NOTICE OF APPLICATION

City of Liberty Lake Planning, Engineering & Building Services (Review Authority) has published this Notice of Application to provide the opportunity to comment on the described proposal. The comment period ends 14 calendar days from the date issued. During this period, written comments may be submitted to the Review Authority. The file may be examined 8:00 a.m. to 5:00 p.m. Monday through Friday (except holidays) at City Hall. Project info is also available on the City website at www.libertylakewa.gov/development/public_notices.asp. Questions may be directed to the Project Coordinator listed below.

Proposal File #: LUA2024-0030 **Zoning:** M-2 (Community Center Mixed-Use)

Proposal: 21st Amendment to BSP 50-96

Proposal Description: 21st amendment to BSP 50-96 to create a 9-lot commercial site that will be accessed by Country Vista Drive and a private road that will serve all secondary lots.

Site Address: No Address Yet Assigned, Parcel No. 55161.9178

General Location: East of Kramer Pkwy, South of I-90 and North of Country Vista Dr.

Abbreviated Legal Description - **Section:** 16 **Township:** 25 **Range:** 45EWM

Owner: Liberty Lake Land Co, LLC **Phone:** N/A

Contact: Jon Hester, Ardurra **Phone:** 509-953-5222

Application Date: 08/21/2024 **Determination of Completeness Issued:** 08/26/2024

Notice of Application Issued: 08/27/2024 **Comment Deadline:** 09/10/2024 at 4 p.m.

City of Liberty Lake Permits Included in Application: City Building Permits will need to be issued prior to beginning construction.

Other Permits: Liberty Lake Sewer District approval, WA State Dept. of Ecology (DOE) permits & approvals, Spokane Clean Air permits & approvals, and Spokane Regional Health District permits & approvals may need to be issued prior to construction.

Required & Existing Studies: A SEPA Checklist has been completed, along with a Trip Generation & Distribution Letter.

Environmental Review: City of Liberty Lake Planning & Building Services is reviewing the proposed project for probable adverse environmental impacts and expects to issue a Mitigated Determination of Nonsignificance (MDNS) for this project. Any SEPA appeal is governed by the City of Liberty Lake Environmental Ordinance and such appeal shall be filed within fourteen (14) days after the notice that the determination has been made and is appealable. The optional DNS process in WAC 197-11-355 is being used and this may be your only opportunity to comment on the environmental impacts of this portion of the proposal. The proposal may include mitigation measures under applicable codes, and the project review process may incorporate or require mitigation measures regardless of whether an EIS is prepared. A copy of the subsequent threshold determination for this proposal may be obtained upon request and will be supplied to reviewing agencies. Probable MDNS Conditions: Harvard Road Mitigation and other conditions as recommended by reviewing agencies.

Development Regulations: City of Liberty Lake Development & Building Codes, Liberty Lake Engineering Design Standards, and the Regional Stormwater Management Manual are the primary City regulations applicable to the site.

Consistency: In consideration of the above referenced development regulations and typical conditions and/or mitigating measures, the proposal is found to be consistent, as provided in RCW 36.70B.040, with the "type of land use", "level of development", "infrastructure", and "character of development".

Written Comments: Agencies, tribes, and the public are encouraged to review and provide written comments on the proposed project and its probable environmental impacts. All comments received within 14 calendar days of the date this Notice of Application is issued, will be considered prior to making a decision on this application.

Public Hearing: As a Type I Project Permit, this action **is not** subject to a future public hearing.

REVIEW AUTHORITY:

PROJECT COORDINATOR: Lisa D. Key, Director

Planning, Engineering & Building Services
22710 E. Country Vista, Liberty Lake, WA 99019
Phone: (509) 755-6708, Fax: (509) 755-6713, www.libertylakewa.gov

Date Issued: 8/27/2024

Signature: Lisa D Key

TWENTY FIRST AMENDMENT TO BINDING SITE PLAN BY SURVEY OF LIBERTY LAKE CORPORATE PARK (BSP-50-96)

DRAFT

NO.	DATE	REVISIONS DESCRIPTION	DESIGNED	DRAWN	CHECKED	APPROVED
	6/6/2024		DESIGNED	DRAWN	CHECKED	APPROVED

ARDURRA
1717 S. RUSTLE STREET, SUITE 201
SPOKANE, WA 99224
509-319-2580 | WWW.ARDURRA.COM

TWENTY FIRST AMENDMENT
TO FINAL BINDING SITE PLAN
BSP-50-96
SECTION 15 & 16, T.25N., R.45E., W.M.

ATTENTION:
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1/2" ON 11x17 SHEET, THEN DRAWING IS NOT TO SCALE

DATE: 6/6/2024
PROJECT: ABSP-240181
SHEET: 1 OF 1

SEPA ENVIRONMENTAL CHECKLIST

Purpose of checklist

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization, or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. **You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown.** You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to **all parts of your proposal,** even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for lead agencies

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B, plus the Supplemental Sheet for Nonproject Actions (Part D). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in "Part B: Environmental Elements" that do not contribute meaningfully to the analysis of the proposal.

A. Background Find help answering background questions

1. **Name of proposed project, if applicable:** 21st Amendment to BSP-50-96

2. **Name of applicant:** Liberty Lake Land Co, LLC

3. **Address and phone number of applicant and contact person:**
   Jon Hester, Ardurra
   509-953-5222

4. **Date checklist prepared:**
   8-20-2024

5. **Agency requesting checklist:**
   City of Liberty Lake

6. **Proposed timing or schedule (including phasing, if applicable):**
   As soon as approval of Amended Binding Site Plan

7. **Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.**
   No

8. **List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.**
   The Greenacres Land Plume easement as been discussed with the Department of Ecology and it has been determined that the monitoring well on-site will be sufficient to approve the Binding Site Plan as proposed.

9. **Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.**
   None known

10. **List any government approvals or permits that will be needed for your proposal, if known.**
    Traffic study, building permits and approval of the Amendment to BSP-50-96

11. Give a brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

The 21st Amendment to BSP-50-96 is a 9 lot commercial development with a sports entertainment facility, potential fast food restaurant, bank, and hotel. The remainder of the lots are unknown at this time.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The address is 0 unknown Country Vista Dr. Bound to the south of Interstate 90 and adjacent to the east by Kramer Parkway, and north of Country Vista Dr. in the City of Liberty Lake. Parcel No. 55161.9178

B. Environmental Elements

1. Earth Find help answering earth questions

a. General description of the site:
Vacant, generally flat, sloping slightly to the north.

Circle or highlight one: Flat, rolling, hilly, steep slopes, mountainous, other:

b. What is the steepest slope on the site (approximate percent slope)?
3%±

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them, and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.
Opportunity very gravelly ashy loam, 0 to 3% slopes. (per Web Soil Survey 2024)

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.
There are no indications of unstable soils in the project footprint.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.
The 26.61 acre project site will be excavated, graded, and filled where applicable in order to construct commercial buildings and parking lots. The approximate quantiles of fill needed for grading and filling are unknown. Fill will be obtained on-site from grading activities and supplemented with local materials.

f. Could erosion occur because of clearing, construction, or use? If so, generally describe.
Erosion isn't expected to occur during or as a result of construction due to the relatively flat project footprint; however, a ashy loam could erode under certain conditions. Precautions will be taken to avoid erosion during construction activities.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?
Not known at this time.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any.
A water truck ill be on-site during construction to minimize wind erosion and dust control. Silt fences will be implemented as a perimeter control to avoid erosion during construction activities.

2. Air Find help answering air questions

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

Emission sources from construction activities include non-road construction equipment (excavator, grader, etc.), on-road construction equipment (dump trucks, gravel and material trucks, etc.), and construction worker personal vehicle emissions.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

There are no current sources of emissions that would affect this project.

c. Proposed measures to reduce or control emissions or other impacts to air, if any.

Construction control measures include an on-site water truck to control particulate emissions from grading and vehicle traffic. Additional measures include efficient use of equipment and fuel-saving efforts to reduce criteria pollutant emissions from the proposed project.

3. Water Find help answering water questions

a. Surface Water: Find help answering surface water questions

1. **Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.**
   There is no evidence of surface water in the immediate vicinity of the proposed Amended Binding Site Plan.

2. **Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.**
   No.

3. **Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.**
   N/A

4. **Will the proposal require surface water withdrawals or diversions? Give a general description, purpose, and approximate quantities if known.**
   No.

5. **Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.**
   No.

6. **Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.**
   No.

b. Ground Water: Find help answering ground water questions

1. **Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give a general description, purpose, and approximate quantities if known.**
   No, water will be served by City of Liberty Lake Sewer and Water District. A stormwater management plan will be developed for the project and identify on-site groundwater discharges, if any.
2. **Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (domestic sewage; industrial, containing the following chemicals...; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.**
   N/A

c. Water Runoff (including stormwater):

1. **Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.**
   Stormwater will be treated in compliance with Spokane Regional Stormwater Manuel.

2. **Could waste materials enter ground or surface waters? If so, generally describe.**
   No.

3. **Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.**
   No.

4. **Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any.**
   Stormwater will be treated in compliance with the Spokane Regional Stormwater Manuel.

4. Plants Find help answering plants questions

a. **Check the types of vegetation found on the site:**

- ☐ **deciduous tree: alder, maple, aspen, other**
- ☒ **evergreen tree: fir, cedar, pine, other**
- ☐ **shrubs**
- ☐ **grass**
- ☐ **pasture**
- ☐ **crop or grain**
- ☐ **orchards, vineyards, or other permanent crops.**
- ☐ **wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other**
- ☐ **water plants: water lily, eelgrass, milfoil, other**
- ☒ **other types of vegetation**

b. **What kind and amount of vegetation will be removed or altered?**
Not known at this time but vegetation will be removed at the time of construction.

c. **List threatened and endangered species known to be on or near the site.**
no threatened or endangered species have been observed or are believed to be on the site.

d. **Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any.**
Proposed measures to preserve or enhance native plats are pending compensatory mitigation from site development plans. A detailed landscaping plan will be developed during the design phase of this project.

e. **List all noxious weeds and invasive species known to be on or near the site.**
None known.

5. Animals Find help answering animal questions

a. **List any birds and other animals that have been observed on or near the site or are known to be on or near the site.**

Examples include:

- **Birds: hawk, heron, eagle, songbirds, other:**
- **Mammals: deer, bear, elk, beaver, other:**
- **Fish: bass, salmon, trout, herring, shellfish, other:**

b. **List any threatened and endangered species known to be on or near the site.**
Yellow-billed Cuckoo is listed as a threatened on the IPaC. No threatened or endangered species have been observed on the site.

c. **Is the site part of a migration route? If so, explain.**
This site is not part of a known migration route.

d. **Proposed measures to preserve or enhance wildlife, if any.**
None.

e. **List any invasive animal species known to be on or near the site.**
None.

6. Energy and Natural Resources Find help answering energy and natural resource questions

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Electricity and gas will be utilized to power lighting and building operations on-site. Other energy uses are dependent on future building occupants.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No, the project would not affect the use of solar energy by adjacent properties.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any.

Energy conservation features will be determined upon finalization of development plans. Options include such measures as LED lighting that will conserve energy usage of parking lot and building lighting.

7. Environmental Health Find help with answering environmental health questions

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur because of this proposal? If so, describe.

There are no known environmental health hazards associated with the proposed project.

1. Describe any known or possible contamination at the site from present or past uses.

Greenacres land plume under Auditor's file no. 9601040001.

a. Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

There are no known environmental health hazards associated with the proposed project.

b. Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

None known

c. Describe special emergency services that might be required.

No emergency services will be required.

d. Proposed measures to reduce or control environmental health hazards, if any.

No additional measures will be implemented to reduce of control environmental heath hazards.

b. Noise

1. **What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?**
   Traffic noise from Interstate 90 and Country Vista Drive.

2. **What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site)?**
   Short term normal daylight hours: Delivery and personnel traffic 70-90 dB. Site work 80-90 dB. General construction as listed above, 80-90 dB. Long term normal daylight hours: Vehicular traffic 70-80 dB. Unknown: based on future occupants of buildings.
3. **Proposed measures to reduce or control noise impacts, if any.**
   No measures will be implemented to reduce or control noise impacts.

8. Land and Shoreline Use Find help answering land and shoreline use questions

a. **What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.**
   The current site is vacant and adjacent properties are commercial. This proposal will not affect the current uses.

b. **Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses because of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?**
   No farmland or working forests will be converted as a result of this project.

   1. **Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how?**
      No.

c. **Describe any structures on the site.**
   There are no existing structures on site.

d. **Will any structures be demolished? If so, what?**
   No.

e. **What is the current zoning classification of the site?**
   M2

f. **What is the current comprehensive plan designation of the site?**
   Community Center

g. If applicable, what is the current shoreline master program designation of the site?

N/A

h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

No.

i. Approximately how many people would reside or work in the completed project?

There would be none that resides and employee's is unknown at this time.

j. Approximately how many people would the completed project displace?

None.

k. Proposed measures to avoid or reduce displacement impacts, if any.

N/A.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any.

This project has no adverse impact and future businesses will follow the zoning ordinance of the City of Liberty Lake to assure future development in compatible with existing land uses.

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any.

N/A.

9. Housing Find help answering housing questions

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

N/A

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

N/A

c. Proposed measures to reduce or control housing impacts, if any.

N/A

10. Aesthetics Find help answering aesthetics questions

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

Not known at this time. Future construction will follow the City of Liberty Lake zoning ordinance.

b. What views in the immediate vicinity would be altered or obstructed?

None.

c. Proposed measures to reduce or control aesthetic impacts, if any.

Landscaping will be installed to reduce aesthetic impacts.

11. Light and Glare Find help answering light and glare questions

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

Lighting for the site will be determined at the time of building permit and follow the City of Liberty Lake lighting ordinance.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

No.

c. What existing off-site sources of light or glare may affect your proposal?

None.

d. Proposed measures to reduce or control light and glare impacts, if any.

None.

12. Recreation Find help answering recreation questions

a. What designated and informal recreational opportunities are in the immediate vicinity?

Trailhead golf course is 0.6 miles away.

b. Would the proposed project displace any existing recreational uses? If so, describe.

No.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any.

None.

13. Historic and Cultural Preservation Find help answering historic and cultural preservation questions

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe.

No.

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

There is no material evidence of, nor have artifacts of cultural significance been observed on the site.

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

Will be addressed with preliminary BSP approval and conditions of approval.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

The conditions of approval for the Amendment to BSP-50-96 could require a cultural study.

14. Transportation Find help with answering transportation questions

a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

The site will be fronting on Country Vista Dr. and secondary lots will be served by a private road.

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

The site is served by Spokane Transit Authority. The approximate distance to the nearest bus stop is 600 feet.

c. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle, or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

None to existing roads. There will be a new private road constructed to the City of Liberty Lake road standards.

d. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

The property is adjacent to Interstate 90 with access .75 miles.

e. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

Not known at this time. A traffic impact analysis is being conducted as required by the City of Liberty Lake, City of Spokane Valley and Washington State department of Transportation.

f. Will the proposal interfere with, affect, or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

No.

g. Proposed measures to reduce or control transportation impacts, if any.

Per the City of Liberty Lake and the City of Spokane Valley, a traffic impact analysis, trip generation letter, or operational analysis will be required to ensure that the current road system is sufficient to support the proposed project.

15. Public Services Find help answering public service questions

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

Both fire protection and police protection will be increased.

b. Proposed measures to reduce or control direct impacts on public services, if any.

None.

16. Utilities Find help answering utilities questions

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other:

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

Avista will serve electricity and gas, City of Liberty Lake Sewer and Water District will serve both sewer and water.

C. Signature Find help about who should sign

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

X 

Type name of signee: Click or tap here to enter text.
Jon Hester

Position and agency/organization: Click or tap here to enter text.
Senior Planner - Ardurra

Date submitted: Click or tap to enter a date.
8-20-2024

MEMORANDUM

TO: Lisa Key, Director of Planning & Engineering, City of Liberty Lake
CC: Jerremy Clark, Traffic Engineering Manager, City of Spokane Valley
Greg Figg, Development Services, WSDOT
FROM: Larry Frostad, P.E., PTOE
Michael Lucas
DATE: August 19, 2024
SUBJECT: Liberty Lake Corporate Park, Expanded TG&D Analysis

This Memorandum summarizes the expanded trip generation and distribution (TG&D) analysis prepared for the Liberty Lake Land Company Master Development proposed in a portion of the Liberty Lake Corporate Park in Liberty Lake, WA (21st Amendment to BSP-50-96). The expanded TG&D provides a preliminary assessment of project impacts, identifying trip generation potentials, the likely travel routes of commuters, and level of service for an intersection of agency concern. The letter was developed to support the SEPA Application / Review processes for approval by the City of Liberty Lake. Outside agencies can comment on the project at the invitation of City staff.

This version addresses comments received from the review of the June 4, 2024, submittal. Comments and responses are attached.

PROJECT DESCRIPTION

The proposal includes development of a 31.3-acre site just east of Kramer Parkway and north of Country Vista Drive (Spokane County parcels 55161.9178, 55161.9179, and 55161.9165). Zoning is M2 Community Center. Historically the site is part of the Liberty Lake Corporate Park Binding Site Plan (BSP-50-96). Planned project completion is estimated for 2025. Site access is proposed via five approaches on Country Vista Drive, including the Legacy Ridge Drive intersection.

The development is aligned in an M-2 Community Center zone of Liberty Lake. The land use proposal includes the construction of a sports entertainment venue as the anchor tenant. In coordination with the project proponent, a 100-room hotel and 39,500 square-feet (s.f.) of commercial/service space was assumed as the ancillary land uses, including a bank, fast-food restaurant, pharmacy, medical office, and supermarket. These land uses were assumed based on current market conditions and may be subject to change. The conclusions of this report should not alter so long as the subsequent trip generation estimates do not vary notably.

Attached **Figure 1** provides a location map. **Figure 2** provides a site plan.

TRIP GENERATION

Project traffic is usually forecast using the methods of the Trip Generation Manual (ITE, 11th Edition, 2021). The Manual is a nationally recognized and locally accepted resource for forecasting traffic for commercial, institutional, and residential developments. The methods were developed based on the survey of other comparable land uses situated throughout the United States.

Descriptions of ITE trip types are as follows:

- **Pass-By/Diverted.** Trips attracted to/from adjacent streets or nearby streets as travelers commute between origins and destinations. These are addressed as turning trips diverted at a project approach or intersection, noted as an impact only to streets in-route between the initial travel route and proposed land use. Thus, they are only considered to impact project approaches and streets/intersections that are along the diverted routes of travel. The Pass-By tips are derived from the Trip Generation Handbook and calculated as percentage based off of the land uses.
- **Internal Trips.** The trips "shared" between the various aspects of a multiuse development, addressed as a reduction of trips before assignments are developed for the street system. The reduction of these trips occurs because traffic operates between land uses off the street system (i.e. via easements and/or local roadways). Given the reduced scale of commercial development, internal trips were neglected to establish conservative new trip forecasts.
- **Net-New.** These are new trips specifically generated by a project. They impact driveways, intersections, and streets aligned in-route between originating land uses and the project site. These are trips that remain following internal, pass-by, and diverted trip adjustments.

Exact land uses are unknown at this time, thus a mix of allowed uses congruent with the zoning were assumed to develop trip generation estimates for the seven building sites.

Table 1 provides a summary of project trip generation estimates.

Table 1. Trip Generation, Liberty Lake Land Company Master Development

Land Use / ITE Code	Units	Weekday	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Sports Entertainment – N/A**	72 positions	1,296	19	3	22	66	66	132
Fast Food – 934	2,500 SF	1,169	57	55	112	43	40	83
Bank – 912	5,000 SF	502	29	21	50	53	52	105
Pharmacy – 881	13,000 SF	1,409	25	24	49	67	67	133
Medical – 720	4,000 SF	144	10	3	13	4	9	13
Supermarket – 850	15,000 SF	1,790	25	18	43	67	67	134
Hotel – 310	100 rooms	799	24	19	43	23	23	46
Totals:		**7,109**	**189**	**143**	**332**	**323**	**323**	**646**
Pass-By LUC 934 (0.50 AM / 0.55 PM)		614*	28	28	56	23	23	46
Pass-By LUC 912 (0.29 AM / 0.35 PM)		161*	8	8	16	19	19	38
Pass-By LUC 881 (0.49 PM)		345*	0	0	0	33	33	66
Pass-By LUC 850 (0.24 PM)		215*	0	0	0	16	16	32
Net New Trips:		**5,774***	**153**	**107**	**260**	**232**	**232**	**464**

Source: ITE Trip Generation Manual (11th Edition)
* - Estimated from ITE Pass-By Rates
** - Rates derived from trip generation study of a similar project.

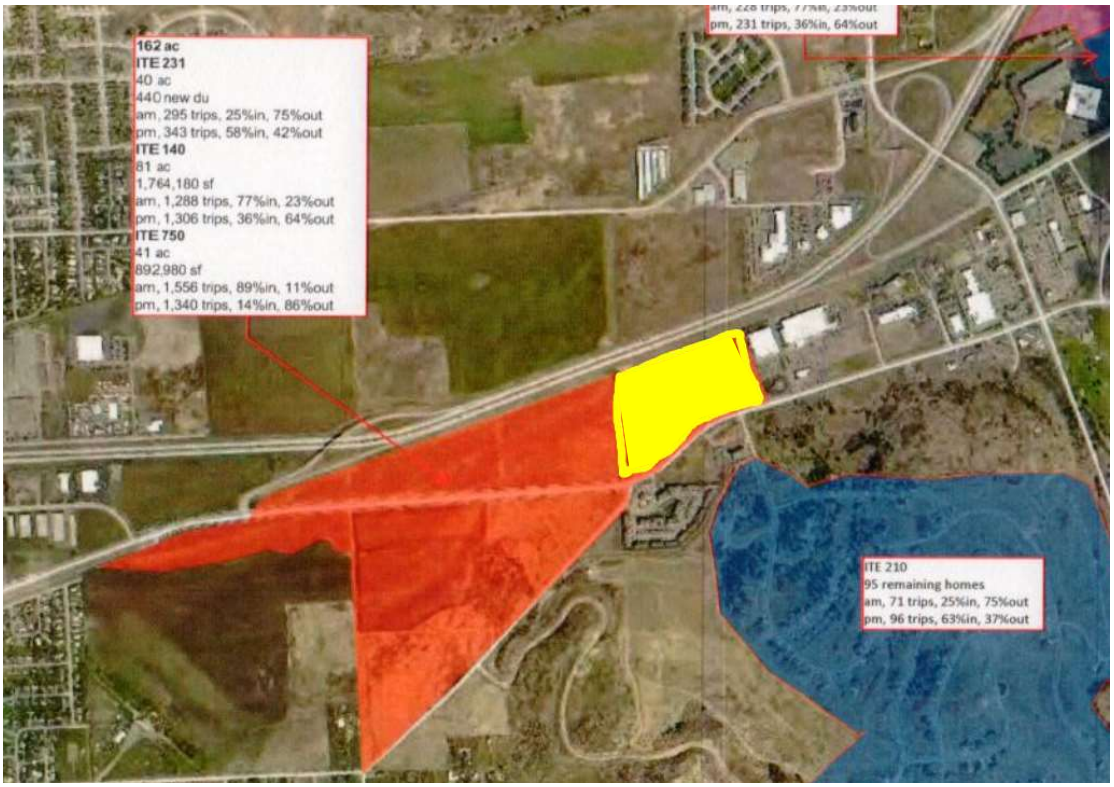
Trip generation for the Sports Entertainment land use is derived from several studies of similar developments and has been approved by the interested agencies.

Average Rates were used for estimating trips where the threshold of 20 field studies and $R^2 > 0.75$ is not met for use of fitted curves. Fitted Curve equations are used for AM and PM trip generation for LUCs 720 and 310, and for Weekday trips for LUC 850.

As shown, after accounting for Pass-By trips for LUCs 934, 912, 881, and 850 per ITE tables, the project is estimated to generate 5,574 new weekday vehicle trips, with 260 trips generated during the AM peak hour and 464 trips generated during the PM peak hour.

Vested Trips. The City of Liberty Lake reports that there are no vested trips associated with the site to compare with the proposed uses.

Comparison to Historical Trip Estimates. The *Harvard Road Mitigation Plan* indicates that LUC 750 – Office Park was one of three uses considered for this project site area (shaded in yellow in the illustration below):



Assuming an Office Park with building footprints sized at 30% of the site acreage (409 ksf) yields 4,528 Weekday, 579 AM, and 536 PM trips. The current land use proposal appears to result in peak hourly trips that are comparable with those forecast with the Harvard Road Plan. This is an important distinction as this project has been anticipated from a concurrency level as it relates to GMA planning and local Comprehensive Plans.

Trip Distribution and Assignment

Trip distribution and assignment is the process of forecasting likely travel routes for development-related traffic to help quantify project impacts on adjacent streets. For this study, the trip distribution was based on an assessment of residential areas and the street network near the site. Previous Trip Letters for this area, as well as the commercial distribution analysis conducted

by Transportation Solutions (August 18, 2022) were also considered.

Trip distributions and the resulting weekday assignments are shown in **Table 2**. Distributions and assignments were rounded to keep the totals to 100%. The table also is updated for comments from WSDOT on distribution to both Barker and Greenacres Interchanges.

Table 2. Trip Distribution and Assignment – New Trips

Origin/Destination	Distribution In/Out	Trip Assignments Weekday / AM / PM
Mission Avenue		
- West of Kramer Parkway	10% / 10%	577 / 26 / 46
- North of I-90 WB Ramps	2% / 2%	116 / 5 / 9
Barker Road		
- South of Appleway	10% / 10%	577 / 26 / 46
Harvard Road		
- North of Mission	6% / 6%	346 / 16 / 28
Appleway Ave		
- East of Liberty Lake Drive	5%/ 5%	289 / 13 / 23
Appleway / Country Vista Drive		
- East of Liberty Lake Road	20% / 20%	1155 / 52 / 94
- West of Appleway / Barker	10% / 10%	577 / 26 / 46
Kramer Road		
- South of Country Vista	10% / 10%	577 / 26 / 46
Liberty Lake Road		
- South of Country Vista	4% / 4%	231 / 10 / 19
Legacy Ridge Drive		
- South of Country Vista	2% / 2%	116 / 5 / 9
Interstate 90 Westbound		
- Barker Road I/C	0% / 6%	0-346 / 0-16 / 0-28
- Greenacres I/C	3% / 0%	173-0 / 8-0 / 14-0
- Liberty Lake I/C	6% / 6%	346 / 16 / 28
Interstate 90 Eastbound		
- Barker Road I/C	3% / 0%	173-0 / 8-0 / 14-0
- Greenacres I/C	0% / 5%	0-289 / 0-13 / 0-23
- Liberty Lake I/Ca	9% / 4%	521-231 / 23-10 / 42-19
Totals	**100%**	**5,774 / 260 / 464**

Trips were distributed east and west to assumed residential areas via main arterials. AM and PM peak hour trip distributions at selected intersections are shown in **Figures 3** and **4,** with Pass By trips shown in **Figure 5**.

Some trips may be made by walking, however there are few residential units within 0.25 miles of the location. Enhanced crossings are available at the Kramer Parkway and at the Legacy Drive intersections.

Spokane Transit Authority Route 98 provides Weekday transit service on Country Vista at 30

minute intervals, and Saturday/Sunday/Holiday service at 60 minute intervals from 6am to Midnight. No vehicle trip adjustment was taken for these possible trips.

Forecast volume increases at key intersections indicate that several will have an increase of more than 50 trips in the PM Peak:

- Appleway / Barker – 123
- Country Vista / I-90 Greenacres Ramps – 142
- Country Vista / Kramer Parkway - 234
- Country Vista / Legacy Ridge Drive – 347
- Country Vista / N. Liberty Lake Road – 220
- I-90 EB Ramps / N. Liberty Lake Road – 110
- Harvard / I-90 Westbound Off Ramp – 42

CITY OF LIBERTY LAKE – HARVARD ROAD MITIGATION PLAN

The City of Liberty Lake provides the opportunity to participate in the *Harvard Road Mitigation Plan* voluntary impact fee program in lieu of completing a Traffic Impact Analysis (TIA) and mitigations as may be identified therein. The "Updated Harvard Road Mitigation Plan Fees", adopted in 2014, identify various rates for different types of retail and commercial usage based upon square footage or other unit of measure. Per the City, the assessment for recreational uses is based on PM Peak Hour trips at the current per trip rate. The resulting preliminary assessments are shown in **Table 3**.

CITY OF SPOKANE VALLEY IMPACTS

The *Harvard Road Mitigation Plan* does not include the City of Spokane Valley, and the City does not have an interlocal agreement with the City of Liberty Lake to collect transportation impact fees. The City of Spokane Valley's South Barker Corridor is an impact fee area. Impacts of development outside the City limits were considered in developing the fee structure. While the fee is based on total development trips, a reduction is taken for the proportion going through the corridor prior to the cost per trip calculation. Per the *South Barker Corridor Transportation Impact Fee Rate Study for Liberty Lake*, projects located within Liberty Lake transportation analysis zones are estimated to have a fair share cost of $653 per new PM peak hour trip. This fee and associated rates were developed based on a Transportation Analysis Zone (TAZ) level analysis of impact to the South Barker Corridor.

The resulting preliminary project assessment is based on 464 new PM trips generated and also shown in **Table 3** on the following page.

Table 3. Impact Fee Assessment, Liberty Lake Land Company Master Development				
City of Liberty Lake				
Land Use / ITE Code	**Mitigation Unit**	**Number of Units**	**Fee per Unit**	**Assessment**
Sports Entertainment – N/A	PM Peak Trips	132	762.53	$100,653.96
Fast Food – 934	1,000 SF	2.5	6,519.12	$16,297.80
Bank – 912	1,000 SF	5	6,519.12	$32,595.60
Pharmacy – 881 (Use Specialty Retail)	1,000 SF	13	3,123.41	$40,604.33
Medical – 720	1,000 SF	4	2,578.82	$10,315.28
Supermarket – 850	1,000 SF	15	4,821.27	$72,319.05
Hotel – 310	Room	100	544.60	$54,460.00
			Subtotal:	**$327,246.02**
City of Spokane Valley				
	PM Peak Trips	464	653.00	$302,992.00
			Subtotal:	**$302,992.00**
			Total:	**$630,238.02**

WSDOT Impacts

WSDOT requested a review of the Appleway / Greenacres Interchange intersection to assess capacity to accommodate project trips. Counts for the intersection performed by IDAX on May 8, 2024 were provided to Ardurra by Spokane Valley for this evaluation. AM and PM count volumes were grown at a background rate of 2% for the 2025 Without and 2025 With-Project conditions. Three Pipeline projects were also requested for inclusion in this analysis:

- Legacy Ridge Mixed Use / Jakes Townhomes (LUA2023-0001)
- Country Vista BSP (85% volumes) (LUA2022-0028)
- Neighborly Ventures / Liberty Lake Apartments (LUA2022-0004)

Table 4 provides a summary of existing and forecast traffic operations, including LOS, delay, and maximum v/c ratio (movement) for the intersection during the AM and PM peak hours.

Table 4. Appleway / Greenacres Intersection LOS						
Conditions	**AM Peak Hour**			**PM Peak Hour**		
	LOS[1]	**Delay[2]**	**Max v/c**	**LOS[1]**	**Delay[2]**	**Max v/c**
2024 Existing	B	14.5 (SB)	0.21 (EBL)	B	12.7 (SB)	0.30 (SBR)
2025 Without Project	D	32.2 (SB)	0.51 (SBL)	C	24.5 (SB)	0.50 (SBR)
2025 With Project	E	38.8 (SB)	0.61 (SBL)	D	28.2 (SB)	0.54 (SBR)

1. LOS = Level of service
2. Average Control Delay for signalized/roundabout/AWSC intersections. Worst movement delay for TWSTC

The conditions today indicate low v/c and acceptable LOS at the intersection, indicating available capacity. The project forecast volumes added to forecast 2025 volumes and pipeline projects indicate LOS reaches E in the AM Peak. Queuing (95th percentile) is reported at less than three vehicles, although site observations (such as from street imagery) show instances of more than five vehicles.

Forecast PM Peak contributions to the intersection from each project are as follows:

- Legacy Ridge – 28 vehicles
- Country Vista BSP (85%) – 855 vehicles
- Neighborly Ventures / Liberty Lake Apartments – 161 vehicles
- Liberty Lake Corporate Park – 142 vehicles

WSDOT also has an interest in the effect of the project on operations of the Barker Road interchange at Interstate 90. Based on trip distributions, the number of PM trips forecast to be added to the ramp intersections is as follows:

- Interstate 90 EB Ramps – 31
- Interstate 90 WB Ramps – 24

It should be noted that drivers with knowledge of the performance of the Barker corridor may choose to use the Harvard Road interchange despite the difference in travel distance.

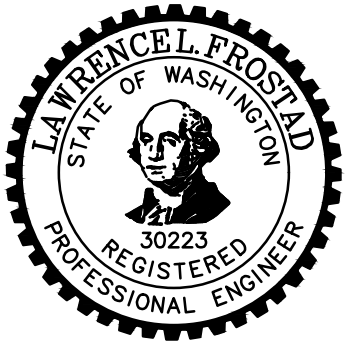
SUMMARY

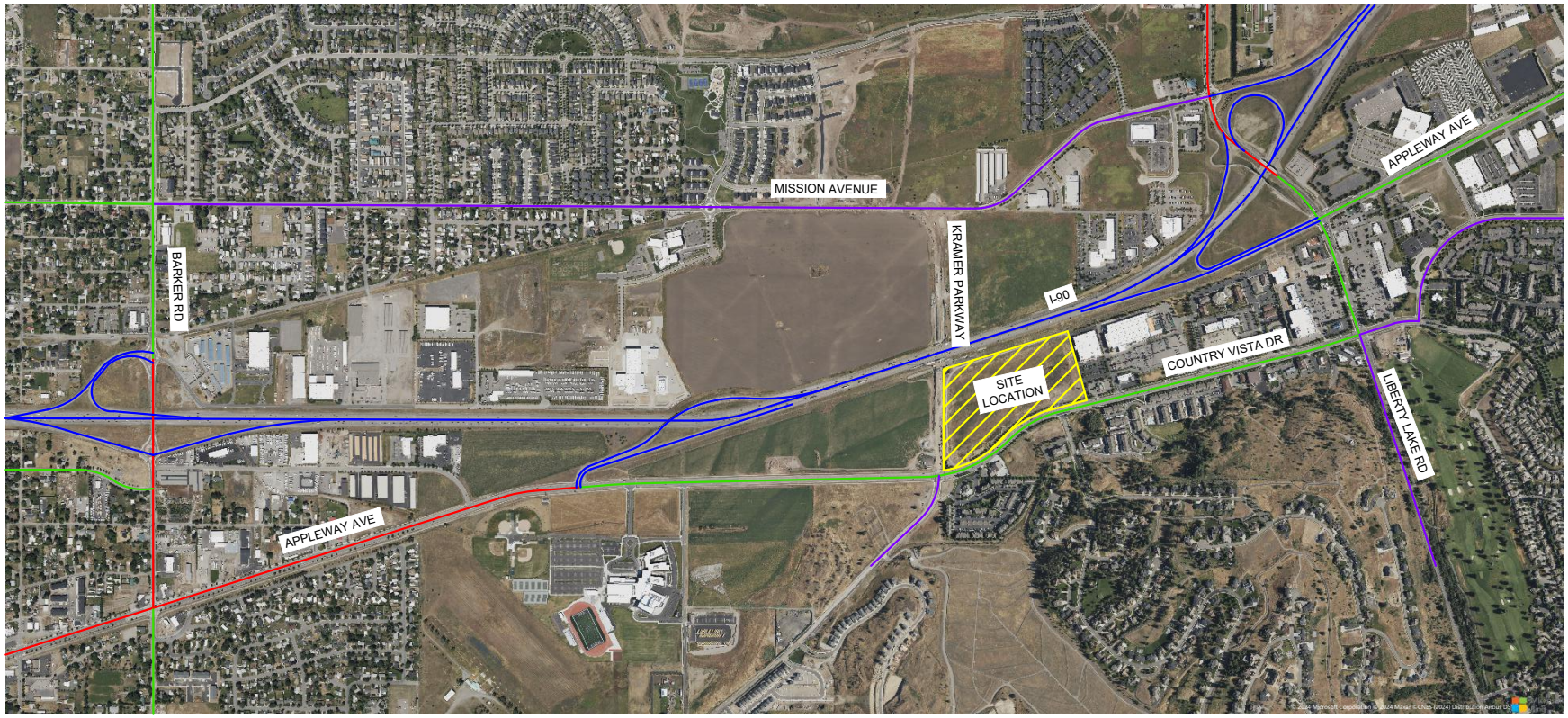
The Liberty Lake Land Company Master Development is proposed in a portion of the Liberty Lake Corporate Park in Liberty Lake, WA. Planned project completion is estimated for 2025. Access will be from approaches on Country Vista Drive, including the Legacy Ridge Drive intersection. Typical land uses congruent with site zoning were used to estimate trip potentials. The project is anticipated to generate 7,109 Weekday, 332 AM Peak, and 646 PM Peak trips. Pass-By trips reduce the number of new trips to 5,774 Weekday, 260 AM, and 464 PM Peak trips. By way of comparison with historically anticipated uses (*Harvard Road Mitigation Plan*), an Office Park sized at 30% of the site acreage (409 ksf) yields 4,528 Weekday, 579 AM, and 536 PM trips.

Trips were assigned to the network. Six intersections were noted to have a forecast increase of more than 50 PM Peak trips. Per WSDOT request, analysis of the Appleway / Greenacres Interchange intersection with traffic volumes collected in May 2024 shows that it currently functions at LOS B/B. Addition of background, pipeline, and project volumes indicate the intersection will operate at LOS E/D in 2025 AM/PM. No specific improvement is indicated at the intersection to accommodate increased traffic volume associated with this development.

It is recommended that project impacts be addressed through established impact fee and proportionality programs. This would be SEPA impact mitigation estimate of $327,246.02 for the City of Liberty Lake and $302,992.00 to the City of Spokane Valley; conditioned as a mitigated determination of non-significance (MDNS).

This ends the expanded trip generation, distribution and threshold analysis for the Liberty Lake Corporate Park prepared as a function of the transportation concurrency review process. Please contact our office with questions or comments.





LEGEND

- INTERSTATE
- OTHER PRINCIPAL ARTERIAL
- MINOR ARTERIAL
- MAJOR COLLECTOR

DATE: 7/31/24 JOB:

1 VICINITY MAP
SCALE: NTS

TWENTY FIRST AMENDMENT BSP-50-96
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NOT FOR PUBLIC KNOWLEGE

NO.	REVISIONS DESCRIPTION	DATE

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CHECKED		
APPROVED		

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TO FINAL BINDING SITE PLAN
BSP-50-96
SECTION 15 & 16, T.25N., R.45E., W.M.

ATTENTION: IF THIS BAR DOES NOT MEASURE 1/2" ON 11x17 SHEET, THEN DRAWING IS NOT TO SCALE

DATE: 8/31/2024
PROJECT: ARBP-240181
SHEET: 1 OF 1

DATE: 7/31/24 JOB:

2 SITE PLAN
SCALE: NTS

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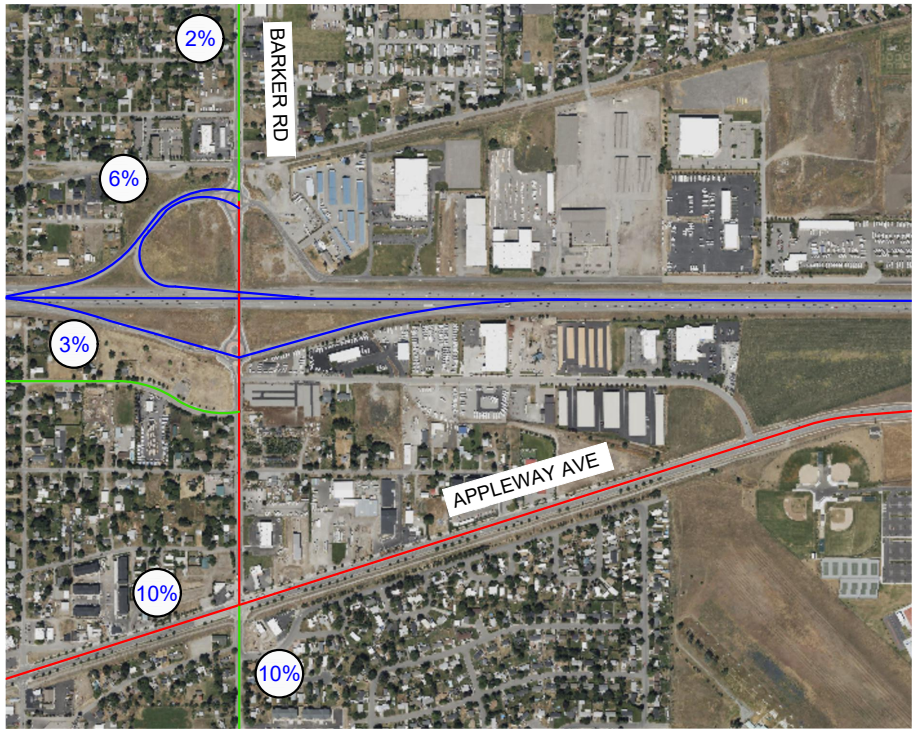

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- MAJOR COLLECTOR
- INTERSECTION TURNING MOVEMENTS
- X% DISTRIBUTION %

DATE: 7/31/24 JOB:

3A TRIP ASSIGNMENTS & DISTRIBUTION
AM PEAK HOUR
INCLUDES PASS BY TRIPS

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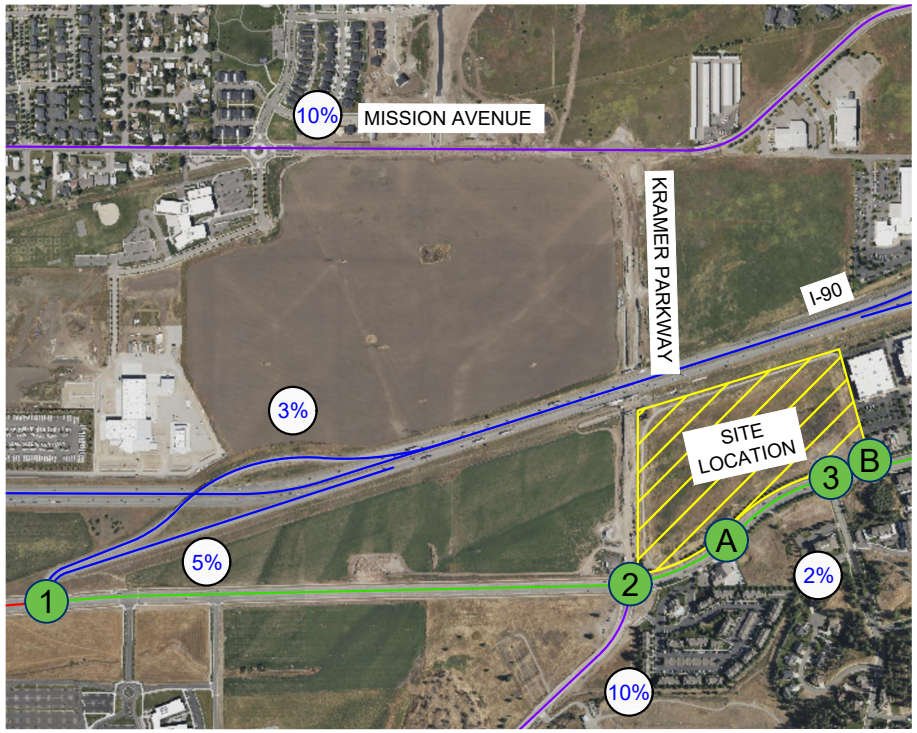

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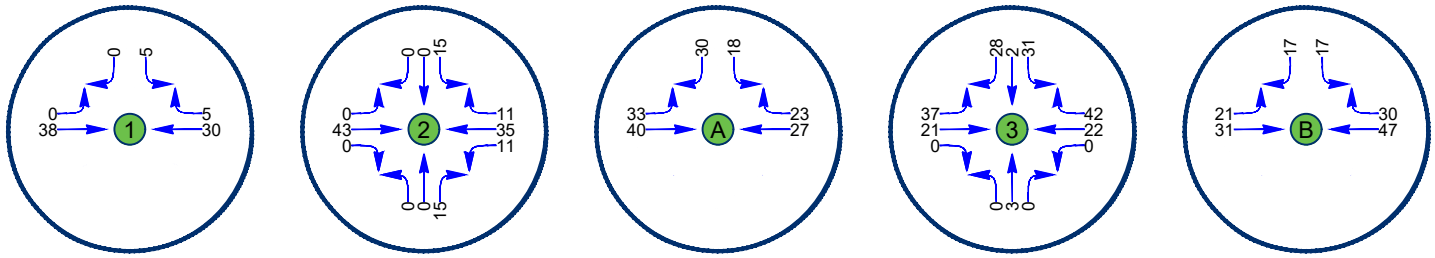
- MINOR ARTERIAL
- MAJOR COLLECTOR
- INTERSECTION TURNING MOVEMENTS
- X% DISTRIBUTION %



DATE: 7/31/24 JOB:

3B TRIP ASSIGNMENTS & DISTRIBUTION
AM PEAK HOUR
INCLUDES PASS BY TRIPS

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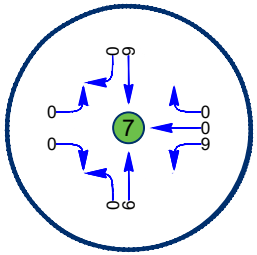

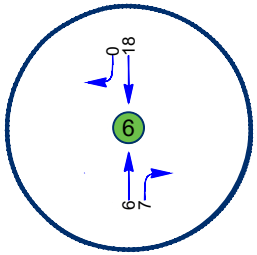

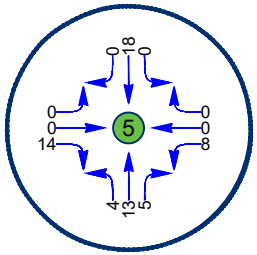

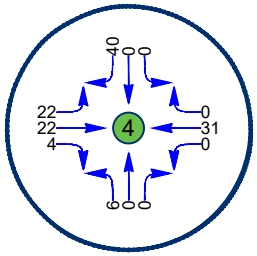

LEGEND

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- MINOR ARTERIAL
- MAJOR COLLECTOR
- INTERSECTION TURNING MOVEMENTS
- X% DISTRIBUTION %

DATE: 7/31/24 JOB:

3C TRIP ASSIGNMENTS & DISTRIBUTION
AM PEAK HOUR
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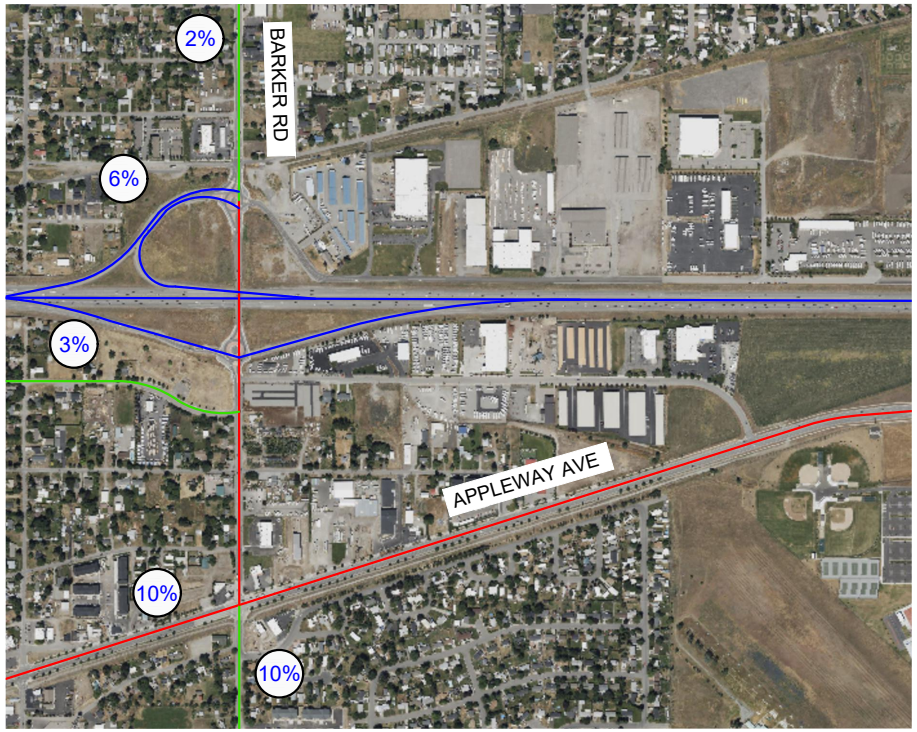

LEGEND

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- MINOR ARTERIAL
- MAJOR COLLECTOR
- INTERSECTION TURNING MOVEMENTS
- X% DISTRIBUTION %

DATE: 7/31/24 JOB:

4A TRIP ASSIGNMENTS & DISTRIBUTION
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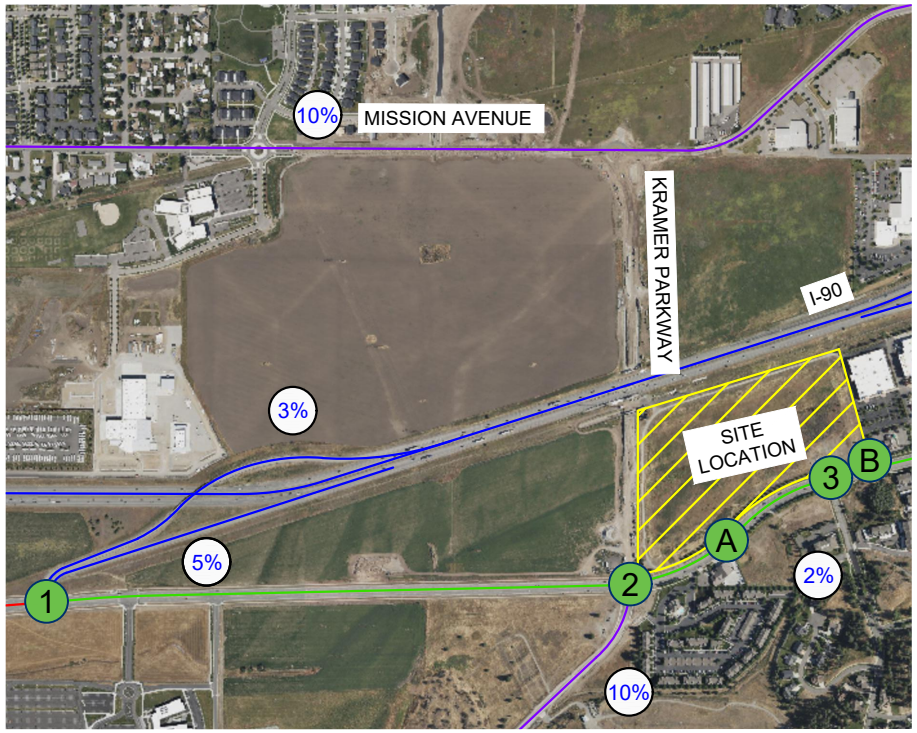

LEGEND

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- INTERSECTION TURNING MOVEMENTS
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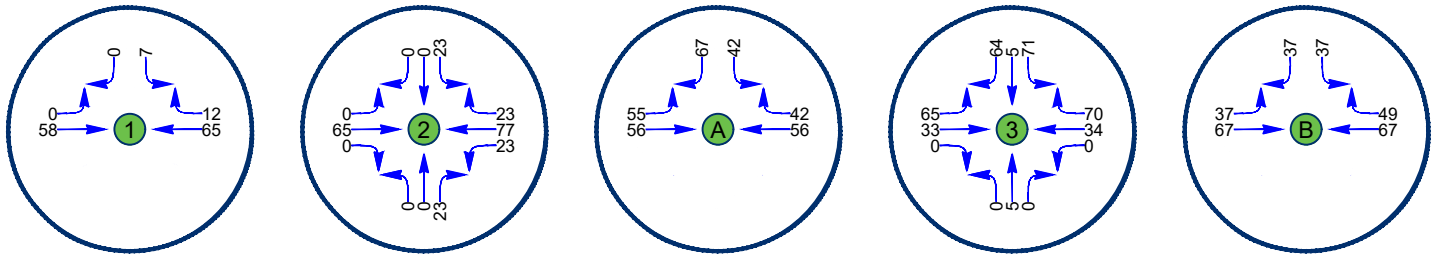

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4B TRIP ASSIGNMENTS & DISTRIBUTION
PM PEAK HOUR
INCLUDES PASS BY TRIPS

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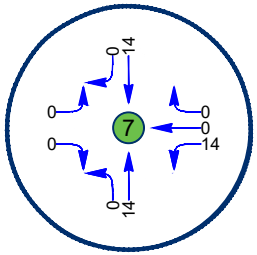

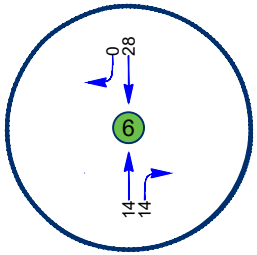

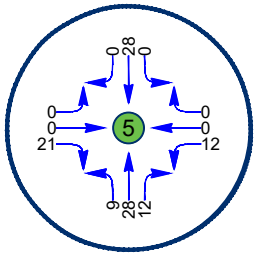

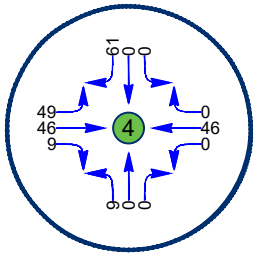

LEGEND

- INTERSTATE
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- MINOR ARTERIAL
- MAJOR COLLECTOR
- INTERSECTION TURNING MOVEMENTS
- X% DISTRIBUTION %

DATE: 7/31/24 JOB:

4C TRIP ASSIGNMENTS & DISTRIBUTION

PM PEAK HOUR
INCLUDES PASS BY TRIPS

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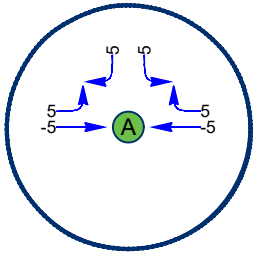
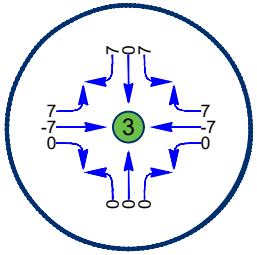
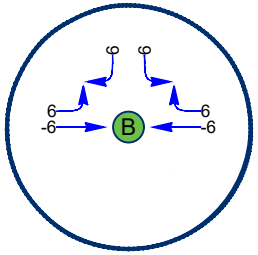
LEGEND

- INTERSTATE
- OTHER PRINCIPAL ARTERIAL
- MINOR ARTERIAL
- MAJOR COLLECTOR
- INTERSECTION TURNING MOVEMENTS
- X% DISTRIBUTION %

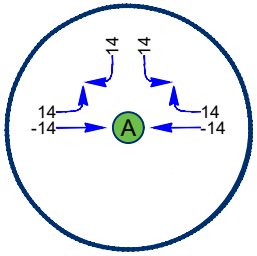
AM PASS BY TRIPS

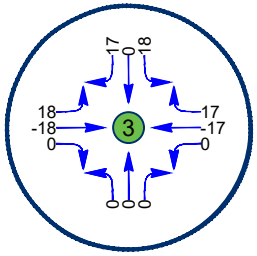


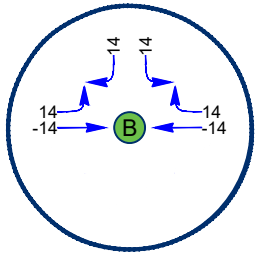




PM PASS BY TRIPS







DATE: 7/31/24 JOB:

5 PASS BY TRIPS
AM/PM PEAK HOUR

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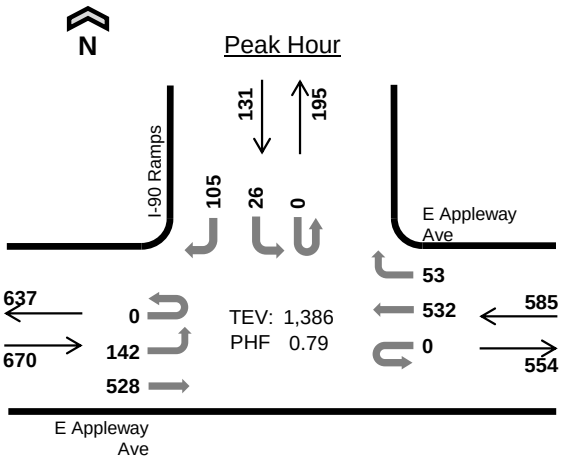
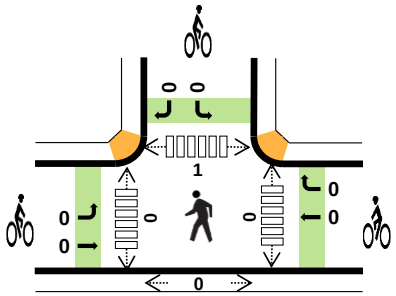
I-90 Ramps
E Appleway Ave



Date: 05/08/2024
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:00 AM to 8:00 AM



	HV %:	PHF
EB	4.9%	0.78
WB	5.6%	0.77
NB	-	-
SB	2.3%	0.94
TOTAL	5.0%	0.79

Two-Hour Count Summaries

Interval Start		E Appleway Ave Eastbound				E Appleway Ave Westbound				0 Northbound				I-90 Ramps Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		**0**	**37**	**104**	**0**	**0**	**0**	**87**	**7**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**23**	**264**	0
7:15 AM		**0**	**31**	**132**	**0**	**0**	**0**	**125**	**17**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**27**	**340**	0
7:30 AM		**0**	**43**	**172**	**0**	**0**	**0**	**173**	**16**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**26**	**437**	0
7:45 AM		**0**	**31**	**120**	**0**	**0**	**0**	**147**	**13**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**29**	**345**	**1,386**
8:00 AM		0	29	108	0	0	0	77	8	0	0	0	0	0	4	0	27	253	1,375
8:15 AM		0	28	82	0	1	0	83	4	0	0	0	0	0	0	0	24	222	1,257
8:30 AM		0	32	110	0	0	0	96	6	0	0	0	0	0	6	0	36	286	1,106
8:45 AM		0	29	82	0	0	0	99	15	0	0	0	0	0	3	0	33	261	1,022
Count Total		0	260	910	0	1	0	887	86	0	0	0	0	0	39	0	225	2,408	0
Peak Hour	**All**	**0**	**142**	**528**	**0**	**0**	**0**	**532**	**53**	**0**	**0**	**0**	**0**	**0**	**26**	**0**	**105**	**1,386**	**0**
	HV	**0**	**8**	**25**	**0**	**0**	**0**	**32**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**69**	**0**
	HV%	**-**	**6%**	**5%**	**-**	**-**	**-**	**6%**	**2%**	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**3%**	**5%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
7:00 AM	**10**	**4**	**0**	**0**	***14***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:15 AM	**4**	**11**	**0**	**2**	***17***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	*1*
7:30 AM	**9**	**9**	**0**	**0**	***18***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**10**	**9**	**0**	**1**	***20***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:00 AM	7	5	0	0	*12*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 AM	7	5	0	1	*13*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	5	2	0	3	*10*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	9	3	0	1	*13*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	61	48	0	8	*117*	0	0	0	0	*0*	0	0	1	0	*1*
Peak Hr	**33**	**33**	**0**	**3**	***69***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	***1***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Appleway Ave				E Appleway Ave				0				I-90 Ramps				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	**0**	**2**	**8**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**14**	0
7:15 AM	**0**	**0**	**4**	**0**	**0**	**0**	**11**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**17**	0
7:30 AM	**0**	**2**	**7**	**0**	**0**	**0**	**8**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**18**	0
7:45 AM	**0**	**4**	**6**	**0**	**0**	**0**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**20**	**69**
8:00 AM	0	0	7	0	0	0	5	0	0	0	0	0	0	0	0	0	12	67
8:15 AM	0	3	4	0	0	0	5	0	0	0	0	0	0	0	0	1	13	63
8:30 AM	0	2	3	0	0	0	2	0	0	0	0	0	0	0	0	3	10	55
8:45 AM	0	3	6	0	0	0	3	0	0	0	0	0	0	0	0	1	13	48
Count Total	0	16	45	0	0	0	47	1	0	0	0	0	0	0	0	8	117	0
Peak Hour	**0**	**8**	**25**	**0**	**0**	**0**	**32**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**69**	**0**

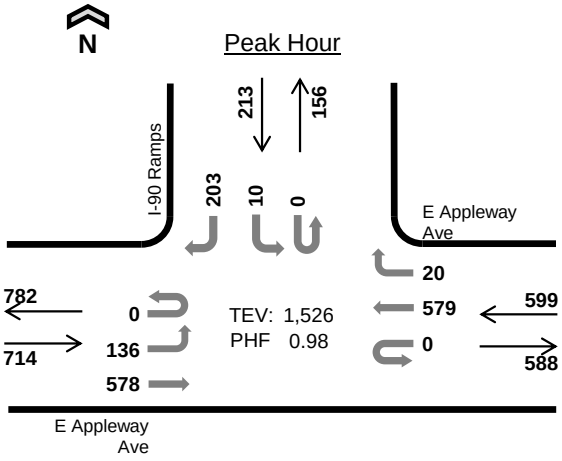
Two-Hour Count Summaries - Bikes

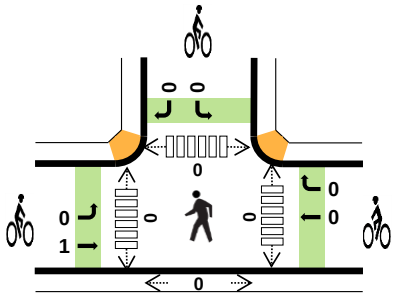
Interval Start	E Appleway Ave			E Appleway Ave			0			I-90 Ramps			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

I-90 Ramps
E Appleway Ave

Date: 05/08/2024
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:00 PM to 5:00 PM





	HV %:	PHF
EB	4.5%	0.96
WB	2.3%	0.90
NB	-	-
SB	1.9%	0.87
TOTAL	3.3%	0.98

Two-Hour Count Summaries

Interval Start		E Appleway Ave Eastbound				E Appleway Ave Westbound				0 Northbound				I-90 Ramps Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		**0**	**33**	**152**	**0**	**0**	**0**	**141**	**3**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**42**	**375**	0
4:15 PM		**0**	**38**	**134**	**0**	**0**	**0**	**139**	**2**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**56**	**374**	0
4:30 PM		**0**	**39**	**137**	**0**	**0**	**0**	**161**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**45**	**388**	0
4:45 PM		**0**	**26**	**155**	**0**	**0**	**0**	**138**	**9**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**60**	**389**	**1,526**
5:00 PM		0	37	129	0	0	0	145	8	0	0	0	0	0	2	0	52	373	1,524
5:15 PM		0	28	141	0	0	0	113	7	0	0	0	0	0	1	0	54	344	1,494
5:30 PM		0	23	155	0	0	0	152	1	0	0	0	0	0	1	0	57	389	1,495
5:45 PM		0	24	114	0	0	0	124	8	0	0	0	0	0	4	0	49	323	1,429
Count Total		0	248	1,117	0	0	0	1,113	44	0	0	0	0	0	18	0	415	2,955	0
Peak Hour	**All**	**0**	**136**	**578**	**0**	**0**	**0**	**579**	**20**	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**203**	**1,526**	**0**
	HV	**0**	**4**	**28**	**0**	**0**	**0**	**14**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**50**	**0**
	HV%	**-**	**3%**	**5%**	**-**	**-**	**-**	**2%**	**0%**	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**2%**	**3%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	**21**	**2**	**0**	**2**	***25***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:15 PM	**6**	**5**	**0**	**1**	***12***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:30 PM	**2**	**4**	**0**	**1**	***7***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**3**	**3**	**0**	**0**	***6***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:00 PM	4	1	0	1	*6*	0	0	0	0	*0*	0	0	0	0	*0*
5:15 PM	2	1	0	1	*4*	0	0	0	0	*0*	0	0	0	0	*0*
5:30 PM	2	2	0	2	*6*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	1	1	0	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	41	19	0	8	*68*	1	0	0	0	*1*	0	0	0	0	*0*
Peak Hr	**32**	**14**	**0**	**4**	***50***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***

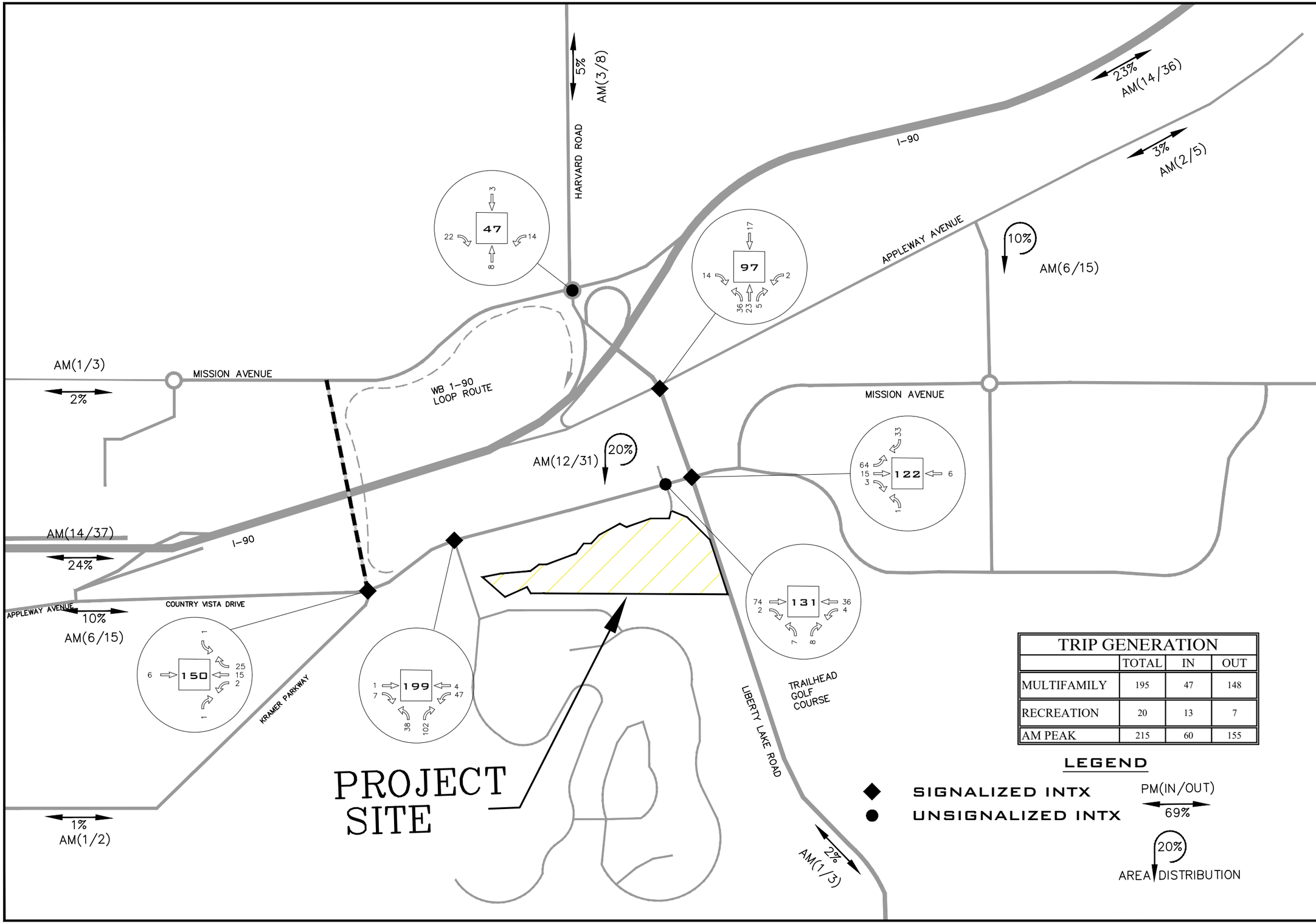
Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Appleway Ave				E Appleway Ave				0				I-90 Ramps				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**3**	**18**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**25**	0
4:15 PM	**0**	**1**	**5**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**12**	0
4:30 PM	**0**	**0**	**2**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**7**	0
4:45 PM	**0**	**0**	**3**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**50**
5:00 PM	0	2	2	0	0	0	1	0	0	0	0	0	0	0	0	1	6	31
5:15 PM	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	1	4	23
5:30 PM	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	2	6	22
5:45 PM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	18
Count Total	0	6	35	0	0	0	19	0	0	0	0	0	0	0	0	8	68	0
Peak Hour	**0**	**4**	**28**	**0**	**0**	**0**	**14**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**50**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	E Appleway Ave			E Appleway Ave			0			I-90 Ramps			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:30 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	1	0	0	0	0	0	0	0	0	0	0	1	0
Peak Hour	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.



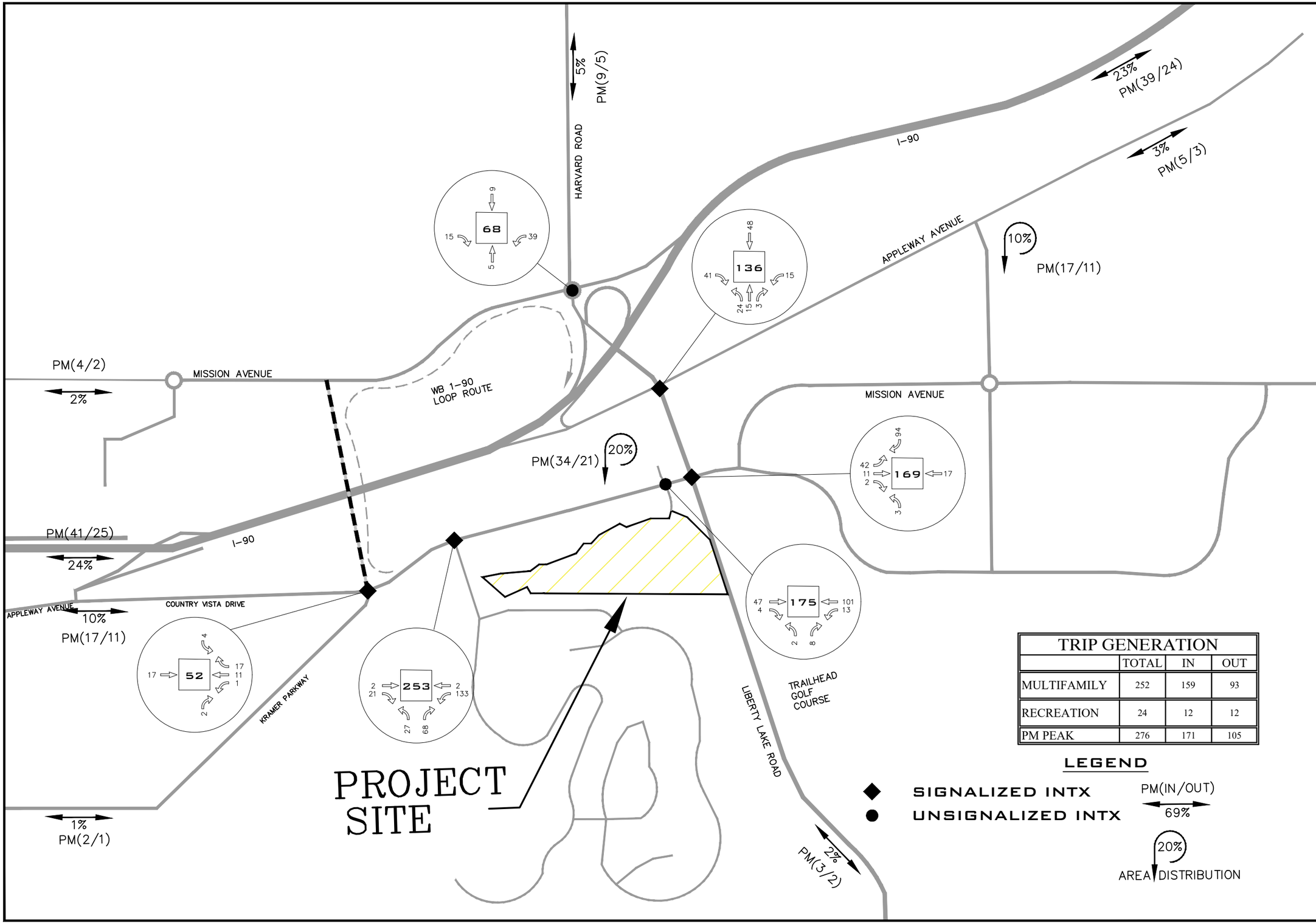
TRIP GENERATION			
	TOTAL	IN	OUT
MULTIFAMILY	195	47	148
RECREATION	20	13	7
AM PEAK	215	60	155

WCE
WHIPPLE CONSULTING ENGINEERS
21 S. PINES ROAD
SPOKANE VALLEY, WA 99206
PH: 509-893-2617 FAX: 509-926-0227

DATE: 21-3137
DRAWN: 04/03/23 MTR
APPROVED: TRW

TRIP GENERATION AND DISTRIBUTION
LEGACY MIXED USE
LIBERTY HEIGHTS LANE
LIBERTY LAKE, WASHINGTON
AM MULTIFAMILY DISTRIBUTION

FIGURE
3



TRIP GENERATION			
	TOTAL	IN	OUT
MULTIFAMILY	252	159	93
RECREATION	24	12	12
PM PEAK	276	171	105

LEGEND

- SIGNALIZED INTX
- UNSIGNALIZED INTX
- PM(IN/OUT) 69%
- 20% AREA DISTRIBUTION

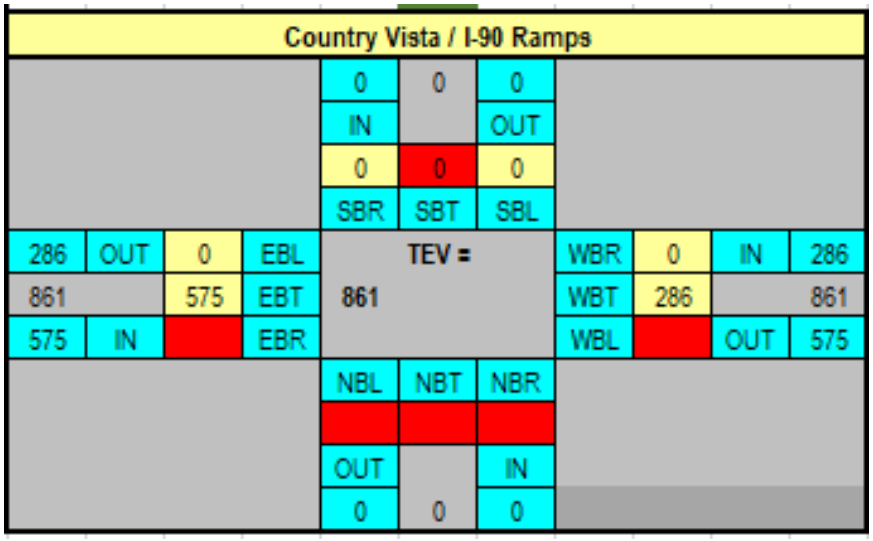
WHIPPLE CONSULTING ENGINEERS
21 S. PINES ROAD
SPOKANE VALLEY, WA 99206
PH: 509-893-2617 FAX: 509-926-0227

DATE: 21-3137
DRAWN: 04/03/23 MTR
APPROVED: TRW

TRIP GENERATION AND DISTRIBUTION
LEGACY MIXED USE
LIBERTY HEIGHTS LANE
LIBERTY LAKE, WASHINGTON
PM MULTIFAMILY DISTRIBUTION

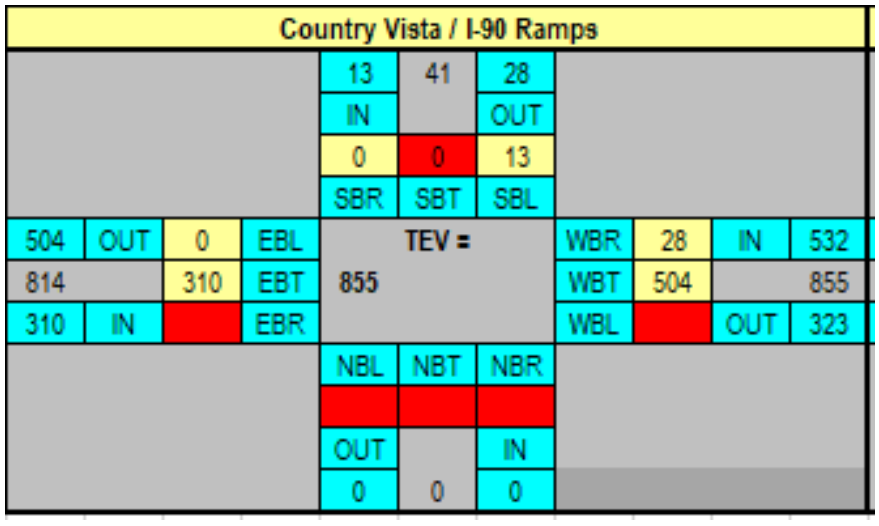
FIGURE
4

Country Vista BSP (85%) AM Volumes

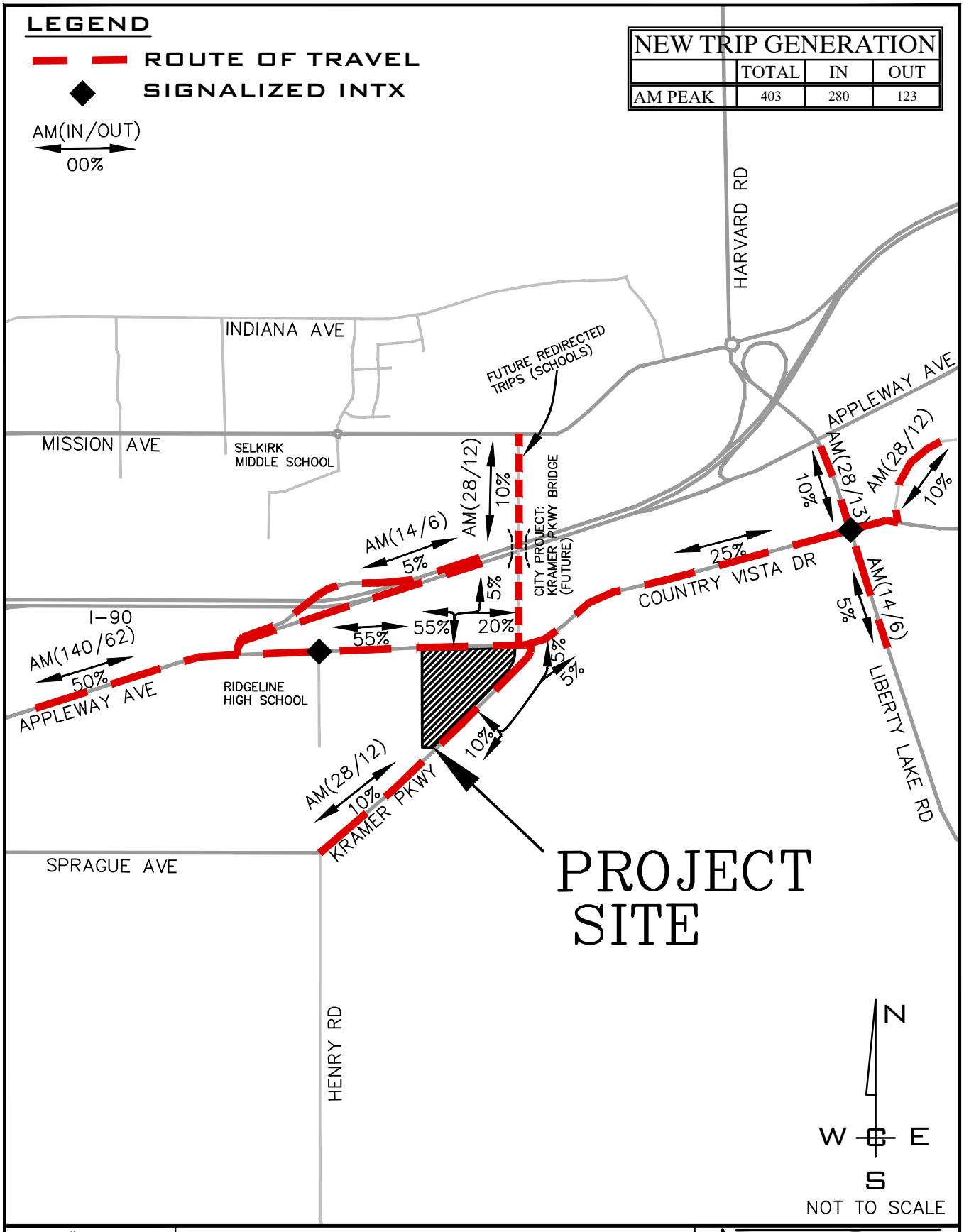


Country Vista / I-90 Ramps										
				0	0	0				
				IN		OUT				
				0	0	0				
				SBR	SBT	SBL				
286	OUT	0	EBL	TEV =			WBR	0	IN	286
861		575	EBT	861			WBT	286		861
575	IN		EBR				WBL		OUT	575
				NBL	NBT	NBR				
				OUT		IN				
				0	0	0				

Country Vista BSP (85%) PM Volumes



Country Vista / I-90 Ramps										
				13	41	28				
				IN		OUT				
				0	0	13				
				SBR	SBT	SBL				
504	OUT	0	EBL	TEV =			WBR	28	IN	532
814		310	EBT	855			WBT	504		855
310	IN		EBR				WBL		OUT	323
				NBL	NBT	NBR				
				OUT		IN				
				0	0	0				



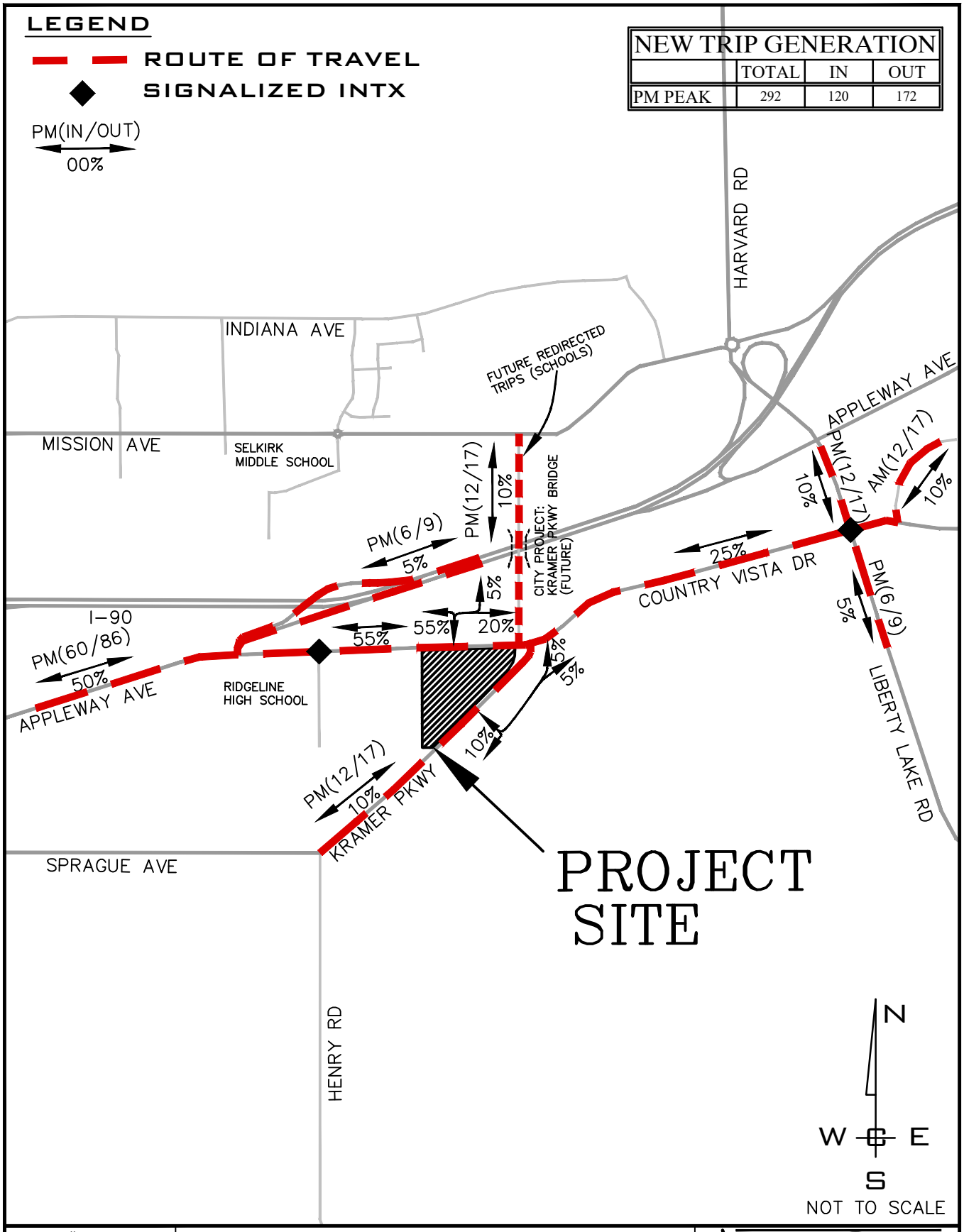
PROJ #: 21-3135
DATE: 04/26/22
DRAWN: KMK
APPROVED: TRW

TRIP GENERATION & DISTRIBUTION
LIBERTY LAKE APT
COUNTRY VISTA DR & KRAMER PKWY
LIBERTY LAKE, WASHINGTON

FIGURE 3

AM PROJECT TRIP DISTRIBUTION

WCE
WHIPPLE CONSULTING ENGINEERS
CIVIL AND TRANSPORTATION ENGINEERING
21 S. PINES ROAD
SPOKANE VALLEY, WASHINGTON 99206
PH: 509-893-2617 FAX: 509-926-0227



PROJ #: 21-3135
DATE: 04/26/22
DRAWN: KMK
APPROVED: TRW

TRIP GENERATION & DISTRIBUTION
LIBERTY LAKE APT
COUNTRY VISTA DR & KRAMER PKWY
LIBERTY LAKE, WASHINGTON

FIGURE 4

PM PROJECT TRIP DISTRIBUTION

WCE
WHIPPLE CONSULTING ENGINEERS
CIVIL AND TRANSPORTATION ENGINEERING
21 S. PINES ROAD
SPOKANE VALLEY, WASHINGTON 99206
PH: 509-893-2617 FAX: 509-926-0227

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	142	528	532	53	26	105
Future Vol, veh/h	142	528	532	53	26	105
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	250	-	-	-	120	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	5	5	6	6	2	2
Mvmt Flow	180	668	673	67	33	133

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	740	0	-	0	1401	370
Stage 1	-	-	-	-	707	-
Stage 2	-	-	-	-	694	-
Critical Hdwy	4.2	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.25	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	843	-	-	-	131	627
Stage 1	-	-	-	-	450	-
Stage 2	-	-	-	-	457	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	843	-	-	-	103	627
Mov Cap-2 Maneuver	-	-	-	-	228	-
Stage 1	-	-	-	-	354	-
Stage 2	-	-	-	-	457	-

Approach	EB	WB	SB
HCM Control Delay, s	2.2	0	14.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	843	-	-	-	228	627
HCM Lane V/C Ratio	0.213	-	-	-	0.144	0.212
HCM Control Delay (s)	10.4	-	-	-	23.4	12.3
HCM Lane LOS	B	-	-	-	C	B
HCM 95th %tile Q(veh)	0.8	-	-	-	0.5	0.8

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	136	578	579	20	10	203
Future Vol, veh/h	136	578	579	20	10	203
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	250	-	-	-	120	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	4	4	2	2	2	2
Mvmt Flow	139	590	591	20	10	207

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	611	0	-	0	1174	306
Stage 1	-	-	-	-	601	-
Stage 2	-	-	-	-	573	-
Critical Hdwy	4.18	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.24	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	950	-	-	-	185	690
Stage 1	-	-	-	-	510	-
Stage 2	-	-	-	-	527	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	950	-	-	-	158	690
Mov Cap-2 Maneuver	-	-	-	-	289	-
Stage 1	-	-	-	-	436	-
Stage 2	-	-	-	-	527	-

Approach	EB	WB	SB
HCM Control Delay, s	1.8	0	12.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	950	-	-	-	289	690
HCM Lane V/C Ratio	0.146	-	-	-	0.035	0.3
HCM Control Delay (s)	9.4	-	-	-	17.9	12.4
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0.5	-	-	-	0.1	1.3

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	145	1260	906	60	41	107
Future Vol, veh/h	145	1260	906	60	41	107
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	250	-	-	-	120	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	5	5	6	6	2	2
Mvmt Flow	184	1595	1147	76	52	135

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1223	0	-	0	2351	612
Stage 1	-	-	-	-	1185	-
Stage 2	-	-	-	-	1166	-
Critical Hdwy	4.2	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.25	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	549	-	-	-	~ 30	436
Stage 1	-	-	-	-	253	-
Stage 2	-	-	-	-	259	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	549	-	-	-	~ 20	436
Mov Cap-2 Maneuver	-	-	-	-	102	-
Stage 1	-	-	-	-	168	-
Stage 2	-	-	-	-	259	-

Approach	EB	WB	SB
HCM Control Delay, s	1.5	0	32.2
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	549	-	-	-	102	436
HCM Lane V/C Ratio	0.334	-	-	-	0.509	0.311
HCM Control Delay (s)	14.8	-	-	-	72.2	16.9
HCM Lane LOS	B	-	-	-	F	C
HCM 95th %tile Q(veh)	1.5	-	-	-	2.3	1.3

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	139	977	1192	57	29	207
Future Vol, veh/h	139	977	1192	57	29	207
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	250	-	-	-	120	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	4	4	2	2	2	2
Mvmt Flow	142	997	1216	58	30	211

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1274	0	-	0	2028	637
Stage 1	-	-	-	-	1245	-
Stage 2	-	-	-	-	783	-
Critical Hdwy	4.18	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.24	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	530	-	-	-	50	420
Stage 1	-	-	-	-	235	-
Stage 2	-	-	-	-	411	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	530	-	-	-	37	420
Mov Cap-2 Maneuver	-	-	-	-	124	-
Stage 1	-	-	-	-	172	-
Stage 2	-	-	-	-	411	-

Approach	EB	WB	SB
HCM Control Delay, s	1.8	0	24.5
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	530	-	-	-	124	420
HCM Lane V/C Ratio	0.268	-	-	-	0.239	0.503
HCM Control Delay (s)	14.3	-	-	-	42.9	21.9
HCM Lane LOS	B	-	-	-	E	C
HCM 95th %tile Q(veh)	1.1	-	-	-	0.9	2.7

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	145	1298	936	65	46	107
Future Vol, veh/h	145	1298	936	65	46	107
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	250	-	-	-	120	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	5	5	6	6	2	2
Mvmt Flow	184	1643	1185	82	58	135

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1267	0	-	0	2416	634
Stage 1	-	-	-	-	1226	-
Stage 2	-	-	-	-	1190	-
Critical Hdwy	4.2	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.25	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	528	-	-	-	~ 27	422
Stage 1	-	-	-	-	240	-
Stage 2	-	-	-	-	251	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	528	-	-	-	~ 18	422
Mov Cap-2 Maneuver	-	-	-	-	96	-
Stage 1	-	-	-	-	156	-
Stage 2	-	-	-	-	251	-

Approach	EB	WB	SB
HCM Control Delay, s	1.5	0	38.8
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	528	-	-	-	96	422
HCM Lane V/C Ratio	0.348	-	-	-	0.607	0.321
HCM Control Delay (s)	15.4	-	-	-	88.4	17.5
HCM Lane LOS	C	-	-	-	F	C
HCM 95th %tile Q(veh)	1.5	-	-	-	2.9	1.4

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	139	1035	1257	69	36	207
Future Vol, veh/h	139	1035	1257	69	36	207
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	250	-	-	-	120	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	4	4	2	2	2	2
Mvmt Flow	142	1056	1283	70	37	211

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1353	0	-	0	2130	677
Stage 1	-	-	-	-	1318	-
Stage 2	-	-	-	-	812	-
Critical Hdwy	4.18	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.24	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	494	-	-	-	43	395
Stage 1	-	-	-	-	214	-
Stage 2	-	-	-	-	397	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	494	-	-	-	~ 31	395
Mov Cap-2 Maneuver	-	-	-	-	112	-
Stage 1	-	-	-	-	153	-
Stage 2	-	-	-	-	397	-

Approach	EB	WB	SB
HCM Control Delay, s	1.8	0	28.2
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	494	-	-	-	112	395
HCM Lane V/C Ratio	0.287	-	-	-	0.328	0.535
HCM Control Delay (s)	15.2	-	-	-	52.1	24.1
HCM Lane LOS	C	-	-	-	F	C
HCM 95th %tile Q(veh)	1.2	-	-	-	1.3	3

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon