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NATURAL RESOURCE SERVICES

June 23, 2022

James and Cecilia Herbert 1994 Revocable Trust
4750 S. Courtland Drive, Jackson, WY 83001
(415) 296-3776

RE: Traffic Impact Study, Proposed *JC Ranches Subdivision*

Dear Mr. and Ms. Herbert:

This memorandum describes the projected effects of traffic generated by and distributed from the "*J.C. Ranches Subdivision*," proposed on the 80-acre parcel # RP05N45E101000, in SEC 10 TWP 5N RNG 45E in Teton County, Idaho.

Based on our analyses, the proposed 26-unit subdivision has no significant impacts on either County Road W 4000 N at the proposed entrance roads, or at the W 4000 N intersection at Idaho State Highway 33.

Capacity analysis suggests that -if current background traffic growth rates continue - the level of service at the W 4000 N intersection will degrade from level of service "B" to "D" over the coming 20 years. This is not due to the JC Ranches Subdivision alone, but to the extensive growth and development throughout Teton County, Idaho. As with all forecasts, this may or may not occur. For this reason, we recommend that area road agencies continue to monitor the intersection for compliance with MUTCD signal warrants.

The above is based on my opinion and my estimate of growth rate for the next 20 years. The estimate may or may not hold, it is an estimate based on my experience.

If there are any questions regarding this traffic impact study, please do not hesitate to contact me.

Sincerely,

Edmund Waddell, Community & Transportation Planner

Y2 Consultants

Atch: Traffic Analysis Memorandum and Appendices

Property Description:

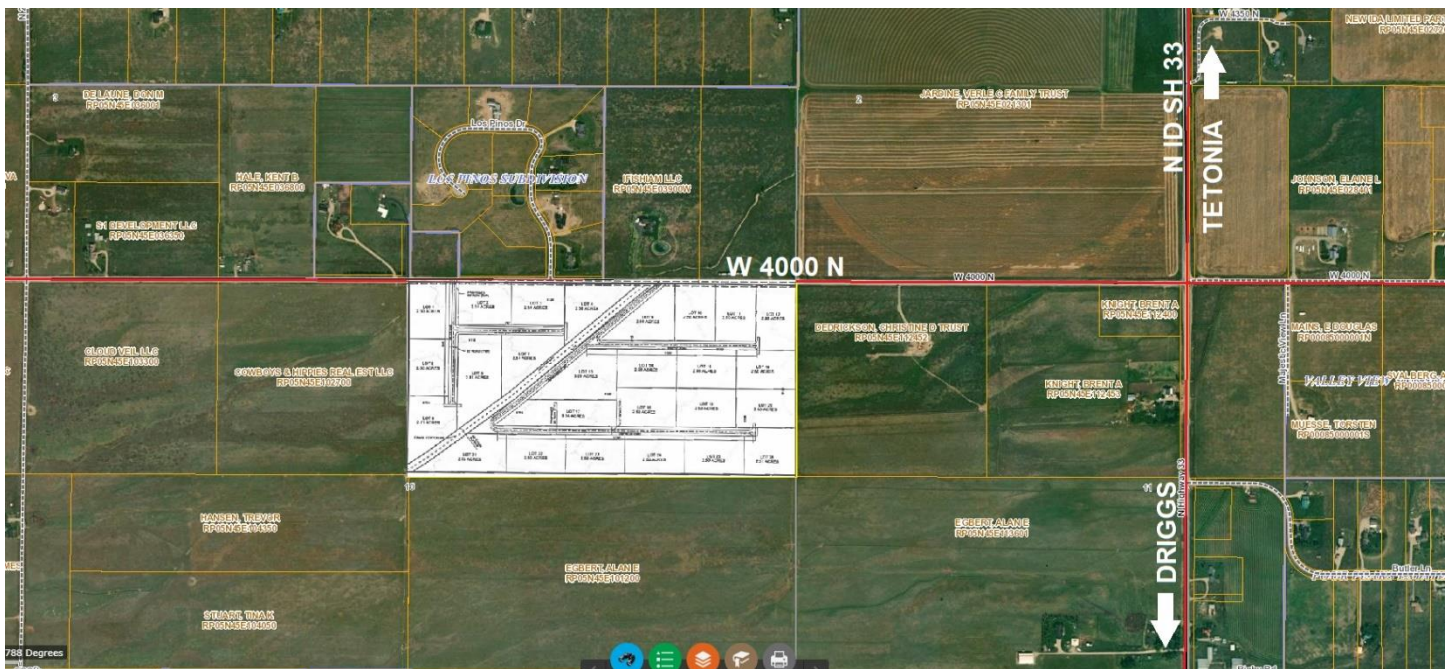
- **Size:** The parcel is ½-mile east-west by ¼-mile north-south, encompassing about 80 Acres.
- **By Township and Range:** The property is the north ½ of the NE ¼ of Section 10, Township 5 North Range 45 East, in Teton County, Idaho.
- **Physical Description:** The property is grass/rangeland, ranging in elevation from about 6,103 feet in the southwest corner to about 6,135 feet in the northeast corner. A surface drain crosses from northeast to southwest across the parcel.

Project Location:

- **By Road:** The proposed *J. C. Ranches Subdivision* is located on the south side of Teton County Road W 4000 N, ½ mile west of Idaho State Highway 33, and four miles north of downtown Driggs, Idaho.
- **By Lat-Long:** Latitude: North 43° 46' 47.37", Longitude: West 111° 07' 37.16"

Project Description:

- The proposed subdivision consists of 26 single-family residential lots, with eight west of the diagonal drainage channel and eighteen east of the drainage channel. A street is proposed to cross over the channel.



Public Road Access:

Two access roads will connect residences to the south side of Teton County Road W 4000 N.

- On the west side of the subdivision, *Vallejo Road* will provide access to eight lots.
- On the east, *Embarcadero Street* will provide access to eighteen lots.

Existing Road Network:

- Teton County Road W 4000 N is an asphalt road with two 11-foot travel lanes and four-foot shoulders. W 4000 N is under STOP control at the SH 33 intersection.

- Idaho SH 33 is an asphalt road with two 12-foot travel lanes and 4-foot shoulders. Approaching W 4000 N, State Highway 33 flares to thirty-six feet wide, with left-turn, through and right-turn lanes. Right turn bays are 250 feet long, and left turn bays are five hundred feet long.
- West of the subdivision, the closest north-south road is Teton County Road N 2000 W. N 2000 W is a gravel road nominally twenty-one feet wide without shoulders.

Aerial Image of Intersection of Idaho SH 33 at W4000 N



Existing Traffic Volumes (2022):

- Current average daily traffic (ADT) on Idaho State Highway SH 33 is about 6200 vehicles per day.
- The west leg of W 4000 N carries approximately 1100 ADT, with about 200 ADT on the opposite (east) leg.

| Turn Movement Counts: Idaho State Highway 33 at W 4000 N | | | | | | | | | | | | | | |
|--|----------------------|---------|---------|--------------------|---------|---------|-------------------|---------|---------|-------------------|---------|---------|---------|---------|
| Project # 22037 | Seasonal Adj. Factor | | | | | | | | | | | | | |
| 5/10-11/2022 | 874 | | | 145 | | | 6660 | | | 5842 | | | | |
| Estimated 2 Way ADT | 874 | | | 145 | | | 6660 | | | 5842 | | | | |
| AM Peak Traffic | Eastbound W 4000 N | | | Westbound W 4000 N | | | Northbound HWY 33 | | | Southbound HWY 33 | | | Total | PHF |
| Time | LEFT | THROUGH | RIGHT | LEFT | THROUGH | RIGHT | LEFT | THROUGH | RIGHT | LEFT | THROUGH | RIGHT | | |
| 06:30 - 06:45 | | | 13 | 1 | | | 1 | 10 | | | | 65 | | 90 |
| 06:45 - 07:00 | | | 19 | | 1 | | | 14 | | 1 | | 69 | | 104 |
| 07:00 - 07:15 | 1 | | 7 | | | | 2 | 28 | | | | 74 | | 112 |
| 07:15 - 07:30 | | | 13 | 1 | | | 1 | 35 | | 1 | | 59 | | 110 |
| 07:30 - 07:45 | 1 | | 9 | 1 | | | 3 | 43 | 1 | | | 89 | | 147 |
| 07:45 - 08:00 | | | 21 | 5 | | 3 | 1 | 36 | 1 | 1 | | 109 | | 177 |
| 08:00 - 08:15 | 1 | | 20 | | 1 | 6 | | 55 | 1 | 1 | | 91 | | 176 |
| 08:15 - 08:30 | 1 | | 12 | | | 3 | 11 | 57 | 3 | 1 | | 74 | 1 | 163 |
| 08:30 - 08:45 | 1 | | 8 | | | 3 | 5 | 37 | 1 | 2 | | 61 | 1 | 119 |
| 08:45 - 09:00 | 1 | 1 | 9 | 3 | | | 6 | 63 | | | | 75 | | 158 |
| TOTAL | 6 | 1 | 131 | 11 | 1 | 10 | 36 | 378 | 7 | 7 | | 766 | 2 | 1162 |
| | 4.3% | 0.7% | 94.9% | 50.0% | 4.5% | 45.5% | 8.6% | 89.8% | 1.7% | 0.9% | | 98.8% | 0.3% | |
| AM PEAK VOLUMES | 3 | - | 62 | 6 | - | 7 | 21 | 191 | 6 | 3 | | 363 | 1 | |
| SEASONALLY ADJUSTED | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 5/10-11/2022 | Eastbound W 4000 N | | | Westbound W 4000 N | | | Northbound HWY 33 | | | Southbound HWY 33 | | | Total | PHF |
| Time | LEFT | THROUGH | RIGHT | LEFT | THROUGH | RIGHT | LEFT | THROUGH | RIGHT | LEFT | THROUGH | RIGHT | | #DIV/0! |
| 11:00 - 11:15 | | | | | | | | | | | | | | 0 |
| 11:15 - 11:30 | | | | | | | | | | | | | | 0 |
| 11:30 - 11:45 | | | | | | | | | | | | | | 0 |
| 11:45 - 12:00 | | | | | | | | | | | | | | 0 |
| 12:00 - 12:15 | | | | | | | | | | | | | | 0 |
| 12:15 - 12:30 | | | | | | | | | | | | | | 0 |
| 12:30 - 12:45 | | | | | | | | | | | | | | 0 |
| 12:45 - 13:00 | | | | | | | | | | | | | | 0 |
| TOTAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | |
| MIDDAY PEAK VOLUMES | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| SEASONALLY ADJUSTED | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 5/10-11/2022 | Eastbound W 4000 N | | | Westbound W 4000 N | | | Northbound HWY 33 | | | Southbound HWY 33 | | | Total | PHF |
| Time | LEFT | THROUGH | RIGHT | LEFT | THROUGH | RIGHT | LEFT | THROUGH | RIGHT | LEFT | THROUGH | RIGHT | | |
| 15:30-15:45 | | | 6 | 2 | | | 10 | 74 | 3 | 3 | | 37 | 1 | 136 |
| 15:45-16:00 | | | 8 | 1 | | 2 | 10 | 91 | 1 | | | 43 | 1 | 157 |
| 16:00-16:15 | | | 7 | 1 | | | 9 | 60 | 1 | | | 43 | 1 | 122 |
| 16:15-16:30 | 1 | | 5 | 1 | | | 15 | 60 | | | | 49 | | 131 |
| 16:30-16:45 | | | 9 | 1 | | | 8 | 75 | | | | 46 | 2 | 141 |
| 16:45-17:00 | | | 5 | | | 1 | 11 | 90 | | | | 67 | | 174 |
| 17:00-17:15 | 2 | | 6 | | | | 15 | 95 | 1 | | | 46 | 1 | 166 |
| 17:15-17:30 | | | 11 | | | | 15 | 100 | 1 | | | 50 | | 177 |
| 17:30-17:45 | | | 9 | | | | 11 | 90 | 1 | 1 | | 48 | | 160 |
| 17:45-18:00 | 1 | | 6 | 1 | | | 9 | 87 | | | | 49 | 2 | 155 |
| 18:00-18:15 | | | 5 | | | | 9 | 84 | 2 | | | 46 | 4 | 150 |
| 18:15-18:30 | | | 5 | 1 | | | 14 | 80 | 1 | | | 40 | | 141 |
| 18:30-18:45 | | | 3 | 1 | 1 | | 7 | 66 | 1 | 2 | | 45 | 0 | 125 |
| 18:45-19:00 | | | 5 | | | | 10 | 47 | 2 | | | 32 | | 96 |
| TOTAL | 4 | 0 | 90 | 9 | 0 | 3 | 153 | 1099 | 14 | 6 | | 641 | 12 | 1616 |
| | 4.3% | 0.0% | 95.7% | 75.0% | 0.0% | 25.0% | 12.1% | 86.8% | 1.1% | 0.9% | | 97.3% | 1.8% | |
| PM PEAK VOLUMES | 2 | 0 | 31 | 0 | 0 | 1 | 52 | 375 | 3 | 1 | | 211 | 1 | |
| SEASONALLY ADJUSTED | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| ESTIMATED DADT | 26 | 0 | 485 | 33 | 0 | 43 | 353 | 2766 | 47 | 21 | | 2976 | 10 | |

Background Traffic Growth:

- Traffic recorded on State Highway 33 near Driggs has been growing at about 3% annually.
- Adjacent roads are being developed with low density rural residential and are estimated to grow at 4% annually.
- These rates are typical in a growing suburban residential area. We have projected that these rates will continue, causing the total intersection traffic volume to double by 2042. (See Appendix A for intersection turn movements.)

Existing Land Use:

- The existing 80-acre parcel is vacant land with a drain running NE-SW across the property.

Proposed Land Use:

- The proposed land use is a 26-unit single family residential subdivision.

Trip Generation Estimate:

The Institute of Transportation Engineers' (ITE) *Trip Generation Manual* for land use 210 (Single Family Homes) estimates each dwelling unit will generate 9.52 vehicle trips per day. The proposed 26-unit single family residential subdivision will therefore generate approximately 247 vehicle trips per day (124 entering and 124 exiting) with the following daily and hourly directional volumes:

| LAND USE 210 SF Homes | DAILY TRIP ENDS | AM | AM INBOUND | AM OUTBOUND | PM | PM INBOUND | PM OUTBOUND |
|--|--------------------|---------------|---------------|----------------|---------|---------------|----------------|
| ITE Factor | 9.52 per du | .75 per du | 25% | 75% | 1.00/du | 63% | 37% |
| 8 Lots via Vallejo Rd. | 76 | 6 | 2 | 5 | 8 | 5 | 3 |
| 18 Lots via Embarcadero St. | 171 | 14 | 3 | 10 | 18 | 11 | 7 |
| TOTAL | 247 | 20 | 5 | 15 | 26 | 16 | 10 |

Trip Distribution Calculation:

- **Access Street Volumes:**

All subdivision traffic will enter the road network via County Road W 4000 N. Eight lots will enter W 4000 N via the west entry (Vallejo Road). Eighteen lots will enter via the east entry (Embarcadero Street). Total subdivision traffic will split about 31% / 69% between these two access points.

- **Network Trip Distribution:**

With no non-residential destinations to the west, all traffic is assumed to interact to the east on W 4000 N. During peak hours, 5.1% of existing CR N 4000 W traffic interacts with north SH 33, while 94.9% interacts to/from the south on SH 33. Traffic from the new subdivision is expected to have the same 5%/95% directional split at the SH 33 intersection.

Mode Choice:

Because of the distance to area destinations and lack of public transit, all trips are assumed to take place by private vehicle.

Traffic Assignment:

Eight lots abut Vallejo Road and eighteen abut Embarcadero Street. We assume these lots will use these adjacent streets to reach W 4000 S.

Based on field-observed turn movement percentages at the SH 33 W 4000 N intersection, site generated traffic volumes were assigned to nearby roads as follows:

| TRAFFIC ASSIGNMENT | | | | | | |
|---------------------------|------------|-----------------|-------|--------|-------|--------|
| | | DAILY TRIP ENDS | AM IN | AM OUT | PM IN | PM OUT |
| | | 247 | 5 | 15 | 16 | 10 |
| Assigned Route | Percentage | | | | | |
| Vallejo Road | 31% | 76 | 2 | 5 | 5 | 3 |
| Embarcadero Street | 69% | 171 | 3 | 10 | 11 | 7 |
| South SH 33 | 94.9% | 235 | 5 | 14 | 15 | 9 |
| North SH 33 | 5.1% | 12 | 0 | 1 | 1 | 1 |
| East W 4000 N | 0% | 0 | 0 | 0 | 0 | 0 |

Turn movement diagrams in Appendix A illustrate the effect of these induced volumes on W4000N and on the W4000N / SH 33 intersection.

Traffic Forecast Scenarios:

- Year 2022 “No-Build” traffic at study intersections was counted May 10-11, 2022
- Year 2022 “Build” traffic at study intersections was estimated by adding site-generated traffic to 2022 no-build traffic volumes.
- Year 2042 “No-Build” traffic was estimated using growth rates of 3% on SH 33 and 2% on W 4000 N compounded for a period of 20 years.
- Year 2042 “Build” traffic at study intersections was estimated by adding site-generated traffic to 2042 no-build traffic volumes.
- Resulting traffic forecasts are depicted in diagrams in Appendix A.

Capacity Analysis:

- The Highway Capacity Software (HCS) was used to estimate the capacity of the STOP-controlled intersections on W 4000 N at Idaho State Highway 33, and future operations at the intersections of W 4000 N at Vallejo Road and Embarcadero Street, before and after construction.
- Both intersections of W 4000 N at Vallejo Road and Embarcadero Street operate at Level of Service A in 2022 and 2042 after the subdivision is constructed.
- For the AM Peak “No-Build” scenario, the eastbound approach to the W 4000 N / SH 33 intersection operates at LOS “D” in 2042 (26.0 seconds of delay) due to the heavy projected southbound through movement reducing available gaps. Construction of the proposed subdivision will increase delay for the eastbound approach by 1.7 seconds to 27.7 seconds delay per vehicle, remaining at LOS “D.”
- The following table describes capacity analysis data:

| Intersection / Location | Traffic Scenario | Level of Service | Seconds of Delay on Minor Road |
|---|-----------------------|------------------|--------------------------------|
| W 4000 N at Vallejo Road | 2022 AM Peak No-Build | A | NA |
| | 2022 AM Peak Build | A | 8.7 |
| | 2042 AM Peak No-Build | A | NA |
| | 2042 AM Peak Build | A | 9.1 |
| | 2022 PM Peak No-Build | A | NA |
| | 2022 PM Peak Build | A | 8.5 |
| | 2042 PM Peak No Build | A | NA |
| | 2042 PM Peak Build | A | 8.7 |
| W 4000 N at Embarcadero Street | 2022 AM Peak No-Build | A | NA |
| | 2022 AM Peak Build | A | 8.7 |
| | 2042 AM Peak No-Build | A | NA |
| | 2042 AM Peak Build | A | 9.1 |
| | 2022 PM Peak No-Build | A | NA |
| | 2022 PM Peak Build | A | 8.5 |
| | 2042 PM Peak No Build | A | NA |
| | 2042 PM Peak Build | A | 8.8 |
| W 4000 N at Idaho State Highway 33 | 2022 AM Peak No-Build | B / B | 11.3 (EB) / 12.6 (WB) |
| | 2022 AM Peak Build | B / B | 11.5 (EB) / 13.0 (WB) |
| | 2042 AM Peak No-Build | D / B | 26.0 (EB) / 14.7 (WB) |
| | 2042 AM Peak Build | D / B | 27.7 (EB) / 15.1 (WB) |
| | 2022 PM Peak No-Build | B / B | 10.0 (EB) / 10.5 (WB) |
| | 2022 PM Peak Build | B / B | 10.2 (EB) / 10.5 (WB) |
| | 2042 PM Peak No Build | C / B | 22.6 (EB) / 13.5 (WB) |
| | 2042 PM Peak Build | C / B | 23.4 (EB) / 13.5 (WB) |

Conclusions:

- Construction of the JC Ranches Subdivision will not impact mainline operations on W 4000 N. New approach street intersections will operate at LOS "A" at all times.
- 2022 AM and PM peak hour level of service at W 400 N and SH 33 remains at LOS "B" before and after construction of the subdivision.
- In 2042, if traffic continues to grow at current rates, the intersection of W 4000 N at SH 33 will operate at LOS "D" during the AM Peak hour. LOS "D" or better is considered acceptable for a 20-year time horizon.
- Construction of the proposed JC Ranches Subdivision will increase average AM Peak Hour delay for the eastbound approach to W 4000 N / SH 33 by 1.7 seconds per vehicle (from 26.0 to 27.7 seconds of delay per vehicle). Level of service therefore remains at "D" with or without the subdivision.
- The above items are based on my professional opinion and estimate of local traffic growth rates for the next 20 years. As with any forecast, the estimated traffic may or may not hold; it is just an estimate.

Recommendations:

1. No road improvements are necessary to accommodate the JC Ranches subdivision.
2. Road agencies should continue to monitor performance of the W 4000 N intersection at Idaho SH 33. If delays increase significantly, right-turn bays may be an appropriate consideration.
3. If-and-when signal warrants are met, road agencies should evaluate constructing either a signal or roundabout at the W 4000 N intersection at Idaho SH 33.

APPENDIX A: INTERSECTION TURN MOVEMENT FORECASTS

Vallejo Road at W 4000 N

Crossroad Diagram:

AM Peak Site-Generated Traffic

Leg 1: Vallejo Road

North Leg

| | | | |
|-------|------|-------|----|
| | | TOTAL | |
| | SB | 0 | NB |
| | 0 | | 0 |
| 0 | 0 | 0 | |
| RIGHT | THRU | LEFT | |

Leg 2: W 4000 N

East Leg

| | | | |
|-------|---|---|-------|
| RIGHT | 0 | | |
| THRU | 0 | 2 | WB |
| LEFT | 2 | | 7 |
| | | 5 | EB |
| | | | TOTAL |

Leg 4: W 4000 N

West Leg

| | | | |
|-------|----|---|-------|
| TOTAL | 0 | 0 | 0 |
| | WB | 0 | |
| | 0 | 0 | LEFT |
| | EB | 0 | THRU |
| | | | 0 |
| | | | RIGHT |

Leg 3: Vallejo Road

South Leg

| | | | |
|----|-------|------|-------|
| | LEFT | THRU | RIGHT |
| | 0 | 0 | 5 |
| 2 | | 5 | |
| SB | 7 | NB | |
| | TOTAL | | |

Embarcadero Street at W 4000 N

Crossroad Diagram:

AM Peak Site-Generated Traffic

Leg 1: Embarcadero Street

North Leg

| | | | |
|-------|------|-------|----|
| | | TOTAL | |
| | SB | 0 | NB |
| | 0 | | 0 |
| 0 | 0 | 0 | |
| RIGHT | THRU | LEFT | |

Leg 2: W 4000 N

East Leg

| | | | |
|-------|---|----|-------|
| RIGHT | 0 | | |
| THRU | 2 | 5 | WB |
| LEFT | 3 | | 20 |
| | | 15 | EB |
| | | | TOTAL |

Leg 4: W 4000 N

West Leg

| | | | |
|-------|----|---|-------|
| TOTAL | 7 | 0 | 0 |
| | WB | 2 | |
| | 0 | 0 | LEFT |
| | EB | 5 | THRU |
| | | | 5 |
| | | | 0 |
| | | | RIGHT |

Leg 3: Embarcadero Street

South Leg

| | | | |
|----|-------|------|-------|
| | LEFT | THRU | RIGHT |
| | 0 | 0 | 10 |
| 3 | | 10 | |
| SB | 13 | NB | |
| | TOTAL | | |

State Highway 33 at W 4000 N

Crossroad Diagram:

AM Peak Site-Generated Traffic

Leg 1: State Highway 33

North Leg

| | | | |
|-------|------|-------|----|
| | | TOTAL | |
| | SB | 1 | NB |
| | 0 | | 1 |
| 0 | 0 | 0 | |
| RIGHT | THRU | LEFT | |

Leg 4: W 4000 N

West Leg

| | | | |
|-------|----|----|-------|
| | WB | 5 | |
| TOTAL | 20 | | 1 |
| | 15 | 0 | THRU |
| | | 14 | RIGHT |
| | | | LEFT |

Leg 2: W 4000 N

East Leg

| | | | |
|-------|---|---|-------|
| RIGHT | 0 | | |
| THRU | 0 | 0 | WB |
| LEFT | 0 | | 0 |
| | | 0 | EB |
| | | | TOTAL |

Leg 3: State Highway 33

South Leg

| | | | |
|----|-------|------|-------|
| | LEFT | THRU | RIGHT |
| | 5 | 0 | 0 |
| 14 | | 5 | |
| SB | 19 | NB | |
| | TOTAL | | |

AM PHF = .936

Idaho SH 33 at W 4000 N

Crossroad Diagram:
2022 AM PEAK COUNT

Leg 1: Idaho SH 33

North Leg

| | | | |
|-------|------|-------|-----|
| | | TOTAL | |
| | SB | 568 | NB |
| | 367 | | 201 |
| 1 | 363 | 3 | |
| RIGHT | THRU | LEFT | |

Leg 2: W 4000 N

East Leg

| | | | | |
|-------|---|----|----|-------|
| RIGHT | 7 | | | |
| THRU | 0 | 13 | WB | |
| LEFT | 6 | | 22 | TOTAL |
| | | 9 | EB | |

Leg 4: W 4000 N

West Leg

| | | | | |
|-------|----|----|----|-------|
| | WB | 22 | | |
| TOTAL | 87 | | 3 | LEFT |
| | EB | 65 | 0 | THRU |
| | | | 62 | RIGHT |

Leg 3: Idaho SH 33

South Leg

| | | | | |
|-----|-------|------|------|-------|
| | | LEFT | THRU | RIGHT |
| | | 21 | 191 | 6 |
| 431 | | | 218 | |
| SB | 649 | | NB | |
| | TOTAL | | | |

State Highway 33 at W 4000 N

Crossroad Diagram:
2022 AM PEAK BUILD TRAFFIC

Leg 1: State Highway 33

North Leg

| | | | |
|-------|------|-------|-----|
| | | TOTAL | |
| | SB | 569 | NB |
| | 367 | | 202 |
| 1 | 363 | 3 | |
| RIGHT | THRU | LEFT | |

Leg 2: W 4000 N

East Leg

| | | | | |
|-------|---|----|----|-------|
| RIGHT | 7 | | | |
| THRU | 0 | 13 | WB | |
| LEFT | 6 | | 22 | TOTAL |
| | | 9 | EB | |

Leg 4: W 4000 N

West Leg

| | | | | |
|-------|-----|----|----|-------|
| | WB | 27 | | |
| TOTAL | 107 | | 4 | LEFT |
| | EB | 80 | 0 | THRU |
| | | | 76 | RIGHT |

Leg 3: State Highway 33

South Leg

| | | | | |
|-----|-------|------|------|-------|
| | | LEFT | THRU | RIGHT |
| | | 26 | 191 | 6 |
| 445 | | | 223 | |
| SB | 668 | | NB | |
| | TOTAL | | | |

Access Drives at W 4000 N

**Crossroad Diagram:
2022 AM PEAK NO-BUILD**

Leg 1: Access Drives
North Leg

| | | | |
|-------|------|-------|----|
| | | TOTAL | |
| | SB | 0 | NB |
| | 0 | | 0 |
| 0 | 0 | 0 | |
| RIGHT | THRU | LEFT | |

Leg 2: W 4000 N
East Leg

| | | | |
|-------|----|----|-------|
| RIGHT | 0 | | |
| THRU | 28 | 28 | WB |
| LEFT | 0 | | 93 |
| | | 65 | EB |
| | | | TOTAL |

Leg 4: W 4000 N
West Leg

| | | | |
|-------|----|----|-------|
| | WB | 28 | |
| TOTAL | 93 | | 0 |
| | EB | 65 | 65 |
| | | | 0 |
| | | | RIGHT |
| | | | THRU |
| | | | LEFT |

Leg 3: Access Drives
South Leg

| | | | |
|----|-------|------|-------|
| | LEFT | THRU | RIGHT |
| | 0 | 0 | 0 |
| 0 | | 0 | |
| SB | 0 | NB | |
| | TOTAL | | |

Vallejo Road at W 4000 N

**Crossroad Diagram:
2022 AM PEAK BUILD TRAFFIC**

Leg 1: Vallejo Road
North Leg

| | | | |
|-------|------|-------|----|
| | | TOTAL | |
| | SB | 0 | NB |
| | 0 | | 0 |
| 0 | 0 | 0 | |
| RIGHT | THRU | LEFT | |

Leg 2: W 4000 N
East Leg

| | | | |
|-------|----|----|-------|
| RIGHT | 0 | | |
| THRU | 28 | 30 | WB |
| LEFT | 2 | | 100 |
| | | 70 | EB |
| | | | TOTAL |

Leg 4: W 4000 N
West Leg

| | | | |
|-------|----|----|-------|
| | WB | 28 | |
| TOTAL | 93 | | 0 |
| | EB | 65 | 65 |
| | | | 0 |
| | | | RIGHT |
| | | | THRU |
| | | | LEFT |

Leg 3: Vallejo Road
South Leg

| | | | |
|----|-------|------|-------|
| | LEFT | THRU | RIGHT |
| | 0 | 0 | 5 |
| 2 | | 5 | |
| SB | 7 | NB | |
| | TOTAL | | |

Embarcadero Street at W 4000 N

Crossroad Diagram:

2022 AM PEAK BUILD TRAFFIC

Leg 1: Embarcadero Street

North Leg

| | | | |
|-------|------|-------|----|
| | | TOTAL | |
| | SB | 0 | NB |
| | 0 | | 0 |
| 0 | 0 | 0 | |
| RIGHT | THRU | LEFT | |

Leg 4: W 4000 N

West Leg

| | | | |
|-------|-----|----|-------|
| | WB | 30 | |
| TOTAL | 100 | | 0 |
| | EB | 70 | 70 |
| | | | 0 |
| | | | RIGHT |
| | | | THRU |
| | | | LEFT |

Leg 2: W 4000 N

East Leg

| | | | |
|-------|----|----|-------|
| RIGHT | 0 | | |
| THRU | 30 | 33 | WB |
| LEFT | 3 | | 113 |
| | | 80 | EB |
| | | | TOTAL |

Leg 3: Embarcadero Street

South Leg

| | | | | |
|----|--|------|------|-------|
| | | LEFT | THRU | RIGHT |
| | | 0 | 0 | 10 |
| 3 | | | 10 | |
| SB | | 13 | NB | |
| | | | | TOTAL |

Idaho SH 33 at W 4000 N

**Crossroad Diagram:
2042 AM PEAK NO-BUILD**

Leg 1: Idaho SH 33

North Leg

| | | | |
|-------|------|-------|-----|
| | | TOTAL | |
| | SB | 1069 | NB |
| | 663 | | 406 |
| 9 | 641 | 14 | |
| RIGHT | THRU | LEFT | |

Leg 4: W 4000 N

West Leg

| | | | |
|-------|-----|-----|-------|
| | WB | 45 | |
| TOTAL | 187 | | 29 |
| | EB | 142 | 0 |
| | | | 114 |
| | | | RIGHT |
| | | | LEFT |
| | | | THRU |

Leg 2: W 4000 N

East Leg

| | | | |
|-------|----|----|-------|
| RIGHT | 25 | | |
| THRU | 0 | 29 | WB |
| LEFT | 4 | | 47 |
| | | 19 | EB |
| | | | TOTAL |

Leg 3: Idaho SH 33

South Leg

| | | | |
|-----|-------|------|-------|
| | LEFT | THRU | RIGHT |
| | 36 | 352 | 5 |
| 758 | | 394 | |
| SB | 1152 | NB | |
| | TOTAL | | |

Idaho SH 33 at W 4000 N

**Crossroad Diagram:
2042 AM PEAK BUILD**

Leg 1: Idaho SH 33

North Leg

| | | | |
|-------|------|-------|-----|
| | | TOTAL | |
| | SB | 1070 | NB |
| | 663 | | 407 |
| 9 | 641 | 14 | |
| RIGHT | THRU | LEFT | |

Leg 4: W 4000 N

West Leg

| | | | |
|-------|-----|-----|-------|
| | WB | 50 | |
| TOTAL | 208 | | 30 |
| | EB | 158 | 0 |
| | | | 128 |
| | | | RIGHT |
| | | | LEFT |
| | | | THRU |

Leg 2: W 4000 N

East Leg

| | | | |
|-------|----|----|-------|
| RIGHT | 25 | | |
| THRU | 0 | 29 | WB |
| LEFT | 4 | | 47 |
| | | 19 | EB |
| | | | TOTAL |

Leg 3: Idaho SH 33

South Leg

| | | | |
|-----|-------|------|-------|
| | LEFT | THRU | RIGHT |
| | 41 | 352 | 5 |
| 772 | | 399 | |
| SB | 1171 | NB | |
| | TOTAL | | |

Access Drives at W 4000 N

**Crossroad Diagram:
2042 AM PEAK NO-BUILD**

Leg 1: Access Drives North Leg

| | | | |
|-------|------|-------|----|
| | | TOTAL | |
| | SB | 0 | NB |
| | 0 | | 0 |
| 0 | 0 | 0 | |
| RIGHT | THRU | LEFT | |

Leg 4: W 4000 N West Leg

| | | | |
|-------|-----|-----|-------|
| | WB | 61 | |
| TOTAL | 204 | | 0 |
| | 0 | | LEFT |
| | EB | 142 | 142 |
| | | | THRU |
| | | | 0 |
| | | | RIGHT |

Leg 2: W 4000 N East Leg

| | | | |
|-------|----|-----|-------|
| RIGHT | 0 | | |
| THRU | 61 | 61 | WB |
| LEFT | 0 | | 204 |
| | | 142 | EB |
| | | | TOTAL |

Leg 3: Access Drives South Leg

| | | | |
|----|-------|------|-------|
| | LEFT | THRU | RIGHT |
| | 0 | 0 | 0 |
| 0 | | 0 | |
| SB | 0 | NB | |
| | TOTAL | | |

Vallejo Road at W 4000 N

**Crossroad Diagram:
2042 AM PEAK BUILD TRAFFIC**

Leg 1: Vallejo Road North Leg

| | | | |
|-------|------|-------|----|
| | | TOTAL | |
| | SB | 0 | NB |
| | 0 | | 0 |
| 0 | 0 | 0 | |
| RIGHT | THRU | LEFT | |

Leg 4: W 4000 N West Leg

| | | | |
|-------|-----|-----|-------|
| | WB | 61 | |
| TOTAL | 203 | | 0 |
| | 0 | | LEFT |
| | EB | 142 | 142 |
| | | | THRU |
| | | | 0 |
| | | | RIGHT |

Leg 2: W 4000 N East Leg

| | | | |
|-------|----|-----|-------|
| RIGHT | 0 | | |
| THRU | 61 | 63 | WB |
| LEFT | 2 | | 210 |
| | | 147 | EB |
| | | | TOTAL |

Leg 3: Vallejo Road South Leg

| | | | |
|----|-------|------|-------|
| | LEFT | THRU | RIGHT |
| | 0 | 0 | 5 |
| 2 | | 5 | |
| SB | 7 | NB | |
| | TOTAL | | |

Embarcadero Street at W 4000 N

Crossroad Diagram:

2042 AM PEAK BUILD TRAFFIC

Leg 1: Embarcadero Street

North Leg

| | | | |
|-------|------|-------|----|
| | | TOTAL | |
| | SB | 0 | NB |
| | 0 | | 0 |
| 0 | 0 | 0 | |
| RIGHT | THRU | LEFT | |

Leg 4: W 4000 N

West Leg

| | | | |
|-------|-----|-----|-------|
| | WB | 63 | |
| TOTAL | 210 | | 0 |
| | EB | 147 | 147 |
| | | | 0 |
| | | | RIGHT |
| | | | THRU |
| | | | LEFT |

Leg 2: W 4000 N

East Leg

| | | | |
|-------|----|-----|-------|
| RIGHT | 0 | | |
| THRU | 63 | 66 | WB |
| LEFT | 3 | | 223 |
| | | 157 | EB |
| | | | TOTAL |

Leg 3: Embarcadero Street

South Leg

| | | | | |
|----|-------|------|------|-------|
| | | LEFT | THRU | RIGHT |
| | | 0 | 0 | 10 |
| 3 | | | 10 | |
| SB | 13 | | NB | |
| | TOTAL | | | |

Vallejo Road at W 4000 N

Crossroad Diagram:

PM Peak Site-Generated Traffic

Leg 1: Vallejo Road

North Leg

| | | | |
|-------|------|-------|----|
| | | TOTAL | |
| | SB | 0 | NB |
| | 0 | | 0 |
| 0 | 0 | 0 | |
| RIGHT | THRU | LEFT | |

Leg 2: W 4000 N

East Leg

| | | | | |
|-------|---|---|----|-------|
| RIGHT | 0 | | | |
| THRU | 0 | 5 | WB | |
| LEFT | 5 | | 8 | TOTAL |
| | | 3 | EB | |

Leg 4: W 4000 N

West Leg

| | | | | |
|-------|----|---|---|-------|
| | WB | 0 | | |
| TOTAL | 0 | | 0 | LEFT |
| | EB | 0 | 0 | THRU |
| | | | 0 | RIGHT |

Leg 3: Vallejo Road

South Leg

| | | | |
|----|-------|------|-------|
| | LEFT | THRU | RIGHT |
| | 0 | 0 | 3 |
| 5 | | 3 | |
| SB | 8 | NB | |
| | TOTAL | | |

Embarcadero Street at W 4000 N

Crossroad Diagram:

PM Peak Site-Generated Traffic

Leg 1: Embarcadero Street

North Leg

| | | | |
|-------|------|-------|----|
| | | TOTAL | |
| | SB | 0 | NB |
| | 0 | | 0 |
| 0 | 0 | 0 | |
| RIGHT | THRU | LEFT | |

Leg 2: W 4000 N

East Leg

| | | | | |
|-------|----|----|----|-------|
| RIGHT | 0 | | | |
| THRU | 5 | 16 | WB | |
| LEFT | 11 | | 26 | TOTAL |
| | | 10 | EB | |

Leg 4: W 4000 N

West Leg

| | | | | |
|-------|----|---|---|-------|
| | WB | 5 | | |
| TOTAL | 8 | | 0 | LEFT |
| | EB | 3 | 3 | THRU |
| | | | 0 | RIGHT |

Leg 3: Embarcadero Street

South Leg

| | | | |
|----|-------|------|-------|
| | LEFT | THRU | RIGHT |
| | 0 | 0 | 7 |
| 11 | | 7 | |
| SB | 18 | NB | |
| | TOTAL | | |

State Highway 33 at W 4000 N

Crossroad Diagram:

PM Peak Site-Generated Traffic

Leg 1: State Highway 33

North Leg

| | | | |
|-------|------|-------|----|
| | | TOTAL | |
| | SB | 2 | NB |
| | 1 | | 1 |
| 1 | 0 | 0 | |
| RIGHT | THRU | LEFT | |

Leg 4: W 4000 N

West Leg

| | | | |
|-------|----|----|-------|
| | WB | 16 | |
| TOTAL | 26 | | 1 |
| | EB | 10 | 0 |
| | | | 9 |
| | | | RIGHT |
| | | | LEFT |
| | | | THRU |

Leg 2: W 4000 N

East Leg

| | | | |
|-------|---|---|-------|
| RIGHT | 0 | | |
| THRU | 0 | 0 | WB |
| LEFT | 0 | | 0 |
| | | 0 | EB |
| | | | TOTAL |

Leg 3: State Highway 33

South Leg

| | | | | |
|----|-------|------|------|-------|
| | | LEFT | THRU | RIGHT |
| | | 15 | 0 | 0 |
| 9 | | | 15 | |
| SB | 24 | | NB | |
| | TOTAL | | | |

PM PHF = .956

Idaho SH 33 at W 4000 N

Crossroad Diagram:
2022 PM Peak Count

Leg 1: Idaho SH 33

North Leg

| | | | |
|-------|------|-------|-----|
| | | TOTAL | |
| | SB | 591 | NB |
| | 213 | | 378 |
| 1 | 211 | 1 | |
| RIGHT | THRU | LEFT | |

Leg 2: W 4000 N

East Leg

| | | | | |
|-------|---|---|----|-------|
| RIGHT | 1 | | | |
| THRU | 0 | 1 | WB | |
| LEFT | 0 | | | 8 |
| | | | 7 | EB |
| | | | | TOTAL |

Leg 4: W 4000 N

West Leg

| | | | | |
|-------|----|----|---|-------|
| | WB | 53 | | |
| TOTAL | 89 | | 2 | LEFT |
| | EB | 36 | 0 | THRU |
| | | | | 34 |
| | | | | RIGHT |

Leg 3: Idaho SH 33

South Leg

| | | | | |
|-----|--|-------|------|-------|
| | | LEFT | THRU | RIGHT |
| | | 52 | 375 | 6 |
| 245 | | | 433 | |
| SB | | 678 | NB | |
| | | TOTAL | | |

Idaho SH 33 at W 4000 N

Crossroad Diagram:
2022 PM PEAK BUILD TRAFFIC

Leg 1: Idaho SH 33

North Leg

| | | | |
|-------|------|-------|-----|
| | | TOTAL | |
| | SB | 593 | NB |
| | 214 | | 379 |
| 2 | 211 | 1 | |
| RIGHT | THRU | LEFT | |

Leg 2: W 4000 N

East Leg

| | | | | |
|-------|---|---|----|-------|
| RIGHT | 1 | | | |
| THRU | 0 | 1 | WB | |
| LEFT | 0 | | | 8 |
| | | | 7 | EB |
| | | | | TOTAL |

Leg 4: W 4000 N

West Leg

| | | | | |
|-------|-----|----|---|-------|
| | WB | 69 | | |
| TOTAL | 115 | | 3 | LEFT |
| | EB | 46 | 0 | THRU |
| | | | | 43 |
| | | | | RIGHT |

Leg 3: Idaho SH 33

South Leg

| | | | | |
|-----|--|-------|------|-------|
| | | LEFT | THRU | RIGHT |
| | | 67 | 375 | 6 |
| 254 | | | 448 | |
| SB | | 702 | NB | |
| | | TOTAL | | |

Access Drives at W 4000 N

**Crossroad Diagram:
2022 PM PEAK NO-BUILD**

Leg 1: Access Drives North Leg

| | | | |
|-------|------|-------|----|
| | | TOTAL | |
| | SB | 0 | NB |
| | 0 | | 0 |
| 0 | 0 | 0 | |
| RIGHT | THRU | LEFT | |

Leg 2: W 4000 N East Leg

| | | | |
|-------|----|----|-------|
| RIGHT | 0 | | |
| THRU | 53 | 53 | WB |
| LEFT | 0 | | 89 |
| | | 36 | EB |
| | | | TOTAL |

Leg 4: W 4000 N West Leg

| | | | |
|-------|----|----|-------|
| | WB | 53 | |
| TOTAL | 89 | | 0 |
| | EB | 36 | 36 |
| | | | 0 |
| | | | RIGHT |
| | | | THRU |
| | | | LEFT |

Leg 3: Access Drives South Leg

| | | | |
|----|-------|------|-------|
| | LEFT | THRU | RIGHT |
| | 0 | 0 | 0 |
| 0 | | 0 | |
| SB | 0 | NB | |
| | TOTAL | | |

Vallejo Road at W 4000 N

**Crossroad Diagram:
2022 PM PEAK BUILD TRAFFIC**

Leg 1: Vallejo Road North Leg

| | | | |
|-------|------|-------|----|
| | | TOTAL | |
| | SB | 0 | NB |
| | 0 | | 0 |
| 0 | 0 | 0 | |
| RIGHT | THRU | LEFT | |

Leg 2: W 4000 N East Leg

| | | | |
|-------|----|----|-------|
| RIGHT | 0 | | |
| THRU | 53 | 58 | WB |
| LEFT | 5 | | 97 |
| | | 39 | EB |
| | | | TOTAL |

Leg 4: W 4000 N West Leg

| | | | |
|-------|----|----|-------|
| | WB | 53 | |
| TOTAL | 89 | | 0 |
| | EB | 36 | 36 |
| | | | 0 |
| | | | RIGHT |
| | | | THRU |
| | | | LEFT |

Leg 3: Vallejo Road South Leg

| | | | |
|----|-------|------|-------|
| | LEFT | THRU | RIGHT |
| | 0 | 0 | 3 |
| 5 | | 3 | |
| SB | 8 | NB | |
| | TOTAL | | |

Embarcadero Street at W 4000 N

Crossroad Diagram:

2022 PM PEAK BUILD TRAFFIC

Leg 1: Embarcadero Street

North Leg

| | | | |
|-------|------|-------|----|
| | | TOTAL | |
| | SB | 0 | NB |
| | 0 | | 0 |
| 0 | 0 | 0 | |
| RIGHT | THRU | LEFT | |

Leg 4: W 4000 N

West Leg

| | | | |
|-------|----|----|-------|
| | WB | 58 | |
| TOTAL | 97 | | 0 |
| | EB | 39 | 39 |
| | | | 0 |
| | | | RIGHT |
| | | | THRU |
| | | | LEFT |

Leg 2: W 4000 N

East Leg

| | | | |
|-------|----|----|-------|
| RIGHT | 0 | | |
| THRU | 58 | 69 | WB |
| LEFT | 11 | | 115 |
| | | 46 | EB |
| | | | TOTAL |

Leg 3: Embarcadero Street

South Leg

| | | | | |
|----|--|------|------|-------|
| | | LEFT | THRU | RIGHT |
| | | 0 | 0 | 7 |
| 11 | | | 7 | |
| SB | | 18 | NB | |
| | | | | TOTAL |

Idaho SH 33 at W 4000 N

Crossroad Diagram:
2042 PM Peak No Build

Leg 1: Idaho SH 33
North Leg

| | | | |
|-------|------|-------|-----|
| | | TOTAL | |
| | SB | 1099 | NB |
| | 385 | | 715 |
| 13 | 364 | 8 | |
| RIGHT | THRU | LEFT | |

Leg 4: W 4000 N
West Leg

| | | | |
|-------|-----|-----|-------|
| | WB | 101 | |
| TOTAL | 180 | | 25 |
| | EB | 79 | 0 |
| | | | 54 |
| | | | RIGHT |
| | | | LEFT |
| | | | THRU |

Leg 2: W 4000 N
East Leg

| | | | |
|-------|---|----|-------|
| RIGHT | 2 | | |
| THRU | 0 | 2 | WB |
| LEFT | 0 | | 16 |
| | | 14 | EB |
| | | | TOTAL |

Leg 3: Idaho SH 33
South Leg

| | | | |
|-----|-------|------|-------|
| | LEFT | THRU | RIGHT |
| | 88 | 688 | 6 |
| 418 | | 782 | |
| SB | 1200 | NB | |
| | TOTAL | | |

Idaho SH 33 at W 4000 N

Crossroad Diagram:
2042 PM PEAK BUILD TRAFFIC

Leg 1: Idaho SH 33
North Leg

| | | | |
|-------|------|-------|-----|
| | | TOTAL | |
| | SB | 1102 | NB |
| | 386 | | 716 |
| 14 | 364 | 8 | |
| RIGHT | THRU | LEFT | |

Leg 4: W 4000 N
West Leg

| | | | |
|-------|-----|-----|-------|
| | WB | 117 | |
| TOTAL | 206 | | 26 |
| | EB | 89 | 0 |
| | | | 63 |
| | | | RIGHT |
| | | | LEFT |
| | | | THRU |

Leg 2: W 4000 N
East Leg

| | | | |
|-------|---|----|-------|
| RIGHT | 2 | | |
| THRU | 0 | 2 | WB |
| LEFT | 0 | | 16 |
| | | 14 | EB |
| | | | TOTAL |

Leg 3: Idaho SH 33
South Leg

| | | | |
|-----|-------|------|-------|
| | LEFT | THRU | RIGHT |
| | 103 | 688 | 6 |
| 427 | | 797 | |
| SB | 1224 | NB | |
| | TOTAL | | |

Access Drives at W 4000 N

Crossroad Diagram:
2042 PM PEAK NO-BUILD

Leg 1: Access Drives
North Leg

| | | | |
|-------|------|-------|----|
| | | TOTAL | |
| | SB | 0 | NB |
| | 0 | | 0 |
| 0 | 0 | 0 | |
| RIGHT | THRU | LEFT | |

Leg 2: W 4000 N
East Leg

| | | | |
|-------|-----|-----|-------|
| | | | |
| RIGHT | 0 | | |
| THRU | 116 | 116 | WB |
| LEFT | 0 | | 195 |
| | | 79 | EB |
| | | | TOTAL |

Leg 4: W 4000 N
West Leg

| | | | |
|-------|-----|-----|-------|
| | | | |
| | WB | 116 | |
| TOTAL | 195 | | 0 |
| | EB | 79 | 79 |
| | | | THRU |
| | | | 0 |
| | | | RIGHT |

Leg 3: Access Drives
South Leg

| | | | | |
|----|--|------|------|-------|
| | | LEFT | THRU | RIGHT |
| | | 0 | 0 | 0 |
| 0 | | | 0 | |
| SB | | 0 | NB | |
| | | | | TOTAL |

Vallejo Road at W 4000 N

Crossroad Diagram:
2042 PM PEAK BUILD TRAFFIC

Leg 1: Vallejo Road
North Leg

| | | | |
|-------|------|-------|----|
| | | TOTAL | |
| | SB | 0 | NB |
| | 0 | | 0 |
| 0 | 0 | 0 | |
| RIGHT | THRU | LEFT | |

Leg 2: W 4000 N
East Leg

| | | | |
|-------|-----|-----|-------|
| | | | |
| RIGHT | 0 | | |
| THRU | 116 | 121 | WB |
| LEFT | 5 | | 203 |
| | | 82 | EB |
| | | | TOTAL |

Leg 4: W 4000 N
West Leg

| | | | |
|-------|-----|-----|-------|
| | | | |
| | WB | 116 | |
| TOTAL | 195 | | 0 |
| | EB | 79 | 79 |
| | | | THRU |
| | | | 0 |
| | | | RIGHT |

Leg 3: Vallejo Road
South Leg

| | | | | |
|----|--|------|------|-------|
| | | LEFT | THRU | RIGHT |
| | | 0 | 0 | 3 |
| 5 | | | 3 | |
| SB | | 8 | NB | |
| | | | | TOTAL |

Embarcadero Street at W 4000 N

Crossroad Diagram:

2042 PM PEAK BUILD TRAFFIC

Leg 1: Embarcadero Street

North Leg

| | | | |
|-------|------|-------|----|
| | | TOTAL | |
| | SB | 0 | NB |
| | 0 | | 0 |
| 0 | 0 | 0 | |
| RIGHT | THRU | LEFT | |

Leg 4: W 4000 N

West Leg

| | | | |
|-------|-----|-----|-------|
| | WB | 121 | |
| TOTAL | 203 | | 0 |
| | EB | 82 | 82 |
| | | | 0 |
| | | | RIGHT |
| | | | LEFT |
| | | | THRU |

Leg 2: W 4000 N

East Leg

| | | | |
|-------|-----|-----|-------|
| RIGHT | 0 | | |
| THRU | 121 | 132 | WB |
| LEFT | 11 | | 221 |
| | | 89 | EB |
| | | | TOTAL |

Leg 3: Embarcadero Street

South Leg

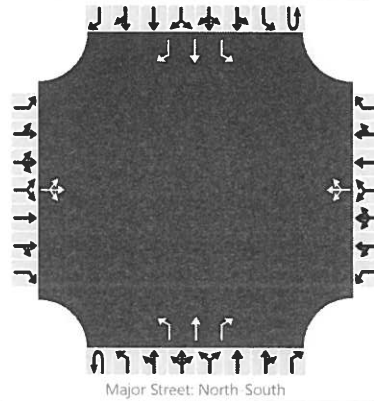
| | | | | |
|----|--|------|------|-------|
| | | LEFT | THRU | RIGHT |
| | | 0 | 0 | 7 |
| 11 | | | 7 | |
| SB | | 18 | NB | |
| | | | | TOTAL |

APPENDIX B: CAPACITY ANALYSES

HCS 2010 Two-Way Stop-Control Report

| General Information | | | | Site Information | | | |
|--------------------------|----------------|--|--|----------------------------|------------------------|--|--|
| Analyst | Gary N Grigsby | | | Intersection | Idaho SH 33 & W 4000 N | | |
| Agency/Co. | | | | Jurisdiction | | | |
| Date Performed | 5/17/2022 | | | East/West Street | W 4000 N | | |
| Analysis Year | 2022 | | | North/South Street | Idaho SH 33 | | |
| Time Analyzed | 2022 AM Peak | | | Peak Hour Factor | 0.94 | | |
| Intersection Orientation | North-South | | | Analysis Time Period (hrs) | 1.00 | | |
| Project Description | | | | | | | |

Lanes



Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|----------------------------|-----------|-----------|-----|----|-----------|----|-----|---|------------|----|-----|---|------------|----|-----|---|
| | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Movement | | | | | | | | | | | | | | | | |
| Priority | | 10 | 11 | 12 | | 7 | 8 | 9 | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 |
| Number of Lanes | | 0 | 1 | 0 | | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 |
| Configuration | | | LTR | | | | LTR | | | L | T | R | | L | T | R |
| Volume, V (veh/h) | | 3 | 0 | 62 | | 6 | 0 | 7 | | 21 | 191 | 6 | | 3 | 363 | 1 |
| Percent Heavy Vehicles (%) | | 3 | 3 | 3 | | 3 | 3 | 3 | | 3 | | | | 3 | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | 0 | | | | 0 | | | | | | | | | | |
| Right Turn Channelized | | No | | | | No | | | | No | | | | No | | |
| Median Type/Storage | | Undivided | | | | | | | | | | | | | | |

Critical and Follow-up Headways

| | | | | | | | | | | | | | | | | |
|------------------------------|--|------|------|------|--|------|------|------|--|------|--|--|--|------|--|--|
| Base Critical Headway (sec) | | 7.1 | 6.5 | 6.2 | | 7.1 | 6.5 | 6.2 | | 4.1 | | | | 4.1 | | |
| Critical Headway (sec) | | 7.13 | 6.53 | 6.23 | | 7.13 | 6.53 | 6.23 | | 4.13 | | | | 4.13 | | |
| Base Follow-Up Headway (sec) | | 3.5 | 4.0 | 3.3 | | 3.5 | 4.0 | 3.3 | | 2.2 | | | | 2.2 | | |
| Follow-Up Headway (sec) | | 3.53 | 4.03 | 3.33 | | 3.53 | 4.03 | 3.33 | | 2.23 | | | | 2.23 | | |

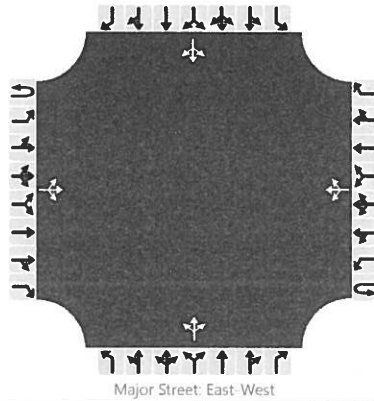
Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|--|------|------|--|--|------|------|--|--|-----|------|--|--|-----|------|--|
| Flow Rate, v (veh/h) | | | 69 | | | | 13 | | | | 22 | | | | 3 | |
| Capacity, c (veh/h) | | | 638 | | | | 485 | | | | 1165 | | | | 1354 | |
| v/c Ratio | | | 0.11 | | | | 0.03 | | | | 0.02 | | | | 0.00 | |
| 95% Queue Length, Q ₉₅ (veh) | | | 0.4 | | | | 0.1 | | | | 0.1 | | | | 0.0 | |
| Control Delay (s/veh) | | | 11.3 | | | | 12.6 | | | | 8.2 | | | | 7.7 | |
| Level of Service, LOS | | | B | | | | B | | | | A | | | | A | |
| Approach Delay (s/veh) | | 11.3 | | | | 12.6 | | | | 0.8 | | | | 0.1 | | |
| Approach LOS | | B | | | | B | | | | | | | | | | |

HCS 2010 Two-Way Stop-Control Report

| General Information | | Site Information | |
|--------------------------|-----------------------|----------------------------|----------------------|
| Analyst | Gary N Grigsby | Intersection | Access Dr @ W 4000 N |
| Agency/Co. | | Jurisdiction | |
| Date Performed | 5/17/2022 | East/West Street | W 4000 N |
| Analysis Year | 2022 | North/South Street | Access Drive |
| Time Analyzed | 2022 AM Peak No Build | Peak Hour Factor | 0.94 |
| Intersection Orientation | East-West | Analysis Time Period (hrs) | 1.00 |
| Project Description | | | |

Lanes



Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | | |
|----------------------------|-----------|----|-----|---|-----------|----|-----|---|------------|----|-----|---|------------|----|-----|----|--|
| | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R | |
| Movement | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 | | 7 | 8 | 9 | | 10 | 11 | 12 | |
| Priority | | | | | | | | | | | | | | | | | |
| Number of Lanes | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | | 0 | 1 | 0 | | 0 | 1 | 0 | |
| Configuration | | | LTR | | | | LTR | | | | LTR | | | | LTR | | |
| Volume, V (veh/h) | | 0 | 65 | 0 | | 0 | 28 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Percent Heavy Vehicles (%) | | 3 | | | | 3 | | | | 3 | 3 | 3 | | 3 | 3 | 3 | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | | | | | | | | | 0 | | | | 0 | | | |
| Right Turn Channelized | | No | | | | No | | | | No | | | | No | | | |
| Median Type/Storage | Undivided | | | | | | | | | | | | | | | | |

Critical and Follow-up Headways

| | | | | | | | | | | | | | | | | |
|------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Base Critical Headway (sec) | | | | | | | | | | | | | | | | |
| Critical Headway (sec) | | | | | | | | | | | | | | | | |
| Base Follow-Up Headway (sec) | | | | | | | | | | | | | | | | |
| Follow-Up Headway (sec) | | | | | | | | | | | | | | | | |

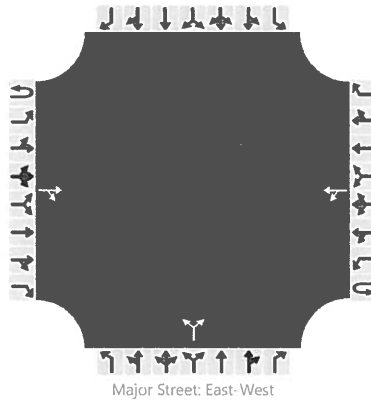
Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | | |
|---|--|------|--|--|------|-----|--|--|--|-----|--|--|--|-----|--|--|--|
| Flow Rate, v (veh/h) | | 0 | | | 0 | | | | | 0 | | | | 0 | | | |
| Capacity, c (veh/h) | | 1574 | | | 1524 | | | | | 0 | | | | 0 | | | |
| v/c Ratio | | 0.00 | | | 0.00 | | | | | | | | | | | | |
| 95% Queue Length, Q ₉₅ (veh) | | 0.0 | | | 0.0 | | | | | | | | | | | | |
| Control Delay (s/veh) | | 7.3 | | | 7.4 | | | | | 5.0 | | | | 5.0 | | | |
| Level of Service, LOS | | A | | | A | | | | | A | | | | A | | | |
| Approach Delay (s/veh) | | 0.0 | | | | 0.0 | | | | 5.0 | | | | 5.0 | | | |
| Approach LOS | | | | | | | | | | A | | | | A | | | |

HCS 2010 Two-Way Stop-Control Report

| General Information | | Site Information | |
|--------------------------|--------------------|----------------------------|-----------------------|
| Analyst | Elizabeth Landry | Intersection | Vallejo Rd @ W 4000 N |
| Agency/Co. | | Jurisdiction | |
| Date Performed | 6/3/2022 | East/West Street | W 4000 N |
| Analysis Year | 2022 | North/South Street | Vallejo Road |
| Time Analyzed | 2022 AM Peak Build | Peak Hour Factor | 0.92 |
| Intersection Orientation | East-West | Analysis Time Period (hrs) | 1.00 |
| Project Description | | | |

Lanes



Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|----------------------------|-----------|---|----|----|-----------|----|----|---|------------|---|----|---|------------|----|----|----|
| | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Movement | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 | | 7 | 8 | 9 | | 10 | 11 | 12 |
| Number of Lanes | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 |
| Configuration | | | | TR | | LT | | | | | LR | | | | | |
| Volume, V (veh/h) | | | 65 | 0 | | 2 | 28 | | | | 0 | | 5 | | | |
| Percent Heavy Vehicles (%) | | | | | | 3 | | | | | 3 | | 3 | | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | | | | | | | | 0 | | | | | | | |
| Right Turn Channelized | No | | | | No | | | | No | | | | No | | | |
| Median Type/Storage | Undivided | | | | | | | | | | | | | | | |

Critical and Follow-up Headways

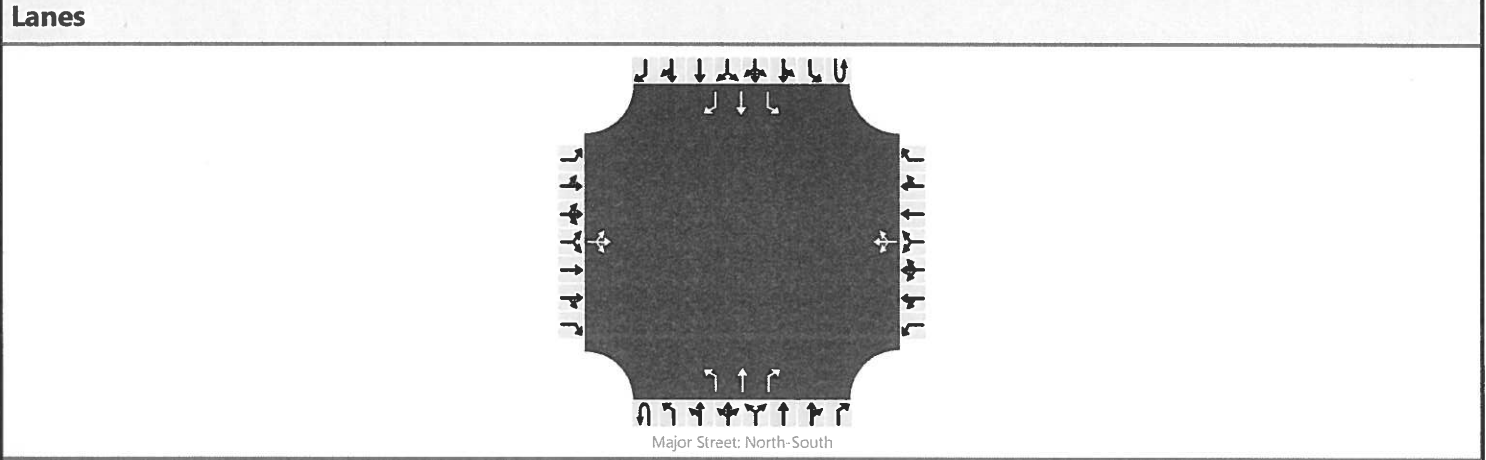
| | | | | | | | | | | | | | | | | |
|------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Base Critical Headway (sec) | | | | | | | | | | | | | | | | |
| Critical Headway (sec) | | | | | | | | | | | | | | | | |
| Base Follow-Up Headway (sec) | | | | | | | | | | | | | | | | |
| Follow-Up Headway (sec) | | | | | | | | | | | | | | | | |

Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|--|--|--|--|-----|------|--|--|-----|--|--|------|--|--|--|--|
| Flow Rate, v (veh/h) | | | | | | 2 | | | | | | 5 | | | | |
| Capacity, c (veh/h) | | | | | | 1521 | | | | | | 988 | | | | |
| v/c Ratio | | | | | | 0.00 | | | | | | 0.01 | | | | |
| 95% Queue Length, Q ₉₅ (veh) | | | | | | 0.0 | | | | | | 0.0 | | | | |
| Control Delay (s/veh) | | | | | | 7.4 | | | | | | 8.7 | | | | |
| Level of Service, LOS | | | | | | A | | | | | | A | | | | |
| Approach Delay (s/veh) | | | | | 0.5 | | | | 8.7 | | | | | | | |
| Approach LOS | | | | | | | | | A | | | | | | | |

HCS 2010 Two-Way Stop-Control Report

| General Information | | | | Site Information | | | |
|--------------------------|--------------------|--|--|----------------------------|------------------------|--|--|
| Analyst | Gary N Grigsby | | | Intersection | Idaho SH 33 & W 4000 N | | |
| Agency/Co. | | | | Jurisdiction | | | |
| Date Performed | 5/17/2022 | | | East/West Street | W 4000 N | | |
| Analysis Year | 2022 | | | North/South Street | Idaho SH 33 | | |
| Time Analyzed | 2022 AM Peak Build | | | Peak Hour Factor | 0.94 | | |
| Intersection Orientation | North-South | | | Analysis Time Period (hrs) | 1.00 | | |
| Project Description | | | | | | | |



Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|----------------------------|-----------|----|-----|----|-----------|---|-----|---|------------|----|-----|---|------------|---|-----|---|
| | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Movement | | | | | | | | | | | | | | | | |
| Priority | | 10 | 11 | 12 | | 7 | 8 | 9 | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 |
| Number of Lanes | | 0 | 1 | 0 | | 0 | 1 | 0 | | 0 | 1 | 1 | | 0 | 1 | 1 |
| Configuration | | | LTR | | | | LTR | | | L | T | R | | L | T | R |
| Volume, V (veh/h) | | 4 | 0 | 76 | | 6 | 0 | 7 | | 26 | 191 | 6 | | 3 | 363 | 1 |
| Percent Heavy Vehicles (%) | | 3 | 3 | 3 | | 3 | 3 | 3 | | 3 | | | | 3 | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | 0 | | | | 0 | | | | | | | | | | | |
| Right Turn Channelized | No | | | | No | | | | No | | | | | | | |
| Median Type/Storage | Undivided | | | | | | | | | | | | | | | |

Critical and Follow-up Headways

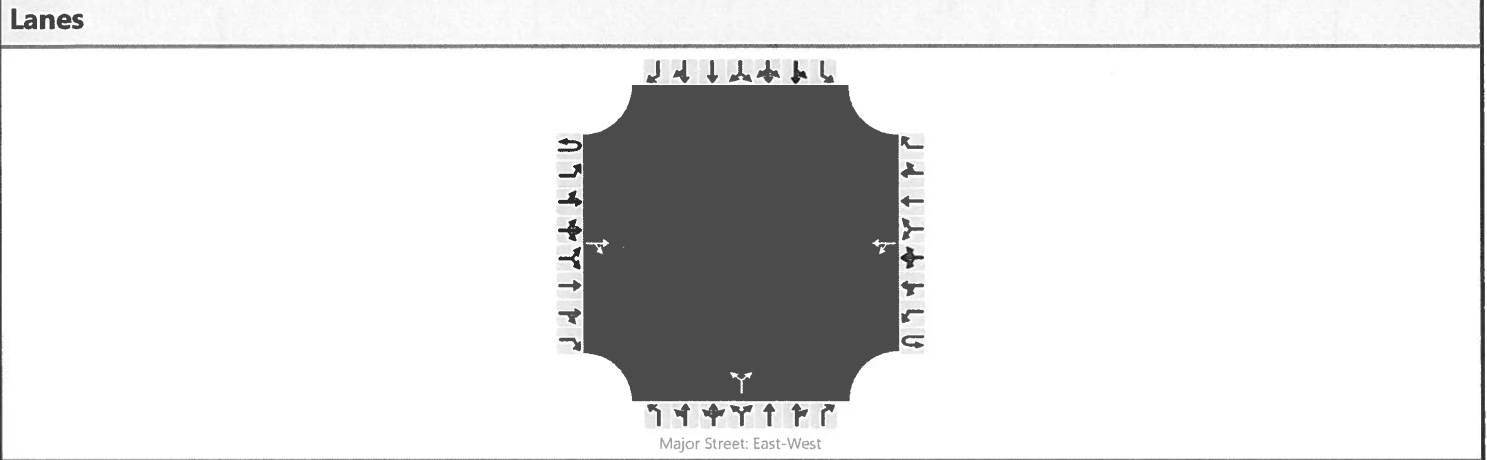
| | | | | | | | | | | | | | | | | |
|------------------------------|--|------|------|------|--|------|------|------|--|------|--|--|--|------|--|--|
| Base Critical Headway (sec) | | 7.1 | 6.5 | 6.2 | | 7.1 | 6.5 | 6.2 | | 4.1 | | | | 4.1 | | |
| Critical Headway (sec) | | 7.13 | 6.53 | 6.23 | | 7.13 | 6.53 | 6.23 | | 4.13 | | | | 4.13 | | |
| Base Follow-Up Headway (sec) | | 3.5 | 4.0 | 3.3 | | 3.5 | 4.0 | 3.3 | | 2.2 | | | | 2.2 | | |
| Follow-Up Headway (sec) | | 3.53 | 4.03 | 3.33 | | 3.53 | 4.03 | 3.33 | | 2.23 | | | | 2.23 | | |

Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|------|--|------|--|------|--|------|--|-----|--|------|--|-----|--|------|--|
| Flow Rate, v (veh/h) | | | 85 | | | | 13 | | | | 28 | | | | 3 | |
| Capacity, c (veh/h) | | | 636 | | | | 465 | | | | 1165 | | | | 1354 | |
| v/c Ratio | | | 0.13 | | | | 0.03 | | | | 0.02 | | | | 0.00 | |
| 95% Queue Length, Q ₉₅ (veh) | | | 0.5 | | | | 0.1 | | | | 0.1 | | | | 0.0 | |
| Control Delay (s/veh) | | | 11.5 | | | | 13.0 | | | | 8.2 | | | | 7.7 | |
| Level of Service, LOS | | | B | | | | B | | | | A | | | | A | |
| Approach Delay (s/veh) | 11.5 | | | | 13.0 | | | | 1.0 | | | | 0.1 | | | |
| Approach LOS | B | | | | B | | | | A | | | | A | | | |

HCS 2010 Two-Way Stop-Control Report

| General Information | | Site Information | |
|--------------------------|--------------------|----------------------------|--------------------------|
| Analyst | Elizabeth Landry | Intersection | Embarcadero St @ W4000 N |
| Agency/Co. | | Jurisdiction | |
| Date Performed | 6/3/2022 | East/West Street | W 4000 N |
| Analysis Year | 2022 | North/South Street | Embarcadero St |
| Time Analyzed | 2022 AM Peak Build | Peak Hour Factor | 0.92 |
| Intersection Orientation | East-West | Analysis Time Period (hrs) | 1.00 |
| Project Description | | | |



Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|----------------------------|-----------|---|----|----|-----------|----|----|---|------------|---|----|----|------------|----|----|----|
| | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Movement | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 | | 7 | 8 | 9 | | 10 | 11 | 12 |
| Priority | | | | | | | | | | | | | | | | |
| Number of Lanes | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 |
| Configuration | | | | TR | | LT | | | | | LR | | | | | |
| Volume, V (veh/h) | | | 70 | 0 | | 3 | 30 | | | 0 | | 10 | | | | |
| Percent Heavy Vehicles (%) | | | | | | 3 | | | | 3 | | 3 | | | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | | | | | | | | 0 | | | | | | | |
| Right Turn Channelized | No | | | | No | | | | No | | | | No | | | |
| Median Type/Storage | Undivided | | | | | | | | | | | | | | | |

Critical and Follow-up Headways

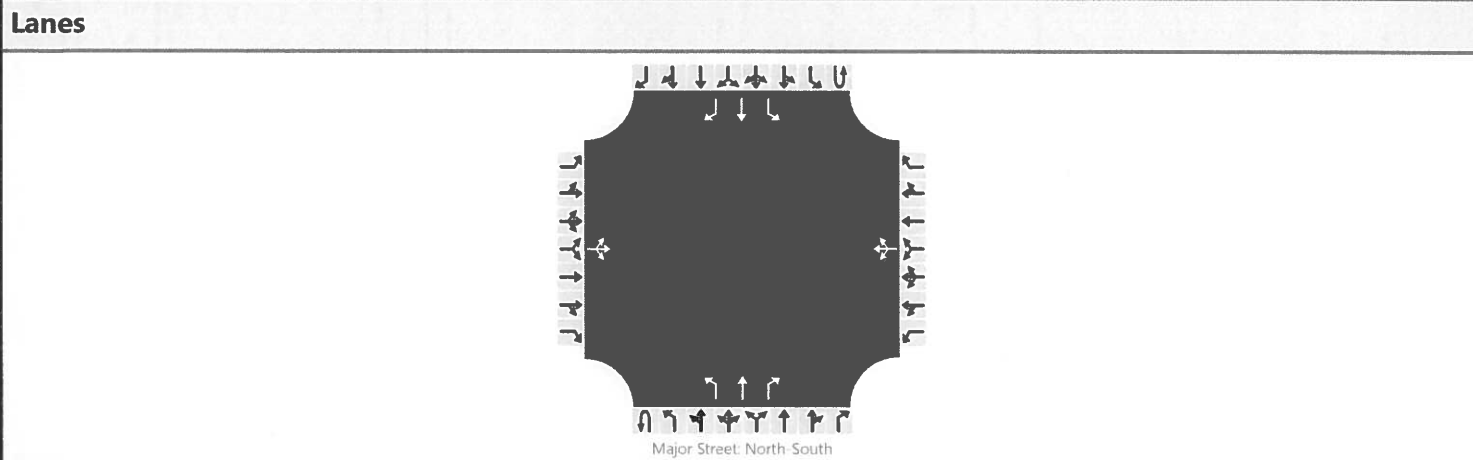
| | | | | | | | | | | | | | | | | |
|------------------------------|--|--|--|--|--|------|--|--|--|--|------|--|------|--|--|--|
| Base Critical Headway (sec) | | | | | | 4.1 | | | | | 7.1 | | 6.2 | | | |
| Critical Headway (sec) | | | | | | 4.13 | | | | | 6.43 | | 6.23 | | | |
| Base Follow-Up Headway (sec) | | | | | | 2.2 | | | | | 3.5 | | 3.3 | | | |
| Follow-Up Headway (sec) | | | | | | 2.23 | | | | | 3.53 | | 3.33 | | | |

Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|--|--|--|--|-----|------|--|--|-----|--|------|--|--|--|--|--|
| Flow Rate, v (veh/h) | | | | | | 3 | | | | | 11 | | | | | |
| Capacity, c (veh/h) | | | | | | 1515 | | | | | 982 | | | | | |
| v/c Ratio | | | | | | 0.00 | | | | | 0.01 | | | | | |
| 95% Queue Length, Q ₉₅ (veh) | | | | | | 0.0 | | | | | 0.0 | | | | | |
| Control Delay (s/veh) | | | | | | 7.4 | | | | | 8.7 | | | | | |
| Level of Service, LOS | | | | | | A | | | | | A | | | | | |
| Approach Delay (s/veh) | | | | | 0.6 | | | | 8.7 | | | | | | | |
| Approach LOS | | | | | | | | | A | | | | | | | |

HCS 2010 Two-Way Stop-Control Report

| General Information | | Site Information | |
|--------------------------|-----------------------|----------------------------|------------------------|
| Analyst | Elizabeth Landry | Intersection | Idaho SH 33 & W 4000 N |
| Agency/Co. | | Jurisdiction | |
| Date Performed | 6/15/2022 | East/West Street | W 4000 N |
| Analysis Year | 2042 | North/South Street | Idaho SH 33 |
| Time Analyzed | 2042 AM Peak No Build | Peak Hour Factor | 0.94 |
| Intersection Orientation | North-South | Analysis Time Period (hrs) | 1.00 |
| Project Description | | | |



Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|----------------------------|-----------|-----------|-----|-----|-----------|----|-----|----|------------|----|-----|---|------------|----|-----|---|
| | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Movement | | | | | | | | | | | | | | | | |
| Priority | | 10 | 11 | 12 | | 7 | 8 | 9 | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 |
| Number of Lanes | | 0 | 1 | 0 | | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 |
| Configuration | | | LTR | | | | LTR | | | L | T | R | | L | T | R |
| Volume, V (veh/h) | | 29 | 0 | 114 | | 4 | 0 | 25 | | 36 | 352 | 5 | | 14 | 641 | 9 |
| Percent Heavy Vehicles (%) | | 3 | 3 | 3 | | 3 | 3 | 3 | | 3 | | | | 3 | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | 0 | | | | 0 | | | | | | | | | | |
| Right Turn Channelized | | No | | | | No | | | | No | | | | No | | |
| Median Type/Storage | | Undivided | | | | | | | | | | | | | | |

Critical and Follow-up Headways

| | | | | | | | | | | | | | | | | |
|------------------------------|--|------|------|------|--|------|------|------|--|------|--|--|--|------|--|--|
| Base Critical Headway (sec) | | 7.1 | 6.5 | 6.2 | | 7.1 | 6.5 | 6.2 | | 4.1 | | | | 4.1 | | |
| Critical Headway (sec) | | 7.13 | 6.53 | 6.23 | | 7.13 | 6.53 | 6.23 | | 4.13 | | | | 4.13 | | |
| Base Follow-Up Headway (sec) | | 3.5 | 4.0 | 3.3 | | 3.5 | 4.0 | 3.3 | | 2.2 | | | | 2.2 | | |
| Follow-Up Headway (sec) | | 3.53 | 4.03 | 3.33 | | 3.53 | 4.03 | 3.33 | | 2.23 | | | | 2.23 | | |

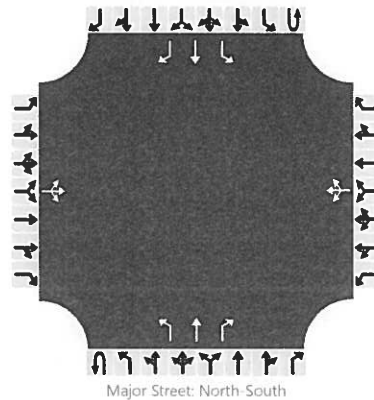
Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|--|------|------|--|--|------|------|--|--|-----|------|--|--|-----|------|--|
| Flow Rate, v (veh/h) | | | 152 | | | | 31 | | | | 38 | | | | 15 | |
| Capacity, c (veh/h) | | | 322 | | | | 402 | | | | 898 | | | | 1173 | |
| v/c Ratio | | | 0.47 | | | | 0.08 | | | | 0.04 | | | | 0.01 | |
| 95% Queue Length, Q ₉₅ (veh) | | | 2.6 | | | | 0.3 | | | | 0.1 | | | | 0.0 | |
| Control Delay (s/veh) | | | 26.0 | | | | 14.7 | | | | 9.2 | | | | 8.1 | |
| Level of Service, LOS | | | D | | | | B | | | | A | | | | A | |
| Approach Delay (s/veh) | | 26.0 | | | | 14.7 | | | | 0.8 | | | | 0.2 | | |
| Approach LOS | | D | | | | B | | | | | | | | | | |

HCS 2010 Two-Way Stop-Control Report

| General Information | | Site Information | |
|--------------------------|--------------------|----------------------------|------------------------|
| Analyst | Elizabeth Landry | Intersection | Idaho SH 33 & W 4000 N |
| Agency/Co. | | Jurisdiction | |
| Date Performed | 6/15/2022 | East/West Street | W 4000 N |
| Analysis Year | 2042 | North/South Street | Idaho SH 33 |
| Time Analyzed | 2042 AM Peak Build | Peak Hour Factor | 0.94 |
| Intersection Orientation | North-South | Analysis Time Period (hrs) | 1.00 |
| Project Description | | | |

Lanes



Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|----------------------------|-----------|-----------|-----|-----|-----------|----|-----|----|------------|----|-----|---|------------|----|-----|---|
| | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Movement | | | | | | | | | | | | | | | | |
| Priority | | 10 | 11 | 12 | | 7 | 8 | 9 | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 |
| Number of Lanes | | 0 | 1 | 0 | | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 |
| Configuration | | | LTR | | | | LTR | | | L | T | R | | L | T | R |
| Volume, V (veh/h) | | 30 | 0 | 128 | | 4 | 0 | 25 | | 41 | 352 | 5 | | 14 | 641 | 9 |
| Percent Heavy Vehicles (%) | | 3 | 3 | 3 | | 3 | 3 | 3 | | 3 | | | | 3 | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | 0 | | | | 0 | | | | | | | | | | |
| Right Turn Channelized | | No | | | | No | | | | No | | | | No | | |
| Median Type/Storage | | Undivided | | | | | | | | | | | | | | |

Critical and Follow-up Headways

| | | | | | | | | | | | | | | | | |
|------------------------------|--|------|------|------|--|------|------|------|--|------|--|--|--|------|--|--|
| Base Critical Headway (sec) | | 7.1 | 6.5 | 6.2 | | 7.1 | 6.5 | 6.2 | | 4.1 | | | | 4.1 | | |
| Critical Headway (sec) | | 7.13 | 6.53 | 6.23 | | 7.13 | 6.53 | 6.23 | | 4.13 | | | | 4.13 | | |
| Base Follow-Up Headway (sec) | | 3.5 | 4.0 | 3.3 | | 3.5 | 4.0 | 3.3 | | 2.2 | | | | 2.2 | | |
| Follow-Up Headway (sec) | | 3.53 | 4.03 | 3.33 | | 3.53 | 4.03 | 3.33 | | 2.23 | | | | 2.23 | | |

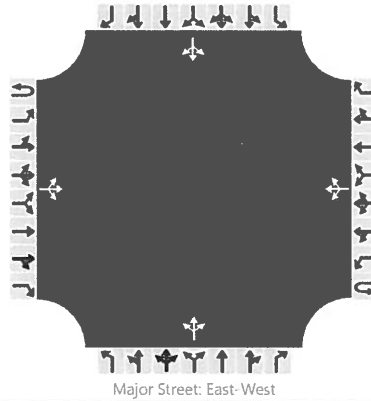
Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|--|------|------|--|--|------|------|--|--|------|--|--|--|------|--|--|
| Flow Rate, v (veh/h) | | | 168 | | | | 31 | | | 44 | | | | 15 | | |
| Capacity, c (veh/h) | | | 325 | | | | 386 | | | 898 | | | | 1173 | | |
| v/c Ratio | | | 0.52 | | | | 0.08 | | | 0.05 | | | | 0.01 | | |
| 95% Queue Length, Q ₉₅ (veh) | | | 3.1 | | | | 0.3 | | | 0.2 | | | | 0.0 | | |
| Control Delay (s/veh) | | | 27.7 | | | | 15.1 | | | 9.2 | | | | 8.1 | | |
| Level of Service, LOS | | | D | | | | C | | | A | | | | A | | |
| Approach Delay (s/veh) | | 27.7 | | | | 15.1 | | | | 1.0 | | | | 0.2 | | |
| Approach LOS | | D | | | | C | | | | | | | | | | |

HCS 2010 Two-Way Stop-Control Report

| General Information | | Site Information | |
|--------------------------|-----------------------|----------------------------|----------------------|
| Analyst | Gary N Grigsby | Intersection | Access Dr @ W 4000 N |
| Agency/Co. | | Jurisdiction | |
| Date Performed | 5/17/2022 | East/West Street | W 4000 N |
| Analysis Year | 2022 | North/South Street | Access Drive |
| Time Analyzed | 2042 AM Peak No Build | Peak Hour Factor | 0.94 |
| Intersection Orientation | East-West | Analysis Time Period (hrs) | 1.00 |
| Project Description | | | |

Lanes



Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|----------------------------|-----------|----|-----|---|-----------|---|-----|---|------------|---|-----|----|------------|----|-----|----|
| | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Movement | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 | | 7 | 8 | 9 | | 10 | 11 | 12 |
| Priority | | | | | | | | | | | | | | | | |
| Number of Lanes | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | | 0 | 1 | 0 | | 0 | 1 | 0 |
| Configuration | | | LTR | | | | LTR | | | | LTR | | | | LTR | |
| Volume, V (veh/h) | | 0 | 142 | 0 | | 0 | 61 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 |
| Percent Heavy Vehicles (%) | | 3 | | | | 3 | | | | 3 | 3 | 3 | | 3 | 3 | 3 |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | | | | | | | | | 0 | | | | 0 | | |
| Right Turn Channelized | | No | | | No | | | | No | | | No | | | | |
| Median Type/Storage | Undivided | | | | | | | | | | | | | | | |

Critical and Follow-up Headways

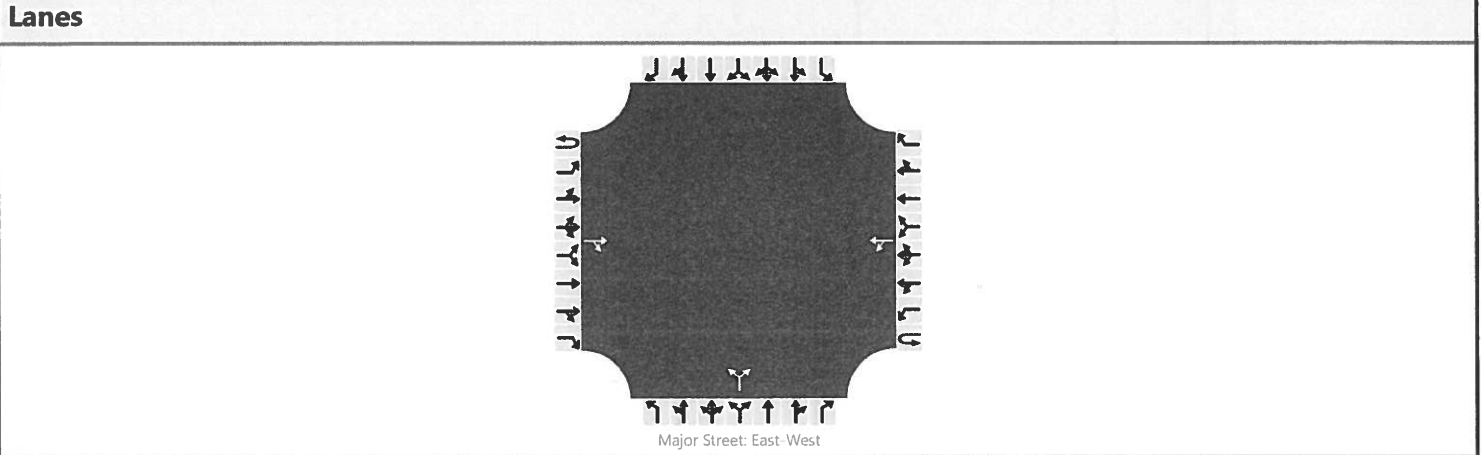
| | | | | | | | | | | | | | | | | |
|------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Base Critical Headway (sec) | | | | | | | | | | | | | | | | |
| Critical Headway (sec) | | | | | | | | | | | | | | | | |
| Base Follow-Up Headway (sec) | | | | | | | | | | | | | | | | |
| Follow-Up Headway (sec) | | | | | | | | | | | | | | | | |

Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|--|------|--|--|------|--|--|--|-----|-----|--|-----|--|-----|--|--|
| Flow Rate, v (veh/h) | | 0 | | | 0 | | | | | 0 | | | | 0 | | |
| Capacity, c (veh/h) | | 1529 | | | 1422 | | | | | 0 | | | | 0 | | |
| v/c Ratio | | 0.00 | | | 0.00 | | | | | | | | | | | |
| 95% Queue Length, Q ₉₅ (veh) | | 0.0 | | | 0.0 | | | | | | | | | | | |
| Control Delay (s/veh) | | 7.4 | | | 7.5 | | | | | 5.0 | | | | 5.0 | | |
| Level of Service, LOS | | A | | | A | | | | | A | | | | A | | |
| Approach Delay (s/veh) | | 0.0 | | | 0.0 | | | | 5.0 | | | 5.0 | | | | |
| Approach LOS | | | | | | | | | A | | | A | | | | |

HCS 2010 Two-Way Stop-Control Report

| General Information | | Site Information | |
|--------------------------|--------------------|----------------------------|-----------------------|
| Analyst | Elizabeth Landry | Intersection | Vallejo Rd @ W 4000 N |
| Agency/Co. | | Jurisdiction | |
| Date Performed | 6/3/2022 | East/West Street | W 4000 N |
| Analysis Year | 2042 | North/South Street | Vallejo Road |
| Time Analyzed | 2042 AM Peak Build | Peak Hour Factor | 0.92 |
| Intersection Orientation | East-West | Analysis Time Period (hrs) | 1.00 |
| Project Description | | | |



Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|----------------------------|-----------|---|-----|----|-----------|----|----|---|------------|----|----|---|------------|----|----|-----------|
| | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Movement | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 | | 7 | 8 | 9 | | 10 | 11 | 12 |
| Priority | | | | | | | | | | | | | | | | |
| Number of Lanes | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 |
| Configuration | | | | TR | | LT | | | | | LR | | | | | |
| Volume, V (veh/h) | | | 142 | 0 | | 2 | 61 | | | 0 | | 5 | | | | |
| Percent Heavy Vehicles (%) | | | | | | 3 | | | | 3 | | 3 | | | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | | | | | | | | | 0 | | | | | | |
| Right Turn Channelized | | | No | | | No | | | | No | | | | No | | |
| Median Type/Storage | | | | | | | | | | | | | | | | Undivided |

Critical and Follow-up Headways

| | | | | | | | | | | | | | | | | |
|------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Base Critical Headway (sec) | | | | | | | | | | | | | | | | |
| Critical Headway (sec) | | | | | | | | | | | | | | | | |
| Base Follow-Up Headway (sec) | | | | | | | | | | | | | | | | |
| Follow-Up Headway (sec) | | | | | | | | | | | | | | | | |

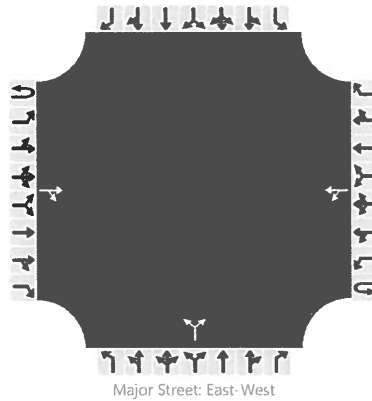
Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|--|--|--|--|------|--|--|-----|--|--|--|--|------|--|--|-----|
| Flow Rate, v (veh/h) | | | | | 2 | | | | | | | | 5 | | | |
| Capacity, c (veh/h) | | | | | 1419 | | | | | | | | 889 | | | |
| v/c Ratio | | | | | 0.00 | | | | | | | | 0.01 | | | |
| 95% Queue Length, Q ₉₅ (veh) | | | | | 0.0 | | | | | | | | 0.0 | | | |
| Control Delay (s/veh) | | | | | 7.5 | | | | | | | | 9.1 | | | |
| Level of Service, LOS | | | | | A | | | | | | | | A | | | |
| Approach Delay (s/veh) | | | | | | | | 0.2 | | | | | | | | 9.1 |
| Approach LOS | | | | | | | | | | | | | | | | A |

HCS 2010 Two-Way Stop-Control Report

| General Information | | | | Site Information | | | |
|--------------------------|--------------------|--|--|----------------------------|--------------------------|--|--|
| Analyst | Elizabeth Landry | | | Intersection | Embarcadero St @ W4000 N | | |
| Agency/Co. | | | | Jurisdiction | | | |
| Date Performed | 6/3/2022 | | | East/West Street | W 4000 N | | |
| Analysis Year | 2042 | | | North/South Street | Embarcadero St | | |
| Time Analyzed | 2042 AM Peak Build | | | Peak Hour Factor | 0.92 | | |
| Intersection Orientation | East-West | | | Analysis Time Period (hrs) | 1.00 | | |
| Project Description | | | | | | | |

Lanes



Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|----------------------------|-----------|---|-----|----|-----------|----|---|---|------------|---|----|----|------------|----|----|----|
| | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Movement | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 | | 7 | 8 | 9 | | 10 | 11 | 12 |
| Priority | | | | | | | | | | | | | | | | |
| Number of Lanes | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 |
| Configuration | | | | TR | | LT | | | | | LR | | | | | |
| Volume, V (veh/h) | | | 147 | 0 | 3 | 63 | | | | 0 | | 10 | | | | |
| Percent Heavy Vehicles (%) | | | | | 3 | | | | | 3 | | 3 | | | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | | | | | | | | 0 | | | | | | | |
| Right Turn Channelized | No | | | | No | | | | No | | | | No | | | |
| Median Type/Storage | Undivided | | | | | | | | | | | | | | | |

Critical and Follow-up Headways

| | | | | | | | | | | | | | | | | |
|------------------------------|--|--|--|--|------|--|--|--|--|------|--|------|--|--|--|--|
| Base Critical Headway (sec) | | | | | 4.1 | | | | | 7.1 | | 6.2 | | | | |
| Critical Headway (sec) | | | | | 4.13 | | | | | 6.43 | | 6.23 | | | | |
| Base Follow-Up Headway (sec) | | | | | 2.2 | | | | | 3.5 | | 3.3 | | | | |
| Follow-Up Headway (sec) | | | | | 2.23 | | | | | 3.53 | | 3.33 | | | | |

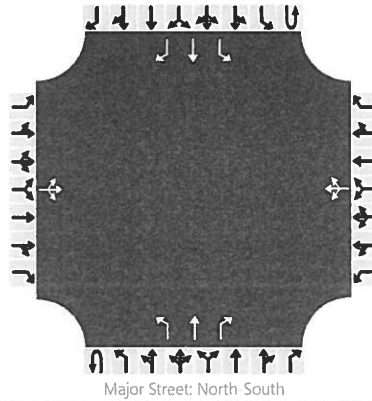
Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|--|--|--|--|------|--|--|--|-----|------|--|--|--|--|--|--|
| Flow Rate, v (veh/h) | | | | | 3 | | | | | 11 | | | | | | |
| Capacity, c (veh/h) | | | | | 1411 | | | | | 882 | | | | | | |
| v/c Ratio | | | | | 0.00 | | | | | 0.01 | | | | | | |
| 95% Queue Length, Q ₉₅ (veh) | | | | | 0.0 | | | | | 0.0 | | | | | | |
| Control Delay (s/veh) | | | | | 7.6 | | | | | 9.1 | | | | | | |
| Level of Service, LOS | | | | | A | | | | | A | | | | | | |
| Approach Delay (s/veh) | | | | | 0.3 | | | | 9.1 | | | | | | | |
| Approach LOS | | | | | A | | | | A | | | | | | | |

HCS 2010 Two-Way Stop-Control Report

| General Information | | Site Information | |
|--------------------------|----------------|----------------------------|------------------------|
| Analyst | Gary N Grigsby | Intersection | Idaho SH 33 & W 4000 N |
| Agency/Co. | | Jurisdiction | |
| Date Performed | 5/17/2022 | East/West Street | W 4000 N |
| Analysis Year | 2022 | North/South Street | Idaho SH 33 |
| Time Analyzed | 2022 PM Peak | Peak Hour Factor | 0.96 |
| Intersection Orientation | North-South | Analysis Time Period (hrs) | 1.00 |
| Project Description | | | |

Lanes



Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|----------------------------|-----------|-----------|-----|----|-----------|----|-----|---|------------|----|-----|---|------------|----|-----|---|
| | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Movement | | | | | | | | | | | | | | | | |
| Priority | | 10 | 11 | 12 | | 7 | 8 | 9 | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 |
| Number of Lanes | | 0 | 1 | 0 | | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 |
| Configuration | | | LTR | | | | LTR | | | L | T | R | | L | T | R |
| Volume, V (veh/h) | | 2 | 0 | 34 | | 0 | 0 | 1 | | 52 | 375 | 6 | | 1 | 211 | 1 |
| Percent Heavy Vehicles (%) | | 3 | 3 | 3 | | 3 | 3 | 3 | | 3 | | | | 3 | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | 0 | | | | 0 | | | | | | | | | | |
| Right Turn Channelized | | No | | | | No | | | | No | | | | No | | |
| Median Type/Storage | | Undivided | | | | | | | | | | | | | | |

Critical and Follow-up Headways

| | | | | | | | | | | | | | | | | |
|------------------------------|--|------|------|------|--|------|------|------|--|------|--|--|--|------|--|--|
| Base Critical Headway (sec) | | 7.1 | 6.5 | 6.2 | | 7.1 | 6.5 | 6.2 | | 4.1 | | | | 4.1 | | |
| Critical Headway (sec) | | 7.13 | 6.53 | 6.23 | | 7.13 | 6.53 | 6.23 | | 4.13 | | | | 4.13 | | |
| Base Follow-Up Headway (sec) | | 3.5 | 4.0 | 3.3 | | 3.5 | 4.0 | 3.3 | | 2.2 | | | | 2.2 | | |
| Follow-Up Headway (sec) | | 3.53 | 4.03 | 3.33 | | 3.53 | 4.03 | 3.33 | | 2.23 | | | | 2.23 | | |

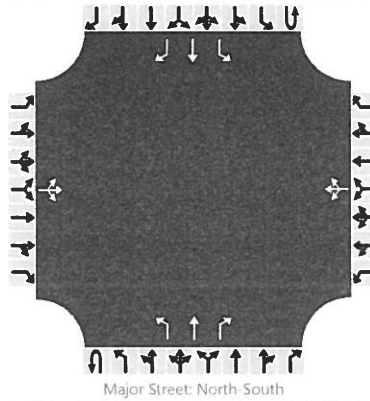
Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|--|------|------|--|--|------|------|--|--|------|--|--|--|------|--|--|
| Flow Rate, v (veh/h) | | | 37 | | | | 1 | | | 54 | | | | 1 | | |
| Capacity, c (veh/h) | | | 756 | | | | 655 | | | 1341 | | | | 1155 | | |
| v/c Ratio | | | 0.05 | | | | 0.00 | | | 0.04 | | | | 0.00 | | |
| 95% Queue Length, Q ₉₅ (veh) | | | 0.2 | | | | 0.0 | | | 0.1 | | | | 0.0 | | |
| Control Delay (s/veh) | | | 10.0 | | | | 10.5 | | | 7.8 | | | | 8.1 | | |
| Level of Service, LOS | | | B | | | | B | | | A | | | | A | | |
| Approach Delay (s/veh) | | 10.0 | | | | 10.5 | | | | 0.9 | | | | 0.0 | | |
| Approach LOS | | B | | | | B | | | | A | | | | A | | |

HCS 2010 Two-Way Stop-Control Report

| General Information | | | | Site Information | | | |
|--------------------------|--------------------|--|--|----------------------------|------------------------|--|--|
| Analyst | Gary N Grigsby | | | Intersection | Idaho SH 33 & W 4000 N | | |
| Agency/Co. | | | | Jurisdiction | | | |
| Date Performed | 5/17/2022 | | | East/West Street | W 4000 N | | |
| Analysis Year | 2022 | | | North/South Street | Idaho SH 33 | | |
| Time Analyzed | 2022 PM Peak Build | | | Peak Hour Factor | 0.96 | | |
| Intersection Orientation | North-South | | | Analysis Time Period (hrs) | 1.00 | | |
| Project Description | | | | | | | |

Lanes



Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|----------------------------|-----------|-----------|-----|----|-----------|----|-----|---|------------|----|-----|---|------------|----|-----|---|
| | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Movement | | | | | | | | | | | | | | | | |
| Priority | | 10 | 11 | 12 | | 7 | 8 | 9 | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 |
| Number of Lanes | | 0 | 1 | 0 | | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 |
| Configuration | | | LTR | | | | LTR | | | L | T | R | | L | T | R |
| Volume, V (veh/h) | | 3 | 0 | 43 | | 0 | 0 | 1 | | 67 | 375 | 6 | | 1 | 211 | 2 |
| Percent Heavy Vehicles (%) | | 3 | 3 | 3 | | 3 | 3 | 3 | | 3 | | | | 3 | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | 0 | | | | 0 | | | | | | | | | | |
| Right Turn Channelized | | No | | | | No | | | | No | | | | No | | |
| Median Type/Storage | | Undivided | | | | | | | | | | | | | | |

Critical and Follow-up Headways

| | | | | | | | | | | | | | | | | |
|------------------------------|--|------|------|------|--|------|------|------|--|------|--|--|--|------|--|--|
| Base Critical Headway (sec) | | 7.1 | 6.5 | 6.2 | | 7.1 | 6.5 | 6.2 | | 4.1 | | | | 4.1 | | |
| Critical Headway (sec) | | 7.13 | 6.53 | 6.23 | | 7.13 | 6.53 | 6.23 | | 4.13 | | | | 4.13 | | |
| Base Follow-Up Headway (sec) | | 3.5 | 4.0 | 3.3 | | 3.5 | 4.0 | 3.3 | | 2.2 | | | | 2.2 | | |
| Follow-Up Headway (sec) | | 3.53 | 4.03 | 3.33 | | 3.53 | 4.03 | 3.33 | | 2.23 | | | | 2.23 | | |

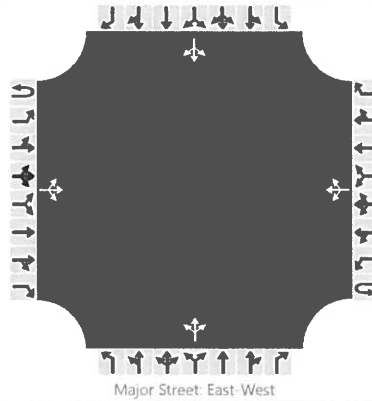
Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|--|------|------|--|--|------|------|--|--|-----|------|--|--|-----|------|--|
| Flow Rate, v (veh/h) | | | 48 | | | | 1 | | | | 70 | | | | 1 | |
| Capacity, c (veh/h) | | | 741 | | | | 655 | | | | 1340 | | | | 1155 | |
| v/c Ratio | | | 0.06 | | | | 0.00 | | | | 0.05 | | | | 0.00 | |
| 95% Queue Length, Q ₉₅ (veh) | | | 0.2 | | | | 0.0 | | | | 0.2 | | | | 0.0 | |
| Control Delay (s/veh) | | | 10.2 | | | | 10.5 | | | | 7.8 | | | | 8.1 | |
| Level of Service, LOS | | | B | | | | B | | | | A | | | | A | |
| Approach Delay (s/veh) | | 10.2 | | | | 10.5 | | | | 1.2 | | | | 0.0 | | |
| Approach LOS | | B | | | | B | | | | | | | | | | |

HCS 2010 Two-Way Stop-Control Report

| General Information | | Site Information | |
|--------------------------|-----------------------|----------------------------|----------------------|
| Analyst | Gary N Grigsby | Intersection | Access Dr @ W 4000 N |
| Agency/Co. | | Jurisdiction | |
| Date Performed | 5/17/2022 | East/West Street | W 4000 N |
| Analysis Year | 2022 | North/South Street | Access Drive |
| Time Analyzed | 2022 PM Peak No Build | Peak Hour Factor | 0.94 |
| Intersection Orientation | East-West | Analysis Time Period (hrs) | 1.00 |
| Project Description | | | |

Lanes



Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|----------------------------|-----------|---|-----|---|-----------|---|-----|---|------------|---|-----|---|------------|----|-----|----|
| | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Movement | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 | | 7 | 8 | 9 | | 10 | 11 | 12 |
| Priority | | | | | | | | | | | | | | | | |
| Number of Lanes | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | | 0 | 1 | 0 | | 0 | 1 | 0 |
| Configuration | | | LTR | | | | LTR | | | | LTR | | | | LTR | |
| Volume, V (veh/h) | | 0 | 36 | 0 | | 0 | 53 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 |
| Percent Heavy Vehicles (%) | | 3 | | | | 3 | | | | 3 | 3 | 3 | | 3 | 3 | 3 |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | | | | | | | | 0 | | | | 0 | | | |
| Right Turn Channelized | No | | | | No | | | | No | | | | No | | | |
| Median Type/Storage | Undivided | | | | | | | | | | | | | | | |

Critical and Follow-up Headways

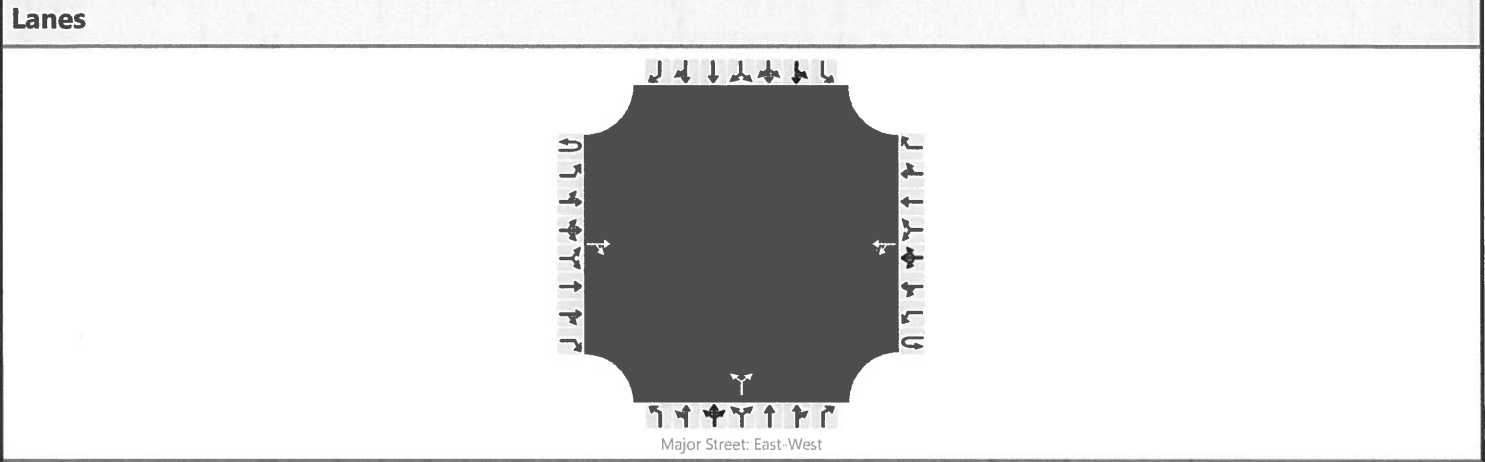
| | | | | | | | | | | | | | | | | |
|------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Base Critical Headway (sec) | | | | | | | | | | | | | | | | |
| Critical Headway (sec) | | | | | | | | | | | | | | | | |
| Base Follow-Up Headway (sec) | | | | | | | | | | | | | | | | |
| Follow-Up Headway (sec) | | | | | | | | | | | | | | | | |

Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|-----|------|--|--|-----|------|--|--|-----|--|-----|--|-----|--|--|-----|
| Flow Rate, v (veh/h) | | 0 | | | | 0 | | | | | 0 | | | | | 0 |
| Capacity, c (veh/h) | | 1540 | | | | 1564 | | | | | 0 | | | | | 0 |
| v/c Ratio | | 0.00 | | | | 0.00 | | | | | | | | | | |
| 95% Queue Length, Q ₉₅ (veh) | | 0.0 | | | | 0.0 | | | | | | | | | | |
| Control Delay (s/veh) | | 7.3 | | | | 7.3 | | | | | 5.0 | | | | | 5.0 |
| Level of Service, LOS | | A | | | | A | | | | | A | | | | | A |
| Approach Delay (s/veh) | 0.0 | | | | 0.0 | | | | 5.0 | | | | 5.0 | | | |
| Approach LOS | | | | | | | | | A | | | | A | | | |

HCS 2010 Two-Way Stop-Control Report

| General Information | | | | Site Information | | | |
|--------------------------|--------------------|--|--|----------------------------|-----------------------|--|--|
| Analyst | Elizabeth Landry | | | Intersection | Vallejo Rd @ W 4000 N | | |
| Agency/Co. | | | | Jurisdiction | | | |
| Date Performed | 6/3/2022 | | | East/West Street | W 4000 N | | |
| Analysis Year | 2022 | | | North/South Street | Vallejo Road | | |
| Time Analyzed | 2022 AM Peak Build | | | Peak Hour Factor | 0.92 | | |
| Intersection Orientation | East-West | | | Analysis Time Period (hrs) | 1.00 | | |
| Project Description | | | | | | | |



Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|----------------------------|-----------|-----------|----|----|-----------|----|----|---|------------|----|----|---|------------|----|----|----|
| | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Movement | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 | | 7 | 8 | 9 | | 10 | 11 | 12 |
| Priority | | | | | | | | | | | | | | | | |
| Number of Lanes | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 |
| Configuration | | | | TR | | LT | | | | | LR | | | | | |
| Volume, V (veh/h) | | | 36 | 0 | | 5 | 53 | | | 0 | | 3 | | | | |
| Percent Heavy Vehicles (%) | | | | | | 3 | | | | 3 | | 3 | | | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | | | | | | | | | 0 | | | | | | |
| Right Turn Channelized | | No | | | | No | | | | No | | | | No | | |
| Median Type/Storage | | Undivided | | | | | | | | | | | | | | |

Critical and Follow-up Headways

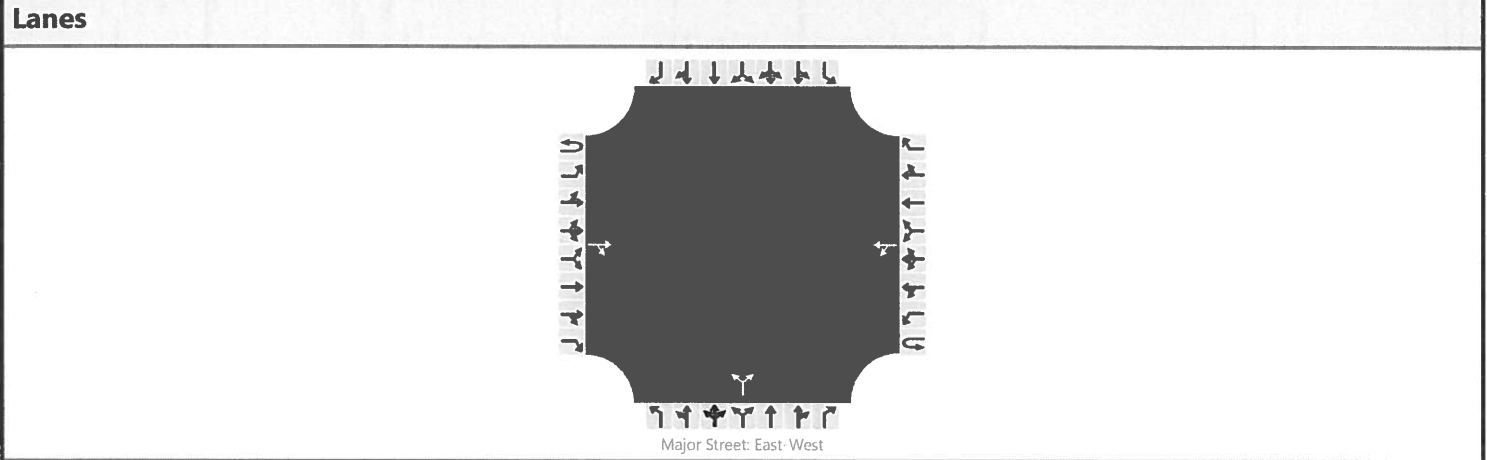
| | | | | | | | | | | | | | | | | |
|------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Base Critical Headway (sec) | | | | | | | | | | | | | | | | |
| Critical Headway (sec) | | | | | | | | | | | | | | | | |
| Base Follow-Up Headway (sec) | | | | | | | | | | | | | | | | |
| Follow-Up Headway (sec) | | | | | | | | | | | | | | | | |

Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | |
|---|--|--|--|--|------|--|--|--|------|--|--|--|--|
| Flow Rate, v (veh/h) | | | | | 5 | | | | 3 | | | | |
| Capacity, c (veh/h) | | | | | 1563 | | | | 1029 | | | | |
| v/c Ratio | | | | | 0.00 | | | | 0.00 | | | | |
| 95% Queue Length, Q ₉₅ (veh) | | | | | 0.0 | | | | 0.0 | | | | |
| Control Delay (s/veh) | | | | | 7.3 | | | | 8.5 | | | | |
| Level of Service, LOS | | | | | A | | | | A | | | | |
| Approach Delay (s/veh) | | | | | 0.6 | | | | 8.5 | | | | |
| Approach LOS | | | | | A | | | | A | | | | |

HCS 2010 Two-Way Stop-Control Report

| General Information | | | | Site Information | | | |
|--------------------------|--------------------|--|--|----------------------------|--------------------------|--|--|
| Analyst | Elizabeth Landry | | | Intersection | Embarcadero St @ W4000 N | | |
| Agency/Co. | | | | Jurisdiction | | | |
| Date Performed | 6/3/2022 | | | East/West Street | W 4000 N | | |
| Analysis Year | 2022 | | | North/South Street | Embarcadero St | | |
| Time Analyzed | 2022 PM Peak Build | | | Peak Hour Factor | 0.92 | | |
| Intersection Orientation | East-West | | | Analysis Time Period (hrs) | 1.00 | | |
| Project Description | | | | | | | |



Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|----------------------------|-----------|---|----|----|-----------|----|----|---|------------|---|----|---|------------|----|----|----|
| | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Movement | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 | | 7 | 8 | 9 | | 10 | 11 | 12 |
| Priority | | | | | | | | | | | | | | | | |
| Number of Lanes | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 |
| Configuration | | | | TR | | LT | | | | | LR | | | | | |
| Volume, V (veh/h) | | | 39 | 0 | | 11 | 58 | | | 0 | | 7 | | | | |
| Percent Heavy Vehicles (%) | | | | | | 3 | | | | 3 | | 3 | | | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | | | | | | | | 0 | | | | | | | |
| Right Turn Channelized | No | | | | No | | | | No | | | | No | | | |
| Median Type/Storage | Undivided | | | | | | | | | | | | | | | |

Critical and Follow-up Headways

| | | | | | | | | | | | | | | | | |
|------------------------------|--|--|--|--|------|--|--|--|--|------|--|------|--|--|--|--|
| Base Critical Headway (sec) | | | | | 4.1 | | | | | 7.1 | | 6.2 | | | | |
| Critical Headway (sec) | | | | | 4.13 | | | | | 6.43 | | 6.23 | | | | |
| Base Follow-Up Headway (sec) | | | | | 2.2 | | | | | 3.5 | | 3.3 | | | | |
| Follow-Up Headway (sec) | | | | | 2.23 | | | | | 3.53 | | 3.33 | | | | |

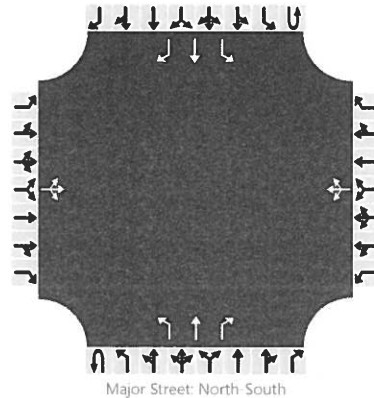
Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|--|--|--|--|------|--|--|--|-----|------|--|--|--|--|--|--|
| Flow Rate, v (veh/h) | | | | | 12 | | | | | 8 | | | | | | |
| Capacity, c (veh/h) | | | | | 1559 | | | | | 1025 | | | | | | |
| v/c Ratio | | | | | 0.01 | | | | | 0.01 | | | | | | |
| 95% Queue Length, Q ₉₅ (veh) | | | | | 0.0 | | | | | 0.0 | | | | | | |
| Control Delay (s/veh) | | | | | 7.3 | | | | | 8.5 | | | | | | |
| Level of Service, LOS | | | | | A | | | | | A | | | | | | |
| Approach Delay (s/veh) | | | | | 1.2 | | | | 8.5 | | | | | | | |
| Approach LOS | | | | | | | | | A | | | | | | | |

HCS 2010 Two-Way Stop-Control Report

| General Information | | Site Information | |
|--------------------------|-----------------------|----------------------------|------------------------|
| Analyst | Gary N Grigsby | Intersection | Idaho SH 33 & W 4000 N |
| Agency/Co. | | Jurisdiction | |
| Date Performed | 5/17/2022 | East/West Street | W 4000 N |
| Analysis Year | 2022 | North/South Street | Idaho SH 33 |
| Time Analyzed | 2042 PM Peak No Build | Peak Hour Factor | 0.96 |
| Intersection Orientation | North-South | Analysis Time Period (hrs) | 1.00 |
| Project Description | | | |

Lanes



Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | | |
|----------------------------|-----------|-----------|-----|----|-----------|----|-----|---|------------|----|-----|---|------------|---|-----|----|--|
| | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R | |
| Movement | | | | | | | | | | | | | | | | | |
| Priority | | 10 | 11 | 12 | | 7 | 8 | 9 | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 | |
| Number of Lanes | | 0 | 1 | 0 | | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | |
| Configuration | | | LTR | | | | LTR | | | L | T | R | | L | T | R | |
| Volume, V (veh/h) | | 25 | 0 | 54 | | 0 | 0 | 2 | | 88 | 688 | 6 | | 8 | 364 | 13 | |
| Percent Heavy Vehicles (%) | | 3 | 3 | 3 | | 3 | 3 | 3 | | 3 | | | | 3 | | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | 0 | | | | 0 | | | | | | | | | | | |
| Right Turn Channelized | | No | | | | No | | | | | No | | | | | | |
| Median Type/Storage | | Undivided | | | | | | | | | | | | | | | |

Critical and Follow-up Headways

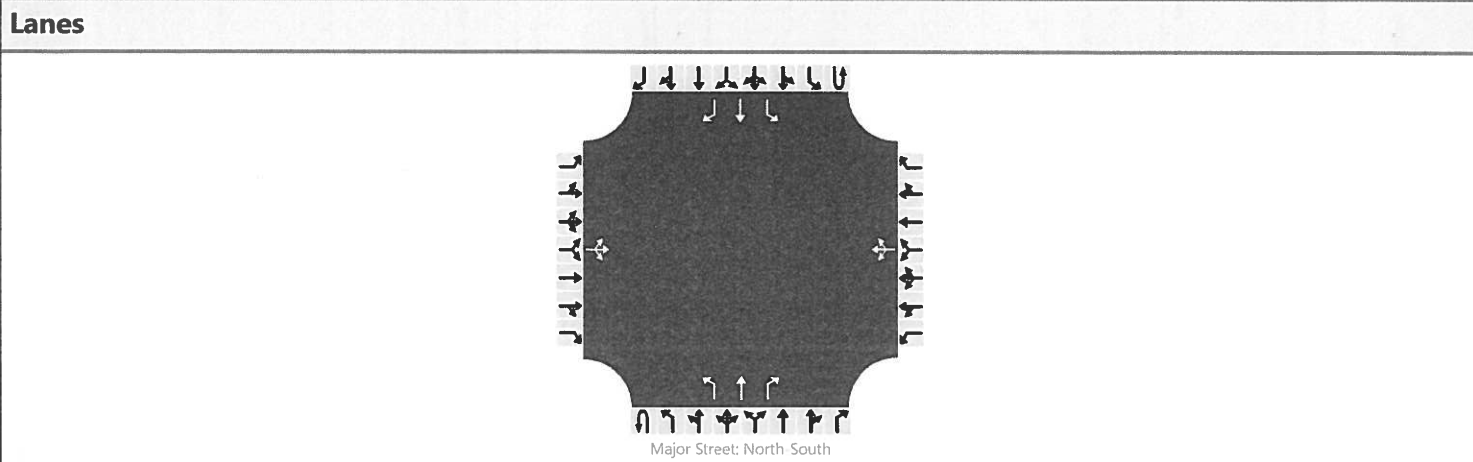
| | | | | | | | | | | | | | | | | | |
|------------------------------|--|------|------|------|--|------|------|------|--|------|--|--|--|------|--|--|--|
| Base Critical Headway (sec) | | 7.1 | 6.5 | 6.2 | | 7.1 | 6.5 | 6.2 | | 4.1 | | | | 4.1 | | | |
| Critical Headway (sec) | | 7.13 | 6.53 | 6.23 | | 7.13 | 6.53 | 6.23 | | 4.13 | | | | 4.13 | | | |
| Base Follow-Up Headway (sec) | | 3.5 | 4.0 | 3.3 | | 3.5 | 4.0 | 3.3 | | 2.2 | | | | 2.2 | | | |
| Follow-Up Headway (sec) | | 3.53 | 4.03 | 3.33 | | 3.53 | 4.03 | 3.33 | | 2.23 | | | | 2.23 | | | |

Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | | |
|---|--|------|------|--|--|------|------|--|--|------|--|--|--|-----|------|--|--|
| Flow Rate, v (veh/h) | | | 82 | | | | 2 | | | 92 | | | | | 8 | | |
| Capacity, c (veh/h) | | | 286 | | | | 428 | | | 1159 | | | | | 874 | | |
| v/c Ratio | | | 0.29 | | | | 0.00 | | | 0.08 | | | | | 0.01 | | |
| 95% Queue Length, Q ₉₅ (veh) | | | 1.2 | | | | 0.0 | | | 0.3 | | | | | 0.0 | | |
| Control Delay (s/veh) | | | 22.6 | | | | 13.5 | | | 8.4 | | | | | 9.2 | | |
| Level of Service, LOS | | | C | | | | B | | | A | | | | | A | | |
| Approach Delay (s/veh) | | 22.6 | | | | 13.5 | | | | 0.9 | | | | 0.2 | | | |
| Approach LOS | | C | | | | B | | | | | | | | | | | |

HCS 2010 Two-Way Stop-Control Report

| General Information | | Site Information | |
|--------------------------|--------------------|----------------------------|------------------------|
| Analyst | Gary N Grigsby | Intersection | Idaho SH 33 & W 4000 N |
| Agency/Co. | | Jurisdiction | |
| Date Performed | 5/17/2022 | East/West Street | W 4000 N |
| Analysis Year | 2022 | North/South Street | Idaho SH 33 |
| Time Analyzed | 2042 PM Peak Build | Peak Hour Factor | 0.96 |
| Intersection Orientation | North-South | Analysis Time Period (hrs) | 1.00 |
| Project Description | | | |



Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | | |
|----------------------------|-----------|-----------|-----|----|-----------|----|-----|---|------------|-----|-----|---|------------|----|-----|----|--|
| | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R | |
| Movement | | | | | | | | | | | | | | | | | |
| Priority | | 10 | 11 | 12 | | 7 | 8 | 9 | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 | |
| Number of Lanes | | 0 | 1 | 0 | | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | |
| Configuration | | | LTR | | | | LTR | | | L | T | R | | L | T | R | |
| Volume, V (veh/h) | | 26 | 0 | 63 | | 0 | 0 | 2 | | 103 | 688 | 6 | | 8 | 364 | 14 | |
| Percent Heavy Vehicles (%) | | 3 | 3 | 3 | | 3 | 3 | 3 | | 3 | | | | 3 | | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | 0 | | | | 0 | | | | | | | | | | | |
| Right Turn Channelized | | No | | | | No | | | | No | | | | No | | | |
| Median Type/Storage | | Undivided | | | | | | | | | | | | | | | |

Critical and Follow-up Headways

| | | | | | | | | | | | | | | | | |
|------------------------------|--|------|------|------|--|------|------|------|--|------|--|--|--|------|--|--|
| Base Critical Headway (sec) | | 7.1 | 6.5 | 6.2 | | 7.1 | 6.5 | 6.2 | | 4.1 | | | | 4.1 | | |
| Critical Headway (sec) | | 7.13 | 6.53 | 6.23 | | 7.13 | 6.53 | 6.23 | | 4.13 | | | | 4.13 | | |
| Base Follow-Up Headway (sec) | | 3.5 | 4.0 | 3.3 | | 3.5 | 4.0 | 3.3 | | 2.2 | | | | 2.2 | | |
| Follow-Up Headway (sec) | | 3.53 | 4.03 | 3.33 | | 3.53 | 4.03 | 3.33 | | 2.23 | | | | 2.23 | | |

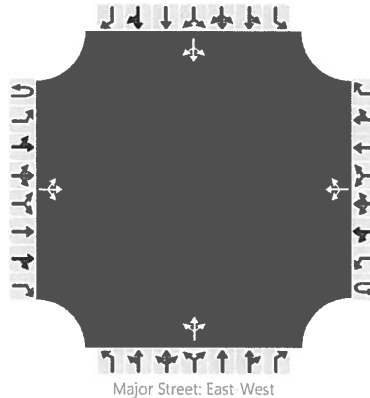
Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | | |
|---|--|------|------|--|--|------|------|--|--|------|--|--|--|------|--|--|--|
| Flow Rate, v (veh/h) | | | 93 | | | | 2 | | | 107 | | | | 8 | | | |
| Capacity, c (veh/h) | | | 288 | | | | 428 | | | 1158 | | | | 874 | | | |
| v/c Ratio | | | 0.32 | | | | 0.00 | | | 0.09 | | | | 0.01 | | | |
| 95% Queue Length, Q ₉₅ (veh) | | | 1.4 | | | | 0.0 | | | 0.3 | | | | 0.0 | | | |
| Control Delay (s/veh) | | | 23.4 | | | | 13.5 | | | 8.4 | | | | 9.2 | | | |
| Level of Service, LOS | | | C | | | | B | | | A | | | | A | | | |
| Approach Delay (s/veh) | | 23.4 | | | | 13.5 | | | | 1.1 | | | | 0.2 | | | |
| Approach LOS | | C | | | | B | | | | | | | | | | | |

HCS 2010 Two-Way Stop-Control Report

| General Information | | Site Information | |
|--------------------------|-----------------------|----------------------------|----------------------|
| Analyst | Gary N Grigsby | Intersection | Access Dr @ W 4000 N |
| Agency/Co. | | Jurisdiction | |
| Date Performed | 5/17/2022 | East/West Street | W 4000 N |
| Analysis Year | 2022 | North/South Street | Access Drive |
| Time Analyzed | 2042 PM Peak No Build | Peak Hour Factor | 0.94 |
| Intersection Orientation | East-West | Analysis Time Period (hrs) | 1.00 |
| Project Description | | | |

Lanes



Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|----------------------------|-----------|---|-----|---|-----------|---|-----|---|------------|---|-----|---|------------|----|-----|----|
| | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Movement | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 | | 7 | 8 | 9 | | 10 | 11 | 12 |
| Priority | | | | | | | | | | | | | | | | |
| Number of Lanes | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | | 0 | 1 | 0 | | 0 | 1 | 0 |
| Configuration | | | LTR | | | | LTR | | | | LTR | | | | LTR | |
| Volume, V (veh/h) | | 0 | 79 | 0 | | 0 | 116 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 |
| Percent Heavy Vehicles (%) | | 3 | | | | 3 | | | | 3 | 3 | 3 | | 3 | 3 | 3 |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | | | | | | | | 0 | | | | 0 | | | |
| Right Turn Channelized | No | | | | No | | | | No | | | | No | | | |
| Median Type/Storage | Undivided | | | | | | | | | | | | | | | |

Critical and Follow-up Headways

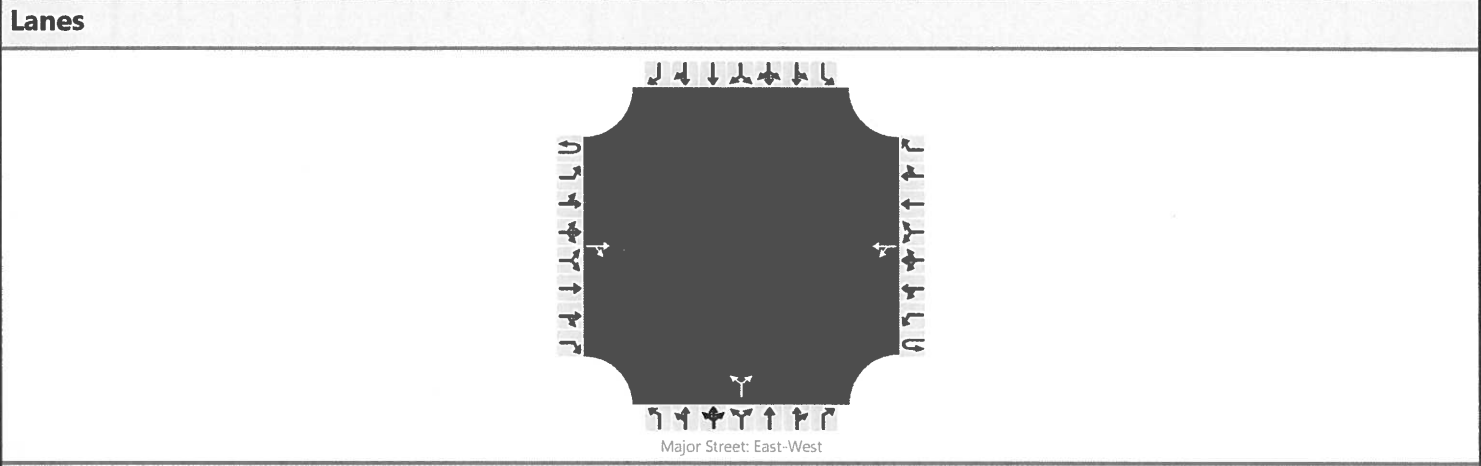
| | | | | | | | | | | | | | | | | |
|------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Base Critical Headway (sec) | | | | | | | | | | | | | | | | |
| Critical Headway (sec) | | | | | | | | | | | | | | | | |
| Base Follow-Up Headway (sec) | | | | | | | | | | | | | | | | |
| Follow-Up Headway (sec) | | | | | | | | | | | | | | | | |

Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|-----|------|--|--|-----|------|--|--|-----|--|-----|--|-----|--|-----|--|
| Flow Rate, v (veh/h) | | 0 | | | | 0 | | | | | 0 | | | | 0 | |
| Capacity, c (veh/h) | | 1456 | | | | 1505 | | | | | 0 | | | | 0 | |
| v/c Ratio | | 0.00 | | | | 0.00 | | | | | | | | | | |
| 95% Queue Length, Q ₉₅ (veh) | | 0.0 | | | | 0.0 | | | | | | | | | | |
| Control Delay (s/veh) | | 7.5 | | | | 7.4 | | | | | 5.0 | | | | 5.0 | |
| Level of Service, LOS | | A | | | | A | | | | | A | | | | A | |
| Approach Delay (s/veh) | 0.0 | | | | 0.0 | | | | 5.0 | | | | 5.0 | | | |
| Approach LOS | A | | | | A | | | | A | | | | A | | | |

HCS 2010 Two-Way Stop-Control Report

| General Information | | | | Site Information | | | |
|--------------------------|--------------------|--|--|----------------------------|-----------------------|--|--|
| Analyst | Elizabeth Landry | | | Intersection | Vallejo Rd @ W 4000 N | | |
| Agency/Co. | | | | Jurisdiction | | | |
| Date Performed | 6/3/2022 | | | East/West Street | W 4000 N | | |
| Analysis Year | 2042 | | | North/South Street | Vallejo Road | | |
| Time Analyzed | 2042 PM Peak Build | | | Peak Hour Factor | 0.92 | | |
| Intersection Orientation | East-West | | | Analysis Time Period (hrs) | 1.00 | | |
| Project Description | | | | | | | |



Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|----------------------------|-----------|---|----|----|-----------|----|-----|---|------------|---|----|---|------------|----|----|----|
| | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Movement | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 | | 7 | 8 | 9 | | 10 | 11 | 12 |
| Priority | | | | | | | | | | | | | | | | |
| Number of Lanes | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 |
| Configuration | | | | TR | | LT | | | | | LR | | | | | |
| Volume, V (veh/h) | | | 79 | 0 | | 5 | 116 | | | 0 | | 3 | | | | |
| Percent Heavy Vehicles (%) | | | | | | 3 | | | | 3 | | 3 | | | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | | | | | | | | 0 | | | | | | | |
| Right Turn Channelized | No | | | | No | | | | No | | | | No | | | |
| Median Type/Storage | Undivided | | | | | | | | | | | | | | | |

Critical and Follow-up Headways

| | | | | | | | | | | | | | | | | |
|------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Base Critical Headway (sec) | | | | | | | | | | | | | | | | |
| Critical Headway (sec) | | | | | | | | | | | | | | | | |
| Base Follow-Up Headway (sec) | | | | | | | | | | | | | | | | |
| Follow-Up Headway (sec) | | | | | | | | | | | | | | | | |

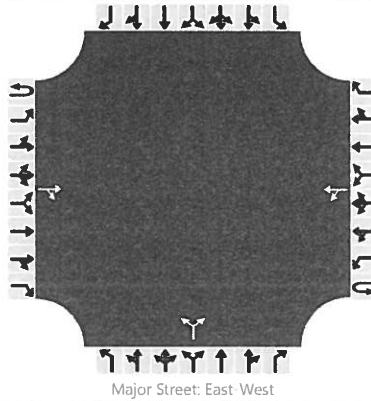
Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|--|--|--|--|-----|------|--|--|-----|--|--|------|--|--|--|--|
| Flow Rate, v (veh/h) | | | | | | 5 | | | | | | 3 | | | | |
| Capacity, c (veh/h) | | | | | | 1502 | | | | | | 969 | | | | |
| v/c Ratio | | | | | | 0.00 | | | | | | 0.00 | | | | |
| 95% Queue Length, Q ₉₅ (veh) | | | | | | 0.0 | | | | | | 0.0 | | | | |
| Control Delay (s/veh) | | | | | | 7.4 | | | | | | 8.7 | | | | |
| Level of Service, LOS | | | | | | A | | | | | | A | | | | |
| Approach Delay (s/veh) | | | | | 0.3 | | | | 8.7 | | | | | | | |
| Approach LOS | | | | | | | | | A | | | | | | | |

HCS 2010 Two-Way Stop-Control Report

| General Information | | Site Information | |
|--------------------------|--------------------|----------------------------|--------------------------|
| Analyst | Elizabeth Landry | Intersection | Embarcadero St @ W4000 N |
| Agency/Co. | | Jurisdiction | |
| Date Performed | 6/3/2022 | East/West Street | W 4000 N |
| Analysis Year | 2042 | North/South Street | Embarcadero St |
| Time Analyzed | 2042 PM Peak Build | Peak Hour Factor | 0.92 |
| Intersection Orientation | East-West | Analysis Time Period (hrs) | 1.00 |
| Project Description | | | |

Lanes



Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|----------------------------|-----------|---|----|-----------|-----------|----|-----|---|------------|----|----|---|------------|----|----|----|
| | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Movement | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 | | 7 | 8 | 9 | | 10 | 11 | 12 |
| Priority | | | | | | | | | | | | | | | | |
| Number of Lanes | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 |
| Configuration | | | | TR | | LT | | | | | LR | | | | | |
| Volume, V (veh/h) | | | 82 | 0 | | 11 | 121 | | | 0 | | 7 | | | | |
| Percent Heavy Vehicles (%) | | | | | | 3 | | | | 3 | | 3 | | | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | | | | | | | | | 0 | | | | | | |
| Right Turn Channelized | | | No | | | No | | | | No | | | | No | | |
| Median Type/Storage | | | | Undivided | | | | | | | | | | | | |

Critical and Follow-up Headways

| | | | | | | | | | | | | | | | | |
|------------------------------|--|--|--|--|------|--|--|--|--|------|--|------|--|--|--|--|
| Base Critical Headway (sec) | | | | | 4.1 | | | | | 7.1 | | 6.2 | | | | |
| Critical Headway (sec) | | | | | 4.13 | | | | | 6.43 | | 6.23 | | | | |
| Base Follow-Up Headway (sec) | | | | | 2.2 | | | | | 3.5 | | 3.3 | | | | |
| Follow-Up Headway (sec) | | | | | 2.23 | | | | | 3.53 | | 3.33 | | | | |

Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|--|--|--|--|------|--|--|--|-----|------|--|--|--|--|--|--|
| Flow Rate, v (veh/h) | | | | | 12 | | | | | 8 | | | | | | |
| Capacity, c (veh/h) | | | | | 1498 | | | | | 966 | | | | | | |
| v/c Ratio | | | | | 0.01 | | | | | 0.01 | | | | | | |
| 95% Queue Length, Q ₉₅ (veh) | | | | | 0.0 | | | | | 0.0 | | | | | | |
| Control Delay (s/veh) | | | | | 7.4 | | | | | 8.8 | | | | | | |
| Level of Service, LOS | | | | | A | | | | | A | | | | | | |
| Approach Delay (s/veh) | | | | | 0.7 | | | | 8.8 | | | | | | | |
| Approach LOS | | | | | A | | | | A | | | | | | | |