TRAFFIC ANALYSIS REPORT

FOR

LAKERIDGE HIGH SCHOOL

1235 OVERLOOK DRIVE
CITY OF LAKE OSWEGO

PREPARED BY
Charbonneau Engineering LLC
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JANUARY 2008
PROJECT 08-01

EXHIBIT F-23
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INTRODUCTION

A traffic study for Lakeridge High School was conducted to determine the traffic impacts associated with instituting Friday night varsity football games at Lakeridge High School. Currently Lakeridge plays their football games at Lake Oswego High School and the traffic levels associated with such a major event have not been experienced within the Lakeridge community. Therefore, the analysis was performed to identify and document the anticipated traffic flow impacts to the surrounding area streets and intersections surrounding Lakeridge High School. In December 2007 a study was completed for the School District in order to develop a parking model that would be applicable to project the parking demand at Lakeridge High School attributed to hosting football games.

Lakeridge High School is located within the City of Lake Oswego on the north side of Overlook Drive and approximately 0.3 mile west of the traffic signal on Stafford Road at Overlook Drive. Traffic access occurs directly onto Overlook Drive at a total of three driveways. A vicinity map (Figure ‘a’) is contained in the report’s appendix.

In establishing the project scope a number of important elements were identified and considered, including the following items. The City of Lake Oswego Traffic Engineering staff provided input in developing the work scope.

- Identify the critical streets and intersections that will be impacted by traffic associated with the football games. Significant streets include Overlook Drive, Stafford Road, McVey Drive, South Shore Blvd., Treetop Lane, Westview Drive, Royce Way, and Bryant Road.
- Conduct Friday evening traffic counts at the study intersections during the hours that will be impacted by the event traffic. The counts were recorded from 6:20 PM to 7:30 PM and 9 PM to 11 PM in order to match the traffic peak conditions at the football game’s start and at the game’s conclusion.
- Trip generation used in the analysis was based on the parking analysis study conducted at Lake Oswego High School during two recent football games played in November 2007. The parking study concluded that high school varsity football games in Lake Oswego generate a parking demand of 951 vehicles. A copy of the study is provided in the appendix.
- A total 362 on-site parking spaces will be available at Lakeridge High School.
- A total of 430 off-site parking spaces will be available at several auxiliary parking lots that the School District is in the process of securing for use. Five locations are documented in the study. On-Street parking will occur on the streets that do not have parking restrictions.
- Distribution of the football game traffic was based on the site’s location within the community and other considerations including the City limits, school boundary, residential density, accessibility to area streets, traffic control, parking availability,
and engineering judgement. Consideration was also given to non-local traffic (visiting teams) in the analysis.

- An inventory of the current on-street parking conditions and restricted parking areas was conducted to document the current parking status.
- The School District acknowledges that it may be necessary to implement traffic control measures such as temporary signing, barricades, and police patrols to manage and insure that the restricted parking areas are enforced within the neighborhood during the football games.
- Analysis of the study intersections to determine the level of service and queuing.

An appendix to the report contains technical data including vicinity map, site plan, traffic control plan, restricted parking areas, traffic flow diagrams, traffic count data, capacity analyses, queuing, and previous Lakeridge High School Parking study report.

SITE DESCRIPTION AND STREETS

Lakeridge High School is located on the north side of Overlook Drive in Lake Oswego approximately 0.3 mile west of Stafford Road. The surrounding vicinity is predominately residential. Lake Oswego Municipal Golf Course is located immediately northeast of the school property. The school’s campus contains the main school building with parking lots at the front and on each end of the site, and outdoor sports fields on the north and east sides. Figure ‘b’ serves as a site plan.

Overlook Drive is classified as a collector street. Near the school’s frontage the street consists of one through lane in each direction and limited on-street parking on both sides of Overlook Drive. There is no center turn lane. Curb and sidewalk occur on both sides of Overlook Drive. Overlook Drive is posted at 25 miles per hour and includes standard school zone signing for 20 MPH with school pedestrian symbol signs at the designated crossing locations. Two-way traffic access is permitted at the site access points and is controlled by stop signing.

Several intersections were identified for analysis. South Shore Blvd. at McVey/Stafford Road and Overlook Drive at Stafford Road are controlled by traffic signalization. Overlook Drive at Treetop Lane is controlled as a four-way stop. Overlook Drive at Westview Drive is configured as a tee-shaped design with stop control on Overlook Drive. Westview Drive at Royce Way and Bryant Road at Jean Road are controlled as three-way stop intersections. Figure ‘c’ depicts the lane configuration and traffic control at each of the study intersections.
EXISTING PARKING CONDITIONS

The streets in the vicinity were reviewed in the field in order to identify the areas with restricted parking conditions. Figure ‘d’ was prepared to illustrate the restricted parking locations near Lakeridge High School. The inventory confirmed that parking is prohibited along Overlook Drive east of Treetop Lane except where authorized in front of the school. Parking is also prohibited on Ridge Lake Drive immediately south of Overlook Drive and on the south side of Cloverleaf Road adjacent to the sports fields on the north side of the high school.

Several streets are posted with restricted parking (No Parking 9AM-3PM, School Days) as shown on Figure ‘d’. These streets include Ridge Lake Drive, Saint Clair Drive, Overlook Drive, Cloverleaf Road, Fernwood Drive, Banyon Lane, Marjorie Avenue, and Greentree Avenue.

A parking map was developed to illustrate several properties that could conceivably be served by shuttle and provide additional parking for the football games (reference Figure ‘e’). The auxiliary parking areas include Bethlehem Christian City Church located on Stafford Road, Palisades Elementary School on Greentree Avenue, Lake Oswego United Methodist Church and the Oregon National Guard facility located along South Shore Blvd., and the new sports field complex located across from the intersection of Overlook Drive and Stafford Road. A total of 488 spaces exist in the auxiliary lots. However, accounting for the background parking conditions 430 parking spaces are available.

TRAFFIC FLOW ANALYSIS

In order to document the existing traffic conditions during the peak hour following a football game it was necessary to perform several traffic counts on Friday evening January 11, 2008. The counts were recorded during the hours of 9 PM to 11 PM at each of the study intersections including South Shore Blvd. at McVey/Stafford Road, Overlook Drive at Stafford Road, Overlook Drive at Treetop Lane, Overlook Drive at Westview Drive, Westview Drive at Royce Way, and Bryant Road at Jean Road. At Overlook Drive and Stafford Road the counts were also recorded between 6:20 PM to 7:30 PM to record the traffic conditions that exist prior to the start of the 7 PM football game. Figure 1 illustrates the turning movement volumes for each location. The supporting data sheets for the counts are contained in the report’s appendix.

Staging a varsity football game at Lakeridge High School will mean an influx of traffic into the surrounding neighborhood for home-games scheduled on Friday nights. Traffic will arrive prior to the 7 PM start time and depart close to the finish time (normally between 9:30 PM & 10 PM). The departure period is considered the most critical time as there will be a short duration traffic spike (less than 30 minutes) in which game-related traffic accesses the streets. It is anticipated that the frequency
of the football games will occur from four to six times per season at Lakeridge High School.

The distribution of game-related traffic onto the street network will incorporate traffic exiting from the school's parking lots and from the auxiliary parking lots. Figure 2 illustrates the trip distribution anticipated from the parking lots. The distribution of traffic parking on the streets is not shown in Figure 2 as these trips were assigned and accounted for in Figure 3 'b'. The trip assignment of the game traffic is shown on Figure 3 'a' (parking lot trips) and 3 'b' (on-street parking related trips). The total traffic is the summation of the existing and trip assignment traffic and is shown on Figure 4.

Based on the recent parking study conducted at Lake Oswego High School a parking demand of 951 vehicles was identified for football games. Currently Lakeridge High School has a capacity for 362 on-site parking spaces that will be available for football games. This equates to 38% of the total football parking demand. Available parking was also determined for the auxiliary lots and is illustrated in the following table. The total parking available in all of the parking lots totals 792 spaces and represents 83% of total number of spaces needed. As a result 159 vehicles are expected to park on the local streets near Lakeridge High School.

<table>
<thead>
<tr>
<th>Parking Lot Location</th>
<th>Total Spaces</th>
<th>Available Spaces for Football</th>
<th>% of Total Parking Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lakeridge High School</td>
<td>362</td>
<td>362</td>
<td>38%</td>
</tr>
<tr>
<td>National Guard Lot</td>
<td>56</td>
<td>42</td>
<td>4%</td>
</tr>
<tr>
<td>Methodist Church</td>
<td>79</td>
<td>45</td>
<td>5%</td>
</tr>
<tr>
<td>Palisades School</td>
<td>90</td>
<td>86</td>
<td>9%</td>
</tr>
<tr>
<td>Bethlehem Church</td>
<td>142</td>
<td>136</td>
<td>14%</td>
</tr>
<tr>
<td>L.O. Sports Field</td>
<td>121</td>
<td>121</td>
<td>13%</td>
</tr>
<tr>
<td></td>
<td>850</td>
<td>792</td>
<td>83%</td>
</tr>
</tbody>
</table>

CAPACITY ANALYSIS

Capacity analyses for the site accesses and study intersections were performed to determine the levels of service for the evening peak hour occurring between 9 PM and 10 PM. At the intersection of Overlook Drive and Stafford Road an analysis of the earlier peak traffic hour (6:25-7:25 PM) was also conducted to assess the conditions when traffic arrives for the start of the game. The intersections were analyzed for existing and total traffic conditions. Traffix and HCS programs based on the year 2000 Highway Capacity Software (HCS) were applied in the analyses. For the existing conditions scenario (without football traffic flow) the LOS analysis reflects that all of the study intersections are operating at LOS 'B' or better. The
resulting service levels are considered excellent and confirm that vehicular delays are within the acceptable ranges adopted by the City of Lake Oswego.

Table 1 summarizes the early evening peak intersection operation at Overlook Drive and Stafford Road with and without the football game trips. Table 2 summarizes the late evening peak intersection operations with and without the football game trips. The study intersections are expected to operate at level of service “B” or better during the early evening peak and late evening peak with the football game trips. This level of operation meets or exceeds the City of Lake Oswego’s standards. As a result it will not be necessary to provide any traffic control changes or improvements to the study intersections.

Table 1 Capacity Analysis Summary (6:25pm - 7:25pm)

<table>
<thead>
<tr>
<th>Intersection</th>
<th>Type of Control</th>
<th>2008 Existing Traffic without Football Game Trips</th>
<th>2008 Total Traffic with Football Game Trips</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overlook Drive and Stafford Road</td>
<td>Signal</td>
<td>- B 11.5 0.34</td>
<td>- B 13.7 0.43</td>
</tr>
</tbody>
</table>


Table 2 Capacity Analysis Summary (9:00pm - 10:00pm)

<table>
<thead>
<tr>
<th>Intersection</th>
<th>Type of Control</th>
<th>2008 Existing Traffic without Football Game Trips</th>
<th>2008 Total Traffic with Football Game Trips</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jean Road and Bryant Road</td>
<td>All-way Stop</td>
<td>- A 8.4 0.16</td>
<td>- A 8.7 0.22</td>
</tr>
<tr>
<td>Royce Way and Westview Drive</td>
<td>All-way Stop</td>
<td>- A 7.7 0.17</td>
<td>- A 7.8 0.22</td>
</tr>
<tr>
<td>Overlook Drive and Westview Drive</td>
<td>Two-way Stop</td>
<td>WB A 9.9 -</td>
<td>WB B 10.3 -</td>
</tr>
<tr>
<td>Overlook Drive and Treetop Lane/Meadowlark Lane</td>
<td>All-way Stop</td>
<td>- A 7.9 0.23</td>
<td>- B 11.6 0.60</td>
</tr>
<tr>
<td>Overlook Drive and West High School Access</td>
<td>Two-way Stop</td>
<td>- SB B 14.0 -</td>
<td></td>
</tr>
<tr>
<td>Overlook Drive and East High School Access</td>
<td>Two-way Stop</td>
<td>- SB B 11.9 -</td>
<td></td>
</tr>
<tr>
<td>Overlook Drive and Stafford Road</td>
<td>Signal</td>
<td>- B 13.7 0.19</td>
<td>- B 13.5 0.40</td>
</tr>
<tr>
<td>South Shore Boulevard and Stafford Road</td>
<td>Signal</td>
<td>- B 12.7 0.28</td>
<td>- B 15.1 0.37</td>
</tr>
</tbody>
</table>

Generally L.O.S. "A", "B", "C" and "D" are desirable service levels ranging from no vehicular delay to average or longer than average delays in the peak hours. Level "E" represents long delays indicating signalization warrants need to be reviewed and signals considered only if warrants are met. Level "F" indicates that intersection improvements such as widening and signalization may be required. By definition, and according to the Highway Capacity Manual, the following delay times are associated with the level of service at stop controlled and signalized intersections.

<table>
<thead>
<tr>
<th>Level of Service criteria defined in the year 2000 Highway Capacity Manual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of Service (LOS)</td>
</tr>
<tr>
<td>----------------------</td>
</tr>
<tr>
<td>A</td>
</tr>
<tr>
<td>B</td>
</tr>
<tr>
<td>C</td>
</tr>
<tr>
<td>D</td>
</tr>
<tr>
<td>E</td>
</tr>
<tr>
<td>F</td>
</tr>
</tbody>
</table>

**SIGNAL TIMING RECOMMENDATIONS:**

The recommended signal timing for the intersection at Overlook Drive and Stafford Road was established from the Traffix analysis for the total traffic scenario (with football game traffic included). For the period between 6:25 PM and 7:25 PM the optimized timing analysis yielded a cycle length of 60 seconds with the time-splits shown on the Traffix output sheets contained in the appendix. The results indicate that a 60 second cycle length is also recommended in the late evening peak hour after the game with the associated time-splits as shown on the output sheets.

**INTERSECTION QUEUING**

Queue lengths at the Stafford Road signalized intersections with South Shore Boulevard and Overlook Drive were taken from the Traffix analysis reports. Queue lengths for the Overlook Drive two-way stop intersections with the west high school access and the east high school access were taken from the Highway Capacity Software (HCS) analysis reports. Copies of the reports are included in the appendix.

Table 3 presents a summary of the available storage lengths and the calculated queue lengths at the intersections reviewed. None of the calculated queue lengths exceed the storage available.
Table 3 Queuing Summary.

<table>
<thead>
<tr>
<th>Intersection</th>
<th>Movement</th>
<th>Storage Available</th>
<th>Calculated Queue Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School East Access and Overlook Drive</td>
<td>SB LT</td>
<td>25'</td>
<td>25'</td>
</tr>
<tr>
<td></td>
<td>SB RT</td>
<td>25'</td>
<td>25'</td>
</tr>
<tr>
<td></td>
<td>WB RT</td>
<td>100'</td>
<td>0'</td>
</tr>
<tr>
<td>High School West Access and Overlook Drive</td>
<td>SB LT/RT</td>
<td>100'</td>
<td>50'</td>
</tr>
<tr>
<td>Stafford Road and Overlook Drive</td>
<td>NB LT</td>
<td>150'</td>
<td>50'</td>
</tr>
<tr>
<td></td>
<td>SB LT</td>
<td>150'</td>
<td>25'</td>
</tr>
<tr>
<td></td>
<td>SB RT</td>
<td>150'</td>
<td>150'</td>
</tr>
<tr>
<td></td>
<td>EB LT</td>
<td>100'</td>
<td>100'</td>
</tr>
<tr>
<td>South Shore Boulevard and Stafford Road</td>
<td>NB LT</td>
<td>105'</td>
<td>75'</td>
</tr>
<tr>
<td></td>
<td>SB LT</td>
<td>240'</td>
<td>0'</td>
</tr>
<tr>
<td></td>
<td>EB LT</td>
<td>115'</td>
<td>75'</td>
</tr>
</tbody>
</table>

* Proposed storage distance according to site plan for City Sports Field project

CONCLUSION

The traffic analysis of the street network and parking conditions surrounding Lakeridge High School has determined that there is sufficient transportation and parking capacity to initiate varsity football games on Friday nights at the High School. The games will be played infrequently with only four to six home games scheduled during the season.

The games will be scheduled at 7 PM and normally conclude after 9:30 PM when the adjacent street traffic volumes have subsided for the evening. This condition is supported by the technical analysis that included the measurement of traffic volumes and a determination that the critical intersections on Overlook Drive, Stafford Road, McVey Drive, Westview Drive, and Bryant Road will experience acceptable level of service conditions (LOS 'B' or better) when the football-related traffic is added.

An inventory of the existing parking capacity (on-street and off-street) has concluded that ample parking will be available to accommodate the added demand associated with the football game. The use of several auxiliary parking lots including Lakeridge High School will absorb 83% of the parking projected for the games. As a result the impacts to on-street parking within the neighborhood will be low and can be managed by implementing a parking plan.
APPENDIX

- Figure ‘a’ Vicinity Map
- Figure ‘b’ Site Plan
- Figure ‘c’ Intersection Lane Configuration & Traffic Control
- Figure ‘d’ Restricted Parking Zones
- Figure ‘e’ Auxiliary Parking Lots
- Traffic Flow Maps
  - Figure 1 Year 2008 Existing Hour Traffic, 9-10 PM
  - Figure 2 Trip Distribution
  - Figure 3 ‘a’ Trip Assignment, High School Parking & Auxiliary Lots
  - Figure 3 ‘b’ Trip Assignment, On-Street Parking
  - Figure 4 Total Traffic (Existing + Game Traffic)
- Site Plan for Lake Oswego Sports Facility
- Traffic Count Data Sheets
- LOS Capacity Calculations
- Queuing Calculations
NOTES: Site plan provided by LSW Architects.

SITE PLAN
LAKERIDGE HIGH SCHOOL

CHARBONNEAU ENGINEERING LLC
PROJECT: 08-01
**LOCATION**

<table>
<thead>
<tr>
<th>Location</th>
<th>Number of Spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>STATE OF OREGON NATIONAL GUARD</td>
<td>56</td>
</tr>
<tr>
<td>LAKE OSWEGO UNITED METHODIST CHURCH</td>
<td>79</td>
</tr>
<tr>
<td>PALISADES ELEMENTARY SCHOOL</td>
<td>90</td>
</tr>
<tr>
<td>BETHLEHEM CHRISTIAN CITY (CHURCH/SCHOOL)</td>
<td>142</td>
</tr>
<tr>
<td>SPORTS FIELD</td>
<td>121</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>488</strong></td>
</tr>
</tbody>
</table>

**NOTES:** NO SCALE

**AUXILIARY PARKING LOTS**

**LAKE RIDGE HIGH SCHOOL**
NOTES:
PEAK HOUR 9:00PM - 10:00PM

EXITING TRIP DISTRIBUTION
(FROM SCHOOL PARKING LOT & AUXILIARY LOTS)
LAKE RIDGE HIGH SCHOOL

FILE: 0801flow.dwg
PLOT DATE: 01.21.08
PROJECT: 08-01
CHARBONNEAU ENGINEERING LLC

FIGURE 2
NO SCALE
NOTES:
PEAK HOUR 9:00PM - 10:00PM

TRIP ASSIGNMENT
(FROM SCHOOL PARKING LOT & AUXILIARY LOTS)
LAKERIDGE HIGH SCHOOL

PEAK HOUR
6:25PM - 7:25PM

NO SCALE
MEMORANDUM

Date: January 21, 2008

To: Robert Dreier
   Director of Technical & Engineering Services
   Lake Oswego School District
   P.O. Box 70
   Lake Oswego OR 97034

From: Frank Charbonneau, PE, PTOE

Subject: Parking Study Report

Lakeridge High School
Overlook Drive, City of Lake Oswego

This memorandum will serve as the parking study and report recently conducted in November & December 2007 for Lakeridge High School in the Lake Oswego School District. Figure ‘a’ serves as vicinity map depicting the site’s location.

The School District is considering allowing varsity football games to be played at Lakeridge High School. Currently Lakeridge plays their football games at Lake Oswego High School located adjacent to the intersection of Boones Ferry Road and Country Club Road. As there are potential traffic and parking concerns relative to allowing the varsity games to be held at Lakeridge High School the School District has retained Charbonneau Engineering LLC to conduct a parking study to assess the impacts within the surrounding community.

To assess the parking demand that will occur at Lakeridge High School and the community it was necessary to project the parking demand by creating a parking database from a similar event. Therefore, at the School District’s request a series of parking surveys were performed at Lake Oswego High School during two recent football playoff games in November 2007. On Friday November 9th and Friday November 23rd parking counts were recorded to quantify a baseline parking volume that could be applied at Lakeridge High School should a similar event be held. The surveys covered the parking areas in the school’s lots and driveways and the overflow parking conditions that extended to the surrounding streets. Other areas used for football game parking such as Lake Oswego Junior High, Uplands Elementary School, and Our Savior’s Lutheran Church were also surveyed. Figure ‘b’ illustrates the area surveyed in conjunction with the football games played at Lake Oswego High School.

The surveys were conducted manually by providing two teams of surveyors to tour and observe all of the parking locations at least two times while the football games were in progress. Counts were tallied for each of the designated areas that were assigned a parking zone number. The survey results are documented on the summary sheets (Exhibit 1) included in the appendix.

In order to determine the background parking conditions at Lake Oswego High School and in the neighborhood occurring on a typical weekday evening (non-football game night) it was

9370 SW Greenburg Road, Suite 411, Portland, OR 97223 • Phone: (503) 293-1118 • Fax: (503) 293-1119
necessary to conduct a separate survey. Therefore, a parking survey was conducted on
Thursday, November 7th to establish the background parking conditions. The parking demand
for football games was then derived by subtracting the background number of parked
vehicles. The game on November 23rd yielded the highest number of parked vehicles and was
therefore used to model the parking impacts at Lakeridge High School. The following table
presents the results for the parking surveys conducted at Lake Oswego High School.

<table>
<thead>
<tr>
<th>Football Game Parking Demand at Lake Oswego High School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicles Parked at LOHS football game on 11/23/07</td>
</tr>
<tr>
<td>Vehicles Parked at LOHS on 11/7/07 (Background Parking)</td>
</tr>
</tbody>
</table>

Based on the survey information collected at Lake Oswego High School a parking demand of
951 vehicles was projected as the number of vehicles that will need to park for a varsity
football game at Lakeridge High School.

On-site parking at Lakeridge High School occurs within a series of parking lots located along
the school’s frontage and at both ends of the property. Figure ‘c’ illustrates the on-site
parking areas. A total of 362 parking spaces are available on the site.

Street parking is available in front of Lakeridge High School on both sides of Overlook Drive,
except within the prohibited sections posted for no parking. On-street parking is also
available on many of the other public streets in the neighborhood that have been surveyed
and documented in the study. The inventory of streets measured the parking capacity within
a 0.75 mile radius of the school and accounted for factors that would limit or restrict parking
including street width, posted parking zones, driveway locations, and fire hydrants. The
survey assumed that no parking would be permitted along Cloverleaf Road. Figure ‘d’
displays the streets included in the survey. Each street is referenced by a code that relates
to the parking data recorded in the field and listed in Exhibit 2.

A parking availability map was developed for the Lakeridge High School neighborhood and is
shown on Figure ‘e’. The map displays the on-street parking locations and several properties
that could conceivably be served by shuttle and provide additional parking for the football
games. The auxiliary parking areas include Bethlehem Christian City Church located on
Stafford Road, Palisades Elementary School on Greentree Avenue, the Lake Oswego Sports
Fields (Luscher Park), and the Lake Oswego United Methodist Church and the Oregon National
Guard facility located along South Shore Blvd. For reference purposes Figure ‘e’ includes a
scaled radius grid to gauge distances from Lakeridge High School to the surrounding area.

The available parking at Lakeridge High School was established to be the total parking
capacity of the High School (on-site) plus the available street parking within the community at
the locations illustrated on Figure ‘e’. A total of 944 on-street parking spaces are available
within a distance of 0.75 miles from the high school. The parking capacity for Lakeridge High
School including the number of spaces at the High School and on-street parking available in
the surrounding community is summarized below.

<table>
<thead>
<tr>
<th>Lakeridge High School Parking Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-Site Parking Stalls</td>
</tr>
<tr>
<td>Available Street Parking</td>
</tr>
<tr>
<td>Parking Capacity</td>
</tr>
</tbody>
</table>
Off-site parking in the auxiliary parking lots totals 488 vehicles (reference Exhibit 3). Accounting for background parking 430 available spaces would be available in the auxiliary lots for the football games if the School District establishes agreements with the respective property owners and shuttle service is provided. By including the available auxiliary parking spaces the total parking capacity within the neighborhood equates to 1,736 spaces.

It can be concluded that ample parking for football games will be available at Lakeridge High School and the surrounding community. With 1,306 accessible parking spaces on site and on the neighborhood streets (Cloverleaf Road excluded) and a projected parking demand of 951 vehicles for the football games, sufficient capacity does exist. In addition 430 more spaces exist in several candidate parking lots that potentially may be reserved by the Lake Oswego School District.

If you should have any questions please contact Frank Charbonneau, PE, PTOE.

List of Attachments
- Figure ‘a’ Site Vicinity Map
- Figure ‘b’ Lake Oswego High School Parking Survey Area Map
- Figure ‘c’ Lakeridge High School On-Site Parking Plan
- Figure ‘d’ Lakeridge High School Parking Study Area Map
- Figure ‘e’ Lakeridge High School On-Street Parking Availability Map
- Exhibit 1a, 1b, & 1c Parking Survey Data Sheets, Lake Oswego High School
- Exhibit 2 Parking Inventory Data Sheets for Lakeridge High School
- Exhibit 3 Auxiliary Lots Available Parking