analysis Year	2030			
Analysis Time Period	Background AM Peak Hour							
Project Description <i>Riverbend Landfill</i>								
East/West Street: <i>Oregon Highway 18</i>				North/South Street: <i>Access</i>				
Intersection Orientation: <i>East-West</i>				Study Period (hrs): <i>0.25</i>				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)		468	0	31	371			
Peak-Hour Factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92		
Hourly Flow Rate, HFR (veh/h)	0	508	0	33	403	0		
Percent Heavy Vehicles	0	--	--	19	--	--		
Median Type	Undivided							
RT Channelized			0				0	
Lanes	0	1	1	1	1		0	
Configuration		T	R	L	T			
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	2		18					
Peak-Hour Factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92		
Hourly Flow Rate, HFR (veh/h)	2	0	19	0	0	0		
Percent Heavy Vehicles	75	0	75	0	0	0		
Percent Grade (%)		0			0			
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0				0	
Lanes	0	0	0	0	0		0	
Configuration		LR						
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		L		LR				
v (veh/h)		33		21				
C (m) (veh/h)		975		398				
v/c		0.03		0.05				
95% queue length		0.11		0.17				
Control Delay (s/veh)		8.8		14.5				
LOS		A		B				
Approach Delay (s/veh)	--	--		14.5				
Approach LOS	--	--		B				

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	Will Farley			Intersection				
Agency/Co.	Lancaster Engineering			Jurisdiction	ODOT			
Date Performed	8/15/2013			Analysis Year	2030			
Analysis Time Period	Background PM Peak Hour							
Project Description <i>Riverbend Landfill</i>								
East/West Street: <i>Oregon Highway 18</i>				North/South Street: <i>Access</i>				
Intersection Orientation: <i>East-West</i>				Study Period (hrs): <i>0.25</i>				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)		674	1	3	803			
Peak-Hour Factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93		
Hourly Flow Rate, HFR (veh/h)	0	724	1	3	863	0		
Percent Heavy Vehicles	0	--	--	3	--	--		
Median Type	<i>Undivided</i>							
RT Channelized			0			0		
Lanes	0	1	1	1	1	0		
Configuration		T	R	L	T			
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	2		29					
Peak-Hour Factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93		
Hourly Flow Rate, HFR (veh/h)	2	0	31	0	0	0		
Percent Heavy Vehicles	13	0	13	0	0	0		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	0	0	0	0		
Configuration		LR						
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		L		LR				
v (veh/h)		3		33				
C (m) (veh/h)		873		351				
v/c		0.00		0.09				
95% queue length		0.01		0.31				
Control Delay (s/veh)		9.1		16.3				
LOS		A		C				
Approach Delay (s/veh)	--	--	16.3					
Approach LOS	--	--	C					

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	Will Farley			Intersection				
Agency/Co.	Lancaster Engineering			Jurisdiction	ODOT			
Date Performed	8/15/2013			Analysis Year	2030			
Analysis Time Period	Background Saturday Peak Hour							
Project Description <i>Riverbend Landfill</i>								
East/West Street: <i>Oregon Highway 18</i>				North/South Street: <i>Access</i>				
Intersection Orientation: <i>East-West</i>				Study Period (hrs): <i>0.25</i>				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)		684	3	26	965			
Peak-Hour Factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93		
Hourly Flow Rate, HFR (veh/h)	0	735	3	27	1037	0		
Percent Heavy Vehicles	0	--	--	4	--	--		
Median Type	Undivided							
RT Channelized			0				0	
Lanes	0	1	1	1	1		0	
Configuration		T	R	L	T			
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	6		22					
Peak-Hour Factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93		
Hourly Flow Rate, HFR (veh/h)	6	0	23	0	0	0		
Percent Heavy Vehicles	7	0	7	0	0	0		
Percent Grade (%)		0			0			
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0				0	
Lanes	0	0	0	0	0		0	
Configuration		LR						
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		L		LR				
v (veh/h)		27		29				
C (m) (veh/h)		859		220				
v/c		0.03		0.13				
95% queue length		0.10		0.45				
Control Delay (s/veh)		9.3		23.8				
LOS		A		C				
Approach Delay (s/veh)	--	--		23.8				
Approach LOS	--	--		C				

TWO-WAY STOP CONTROL SUMMARY							
General Information				Site Information			
Analyst	Will Farley			Intersection			
Agency/Co.	Lancaster Engineering			Jurisdiction	ODOT		
Date Performed	8/15/2013			Analysis Year	2030		
Analysis Time Period	Site AM Peak Hour						
Project Description <i>Riverbend Landfill</i>							
East/West Street: <i>Oregon Highway 18</i>				North/South Street: <i>Access</i>			
Intersection Orientation: <i>East-West</i>				Study Period (hrs): <i>0.25</i>			
Vehicle Volumes and Adjustments							
Major Street		Eastbound			Westbound		
Movement	1	2	3	4	5	6	
	L	T	R	L	T	R	
Volume (veh/h)		468	3	57	371		
Peak-Hour Factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly Flow Rate, HFR (veh/h)	0	508	3	61	403	0	
Percent Heavy Vehicles	0	--	--	19	--	--	
Median Type	Undivided						
RT Channelized			0			0	
Lanes	0	1	1	1	1	0	
Configuration		T	R	L	T		
Upstream Signal		0			0		
Minor Street		Northbound			Southbound		
Movement	7	8	9	10	11	12	
	L	T	R	L	T	R	
Volume (veh/h)	4		40				
Peak-Hour Factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly Flow Rate, HFR (veh/h)	4	0	43	0	0	0	
Percent Heavy Vehicles	75	0	75	0	0	0	
Percent Grade (%)		0			0		
Flared Approach		N			N		
Storage		0			0		
RT Channelized			0			0	
Lanes	0	0	0	0	0	0	
Configuration		LR					
Delay, Queue Length, and Level of Service							
Approach	Eastbound	Westbound	Northbound			Southbound	
Movement	1	4	7	8	9	10	11
Lane Configuration		L		LR			
v (veh/h)		61		47			
C (m) (veh/h)		973		394			
v/c		0.06		0.12			
95% queue length		0.20		0.40			
Control Delay (s/veh)		8.9		15.4			
LOS		A		C			
Approach Delay (s/veh)	--	--	15.4				
Approach LOS	--	--	C				

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	Will Farley			Intersection				
Agency/Co.	Lancaster Engineering			Jurisdiction	ODOT			
Date Performed	8/15/2013			Analysis Year	2030			
Analysis Time Period	Site PM Peak Hour							
Project Description <i>Riverbend Landfill</i>								
East/West Street: <i>Oregon Highway 18</i>				North/South Street: <i>Access</i>				
Intersection Orientation: <i>East-West</i>				Study Period (hrs): <i>0.25</i>				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)		674	3	20	803			
Peak-Hour Factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93		
Hourly Flow Rate, HFR (veh/h)	0	724	3	21	863	0		
Percent Heavy Vehicles	0	--	--	3	--	--		
Median Type	Undivided							
RT Channelized			0				0	
Lanes	0	1	1	1	1		0	
Configuration		T	R	L	T			
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	5		55					
Peak-Hour Factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93		
Hourly Flow Rate, HFR (veh/h)	5	0	59	0	0	0		
Percent Heavy Vehicles	13	0	13	0	0	0		
Percent Grade (%)		0			0			
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0				0	
Lanes	0	0	0	0	0		0	
Configuration		LR						
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		L		LR				
v (veh/h)		21		64				
C (m) (veh/h)		872		331				
v/c		0.02		0.19				
95% queue length		0.07		0.70				
Control Delay (s/veh)		9.2		18.5				
LOS		A		C				
Approach Delay (s/veh)	--	--	18.5					
Approach LOS	--	--	C					

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	Will Farley			Intersection				
Agency/Co.	Lancaster Engineering			Jurisdiction	ODOT			
Date Performed	8/15/2013			Analysis Year	2030			
Analysis Time Period	Site Saturday Peak Hour							
Project Description <i>Riverbend Landfill</i>								
East/West Street: <i>Oregon Highway 18</i>				North/South Street: <i>Access</i>				
Intersection Orientation: <i>East-West</i>				Study Period (hrs): <i>0.25</i>				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)		684	6	52	965			
Peak-Hour Factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93		
Hourly Flow Rate, HFR (veh/h)	0	735	6	55	1037	0		
Percent Heavy Vehicles	0	--	--	4	--	--		
Median Type	Undivided							
RT Channelized			0				0	
Lanes	0	1	1	1	1		0	
Configuration		T	R	L	T			
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	9		47					
Peak-Hour Factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93		
Hourly Flow Rate, HFR (veh/h)	9	0	50	0	0	0		
Percent Heavy Vehicles	7	0	7	0	0	0		
Percent Grade (%)		0			0			
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0				0	
Lanes	0	0	0	0	0		0	
Configuration		LR						
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		L		LR				
v (veh/h)		55		59				
C (m) (veh/h)		857		238				
v/c		0.06		0.25				
95% queue length		0.21		0.95				
Control Delay (s/veh)		9.5		25.0				
LOS		A		D				
Approach Delay (s/veh)	--	--	25.0					
Approach LOS	--	--	D					

OREGON DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
CONTINUOUS SYSTEM CRASH LISTING

039: SALMON RIVER

Highway 039 ALL ROAD TYPES, MP 41.0 to 42.0 01/01/2008 to 12/31/2012, Both Add and Non-Add mileage

Total crash records: 8

SER#	DATE	COUNTY	RD# FC	INT-TYPE	SPCL USE	A	S	INJ	G	E	LICNS	PED	ACT	EVENT	CAUSE										
INVEST	D C S L K TIME	URBAN AREA	MILEPNT	SECOND STREET	LOCTN	(#LANES)	CONTL	DRVWY	LIGHT	SVRTY	V#	TYPE	TO	P#	TYPE	SVRTY	E	X	RES	LOC	ERROR	ACT	EVENT	CAUSE	
01020	Y N N N N 11/22/2010	YAMHILL	1 02	STRGHT		N		Y	SLT	FIX OBJ	01	NONE 0	STRGHT										043,010,124	01	
COUNTY	MO		MN 0	UN	(NONE)	NONE		N	ICE	FIX		PRVTE	W -E									000	043,010,124	00	
	4P		41.00	01				N	DUSK	PDO		PSNGR CAR		01	DRVR	NONE	52	F	OR-Y		047	017		01	
						(02)																			
00521	N Y Y N N 07/21/2009	YAMHILL	1 02	STRGHT		N		N	CLR	S-1STOP	01	NONE 1	STRGHT											07	
STATE	TU		MN 0	UN	(NONE)	UNKNOWN		N	DRY	REAR		PRVTE	W -E									000		00	
	2P		41.00	03				N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	63	M	OR-Y		026	000		07	
						(02)																			
											02	NONE 0	STOP										011		00
												PRVTE	W -E										000		00
												PSNGR CAR		01	DRVR	INJC	63	M	OR-Y		000	000			00
											03	NONE 0	STOP										011		00
												PRVTE	W -E										000		00
												PSNGR CAR		01	DRVR	INJC	55	M	OR-Y		000	000			00
00757	N N N 09/18/2011	YAMHILL	1 02	STRGHT		N		N	RAIN	S-1STOP	01	NONE 0	STRGHT											07	
NONE	SU		MN 0	UN	(NONE)	UNKNOWN		N	WET	REAR		PRVTE	W -E									000		00	
	12P		41.00	03				N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	16	F	OR-Y		026	000		07	
						(02)																			
											02	NONE 0	STOP										011		00
												PRVTE	W -E										000		00
												PSNGR CAR		01	DRVR	NONE	18	M	OR-Y		000	000			00
01172	Y N N N N 12/17/2012	YAMHILL	1 02	STRGHT		N		Y	RAIN	FIX OBJ	01	NONE 0	STRGHT											124,079,053	01
STATE	MO		MN 0	UN	(NONE)	NONE		N	WET	FIX		PRVTE	W -E									000		124,079,053	00
	1A		41.00	06				N	DARK	PDO		PSNGR CAR		01	DRVR	NONE	62	F	OR-Y		047,080,081	017			01
						(02)																			
00681	N N N N N 08/23/2010	YAMHILL	1 02	STRGHT		N		N	CLR	S-1STOP	01	NONE 0	STRGHT												07
STATE	MO		MN 0	UN	(NONE)	NONE		N	DRY	REAR		PRVTE	W -E									000		00	
	5P		41.00	08				N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	41	F	OR-Y		026	000		07	
						(02)																			
											01	NONE 0	STRGHT										000		00
												PRVTE	W -E										000		00
												PSNGR CAR		02	PSNG	NO<5	04	M				000	000		00
											02	NONE 0	STOP										011		00
												PRVTE	W -E										000		00
												PSNGR CAR		01	DRVR	INJC	25	M	OR-Y		000	000			00
											02	NONE 0	STOP										011		00
												PRVTE	W -E										000		00
												PSNGR CAR		02	PSNG	INJC	27	F				000	000		00
00378	N N N 04/01/2008	YAMHILL	1 02	STRGHT		N		N	CLR	S-STRGHT	01	NONE 0	STRGHT												07
NONE	TU		MN 0	UN	(NONE)	UNKNOWN		N	DRY	REAR		PRVTE	W -E									000		00	
	4P		41.54	03				N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	34	F	OR-Y		042	000		07	
						(02)																			
											02	NONE 0	STRGHT												

Disclaimer: The information contained in this report is compiled from individual driver and police crash reports submitted to the Oregon Department of Transportation as required in ORS 811.720. The Crash Analysis and Reporting Unit is committed to providing the highest quality crash data to customers. However, because submittal of crash report forms is the responsibility of the individual driver, the Crash Analysis and Reporting Unit can not guarantee that all qualifying crashes are represented nor can assurances be made that all details pertaining to a single crash are accurate. Note: Legislative changes to DMV's vehicle crash reporting requirement, effective 01/01/2004, made property damage only crashes being eligible for inclusion in the Statewide Crash Data File.

