March 16, 2021

Mike Nilsson, PE
City of Spokane Department of Engineering Services
808 W Spokane Falls Boulevard
Spokane, WA 99201

RE:    Trip Generation and Distribution Letter
       Corbin Cottages, B19M0053PDEV
       Storhaug Engineering Project #19-087

Dear Mike,

It is the intent of this narrative to discuss the Corbin Cottages project, B19M0053PDEV, 600 W Cora Ave, Spokane, WA 99205, to summarize the trips generated by the completed project. The project is situated on the north side of W Cora Ave, approximately 2,000 feet west of N Division St. A road will be constructed that will provide access to the proposed residential lots called N Howard Ct, but W Cora Ave will provide primary access to this development. The project site is 1.89-acres in size. There is also an existing church and parking lots, which will not be affected by the proposed project. The current zoning of the site is RSF. Please see the attached drawings for site plan and vicinity map. The project is anticipated to be built in 1 phase, and construction will start in Summer of 2022.

Trip Generation characteristics for the Corbin Cottages project, B19M0053PDEV, 600 W Cora Ave, Spokane, WA 99205, are calculated from trip generation studies compiled by the Institute of Transportation Engineers, “Trip Generation”, 10th Edition, 2017. The project proposes 13 single-family homes. Based on the total number of units for the proposed project, Trip Generation characteristics of the project are projected as follows:

The trip generation characteristics of the commercial project conforms to ITE Land Use category 210, Single-Family Housing. The weekday trips were calculated as follows:

LEGEND
T: Number of Trips
X: Number of Dwelling Units

Note: New address of 1.89 acre preliminary plat is 516 W. Cora Ave. MDO 06/28/2021
ITE 210 Single-Family Housing Weekday Trip Generation Fitted Curve Equation:
\[ \ln(T) = 0.92 \ln(X) + 2.71 \]
Calculation:
\[ \ln(T) = 0.92 \ln(13) + 2.71 \]
\[ e^{\ln(T)} = e^{5.07} \]
\[ T = 159.14 \text{ rounded to } 160 \text{ ADT} \]

ITE 210 Single-Family Housing A.M. Peak Hour of Adjacent Street Traffic Trip Generation Equation:
\[ T = 0.71(X) + 4.80 \]
Calculation:
\[ T = 0.71(13) + 4.80 \]
\[ T = 14.03 \text{ rounded to } 14 \text{ A.M. Peak Hour Trips} \]
Allocation: 25% entering, 75% exiting: 4 trips enter, 10 trips exit

ITE 210 Single-Family Housing P.M. Peak Hour of Adjacent Street Traffic Trip Generation Equation:
\[ \ln(T) = 0.56 \ln(X) + 0.20 \]
Calculation:
\[ \ln(T) = 0.96 \ln(13) + 0.20 \]
\[ e^{\ln(T)} = e^{2.66} \]
\[ T = 14.33 \text{ rounded to } 15 \text{ P.M. Peak Hour Trips} \]
Allocation: 63% entering, 37% exiting: 9 trips enter, 6 trips exit

Trip Generation summary for overall proposed project:
ADT Total: 160
A.M. Peak Total: 14, 4 enter, 10 exit
P.M. Peak Total: 15, 9 enter, 6 exit

It is anticipated that 70% of the traffic will travel to and from the east, utilizing N Division St, and 25% of the traffic will travel to and from the west, utilizing N Post St. The remaining 5% of the traffic will travel to and from the south, utilizing N Howard St.

Written by: Liam J. Taylor

Reviewed by: Jerry Storhaug, PE